Policy Coherence for Sustainable Development 2018

TOWARDS SUSTAINABLE AND RESILIENT SOCIETIES

OECD

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BETTER POLICIES FOR BETTER LIVES

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Foreword

The 2030 Agenda is a universal, collective responsibility that covers all levels: global, national and territorial. The increased complexity and interconnectedness of the world, combined with the growing perception of unfair globalisation and the erosion of trust in the multilateral system, have considerably expanded the range of global policy challenges which cannot be solved by any one country alone. This calls for a stronger and more coherent multilateral system that helps to reconcile and deliver the economic, social and environmental transformations needed to achieve the SDGs.

This year, the United Nations High Level Political Forum (HLPF) will take stock of progress on the Sustainable Development Goals (SDGs) under the theme "Transformation towards sustainable and resilient societies". SDG target 17.14 to "enhance policy coherence for sustainable development" reflects the reality that transforming our societies and realising the SDGs is a multidimensional challenge. It calls for breaking out of policy silos and increasing capacities to identify, understand and manage interactions and interconnections among SDGs. It entails harnessing synergies, managing trade-offs and policy conflicts, and addressing the potential transboundary and intergenerational policy effects of domestic and international action. Most importantly, it means ensuring that "no one is left behind", which is the foundational purpose of the 2030 Agenda for Sustainable Development. Governments cannot act alone, however. They have a responsibility to engage with and work across multiple sectors, actors and governance levels.

The transformation towards sustainable and resilient societies cannot be achieved without addressing the systemic causes of vulnerability, including: inequalities; injustice and discrimination; weak governance and institutions; and the depletion of natural resources. It requires significantly changing the scale and the way we consume and produce in order to relieve pressure on the natural asset base on which economies and human well-being rely. In practice, this means challenging the often short-term focus on the domestic interests and recognising the long term, systemic risks that threaten social, economic, environmental and governance systems, while taking into account the enabling role of global common goods and enhancing well-being globally and for future generations.

Against this backdrop, the 2018 edition of *Policy Coherence for Sustainable Development*, which forms part of the OECD's contribution to this year's HLPF, seeks to inform policymaking by providing analysis on critical interlinkages among the Goals under HLPF review. It identifies institutional mechanisms for enhancing policy coherence in SDG implementation and explores ways of tracking progress by sharing insights from a range of thinkers and partner organisations. This work also responds to the OECD Action Plan on the Sustainable Development Goals which calls on the OECD to contribute policy analysis, guidance and tools to support countries' efforts to implement the SDGs.

The OECD stands ready to support all actors, stakeholders and policymakers to develop and implement approaches to strengthen policy coherence. This shared effort can help deliver on the goals of the 2030 Agenda for Sustainable Development and on the vision, mission and ambition of the OECD to promote better policies for better lives.

Angel Gurría

Secretary-General of the OECD

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Table of contents

Foreword **3**

Acknowledgements **5**

Abbreviations and acronyms **13**

Executive summary **17**

Chapter 1. Coherent approaches to achieving sustainable societies **21**

Introduction 22
Coherent approaches to achieving sustainable societies 22
Goal 6: Water and sanitation for all 23
Water challenges 24
Key interactions with other SDGs 27
Policy and governance responses 32
Goal 7: Affordable, reliable, sustainable and modern energy for all 37
Energy challenges 38
Key interactions with other sustainable development goals 40
Policy and governance responses 44
Goal 11: Make cities and human settlements inclusive, safe and sustainable 46
The urbanisation challenge 48
The role of cities and key interactions with other sustainable development goals 52
Policy and governance responses 54
Goal 12: Responsible consumption and production 56
Key challenges 57
Key interactions with other sustainable development goals 60
Policy and governance responses 63
Goal 15: Life on land 66
Key challenges 67
Key interactions with other sustainable development goals 69
Policy and governance responses 71
Notes 74
References 74

Chapter 2. Eight building blocks for coherent implementation of the SDGs **81**

Introduction 82
Policy coherence and the Sustainable Development Goals 83
Eight building blocks of policy coherence for sustainable development 83
Political commitment 85
Policy integration 89
Long-term planning horizons 91
Policy Effects 92
Policy – and institutional – co-ordination 94

Subnational and local involvement ... 97
Stakeholder engagement ... 98
Monitoring and reporting ... 100
Contributions by Policy Coherence for Sustainable Development Partners ... 101
Applying the SDG interactions framework: preliminary lessons learnt ... 101
Because reality is not a game ... 103
References ... 105
Annex 2.A. ... 108

Chapter 3. Country profiles: Institutional mechanisms for policy coherence ... 111

Introduction ... 112
Austria ... 112
Belgium ... 114
Czech Republic ... 116
Estonia ... 119
Finland ... 121
Germany ... 124
Greece ... 126
Japan ... 128
Lithuania ... 130
Luxembourg ... 133
Mexico ... 135
The Netherlands ... 137
Poland ... 139
Portugal ... 142
Slovak Republic ... 143
Slovenia ... 144
Spain ... 146
Sweden ... 148
Switzerland ... 150
Contributions by Policy Coherence for Sustainable Development Partners ... 153
Institutional Coherence for SDG Implementation in Nepal ... 153
Pakistan: Implementation of the 2030 for Sustainable Development ... 154
A case study on vertical policy coherence applied to legislation at the municipal level in Brazil ... 155
Notes ... 157

Chapter 4. Tracking progress in policy coherence for sustainable development ... 165

Introduction ... 166
A framework for tracking progress on policy coherence ... 167
Indicators for assessing institutional mechanisms for policy coherence ... 167
Indicators for assessing policy interactions ... 171
Indicators for assessing policy effects ... 173
Applying the framework to identify national priorities and indicators for policy coherence ... 175
Goal 6. Water and sanitation for all ... 175
Goal 7. Affordable and clean energy for all ... 179
Goal 11. Sustainable cities and communities ... 182
Goal 12. Responsible consumption and production ... 184
Goal 15. Life on land ... 187
Contributions by Policy Coherence for Sustainable Development Partners ... 190

Adapting the Commitment to Development Index to new global realities 190
Lessons learnt from applying network analysis to SDG 7 on Energy in Sri Lanka 192
Tracking SDG activity in national parliaments: a technological answer 193
Notes 195
References 196

Chapter 5. Aligning domestic and international agendas for Agenda 2030 201

Introduction 202
Long-term visioning of systemic transformation in Agenda 2030 in the context of resurgent primacy of domestic politics 204
Targeting the Trillions: The need for a common compass to implement the 2030 Agenda 211
Contributions by Policy Coherence for Sustainable Development Partners 213
Strengthening integrated approaches for promoting the SDGs: What role for the High-level Political Forum? 213
Multi-level SDG policy coherence: Aligning intergovernmental agendas with the 2030 Agenda215
Thematic connections of the Paris Climate Agreement and the 2030 Agenda 217
Successful financing of the SDGs through PPPs requires building capacities for a PCSD approach 220
Good Enough Coherence 222
The daily realities of managing the Sustainable Development Goals 225
SDGs 6, 7, 11, 12, 15 and Cultural and Creative Industries: Building cultural landscapes for the Sustainable Development Goals 227
Notes 228
References 228

Tables

Table 1.1. Economic, social and environmental impacts of water pollution 26
Table 1.2. SDG 6 as enabler for achieving the Sustainable Development Goals 28
Table 1.3. Examples of water quality policies and impacts on other sectors 34
Table 1.4. OECD Principles on Stakeholder Engagement in Water Governance 37
Table 1.5. SDG 7 on Energy as prerequisite for achieving the Sustainable Development Goals 41
Table 1.6. Transport related targets in the Sustainable Development Goals 54
Table 1.7. Sustainable Development Goals and resource efficiency 61
Table 1.8. The contribution of biodiversity to the Sustainable Development Goals 69
Table 1.9. Policy instruments for biodiversity conservation and sustainable use 72
Table 1.10. Planning principles for sustainable development 73
Table 3.1. Institutional mechanisms for PCSD in Austria 113
Table 3.2. Institutional mechanisms for PCSD in Belgium 115
Table 3.3. Institutional mechanisms for PCSD in the Czech Republic 117
Table 3.4. Institutional Mechanisms for PCSD in Estonia 119
Table 3.5. Institutional mechanisms for PCSD in Finland 122
Table 3.6. Institutional mechanisms for PCSD in Germany 124
Table 3.7. Institutional mechanisms for PCSD in Greece 127
Table 3.8. Institutional mechanisms for PCSD in Japan 129
Table 3.9. Institutional mechanisms for PCSD in Lithuania 131
Table 3.10. Institutional mechanisms for PCSD in Luxembourg 133
Table 3.11. Institutional mechanisms for PCSD in Mexico 135
Table 3.12. Institutional mechanisms for PCSD in the Netherlands 138

Table 3.13. Institutional mechanisms for PCSD in Poland ... 140
Table 3.14. Institutional mechanisms for PCSD in Portugal ... 143
Table 3.15. Institutional mechanisms for PCSD in the Slovak Republic ... 144
Table 3.16. Institutional mechanisms for PCSD in Slovenia ... 145
Table 3.17. Institutional mechanisms for PCSD in Spain ... 147
Table 3.18. Institutional mechanisms for PCSD in Sweden ... 149
Table 3.19. Institutional mechanisms for PCSD in Switzerland ... 151
Table 4.1. Suggested indicators for assessing institutional mechanisms for policy coherence in SDG implementation ... 168
Table 4.2. Examples of indicators for capturing policy interactions ... 172
Table 4.3. Goals Scoring ... 172
Table 4.4. Examples of indicators for capturing transboundary effects ... 174
Table 4.5. Examples of indicators for monitoring resources for future well-being ... 175
Table 4.6. Core indicators for assessing the state of transboundary river basins ... 177
Table 4.7. Indicators for tracking progress on PCSD in relation to SDG 6 ... 178
Table 4.8. Indicators for tracking progress on PCSD in relation to SDG 7 ... 181
Table 4.9. OECD Metropolitan Database: Comparable urban indicators ... 182
Table 4.10. Indicators for tracking progress on PCSD in relation to SDG 11 ... 184
Table 4.11. Indicators for tracking progress on PCSD in relation to SDG 12 ... 187
Table 4.12. Indicators for tracking progress on PCSD in relation to SDG 15 ... 189

Figures

Figure 1.1. Global water demand is projected to increase significantly by 2050 ... 27
Figure 1.2. Access to safe drinking water and improved sanitation ... 31
Figure 1.3. Investment by renewable energy sector ... 40
Figure 1.4. Urban population by region, 1970-2050 ... 48
Figure 1.5. Growth trends in Africa's urban, rural and total population, 1950-2050 ... 49
Figure 1.6. Built-up area per capita is increasing, including in countries that are already very urbanised, 1990-2014 ... 50
Figure 1.7. Premature deaths from exposure to particulate matter and ozone ... 51
Figure 1.8. Decoupling trends, OECD and world, 1980-2010 ... 58
Figure 1.9. Global land use, 1970 and 2010 ... 68
Figure 1.10. ODA targeting environmental objectives ... 69
Figure 2.1. Eight Building Blocks of Policy Coherence for Sustainable Development ... 84
Figure 2.2. Leadership in coordinating SDG implementation ... 94
Figure 2.3. Seven-point typology of SDG interactions ... 102
Figure 3.1. Main institutional mechanisms, policy documents and key actors for SDG implementation in Estonia ... 120
Figure 3.2. Main institutional mechanisms, policy documents and key actors for implementation of the 2030 Agenda in Finland ... 123
Figure 3.3. Institutional mechanisms for SDG implementation in Germany ... 125
Figure 3.4. Slovenian development planning model ... 146
Figure 3.5. Five Ps and Capitals towards Agenda 2030 ... 157
Figure 4.1. Elements for tracking progress on PCSD ... 167
Figure 5.1. Five complementary levels of coherence ... 203
Figure 5.2. How NDC climate activities correspond to each SDG ... 218
Figure 5.3. Synergies and trade-offs between the NDCs and SDGs ... 219

Boxes

Box 1.1. SDG 6: Ensure availability and sustainable management of water and sanitation for all. 24
Box 1.2. OECD Recommendation on Water 32
Box 1.3. Section VI of the OECD Recommendation on Water OECD Principles on Water Governance 36
Box 1.4. SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all. 38
Box 1.5. The IEA Sustainable Development Scenario: Integrating climate, air pollution and universal energy access 42
Box 1.6. Achieving affordable and clean energy for all by 2030, some lessons learnt 45
Box 1.7. SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable. 47
Box 1.8. SDG 12: Ensure sustainable consumption and production patterns. 57
Box 1.9. SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss 66
Box 2.1. What is policy coherence for sustainable development? 83
Box 2.2. National strategies updated to align with the 2030 Agenda and SDGs 85
Box 2.3. National action plans for SDG implementation 87
Box 2.4. Countries with explicit commitments to policy coherence 88
Box 2.5. Examples of policy integration 91
Box 2.6. Long-term planning horizons for SDG implementation 92
Box 2.7. Measures to identify and address potential transboundary impacts 93
Box 2.8. Countries with central co-ordination mechanisms at the highest level 95
Box 2.9. Subnational and local involvement in SDG implementation 98
Box 2.10. Stakeholder engagement in national SDG plans and strategies 99
Box 2.11. Monitoring and reporting systems as a tool for policy coherence 100
Box 3.1. Breaking down policy silos in Belgium 116
Box 3.2. Identifying and setting priorities for SDG implementation 118
Box 3.3. A participatory follow-up and review system for sustainable development 123
Box 3.4. German initiative on sustainable cocoa 126
Box 3.5. Fostering culture change in the public service in support of policy coherence 128
Box 3.6. Promoting the SDGs within Japanese society 130
Box 3.7. Cross-ministerial collaboration for coherent environmental policies 132
Box 3.8. Aligning efforts to finance climate actions 134
Box 3.9. Aligning Mexico's budget with the SDGs 136
Box 3.10. A proposal for coherent assessments of policies: the SDG Test 139
Box 3.11. Supporting regional development with integrated solutions 141
Box 3.12. Promoting sustainable business models 150
Box 3.13. Using the MONET indicator system to monitor SDG implementation 152
Box 4.1. OECD Water Governance Indicator Framework 170

Abbreviations and acronyms

AMIS	Agricultural Market Information System
BAT	best available technology
BRIICS	Brazil, Russia, India, Indonesia, China, South Africa
BRS	Secretariat of the Basel, Rotterdam and Stockholm Conventions
CBD	Convention on Biological Diversity
CH_4	methane gas
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CO_2	carbon dioxide
COP21	21st Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change
CSO	civil society organisation
DAC	Development Assistance Committee (OECD)
DEU	domestic extraction used
DMC	domestic material consumption
DMI	domestic material input
EAMP	environmentally adjusted multifactor productivity
EC	European Commission
EFC	Ecological Footprint of Consumption
EFE	Ecological Footprint of Exports
EFI	Ecological Footprint of Imports
EFP	Ecological Footprint of Production
EIA	environmental impact assessments
ESD	education for sustainable development
EU	European Union
EU-28	Belgium, Bulgaria, Czech Republic, Denmark, Germany, Estonia, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Hungary, Malta, Netherlands, Austria, Poland, Portugal, Romania, Slovenia, Slovakia, Finland, Sweden, United Kingdom
EUR	euro

FAO	Food and Agriculture Organization of the United Nations
FWF	food wastage footprint (FAO)
GDP	gross domestic product
GHG	greenhouse gas
HLPF	High-level Political Forum (United Nations)
ICIO	Inter-Country Input-Output Database (OECD)
ICSU	International Council for Science
IEA	International Energy Agency
IIASA	Institute for Applied Systems Analysis
ILO	International Labour Organization
ITI	integrated territorial investment
IUCN	International Union for Conservation of Nature
KPI	key performance indicator
LED	light-emitting diode
LDC	least developed country
litres/MWh	litres per megawatt hour
LPG	liquefied petroleum gas
MAPS	Methodology for Assessing Procurement Systems (OECD)
MDGs	Millennium Development Goals
MGoS	major groups and other stakeholders
µg/m3	microgram per cubic meter
MNE	multinational enterprise
MP	Member of Parliament
$MtCO_2$	metric tons of carbon dioxide
N_2O	nitrous oxide
NGO	non-governmental organisation
NO_X	nitrogen oxides
NPC	nominal protection coefficient
NPO	non-profit organisation
NSDS	national strategy for sustainable development
NUP	national urban policy
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
PCD	policy coherence for development

PCSD	policy coherence for sustainable development
PCT	Patent Cooperation Treaty
PINE	Policy Instruments for the Environment (OECD database)
$PM_{2.5}$	particulate matter
PPP	public-private partnership
PRTR	Pollutant Release and Transfer Registers
PSE	Producer Support Estimates
PV	solar photovoltaic
REDD+	United Nations Programme on Reducing Emissions from Deforestation and Forest Degradation
RIA	regulatory impact assessment
SCP	sustainable consumption and production patterns
SD	sustainable development
SDGs	Sustainable Development Goals
SEA	strategic environmental assessments
SEI	Stockholm Environment Institute
SIA	sustainable impact assessment
TFI	trade facilitation indicator
TRIPS	Agreement on Trade-Related Aspects of Intellectual Property Rights
UDE	unused domestic extraction
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNEP	UN Environment
UNGPs	United Nations Guiding Principles for Business and Human Rights
UN HLPF	United Nations High-level Political Forum
UNSD	United Nations Statistics Division
VNR	Voluntary National Review
WHO	World Health Organization
USD	United States dollar
WWF	World Wildlife Fund

Executive summary

Sustainable Development Goal (SDG) target 17.14 calls on all countries to enhance policy coherence for sustainable development (PCSD) as a key means of implementation. Governments and stakeholders recognise the relevance of PCSD for identifying, understanding and managing interactions among highly interconnected SDGs, and for addressing the potential transboundary and intergenerational policy effects of domestic and international action. They are also increasingly recognising the need to break out of institutional and policy silos to realise the benefits of synergistic actions and to effectively address unavoidable trade-offs across the SDGs. Most importantly, they recognise the need for coherent approaches to ensure that "no one is left behind", the underlying principle of the 2030 Agenda for Sustainable Development.

The 2018 edition of *Policy Coherence for Sustainable Development* shows how integrated and coherent policies, supported by strong institutional mechanisms, can contribute to the "Transformation towards sustainable and resilient societies" – the theme of the 2018 United Nations High-Level Political Forum (HLPF). It applies the institutional, analytical and monitoring elements of the PCSD Framework to identify challenges and opportunities facing governments as they move to implement the SDGs, both at the national level and collectively at the global level.

Chapter 1 (Building coherent approaches to transformation) applies a PCSD lens to identify critical interlinkages among the five SDGs under 2018 HLPF review:

- SDG 6: Ensure availability and sustainable management of water and sanitation for all;
- SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all;
- SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable;
- SDG 12: Ensure sustainable consumption and production patterns; and
- SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

It brings together several strands of OECD analysis to show that each goal has a different but complementary role in achieving the 2030 Agenda's primary aspiration of "shifting the world onto a sustainable path". It emphasises that the SDGs cannot be achieved through single-sector or silo approaches. The chapter explores each of the five goals in terms of: 1) major challenges; 2) fundamental synergies and trade-offs that need to be managed to ensure a coherent and effective implementation; and 3) potential policy and governance responses. It also encourages enhanced policy coherence across actors, governance levels and timeframes to ensure a sustainable transformation, and address the

root causes of vulnerability – such as weak institutions, socio-economic inequalities, and the depletion of natural resources.

Chapter 2 (Eight building blocks for coherent SDG implementation) highlights new policy interdependencies that challenge sectoral structures and decision-making processes in many governments. It emphasises that enhancing PCSD, as called for in SDG 17.14, depends on supporting institutional mechanisms able to anticipate, balance and reconcile divergent policy pressures. This means adjusting structures and decision-making processes to effectively integrate sustainable development goals into the mandate of existing institutions, and fostering an administrative culture that promotes cross-sectoral collaboration sensitive to the need for global action.

There is no one-size-fits-all approach to PCSD. Each country must determine its own institutional mechanisms and sequencing of actions. The chapter explores plans and initial steps towards adapting institutional frameworks for SDG implementation taken by the 20 OECD countries that have presented Voluntary National Reviews (VNRs) to the HLPF so far: Belgium, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, Norway, Portugal, Slovenia, Sweden, Switzerland and Turkey. It applies eight building blocks for PCSD as a lens to identify good institutional mechanisms and practices: 1) political commitment and leadership; 2) policy integration; 3) long-term planning horizons; 4) analysis and assessments of potential policy effects; 5) policy and institutional co-ordination; 6) subnational and local involvement; 7) stakeholder engagement; and 8) monitoring and reporting.

Chapter 3 (Country profiles: Institutional mechanisms for policy coherence) complements the analysis of the eight PCSD building blocks. It presents up-to-date country profiles from 19 countries on institutional arrangement for promoting PCSD: Austria, Belgium, Czech Republic, Estonia, Finland, Germany, Greece, Japan, Lithuania, Luxembourg, Mexico, The Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden and Switzerland. The chapter draws on responses to a survey sent out to the members of the informal network of national focal points for policy coherence with questions corresponding to the eight PCSD building blocks. The results are intended to form the basis for developing process indicators for each of the building blocks.

Chapter 4 (Tracking progress in policy coherence for sustainable development) aims to support government efforts to monitor SDG target 17.14 at the national level, as well as to contribute to the development of the global methodology for indicator 17.14.1 (Number of countries with mechanisms in place to enhance policy coherence for sustainable development).

It focuses on three key elements of the PCSD Framework that need to considered when tracking progress on PCSD at the national level: 1) institutional mechanisms; 2) critical interactions; and 3) transboundary and intergenerational policy effects. It applies this approach to the five thematic SDGs under review by the 2018 HLPF, and provides examples from both OECD and partner countries to illustrate the need to identify and use different combinations of indicators depending on national context, priorities and long-term policy objectives. The chapter draws extensively on existing OECD measurement frameworks and data sources.

Chapter 5 (Aligning domestic and international agendas for Agenda 2030) highlights the importance of enhancing PCSD at multiple levels. While governmental action at the national level will remain the key driver, progress cannot be achieved without stakeholder

engagement, collective action across national boundaries and collaboration among international processes and institutions. Collective efforts are at the heart of SDG 17 to strengthen the means of implementation and revitalise the global partnership for sustainable development.

It is in this spirit that members of the PCSD Partnership have been invited to contribute to this report with individual opinion pieces. While some have been integrated into other relevant chapters, those highlighting challenges and tensions in addressing policy coherence at the international level are presented here in Chapter 5.

Chapter 1. Coherent approaches to achieving sustainable societies

This chapter applies a policy coherence lens to identify critical interlinkages between the SDGs to be reviewed by the HLPF in 2018: Goal 6 on water, 7 on energy, 11 on cities, 12 on sustainable consumption and production, and 15 on biodiversity. It draws on OECD work to explore each of the five goals in terms of: 1) major challenges; 2) fundamental synergies and trade-offs between Goals that need to be managed to ensure a coherent and effective implementation; and 3) potential policy and governance responses. The chapter is intended to provide analytical input and inform the thematic review at the UN HLPF. This work is part of the OECD Action Plan on the Sustainable Development Goals which calls on the OECD to contribute to policy analysis, guidance and tools to support countries' efforts to implement the SDGs.

Introduction

In July 2018, the United Nations High-level Political Forum (HLPF) will address the theme "Transformation towards sustainable and resilient societies". Along with SDG 17, which calls on countries to revitalise the global partnership for sustainable development, the 2018 HLPF will review:

- SDG 6: Ensure availability and sustainable management of water and sanitation for all;
- SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all;
- SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable;
- SDG 12: Ensure sustainable consumption and production patterns; and
- SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

This chapter applies a policy coherence for sustainable development (PCSD) lens to the 2018 HLPF theme. It identifies some critical interlinkages among the five SDGs under review, based on the premise that each goal has a different but complementary role in achieving the 2030 Agenda's primary aspiration of "shifting the world onto a sustainable path".

Drawing on extensive work and analysis by the OECD on sustainable and resilient societies, the chapter examines each of the five goal in terms of: 1) major challenges; 2) key interlinkages with other goals, i.e. fundamental synergies and trade-offs that need to be managed to ensure coherent implementation; and 3) policy and governance responses.

Interlinkages among the SDGs necessarily depend on specific country contexts and challenges. Many goals and targets are a means of contributing to the achievement of other goals and cannot be achieved through single-sector or silo approaches. SDG target 17.14 on enhancing policy coherence for sustainable development recognises the importance of PCSD in this context.

Coherent approaches to achieving sustainable societies

Transformation towards resilient societies is a multidimensional challenge. It calls for strengthening policy coherence across sectors, actors, governance levels and timeframes to address the underlying and interconnected causes of vulnerability. These causes include: weak institutions and governance capacity (including lack of vertical and horizontal co-ordination); socio-economic inequalities; injustice and discrimination; inadequate services and infrastructure; depletion of natural resources, global shocks, climate-related extreme events and disasters. Coherent and integrated approaches are also needed to manage risk factors such as rapid urbanisation, increased environmental pollution, depletion of natural resources and demographic changes.

Policy coherence is essential to transform systems that undermine well-being and perpetuate vulnerabilities. It can help to build resilience and generate fundamental changes in the ways societies and economies use resources (natural, economic, human,

and social) for human well-being. It addresses how societies and economies consume and produce, as well as the structural inequalities that underlie vulnerability.

In the context of the 2030 Agenda, this means increasing our capacities to manage the critical interlinkages among the Sustainable Development Goals (SDGs) and address their implications. It entails harnessing synergies, managing trade-offs, and avoiding or minimising negative spillovers and impacts. Applying this perspective to the five Goals to be reviewed by the HLPF in 2018, highlights for example that:

- SDG 6 on water, SDG 7 on energy, and SDG 15 on land, forest, and ecosystems are related to key natural resources. They represent a major component of the natural asset base from which human well-being is derived. They are necessary to life and a major foundation of economic activity. Policy decisions made in each of these sectors can have significant impacts on the others. At the same time, these sectors can be affected by how countries collectively address SDG 13 on climate. The interactions between water, energy and land, forest ecosystems and climate are numerous and complex, and cannot be addressed through sectoral approaches alone.
- SDG 12 on responsible consumption and production is in this regard one of the key drivers for transformation which applies to all goals. It sets out the necessary requirements to ensure a sustainable management of resources (natural, economic, human and social capital), and to restore and preserve the asset base over time. This goal is supported by targets related to efficiency and resource use across all SDGs.
- SDG 11 on inclusive, safe, resilient and sustainable cities and human settlements is essential for guiding more sustainable, inclusive urban development in the context of a rapidly urbanising world. More than half of the world's population currently resides in cities and with urbanisation projected increase. A great demand for natural resources (water, energy, land, forests and ecosystems) originates from cities and metropolitan areas, which means that achieving SDG 11 will depend on the achievement of SDGs 6, 7, 12 and 15. Cities account for an estimated 67% of energy use and 71 % of global energy-related CO_2 emissions. Moreover, while cities concentrate economic growth, they also intensify inequalities. For instance, income inequality is higher in cities relative to the respective national average and tends to be higher in larger cities (OECD, 2016[1]). Across a range of dimensions – health, housing, education, jobs – well-being outcomes vary considerably within and across cities.

Goal 6: Water and sanitation for all

Water is a critical asset for our well-being and that of future generations. The provision of good quality water and adequate sanitation, as well as the sustainable management of water resources, generates substantial benefits for society, the economy and the environment, such as reduced poverty and incidence of diseases; increased school attendance and opportunities for education; women empowerment both domestically and as actors in the economy; increased productivity and food security; and tourism growth (OECD, 2011[2]). Adequate good quality water is vital for supporting freshwater ecosystems and the services they provide, such as plant growth, natural habitats, nutrient recycling, and waste removal. It is essential for use in agriculture, aquaculture, industry, and energy production. Conversely, inadequate access to these resources and services act

as a significant drag on sustainable development, affecting people's health, reducing labour productivity, increasing health care costs and undermining freshwater ecosystems (OECD, 2017[3]).

Millennium Development Goal 7 called for halving the proportion of the universal population without sustainable access to clean and safe drinking water and basic sanitation as part of "ensuring environmental sustainability". SDG 6 (Box 1.1) is a game changer, compelling all countries to "ensure availability and sustainable management of water and sanitation for all" (UNGA, 2015[4]). While MDG 7 focused on drinking water and basic sanitation, SDG 6 covers the entire freshwater resource cycle (e.g. water quality and wastewater, water use and scarcity, and ecosystems).

Box 1.1. SDG 6: Ensure availability and sustainable management of water and sanitation for all

6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all.

6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.

6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate.

6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.

Targets on means of implementation

6.a By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies.

6.b Support and strengthen the participation of local communities in improving water and sanitation management.

Source: (UNGA, 2015[4]).

Water challenges

Lack of access to safe water and inadequate sanitation have profound socio-economic impacts and represent a major obstacle to eradicating poverty. Water-related diseases are among the most common cause of illness and premature deaths, affecting mainly the

poor. More than 340 000 children under five die annually from diarrhoeal diseases due to unsafe drinking water and poor sanitation and hygiene (WHO/UNICEF, 2015[5]).

Progress has been made over the past 15 years, according to two status reports on the SDGs presented by the UN Secretary-General so far. In 2015, 91% of the world's population (6.6 billion people) had access to improved drinking water sources compared with 82% in 2000 (UN ECOSOC, 2016[6]). It is important to note that "improved" water does not necessarily mean "safe" water fit for human consumption. In the same year, 68% of the global population (4.9 billion people) used improved sanitation facilities compared with 59% in 2000 (UN ECOSOC, 2017[7]).

Yet, in 2015 an estimated 663 million people still lacked access to improved water sources. In the same year, 2.4 billion people lacked basic sanitation services, and among this number 946 million had no facilities at all (UN ECOSOC, 2016[6]). In developing and emerging economies the main challenge is to extend water supply and sanitation services to poor urban and rural areas in particular. In OECD countries the more common concern is to renew and upgrade existing or ageing infrastructure (OECD, 2017[3]).

The challenge of ensuring universal access to safe water for all (SDG 6) is compounded by the changing distribution of global water resources due to climate change. It is expected that climate change will alter the intensity, frequency, seasonality and amount of rainfall, aspects which impact surface water flows and groundwater recharge, as well as temperature (OECD, 2013[8]). Climate change impacts on freshwater include rising water temperature, deteriorating water quality, increases in vaporisation and in frequency and intensity of extreme events (OECD, 2013[9]).

Water pollution is also a factor. At least half the world's population suffers from polluted water (OECD, 2017[10]). Water pollution reduces the quantity and quality of useable water, exacerbating the problem of water scarcity. Water quality is most affected by the drivers of water demand: agriculture, industry, and urban water use (OECD, 2017[10]). They are linked to nutrient flows from agriculture, industrial and combustion activities, such as transport and power generation; poor wastewater treatment; and rainwater run-off in urban settlements when it is not properly captured and treated. This results in increased eutrophication, biodiversity loss, water-related disease and costs for treatment prior to use. Water pollution from urban sewage is expected to increase three-fold by 2050, compared with its volume in 2000 (OECD, 2015[11]).

The economic, social and environmental costs of water pollution include: 1) degradation of ecosystem services; 2) water treatment and health-related costs; 3) reduced productivity in economic activities such as agriculture, fisheries, industrial manufacturing and tourism; 4) reduced property values in some areas; and 5) opportunity costs of further development (OECD, 2017[10]). Examples of water pollution impacts to economic, social and environmental values, as well as to relevant SDGs and targets, are presented in Table 1.1.

Table 1.1. Economic, social and environmental impacts of water pollution

Water pollution as a disabler of the Sustainable Development Goals

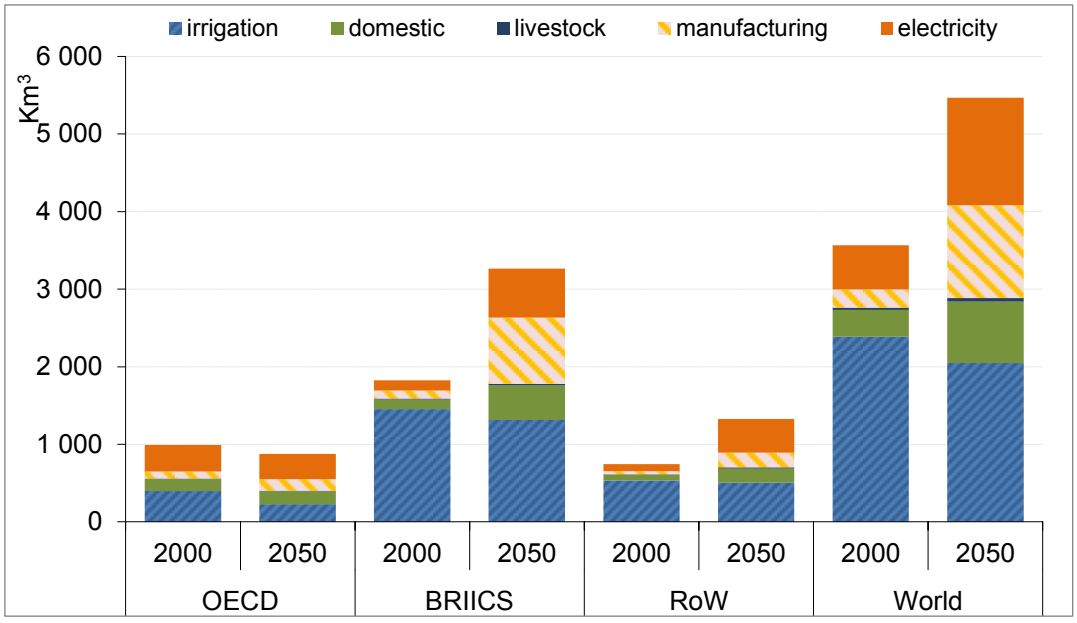
Impact	Example	Related SDGs/targets
Human health	Polluted water is the world's largest health risk, threatening quality of life and public health. Associated with this are health service costs, decreased life expectancy and emergency health costs related to major pollution events.	SDG 3.9
Ecosystem health	Damage to freshwater and marine ecosystems (e.g. fish kill, invertebrates, benthic fauna, flora, habitat degradation) and loss of ecosystem services (including the ability to process pollutants) may require investment in additional or different grey infrastructure alternatives.	SDG 14.2 SDG 15.1 SDG 15.8
Social values	Prohibition from recreational use (e.g. swimming, fishing, kayaking), beach closure, impacts on aesthetics, cultural and spiritual values.	SDG 8.9 SDG 14.7
Agricultural productivity	Exclusion of contaminated water for irrigation results in increased water scarcity. Irrigation with contaminated water causes damage to and reduced productivity of pasture and crops, contamination of soil, impacts to livestock health and production, and scouring of infrastructure.	SDG 2.3 SDG 2.4 SDG 15.3
Industrial productivity	Exclusion of contaminated water for industrial use results in increased water scarcity. Scouring of infrastructure and clean-up costs from spills or accidents.	SDG8.4 SDG 9.4 SDG12.4
Commercial fisheries	Direct and indirect fish kill, shellfish contamination.	SDG 14.7
Urban and domestic use	Increased water treatment and inspection costs, maintenance costs from scouring and premature ageing of infrastructure, increased wastewater treatment costs with implementation of more strict regulations. Emergency and clean-up costs from spills or accidents.	SDG 11.1 SDG 11.2 SDG 11.7
Tourism	Loss of fishing, boating, rafting and swimming activities to other tourism activities or to other locations with better water quality.	SDG 14.7
Property values	Declining waterfront property values due to unsightly pollution and/or odour.	SDG 1.4 SDG 5.a

Source: Adapted from (OECD, 2017[10]).

Competing demands for water – e.g. from cities, farmers, industries, energy suppliers, and ecosystems – adds to the challenge of achieving SDG 6. The rate of demand growth for water has been double that of population growth over the last few decades (OECD, 2016[12]). Irrigated agriculture, which provides 40% of the world's food supply, is the largest water user globally, accounting for around 70% of withdrawals worldwide and up to 85% in some developing countries (OECD, 2017[13]). Agriculture also accounts for the bulk of water consumption due to losses from evaporation and transpiration (OECD, 2016[12]).

Global water demand is projected to increase significantly – by 55% between 2000 and 2050 – according to the *OECD Environmental Outlook to 2050* (Figure 1.1). OECD projections also anticipate that without new policies the allocation of water use could shift significantly, with demand from manufacturing (+400%,), electricity (+140%) and domestic use (+130%) competing with and largely overtaking demand from irrigation in all parts of the world. (OECD, 2012[14]).

Figure 1.1. Global water demand is projected to increase significantly by 2050



Note: The OECD baseline used for the *Environmental Outlook to 2050* presents projections of what the world could look like in 2050 if current socio-economic and environmental trends are maintained without new policies to protect the environment. This graph measures only blue water demand and does not consider rainfed agriculture.
Source: (OECD, 2012[14]).

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Increased water demand is expected to exacerbate water stress, which now affects more than 2 billion people globally. Northern Africa and Western Asia experience water stress levels above 60%, indicating a strong probability of future water scarcity (UN ECOSOC, 2017[7]). In more than one-third of OECD countries, freshwater resources are under moderate to medium-high stress (OECD, 2017[3]). The number of people living in stressed river basins (i.e. those where withdrawals exceed 40% of available resources) is projected to increase from 1.6 billion in 2000 to 3.9 billion by 2050, or more than 40% of the world's population (OECD, 2012[14]).

Key interactions with other SDGs

Water is a key enabler for all the SDGs. Identifying the mutually reinforcing interactions between the targets under SDG 6 on water and sanitation and every other SDG can accelerate progress and facilitate the achievement of multiple targets while alleviating potential conflicts. Table 1.2 highlights some of these potential interactions, as well as the relevance of SDG 6 as enabler for achieving other SDGs.

Table 1.2. SDG 6 as enabler for achieving the Sustainable Development Goals

Goal	Links with SDG 6
SDG 1. No poverty	Universal access to water and sanitation is a prerequisite for eliminating poverty. SDG 1 calls for universal access to basic services, which include water and sanitation (6.1, 6.2) among others.
SDG 2. Zero Hunger	Water resources are necessary to produce food. Agriculture is the largest water user, accounting for around 70% of global freshwater demand. Access to safe water and sanitation helps to improve nutrition and food security. Irrigation with contaminated water damages and reduces productivity of pasture and crops, contaminates soil, and impacts on livestock health and production.
SDG 3. Good health and well-being	Ensuring water and sanitation services underpins health targets. It helps to alleviate diarrhoea and malnutrition, which are leading causes of death among children under five. Polluted water is the world's largest health risk. Associated with this are health service costs, decreased life expectancy and emergency health costs related to major pollution events.
SDG 4. Quality education	Water supply and sanitation are key factors in improving student health, thus affecting school attendance and educational outcomes. Adequate water supply is a critical factor for girls in poor rural areas, who spend large parts of each day fetching water, to attend school.
SDG 5. Gender equality	In many communities women and girls bear the burden of collecting water and caring for relatives made sick by lack of water and sanitation services. Economic activities of women are impeded by lack of access to water or lack of decision making power in allocation of water. The role of women in managing water use in agriculture, health care, facility management is essential and not acknowledged and facilitated enough.
SDG 7. Affordable and clean energy	Water is needed for energy production, fossil-fuel extraction and irrigation of feedstock for biofuels. Water provision needs to be made less (fossil fuel) energy dependent; energy provision needs to be less water dependent. Renewables and energy efficiency can reinforce targets related to water access, scarcity and management by lowering water demands and negative impacts on water flows e.g. for energy production. Renewable energy solutions need to prevent negative impacts on water availability and use
SDG 8. Decent work and economic growth	Water is an important input for economic activity and an important growth factor. Water, sanitation and wastewater treatment supports a healthy work force. Enough educated people are needed to ensure reaching the water-related targets. Access to water and sanitation in the workplace is a core component of decent work with positive impact on workers' productivity. Vocational training including for women is essential to ensure enough professional input and management. Career opportunities for women in the sector are crucial. Moving from unpaid to paid, from unsafe working conditions to safe conditions.
SDG 9. Industry, innovation and infrastructure	Industry relies on water resources and infrastructure. Tools like water stewardship standards need to be spread world-wide and implemented.
SDG 10. Reduced inequalities	SDG 6 and its targets can help reduce inequalities by ensuring essential water and sanitation services are available to all.
SDG 11. Sustainable cities and communities	Cities rely on water supply and sanitation. In several countries urbanisation has contributed to water pollution and scarcity. Improving water quality, wastewater treatment, rainwater collection and treatment, efficiency in water use is a prerequisite to sustainable cities and communities.
SDG 12. Responsible consumption and production	Sustainable and efficient use of water resources is fundamental to avoid overexploitation of surface and groundwater.
SDG 13. Climate action	Climate change will alter the intensity, frequency, seasonality and amount of rainfall, aspects which impact surface water flows and groundwater recharge, as well as temperature. Robust water management is a precondition for mitigation.
SDG 14. Life below water	Improving water quality and waste water management can help improving aquatic and marine ecosystems by reducing the pollution load.
SDG 15. Life on land	Ensuring sufficient water to cover ecosystems' needs supports the conservation and restoration of water-related ecosystems. Pressures on ecosystems increase water risks, including water shortages, excesses, pollution, and other risks to freshwater systems (rivers, lakes, aquifers)
SDG 16. Peace, justice and institutions	Achieving the water goal and targets is critical to reducing conflicts within and between countries, and aim for transboundary benefit sharing in river basins.
SDG 17. Partnerships	International co-operation is essential to manage shared water resources; disaggregated data collection and sharing are needed to make adequate analysis and made-to- measure policies.

Source: OECD PCD Unit.

Policies neglecting the interlinkages between water, energy and land can exacerbate problems instead of solving them

The interactions between water (SDG 6), energy (SDG 7), land (SDG 15) and agriculture (SDG 2), are numerous and complex. All are influenced by climate variability and change. Policy decisions made in any one of these sectors can have significant impacts on the others, as well as on other areas of sustainable development.

Agriculture depends on land and water resources, and also on the energy sector. The energy sector needs energy and water resources and, in the case of biofuels, interacts with the agriculture sector. Water supply services require water resources, but also energy services. Water, energy and land are interdependent – unsustainable use of one resource can negatively affect the others (OECD, 2017[13]).

Some agricultural regions rely mainly on surface water, whereas others depend more heavily on groundwater for irrigation. Agriculture has an impact on water quality through the release of excess nutrients and micro-pollutants into surface water and groundwater (OECD, 2017[13]). Water quality can significantly impact agriculture by decreasing plant growth and increasing livestock contamination, thus affecting productivity (OECD, 2017[15]).

Water supply is dependent on energy, which is necessary for the provision of freshwater from surface and groundwater sources or via desalination, water transport and distribution, and the collection and treatment of wastewater. The International Energy Agency (IEA) estimates that in 2014, some 4% of global electricity consumption was used to extract, distribute and treat water and wastewater, along with 50 million tonnes of oil equivalent of thermal energy, mostly diesel used for irrigation pumps and gas in desalination plants. Over the period to 2040, the amount of energy used in the water sector is projected to more than double (IEA, 2016[16]). The dependence of water services on energy availability can hinder the provision of clean drinking water and sanitation services (OECD, 2016[12]).

Water is needed for energy production, the extraction, transport and processing of fossil fuels, power production (including cooling for thermal plants), and irrigation of feedstock for biofuels. It is estimated that roughly 2% of total water for irrigation is used for producing biofuels (OECD, 2017[13]). Water is a critical input for crops used for biofuels, which are the largest source of water withdrawals and consumption for primary energy production. Thermal power plants are the main source of water demand in the power sector, which also withdraws significant amounts of water – mostly from surface water sources. The availability of water affects the viability of energy projects and must be considered when deciding on energy options (OECD, 2016[12]).

Integrated management of water, energy and land resources needs to take into account specific contexts as well as direct and indirect effects of changes in their supply and demand. Sectors using the same resource may compete for access when that resource is under stress; e.g. operations in the energy sector may reduce availability of water for agriculture, and therefore crop yields. A resource becoming scarcer and less accessible may lead to increased use of other resources (substitution). For example, depletion of conventional oil reserves could result in oil and gas resources requiring more water for processing, putting pressure on water resources.

Similarly, resource scarcity may require redirecting the inputs or output of a sector towards other sectors in order to ensure security of supply. In the Middle East, for example, where water is scarce and energy cheap, a significant share of regional energy

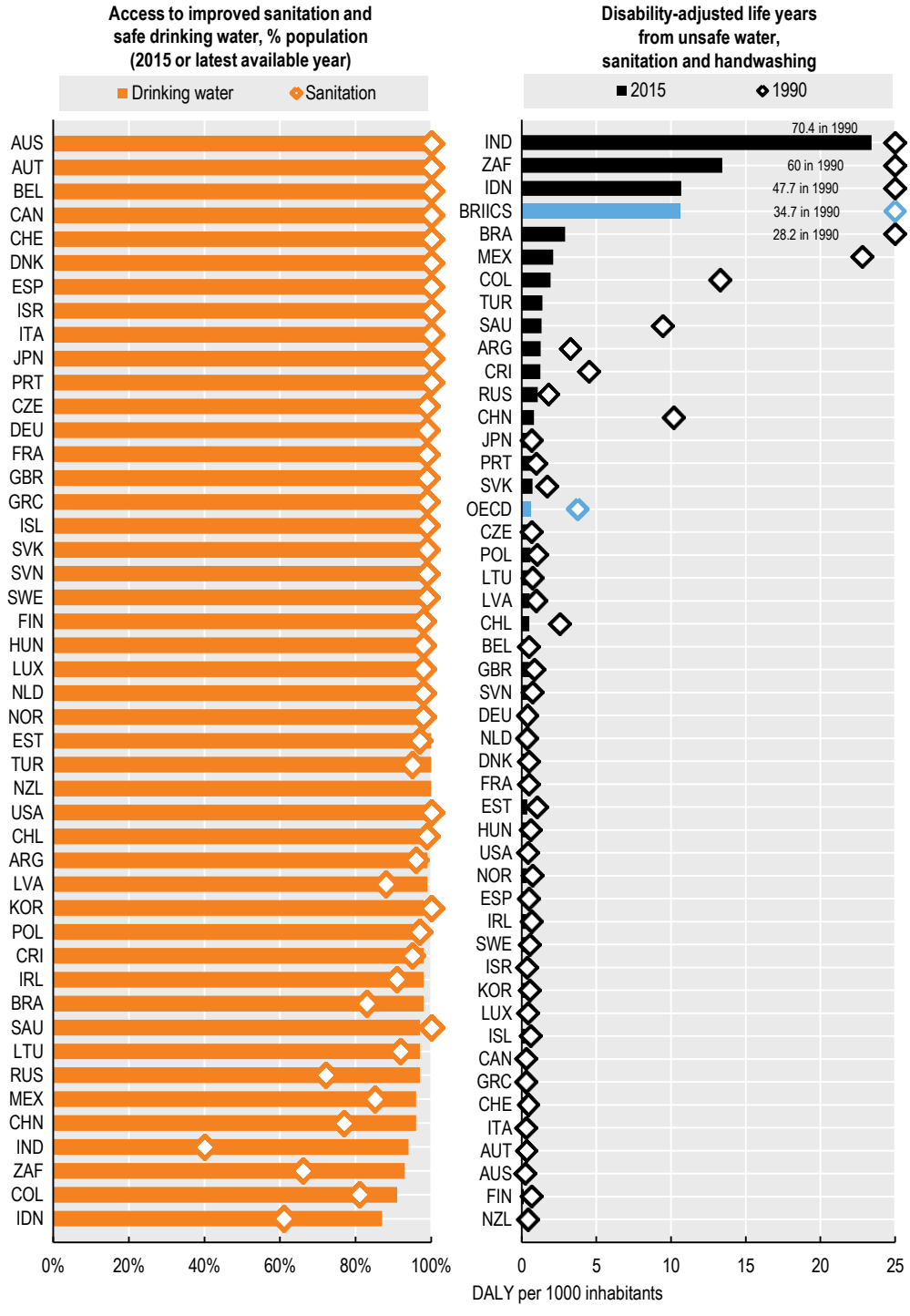
production is used for pumping, transporting and desalinating water. This is beneficial to the water security objective, but represents a cost for society in the form of lower national revenues from energy exports (OECD, 2017[13]). Careful consideration of the land-water-energy nexus is called for in designing policies to remove incentives that encourage unsustainable options, as ignoring their interactions can have negative consequences.

Adequate access to safe water and sanitation is a prerequisite to advance health targets

Ensuring water and sanitation services along with safe wastewater treatment can amplify health gains and reduce mortality and morbidity. For example, improvements of access to safe water and sanitation in Mexico and Turkey have helped to significantly reduce health impacts in terms of disability-adjusted life years (down by 90% since 1990). Similarly, in Brazil, Russian Federation, India, Indonesia, China, and South Africa health impacts are down by 70% or more (Figure 1.2). Greater progress is needed in Indonesia, India and South Africa to increase access to improved sanitation and drinking water facilities. In these countries, the consequent health impacts, premature mortality and productivity losses remain relatively high (OECD, 2017[3]).

Figure 1.2. Access to safe drinking water and improved sanitation

Health impacts from lack of access to safe water and improved sanitation have been reduced, but remain severe in some countries



Note: Data shown in panel A contain estimates.
Source: (OECD, 2017[3]).

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Policy and governance responses

The cost of meeting the SDG targets on access to safe drinking water and sanitation is estimated at around USD 114 billion per year, three times current investment levels (Hutton and Varughese, 2016[17]). Investment needs are significant, but also needed are better policies and water governance to ensure that investments translate into effective service delivery and sustainable solutions. Adequate responses require robust water policies and coherence across policies in domains that affect water availability and use, and exposure and vulnerability to risks of floods, droughts, or water pollution. These must be supported by good governance which combines different levels and engages a range of stakeholders.

The OECD has been providing policy guidance on water since the early 1970s. Dedicated studies, policy reviews and dialogues have documented the economics and governance of water management, while standards provide guidance to countries for more effective, efficient and inclusive design and implementation of policies towards enhanced water security. In December 2016, the OECD Council adopted the *Council Recommendation on Water* (Box 1.2), which reflects the OECD Principles on Water Governance.

Box 1.2. OECD Recommendation on Water

The OECD Recommendation on Water, adopted by the OECD Council on 13 December 2016, proves policy guidance on a range of topics relevant for water resources management and the delivery of water services:

- managing water quantity;
- improving water quality;
- managing water risks and disasters;
- ensuring good water governance;
- ensuring sustainable finance, investment and pricing for water and water services.

It recommends to set up and implement water policies that:

- are adjusted to local conditions, based on long-term water management plans and enhanced policy coherence with climate change adaptation and across various sectors (e.g. land management, food and energy security, urban development, spatial planning, biodiversity protection);
- combine water demand management with the promotion of water use efficiency and allocation regimes that are dynamic, flexible and adjustable to shifting circumstances at least social cost;
- prevent, reduce and control water pollution through regulatory, economic and voluntary policy instruments that hold polluters accountable;
- assess and prioritise water-related disaster risk reduction, and develop emergency management capabilities and financial protection strategies;
- enhance the effectiveness and efficiency of, and trust and engagement in, water governance;
- set up measures for the sustainable financing of water services, water infrastructures, water resources management and the protection of water-related

ecosystems;

- Ensure multi-stakeholder involvement in implementation.

Source: (OECD, 2016[18]).

Water resource management and the need for policy coherence

The effective, efficient and sustainable management of water resources and water services remains a major challenge for all countries as pressures on water resources continue to mount. The global scale of the challenge that can be monetised (excluding environmental risks) is estimated to be USD 500 billion annually. Of these costs, inadequate water supply and sanitation amounts to USD 260 billion per year (Sadoff, 2015[19]). Failure to manage water resources effectively is also resulting in increased pressure on these resources, mounting competition for their use among different economic activities, and, in some regions, conflict (OECD, 2009[20]).

There are limitations to what can be achieved through water policies alone. As mentioned earlier, water availability and use, exposure and vulnerability to water risks (drought, floods, pollution) derive from a variety of initiatives in other domains such as land use, urban development, agriculture, climate and energy. Policy coherence across these areas is essential in ensuring that initiatives mutually reinforce and do not stifle each other.

Enhancing policy coherence is vital to address externalities from multiple sectors and reduce negative impacts on water quality

Policy coherence can help ensure that actions taken by different policy sectors do not have negative impacts on water quality and freshwater ecosystems. Multiple policy sectors affect diffuse water pollution and its management, including: urban development, agriculture, climate, natural resources, forestry, energy, conservation and human health. For example, artificially low production costs in agriculture (induced by input subsidies) distort the market and can encourage food, feed and fibre production that leads to nutrient runoff and eutrophication of water bodies, with economic, social and environmental costs to downstream users. This requires revising policies to achieve more economically, environmentally and socially optimal and sustainable outcomes (OECD, 2017[10]).

Policy coherence, in this context, would entail:

- Removing subsidies that encourage land use change or intensification that results in diffuse water pollution.
- Looking for solutions such as NO_x reductions to improve air and water quality and reduce greenhouse gas emissions simultaneously.
- Integrating water pollution control (both point and diffuse source) with air pollution control, land use management, and water quantity management.

Policy coherence is also required to avoid conflicting signals and incentives. Some government programmes and subsidies inadvertently work in opposition to efforts to improve water quality. For example, policies that support agriculture productivity to preserve land for biodiversity habitat can lead to more intensive use of inputs such as fertilisers and pesticides, and fossil fuel use. Similarly, policies aimed at sustaining flows to protect water quality and ecosystems may be at odds with policies to sustain irrigated

agricultural in semi-arid areas. Energy subsidies can encourage irrigation from groundwater sources, and cause saltwater intrusion with largely irreversible effects on groundwater quality (OECD, 2017[10]).

Section VI of the OECD Recommendation on Water (Box 1.2) includes 12 Principles on Water Governance (Box 1.3). Principle 3 encourages policy coherence through effective cross-sectoral co-ordination, especially among policies for water and the environment, health, energy, agriculture, industry, spatial planning and land use through:

- co-ordination mechanisms to facilitate coherent policies across ministries, public agencies and levels of government, including cross-sectoral plans;
- co-ordinated management of use, protection and clean-up of water resources, taking into account policies that affect water availability, quality and demand as well as risk prevention;
- identification of barriers to policy coherence from practices, policies and regulations within and beyond the water sector, using monitoring, reporting and reviews; and
- incentives and regulations to mitigate conflicts among sectoral strategies, bringing these strategies into line with water management needs and finding solutions that fit with local governance and norms. Principle 10 addresses the involvement of stakeholders in that respect to take a good look at diversity of impacts and needs.

Policy coherence can help formulate policy options that optimise co-benefits across sectors, stakeholders and uses, such as between water quantity and quality management, and other important sectoral policies, such as land, energy, biodiversity, urban planning, health care, waste, construction, transport, and climate change. For example, increasing desalination to improve water security requires large amounts of energy and produces highly concentrated brine. Potential synergies among the sectors should be used to guide formulation of options to maximise gain, optimise positive impacts, and avoid negative impacts (OECD, 2017[10]). Table 1.3 provides examples of the potential positive and negative impacts from water quality interventions.

Table 1.3. Examples of water quality policies and impacts on other sectors

Water quality intervention	*Potential impact*
Wastewater reuse to avoid pollution of rivers	*Negative:* reduced environmental flow of rivers, additional energy requirements to process and/or transport wastewater and sludge from surplus regions to regions with a deficit.
	Positive: utilisation of finite resources, such as phosphate, increased water security.
Higher drinking water quality standards to improve human health	*Negative:* increased energy and chemicals consumption associated with increased water treatment, and increased carbon footprint.
	Positive: reduced health costs.
Conversion to decentralised water and wastewater systems	*Positive:* reduced energy and chemicals consumption and carbon footprint from pumping water over large distances.
Restoration of wetlands	*Positive:* reduced water treatment and energy consumption, increased biodiversity, carbon capture and storage, reduced flood risk.
Soil conservation to prevent erosion and sedimentation	*Positive:* increased land use efficiency, biodiversity, food production, and water and fertiliser efficiency.

Source: (OECD, 2017[10]).

Ensuring access to water for all requires good governance

Managing and securing access to water for all is not only a question of resources, policies and infrastructure, but equally a matter of good governance. Poor governance can deprive large populations of the water services they need.

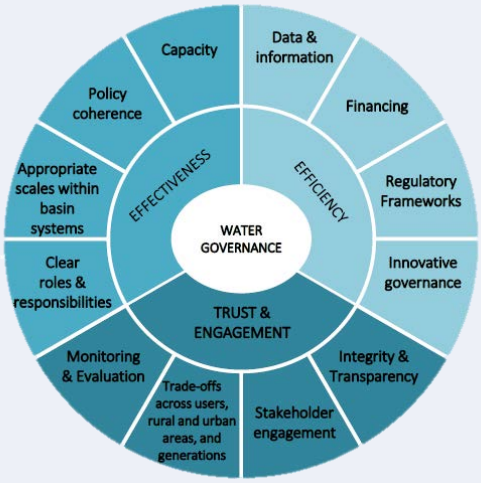
Water governance is defined as the "range of political, institutional and administrative rules, practices and processes (formal and informal) through which decisions are taken and implemented, stakeholders can articulate their interests and have their concerns considered, and decision makers are held accountable for water management" (OECD, 2015[21]). In other words, who does what, at which level and how (OECD, 2011[22]).

The OECD Multi-level Governance Framework identifies seven "gaps" to effective water policy design and implementation. They are intrinsically linked to, or exacerbated by, key features of the water sector (local and global, capital intensive, fragmented, monopolistic, etc.). They relate to the mismatch between administrative and hydrological boundaries (administrative gap), silos and fragmentation (policy gap), diverging rationales and objectives (objective gap), asymmetries of information (information gap), lack of capacity (capacity gap), insufficient resources (funding gap), as well as integrity and transparency (accountability gap) (OECD, 2016[23]).

Many of the challenges that the SDGs try to address cut across multiple scales, levels of government and policy areas. Water connects across sectors, places and people, as well as geographic and temporal scales. Water policy is strongly linked to multiple domains that are critical for sustainable development: health, environment, equality and equity, agriculture, energy, spatial planning, and poverty alleviation. To varying degrees, countries have decentralised water policy, resulting in a strong need for co-ordination to manage interdependencies across levels of government (OECD, 2011[22]) (OECD, 2012[24]). Assigning clear roles across all types of stakeholders and responsibilities across levels of government and coordination mechanisms is essential to ensure a whole-of-government approach so that water can contribute to the broader economic, social and environmental agenda (OECD, 2016[23]).

Viable policy responses to improve water governance would require specific conditions to be met. These include, amongst others: stakeholder engagement, well-designed regulatory frameworks, adequate and accessible information, and sufficient capacity, integrity and transparency. The *OECD Principles on Water Governance* (Box 1.3), welcomed by Ministers at the 2015 meeting of the Council at Ministerial level are reflected in Section VI of the Recommendation on Water. The Principles will guide the implementation of that Section of the Recommendation. They seek to enhance water governance systems to help manage "too much", "too little" and "too polluted" water in a sustainable, integrated and inclusive way. The 12 Principles are organised around three dimensions of water governance: effectiveness, to define clear goals and achieve them; efficiency, to maximise the benefits of sustainable water management and welfare at the least cost to society; trust and engagement, to build public confidence and awareness and ensure inclusiveness of stakeholders through democratic legitimacy and fairness for society at large (OECD, 2015[21]). The OECD Principles have been developed through an inclusive process involving OECD member countries and relevant non-OECD Members, as well as by more than 140 major stakeholder groups gathered in a global water governance initiative.

Box 1.3. Section VI of the OECD Recommendation on Water
OECD Principles on Water Governance



1. Clearly allocate and distinguish **roles and responsibilities** for water policymaking, policy implementation, operational management and regulation, and foster co-ordination across these responsible authorities.
2. Manage water at the **appropriate scale(s)** within integrated basin governance systems to reflect local conditions, and foster co-ordination between the different scales.
3. Encourage **policy coherence** through effective cross-sectoral co-ordination, especially between policies for water and the environment, health, energy, agriculture, industry, spatial planning and land use.
4. Adapt the level of **capacity** of responsible authorities to the complexity of water challenges to be met, and to the set of competencies required to carry out their duties.
5. Produce, update, and share timely, consistent, comparable and policy-relevant water and water-related **data and information**, and use it to guide, assess and improve water policy.
6. Ensure that governance arrangements help mobilise **water finance** and allocate financial resources in an efficient, transparent and timely manner.
7. Ensure that sound water management **regulatory frameworks** are effectively implemented and enforced in pursuit of the public interest.
8. Promote the adoption and implementation of **innovative water governance** practices across responsible authorities, levels of government and relevant stakeholders.
9. Mainstream **integrity** and **transparency** practices across water policies, water institutions and water governance frameworks for greater accountability and trust in decision making.
10. Promote **stakeholder engagement** for informed and outcome-oriented contributions to water policy design and implementation.

11. Encourage water governance frameworks that help manage **trade-offs** across water users, rural and urban areas, and generations.
12. Promote regular **monitoring** and **evaluation** of water policy and governance where appropriate, share the results with the public and make adjustments when needed.

Source: (OECD, 2015[21]).

Engaging stakeholders is crucial to support effective implementation of water policy

Given the size and nature of water challenges, tackling them requires a co-ordinated effort among policy makers and stakeholders. (OECD, 2015[25]). Stakeholder engagement is needed to achieve common objectives, identify preferences, needs and desired outcomes, provide a constructive means for collective decision making about sharing the risks, costs and benefits, and encourage buy-in and compliance with implemented policies. Stakeholder engagement is also required for policy integration, harmonisation, and governance to build synergies and generate co-benefits across sectors and public-private and public-public partnerships (OECD, 2017[10]). To guide public action in that direction, the OECD has developed a set of overarching Principles on Stakeholder Engagement in Water Governance (Table 1.4) intended as a standard for governments to follow when designing water policy and projects. Principle 10 on "promoting stakeholder engagement for informed and outcome-oriented contributions to water policy design and implementation" frames the participatory angle within the OECD Principles on Water Governance (OECD, 2015[25]).

Table 1.4. OECD Principles on Stakeholder Engagement in Water Governance

Principle	Description
1. Inclusiveness and equity	Map all stakeholders who have a stake in the outcome or that are likely to be affected, as well as their responsibility, core motivations and interactions
2. Clarity of goals, transparency and accountability	Define the ultimate line of decision making, the objectives of stakeholder engagement and the expected use of inputs
3. Capacity and information	Allocate proper financial and human resources and share needed information for result-oriented stakeholder engagement
4. Efficiency and effectiveness	Regularly assess the process and outcomes of stakeholder engagement to learn, adjust and improve accordingly
5. Institutionalisation, structuring and integration	Embed engagement processes in clear legal and policy frameworks, organisational structures/principles and responsible authorities
6. Adaptiveness	Customise the type and level of engagement as needed and keep the process flexible to changing circumstances.

Source: (OECD, 2017[10]); (OECD, 2015[25]).

Goal 7: Affordable, reliable, sustainable and modern energy for all

Energy is essential for humanity to develop and thrive. It is central to poverty eradication and economic growth. At the same time, energy production from fossil fuels is the world's primary source of greenhouse-gas (GHG) and air pollutant emissions. Access to modern, affordable (i.e. at a price that does not prohibit use), and reliable (usable for most of the time) forms of energy is a prerequisite for sustainable development. It is a key

priority for countries where universal access has yet to be achieved and on the international agenda. This has been emphasised in two major global agreements adopted in 2015: the 2030 Agenda with its Sustainable Development Goals, which include a standalone goal on energy (SDG 7), and the Paris Agreement on climate change, which acknowledges the need to promote universal access to sustainable energy, particularly in Africa. SDG 7 calls on all countries to ensure access to affordable, reliable, sustainable, and modern energy for all (Box 1.4).

Box 1.4. SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all

7.1 By 2030, ensure universal access to affordable, reliable and modern energy services.

7.2 By 2030, increase substantially the share of renewable energy in the global energy mix.

7.3 By 2030, double the global rate of improvement in energy efficiency.

Targets on means of implementation

7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology.

7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support.

Source: (UNGA, 2015[4]).

Energy challenges

In 2016, around 86% of the world's population had access to electricity. In the same year, according to IEA estimates, the number of people without access fell to 1.1 billion people for the first time, with nearly 1.2 billion people having gained access since 2000. This means that 14% of the world's population, predominantly rural dwellers, still lack access to electricity.

Recent global progress has been driven largely by developing Asia, where 870 million gained access since 2000. Sub-Saharan Africa remains the region with the greatest concentration of energy poverty, with 58% of the population, 600 million people, lacking access to electricity. Urban areas in sub-Saharan Africa have 71% access (14 countries have an urban access rate of below 50%), and only around 22% of rural residents benefit from this service (IEA, 2017[26]). The urban-rural gap in many sub-Saharan African countries exceeds 50% (OECD, 2016[27]).

In some developing countries, there are many people above the poverty line but without access to electricity. This signals the existence of systemic impediments such as the lack of infrastructure and high cost of connection. In sub-Saharan Africa, at least 120 million

people are living above the poverty line but are without electricity access, while in developing Asia, this number is 70 million (IEA, 2017[26]). According to IEA, in many developing countries, access is often unreliable even when households have it. Providing universal energy access for households, however, is not enough to ensure sustainable development. Energy also needs to be available for productive uses such as agriculture, industry and commercial activity to help achieve all SDGs.

Access to clean cooking is essential to simultaneously improving livelihoods, reducing the burden of disease from household air pollution, empowering women, and protecting the environment. Latest IEA estimates show that today about 2.8 billion people still lack access to clean cooking, and progress has not been keeping pace with strong population growth in developing countries. This is particularly the case in sub-Saharan Africa, where the number of people relying on biomass for cooking has grown by 400 million since 2000 (IEA, 2017[26]). IEA also estimates that more than half of the global population lacking clean cooking access lives in Asia, particularly India, where 834 million people still lack access. The problem is also acute in sub-Saharan Africa, where more than 80% of the population cooks with biomass using traditional methods (IEA, 2017[28]). The smoky environments caused by the use of solid biomass in households are a major health hazard that leads to about 2.8 million premature deaths per year (IEA, 2016[16]).

The IEA projection for access to clean cooking shows that the world is far from being on track to meeting the SDG target 7.1 by 2030. In the IEA New Policies Scenario (i.e. with current and planned policies),[1] 2.3 billion people are projected to remain without access to clean cooking facilities. Developing countries in Asia, despite reaching almost universal electrification, still have more than 1.3 billion people without clean cooking access in 2030, around one-third of the population at that time. Even in China, where universal electrification is already complete, around 450 million people still rely on the traditional use of biomass for cooking today and this number only falls to 247 million people in 2030. In sub-Saharan Africa, the number of people without access is projected to increase by 2030, to over 900 million (IEA, 2017[26]).

The transition to modern energy use is a challenging one. Use of modern energy services beyond very basic needs requires those services to be technically available, affordable (i.e. at a price that does not prohibit use), adequate (i.e. sufficient supply and quality of supply), acceptable (in line with historical or cultural factors) and reliable (usable for most of the time). Even in countries that have achieved universal access to energy, such as in most high-income countries, the quality and affordability of access often remains a challenge (IEA, 2017[26]). Furthermore, a transition towards modern energy requires containing the adverse environmental effects from energy use, including carbon emissions and local air pollutants, either by substituting towards less polluting forms of energy or by lowering the demand for energy overall (OECD, 2016[29]).

The efficient use of energy resources is a prerequisite for achieving several of the SDGs. It is central for achieving sustainable economic growth (SDG 8), building sustainable cities (SDG 11), ensuring sustainable consumption and production patterns (SDG 12) and combating climate change (SDG 13). In 2016, global energy intensity, a measure of the amount of primary energy demand needed to produce one unit of GDP, decreased by 2.0% (IEA, 2017[28]). Overall progress towards reducing energy intensity has slowed, according to IEA, if compared to the 2.8% reduction in 2015 progress. Part of the reduction in energy intensity was due to changes in the global economy: for example, production of steel and cement fell by 2-3% in 2015, mainly because of developments in China (IEA, 2016[16]). The 2017 UN Report on progress towards the SDGs, estimates that

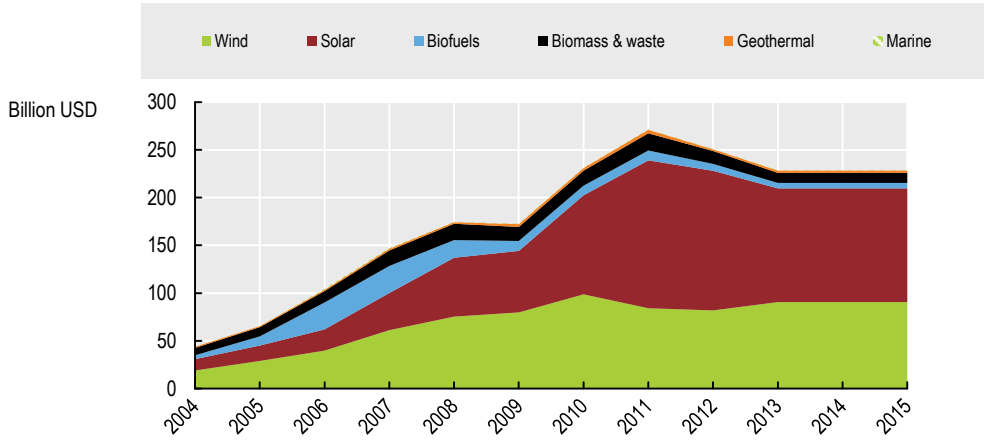
global progress is still not sufficient to meet the target of doubling the global rate of improvement in energy efficiency (UN ECOSOC, 2017[7]).

IEA projects that in the long term all world regions will improve in the energy intensity of GDP. China is projected to improve energy intensity by 3.5% per year on average from 2014 to 2040, followed by India, with an average annual improvement of 3.0%. Energy intensity at the world level will drop by more than 60% by 2040, compared with 2014, but will fall short of the SDG 7 in 2030: the target is 2.1% average annual improvement in the period 2010-2030, while the IEA New Policies Scenario estimates only 1.9% per year in the same period. Although the difference is small, the extra effort needed to reach the SDG 7.3 target is significant and will require stringent energy efficiency measures in all world regions (IEA, 2016[16]).

Renewable energy is fundamental for the transition to a less carbon-intense and more sustainable energy systems. According to the 2017 OECD Green Growth Indicators, new investment flows in renewable energy, both domestic and international, have more than quadrupled since 2005 (Figure 1.3). In 2015, most funds were invested in projects related to wind (38%) and solar (56%) energy. Investment in electricity generation from renewable sources at the global level has surpassed investment in fossil fuel technology, mainly due to falling cost of wind and solar photovoltaics (OECD, 2017[3]). The challenge is to increase reliance on renewable energy in the heat and transport sectors, which account for the bulk of global energy consumption. Despite advances in technology and falling prices in the electricity sector the gains in the energy mix are a fraction of what is needed to meet SDG 7.2 (IEA and the World Bank, 2017[30]).

Figure 1.3. Investment by renewable energy sector

World total, 2004-2015



Source: (OECD, 2017[3]).

Key interactions with other sustainable development goals

The importance of energy is not confined to SDG 7. Energy is also either explicitly or implicitly included in other SDGs as highlighted by the IEA's World Energy Outlook 2017. SDG 3, for example, includes a target to reduce premature deaths from household air pollution (for which lack of access to clean cooking is a primary cause); SDG 11 includes targets on climate change adaptation and mitigation for cities and human

settlements; SDG 12 has a target that aims at reducing harmful and inefficient fossil-fuel subsidies; and SDG 13 aims at taking urgent action to combat climate change.

Action for ensuring universal energy access is also a requirement for achieving other SDGs. For example, a lack of access to modern energy can make it difficult or impossible for a country to confront the numerous challenges that it faces, such as eradicating poverty (SDG 1) for some poor households, a large share of their income may be directed towards low quality and often expensive energy sources such as kerosene. The same is true for delivering quality education (SDG 4). More than 90 million primary school-aged children in sub-Saharan Africa go to a school that lacks electricity, hampering their education and their future economic prospects (IEA, 2017[26]). Some of the key interlinkages between SDG 7 on energy and other SDGs are highlighted in Table 1.5.

Table 1.5. SDG 7 on Energy as prerequisite for achieving the Sustainable Development Goals

Goals	Links with SDG 7 on energy
SDG 1. No poverty	Energy is a basic service, therefore universal energy access reinforces the achievement of SDG 1.4 related to access to basic services.
SDG 2. Zero Hunger	Providing electricity access can enhance agricultural productivity through irrigation, mechanisation and refrigeration. Energy efficiency improvements can reinforce agricultural productivity by reducing the energy inputs needed.
SDG 3. Good health and well-being	Energy is the main source of air pollution linked to severe human health impacts. Efforts to provide energy access, expand renewables, and promote energy efficiency will lead to simultaneous reductions in air pollutant emissions.
SDG 4. Quality education	Ensuring energy access in countries where access to reliable energy services may be lacking can therefore reinforce education goals.
SDG 5. Gender equality	Households relying on biomass for cooking dedicate around 1.4 hours each day collecting firewood, and several hours cooking with inefficient stoves, a burden largely borne by women.
SDG 6. Clean water and sanitation	Water is needed for energy production, fossil-fuel extraction and irrigation of feedstock for biofuels. Renewables and energy efficiency can, in most instances, reinforce targets related to water access, scarcity and management by lowering water demands for energy production (compared to a less-efficient fossil energy supply system).
SDG 8. Decent work and economic growth	Design, manufacture, and installation of renewables and energy efficient technologies can create conditions for new and higher paying jobs.
SDG 9. Industry, innovation and infrastructure	Retrofitting existing infrastructure to make it energy efficient as well as building resilient infrastructure, promoting inclusive and sustainable industrialisation and fostering innovation are pre-conditions for achieving the SDG 7 targets on access to energy services, increasing the share of renewables in the energy mix, and increasing energy efficiency.
SDG 10. Reduced inequalities	Ensuring energy access and increasing the share of some types of renewable energy (such as agriculture and forest-based bioenergy) can enable educational, health and employment opportunities for the rural poor, with positive effects on income and equality
SDG 11. Sustainable cities and communities	Energy is central to urbanisation; energy allows cities to grow and perform. Clean, efficient energy systems, in particular, create the conditions for cities and human settlements to be inclusive, safe, resilient, less-polluting, and more sustainable.
SDG 12. Responsible consumption and production	Phasing out inefficient, wasteful, and market-distorting fossil fuel subsidies – in a way that minimises counteracting adverse side-effects on the poor – could reinforce attempts to deploy renewables and energy-efficient technologies and consumption patterns.
SDG 13. Climate action	Energy is the main source of global greenhouse-gas (GHG) emissions. Decarbonising energy systems through an up-scaling of renewables and energy efficiency is a necessary but not sufficient condition for combatting climate change. Less fossil energy means lower CO_2 emissions.
SDG 14. Life below water	Upscaling of renewables and energy-efficient technologies and consumption patterns can help decrease ocean acidification (via lower carbon emissions).
SDG 15. Life on land	Land-use changes involved in extensive renewable energy production such as hydroelectric dams may conflict with targets aimed at protecting terrestrial ecosystems, halting deforestation, and preventing biodiversity loss

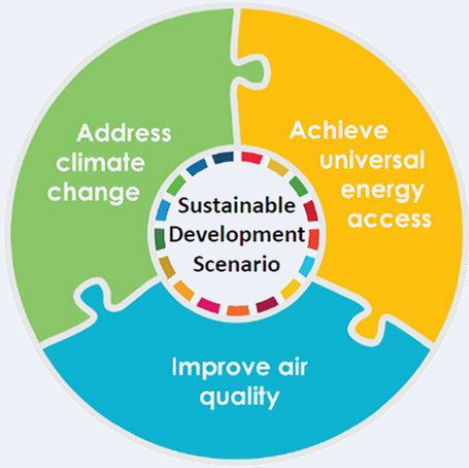
SDG 16. Peace, justice and institutions	Effective, accountable and transparent institutions are needed at all levels of government for creating the conditions necessary to be able to ensure universal energy access, increase the share of renewables and increase energy efficiency.
SDG 17. Partnerships	Ensuring access to affordable, reliable, sustainable and modern energy for all, requires that all countries are able to mobilise the necessary financial resources and willing to disseminate knowledge and share innovative technologies

Source: Adapted from (ICSU, 2017[31]).

There are strong linkages between SDG 7 on energy, SDG 13 on climate change, SDG 3 on health (air pollution) and SDG 11 on cities. The links between these interrelated areas are also considered in the Paris Agreement, whose objective to strengthen the global response to the threat of climate change is explicitly framed in the context of sustainable development and efforts to eradicate poverty (IEA, 2017[28]). The IEA's World Energy Outlook 2017 has introduced a new integrated approach – the Sustainable Development Scenario – to energy and sustainable development which provides a benchmark for measuring progress towards three SDGs that are closely related to energy: SDG 13, SDG 3 and SDG 11 (Box 1.5).

Box 1.5. The IEA Sustainable Development Scenario: Integrating climate, air pollution and universal energy access

The IEA's *World Energy Outlook 2017* (WEO 2017) introduces a Sustainable Development Scenario' which offers an integrated approach to achieve key interrelated SDGs: to address climate change (SDG 13) while also tackling air pollution and thereby contributing to health (SDG 3.9) and achieving universal energy access (SDG 7.1). Unlike other scenarios in the WEO 2017, which track current and planned policies, the Sustainable Development Scenario starts from a set of desired outcomes and considers what would be necessary to deliver them. Central to these outcomes is the achievement of an early peak in CO_2 emissions and a subsequent rapid decline, consistent with the Paris Agreement.



In the Sustainable Development Scenario:

- Universal access to electricity and clean cooking can be reached at least cost

without threatening the achievement of climate target, and with substantial air pollution benefits.

- The 2030 targets for renewables and efficiency that are defined in SDG 7 are met or exceeded.
- The share of low-carbon sources in the energy mix doubles to 40% in 2040, all avenues to improve efficiency are pursued, coal demand goes into an immediate decline and oil consumption peaks soon thereafter.
- Power generation is all but decarbonised, relying by 2040 on generation from renewables (over 60%), nuclear power (15%) as well as a contribution from carbon capture and storage (6%) – a technology that plays an equally significant role in cutting emissions from the industry sector.
- Electric cars move into the mainstream quickly, but decarbonising the transport sector also requires much more stringent efficiency measures across the board, notably for road freight.

Source: (IEA, 2017[28]).

Action on one of these goals can support the achievement of another. For example, the universal provision of clean cooking facilities means a comprehensive shift away from the traditional use of solid biomass as a cooking fuel, and thereby also removes the main cause of household energy-related air pollution. Ending the traditional use of biomass for cooking also reduces GHG emissions, even when replaced by liquefied petroleum gas (LPG), therefore creating a net climate benefit. Another important synergy between SDG targets includes the provision of renewables, especially decentralised solar, as the least-cost option for delivering universal electricity access with co-benefits for climate and air pollution. The climate requirements to deploy more efficient technologies and to reduce reliance on energy from fuel combustion – including through clean electrification of end-uses – have co-benefits in terms of lower pollutant emissions (IEA, 2017[28]). This can also support the achievement of targets related to health (SDG 3.9), given that an estimated 2.8 million premature deaths per year are due to a reliance on solid biomass and coal for cooking and the use of candles, kerosene and other polluting fuels for lighting (IEA, 2017[26]). There is a clear need to shift towards integrated policy making. Focussing on a specific goal in isolation might risk a lock-in of energy sector pathways that impede the achievement of other goals, or at least makes their attainment more expensive or more difficult (IEA, 2017[28]).

Integrated approaches to energy and water are essential to realise a range of sustainable development goals

Most of the weaknesses in the global energy system related to energy access, energy security or the environmental impacts of energy use, can be exacerbated by changes in water availability, variability and predictability (OECD, 2016[12]). Managing energy-water linkages is essential to ensure that the development of one sector does not have unintended consequences for the other. There are several connections between the goals on clean water and sanitation (SDG 6) and affordable and clean energy (SDG 7) that, if managed well, can help with the attainment of both sets of targets. There are also many economically viable opportunities for energy and water savings that can relieve pressures on both systems, if considered in an integrated manner.

The provision of energy subsidies to farmers, for example, can have the unintended consequence of encouraging farmers to use water inefficiently and pump aquifers at an unsustainable rate. In addition to concerns about water quantity, there are also concerns about the impact on quality, due to the potential run-off of effluent, which can contain high levels of fertilisers and pesticides, and soil erosion which can pollute waterways. Similarly, efforts to shift towards a lower carbon pathway and tackle climate change could exacerbate water stress in some cases, or be limited by water availability. Some technologies, such as wind and solar photovoltaic (PV), require little water; but the more a decarbonisation pathway relies on biofuels the more water it consumes. As a result, despite lower energy demand, water consumption would increase (IEA, 2016[16]).

Providing electricity access to a region can vastly enhance agricultural productivity through irrigation, mechanisation and refrigeration - increasing food security, and livelihoods/economic growth, and reducing climate vulnerability.

Energy is crucial for cities

The level and type of energy cities use affect not only the economy, the environment and the well-being of their citizens but also that of residents elsewhere. Cities mainly depend on fossil fuels, and they both cause and suffer from their negative effects including air pollution, congestion and noise. It is estimated that approximately 71% of global energy-related emissions of carbon dioxide are caused by energy use in cities. Cities' demand for energy is increasing, and fluctuations in energy prices impact on citizens as well as industrial activity. Any disruption of the energy supply can affect large numbers of the population, as well as production through supply chains. Energy consumption in cities is expected to continue to increase as the urban population increases. Overcoming these challenges would require, first, enhancing the cities' energy management to improve energy efficiency and to reduce energy consumption. Second, it would entail reducing the dependence on fossil fuel by deploying renewable energy in cities (Sugahara and Bermont, 2016[32]).

Policy and governance responses

An IEA projection indicates that the provision of electricity and clean cooking for all would require USD 786 billion in cumulative investment in the period to 2030. This would mean an additional USD 31 billion per year on top of the USD 25 billion per year projected under the IEA New Policies Scenario, with sub-Saharan Africa accounting for the largest share of additional investment, followed by developing Asia. Providing energy for all requires scaling-up in financing from a range of sources, including development banks, governments, bilateral development assistance as well as the private sector and especially long-term investors with large available funds. The private sector is increasingly engaged, and new business models and creative partnerships are increasing the pool of potential investment for projects from large-scale infrastructure to targeted micro schemes (IEA, 2017[26]).

In many cases several obstacles still hamper investment in renewable energy. These obstacles result from market and government failures – including fossil fuel subsidies as well as barriers to international trade and investment. A key challenge to catalyse investment flows in clean energy is to design and implement clear and predictable domestic policy frameworks (OECD, 2015[33]). The OECD Policy Guidance for Investment in Clean Energy Infrastructure provides governments with a tool to identify ways to engage private enterprises in financing and developing clean energy

infrastructure. It also provides policy makers with checklist to consider for enhancing private investment in clean energy infrastructure, including in electricity generation from renewable energy sources and improved energy efficiency in the electricity sector, particularly in five key areas: investment policy; investment promotion and facilitation; competition policy; financial market policy; and public governance. It also addresses cross-cutting issues, such as regional cooperation for promoting clean energy infrastructure (OECD, 2015[33]).

Additional investments alone will not be sufficient. Strategies to achieve SDG 7 and deliver universal access need to be tailored to local conditions and underpinned by firm political commitments, supportive enabling and regulatory frameworks, removal of misalignments (aligning policies for a low-carbon transition) and obstacles in the political economy, engagement with the private sector, appropriate financing options and investment, capacity building and close consultation from the outset with local communities, especially women. While each country will take a different way to achieve SDG 7 and ensure energy for all, there are some general lessons from experience which can help in the process. Box 1.6 summarises some of these lessons.

Box 1.6. Achieving affordable and clean energy for all by 2030, some lessons learnt

IEA analysis highlights key actions that can help ensure "no one is left behind" – the imperative of the Sustainable Development Goals:

- ***Implement policies that encourage a wide range of solutions and business models, avoiding barriers to new entrants.*** Where progress has occurred, it is because policies have been clear and consistent, encouraged cost-effective investment from a wide range of financial streams and engaged a wide range of stakeholders, including the local community.
- ***Facilitate rural electricity access by creating suitable conditions for off-grid investment, and by making provision for subsequent connection of decentralised solutions to the grid.*** On-grid and decentralised solutions are complementary, and their relative share depends on a country's circumstances. Co-ordinated, flexible planning that encourages investment in both and makes provision to integrate them is the quickest and most resilient way to achieve access for all.
- ***Make energy efficiency an integral part of energy access policies.*** Efficient appliances and lighting, such as light-emitting diodes (LEDs), enable consumers to access more energy services for lower overall investment. It also facilitates the uptake of new business models and improves the affordability of off-grid solutions.
- ***Take a holistic approach and include productive uses in energy access policies and targets.*** Electrification strategies should take into account other development goals and opportunities to use energy access to stimulate economic activity and create jobs in addition to household electrification. Actions taken to achieve energy for all can complement those taken to address climate change.
- ***Encourage a shift to clean cooking.*** Despite the scope of the challenge, access

to clean cooking receives less attention than access to electricity. For people to move away from solid biomass, policies and programmes need to reflect local needs and expectations, account for social and cultural factors, clearly explain the health risks, and empower decision makers in household cooking matters.

Source: (IEA, 2017[26]).

Pricing carbon emissions can be a powerful, cost-effective tool for steering producers and households towards low-carbon, less-polluting behaviour and investments. Carbon pricing provides countries with a low cost tool to effectively and gradually reduce emissions starting immediately. It can lead to substitution towards less polluting forms of energy and lower the demand for energy overall (OECD, 2016[29]). Any adverse impact on vulnerable population groups from taxes and higher prices could be addressed by targeted benefit schemes (Flues and van Dender, 2017[34]). However, current use of carbon pricing, via taxes or emissions trading systems, does not live up to its potential. 90% of carbon emissions from energy use across 41 countries are priced below a very conservative estimate of the climate cost of emissions (OECD, 2016[29]).

Goal 11: Make cities and human settlements inclusive, safe and sustainable

Cities are central for advancing sustainable and inclusive development. They are critical drivers of growth and well-being. They generate about 80% of global gross domestic product (GDP). Just 2% of OECD regions, mainly the largest OECD urban areas, generate roughly one-third of all growth in the OECD. In both India and China, the five largest cities' economies contribute approximately 15% of national GDP (OECD, 2013[35]). Cities across the world also contribute to energy consumption, and thus to climate change. They account for an estimated 70% of global energy use and related greenhouse gas (GHG) emissions (OECD, 2017[36]). At the same time, Cities have a higher capacity than other parts of the country to push individuals up the income, education or jobs ladder, and therefore drive social mobility (OECD, 2016[1]).

Cities concentrate economic growth *and* inequalities. Income inequality, for instance, is higher in cities relative to the respective national average and tends to be higher in larger cities. Across a range of dimensions – health, housing, education, jobs – well-being outcomes vary considerably *within* and *across* cities. Local governments also have a hand in many of the policy areas that affect inclusion, sustainability and economic growth; depending on the country, cities may have some responsibilities relating to transport, land use, housing, education, workforce development, health care and other key public services, and many others. This means that cities can also be a key part of the solution to addressing challenges relating to inequality and sustainability.

The 2030 Agenda for Sustainable Development recognises that cities and urban development are crucial to the quality of life of people. The stand-alone urban goal (SDG 11) highlights the role of cities as drivers of sustainable development and in the achievement of SDGs (Box 1.7), although the 2030 Agenda was not designed specifically *for* or *by* them. Indeed, most underlying policies and investments are a shared responsibility across levels of government and it is estimated that 65% of the 169 targets underlying the 17 SDGs will not be reached without proper engagement of, and coordination with, local and regional governments (SDSN, 2016[37]). For example, subnational governments were responsible for 59.3% of total public investment in 2015

throughout the OECD area and for almost 40% worldwide (OECD/UCLG, 2016[38]). Most of such investments are related to infrastructure for basic services over which cities and/or regions have core competences, and which are sometimes the subject of dedicated SDGs (e.g. education, health, social infrastructure, drinking water, sanitation, solid waste management, transport, and housing).

Box 1.7. SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable

11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.

11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.

11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.

11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage.

11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.

11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.

11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.

Targets on means of implementation

11.a Support positive economic, social and environmental links between urban, per-urban and rural areas by strengthening national and regional development planning.

11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels.

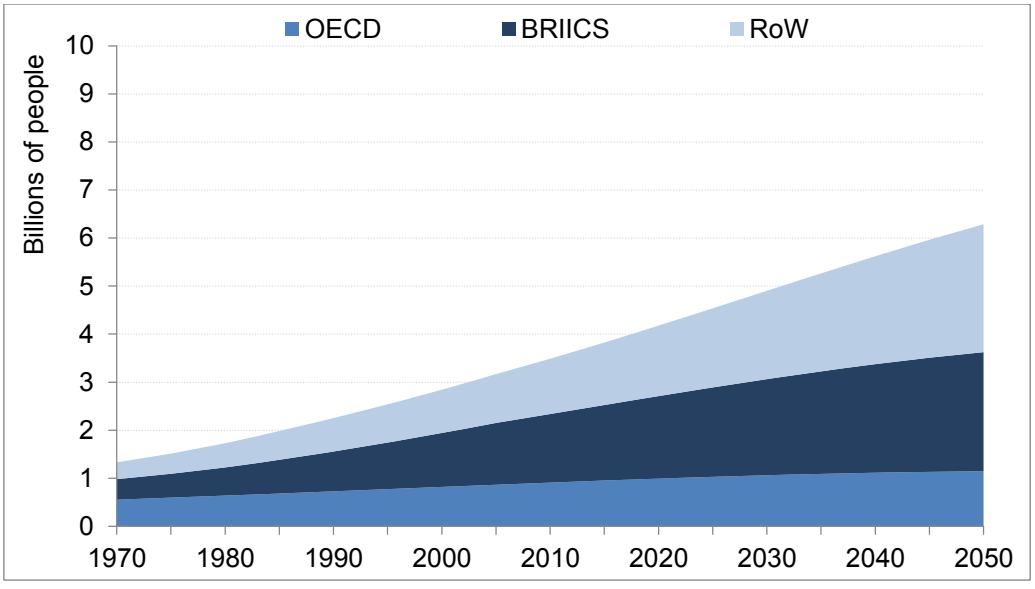
11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials.

Source: (UNGA, 2015[4]).

The urbanisation challenge

The world's population is increasingly urbanised (Figure 1.4). In 1970, 1.3 billion people, or 36% of the world population, lived in urban areas. By 2009 that share had reached 50% (OECD, 2012[14]). In 2015, close to 4 billion people — 54% of the world's population — lived in cities (UN ECOSOC, 2017[7]). This trend is expected to continue, reaching 60% in 2030, and nearly 70% in 2050 (OECD, 2012[14]). The increase in absolute numbers to 2050 is 2.8 billion, which implies that the total world population growth between 2010 and 2050 (more than 2.2 billion people) would be completely absorbed by urban areas. Rural population is projected to decrease by 0.6 billion people over the same period. Within 150 years, the urban population will have increased from less than 1 billion in 1950 to 9 billion by 2100 (OECD, 2015[39]).

Figure 1.4. Urban population by region, 1970-2050



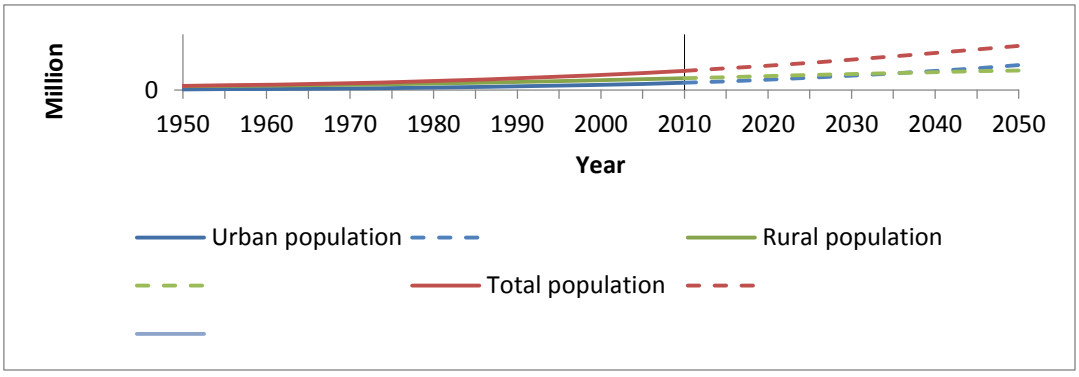
Source: (OECD, 2012[14]).

StatLink http://dx.doi.org/10.1787/888932570126

Across OECD countries, metropolitan areas (defined as urban agglomerations with more than 500 000 inhabitants) cover only 4% of the land, but account for roughly half of the population. Asian OECD countries are particularly urbanised, with roughly 80% of the population living in urban agglomerations and around 70% of the population living in metropolitan areas. In Latin America, urbanisation levels are at around 80%. The share of urban population in OECD countries is projected to be about 86% of total population by 2050 (OECD, 2015[39]).

Africa has the highest current rate of urbanisation globally, although it remains the least urbanised region of the world (OECD, 2015[39]). The share of urban residents has increased from 14% in 1950 to 40% today. By the mid-2030s, 50% of Africans are expected to become urban dwellers (Figure 1.5). Urbanisation is likely to continue and level off at about 56% around 2050 (AfDB/OECD/UNDP, 2016[40]). In Sub-Saharan Africa, urban dwellers accounted for about 37% of the total population in 2010 – however, their share is projected to reach 60% by 2050 (OECD, 2012[14]).

Figure 1.5. Growth trends in Africa's urban, rural and total population, 1950-2050



Source: (AfDB/OECD/UNDP, 2016[40]).

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Rapid urbanisation is bringing about challenges and opportunities. Some of the major challenges include: growing numbers of slum dwellers; uncontrolled urban sprawl; inadequate basic services and infrastructure; and outmoded transport systems which exacerbates pollution and associated environmental risks as well as socio-economic costs, making cities more vulnerable to disasters. Urban slums – with substandard housing and inadequate water, sanitation and waste management services – have negative consequences for human health and the environment. This could become magnified with further urbanisation unless more ambitious urban development and environmental management policies are put in place. This is especially so as the number of people living in slums could grow, despite the projected increase in average GDP levels (OECD, 2012[14]).

The proportion of the urban population that lives in developing country slums fell from 39% in 2000 to 30% in 2014 (UN ECOSOC, 2017[7]). Despite some gains, the absolute number of urban residents who live in slums continued to grow, owing in part to accelerating urbanisation, population growth and lack of appropriate land and housing policies. Globally, an estimated 880 million people (urban residents) were living in slums in 2014 compared with 792 million in 2000 (UN ECOSOC, 2016[6]). In Africa 62% of people live in slum conditions without access to clean water, sanitation, education, and social services. The absolute number of the world's slum population has been rising over the past 25 years, from 650 million in 1990 to nearly 1 billion today (Clos, 2016[41]). Many African countries face a real risk of tripling their slum population by 2050 (AfDB/OECD/UNDP, 2016[40]).

From 2000 to 2015, in all regions of the world, the expansion of urban land outpaced the growth of urban populations. As a result, cities are becoming less dense as they grow, with unplanned urban sprawl (UN ECOSOC, 2017[7]). Uncontrolled urban sprawl is undermining some of the key determinants of sustainable development. For example, for every 10% increase in sprawl, there is a 5.7% increase in per capita CO_2 emissions (UN ECOSOC, 2016[6]). Cities in many OECD countries are sprawling – that is, the growth in the built-up area has outpaced the population growth. Across all OECD countries built-up areas now cover 1.11% of the total land area, a 30% increase since 1990 (Figure 1.6) (OECD, 2017[3]).

Figure 1.6. Built-up area per capita is increasing, including in countries that are already very urbanised, 1990-2014

Source: (OECD, 2017[42]).
Note: The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

The expected growing pace of urbanisation has positive and negative consequences. With the concentration of economic activities in urban areas, urbanisation can lead to higher economic growth. Conversely, a greater concentration of economic activities can also cause higher levels of exposure to outdoor air pollution and could worsen environmental conditions in slums, with serious consequences for human health (OECD, 2012[14]).

Air pollution is a major environmental health risk worldwide, particularly in big cities and highly populated areas. Outdoor air pollution has consequences for the environment, with impacts on crop yields, biodiversity, land and water, and on human activities, with impacts on visibility and on buildings and materials, including cultural heritage. These negative impacts lead to high economic costs. The cost of the health impacts of air pollution in OECD countries (including deaths and illness) was USD 1.7 trillion in 2010. The cost of the health impact of air pollution in 2010 was estimated to be USD 1.4 trillion in China, and USD 0.5 trillion in India (OECD, 2016[43]).

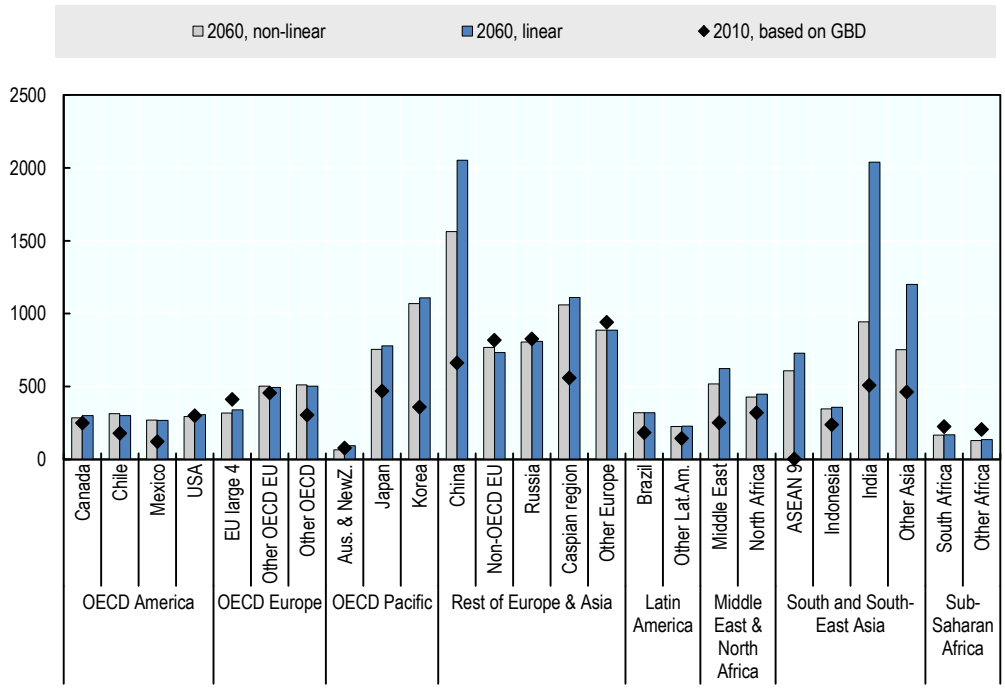
Air pollution is mainly a "city issue". In 2014, 9 of 10 people who live in cities were breathing air that did not comply with the safety standard set by the World Health Organization (WHO), according to the last Report on progress towards the SDGs (UN ECOSOC, 2017[7]). In same year, around half the global urban population was exposed to air pollution levels at least 2.5 times higher than maximum standards set by the WHO

(UN ECOSOC, 2016[6]). Around 98% of cities in low- and middle income countries and 56% of cities in high-income countries do not meet WHO air quality guidelines (OECD, 2016[43]).

Outdoor air pollution is the cause of more than 4.4 million premature deaths per year at global level (OECD, 2017[3]). It is estimated that Outdoor air pollution could cause 6 to 9 million premature deaths a year by 2060 and cost 1% of global GDP – around USD 2.6 trillion annually. By 2060 the number of premature deaths from dirty air could double, or even triple, according to OECD projections – this means one premature death every four or five seconds (OECD, 2016[43]). India and China are projected to have an extremely high number of premature deaths per million people, while Africa, Oceania and Latin America are by contrast the regions with the lowest number of premature deaths per million people (Figure 1.7).

Figure 1.7. Premature deaths from exposure to particulate matter and ozone

Number of deaths caused by outdoor air pollution per year per million people



Source: (OECD, 2016[43]).

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Income inequality – which has been rising in the last decades – is higher, on average, in cities than in their respective countries. Moreover, the larger the city, the greater is its income inequality. Copenhagen, Brussels, Paris and Santiago all record the highest Gini coefficients in their respective countries (OECD, 2016[44]). Where people live in a city has an important impact on well-being, as much as or more so than their income. Life expectancies, for example, differ by a staggering 20 years across neighbourhoods in Baltimore and London. When income, jobs and health are considered together, differences in overall living standards in the different places within a country are starker

than those in terms of income only, showing that different well-being outcomes amplify the concentration of prosperity or exclusion in regions (OECD, 2016[44]).

Moreover, cities are split across economic lines, which may reproduce disadvantages across generations. Residential segregation – in which individuals with shared characteristics, such as income level, race or ethnicity, are spatially concentrated – has been increasing in many OECD countries over the past decades, though the trends, challenges and drivers differ across countries (OECD, 2016[44]). OECD evidence finds that the *most* income segregated cities in the Netherlands and France are at comparable levels to the *least* segregated cities in the United States (OECD, 2016[44]). People living in disadvantaged areas often have lower quality public services, which undermines opportunities. These disadvantages can weigh on future generations and limit social mobility. Evidence suggests that transport plays a crucial role in this regard: a lack of, or poor access to, transport options is central to limitations on access to jobs, educational institutions, health facilities and social networks, which in turn can generate a "poverty trap" (ITF, 2017[45]).

The role of cities and key interactions with other sustainable development goals

Cities need to address the SDGs holistically. With populations increasingly urbanised, achieving the SDGs within cities will significantly contribute to reaching these goals on a broader national scale. The SDGs are tackling intimately interconnected problems where the particular conditions in a place matter. For example, sustainable and integrated urbanisation processes will have important implications for CO_2 emissions. Improved rural development has considerable benefits for food security in rural areas. Focusing on targets in a single-minded way ignores both the compounded benefits of joint action as well as the potentially perverse effects of supporting one target in a way that detracts from success in another target (OECD, 2016[46]). Cities, therefore, should address the SDGs as a framework of highly interconnected and interdependent goals that require high degrees of policy coherence and in which all levels of government and society are actively involved.

The role of cities in achieving the SDGs goes beyond SDG 11. Cities can and should play a role to address all the 17 goals. Some cities and regions are already moving towards this direction and have started working on the localisation of the SDGs (two interesting examples include New York and Medellin). Despite these initiatives, there is a significant lack of a coordinated and coherent action across and within OECD and partner countries able to support in a more systematic fashion cities (in particular medium and small size municipalities) that are willing to use the 2030 Agenda to guide their policy making, planning and investment strategies.

Integrated water management in cities will significantly contribute to the global goal on water

The Sustainable Development Goals (SDGs) call for action in relation to water management in cities, as reflected in SDG 6 and SDG11. As cities will be increasingly exposed to the risks of "too much" (e.g. floods), "too little" (scarcity and droughts) and "too polluted" water over the coming years, developing governance frameworks that can foster greater resilience and help adapt to changing circumstances is particularly important for cities to prepare for the future (OECD, 2016[23]).

In several countries, urbanisation has contributed to water pollution and scarcity. Between 1960 and 2000, the rate of groundwater depletion more than doubled, reaching over 280

km^3 per year worldwide. Groundwater depletion could become the greatest threat to urban water supplies in several regions in the coming decades, resulting in potential high replacement costs to secure alternative sources of water (OECD, 2017[47]). The impact of large cities on pollution and ground water levels has been determined by population growth and the quality of water management in the respective areas. Fragmentation in water policy has resulted in co-ordination problems in water governance, which have a large share of responsibility for observed degradations.

Water quality has also suffered from bad sanitation systems and insufficient wastewater clearing. Wastewater in many cities is still flowing untreated into groundwater, rivers and coastlines. In developing countries, up to 90% of all wastewater is released in an untreated form, leading to the spread of diseases such as cholera and typhoid. This reinforces water shortages as polluted water is not available for the supply of drinking water. However, while for some cities scarcity of water is a real problem, as available water resources have to be brought over fairly long distances, problems with wastewater are not genuine to large cities per se, but simply result from bad policies and often lack of co-ordination (OECD, 2017[47]).

Cities play a central role in moving the sustainable energy agenda forward

Energy consumption in cities is primarily based on fossil fuels, and cities suffer from their negative environmental effects, including emissions of greenhouse gases (GHG) and air pollution. Energy demand in cities is projected to grow by 57% between 2006 and 2030. It is expected to account for 73% of the world's energy consumption by 2030. Approximately 71% of global energy-related emissions of CO_2 are caused by energy use in cities. The share of fossil fuels in urban energy demand was 86% in 2006, substantially higher than the 69% outside cities (Sugahara and Bermont, 2016[32]).

As energy demand in cities is projected to grow, strategies for sustainably managing energy in cities can contribute to the well-being of urban residents but also to achieving national energy policy objectives as well as energy goals at the global level, such as SDG 7. National governments as well as sub-national governments have a key role in developing and implementing coherent energy policies that achieve multiple objectives such as improving energy efficiency and reducing energy consumption; decreasing fossil fuel dependence by deploying renewable energy in cities; and managing energy with a view to build resilience and help cities anticipate and absorb shocks, as well as recover and adapt to the impact of chronic economic, environmental and social pressures.

Transport has a critical role in the global decarbonisation process

The rapid urbanisation will create substantial new demand for mobility in cities, making the provision of efficient, sustainable and equitable transport even more of a challenge. The combined effects of rapid urbanisation, income growth and rising private vehicle ownership will result in a surge in emissions, congestion and public health issues. Emissions from this sector keep on rising globally. At 7.5 billion tonnes in 2015, the sector represents 23% of fuel-burn CO_2 emissions globally, or 18% of all man-made CO_2 emissions. The higher efficiency of transport in developed economies does not compensate the much higher rate of travel and freight movements. On average, inhabitants of OECD countries emitted around 2.8 tonnes of CO_2, whereas in non-OECD countries, emissions amounted to 0.5 tonnes. It is expected that the emissions in developing economies will rise to levels comparable with OECD countries (ITF, 2017[45]).

Energy used in road transport is effectively taxed at higher levels than in other sectors across 42 OECD and partner economies (OECD, 2016[29]; OECD, 2013[48]; OECD, 2015[49]) which generates useful revenue for government. Setting tax rates at a level that better reflects the external costs of energy, would mitigate negative environmental effects more effectively while raising additional revenue – also in developing economies.

Sustainable transport is implicit in seven of the 17 SDGs and is covered directly by five targets and indirectly by seven (Table 1.6). The targets are wide reaching and cover, among other issues, road safety (Target 3.6), enhancing the visibility, urgency and ambition of global road safety policy. This is essential as today over 1.2 million people die in road crashes every year, with millions more injured. Another target (11.2) highlights a profound change likely to transform urban passenger transport. Aiming to "provide access to safe, affordable, accessible and sustainable transport systems for all" by 2030, this target touches upon road safety, infrastructure development and the need to pay special attention to people in vulnerable situations, such as women, children, persons with disabilities and older persons. It underlines the need to shift the focus of policies and investment from time savings and transport demand to accessibility. Under this new paradigm, equal access for all to jobs, services and other opportunities takes precedence over small changes in travel times or passenger-kilometre numbers. This new approach deeply modifies the perceived role of transport infrastructure and services, as well as the policy appraisal process. These goals set a pathway for transforming the world's mobility over the next 10 to 15 years (ITF, 2017[45]).

Table 1.6. Transport related targets in the Sustainable Development Goals

Goal	Target
SDG 2 Zero hunger	***Target 2.3.*** Double the agricultural productivity and income of small scale food producers (access to markets).
SDG 3 Good health and well-being	***Target 3.6.*** Halve number of global deaths and road injuries from traffic accidents.
	Target 3.9. Reduce deaths and illnesses from pollution.
SDG 7 Affordable and clean energy	***Target 7.3.*** Double the global rate of improvement in energy efficiency.
SDG 9 Industry, innovation and infrastructure	***Target 9.1.*** Develop sustainable and resilient infrastructure.
SDG 11 Sustainable cities and communities	***Target 11.2.*** Provide access to safe, affordable, accessible and sustainable transport systems for all.
	Target 11.6. Reduce the adverse environmental impact of cities.
SDG 12 Responsible consumption and production	***Target 12.c.*** Rationalise inefficient fossil-fuel subsidies.
SDG 13 Climate action	***Target 13.1.*** Strengthen resilience.
	Target 13.2. Integrate climate change measures into national plans.

Source: (ITF, 2017[45]).

Policy and governance responses

With the projected increase in urban population, the way in which cities are planned and managed will have vast economic, social and environmental implications of crucial importance for achieving the SDGs. Making cities and human settlements inclusive, safe, resilient and sustainable, as called for by SDG 11, will require improving the planning, finance and management of cities. Locking in fragmented and unsustainable urban development patterns can have dramatic results economically, socially and environmentally. This can generate excessive contributions to global carbon emissions, inadequate water supply and sanitation, poor air quality, inefficient and car-dependent

transport networks and, in many places, informal settlements and shanty towns, and thus affecting the achievement of many SDGs and targets (OECD, 2015[39]).

Developing National Urban Policies is essential to achieve local, national and global goals

A national urban policy (NUP) – defined as the coherent set of decisions from a government led process of co-ordinating various actors for a common vision that will promote more productive, inclusive and resilient urban development – has been recognised by the international community as an essential policy instrument to harness the dynamics of urbanisation in order to achieve national and global goals. An NUP does not replace local urban policies, but complements them to create the necessary conditions for sustainable urban development (OECD, 2017[50]). As of May 2017, 149 countries had a national-level urban policy in place or under development (UN ECOSOC, 2017[7]). Those countries are home to more than 75% of the world's urban population.

The large majority of OECD countries with explicit NUPs are still in the early stages of the policy cycle: 33% are in the formulation stage and 33% are in the implementation stage. Only four countries have reached the monitoring and evaluation stage. These countries' experiences could be useful for others seeking to strengthen their NUP processes. NUPs are developed, implemented, monitored and evaluated, mainly through co-ordination among different ministries; thus, effective mechanisms for interministerial co-ordination are essential for successful implementation. Collaboration across levels of government, the private sector, civil society and other stakeholders is crucial at different stages of NUP processes. The majority of the OECD countries have indeed taken a participatory approach, involving different stakeholders in the creation of their NUPs. However, much work remains to be done to increase the scope of NUP and in making it an explicit strategy. Such progress will be crucial to the achievement of SDGs and other global agreements, such as those relating to climate change (OECD, 2017[50]).

Aligning national and subnational priorities is essential to integrated implementation

The SDGs will not be achieved without the active engagement of a wide range of stakeholders, including the people living in the world's cities. Metropolitan areas are critical to the economic prosperity of countries. OECD data show that regional and local governments play crucial roles in the well-being of today's and future generations. For example, 70% of subnational government spending goes to education, health, economic affairs and social expenditures. As the level of government closest to the people, local governments are in a unique position to identify and respond to sustainable development gaps and needs. But aligning priorities between national and subnational governments and ensuring the capacities and resources needed for implementation remain critical challenges. The lack of co-ordination across sectors and levels of government, red tape, and excessive administrative procedures are the top challenges for infrastructure investment at the subnational level (OECD, 2016[51]).

Achieving many of the targets in the SDGs requires public and private investments at the sub-national level, particularly in urban areas: to improve access to sustainable urban services and infrastructure, to improve cities' resilience to climate change and other economic, social and environmental shocks, and to prepare them to host a rapidly increasing urban population. The OECD Principles for Public Governance of Public-Private Partnerships (PPPs) provide concrete guidance to maximise the potential

for PPP projects including their appropriate use for the public interest. Similarly, the OECD Recommendation on Effective Public Investment Across Levels of Government can support governments in assessing the strengths and weaknesses of their public investment capacity and in setting priorities for improvement. The OECD is working with countries, regions and cities through place-specific studies with an implementation toolkit that gathers good practices, data and indicators.

A territorial approach to the SDGs can contribute to improve vertical and horizontal coordination in the implementation of the SDGs in cities. It can support place-based indicators that can underpin the production and disclosure of data as a tool for dialogue and learning to improve performance. A territorial approach to SDGs can also support the allocation and targeting of resources (fiscal, human, technical/infrastructure, etc.) to the most vulnerable groups and/or lagging regions. It can help improve the participation of local and regional authorities, as well as of grassroots communities, for greater accountability and outcomes in the achievement of SDGs. That is why the OECD has launched an initiative on *A territorial approach to the Sustainable Development Goals: A role for cities and regions to leave no one behind* which seeks to support cities and regions in "localising" the SDGs.

Goal 12: Responsible consumption and production

Changing patterns of consumption and production is central for sustainable development transformation. The way in which societies and economies produce and consume goods and services significantly affects the natural resources asset base from which economic development is achieved and human well-being is derived. Furthermore, the use of materials from natural resources in economic activities and related production and consumption processes have environmental, social and economic consequences that extend beyond borders of individual countries or regions, and that affect future generations. For example, the environmental pressures associated with extraction, processing, transport, use and disposal of materials which generate pollution and waste and adversely impact on the quality of air, soil and water with long-term implications.

The way natural resources and materials are managed and used throughout the economy is essential for sustainable development. Promoting sustainable consumption and production (SCP) depends on long-term economic growth that is coherent with social and environmental needs. A major challenge is to decouple economic growth from unsustainable resource use and environmental degradation, while ensuring that natural resources are preserved for the well-being of future generations. The importance of SCP as cross-cutting priority for international and national action is underlined in the 2030 Agenda with the inclusion of SDG 12, which calls on all countries to ensure sustainable consumption and production patterns (Box 1.8).

Box 1.8. SDG 12: Ensure sustainable consumption and production patterns

12.1 Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries.

12.2 By 2030, achieve the sustainable management and efficient use of natural resources.

12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.

12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.

12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.

12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities.

12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature

Targets on means of implementation

12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production.

12.b Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products.

12.c Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities.

Source: (UNGA, 2015[4]).

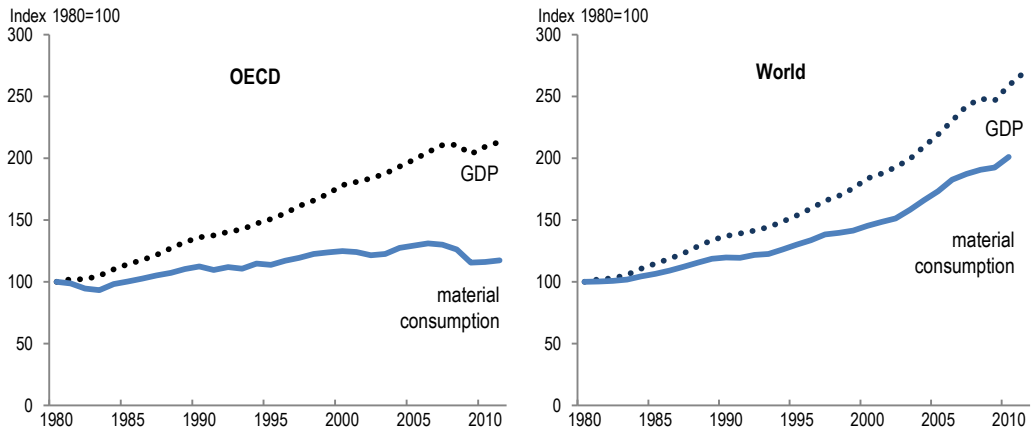
Key challenges

The last decades have witnessed unprecedented growth in demand for raw materials worldwide. According to OECD estimates, the amount of materials from natural resources extracted and consumed worldwide reached nearly 72 billion metric tonnes (Gt) in 2010 (OECD, 2015[52]). This represents an estimated ten-fold increase since the early 1900s when extraction was estimated at around 7 Gt. The rapid industrialisation of

emerging economies and continued high levels of material consumption in developed countries are among the main drivers of this increase. Construction materials, fossil fuels, and biomass for food account for 80% of total global material extraction (OECD, 2015[52]). OECD countries accounted for 27% of domestic extraction of used materials (DEU) worldwide in 2010 (compared with 46% in 1980), while the BRIICS countries (Brazil, Russia, India, Indonesia, China and South Africa) accounted for 51% (compared with 30% in1980) (OECD, 2015[52]).

Progress is being made in decoupling material extraction and consumption from economic growth, fundamental to advance sustainable development and to achieve the SDGs. The material productivity of the global economy improved by almost 30% between 1980 and 2010, rising from USD 0.70 per kilogram (in 2005 USD and PPPs) in 1980 to USD 1 per kg by 2010, according to OECD estimates (OECD, 2015[52]). This means that the global economy generated 30% more economic value with a kilogram of material resources in 2010 than in 1980. OECD countries generate 50% more economic value per unit of material resources used than in 1990 and 30% more than in 2000 (Figure 1.8). As OECD economies become more service-based, their reliance on imports is increasing with resource-intensive production often being displaced to non-OECD economies (OECD, 2015[52]).

Figure 1.8. Decoupling trends, OECD and world, 1980-2010



Source: (OECD, 2015[52]).

Although countries have made progress in improving resource productivity, material use per capita remains high. During the 1980s and the early 1990s per capita domestic material consumption (DMC) (DEU) remained stable around 8 tonnes per person per year, but has been rising over the last fifteen years. In 2010 per capita DMC reached over 10 tonnes per year, meaning that on average each person is using 29 kg of material resources per day, including 12 kg of construction minerals, 7 kg of biomass for food and feed, 5.3 kg of fossil energy carriers and 3 kg of metals. If unused domestic extraction (UDE) is included, per capita material use rose to nearly 17 tonnes per person per year in 2010 (46.6 kg per person per day), up from 13.6 tonnes in 1980.

According to the 2016 SDG progress report, domestic material consumption per capita increased in almost all developing regions from 2000 to 2010, except in Africa, where it remained relatively stable (around 4 tonnes per capita), and Oceania, where it decreased from around 10.7 to 7.7 tonnes per capita (UN ECOSOC, 2016[6]). An average person

living in an OECD country consumes about 46 kg of materials per day (about 60% more than the world average), including 10 kg of biomass, 17 kg of construction minerals, 5kg of metals and about 13 kg of fossil fuels (OECD, 2015[52]).

With rising global demand for raw materials and economic growth, the amount of waste generated by economic activity is growing. It is estimated that about one fifth of the raw materials extracted worldwide end up as waste, and that OECD countries account for about one third of global waste generation (OECD, 2015[52]). The quantity of municipal waste generated in the OECD area exceeds an estimated 650 million tonnes. A person living in the OECD area generates on average 520 kg of waste per year; this is 20 kg more than in 1990, but 30 kg less than in 2000 (OECD, 2015[53]).

One of the growing waste streams is e-waste (electric and electronic waste), a management challenge in both developed and developing countries. Markets in electronic equipment change rapidly and the useful life of such appliances is constantly shrinking, resulting in an exponential growth in e-waste. Globally, some 50 million tonnes are estimated to be generated every year. This represents an important source of secondary raw materials for industry (OECD, 2015[52]).

Another important waste stream is food waste. The Food and Agriculture Organization of the United Nations (FAO) estimates that each year, approximately one-third of all food produced for human consumption in the world is lost or wasted (FAO, 2013[54]). Food losses and waste represent an obstacle for achieving SDG 2 on food security, and also are a major cause of energy loss in food supply (OECD, 2017[55]). Although reducing food waste in high income countries may not directly help tackle food insecurity in low income countries, it reduces competition on limited water, land and biodiversity resources; making these resources available for other uses (Bagherzadeh, Inamura and Jeong, 2014[56]). According to the FAO, the carbon footprint of food produced but not eaten is estimated to 3.3 billion tons of CO_2. As such, food wastage ranks as the third top emitter after the United States and China (FAO, 2013[54]).

According to some estimates, over 30% of the fresh produce (fruit and vegetables) harvested in both developed and developing countries is lost. With the rate being highest (20%) in the retail, food service and consumer part of the system, whereas in developing countries the rate is highest in the distribution system from farmers to retail (22%). In Europe, the EU-28 produces around 88 million tonnes of food waste very year, at an estimated cost of EUR 143 billion, with 70% of the waste generated by consumers, retail and food service sectors, while 30% is generated by the processing and production sectors (OECD, 2017[55]). Increasing resource use efficiency and reducing food waste and food losses in the food chain can help increase the available food supply and reduce pressures on natural resources and the climate.

Decoupling CO_2 and other GHG emissions growth from economic growth, and reduce the overall level of emissions is fundamental to shift towards sustainable consumption and production patterns. CO_2 emissions from energy use are still growing worldwide, mainly due to increases in transport and energy sectors. In 2014, global energy-related CO_2 emissions reached a record high of 32.38 billion tonnes, or 58% more than in 1990. Production-based emissions growth has decelerated in OECD countries in the wake of the 2008 financial crises. In BRIICS economies, emissions have continued to rise sharply. From the perspective of final demand, total emissions generated to satisfy domestic final demand in OECD countries have increased faster than emissions from domestic production. Most OECD countries are “net-importers” of CO_2 emissions because these

emissions from domestic final demand for goods and services exceed emissions from domestic production (OECD, 2017[3]).

The combustion of fossil fuels in power plants, vehicles, machinery and dwellings is responsible for the majority of global man-made greenhouse gas (GHG) emissions. CO_2 from the combustion of fossil fuels and biomass account for 90% of total GHG emissions (OECD, 2017[3]). Governments in OECD and the six of the biggest emerging economies are spending collectively up to USD 200 billion a year subsidising extraction, refining and combustion of fossil fuels (OECD, 2015[57]). This represents more than what would be needed to meet the climate-finance objectives set by the international community, which call for mobilising USD 100 billion a year by 2020. Recent OECD and IEA analysis indicates that phasing-out fossil fuel subsidies across the globe could lead to a 3% reduction in global GHGs in 2020, compared with business-as-usual (OECD, 2017[55]).

Key interactions with other sustainable development goals

SDG 12 on responsible consumption and production has a key role to play in advancing the transformational vision of the 2030 Agenda. It can be considered one of the key drivers for transformation which sets out the essential requirements to ensure a sustainable management of resources, and to restore and preserve the natural asset base over time. Advancing SDG 12 entails addressing the major drivers of consumption and production that generate negative spillover effects for the environment and that put pressure on natural resources, ecosystems and biodiversity. It involves considering key interlinkages with all goal areas from poverty eradication to environmental protection. Table 1.7 highlights some of the potential interactions with other goals as well as the relevance of SDG 12 as a driver for transformation.

Resource efficiency is fundamental to transformation

Resource efficiency improvements through an approach of "reduce, reuse and recycle" can support the achievement of half of the SDGs. Since 1990, the global use of material resources has grown broadly in line with global GDP. Global material resource consumption is projected to double by 2050 (OECD, 2017[58]). The main challenge is to ensure that materials are used efficiently at all stages of their life cycle (extraction, transport, manufacturing, consumption, recovery and disposal) and throughout the supply chain. This can avoid waste of resources, reduce the associated negative environmental impacts (both upstream and downstream) and potentially decrease pressures on primary natural resources (OECD, 2017[3]).

Assessing the energy requirements and GHG emissions associated with the production, consumption and end-of-life management of materials requires taking a systems view of the production of goods and fuels, transportation of goods, crop and food production and storage the life-cycle. The life-cycle GHG emissions arising from material management activities were estimated to account for 55% to 65% of national emissions for four OECD member countries, suggesting significant potential to reduce emissions through material resource efficiency measures (OECD, 2017[58]). Resource efficiency is a key criterion for transitioning towards a more sustainable path which applies across the SDGs. Apart from SDG 12, eight SDGs include targets that refer directly to resource efficiency or sustainable use of resources (Table 1.7).

Table 1.7. Sustainable Development Goals and resource efficiency

Goal	Targets related to sustainable use of resources
SDG 2 Zero Hunger:	**Target 2.4:** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality
SDG 6 Clean water and sanitation	**Target 6.4:** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity
SDG7 Affordable and clean energy	**Target 7.3:** By 2030, double the global rate of improvement in energy efficiency
SDG 8 Decent work and economic growth:	**Target 8.4:** Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead.
SDG 9 Industry, innovation and infrastructure:	**Target 9.4:** By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.
SDG 11 Sustainable cities and communities:	**Target 11b:** By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-30, holistic disaster risk management at all levels.
SDG 14 Life below water:	**Target 14.4** By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics
	Target 14.6: By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognising that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation.
SDG 15 Life on land:	**Target 15.1:** By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.

Source: (OECD, 2016[59]).

Improvements in water resource use efficiency and reduction of water pollution from agricultural systems and industry is critical for advancing several SDGs

Sustainable management of water in agriculture is critical to increase agricultural production, ensure water can be shared with other users and maintain the environmental and social benefits of water systems. Agriculture is the largest – and often inefficient – user and polluter of water resources in many regions. Farming accounts for around 70% of water abstraction, and over 40% in many OECD countries, and also contributes to water pollution from excess nutrients, pesticides and other pollutants. Agricultural regions in OECD have been affected by increasing water constraints in recent years. This trend is expected to continue. Projections reveal that agricultural production will have to rely on much less freshwater resources than before. It is also projected that farmers in many regions will face increasing competition from non-agricultural users due to rising urban population density and water demands from the energy and industry sectors. Water quality is also likely to deteriorate in many regions, due to the growth of polluting activities. These water challenges are expected to impact agriculture, undermining the

productivity of rain-fed and irrigated crop and livestock activities in many regions, as well as further impacting markets, trade and broader food security (OECD, 2016[60]).

In industry, the use of water has multiple impacts on water quality. Large-scale manufacturing and mining can release trace elements and heavy metals such as mercury, zinc, and arsenic into the surrounding water. While such elements can occur naturally in water sources in very small amounts, even slightly elevated levels can be highly toxic. Industrial pollution can also lead to the acidification of water. Mining operations can lead to acid mine drainage whereby sulphate-containing rocks, exposed by the mine, react to form sulphuric acid when in contact with water. Similarly, sulphur dioxide, formed by the burning of fossil fuels, can dissolve in water and fall to the earth as acid rain. This can reduce the pH of lakes and rivers with disastrous consequences (OECD, 2013[8]).

Transformative change in the energy sector is needed to support economic development and prosperity, social imperatives and environmental needs

Energy production and use accounts for around two-thirds of all anthropogenic GHG emissions, mostly in the form of CO_2. This reflects the energy sector's heavy reliance on the combustion of fossil fuels (IEA/IRENA, 2017[61]). The transformation of the energy and industrial systems over the next decades is fundamental to achieving the Paris Agreement's goal of well below 2°C as well as the SDGs. Gains in energy efficiency, as well as the expanded use of cleaner energy sources worldwide, are contributing to the decline in global energy intensity. This means that the world is able to produce more GDP for each unit of energy consumed.

The last few years have shown important improvements in relation to CO_2 emissions. Despite an increase in global GDP of around 3% in 2016, IEA preliminary estimate of CO_2 emissions in 2016 shows that emissions stayed flat for a third straight year, at just above 32 Gt. This is driven by a combination of market dynamics, technological improvements and policy initiatives, reflected in the increased proportion of electricity being generated from renewables and energy efficiency improvements (themselves targeted in SDG 7.2 and 7.3) (IEA, 2017[28]).

In 2016, according to IEA, the world would have used 12% more energy had it not been for energy efficiency improvements since 2000 – equivalent to adding another European Union to the global energy market. In emerging economies, energy efficiency gains have limited the increase in energy use associated with economic growth. Lower energy intensity, driven largely by efficiency improvements, is combining with the ongoing shift to renewables and other low-emission fuels to offset the impact of GDP growth on emissions (IEA, 2017[62]).

Fossil-fuel subsidies distort energy markets, promoting inefficient use of energy and increasing CO_2 emissions

Fossil-fuel subsidies hamper efforts to curb emission, combat climate change and shift towards a cleaner and more efficient energy future (SDG 7). Government support to fossil fuel remains high: in 2014, for example, fossil-fuel consumption subsidies reached almost USD 500 billion. The value of global fossil-fuel consumption subsidies is estimated by the IEA to have since fallen, close to USD 310 billion in 2015, and USD 260 in 2016 reflecting lower fossil-fuel prices but also a subsidy reform process that has gathered momentum in several countries. Oil subsidies accounted for 40% of the total (USD 105 billion), covering an estimated 11% of global oil consumption), while electricity subsidies became the largest at USD 107 billion (covering 16% of global

electricity use). Natural gas consumption subsidies were also significant, amounting to nearly USD 50 billion (affecting the price paid for 22% of gas consumption). Coal consumption subsides were relatively small, at USD 2 billion in 2016 (IEA, 2017[28]).

Subsidies to fossil-fuel consumers often fail to meet their intended objectives of: alleviating energy poverty or promoting economic development and, instead, promote the wasteful use of energy; contribute to price volatility by blurring market signals; encourage fuel smuggling and undermine the competitiveness of renewables and energy-efficient technologies. Such subsidies can have economic costs by distorting trade and competitiveness; environmental costs through overuse of natural resources and carbon emissions that spill over globally; re-distributional costs when those subsidies benefit primarily the better off at the expense of the poor; and health impacts affecting livelihoods. In addition, fossil fuel subsidies are sometimes provided in conjunction with incentives that promote the use of renewable energies, thereby undermining policy coherence and sending confusing signals to producers. Phasing out fossil-fuel subsidies would reduce GHG emissions and provide an impetus for investment, growth and jobs in renewable energy and energy efficiency (OECD, 2017[55]). A fuel subsidy reform could also offer fiscal space to extend social programmes targeted specifically to the poor and deliver results to leave no one behind.

Policy and governance responses

Strengthening public procurement systems is central to achieve sustainable results and to build effective institutions

Governments around the world spend approximately USD 9.5 trillion in public contracts every year. This means that on average, public procurement represents around 12%-20% of a country's GDP (OECD, 2016[63]), and nearly one third of government expenditures in OECD countries (OECD, 2016[64]). Governments are increasingly using public procurement as a policy lever to pursue additional policy objectives, such as green growth and sustainable development, the development of small and medium-sized enterprises, innovation or standards for responsible business conduct (OECD, 2015[65]). Governments have policies encouraging green procurement at the central government level, such as Japan with its Green Purchasing Act. Green Public Procurement aims to establish criteria for public purchases and can stimulate innovation and increase demand for green products (OECD, 2016[59]).

The OECD Recommendation of the Council on Public Procurement provides a reference for modernising procurement systems which can be applied across all levels of government and state owned enterprises. The OECD has also developed a Methodology for Assessing Procurement Systems (MAPS) as a universal tool to assess the quality and effectiveness of public procurement systems, and based on the identified strengths and weaknesses, to develop strategies and implement reforms. It is relevant for all countries, irrespective of income level or development status. MAPS supports countries in achieving SDG 12 on responsible consumption and production (specifically target 12.7 on sustainable public procurement practices), and SDG 16 on peace, justice and strong institutions (specifically target 16.6 on effective accountable, and transparent institutions).

Engaging businesses in addressing the negative impacts of their operations is key to advance sustainable development

Irresponsible business practices can result in economic loss, environmental degradation, and poor labour conditions. The OECD has developed tools to promote and enable responsible business conduct to support sustainable development in all sectors and industries of the economy. These tools include the *OECD Guidelines for Multinational Enterprises (MNE Guidelines)*, which comprise principles and standards in all key areas, including information disclosure, human rights, employment and industrial relations, the environment, bribery and corruption, consumer interests, science and technology, competition, and taxation. The MNE Guidelines are fully aligned with the recommendations of the UN Guiding Principles for Business and Human Rights (UNGPs). They include an expectation that businesses avoid and address adverse impacts that they cause, or contribute to, and seek to prevent or mitigate adverse impacts directly linked to their products, operations or services by a business relationship. To that effect, businesses carry out due diligence for adverse impacts in their own operations and throughout their business relationships. Each country adhering to the guidelines commits to setting up a National Contact Point to promote their use, handle inquiries and help resolve issues that can arise when an enterprise does not observe the MNE Guidelines (Bule and Tebar Less, 2016[66]).

In conflict-affected and high-risk areas, companies involved in mining and trade in minerals may be at risk of contributing to or being associated with significant adverse impacts, including serious human rights abuses and conflict. The *OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High Risk Areas* provides a practical framework to help companies respect human rights and avoid contributing to conflict through their sourcing decisions, including the choice of their suppliers.[2] The Guidance includes supplements on tin, tantalum and tungsten (3T) and on gold, with tailored recommendations for each of these supply chains. It provides a common reference for suppliers and stakeholders, and focuses industry attention on leverage points such as smelters and refiners, while also recognising the interconnected nature of due diligence responsibilities. Its implementation programme involves over 500 stakeholders and has managed to engage in outreach with non-Adherents that play important roles in global mineral supply chains (OECD, 2016[67]).

Extractive operations can also have a significant social and environmental footprint and thus are often at risk of causing or contributing to adverse impacts, such as human rights infringements, economic set-backs and environmental degradation. Regardless of the requirements in law, meaningful stakeholder engagement is critical to avoiding some of the potential adverse impacts of extractive operations as well as optimising potential contributions. The OECD has developed a *Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractive Secto*r. Extractive sector enterprises are considered to include enterprises conducting exploration, development, extraction, processing, transport, or storage of oil, gas and minerals.

Enterprises operating along agricultural supply chains can make a significant contribution to sustainable development by creating employment and bringing expertise, technology and financing capacities for increasing agricultural production sustainably and upgrading in supply chains. This can enhance food and nutritional security and help achieve the development goals of the host country. For instance, if domestic land legislation does not adequately recognise and protect informal land tenure rights, land acquisition may lead to the eviction – without fair compensation – of local communities holding customary

rights; this, in turn, can result in a loss of income, increased vulnerability and food insecurity. The *OECD-FAO Guidance for Responsible Agricultural Supply Chains* helps enterprises observe existing standards for responsible business conduct along agricultural supply chains. These standards include the OECD Guidelines for Multinational Enterprises, the Principles for Responsible Investment in Agriculture and Food Systems, and the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. Observing these standards helps enterprises mitigate their adverse impacts and contribute to sustainable development (OECD/FAO, 2016[68]).

Effectively managing toxic materials and the generation of waste and pollutants in the production and consumption process is essential to sustainable development

Sustainable growth and development require minimising the natural resources and toxic materials used, and the waste and pollutants generated, throughout the entire production and consumption process (UN ECOSOC, 2016[6]). The OECD encourages the development of Pollutant Release and Transfer Registers (PRTR) as a tool for measuring and promoting improved environmental performance of industrial activities. A revised Recommendation of the Council on Establishing and Implementing PRTRs adopted in 2018 recognises the importance of these tools for SDG targets 3.9, 6.3, 9.4, 12.14. 12.5, 12.8, and 16.10; and calls for Members to design and establish PRTRs. To support these efforts the OECD develops practical tools and guidance to help member countries implement harmonised PRTRs. The OECD has also developed, in collaboration with partners, tools to support countries in developing chemicals management frameworks. These tools include the *IOMC Toolbox for Decision-Making in Chemicals Management* and the *OECD Environmental Risk Assessment Toolkit* (ERAT). The IOMC Toolbox offers a one-stop shop to identify the best tools and guidance to address specific national problems or objectives in chemical management. The Toolbox takes into account the resources available and guides the user towards cost-effective solutions adapted to the country. The Toolbox gives priority to hazard-based implementation tools and easily implemented and readily available tools.

ERAT is an internet-based tool that gives access to practical tools on environmental risk assessment of chemicals. The Toolkit walks the user through: 1) a general Risk Assessment Process which includes four steps: hazard identification, hazard characterisation, exposure assessment, and risk characterisation; 2) a Risk Assessment Process for Pesticides which takes into account the specificity of Pesticides which are deliberately applied to the environment; 3) six examples of how to use the Toolkit, including: Risk Assessment of a textile dye, Risk assessment of a pesticide, setting an Environmental Quality Standard, air pollution: compliance with limits set in a permit, risk assessment of a metal, initial screening of substances for persistent, bioaccumulative and toxic properties.

The OECD has also developed a global portal with information on chemical substances, the eChemPortal. This portal supports users in carrying-out or reviewing hazard assessment of chemicals by providing access to existing health and environmental effects information. A variety of other OECD tools have also been developed to help governments review registration dossiers submitted by registrants and to take decisions about risk assessment and risk management of chemicals. These tools include test methods, guidance documents and best practices on a variety of topics (risk assessment, exposure, risk management, risk communication), toolboxes, information portals.

Goal 15: Life on land

Biodiversity is fundamental to sustaining life. It provides critical ecosystem services such as food provisioning, water purification, flood and drought control, nutrient cycling and climate regulation. These services are also a major foundation of economic activity. The need to protect, restore and responsibly manage ecosystems and biodiversity has been repeatedly called for under the Convention on Biological Diversity (CBD). The Sustainable Development Goals reiterate this imperative with goals dedicated to both marine (SDG 14) and terrestrial ecosystems (SDG 15) (OECD, 2017[69]). SDG 15 calls on the international community to "protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forest, combat desertification, and halt and reverse land degradation and halt biodiversity loss" (Box 1.9). At the international level, Parties to the Convention on Biological Diversity have committed to achieving the 2011-20 Aichi Biodiversity Targets, many of which are also echoed in the SDGs (OECD, 2017[69]).

Box 1.9. SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.

15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.

15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.

15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development.

15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.

15.6 Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed.

15.7 Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products.

15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species.

15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts.

Targets on Means of Implementation

15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems.

15.b Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation.

15.c Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities.

Source: (UNGA, 2015[4]).

Key challenges

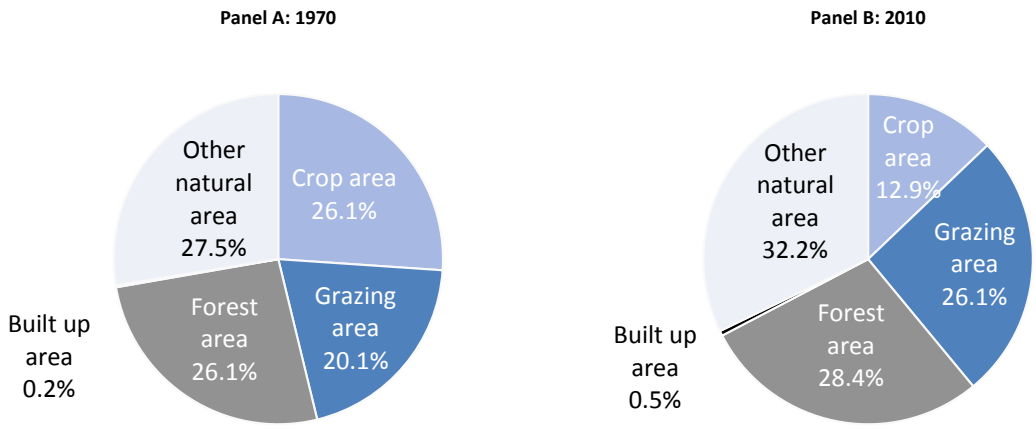
Despite the invaluable benefits provided by biodiversity and associated ecosystems, current and projected trends show continued decline worldwide. Around 20% of mammals and birds, almost 40% of reptiles, a third of amphibians and a quarter of marine fish are already on the list of threatened species (OECD, 2016[70]). According to the 2016 UN Report on progress towards the SDGs, amphibians are declining most rapidly in Latin America and the Caribbean, while the greatest extinction risks for birds and mammals are found in South-Eastern Asia, owing mainly to the conversion of lowland forests (UN ECOSOC, 2016[6]).

The *OECD Environmental Outlook to 2050* projects continued declines under a business-as-usual scenario, i.e. in the absence of new policy. Projections indicate that a further 10% loss of global biodiversity is expected between 2010 and 2050, with most of the loss occurring before 2030. Primary forests, which tend to be most rich in biodiversity, are projected to decrease steadily to 2050 in all regions (OECD, 2012[14]).

The main drivers of global terrestrial biodiversity loss are land-use change and management, i.e. conversion of natural ecosystems for producing food and bioenergy crops and livestock (OECD, 2012[14]). Agriculture is the most land-intensive human activity: currently around 33% of the earth's surface is used for crops and livestock farming (Figure 1.9). About 80% of this production increase has been achieved through higher yields from existing land, and about 20% through expanding agricultural land. Between 1970 and 2010, the share of agricultural land use (crop and grazing land) expanded by about four percentage points, largely at the expense of forest area. Expansion has slowed over the past decade (OECD, 2017[13]). Biodiversity is also threatened by land cover changes and fragmentation due to urban growth, urban sprawl and infrastructure development (see section on the urbanisation challenge).

Deforestation and forest degradation remain a major concern. Together they are the second leading human cause of CO_2 emissions, according to the Intergovernmental Panel on Climate Change. Some progress has been made in managing forests sustainably and protecting areas for biodiversity: according to UN estimates, the global net loss of forest area declined from 7.3 million hectares per year in the 1990s to 3.3 million hectares per year during the period from 2010 to 2015 (UN ECOSOC, 2016[6]).

Figure 1.9. Global land use, 1970 and 2010



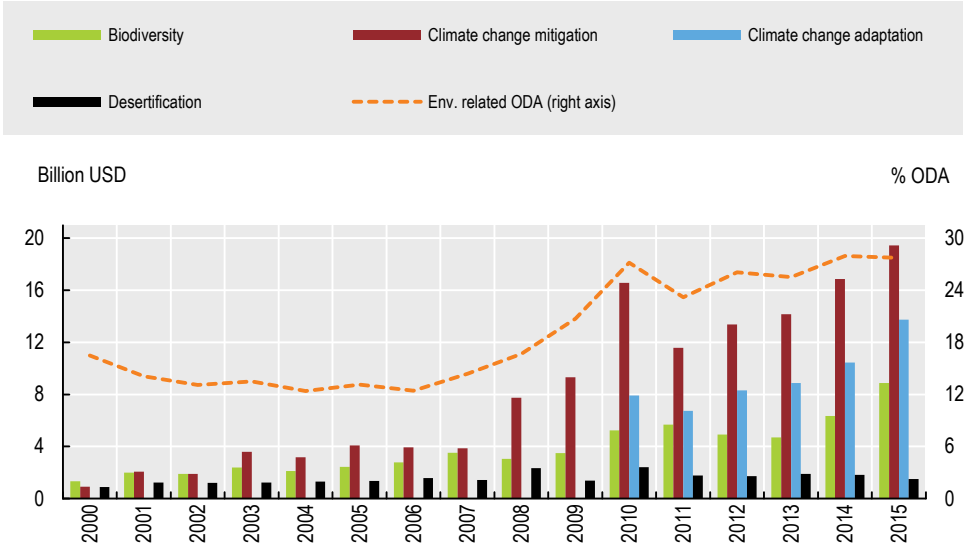
Source: (OECD, 2017[13]).

Biodiversity loss and ecosystem degradation result in adverse and costly impacts on human health, well-being and economic growth. They can have particularly severe implications for the rural poor who depend heavily on natural resources: forest resources alone, according to some estimates, underpin the livelihoods of about 90% of the 1.2 billion people living in extreme poverty (OECD, 2013[71]).

Official Development Assistance (ODA) has an important role to play in supporting biodiversity in developing countries. According to some estimates, ODA remains the most significant source of finance for biodiversity in many low- and lower-middle-income countries (Drutschinin and Ockenden, 2015[72]). Biodiversity-related ODA is on the rise – reaching USD 8.7 billion per year in 2014-15 compared with USD 6 billion in 2012-2013 – with Africa accounting for the highest share (31%) (OECD, 2016[73]). Biodiversity-related ODA represents a small part of overall environmentally-related ODA, which reached USD 35.5 billion in 2015 (OECD, 2017[3]). During that year, most of these funds were designated for climate change mitigation and adaptation (Figure 1.10). Meeting the SDG biodiversity targets will require scaling up finance from all sources – public and private, domestic and international.

Figure 1.10. ODA targeting environmental objectives

OECD-DAC 2000-15



Note: Indicators are constructed from project-level data. Expressed in 2014 USD using PPPs.
Source: (OECD, 2017[3]).

Key interactions with other sustainable development goals

Biodiversity, as a key component of the natural asset base necessary for human well-being, plays an essential role in achieving the 2030 Agenda and SDGs. Some of the critical links between biodiversity and the SDGs are highlighted in Table 1.8.

Table 1.8. The contribution of biodiversity to the Sustainable Development Goals

Goal	The role of biodiversity
SDG 1. No poverty	Biodiversity provides resources and income, particularly for the rural poor, the majority of whom directly depend on biodiversity and ecosystems for subsistence.
SDG 2. Zero Hunger	Healthy ecosystems help produce more food from each unit of agricultural land and improve resilience to climate change. Many of the most vulnerable depend on food gathered from natural ecosystems such as forests, grasslands, oceans and rivers. Biodiversity also underpins ecosystem functions such as pollination, maintenance of soil fertility and water quality, which are central to agricultural productivity. Maintaining genetic and ecosystem diversity in agricultural practices can reduce farmers' vulnerability to climate change and market variability.
SDG 3. Good health and well-being	Healthy ecosystems help mitigate the spread and impact of pollution by sequestering and eliminating certain types of air, water and soil pollution.
SDG 5. Gender equality	Loss of biodiversity and associated ecosystem services can perpetuate gender inequalities by increasing the time spent by women and girls performing certain tasks, such as collecting food, fuel and water.
SDG 6. Clean water and sanitation	Ecosystems help maintain water supply and quality, and guard against water-related hazards and disasters.
SDG 8. Decent work and economic growth	Biodiversity and ecosystems underpin many national and global economic activities, including those related to agriculture, forestry, fisheries and aquaculture, energy, tourism, transport and trade.
SDG 9. Industry, innovation and infrastructure	Biodiversity and healthy ecosystems can provide reliable and cost-effective natural infrastructure. For example, coral reefs and mangrove forests protect coasts against

	flooding, which is expected to increase with climate change.
SDG 11. Sustainable cities and communities	Biological resources provide many of the foods, building materials, energy, and medicines consumed in urban centres.
SDG 12. Responsible consumption and production	Current unsustainable consumption and production patterns can undermine the ability of ecosystems to provide services for industries and communities that rely upon them.
SDG 13. Climate action	Forests, peatlands, wetlands, ocean and coastal ecosystems represent globally significant carbon stores. Biodiversity contributes to resilience by providing critical ecosystem services, such as flood and drought control and climate regulation.
SDG 14. Life below water	Biodiversity underpins all fishing and aquaculture activities, as well as other species harvested for foods and medicines.
SDG 15. Life on land	Land-use changes involved in extensive renewable energy production such as hydroelectric dams may conflict with targets aimed at protecting terrestrial ecosystems, halting deforestation, and preventing biodiversity loss.
SDG 16. Peace, justice and institutions	Conflicts over natural resources, environmental degradation and contamination can be one of the factors leading to social insecurity and violence.

Source: Adapted from (CBD/FAO/the World Bank/UNEP/UNDP, 2017[74]).

Addressing interlinkages between land-use, agriculture, forests and ecosystems is key for achieving biodiversity targets and climate goals

The way land is used and managed impacts on the environment – from biodiversity and ecosystem services (including erosion risk, flood protection) to soil, water and air quality (OECD, 2017[3]). Land use also affects individual and collective well-being and is an important factor in achieving environmental sustainability, economic growth and social inclusion (OECD, 2017[75]). Historically, land use change and the conversion of habitat to other land uses, notably for agricultural production, is a main driver of biodiversity loss (OECD, 2016[76]). Agriculture, forestry and other land use contribute to around 25% of global anthropogenic GHG emissions, around half of which is from agriculture. Land sectors (agriculture, forests and soils) are sources of GHGs (i.e. methane from cattle and rice, nitrous oxide from fertiliser use), but also act as CO_2 sinks (from forestry and carbon stocks in soils) (OECD, 2017[58]).

Agricultural land use and production practices have both positive and negative impacts on biodiversity. Low-intensity agricultural practices such as grazing and traditional haymaking create and support diverse semi-natural habitats with novel species. However, modern agriculture practices such as intensification (e.g. increased use of fertilisers and pesticides), specialisation (reduced crop rotations and fewer mixed crop-livestock farms) and rationalisation (removal of hedges, edges and other boundary habitats) are detrimental to these semi-natural habitats and their associated species. For example, insecticides and herbicides intended to remove unwanted species such as pests and weeds are also toxic for non-target species, with substantial knock-on effects for food webs, competitors and parasites within ecosystems (Lankoski, 2016[77]).

With the world's population expected to reach 9 billion by 2050, it is estimated that agricultural production would need to increase by 60% over the next 40 years to meet rising food demand (OECD, 2013[78]). Increased agricultural demand has so far been met largely through improvements in yield rather than land expansion. But the rate of yield growth for most crops has been decelerating in the past few decades. So without faster yield improvements, demand for agricultural land is likely to grow, increasing the associated CH_4 and N_2O emissions. At the same time, demand for bioenergy for climate mitigation could grow rapidly through the century (OECD, 2017[58]), generating a potential trade-off between bioenergy production and food security.

Sustainable agriculture practices (SDG 2.4) and technological innovation will be critical to ensure progress on several SDGs related to natural resources, such as SDG 15 on land, forest and ecosystems. This includes improving crop and livestock productivity (e.g. by developing crop varieties that are resilient to local hazards and that inhibit the production of nitrous oxides); more efficient fertiliser use; improved soil management; and practices aimed at reducing emissions of methane (CH_4) from ruminants, rice paddies and manure management. Sustainable agricultural practices that increase the productivity of arable land would also help to halt and reverse deforestation (SDG 15.2) and widespread land degradation (SDG 15.3), which is estimated to cost USD 100 billion per year (OECD, 2017[58]).

Healthy ecosystems can contribute to the achievement of water goals

Healthy ecosystems play a key role in regulating water flows. They reduce runoff (and therefore flood levels of the streams flowing from preserved areas) and improve water infiltration into the soil (helping to replenish groundwater). They contribute to purification of water resources, thus improving water quality. For example, almost 1 million urban dwellers rely on natural wetlands for wastewater retention and purification services. Healthy ecosystems can also enhance food security and climate security with spillover effects on water security. For example, healthy ecosystems help produce more food from each unit of agricultural land and improve resilience to climate change (OECD, 2013[8]).

Conversely, pressures on ecosystems increase water risks, including shortages, excesses, pollution, and other risks to freshwater systems (rivers, lakes, aquifers). For example, over-exploitation of water resources by agriculture in certain areas in OECD countries is damaging ecosystems by reducing water flows below minimum levels in rivers, lakes and wetlands, which is also detrimental to recreational, fishing and cultural uses of these ecosystems (OECD, 2010[79]).

Maintaining ecosystems requires more effective and sustainable management of water resources. This is becoming more urgent given the increasing pressure and competition over the use of water resources. A key challenge is to balance water demand for consumptive purposes against the environmental needs for water. A lack of water available for environmental needs could create serious environmental problems. For example, due to extensive water extractions, the reduced water volumes in lakes and wetlands have had a major negative impact on ecosystems. The most infamous example is the Aral Sea, which was once one of the largest freshwater lakes in the world, but is now just 10% of its size as a result of diversions from its main tributaries for irrigation purposes. This transformation has also greatly reduced the water quality of the remaining water, making it much more saline (OECD, 2013[8]).

Policy and governance responses

Mainstreaming biodiversity into sectoral policies

Many of the drivers of biodiversity loss and degradation are, directly or indirectly, related to policies in other sectors. A central challenge is the integration and mainstreaming of biodiversity policy objectives into economic development strategies and sectoral policies (Karousakis et al., 2012[80]). As biodiversity provides public benefits at local, regional and global scale, governments have a key role to play at all these levels to mainstream biodiversity and ecosystem services into policy and planning, such as: development

strategies, plans, policies and budgets; sectoral plans and policies; subnational strategies, plans and policies; and development co-operation programmes. Intervening at any of these entry points may require different policy instruments (Drutschinin et al., 2015[81]). The *OECD Recommendation on the Use of Economic Instruments in Promoting the Conservation and Sustainable Use of Biodiversity* calls for member countries to develop sector policies in ways that are consistent with biodiversity objectives, and to make greater and more consistent use of properly designed economic instruments for sustainable biodiversity management. Some policy instruments available for biodiversity conservation and sustainable use are presented in Table 1.9, and can be categorised as: regulatory (i.e. command-and-control) approaches, economic instruments, and information and other instruments (OECD, 2013[71]).

Table 1.9. Policy instruments for biodiversity conservation and sustainable use

Regulatory (command-and-control) approaches	Economic instruments	Information and other instruments
Restrictions or prohibitions on use (*e.g.* trade in endangered species and CITES).[1]	Price-based instruments: ▪ Taxes (e.g. groundwater extraction, pesticide and fertiliser use). ▪ Charges or fees (e.g. for natural resource use, access to national parks, hunting or fishing license fees). ▪ Subsidies to promote biodiversity.	Eco-labelling and certification (e.g. organic agriculture labelling schemes; labels for sustainably harvested fish or timber).
Access restrictions or prohibitions (e.g. protected areas; legislated buffer zones along waterways).	Reform of environmentally harmful subsidies.	Green public procurement (e.g. of sustainably harvested timber).
Permits and quotas (e.g. for logging and fishing).	Payment for ecosystem services.	Voluntary approaches (e.g. negotiated agreements between businesses and government for nature protection or voluntary offset schemes).
Quality, quantity and design standards (e.g. commercial fishing net mesh-size specifications).	Biodiversity offsets/biobanking.	Corporate environmental accounting.
Spatial planning (e.g. ecological corridors).	Tradable permits (e.g. individual transferable quotas for fisheries, tradable development credits).	
Planning tools and requirements (e.g. environmental impact assessments [EIAs] and strategic environmental assessments [SEA].	▪ Liability instruments. ▪ Non-compliance fines. ▪ Performance bonds.	

[1.] Convention on International Trade in Endangered Species.
Source: (OECD, 2013[71]).

Biodiversity offsets, for example, can be used to help internalise external negative costs of development activities. To date, the have been used to compensate for impacts from various sectors, including mining, infrastructure, hydropower and agriculture (OECD, 2016[82]). The OECD database on Policy Instruments for the Environment (PINE) provides an inventory of six types of biodiversity-relevant instruments, such as taxes, fees and charges that are used in 80 countries.[3]

Applying an integrated approach to land-use planning

Land-use planning has a crucial role to play to accomplish 6 of the 17 SDGs. They include SDG 7 access to energy, SDG 9 the construction of resilient infrastructure,

SDG 11 inclusive cities, SDG 13 climate change mitigation, and SDG 15 protection of ecosystems. Sustainable development's integration into countries' planning systems suggests that one can pursue the three dimensions of sustainable development – economic growth, environmental protection and social inclusion – in a balanced manner through planning. This represents a significant challenge for spatial planning.

The integration of the three dimensions of sustainable development requires the adoption of sophisticated planning instruments, capable of overcoming the rigidity of some land-use plans. Spatial planning is expected to be flexible and adaptable to the evolving needs of sustainable development. It also has to provide vertical co-ordination between the different level of governments involved in the planning process and horizontal integration of different sectors (OECD, 2017[75]). Table 1.10 summarises some basic principles for translating sustainable integration into planning practice.

Table 1.10. Planning principles for sustainable development

Principle and relevant SDGs	Description
Supporting biodiversity *(SDG15 Life on Land)*	Land use and development activities should support the essential cycles and life support functions of ecosystems. Whenever possible, these activities should mimic ecosystem processes, rather than modify them to fit urban forms. These activities must respect and preserve biodiversity, as well as protect and restore essential ecosystem services that maintain water quality, reduce flooding, and enhance sustainable resource development.
Livable built environments *(SDG11 Sustainable Cities and Communities)*	The location, shape, density, mix, proportion, and quality of development should enhance the fit between people and urban form by creating physical spaces adapted to the desired activities of inhabitants; encourage community cohesion by fostering access among land uses; and support a sense of place to ensure protection of any special physical characteristics of urban forms that support community identity and attachment.
Local sustainability *(SDG12 Responsible consumption and production)*	A local economy should strive to operate within natural system limits. It should not cause deterioration of the natural resource base, which serves as a capital asset for future economic development. Essential products and processes of nature should be used up no more quickly than nature can renew them. Waste discharges should occur no more quickly than nature can assimilate them. The local economy should also produce built environments that meet locally defined needs and aspirations. It should create diverse housing, and infrastructure that enhances community liveability and the efficiency of local economic activities.
Equity *(SDG1 No Poverty)* *(SDG10 Reduced Inequalities)*	Land-use patterns should recognise and improve the conditions of low-income populations and not deprive them of basic levels of environmental health and human dignity. Equitable access to social and economic resources is essential for eradicating poverty and in accounting for the needs of the least advantaged.
Polluters pay *(SDG12 Responsible consumption and production)*	Polluters (or culpable interests) that cause adverse communitywide impacts should be required to bear the cost of pollution and other harms, with due regard to the public interest.
Responsible regionalism *(SDG12 Responsible consumption and production)*	Communities should not act in their own interests to the detriment of the interests of others, and they should be responsible for the consequences of their actions. Just as individual developers should be subject to the principle that polluters (or culpable interests) pay, a local jurisdiction has an obligation to minimise the harm it imposes on other jurisdictions in pursuit of its own objectives

Source: Adapted from (OECD, 2017[75]).

Land-use planning policies can also play an important role in reducing GHG emissions over the longer term because they can prevent the locking-in of energy and carbon intensive behaviour, particularly in urban areas. Implementing policies that price emissions will further steer producers and households towards less-polluting behaviour and investments.

Protected areas can help to reduce biodiversity loss

Globally, 15% of terrestrial and freshwater environments are covered by protected areas, according to the SDGs Report 2017 (DESA, 2017[83]). From 2000 to 2017, the average worldwide coverage of terrestrial, freshwater and mountain key biodiversity areas by protected areas increased from 35% to 47%, from 32% to 43% and from 39% to 49%, respectively (UN ECOSOC, 2017[7]). There are large variations among countries in the extent and the management of protected areas, which can be partly explained by differences in geography, ecology, and the pre-existing patterns of human settlement in the territory (OECD, 2017[3]). The OECD has developed a method to report a more detailed and harmonised account of countries' terrestrial and marine protected areas and better understand the extent and focus of countries' conservation efforts. This method can assist in monitoring progress towards the Aichi Targets of the Convention on Biological Diversity (CBD) and the SDGs, in particular SDG target 14.5, SDG target 15.1 and SDG target 15.4 (Mackie et al., 2017[84]).

Notes

[1] The New Policies Scenario of the World Energy Outlook serves as the IEA baseline scenario. It takes account of broad policy commitments and plans that have been announced by countries, including national pledges to reduce greenhouse-gas emissions and plans to phase out fossil-energy subsidies, even if the measures to implement these commitments have yet to be identified or announced.

[2] An OECD Recommendation on the Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas was adopted by Council at Ministerial level on 25 May 2011 and subsequently amended on 17 July 2012 to include a reference to the Supplement on Gold [C/MIN(2011)12/FINAL].

[3] For further information on the PINE database, see: https://pinedatabase.oecd.org/.

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Chapter 2. Eight building blocks for coherent implementation of the SDGs

Enhancing policy coherence is one of the most difficult challenges to implementing the Sustainable Development Goals (SDGs), according to most Voluntary National Reviews (VNRs) presented by UN members to the UN High-level Political Forum (HLPF).This chapter looks at plans and initial steps towards adapting institutional frameworks for SDG implementation taken by the 20 OECD countries that have presented VNRs to the HLPF so far: Belgium, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, Norway, Portugal, Slovenia, Sweden, Switzerland and Turkey. It applies eight key elements of the Framework for Policy Coherence for Sustainable Development (PCSD) as a lens to identify good institutional practices for PCSD as required in SDG Target 17.14. The analysis benefits from several examples from the VNRs that serve to illustrate national variations in the approaches and mechanisms used for implementation. This chapter also includes two contributions by two member institutions of the Partnership for Enhancing Policy Coherence for Sustainable Development which have developed analytical tools for coherent implementation of the SDGs. This chapter is complemented by country profiles presented in Chapter 3.

Introduction

More than two years since the adoption of the 2030 Agenda, many countries still face the challenge of effectively organising themselves to ensure an integrated implementation of the SDGs. The complexity of interlinkages among the SDGs is bringing to light new policy interdependencies that challenge sectoral structures and decision making processes in many governments. The 2030 Agenda compels governments to break out of policy and institutional silos and find new ways of working to widen participation, build consensus, create ownership across institutions and actors and ultimately to enhance policy coherence.

According to most of the 65 Voluntary National Reviews (VNRs) presented by UN members to the UN High-level Political Forum (HLPF) so far, enhancing policy coherence is one of the most difficult challenges to implementing the SDGs (UNDESA, 2017[1]). In practice, it entails adjusting structures and decision making processes to effectively integrate sustainable development goals into the mandate of existing institutions, necessitating an administrative culture that promotes cross-sectoral collaboration and is sensitive to the need for global action.

There is no one-size-fits-all approach to enhancing policy coherence. Each country must determine its own institutional mechanisms and sequencing of actions. The purpose of this chapter is to highlight diverse experiences with a view to examining what works and what doesn't, and to identify good practices that can inspire other countries to improve their strategic frameworks, strengthen institutional mechanisms and monitoring and reporting systems, find effective ways to address transboundary impacts and ultimately enhance policy coherence in the implementation of the SDGs.

This chapter focuses on institutional mechanisms for policy coherence in SDG implementation. It looks in particular at plans and initial steps towards adapting institutional frameworks for SDG implementation taken by the 20 OECD countries that have presented VNRs to the UN High-level Political Forum (HLPF) so far: Belgium, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, Norway, Portugal, Slovenia, Sweden, Switzerland and Turkey. Drawing on the VNRs and other official sources and reports, it highlights institutional mechanisms and practices which could form the basis of good practice guidance or tools for enhancing policy coherence for sustainable development (PCSD), as called for in SDG target 17.14.

The chapter is structured according to eight elements from the PCSD Framework developed by the OECD in 2016 which are relevant and applicable to countries regardless of their administrative and political traditions (OECD, 2016[2]): 1) political commitment and leadership; 2) policy integration; 3) long-term planning horizons; 4) analysis and assessments of potential policy effects; 5) policy and institutional co-ordination; 6) subnational and local involvement; 7) stakeholder engagement; and 8) monitoring and reporting. This chapter includes two contributions by the Stockholm Environment Institute (SEI) and International Institute for Applied Systems Analysis (IIASA) – two member institutions of the Partnership for Enhancing Policy Coherence for Sustainable Development – which have developed analytical tools for coherent implementation of the SDGs. This chapter is complemented by Chapter 3 which presents country profiles from 19 countries highlighting institutional practices and mechanisms corresponding to the eight PCSD building blocks.

Policy coherence and the Sustainable Development Goals

Policy coherence for sustainable development (PCSD) – embodied in target 17.14 – is an integral part of the means of implementation for all SDGs. It can help identify critical interlinkages among goal areas, manage potential trade-offs, promote synergies, and address negative impacts (Box 2.1). By assessing how efforts to attain a target in one sector could affect efforts in another, PCSD can also support more effective and cost-efficient actions. For example, some support programmes for farmers that contribute to SDG target 2.1 to end hunger may increase deforestation through conversion to crop and livestock production, thereby undermining efforts to halt biodiversity loss (SDG target 15.5). The OECD estimates that land use change for agriculture is the main source of biodiversity loss worldwide. Coherence can help avoid contradictions, address inconsistent policies, reduce inefficient spending and minimise negative effects and obstacles to achieving goals.

Box 2.1. What is policy coherence for sustainable development?

The OECD defines policy coherence for sustainable development (PCSD) as an approach and policy tool to systematically integrate the economic, social and environmental dimensions of sustainable development at all stages of domestic and international policy making. Its three main objectives are to:

1) Foster synergies across economic, social and environmental policy areas.
2) Identify trade-offs and reconcile domestic policy objectives with internationally agreed objectives.
3) Address the negative spillovers of domestic policies.

Source: (OECD, 2014[3]).

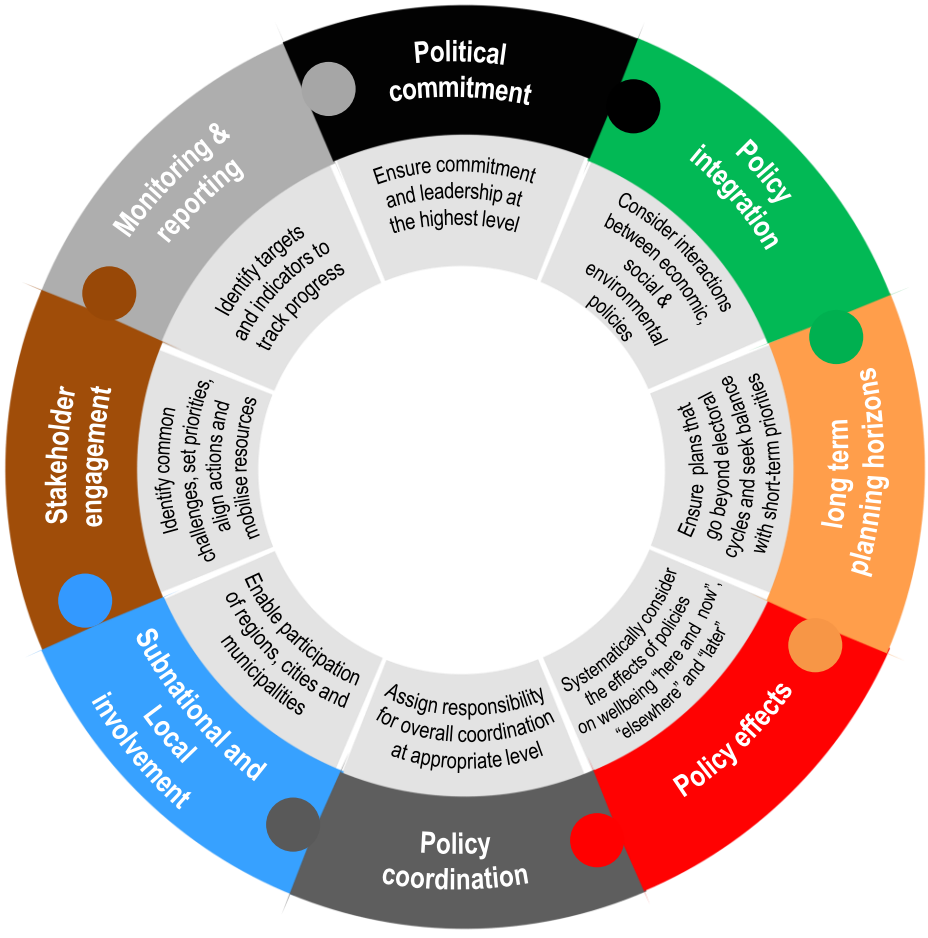
The VNRs presented by OECD countries to the HLPF in 2016 and 2017 illustrate the diverse institutional mechanisms that governments are putting in place to support SDG implementation (see Annex 2.A). Most of these countries have a long tradition of working towards sustainable development, often established as part of their implementation of Agenda 21 signed at the Rio Earth Summit in 1992. A key question is how these institutional structures and mechanisms operate to ensure a coherent implementation of the SDGs.

Eight building blocks of policy coherence for sustainable development

Policy coherence does not happen automatically – it is a political choice by governments to establish supporting institutional structures and take specific initiatives. Enhancing PCSD as called for in SDG target 17.14 will depend on mechanisms to anticipate, balance and reconcile divergent policy pressures, including conflicting domestic and international priorities; opposing economic, social and environmental concerns; competing sectoral interests; and reconciling short-term priorities with the long-term policy direction integral to attaining sustainable development objectives.

The experiences of OECD countries in promoting policy coherence for development over the past two decades, as well as in implementing national sustainable development strategies (NSDS) in accordance with Agenda 21, has led the OECD to identify eight building blcoks essential for coherent SDG implementation (Figure 2.1). They represent structures, processes and working methods that can facilitate improvements in policy coherence and are applicable to countries regardless of their administrative and political traditions.

Figure 2.1. Eight Building Blocks of Policy Coherence for Sustainable Development



Source: (OECD, 2017[4]).

These building blocks illustrate how different institutional mechanisms fit together and can contribute towards higher degrees of policy coherence in terms of: 1) mobilising whole-of-government action; 2) balancing economic, environmental, and social concerns; 3) reconciling short- and long-term priorities; 4) addressing potential negative impacts of domestic policies beyond borders; 5) ensuring co-ordinated and mutually supporting efforts across sectors; 6) involving subnational and local levels of government; 7) engaging key stakeholders beyond government; and 8) using monitoring and reporting systems to inform coherent policy making. There is no particular sequencing, but all eight must be in place for sustained progress towards policy coherence for sustainable development.

Political commitment

Greater policy coherence starts with strong political commitment and leadership. Political commitment, clearly and publicly expressed at the highest level, is an essential foundation for prioritising policy objectives. It must be backed by broad consensus among parties and parliamentary support, a strategic framework, time-bound action plans, and incentives (OECD, 2010[5]). Strong political leadership is needed to shape national debate on how to shift towards a sustainable path and achieve the SDGs both nationally and internationally, guide whole-of-government action and build ownership across institutions and stakeholders. It is critical to orient policy development in line ministries and translate commitments into concrete measures at local, national and international levels.

The 20 OECD countries covered in this chapter have publicly expressed strong political commitment to the 2030 Agenda and SDGs in national and international forums. For example, Mexico's President, in his statement to the 71st UN General Assembly in 2016, affirmed that his country had taken on implementation of the 2030 Agenda as a "commitment of the State" (UNGA, 2016[6]). Based on this commitment, Mexico is aligning its existing national and sectoral plans, adapting institutional and legal frameworks and shifting policies in preparation for SDG implementation. Similarly, several countries have adapted or launched new sustainable development strategies, while others have developed more specific national implementation plans. In most cases these processes were based on broad consultations and a clear indication of commitment, such as volunteering for national reviews at the HLPF. Mexico and Switzerland will present VNRs for a second time in 2018.

Several countries have updated national sustainable development strategies developed for the 1992 Rio Conference as a starting point for implementation. In **Estonia,** for example, the Sustainable Development Commission launched a review of *Sustainable Estonia 21* to ensure compliance with the 2030 Agenda and the SDGs. In **Korea,** the Third National Basic Plan for Sustainable Development 2016-2035, which is updated every five years, was established in January 2016 as a framework to translate the SDGs into national policies. In 2016, **Switzerland** renewed its Sustainable Development Strategy, which defines the Federal Council's policy priorities for sustainable development in the medium to long term (2016-19) and outlines the country's contribution to the SDGs. The process of updating national sustainable development strategies has entailed extensive enhancements to better reflect the integrated, multi-level and long-term nature of the 2030 Agenda and SDGs (Box 2.2).

Box 2.2. National strategies updated to align with the 2030 Agenda and SDGs

Belgium - The National Sustainable Development Strategy, approved in 2017 after consultation with stakeholders, provides an umbrella framework for government actors at the federal and federated levels to align their efforts towards the SDGs and aims to create the basis for a coherent approach to sustainable development policies. A new feature is the commitment of relevant authorities to collectively report on implementation twice per government term, and to engage in broad dialogue with key stakeholders (PMO Belgium, 2017[7]).

Czech Republic - The 2010 Strategic Framework for Sustainable Development was revised to align with the principles, goals and targets of the 2030 Agenda. Adopted in April 2017, *Czech Republic 2030* identifies six national priority areas: People and Society, Economy, Resilient

Ecosystems, Regions and Municipalities, Global Development and Good Governance. It sets forth 97 specific goals to improve the well-being of citizens while respecting the principles of sustainable development, and provides an overarching framework for sectoral, regional and local strategies (Czech Republic, 2017[8]).

Germany - In January 2017, the Federal Government approved a new version of the Sustainable Development Strategy, considered the most extensive enhancement since its adoption in 2002. It defines concrete targets and measures covering a wide range of policies. All federal institutions are called upon to contribute to achieving the targets with activities in their own fields. The Strategy presents measures to implement the 17 SDGs at three levels: 1) measures by Germany with domestic effects; 2) measures with global effects; and 3) concrete support for other countries in the form of bilateral co-operation (measures with Germany) (Germany, 2016[9]). With the coalition treaty of the new government, Germany reiterated its high commitment to sustainable development. The treaty acknowledges that the implementation of the 2030 Agenda and the promotion of sustainable development are yardsticks for government action".

Italy - The updated National Sustainable Development Strategy 2018/2030 is organised into five core areas: People, Planet, Prosperity, Peace and Partnership. The first four areas cover mainly the domestic dimension; the latter covers principles and objectives of international co-operation. Implementation is linked to existing national programming documents such as the National Reform Programme and the Economic and Financial Document (Italy, 2017[10]).

Slovenia - The *Slovenian Development Strategy 2030*, adopted in December 2017, provides an umbrella development framework aligned to the 2030 Agenda for Sustainable Development. The Strategy's primary objective, "Slovenia, a country with a high quality of life for all", will be achieved through balanced economic, social and environmental development, supported by sectoral, regional and municipal strategies and programmes as well as operational measures (Republic of Slovenia, 2017[11]).

Sweden - The Policy for Global Development, adopted by the Riksdag (Parliament) in 2003, was relaunched in 2015, providing Sweden with a framework to support implementation of the 2030 Agenda and the global goals (Sweden, 2017[12]).

Some countries have integrated the SDGs and key principles of the 2030 Agenda into their existing national development plans. **Mexico** is considering using its National Development Plan (NDP) as an overarching framework to guide government-wide policies and actions for achieving the 2030 Agenda. The country's National Planning Law was updated in 2017 to integrate the 17 SDGs and key 2030 Agenda principles into national development planning and serve as a reference for future actions. Guidelines have been developed to support integration of the 2030 Agenda principles and approach into state and municipal development plans (Mexico, 2017[13]).

Similarly, the **Netherlands** is integrating the vision and key principles of the 2030 Agenda into its existing government plan. The coalition agreement "Confidence in the Future", presented to Parliament in October 2017, contains plans for: 1) investing in key public services; 2) improving security and ensuring opportunities in the economy for all; 3) addressing climate change and ensuring a sustainable future for the Netherlands; and 4) strengthening the role of Netherlands in the world, including through international co-operation with SDGs as guiding framework (Government of the Netherlands, 2017[14]). In **Portugal,** incorporation of the 2030 Agenda into national plans and policies is organised around thematic areas identified as 5Ps: People, Prosperity, Planet, Peace and Partnerships (Portugal, 2017[15]). The government of **Turkey** intends to include the SDGs

as one of the main inputs for preparing the long-term strategic vision for its 11th National Development Plan (2019-2023).

Developing a specific time-bound action plan with clearly identified objectives that encompass all government policies helps to translate political commitment into action. Several countries are developing specific 2030 Agenda implementation plans in addition to their overarching strategic frameworks (Box 2.3). **France** is developing a roadmap to implement the SDGs with input from stakeholders at each stage (definition, implementation, monitoring and evaluation, and regular reviews) (OECD, 2017[4]). **Norway** has developed a plan for national follow-up on the SDGs linked to the budget process. In **Switzerland**, the Sustainable Development Strategy 2016-2019 includes a concrete action plan structured into nine thematic areas closely related to the SDGs: consumption and production (SDG 12); urban development, mobility and infrastructure (SDGs 9 and 11); energy and climate (SDGs 7 and 13); natural resources (SDGs 2, 6, 14 and 15); economic and financial systems (SDGs 8, 10, 16, and 17); education, research and innovation (SDG 4); social security (SDGs 1 and 16); social cohesion and gender equality (SDG 5, 10 and 16); and health (SDG 3).

Box 2.3. National action plans for SDG implementation

Czech Republic - Implementation of *Czech Republic 2030* will include establishing mechanisms and tangible measures to ensure compliance between its strategic and specific goals and the objectives of other sectoral strategies, concepts and programmes, and minimise existing policy gaps. (Czech Republic, 2017[8]).

Denmark - The government has formulated an Action Plan focused on the 5 P's: Prosperity, People, Planet, Peace and Partnerships. Partnerships are cross-cutting, but for the other dimensions the government has developed a total of 37 concrete national targets for achievement of the SDGs, prioritising areas where strengths exist but improvement is needed (Denmark, 2017[16]).

Finland - The government plan submitted to parliament in 2017 provides a framework for implementation, national follow-up and review up until 2030, focusing on two areas: 1) a carbon-neutral and resource-wise Finland; and 2) a non-discriminatory, equal and competent Finland (PMO Finland, 2017[17]).

Italy - With the endorsement of the National Sustainable Development Strategy by the Council of Ministers, a future Plan of Action will be developed to include numerical and quantitative targets at 2030, as well as monitoring and review mechanisms including analytical models to measure the impacts of policies on the NSDS objectives (Italy, 2017[10]).

Japan - In December 2016, the cabinet body "SDGs Promotion Headquarters", headed by the Prime Minister, adopted the *SDGs Implementation Guiding Principles*, which represent Japan's national strategy to address the major challenges for implementation of the 2030 Agenda. The guiding principles set out a vision, five implementation principles, eight priority areas and an approach to the follow-up and review process. An annex includes 140 specific measures to be implemented domestically and abroad (Japan, 2017[18]).

Luxembourg - Preparation of the Third National Plan for Sustainable Development in 2018 will be informed by an inventory of existing policies and international commitments currently integrating the SDGs, as well as a gap analysis. The National Plan specifies Luxembourg's priority areas for sustainable development at national and international levels, formulates concrete objectives and proposes actions and instruments necessary for their implementation.

Mexico - A National Strategy for implementation of the 2030 Agenda is being elaborated

through a broad consultation process under the co-ordination of the Office of the President. The new Strategy will incorporate a long-term vision to guide the elaboration of future National Development Plans. The National Council for 2030 Agenda will be responsible for its implementation.

A clearly stated commitment, widely communicated within and outside government, is a precondition for enhancing policy coherence. Providing specific guidelines and mandates on how to proceed across the administration is equally important. Half of the countries covered in this chapter have made explicit commitments to policy coherence as part of their strategies and plans for SDG implementation or their development co-operation policy (Box 2.4).

Box 2.4. Countries with explicit commitments to policy coherence

Belgium - Commitment to sustainable development is enshrined in the Belgian constitution since 2007, to which the federal state, the communities (Flemish, French and German-speaking) and the regions (Wallonia, Flanders and Brussels-Capital) must contribute. The 2013 Law on Development Cooperation refers to policy coherence for development, and an intergovernmental declaration on adherence to PCD involving both federal and federated governments was signed in 2014. Reflections are underway to adapt existing commitments and the institutional architecture for policy coherence for development to the new realities of the 2030 Agenda.

Czech Republic - The overarching framework outlined in *Czech Republic 2030*, with sustainable development and well-being at its core, uses PCSD as a guiding principle for national, regional and local policies (Czech Republic, 2017[8]).

Denmark - The government supports policy coherence for sustainable development, and line ministries integrate sustainable development in policy making. As part of its SDG Action Plan, the government will assess the consequences of new legislation and major initiatives (Denmark, 2017[16]).

Finland - The government's plan for the 2030 Agenda, submitted to the Parliament in 2017, is the framework for implementation, national follow-up and review up until 2030. It also outlines both domestic and international commitments and makes an explicit commitment to policy coherence to support sustainable development. (PMO Finland, 2017)

Germany - The National Sustainable Development Strategy contains the Federal Government's ambition to use the 2030 Agenda as an opportunity to increase its efforts for policy coherence, with particular reference to SDG 17.14. Various policy areas are bundled to achieve greater coherence in light of the large number of systemic interdependencies. Ministry Coordinators for Sustainable Development have been appointed in all ministries as central contact persons.

Luxembourg - The report on implementation of the 2030 Agenda adopted in May 2017 addressed policy coherence and the need for whole-of-government involvement (Luxembourg, 2017[19]). The National Plan for Sustainable Development as implementation strategy will further address PCSD. Close ties have been established between the Interdepartmental Sustainable Development Commission and the Inter-ministerial Committee for Development Co-operation. Work is underway to clarify the role of development co-operation in SDG implementation. (OECD, 2017[20]).

Netherlands - In 2016 the Netherlands adopted an action plan on policy coherence for development with time-bound goals and actions aligned with the SDGs focusing on key areas of

trade agreements, tax evasion/avoidance, investment protection, climate change, cost of remittances, sustainable value chains (including responsible business conduct), access to medicines and food security. The action plan will be revised in 2018 in light of the country's new policy on Foreign Trade and Cooperation.

Portugal - A National Plan for Policy Coherence for Development, aligned with the national priorities for the SDGs, will intensify joint work between various ministries, the national parliament, and representations in third countries (Portugal, 2017[15]).

Slovenia - The new *Slovenian Development Strategy 2030* emphasises the importance of enhancing policy coherence for development and the need to establish better mechanisms of horizontal and multilevel co-operation, understanding cross-cutting topics and central planning, harmonising and monitoring domestic policies, and aligning national and international development goals (Republic of Slovenia, 2017[11]).

Sweden - The Policy for Global Development (PGD) relaunched in 2015 underlines the centrality of policy coherence to promote sustainable development. After the adoption of the 2030 Agenda, all ministries have for the first time developed internal action plans with concrete goals for the work of the PGD linked to the global goals. Horizontal and vertical policy coherence are regarded as challenges but also as opportunities to identify trade-offs and synergies in SDG implementation.

Policy integration

In adopting the 2030 Agenda, governments committed to "achieving sustainable development in its three dimensions – economic, social and environmental – in a balanced and integrated manner" and to "implement the Agenda within [their] own countries and at the regional and global levels" (UNGA, 2015[21]). Policy integration is central to balancing the often divergent dimensions of sustainable development, as well as maximising synergies and managing trade-offs at all stages of policy making.

Policy coherence is a key facilitator of integration. It is essential in ensuring that policies aimed at achieving one SDG contribute to progress in others – for example, that policies for improving energy efficiency (SDG 7) are designed in a way that contribute to achieving sustainable economic growth (SDG 8), building sustainable cities (SDG 11), ensuring sustainable consumption and production patterns (SDG 12) and combating climate change (SDG 13). It is equally important in avoiding the risk of progress on one goal occurring at the expense of another – for example, actions towards ensuring universal access to electricity and clean cooking (SDG 7) threatening achievement of the climate goal (SDG 13) or worsening air pollution, with negative consequences for health (SDG 3).

Policy integration requires strategic frameworks and mandates to ensure that policies and institutions: 1) work under a new logic of cross-sectoral collaboration, based on shared priorities, and 2) align sectoral objectives to overarching or higher level goals (such as the SDGs). This means specific measures, including budgetary, to incorporate SDGs into the mandate of each national institution. It also requires a decision making process (inter-ministerial, multi-stakeholder) with the capacity to take strategic decisions and influence planning, budgeting, legislation and sectoral programmes and policies. Policy priorities must take into account the fulfilment of international obligations. Integration should take place both vertically (across international, national, subnational and local levels of government) and horizontally (across policy communities and government entities) (OECD, 2002[22]).

Experiences with implementation of National Sustainable Development Strategies (NSDS) developed as part of Agenda 21 signed at the Rio Earth Summit in 1992 show that policy integration is extremely difficult to achieve (OECD, 2005[23]). Most NSDSs focused on environmental sustainability, with attempts made to integrate economic and social aspects. Sustainable development was perceived as an environmental issue rather than an integrated concept, and efforts were often led by environment ministries with a focus on the domestic setting.

In line with the integrated nature of the 2030 Agenda, governments are taking measures to embrace economic, social and environmental concerns in a more coherent and balanced manner (Box 2.5). In the **Netherlands,** key policy domains for sustainable development have been assigned to the recently renamed Ministry of Economic Affairs and Climate Policy, which is tasked with avoiding trade-offs and strengthening synergies. Similarly, the foreign trade and development co-operation portfolios are now under the responsibility of one minister. In **Korea**, the Third Basic Plan for Sustainable Development 2016-2035 was expanded to encompass economic and social development goals and mainstream the SDGs.

Some countries have integrated the dimensions of sustainable development into their national legislation. In **Belgium**, sustainable development is enshrined in the Belgian Constitution as a general policy objective for the Federal State, Communities and Regions in exercising their respective competences. **Chile** has recently adopted a range of laws – in the areas of education, labour, and taxation – supportive of the 2030 Agenda and the SDGs (UNDESA, 2017[1]).

Other countries have developed guidelines or created working groups to support integration. In **Switzerland**, guidelines contained in the Sustainable Development Strategy 2016-2019 explain how the Federal Council should mainstream sustainable development in all of the Confederation's sectoral policies. In **Turkey**, a task force within the Ministry of Development composed of experts in relevant areas was mandated to integrate SDGs into public documents at all levels, including the National Development Plan, regional plans, annual programmes, and sectoral strategies.

As a key policy and priority-setting document for governments, national budgets are an essential tool for policy integration and coherence. Several countries are using budgetary processes to align actions and programmes with the SDGs. **Mexico** has incorporated a provision into its Guidelines for the Programming and Budgeting Process for the Fiscal Year 2018 establishing elements, dates and specific actions so that federal agencies and entities can link their authorised programme structures with the SDGs. In **Norway**, the Ministry of Finance is responsible for ensuring a co-ordinated budget to foster SDG implementation. It assigns each of the 17 Goals to a co-ordinating ministry who must co-operate with other ministries involved in the follow-up of relevant targets. Ministries' progress reports are compiled by the Ministry of Finance and submitted to the parliament as part of the national budget annual White Paper.

Box 2.5. Examples of policy integration

Belgium - The Federal Institute on Sustainable Development (FISD) supports ministries and other stakeholders in integrating sustainable development into their core business. Two additional instruments support policy integration: an *ex ante* impact assessment of regulatory action and the Federal Long-Term Vision statement for the Belgian 2030 outlook.

Denmark - The government already assesses new legislative proposals in terms of their economic, environmental and gender equality consequences. It also supports policy coherence in sustainable development and line ministries to integrate sustainable development in policy making.

Finland - As part of the Government Implementation Plan, sustainable development objectives will be included in the performance targets and performance management of ministries. Attention will be paid in the budgetary planning process to the inclusion of information essential to the promotion and monitoring of sustainable development in performance targets and follow-up indicators for various administrative branches (PMO Finland, 2017[17]).

Germany - The 12 management rules of the German Sustainable Development Strategy define general requirements for sustainable policy making. According to the new Strategy, the guiding principle of sustainability should be considered in every law and decree from the start. Sustainable development is enshrined in the Joint Rules of Procedure of the Federal Ministries as a mandatory criterion when assessing the impact of proposed laws and regulations (Germany, 2016[9]). In March 2018, a new online tool (www.enap.bund.de) was introduced as part of the Sustainability Impact Assessment, which helps to check proposals for laws and regulations against all targets and indicators of the German Sustainable Development Strategy as well as SDGs.

Japan - The 2016 *SDGs Implementation Guiding Principles* are based on Japan's aspiration to "become a leader toward a future where economic, social and environmental improvements are attained in an integrated, sustainable and resilient manner while leaving no one behind." The guiding principles provide a framework for policy integration and direct the government and related agencies to incorporate the SDGs into their plans, strategies and policies as much as possible (Japan, 2017[18]).

Long-term planning horizons

Adopters of the 2030 Agenda committed to "implement the Agenda for the full benefit of all, for today's generation and for future generations" (UNGA, 2015[21]). The intergenerational nature of the SDGs calls for a long-term perspective that includes precautionary decisions and mechanisms to maintain commitment over time.

Government decision making rarely goes beyond the electoral cycle of four to six years – insufficient time to take intergenerational and long-term considerations into account. A key challenge is ensuring that sustained efforts on SDG implementation outlive electoral cycles, government programmes or cabinet compositions, and are balanced with short-term priorities. The 2030 Agenda has motivated some countries to apply 20- or 30-year timeframes to their national strategies (Box 2.6).

Box 2.6. Long-term planning horizons for SDG implementation

Belgium - The Federal Vision for Sustainable Development is based on a horizon to 2050. The Inter-ministerial Conference for Sustainable Development (IMCSD) has no fixed end date.

Finland - The vision and goals set forth in the National Commission on Sustainable Development's implementation plan, *The Finland we want by 2050 - Society's Commitment to Sustainable Development,* provide a long-term framework for sustainability. The plan defines several key actions, such as more closely aligning foresight activities with SDG implementation, developing competence among government officials, and creating conditions for long-term work.

Germany - The first Management Rule of the German Sustainable Development Strategy emphasises that "Each generation is required to solve the challenges facing it and must not unload them onto future generations. It must also make provisions for foreseeable future problems." Long-term effects of particular regulations are explicitly considered in the Sustainable Impact Assessment.

Italy - The National Sustainable Development Strategy 2018/2030 sets the path for a long-term vision based on the 2030 Agenda.

Slovenia - The recently adopted Slovenian Development Strategy 2030, which is the overall development framework of the state aligned to the SDGs, is a response to the Vision of Slovenia 2050 document. The Vision of Slovenia 2050 was developed through an inclusive process and is the key framework for the country's long-term orientations. (Republic of Slovenia, 2017[11])

Policy Effects

In adopting the 2030 Agenda, countries affirmed that they were "setting out together on the path towards sustainable development, devoting [themselves] collectively to the pursuit of global development" (UNGA, 2015[21]). This highlights the international dimension of sustainable development as well as the common goal of poverty eradication, particularly in developing countries. SDG implementation calls for consideration of how countries' development paths can impact one another and how domestic policies may affect the well-being of citizens in other countries.

With increasing global interconnectedness, transmission channels are numerous and countries necessarily impact on one another (OECD, 2017[4]). Transmission channels include: financial flows or income transfers (ODA, remittances, loans); imports or exports of goods and services (economic activities "here" will impact on natural resources "elsewhere"); migration ("brain-drain"); and knowledge transfers. Building capacity to measure policy impacts is essential to enhance policy coherence. It can help identify transboundary impacts of consumption and production patterns and inform decision making by refining or re-prioritising policy objectives. Addressing and minimising potential negative transboundary effects is a key building block for enhancing PCSD. As part of the OECD study on Measuring Distance to SDG targets, work is underway to develop a framework for measuring transboundary effects within the SDGs, based on available indicators.

Some countries are working towards adopting broader forms of impact assessment to ensure the sustainability of policies (Box 2.7). Several have taken steps to ensure an effective interface between the domestic and international dimensions of sustainable

development as part of their SDG implementation processes. In **Finland**, for example, the National Commission on Sustainable Development and Development Policy Committee have strengthened collaboration as part of the country's intention to implement the SDGs domestically and internationally under a single national implementation plan.

Box 2.7. Measures to identify and address potential transboundary impacts

Belgium - With the adoption of the 2013 Federal Long-term Vision for Sustainable Development a new *ex ante* impact assessment tool – the Sustainable Impact Assessment (SIA) – was integrated into the Regulatory Impact Assessment (RIA) in 2014. The RIA assesses possible effects of preliminary draft regulations on the dimensions of sustainable development (economic, social, environmental) and public services. It constitutes an important tool for PCSD.

Czech Republic - The Czech Republic aims at strengthening its institutional, analytical and control mechanisms to ensure policy coherence for sustainable development in order to reduce any adverse impact of the country's policies beyond its borders. It particularly seeks to protect human rights in national entities' supply chains. The quality of policies will be improved through better *ex ante* impact assessments and enhanced *ex post* evaluations.

Denmark - The government already assesses the economic, environmental and gender consequences of new legislation. As part of the Action Plan for SDGs the government will also assess the consequences of new legislation and major initiatives for the SDGs when considered relevant to the Danish context and where the impact is significant (Denmark, 2017[16]).

Finland - As part of the Government Implementation Plan for the 2030 Agenda, steps will be taken to explore the inclusion of sustainable development impact assessment in key policy and legislative motions. The existing impact assessment process for bill drafting will be developed to ensure better co-ordination with sustainable development goals and to identify coherence between goals and actions undertaken at national and global levels (PMO Finland, 2017[17]).

Germany - Management Rule 12 of the German Sustainable Development Strategy emphasises that actions in Germany must consider the burdens they create in other parts of the world. With the new Strategy, Germany aims to contribute to the SDGs at three levels: measures with effects in Germany; measures implemented by Germany with global effects, in particular activities for the benefit of global public goods; and concrete support for other countries and joint implementation of measures with Germany, in particular in the context of bilateral development co-operation.

Luxembourg - The Committee for Development Co-operation (CID) has adopted a new working method to analyse and deal with policy coherence issues. Once identified, topics are discussed in the CID, which can formulate recommendations to the government. It also sets out a list of topics to be discussed during the year, such as the common pension compensation fund, economic partnership agreements, the common agricultural policy, taxation, COP21 and social protection. Members can propose that policies with potential transboundary and intergenerational effects be reviewed at the design stage. Civil society also supports the CID in identifying such topics.

Netherlands - The 2016 action plan on policy coherence for development identifies potential transboundary effects, specifically on developing countries, related to the eight themes the Netherlands is focusing on which are linked to the SDGs. The 2017 annual report on PCD provides detail on the different effects of each theme and examines conflicts of interests related to three of them (access to medicines under the WTO/TRIPS Agreement; remittance costs; and tax avoidance) and illustrates how the Netherlands is pursuing policy coherence on these issues (Dutch Ministry of Foreign Affairs, 2017[24]).

Policy – and institutional – co-ordination

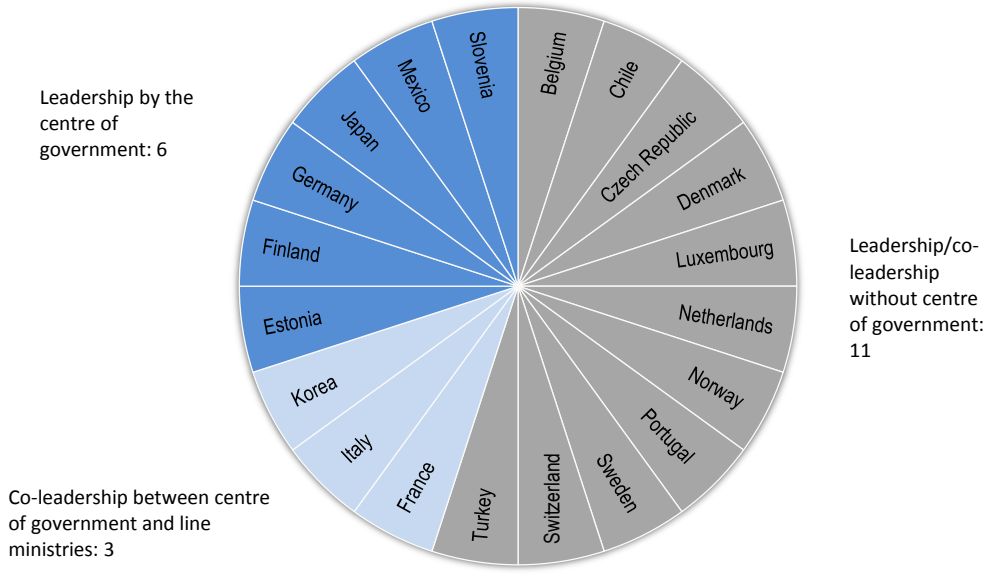
The cross-cutting nature of the SDGs poses co-ordination challenges at each level of the policy making process. It requires that governments strengthen existing mechanisms for horizontal co-ordination (between entities of a particular tier) and vertical co-ordination (between national, subnational and local levels).

Appropriate co-ordination mechanisms allow ministries, public sector agencies and other key stakeholders to share information, define and distribute responsibilities and efficiently allocate resources for SDG implementation. Involving a wide range of government departments and other stakeholders helps to ensure a holistic perspective on issues, give voice to diverse interests, address potential trade-offs, raise public awareness and create ownership.

An OECD Survey on Planning and Co-ordinating the Implementation of the SDGs suggests that countries recognise the role of centres of government (CoG): in 19 out of 31 countries surveyed the CoG is helping to steer and co-ordinate SDG implementation (OECD, 2016[25]). In nine of the OECD countries that have presented VNRs so far, the Office of the President or Prime Minister leads SDG implementation either on its own or supported by line ministries. In the other countries, co-ordination responsibility is assigned to line ministries with cross-cutting influence (Figure 2.2).

Figure 2.2. Leadership in coordinating SDG implementation

OECD countries that presented VNRs in 2016 and 2017



Note: Based on information from VNRs and (OECD, 2016[25]).
Source: Adapted from (OECD, 2017[26]).

Both approaches are effective for enhancing policy coherence, provided they have clear mandates to resolve policy divergences and tensions arising from different sectoral interests. Elements to consider include: 1) the neutrality and convening power of the body responsible for co-ordination functions throughout the administration; 2) mandates of the

co-ordinating body to deal specifically with policy divergences and resolve conflicts of interest; 3) capacity and resources to influence changes in policy making; and 4) involvement of outside actors as a way to identify common challenges and build ownership of new agendas.

Some countries have established central co-ordination mechanisms at the highest level to ensure political leadership and facilitate cross-sectoral collaboration. For example, in 2016 **Japan** created a new cabinet body, "SDGs Promotion Headquarters", headed by the Prime Minister and comprising all ministries to lead co-operation among ministries and government agencies in implementing the SDGs (Japan, 2017[18]). Similarly, Estonia, Finland, Germany, Mexico and Slovenia have placed responsibility for overall co-ordination of SDG implementation directly under the Head of Government (Box 2.8).

Box 2.8. Countries with central co-ordination mechanisms at the highest level

Estonia - The national co-ordination mechanism for sustainable development is led by the Government Office Strategy Unit under the central government.

Finland - Co-ordination for national implementation of the SDGs is led by the Prime Minister's Office (PMO). The co-ordinating secretariat of the Commission on Sustainable Development was transferred from the Ministry of the Environment to the PMO in 2016, along with responsibility for planning, preparing, co-ordinating and ensuring implementation. An Inter-ministerial Coordination Network consisting of sustainable development focal points from each line ministry supports the PMO.

Germany - Chaired by the Head of the Federal Chancellery, the State Secretaries' Committee serves as the central co-ordinator for the Sustainable Development Strategy. Its role is to ensure that the Strategy is applied to all policy areas. All ministries retain primary responsibility for contributions to the SDGs and 2030 Agenda in their respective policy areas (Germany, 2016[9]). A new directors' working group for sustainable development (UAL-AG) has been established. This group comprises representatives from all ministries and, led by the Federal Chancellery, deals with all questions of sustainable development relevant to the ministries. The strategic and content-related work of the UAL-AG will be expanded in future also in line with its role as a central interface in the overall architecture of the National Strategy.

Mexico - The President established the National Council for the 2030 Agenda for Sustainable Development as a bonding mechanism between the Federal and local governments, civil society, the private sector and academia. It is chaired by the President and composed of state secretaries. The National Council is tasked with co-ordinating actions for the design, implementation and evaluation of policies to comply with the 2030 Agenda. The work of the Council is supported by an Executive Secretary located within the Office of the President.

Slovenia - The Government Office for Development and European Cohesion Policy has been appointed as the 2030 Agenda implementation co-ordinator. The co-ordinator for monitoring the achievement of the goals of the 2030 Agenda at the national level is the body responsible for development. Communication and harmonisation with the ministries and government offices will be carried out by the Permanent Interdepartmental Working Group for Development Planning. The working group allows more effective coordination and an active contribution to the compilation of the central strategic and implementing documents of the Republic of Slovenia and also oversees the inclusion of the 2030 Agenda in draft documents and the transfer of information about the importance of the 2030 Agenda in individual areas.

In France and Italy, the centre of government and line ministries work together on SGD implementation. **In France**, efforts are co-ordinated by the General Commissariat for Sustainable Development (CGDD), mandated by the Prime Minister, in close partnership with the Ministry for Europe and Foreign Affairs (MEAE) for the international dimension. In **Italy**, the prime minister leads co-ordination and management of the National Sustainable Development Strategy (NSDS), with support from the Ministry for the Environment, Land and Sea and the Ministry of Foreign Affairs for the internal and external dimensions respectively. The Ministry of Finance will be tasked with creating synergies between NSDS implementation and formal economic policies (Italy, 2017[10]).

In some countries, the Ministry of Foreign Affairs plays an important role. In **Chile** the new National Council for the Implementation of the 2030 Agenda is chaired by the Ministry of Foreign Affairs and composed by the Ministry of Economic Affairs, Business Development and Tourism, the Ministry of Social Development and the Ministry of the Environment (Chile, 2017[27]). In the **Netherlands**, the Minister for Foreign Trade and Development Cooperation is in charge of overall co-ordination. An SDG network of focal points with representatives from each ministry and the Association of Netherlands Municipalities has been established and meets regularly. The network is chaired by a specially appointed high-level co-ordinator for national SDG implementation, assisted by a small secretariat (Kingdom of the Netherlands, 2017[28]).

In **Portugal**, general co-ordination is led by the Ministry of Foreign Affairs together with the Ministry of Planning and Infrastructure. This is to ensure close alignment between the domestic and international dimensions of the 2030 Agenda and maintain a structured dialogue with United Nations bodies. Intra-governmental guidelines for the 2030 Agenda were adopted for the first time by the Council of Ministers in 2016 . The Inter-ministerial Commission for Foreign Policy oversees domestic implementation, while the Inter-ministerial Commission for Co-operation Policy is responsible for incorporation of the SDGs into development co-operation and overseeing the external dimension. A network of focal points from different government departments has also been established to facilitate systematic exchange of information (Portugal, 2017[15])

Similarly, in **Sweden** the Minister for Public Administration is responsible for co-ordinating and promoting implementation of the 2030 Agenda at the national level, while the Minister for International Development Cooperation and Climate is responsible for international implementation, through the Policy for Global Development and development co-operation (Sweden, 2017[12]). A consultation group of state secretaries from the Ministry of Finance, the Ministry for Foreign Affairs, the Ministry of the Environment and Energy and the Ministry of Enterprise and Innovation has been established, as well as an interministerial working group for the 2030 Agenda.

Luxembourg has put in place co-ordination, planning and evaluation mechanisms under the chairmanship of the Ministry of Sustainable Development and Infrastructure. The composition, organisation and functioning of the Inter-Departmental Commission for Sustainable Development (ICSD) were modified to better reflect the integrated nature of the 2030 Agenda and ensure inter-governmental co-ordination. The Director of Development Co-operation is being designated Vice-Chair of the ICSD to better integrate the domestic and international dimensions of the SDGs. Collaboration between the ICSD and the Inter-Ministerial Committee for Development Co-operation has been strengthened (OECD, 2017[20]). In the **Czech Republic**, the Ministry of environment is responsible for implementation of the 2030 Agenda. The Government Council for

Sustainable Development is chaired by the First Deputy Minister and Minister for the Environment.

In both Denmark and Norway, the Ministry of Finance plays a key role. In **Denmark**, the Ministry of Finance is responsible for co-ordinating national implementation. Line ministries are responsible for designing policies with attention to the SDGs when relevant, and co-ordination is supported by an interministerial SDG working group. The Ministry of Foreign Affairs is responsible for the SDGs in the context of the United Nations and other international forums, as well as for international engagement in support of the SDGs. Both ministries maintain close co-ordination efforts. In **Norway**, responsibility for following up each of the 17 goals is allocated to a specific co-ordinating ministry. These ministries consult with other ministries involved in following up the various targets. Ministries report progress annually in their budget proposals to the Norwegian parliament. The Ministry of Finance sums up the main points from all ministries in a national budget white paper.

Cross-sectoral structures support co-ordination in Belgium and Switzerland. **Belgium** has revitalised its Inter-Ministerial Conference for Sustainable Development (IMCSD), gathering ministers in charge of sustainable development and development co-operation at different levels (Federal, Communities and Regions) as the central co-ordination mechanism for SDG implementation. The Inter-departmental Commission for Sustainable Development (ICSD) supports co-ordination between federal government departments. The advisory Federal Council for Sustainable Development and the Advisory Council for Policy Coherence for Development (PCD) help engage key stakeholders. An inter-departmental mechanism in **Switzerland** co-ordinates implementation of the SDGs. A dedicated office at the Ministry of Territorial Affairs (Ministry of Environment and Infrastructure) is in charge of co-ordinating the activities jointly with a unit within the Agency of Development Cooperation (Foreign Affairs) supported by a steering body including environment, health, statistics, agriculture and foreign affairs.

Subnational and local involvement

The 2030 Agenda emphasises that "governments and public institutions will work closely on implementation with regional and local authorities" (UNGA, 2015[21]). Subnational and local governments are essential for delivering a wide range of public services as well as the economic, social and environmental transformations needed to achieve the SDGs.

As the level of government closest to the people, local governments are in a unique position to identify and respond to sustainable development needs and gaps. Indeed, most underlying policies and investments are a shared responsibility across levels of government; it is estimated that 65% of the 169 targets underlying the 17 SDGs will not be reached without proper engagement of, and co-ordination with, local and subnational governments (SDSN, 2016[29]). Subnational governments were responsible for 59.3% of total public investment in 2015 throughout the OECD area and for almost 40% worldwide (OECD/UCLG, 2016[30]). Most investments were related to infrastructure for basic services for which cities and/or regions have core competences, and correspond to dedicated SDGs (e.g. education, health, social infrastructure, drinking water, sanitation, solid waste management, transport, and housing).

To co-ordinate national and local SDG implementation, some countries are building on existing mechanisms developed for Agenda 21. In **Belgium** the Inter-Ministerial Conference for Sustainable Development, composed of federal, regional and community

ministers responsible for sustainable development and development co-operation, is used as a central co-ordination mechanism. In **Estonia**, local municipalities apply the main principles of sustainable development through action plans and local legislation adopted during processes related to Agenda 21. Cities and regions in **Finland** have representatives in the National Commission on Sustainable Development. **Norway** uses existing mechanisms for co-operation with local and regional authorities, such as regular consultations between the central government and local authorities. Similarly, **Turkey** uses existing structures and current high-level councils to promote SDGs at the local level. Some countries are creating or strengthening mechanisms to link and co-ordinate national, subnational and local levels of governments for SDG implementation (Box 2.9).

Box 2.9. Subnational and local involvement in SDG implementation

Czech Republic - Preparation of *Czech Republic 2030* included co-operation with local and regional authorities. The Government Council on Sustainable Development includes a thematic Committee on Sustainable Municipalities, where municipal associations are represented. In 2017, representatives of municipalities, regions and other regional and local actors were involved in discussions also through roundtables organised in eight regional capitals.

Denmark - Each year the government negotiates the following year's budget for municipalities and regions. An agreement for 2018 was reached with local governments on 1 June 2017 and with regional governments on 6 June 2017. The government and municipalities and regions agree to co-operate to achieve the SDGs and integrate sustainable development in policy making.

Germany - The German Sustainable Development Strategy adopted in January 2017 creates mechanisms for co-ordination between the Federal Government, Länder and municipalities. These include: the Sustainability Network of Lord Mayors, the regional hubs (RENN) initiated by the German Sustainable Development Council and the Federal-Länder Experience Pool (Bund-Länder-Erfahrungsaustausch). The latter offers room for regular communication on current issues of sustainable development at Federal and Länder level. Currently 13 out of 16 Länder have already drawn up or are working on their own sustainable development strategies.

Italy - Through the State and Regions Conference and in accordance with national legislation, the government will encourage local and regional authorities to take an active part in the implementation of the National Sustainable Development Strategy at their own territorial level (Italy, 2017[10]).

Mexico - The recently established National Council for the 2030 Agenda led by the President provides a platform for aligning efforts at the federal, state and municipal levels. The National Governors' Conference (CONAGO) established in 2017 an Executive Committee for Compliance with the 2030 Agenda. So far 17 states, under the National Governors' Conference, have created state commissions to support SDG implementation at regional and local levels.

Netherlands - The Association of Netherlands Municipalities (VNG) has launched the *Municipalities4GlobalGoals* campaign to promote awareness of the SDGs among municipalities and help them contribute to the goals.

Stakeholder engagement

The 2030 Agenda emphasises that "all countries and all stakeholders, acting in collaborative partnership, will implement this plan" (UNGA, 2015[21]). Major barriers to

policy coherence are strongly rooted in differing perceptions of the issues involved. Coherent implementation of the SDGs requires mechanisms for dialogue and engagement whereby governments and key stakeholders identify common challenges, set priorities, align policies and actions, and mobilise resources for sustainable development. This is the spirit of SDG target 16.7, which calls for "responsive, inclusive, participatory and representative decision making at all levels" (UNGA, 2015[21]).

Diverse stakeholders – including business and industry, civil society, science and academia – have important roles to play in SDG implementation. These range from resource mobilisation, provision of solutions and innovations, change in production patterns and lifestyles, and advocacy and accountability to giving voice to the concerns and needs of under-represented communities and regions and helping to ensure accountability. Stakeholder consultation in the formulation, implementation and monitoring of national SDG plans and strategies is now an inherent feature of many national processes (Box 2.10).

In **Belgium**, Advisory Councils engage stakeholders from civil society and academia such as the Federal Council for Sustainable Development or the Advisory Council for Policy Coherence for Development. In **Finland**, both the Commission on Sustainable Development, a prime minister-led mechanism, and the Development Policy Committee, a parliamentary body, include stakeholders such as civil society and private sector and interest groups. Both committees support and promote the implementation of the SDGs. In **France**, the National Council for Development and International Solidarity (CNDSI) and the National Council for the Ecological Transition (CNTE) are key fora for involving civil society, the private sector and citizens.

Box 2.10. Stakeholder engagement in national SDG plans and strategies

Czech Republic - Preparation of *Czech Republic 2030* involved hundreds of experts from different sectors, including nine committees and several working groups under the Government Council on Sustainable Development, a series of round tables, public regional consultations, CSO platform consultations and discussion in both chambers of parliament. The government is also engaged in dialogue with the private sector through the promotion of corporate social responsibility and encouraging voluntary commitments by private entities and other actors and individuals to the SDGs.

Denmark - Several large companies are working to integrate the SDGs into their business models, strategies and investments, including by implementing the UN Guiding Principles on Business and Human Rights and actively engaging in the UN Global Compact. The Danish government, in collaboration with partners, hosts a series of workshops aiming to accelerate companies' engagement with the SDGs (Denmark, 2017[16]).

Finland - Society's Commitment to Sustainable Development provides a tool for operational commitments allowing active engagement by citizens and organisations. In 2016 more than 400 commitments to action promoting sustainable development were made by companies, schools, non-governmental organisations, administration, trade unions, political parties, cities, and private individuals (PMO Finland, 2017[17]).

Germany - The Federal Government has established a Sustainability Forum ("Nachhaltigkeitsforum"), a regular dialogue with social stakeholders at which the federal government presents progress on implementing the 2030 Agenda. Social organisations also report on their own steps to implement the 2030 Agenda and comment on progress made by the Federal Government. Another important instrument for stakeholder engagement is the

Sustainable Development Council, whose members cover the different stakeholder groups and the three dimensions of sustainable development. Since 2001, the Council advises the Federal Government on all matters relating to sustainability.

Italy - A multi-level consultation process was developed for the National Sustainable Development Strategy (NSDS) involving all ministries, regions and key stakeholders. More than 200 NGOs have provided inputs to reflect the vision of the 2030 Agenda into the NSDS. Stakeholders are directly engaged in carrying out initiatives linked to SDGs and NSDS implementation. They include the Italian Alliance for Sustainable Development (ASviS), which gathers over 150 organisations in the economic and social fields (Italy, 2017[10]).

Japan – To strengthen stakeholder collaboration for SDG implementation, the government established the *SDGs Promotion Roundtable Meeting*, consisting of representatives from government ministries and agencies as well as relevant stakeholders. Roundtable meetings were held to draft the SDGs Implementation Guiding Principles as well as in preparation for the voluntary national review. As a way to reinforce awareness and incentivise stakeholders' actions, the government has also established the "Japan SDGs Award" to commend the work of private companies and other organisations which contribute to mainstreaming and implementing the SDGs (Japan, 2017[18]).

Netherlands - The Ministry of Foreign Affairs has established the Netherlands' *SDG Charter*, a multi-stakeholder platform aimed at developing partnerships for SDG implementation. Over 100 organisations including Dutch companies, NGOs, knowledge institutes and philanthropists have signed up. The recently launched *SDG Gateway* is an online community of active stakeholders across sectors where potential partners can find each other (Kingdom of the Netherlands, 2017[28]).

Monitoring and reporting

Informed decision making is a critical element of enhancing policy coherence for sustainable development. Coherent implementation of the SDGs requires mechanisms to monitor progress, report to governing bodies and the public, and provide feedback so that actions and sectoral policies can be adjusted in light of potential negative or unintended effects. Monitoring and reporting systems can be used to collect evidence on: 1) the performance of institutional mechanisms to co-ordinate policy and foster more integrated approaches for implementation; 2) critical trade-offs and synergies between policies in different domains; and 3) transboundary and long-term impacts of domestic actions. See Chapter 4 which introduces a three-part framework for tracking progress on PCSD.

Some countries are strengthening their monitoring and reporting systems accordance with the 2030 Agenda and adding elements that can be instrumental for enhancing policy coherence in SDG implementation (Box 2.11). In Germany, for example, the government is revising national targets and indicators of the German Sustainable Development Strategy with a view to strengthening its international dimension accounting for the global impacts of domestic policies.

Box 2.11. Monitoring and reporting systems as a tool for policy coherence

Finland - The Government Implementation Plan foresees that reporting on SDG implementation will pay attention to identifying groups, including those outside Finland's borders, that are at risk of falling behind in their development (PMO Finland,

2017[17]).

Germany - The German Sustainable Development Strategy includes national targets and 30 new indicators, some of which include transboundary consequences of national policies. These include a target to increase the share of imports from LDCs and indicators on sustainable public procurement, food losses, and hunger eradication (Germany, 2016[9]).

Netherlands - The annual report on policy coherence for development monitors progress in eight themes set out in the PCD Action Plan presented to the Parliament in 2016. The Action Plan includes specific targets and criteria in these themes which are linked to relevant SDGs. The 2017 report provides details on trade-offs and synergies for three of the themes (access to medicines, remittance costs and tax avoidance), and illustrates how the Netherlands pursues a concerted effort on these issues (Dutch Ministry of Foreign Affairs, 2017[24]).

Contributions by Policy Coherence for Sustainable Development Partners

The opinions expressed and arguments employed in the contributions below are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries

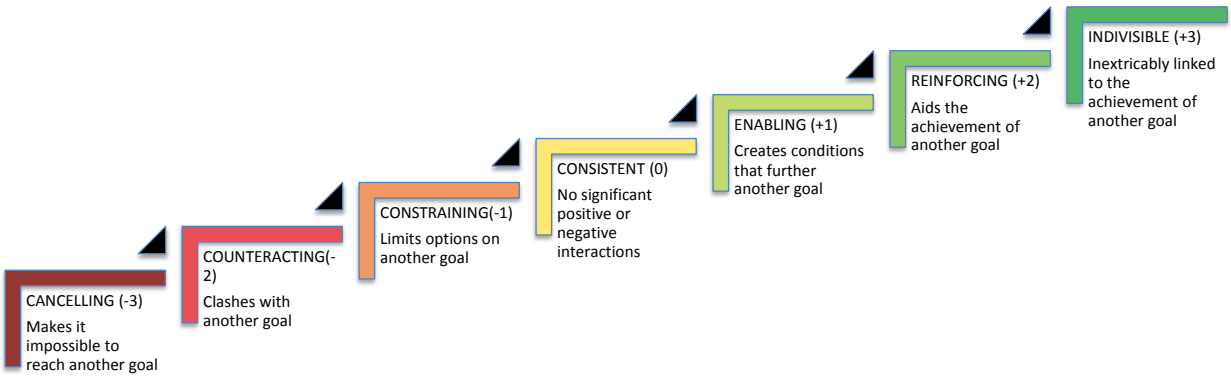
Applying the SDG interactions framework: preliminary lessons learnt

Stockholm Environment Institute

The 2030 Agenda and the 17 Sustainable Development Goals (SDGs) call for a balanced, integrated approach to sustainable development in its three dimensions: economic, social and environmental. Integrating the SDGs into national planning and budgeting requires that governments contextualise the goals, identify priorities and make decisions about how to sequence SDG implementation. This implies clear implementation challenges for governments worldwide.

Against this background, the Stockholm Environment Institute (SEI), together with research partners at the International Council for Science, has developed a conceptual framework for mapping and analysing interactions between SDG targets (Nilsson, Griggs and Visbeck, 2016[31]). The framework proposes a seven-point scale that captures both positive and negative interactions and allows for a more detailed assessment of interactions that goes beyond current tendencies to analyse interactions only in terms of synergies and trade-offs (Figure 2.3). By exploring and assessing interactions between the SDGs, the framework aims to help policy makers design more coherent and resource effective policies to generate progress on the 17 SDGs overall.

Figure 2.3. Seven-point typology of SDG interactions



Source: adapted from (Nilsson, Griggs and Visbeck, 2016[31]).

In 2016, SEI researchers applied the framework in a country context (Sweden) seeking to identify the systemic impacts of the interactions between 34 SDG targets using a cross-impact matrix and network theory analysis (Weitz et al., 2017[32]). In the past year, SEI has undertaken pilot studies with the objective of refining a methodology which is both usable and useful for policy makers. In December 2017 the framework was for the first time applied in a stakeholder workshop: with the government of Mongolia on targets from Mongolia's National Sustainable Development Vision 2030, with the support of UNDP Mongolia. Together with UNDP and the Center for Poverty Analysis (CEPA) in Sri Lanka, SEI is also supporting the Government of Sri Lanka in using the framework to bolster policy coherence when integrating the SDG targets into national development strategies. The project was launched in October 2017 and will continue into the second half of 2018. One of the project outputs will be guidelines for governments interested in applying the SDG interactions framework.

While the framework and methodology for assessing SDG interactions is ongoing, some preliminary reflections have emerged based on the experiences from the pilot studies in Mongolia and Sri Lanka.

Ensure commitment and strong sector participation

The SDG interactions framework demands strong government commitment. The process inevitably requires considerable investments of time: in preparations, selecting targets to focus on, scoring interactions and translating the findings into actual policy. When scoring of interactions is conducted by sector experts, broad sector participation is key to ensuring sufficient expertise and avoiding sector-driven biases. The quality and credibility of results may suffer if key stakeholders or sectors are missing from the process.

Design a strategic process for target selection

The framework serves as an input to policy making processes fostering a more coherent implementation of the SDGs. The prospect for this to have an impact on policy is best in the case of strong government ownership in the selection of the targets to be analysed using the methodology (i.e. typically a subset of the 169 SDG targets will be analysed using the interactions framework). However, when the selection of targets for assessment is linked to a formal process for SDG prioritisation, this step can be both political and

time-consuming. The process needs to be adequately planned and accounted for to achieve a careful balance between inclusiveness versus feasibility.

Adjust the framework to national demands

A core strength of the SDG interactions framework is its flexibility in different national contexts, and options for adjustment depending on what policy process the framework aims to feed into. This was highlighted in the Mongolia pilot, where the framework was applied to targets derived from a national development plan rather than to SDG targets. Furthermore, as a follow-up to the SDG interactions workshop, the government adapted the methodology for applying the approach to individual sector plans. Other possible processes the framework could feed into include:

- initiating discussions on national or sector target prioritisations at the time of a mid-term review or drafting of new national or sectoral development policies;
- identifying partnerships between ministries and co-ordination mechanisms, e.g. for organising working groups in charge of the implementation of Agenda 2030;
- providing input to advocacy work within government and giving greater attention to policy issues considered particularly important across ministries,
- providing input to national voluntary reporting to the yearly United Nations High-level Political Forum on Sustainable Development (HLPF).

Value the process itself

The process of applying the SDG interactions framework may be just as important as the final results in terms of bringing about policy coherence. It brings together government stakeholders with different sectoral focuses together to study the relationships between targets in detail. As a scoping exercise to increase government knowledge of interactions, the framework provides a new platform for cross-sectoral dialogue which may be less politically sensitive than other formal fora.

Avoid over-complication

A successful and meaningful assessment process demands considerable time and resources from stakeholders. Demands must be limited in order to maintain a sufficiently high level of commitment and participation. One of the key challenges going forward is to strike a balance between a process that is inclusive, comprehensive and based on sound arguments and evidence while at the same time not being so complex and time consuming as to overwhelm stakeholders.

To conclude, the experience of applying the interactions framework has been encouraging so far. With joined forces, significant progress has been made in developing a user-friendly and useful approach to support coherent SDG implementation. SEI looks forward to further testing and refining the approach with government stakeholders and research and policy partner organisations.

Because reality is not a game

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Dr. Piotr Magnuszewski (Centre for Systems Solutions – CRS, IIASA)

How do children learn about the intricacies of social life? How does the military prepare for complex and highly uncertain missions? How do pilots and surgeons train for life-threatening situations?

One way is through role play and free exploration – simulating and playing out possible scenarios, learning and testing action strategies in a simulator. These learning and training situations are based on collectively shared and consciously evoked experiences from real life scenarios. In addition to the opportunity to test actions, boldly try new strategies or explore nuances in areas of interest to participants, they also facilitate reflection on real-world consequences within a safe, simulated environment.

How then might policy and decision makers prepare for navigating the complexities of governance in a highly interconnected and complex world? We propose that role play and simulation games can also equip policy- and decision makers with improved skills to better master the challenges of the 2030 Agenda and what lies beyond.

The Sustainable Development Goals are an acknowledgement that transformation to sustainable and resilient societies cannot happen through a "business as usual" approach. Developing realistic solutions for global and local issues requires taking into account the complexity and uncertainty of multiple levels, collaborative decision making and communication with others, and connecting the dots across industries, sectors and stakeholders. Policy and decision makers must act within this complex reality of a global, highly interconnected system while being challenged by one of the most urgent needs of our time: ensuring sustainable development for all. A full understanding of the interconnected reality of the SDGs remains elusive and practitioners are seeking robust tools and guidance that can increase understanding and help to make integrated and coherent policy making a common practice.

The Centre for Systems Solutions (CRS) and the Institute for Applied Systems Analysis (IIASA) has jointly developed "The World's Future – A Sustainable Development Goals Game", an innovative exercise combining the benefits of systems analysis and simulation techniques with the dynamics of group scenario-building and creative role play, to support capacity building among policy makers. Since 2017, participants from the OECD and the European Forum Alpbach, as well as participants from DG DEVCO and the European External Action Service of the European Commission, have engaged in "The World's Future" game. Their responses and reflections have been diverse and multilayered, such as:

> *"It was a humbling and eye-opening experience for me as a policy writer to be confronted with the complexity of policy making in action and trying to find sustainable solutions, even in a simplified version of reality." Participant from DG DEVCO, EC*

> *"I got a much clearer insight that policy making is actually very messy based on imperfect understanding of the system and incentives and on imperfect information of what others are doing." Participant from OECD*

More specifically, "The World's Future" aims at helping players deepen their understanding of the complexities of the global system; identify and acknowledge interdependencies of actions in pursuit of the goals across policies, regions and time; better understand synergies, trade-offs, and feedbacks; and be able to reflect on negotiation patterns, effective communication and collaboration.

The game sessions have been broadly acknowledged as offering valuable insights to SDG implementation and an excellent way to facilitate sincere exchange between people from different working units and policy sectors. Our hope is that more and more policy makers will engage in playful, serious gaming and simulation exercises as a way to learn and enhance their skills to develop and implement more sustainable real world policy actions. Reality is not a game – but a game can help to improve reality.

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Annex 2.A.

Main institutional mechanisms for SDG implementation in 20 OECD countries

	Strategic framework / action plan	Institutional Mechanisms for coordination/engagement	International co-operation
Belgium	National Sustainable Development Strategy (approved in 2017) Federal Sustainable Development Strategy The Flanders Sustainable Development strategy The Wallonia Sustainable Development strategy The Brussels-Capital Region strategy	The Inter-ministerial Conference for Sustainable Development (IMCSD) involves federal, regional and community ministers for sustainable development and development cooperation The Inter-departmental Commission for Sustainable Development (ICSD) Federal Council for Sustainable Development Federal Institute for Sustainable Development (IFSD Advisory Council for Policy Coherence for Development http://www.SDGs.be collects actions undertaken in the provinces and local governments	
Chile	Government Programme (2014-2018) Energía 2050	National Council for the Implementation of the 2030 Agenda, composed of the Ministry of Foreign Affairs, the Ministry of Economic Affairs, Business Development and Tourism, the Ministry of Social Development and the Ministry of the Environment Government Network for the SDGs involving 23 ministries "Dialogues for a Sustainable Chile" organised by civil society National Indigenous Council Council of Social Responsibility for Sustainable Development of the Ministry of Economic Affairs	
Czech Republic	The "Czech Republic 2030" (adopted in April 2017)	Government Council for Sustainable Development (GCSD) chaired by First Deputy Minister and Minister for the Environment Department of Sustainable Development Interdepartmental Development Cooperation Council	The new Development Cooperation Strategy of the Czech Republic 2018 – 2030 will reflect the SDGs
Denmark	National Action Plan for the SDGs	Ministry of Finance (responsible for coordinating national implementation) Ministry of Foreign Affairs (responsible for international engagement in support the 2030 Agenda and the SDGs) Inter-ministerial SDG working Group	Strategy for Development Policy and Humanitarian Assistance New Development Strategy "The World 2030"
Estonia	Estonian Sustainable Development Strategy *Sustainable Estonia 21*	Inter-ministerial working group led by the Government Office Strategy Unit Estonian Sustainable Development Commission	Strategy for Estonian Development Cooperation and Humanitarian Aid 2016-2020
Finland	*The Finland we want by 2050* (updated in 2016) Government's Plan for the 2030 Agenda (submitted to Parliament in 2017)	The Prime Minister's Office is responsible for coordinating national implementation. An interministerial Coordination Network with focal points from each ministry supports the PMO National Commission on Sustainable Development (NCSD) The Development Policy Committee (DPC)	International Development Policy (updated in 2016) is steered by the 2030 Agenda
France	National Strategy of ecological transition towards sustainable development 2015-2020 National reform program (French transposition of Europe 2020, EU's ten-year jobs and growth strategy)	The General Commissariat for Sustainable Development (CGDD), mandated by the Prime Minister, in close partnership with the Ministry for Europe and Foreign Affairs (MEAE) Network of senior sustainable development officials The National Council for Development and International Solidarity (CNDSI) The National Council for the Ecological Transition (CNTE)	France's Development Strategy and Multiannual Development and International Solidarity Policy Act (2014)
Germany	German Sustainable Development Strategy (adopted in January 2017)	The State Secretaries' Committee chaired by the Head of the Federal Chancellery	

		Parliamentary Advisory Council on Sustainable Development Sustainable Development Council Ministry Coordinators for Sustainable Development Directors' working group for sustainable development (UAL-AG)	
Italy	National Sustainable Development Strategy 2017/2030 (NSDS) Plan of Action (under development) National Reform Programme and the Economy and Financial Document	Prime Minister leads coordination with the support of the Ministry for the Environment, Land and Sea and the Ministry of Foreign Affairs The Ministry of Finance will be tasked to create strong synergies between the NSDS implementation and the formal economic policies	Three-year Strategic and Planning Document of the Italian Development Cooperation (2016-18)
Japan	SDGs Implementation Guiding Principles SDGs Action Plan 2018	Cabinet body "SDGs Promotion Headquarters", headed by the Prime Minister Public Private Action for Partnership (PPAP) SDGs Promotion Roundtable Meetings "Japan SDGs Award"	
Luxembourg	National Plan for Sustainable Development Law of 25 June 2004 on coordination of national sustainable development policy	Interdepartmental Sustainable Development Commission High Council for Sustainable Development Inter-ministerial Committee for Development Co-operation	
Mexico	National Development Plan National Strategy for Implementation of the 2030 Agenda (under development) National Platform for Monitoring the SDGs	National Council for the 2030 Agenda for Sustainable Development (launched in 2017) Senate's Working Group for the Legislative Follow-up of the SDGs Commission for Compliance with the 2030 Agenda under The National Governors' Conference	
Netherlands	Dutch Coalition Agreement	Minister for Foreign Trade and Development Cooperation, supported by an SDG-Coordinator. The SDG Coordinator leads an interministerial working group of focal points to support a coherent implementation of the SDGs.	New policy on Foreign Trade and Development Cooperation, embedded within broader foreign policy, will take SDGs as guiding framework Action plan and annual report on policy coherence for development , aligned with SDGs.
Norway	National Strategy for Sustainable Development (updated 2011)	Ministry of Finance and coordinating Ministries The Storting (Norwegian parliament) Inter-ministerial contact group led by the Ministry of Foreign Affairs	
Portugal	A part of the sustainable development goals were already enshrined in the Constitution. Intra-governmental guidelines for the 2030 Agenda adopted by the Council of Ministers in 2016.	Ministry of Foreign Affairs and the Ministry of Planning and Infrastructures lead coordination 2 Commissions responsible for 1) the interministerial coordination of foreign policy, and 2) for co-operation policy Network of focal points from different government departments	
Korea	2015 Sustainable Development Act Third Basic Plan for Sustainable Development	Commission for Sustainable Development Committee for International Development Cooperation Ministry of Foreign Affairs and Ministry of Environment	Framework Act on International Development Cooperation
Slovenia	Vision of Slovenia 2050 Slovenian Development Strategy 2030	Government Council for Development	
Sweden	Policy for Global Development (PGU)	Minister for Public Administration Minister for International Development Cooperation and Climate Consultation group for the 2030 Agenda Inter-ministerial working group for the 2030 Agenda The Scientific Council for Sustainable Development Multi-stakeholder National Committee	
Switzerland	Sustainable Development Strategy (SDS) 2016–2019	Interdepartmental Sustainable Development Committee (ISDC) National 2030 Agenda Working Group	
Turkey	10th National Development Plan 2014-2018 and Primary Transformation Programs 11th National Development Plan	High Planning Council Ministry of Development (contact point) Sustainable Development Coordination Commission led by the Ministry of Development Turkish Co-operation and Co-ordination Agency (TIKA)	Legal Framework on Development Cooperation (2011)

Source: OECD PCD Unit, with information from VNRs.

Chapter 3. Country profiles: Institutional mechanisms for policy coherence

This chapter presents country profiles from 19 countries (Austria, Belgium, Czech Republic, Estonia, Finland, Germany, Greece, Japan, Lithuania, Luxembourg, Mexico, the Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden and Switzerland) describing practices and institutional mechanisms that are relevant for enhancing policy coherence for sustainable development. It draws on country responses to a survey sent to all members of the informal network of national focal points for policy coherence (including all OECD member countries), organised with questions corresponding to the eight building blocks identified in Chapter 2 and considered central to coherent policy making. The chapter highlights country practices and mechanisms with a view to sharing experiences and improving mutual understanding in efforts to achieve more coherent SDG implementation. It concludes with three contributions by member institutions of the Partnership for Enhancing Policy Coherence for Sustainable Development presenting brief profiles of Nepal and Pakistan at the national level and a case study on vertical policy coherence in Brazil.

Introduction

The Sustainable Development Goals (SDGs) include an internationally agreed target (SDG 17.14) that calls on all countries to enhance policy coherence for sustainable development (PCSD) as a means of implementation that applies to all SDGs. Countries are increasingly recognising the need to break out of institutional and policy silos to fully realise the benefits of synergistic actions and effectively manage unavoidable trade-offs across SDGs. The proposed global indicator to measure progress on the PCSD target aims to capture the "number of countries with mechanisms in place to enhance policy coherence for sustainable development". There is currently a need for more clarity about the type of mechanisms that can support institutional and policy coherence in implementing highly interconnected SDGs, as well as for developing practical guidance on how to achieve and track progress on SDG 17.14 at the national level.

This chapter aims to respond to this need by highlighting institutional mechanisms (structures, processes and methods of work) for enhancing policy coherence in SDG implementation with examples drawn from current country experiences. It presents country profiles from 19 countries: Austria, Belgium, Czech Republic, Estonia, Finland, Germany, Greece, Japan, Lithuania, Luxembourg, Mexico, The Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden and Switzerland, with information organised according to the eight building blocks set out in Chapter 2. Each country profile is based on information gathered from the country's response to the 2017 Survey on applying the eight building blocks of PCSD in the implementation of the 2030 Agenda, which was sent out to the members of the informal network of national focal points for policy coherence. This chapter also includes three contributions by NGO Federation of Nepal (NFN), Social Policy and Development Centre (SPDC), and Núcleo Girassol (Universidade Federal Fluminense) which are members of the Partnership for Enhancing Policy Coherence for Sustainable Development, presenting brief country profiles of Nepal and Pakistan, and a case study on vertical policy coherence in Brazil respectively.

The chapter provides an overview of different efforts, mechanisms and tools to enhance policy coherence for sustainable development. There is no single blueprint. It is up to each country to determine its institutional mechanisms for promoting policy coherence according with its national circumstances. Through the mutual exchange of experiences and discussions on what works and what does not, countries can identify solutions and strengthen efforts to ensure a coherent implementation of the SDGs. Going forward, this work aims to: 1) inform the update of the 2010 OECD Council Recommendation on good institutional practices for promoting policy coherence for development; 2) provide analytical input to the thematic reviews at the High-level Political Forum on Sustainable Development; and 3) provide input for developing the methodology for the global indicator for SDG Target 17.14.

Austria

New directives aimed at incorporating the SDGs into the programmes of all ministries helps to strengthen the commitment to policy coherence across the government. In January 2016 the Austrian Council of Ministers instructed all ministries to integrate the SDGs into their relevant programmes and strategies, and to develop new action plans for coherent implementation of the 2030 Agenda where necessary. Thus, line ministries share responsibility for achieving the SDGs in their respective areas (Statistik Austria, 2018[1]). *Outline 2016 - Contributions to the implementation of the 2030 Agenda*

for Sustainable Development by the Austrian Federal Ministries, published in March 2017, is evidence of political commitment and outlines national responsibilities and policy processes for SDG implementation (Bundeskanzleramt Österreich, 2017[2]). The relevance of policy coherence is thus systematically recognised in SDG implementation, albeit with a particular focus on the international level. An explicit commitment to PCSD is also articulated in the current Three Year Programme on Austrian Development Policy 2016-2018 (Federal Ministry for Europe, 2016[3]). An even stronger commitment will be incorporated in the next Three Year Programme 2019-2021 (OECD, 2017[4]).

A newly installed interministerial working group takes domestic and international objectives related to the SDGs into consideration to identify potential trade-offs. An interministerial working group co-chaired by the Federal Chancellery and Ministry of Foreign Affairs has been established to co-ordinate activities through information sharing and supports implementation of the SDGs as well as their promotion within society (Bundeskanzleramt Österreich, 2017[2]). SDG focal points from all ministries participate in its regular meetings, exchange information on different policy objectives and are thus able to identify trade-offs and synergies. At these meetings, the international perspective of PCSD is addressed. The Austrian Development Agency's (ADA) work is guided by seven principles (Ownership; Do-no-harm; Equity, equality and non-discrimination; Participation and inclusion; Accountability and transparency; Empowerment; and Sustainability) to foster coherent policies and avoid unintended negative effects.

Table 3.1. Institutional mechanisms for PCSD in Austria

Building Block	Austria
Political commitment	Under the Federal Act on Development Cooperation of 2003, PCSD is a legal obligation at both national and international levels. In January 2016, the federal government instructed all ministries to incorporate the principles of the 2030 Agenda and the SDGs into their relevant strategies and programmes and to elaborate action plans. Commitment to PCSD is expressed in the Three Year Programme on Austrian Development Policy 2016-2018.
Policy integration	The decision-making process for integrating the SDGs into international policies is supported at policy level through the Advisory Board for Development Policy and dialogue with CSOs and the parliament, and at operational level through interministerial working groups, evaluations and selective thematic platforms. The instruction by the Council of Ministers to integrate SDGs into the programmes of ministries provides the incentive to exchange information and objectives among the SDG focal points in ministries, thus allowing for the identification of trade-offs and synergies. Cross-cutting issues of development co-operation (gender and environment) must be mainstreamed in programming, planning and monitoring processes as well as in policy dialogues at various levels.
Intergenerational timeframe	Intergenerational time frames are integrated, where applicable, into new national policies and strategies. The obligation of all ministries to integrate the SDGs into their relevant programmes and strategies is not affected by the electoral cycle.
Policy effects	Potential policy effects are assessed on an ongoing basis in the different working groups and through regular evaluations of the existing interministerial common strategic guidelines.
Co-ordination	An interministerial working group consisting of SDG focal points from all ministries and co-chaired by the Federal Chancellery and the MFA co-ordinates SDG implementation, presents progress reports and aims at information sharing. All ministries are part of the interministerial working group, which takes into consideration both domestic and international objectives related to the implementation of the SDGs. For international policies in selected areas the department responsible for the Three Year Programme is also responsible for PCSD.
Local involvement	The liaison office of the Länder (Austria's regions) has been integrated into correspondence and working groups in preparation of the Three Year Programmes 2016-2018 and 2019-2021, currently being finalised. Under the auspices of the MFA, annual meetings are organised between government representatives of the Länder, cities and municipalities for information exchange and to help align actions undertaken at different levels of government for achieving the SDGs. The MFA is also striving to reach the local population through multiple events organised as part of public relations efforts.
Stakeholder	Main national policy frameworks and strategies rely on well-established multi-stakeholder advisory groups and a broad consultative process. Ministries, other governmental entities and institutions, civil

participation	society, the private sector, academia, political parties and interest groups (such as The Federation of Austrian Industries – IV and the Austrian Economic Chamber - WKÖ) took part in developing the Three Year Programme 2019-2021. SDG Watch Austria, a civil society platform to support the implementation of the 2030 Agenda in Austria, went online in September 2017.
Monitoring and reporting	The interministerial working group will prepare periodic progress reports to monitor national SDG implementation. Statistic Austria has developed a first national set of SDG indicators but does not provide national indicators for SDG17.14. The Austrian Development Agency (ADA) is responsible for effective monitoring and control while instructing their field offices to ensure that local co-operation is based on equal partnership.

Source: OECD (2017[4]), Bundeskanzleramt Österreich (2017[2]).

Belgium

Renewed political commitment at all levels and a long tradition towards sustainable development facilitate horizontal and vertical coherence. The commitment to sustainable development (SD) is enshrined in the Belgian constitution since 2007, to which the federal state, communities (Flemish, French and German-speaking) and regions (Wallonia, Flanders and Brussels-Capital) must contribute. Implementation of the 2030 Agenda relies on a variety of existing SD strategies adopted by respective levels of government. At the federal level, a 2050-time horizon Vision for SD was adopted in 2013 encompassing 55 long-term objectives, a set of indicators and federal plans (IFDD, 2018[5]). The federal strategy has been implemented through a five-year policy learning cycle ("report-plan-do-check-act") since 1997. At the regional level, key strategic frameworks include: the second Walloon Strategy for SD, approved in 2016; Flemish Vision 2050 – a long-term strategy for Flanders (Box 3.1); the Regional SD plan adopted by the Brussels-Capital Region; and the second regional development plan of the German-speaking Community. Reflections are underway to adapt existing commitments and the institutional architecture for policy coherence for development to the new realities of the 2030 Agenda.

A new overarching strategic framework serves as a platform for the Belgian federal system to pursue the 2030 Agenda and SDGs coherently. The first National Sustainable Development Strategy (NSDS), approved in 2017, provides the umbrella for the main governmental actors at both federal and federated levels to combine their efforts to achieve the SDGs in a Belgian context. Priority themes include: sustainable food, sustainable building and housing, sustainable public procurement, means of implementation, awareness-raising and contributions to follow-up and review. There is a common understanding among the NSDS signatories of the need for strengthened forms of co-ordination. The NSDS envisages a national 2030 Agenda implementation report to be issued jointly to all parliaments twice per government term (Kingdom of Belgium, 2017[6]).

An institutional framework promoting transversal work and participation at all levels enhances policy coherence. The Interministerial Conference for Sustainable Development (IMCSD) – composed of federal, regional and community ministers responsible for SD and development co-operation – has been revitalised as the central co-ordination mechanism for SDG implementation. The Inter-departmental Commission for Sustainable Development (ICSD), chaired by the Federal Institute for SD, provides for co-ordination between federal government departments. Different mechanisms also support co-ordination within each level of power and help engage different societal groups, such as the multi-stakeholder advisory Federal Council for Sustainable Development and the Advisory Council for Policy Coherence for Development (PCD).

The institutional framework should enable the country to ensure an effective interface between local, sub-national, national and international implementation, and honour its commitment to PCSD, provided that it allows for cross-sectoral action and enhanced capacities to assess the transboundary impact of domestic policies (Box 3.1).

Table 3.2. Institutional mechanisms for PCSD in Belgium

Building Block	Belgium
Political commitment	The legal and strategic frameworks across the different federal entities reflect Belgium's commitment to policy coherence. The 2013 Law on Development Cooperation refers to policy coherence for development, and an intergovernmental declaration (both federal and federated governments) regarding adherence to PCD was signed in 2014. Reflections are underway to adapt PCD institutional architecture to the new realities of the 2030 Agenda.
Policy integration	At the federal level, integration is promoted through the Interdepartmental Commission for Sustainable Development (ICSD). The Public Service for SD was granted permanent status as the Federal Institute on SD (FISD) in 2013, and supports ministries and other stakeholders in integrating SD into their core business. The Task Force on Sustainable Development (TFSD) of the Federal Planning Bureau (FPB) reports on the current situation and makes policy evaluations and forecasts, supporting policy integration. A key instrument is the Long-Term Vision Statement for the Belgian 2030 outlook, which focusses on enhancing social cohesion, adapting the economy to economic, social and environmental challenges, protecting the environment and taking societal responsibility. In Wallonia an independent SD advisory unit was set up in 2013 within the Walloon administration. It is responsible for delivering "sustainable development advisories" at the request of government, the administrations, or on their own initiative, based on the principles of SD and the SDGs. In Flanders a specific working group on sustainable development is guiding the translation of the SDGs into goals relevant for Flemish policy and to further their implementation. In the Brussels-Capital Region, new legislation concerning development aid was adopted in the summer of 2017 with the goal of enabling a structural dialogue between the several regional services to improve PCSD.
Intergenerational timeframe	The strong legal base for sustainable development provides stability. The federal level vision is based on a horizon of 2050, going well beyond the electoral cycle. The Interministerial Conference for Sustainable Development (IMCSD) has no end date.
Policy effects	The federal long-term vision for sustainable development (2013) gave structure to a new ex-ante impact assessment tool. The Sustainable Impact Assessment (SIA) tool was integrated into the Regulatory Impact Assessment (RIA) in January 2014. The RIA aims for policy coherence by assessing the possible effects of the preliminary draft regulations on the dimensions of sustainable development (economic, social and environmental) and the public services.
Co-ordination	The IMCSD, composed of federal, regional and community ministers responsible for SD and development co-operation is the central co-ordination mechanism. Some representatives attend both the IMCSD and ICSD. Additional co-ordination platforms exist between different ministries on themes such as gender, poverty, and sustainable peace or the link between peace and climate. Federal and regional actors gather in multilateral co-ordination meetings where trade-offs and synergies among economic, social and environmental but also political policy objectives are identified and discussed.
Local involvement	The IMCSD invites representatives from provinces and local governments to participate in advocacy and awareness-raising events. Cities and municipalities were also involved in preparations for the first Belgian VNR. The actions undertaken in the provinces and local governments, as well as other actors, are collected on the website www.SDGs.be.
Stakeholder participation	Belgium strives for a participative process at all levels of policy making, including stakeholders inside and outside of the government. Advisory councils consisting of civil society and academia such as the Federal Council for Sustainable Development or the Advisory Council for Policy Coherence for Development contribute to PCSD.
Monitoring and reporting	The Federal Planning Bureau publishes a report on the implementation of the SDGs in Belgium twice per government term. The indicators are currently being updated. The NSDS also envisions reporting to the general public twice per legislature. At the Federal level, within ICSD there is an annual reporting of the administrations that contribute to sustainable development. Indicators for the 2050-time horizon Vision for SD are available online: www.indicators.be.

Note: According to Belgium's institutional set-up, the Federal State, Communities and Regions are all considered equal from a legal viewpoint. They have powers and responsibilities for different fields, but without any hierarchy between them. Thus, the term "local involvement" applies only to provinces and local authorities (cities and municipalities).
Source: OECD (2017[7]), Kingdom of Belgium (2017[6]).

Box 3.1. Breaking down policy silos in Belgium

At the federal level

The **new Comprehensive Approach** strategy note, designed jointly by the Foreign Ministry, the Ministry for Development Cooperation and the Ministry of Defence, sets out a coherent approach to Belgian foreign policy. Conscious that complex situations generally raise challenges of very different natures (political, social, ecological, economic, military, security), the Comprehensive Approach embeds development with in diplomacy, defence and the rule of law. The strategy note builds on the approach already developed for the 2030 Agenda and the SDGs (SDG 16 in particular), and helps to progressively break down the different policy silos. Recent examples include Belgian contributions to peace and stability in Iraq and in the Sahel, where permanent dialogue, evaluation and adjustment of Belgium's approach requires all departments concerned to collectively set the overarching priorities and adjust mutual efforts.

The Ministry of Foreign Affairs has adjusted its internal organisational structure in light of synergies and created a department competent for environment and climate that covers both development and multilateral aspects of this theme.

At the regional level

Vision 2050 in Flanders has identified seven transition priorities as flagship initiatives cutting across policy areas and requiring involvement of different ministers: the circular economy; smart living; industry 4.0; lifelong learning and a dynamic professional career; healthcare and living together in 2050; transport and mobility; and energy. The focus is on addressing regional challenges and achieving significant progress in key opportunity areas rather than trying to implement an all-encompassing approach. This makes the transition towards a sustainable path more manageable and concrete for stakeholders and public opinion while facilitating co-operation amongst departments and, ultimately, faster and better results. It also facilitates continuous learning amongst all stakeholders, although respective responsibilities for results could be clearer.

Source: OECD (2017[7]).

Czech Republic

A renewed umbrella framework and commitment to policy coherence enables the government to pursue 2030 Agenda coherently. The strategy *Czech Republic 2030*, with sustainable development and wellbeing at its core, uses PCSD as a guiding principle for national, regional and local policies (Office of the Government of the Czech Republic, 2017[8]). The Government Council for Sustainable Development (GCSD), chaired by the First Deputy Minister and Minister for the Environment since April 2018, plays an

important role in promoting PCSD across the government. The commitment to PCSD is also reaffirmed in the Development Cooperation Strategy of the Czech Republic 2018-2030. Translating commitment into practice would be supported by greater awareness on PCSD and by fostering an administrative culture of cross-sectoral co-operation within the public service.

A co-ordinating body allows for a shared approach to sustainable development domestically and abroad. The SDG implementation process is led by the Ministry of Environment and supported by the Government Council for Sustainable Development (GCSD). The GCSD provides a platform for inter-sectoral policy co-ordination among central administrative authorities. Ministries and other stakeholders contribute to its work through nine thematic committees (Box 3.2). The establishment of a formal co-ordination mechanism among GCSD committees is being discussed, raising the possibility for the GCSD to arbitrate between committees and ministries to resolve any overlaps or inconsistencies in the formulation and implementation of policies (OECD, 2017[9]). An effective interface between the GCSD and the Council for Development Cooperation would support a unified approach to PCSD and help to ensure synergies between domestic and international actions the country has identified as a major challenge in DAC reviews (OECD, 2016[10]).

A monitoring and reporting system focused on priority areas, as well as synergies and trade-offs, will be instrumental in enhancing policy coherence. *Czech Republic 2030* identifies six priority clusters: People and Society; Economy; Resilient Ecosystems; Regions and Municipalities; Global Development and Good Governance, which help in identifying thematic synergies, managing trade-offs and reporting coherently. A biannual analytical *Report on the Quality of Life and its Sustainability* will be submitted to the government, building on indicators operationalising the 97 specific goals outlined in *Czech Republic 2030*. GCSD committees are responsible for data collection and indicator preparation within their respective fields. The draft report will be prepared by the Sustainable Development Department of the Office of the Government and consequently be subject to consultations with relevant committees and approval by the GCSD before submission. The Czech Statistical Office plays a key role in providing relevant data and is responsible for co-ordination related to the global set of indicators (Office of the Government of the Czech Republic, 2017[11]).

Table 3.3. Institutional mechanisms for PCSD in the Czech Republic

Building Block	Czech Republic
Political commitment	Commitment to PCSD is reflected in the strategic framework *Czech Republic 2030* as well as in government strategies and communications. Two priority areas of the national strategy (Good Governance, Global Development) contain strategic goals aimed at improving PCSD.
Policy integration	The regular discussion of sectoral documents between departments in government advisory bodies and interministerial co-ordination groups provides a basic mechanism for policy integration. Ongoing methodological work to draft an implementation plan based on policy gap analysis to identify trade-offs/synergies among different policy objectives is fostering policy integration.
Intergenerational timeframe	A long-term perspective is ensured by the nature of *Czech Republic 2030* as well as co-operation with stakeholders and informal networks of actors crossing both agendas and political boundaries. The biannual monitoring report may however serve as a revision mechanism for future governments.
Policy effects	A number of existing policy impact assessment tools (RIA, SIA, EIA) are used. Methodological guidelines are also being developed to analyse the transboundary impacts of policies, but depend on an increase of analytical capacity.
Co-ordination	The governmental body responsible for PCSD, the Government Council for Sustainable Development (GCSD), seeks to engage the support of political representatives through a participatory process. Chaired by the First Deputy Minister and Minister for the Environment, with the participation of the

	Minister of Industry and Trade, the GCSD is the main forum for consultations, building new partnerships and developing the national strategic framework . Future ideas for co-ordination include the establishment of PCSD focal points in relevant ministries and building institutional capacity for strategic work by applying quality management methods.
Local involvement	Regions and municipalities have a key role in *Czech Republic 2030*. The Department of Sustainable Development organised 8 regional round tables/workshops in 2017 to gather input from regional and local stakeholders. The GCSD includes representatives from three important municipal associations and the Committee on Sustainable Municipalities, which represents all key municipal associations and organisations.
Stakeholder participation	A number of stakeholder forums, academic institutions and voluntary associations exist to support SDG implementation in the agenda-setting phase and contributed to developing *Czech Republic 2030*, e.g. the Czech Forum for Development Cooperation (FoRS), think-tank Glopolis, CSO consortium *Mej se k svetu*, the Charles University Environment Center, the Association of Social Responsibility and the Green Circle. Relevant ministries and government agencies are also engaged in dialogue with the private sector. The PCSD governmental body provides a platform for discussion and mediation among stakeholders.
Monitoring and reporting	Progress towards national goals will be monitored by the biannual analytical *Report on Quality of Life and its Sustainability* prepared by the Sustainable Development Department. Indicators are outlined and operationalised in the national strategy. The Czech Statistical Office plays a key role in providing relevant data, while the GCSD reviews national implementation and encourages maintained commitment. Embassies report to the MFA on developments in the field.

Source: OECD (2017[9]), Office of the Government of the Czech Republic (2017[11]).

Box 3.2. Identifying and setting priorities for SDG implementation

In July 2015, the government of the Czech Republic tasked the prime minister with revising the 2010 national Strategic Framework for Sustainable Development. This process aimed to formulate key priority areas and long-term objectives for sustainable development and well-being, mainstream the SDGs into national policies, and identify opportunities and threats as well as global megatrends influencing the development of the Czech Republic.

In mid-2015 the prime minister invited all government advisory bodies and major CSO networks to send proposals for the country's long-term development. Inputs were collected online via the Database of Strategies, a special application created for this opportunity operated by the Ministry of Regional Development. By 15 October 2015, 49 organisations and institutions had provided 172 inputs.

The Government Council for Sustainable Development (GCSD) team edited and evaluated the inputs. The National Network for Foresight, consisting of six academic institutions and think-tanks focusing on strategic management and foresight, supported their efforts. On the basis of their analysis using the Delphi method, relevant inputs were selected and, through the similar added keywords, added to each input clustered into six key areas. The selected areas were presented at the Sustainable Development Forum in December 2015 and consulted with relevant GCSD committees.

A nearly two-year process of drafting of the *Czech Republic 2030* strategy followed. This involved organisation of six roundtables (one for each key area), organisation of eight regional roundtables, two public hearings, consultations in both chambers of parliament and numerous consultations with experts across different sectors. Overall, around 500 experts and 100 different organisations

participated in the process.

Source: OECD (2017[9]).

Estonia

The *Sustainable Estonia 21* strategy is revitalising longstanding commitments for sustainable development and policy coherence. Adopted by Parliament in 2005, *Sustainable Estonia 21* serves as strategic framework for achieving the SDGs (Estonian Government, 2005[12]). The Sustainable Development Commission launched a review of *Sustainable Estonia 21* and its implementation mechanisms to make it compatible with the 2030 Agenda. With preparations for the new planning period starting in 2018, the SDGs will be integrated into the government's sectoral and thematic strategies and action plans. Estonia has also committed to establishing an initial framework for policy coherence by 2020 (Government Office Republic of Estonia, 2016[13]).

Existing co-ordination mechanisms at all levels support policy coherence and integration. The Government Office Strategy Unit co-ordinates work on sustainable development at the central government level. It also co-ordinates other strategies (e.g. *Estonia 2020*, Estonia's EU policy), putting it in a position to align priorities and ensure coherence across various horizontal planning documents. An interministerial working group comprising representatives from all ministries and Statistics Estonia supports implementation of *Sustainable Estonia 21* and the SDGs, develops national sustainable development indicators and prepares the VNR. The Sustainable Development Commission, a non-governmental advisory umbrella organisation, monitors implementation of *Sustainable Estonia 21*. It meets four to five times a year to discuss strategic action plans before their adoption by the government and publishes focus reports with policy recommendations (OECD, 2017[14]). Coherence between sustainable sector-specific policies can be further enhanced by strengthening co-ordination mechanisms and going beyond information sharing and division of responsibilities (OECD, 2017[15]).

Impact assessments support coherence by requiring that economic, social and environmental aspects be taken into account in all strategic planning documents and EU positions. The impact assessments cover: social, including demographic impact; security and foreign policy; the economy; the living and natural environment; regional development; and the organisation of government institutions and local governments. In addition, a strategic environmental impact assessment (covering natural, social, economic and cultural environment) must be conducted when compiling strategic planning documents and local plans, in accordance with the Environmental Impact Assessment Act (OECD, 2017[14]).

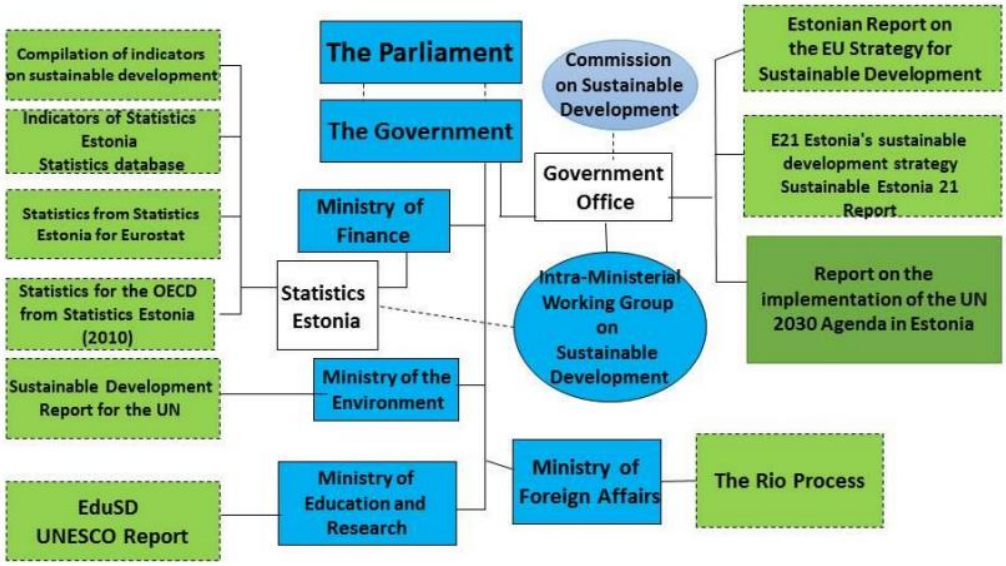
Table 3.4. Institutional Mechanisms for PCSD in Estonia

Building Block	Estonia
Political commitment	The parliament adopted the Sustainable Development Act in 1995, and in 2005 adopted the sustainable development strategy *Sustainable Estonia 21*, which serves as a strategic framework to implement the SDGs and includes a call to enhance PCSD for national implementation of the 2030 Agenda, as articulated in the 2016 VNR. An initial framework for Estonian policy coherence will be established by 2020.
Policy integration	The SDGs will be integrated into sectoral strategies and development plans once they are renewed

	starting in 2018 (some policies already reflect SDGs). Each ministry retains responsibility for achieving and leading initiatives in their respective policy fields.
Intergenerational timeframe	New long-term strategy papers and implementation plans integrate the SDGs. The combination of strategic plans, impact assessment and stakeholder engagement supports a long-term perspective.
Policy effects	All governmental strategic development plans require an environmental impact assessment. Some also require a socio-economic impact assessment. The Ministry of Justice and the Government Office currently share responsibility for enhancing this impact assessment system. Annual monitoring of development plans and their targets helps to identify unintended effects and possible countervailing action.
Co-ordination	The Government Office Strategy Unit co-ordinates work on sustainable development and fosters information sharing among bodies such as the interministerial working group, with representatives from all ministries and Statistics Estonia working on an ad-hoc basis, and the Estonian Sustainable Development Commission, a non-governmental stakeholder organisation. As the Government Office Strategy Unit is co-ordinating not only the implementation of Agenda 2030 but also other strategies (Estonia 2020, Estonia's EU policy), it is able to ensure coherence in various horizontal planning documents.
Local involvement	Representatives of local governments are included in the Estonian Sustainable Development Commission, formed in 1996.
Stakeholder participation	The Sustainable Development Commission, a non-governmental umbrella organisation, meets four to five times per year. It holds thematic discussions and publishes focus reports with policy recommendations. It unites organisations from academic and industrial sectors, youth and local governance and connects non-governmental organisations in different areas of sustainable development. The Code of Good Engagement obliges government institutions to involve interest groups and the general public when making decisions that affect them.
Monitoring and reporting	In December 2017 the ECSD approved a new monitoring system for sustainable development goals which complies with the global goals of the United Nations. In 2018, a statistical report on the sustainable development indicators of Estonia will be published based on the new list of sustainable development goals.

Source: OECD (2017[14]).

Figure 3.1. Main institutional mechanisms, policy documents and key actors for SDG implementation in Estonia



Source: Government Office Republic of Estonia (2016[13]).

Finland

Political commitment at the highest level and a whole-of-government strategic framework put policy coherence at the forefront. The national 2030 Agenda implementation process is led by the Prime Minister's Office (PMO). *The Finland we want by 2050*, adopted in 2014 and updated in 2016, aims at reconciling economic, social and environment imperatives. (National Comission on Sustainable Development, 2016[16]). The strategy provides a long-term strategic framework for a whole-of-society commitment to sustainable development. The government's plan for the 2030 Agenda, submitted to the parliament in 2017, is the framework for implementation, national follow-up and review up until 2030. The plan focuses on two key areas: 1) a carbon-neutral and resource-wise Finland; and 2) a non-discriminatory, equal and competent Finland. It also outlines domestic and international commitments and makes an explicit commitment to policy coherence to support sustainable development (PMO Finland, 2017[17]). The development policy, which is an integral part of Finland's foreign and security policy, includes priority areas based on the 2030 Agenda and SDGs: gender equality and the empowerment of girls and women; supporting economies in developing countries in creating jobs, sources of livelihood and well-being; democratic and functioning societies; better food security and access to water and energy; and the sustainability of natural resources (PMO Finland, 2016[18]).

Enhanced co-ordination across and within government underpins policy coherence and fosters policy integration. The Prime Minister's Office co-ordinates national SDG implementation. An interministerial Coordination Network consisting of sustainable development focal points from each line ministry supports the co-ordination function of the PMO. The National Commission on Sustainable Development (NCSD), a prime minister-led multi-stakeholder forum, brings together the public and private sectors, CSOs, academia and municipalities and regions with the task of integrating sustainable development into Finnish policies, measures and everyday practices at different levels. The Development Policy Committee (DPC), a parliamentary body, is tasked with following up on SDG implementation from a development policy perspective, and with monitoring implementation of the government programme in compliance with development policy guidelines (PMO Finland, 2016[18]). Since the adoption of the 2030 Agenda, collaboration between these two committees is being intensified. Traditionally, policy coherence for development has been under the responsibility of the Ministry for Foreign Affairs, with a thematic focus on issues such as food security, aid for trade, migration, tax and development, and peace and development (OECD, 2017[19]). With the 2030 Agenda, PCSD is becoming a shared responsibility for all governmental bodies.

Systematic and participatory follow-up and review enhance stakeholder engagement and policy coherence at all levels. Finland relies on a wide range of sources to build its evidence base and inform policy. These include scientific panels, think-tanks, research institutions, citizen engagement and an active civil society. Implementation of the 2030 Agenda will be reported on annually to the parliament as part of the government's annual report. From 2017 onwards, each branch of government will provide information on steps taken to advance the 2030 Agenda. The DPC, which monitors and assesses implementation of Finland's international development commitments, will play a key role in the follow-up and review of the global dimension of the national implementation of the 2030 Agenda. Finland is also developing a national follow-up system that enables stakeholder participation (Box 3.3). Finland has in place the key building blocks for ensuring a coherent implementation of the SDGs going forward.

Table 3.5. Institutional mechanisms for PCSD in Finland

Building Block	Finland
Political commitment	The government's implementation plan for the 2030 Agenda submitted to parliament in February 2017 makes an explicit commitment to PCSD. It includes concrete measures and domestic and global commitments.
Policy integration	As part of the government's annual report, all line ministries are required to compile on a yearly basis their policies and measures for implementation of the 2030 Agenda. They are also requested to include information essential to the promotion and monitoring of sustainable development in their yearly budget planning, as well as in their follow-up indicators. Several procedures, which vary from one ministry to another, are in place for identifying trade-offs and synergies. However, it is recognised that trade-offs are often very difficult to reconcile even when identified, as they entail politically sensitive issues and deep-rooted ideological differences. Many of the conflicts are therefore addressed and eventually solved at the political (ministerial) level.
Intergenerational timeframe	The government's implementation plan is based on the long-term vision, principles and goals set forth in the Society's Commitment to Sustainable Development, which extends until 2050. It intentionally has a long-term perspective to urge intergenerational debates and considerations. In 2017, the government established an Agenda 2030 Youth Group to increase the engagement of young people in political planning and help ensure a long-term perspective in decision making.
Policy effects	In its 2030 Agenda implementation plan, the government commits to exploring the use of a sustainable development impact assessment tool to systematically identify the unintended effects of policies. The existing impact assessment process for bill drafting will be improved to ensure better alignment with the SDGs and to enhance coherence between actions undertaken at national and global levels. Steps will also be taken by the Prime Minister's Office in 2018-2019 to include sustainable development impact assessment in key policy and legislative motions. The national follow-up system includes indicators on transboundary and intergenerational issues which can be used to inform decision making.
Co-ordination	Led by the Prime Minister's Office, an interministerial network supports horizontal co-ordination between line ministries. The NCSD, chaired by the prime minister, strives to integrate the strategic objectives of sustainable development into all sector policies and measures and supports decision making for sustainable development nationally and in international co-operation. The mandate for these mechanisms extends to information sharing, capacity-building and co-ordination rather than arbitration. Nevertheless the NCSD has been successful in building common understanding and consensus, thus preventing deadlock situations in the administration and in broader society.
Local involvement	The Prime Minister's Office has conducted roadshows at sub-national level to increase awareness and commitment of cities and regions to implementation of the 2030 Agenda. Cities and towns are represented in the NCSD and have been actively engaging in the operational commitments for sustainable development under the Society's Commitment framework.
Stakeholder participation	Among the main tools to foster participation are operational commitments which provide organisations and active citizens with the opportunity to pursue sustainable development goals on their own. This has provided various actors with an effective and sensible way of participating in implementation of the 2030 Agenda. More than 750 commitments to action promoting sustainable development have been made encompassing all sectors of society: companies, schools, non-governmental organisations, administration, trade unions, political parties, cities, and even private individuals. Finland has been developing a new national follow-up system that enables stakeholder participation. The NCSD includes 16 representatives from business and industry (including agriculture), the 3 largest labour unions and their youth sections, and 28 non-governmental organisations (including environment, women, children, indigenous peoples Saami, Somali immigrants, sports, education, consumer, disabled peoples association and many others), as well as representatives from municipalities, regions, church and research and development. A sustainable development expert panel established in 2014 supports and challenges the work of the government and NCSD. The panel is composed of 8 eminent professors from different disciplines. Since spring 2017, the government partners with 20 young people from different backgrounds and regions via the Agenda 2030 Youth Group.
Monitoring and reporting	Each policy branch contributes to the annual 2030 Agenda implementation report, which is part of the government's annual report to parliament. In addition, the state's budget contains ministries' reports on how the 2030 Agenda is integrated in their budget, planning and implementation. An independent assessment of Finland's sustainable development policy will be conducted every four years, in parliamentary election years, starting in 2019. The PMO, the NCSD and the Development Policy Committee co-host an annual event to discuss current status and trends based on sustainable development indicators, data assessment and contributions by experts and civil society. An ongoing annual cycle review enables a participatory review process (Box 3.3).

Source: OECD (2017[20]), PMO Finland (2016[18]), (PMO Finland, 2017[21]).

Box 3.3. A participatory follow-up and review system for sustainable development

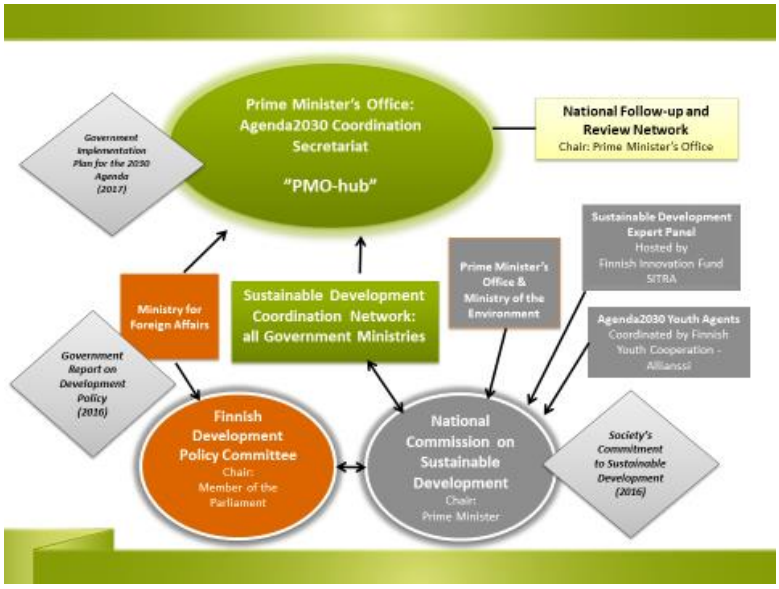
Finland's national follow-up and review system is anchored in the eight objectives of its long-term strategic framework. Policy making is linked to the eight objectives via ten indicator baskets, which in turn consist of four to five indicators and are connected to more than one objective. The baskets serve as the framework for discussions on interpretations and put a lens on entities that are relevant in terms of political decision making.

The indicators in each basket will be reviewed, interpreted and updated once a year by relevant authorities. The purpose is to assess the significance of the change in the indicator value from the perspective of sustainable development. This is followed by a public, multi-stakeholder dialogue where anyone can present different interpretations and introduce new information. This process helps to inform political decision making.

The open discussion takes place on the Prime Minister's Office sustainable development website (kestavakehitys.fi/seuranta) on a rolling basis to discuss a different basket each month. After the update of all baskets, the NCSD and the PMO organise an annual event on the state and future of sustainable development. The event coincides with the parliament discussion on the government's annual report to the parliament.

Source: PMO Finland (2017[21]).

Figure 3.2. Main institutional mechanisms, policy documents and key actors for implementation of the 2030 Agenda in Finland



Source: Prime Minister's Office, Finland.

Germany

A unified strategy with commitment at the highest level promotes PCSD. The German Sustainable Development Strategy, adopted by the cabinet in January 2017, is the key policy instrument for implementation of the 2030 Agenda under the direct aegis of the Federal Chancellery. The strategy bundles various policy areas to achieve greater coherence in light of the large number of systemic interdependencies and contains the ambition to use the 2030 Agenda as an opportunity to increase efforts for policy coherence, with particular reference to SDG 17.14 (German Federal Government, 2016[22]). It thus provides a good basis for further enhancing Germany's sustained commitment to PCSD (OECD, 2015[23]).

The centre of government promotes PCSD through an issues-based approach backed by all ministries. The State Secretaries' Committee (SSC) is the central steering institution of the Sustainable Development Strategy. It is composed of representatives from all ministries and chaired by the Head of the Federal Chancellery. Germany's whole-of-government approach also requires all ministries to participate actively in the SD Working Group (UAL-AG), which prepares the meetings of the SSC and helps to implement and further develop the strategy. The SSC meets regularly to address important cross-cutting or sectoral issues on a consensus basis, e.g. setting a new political framework for topics or announcing concrete actions. While Germany has implemented many mechanisms after its first VNR, such as the establishment of SD co-ordinators in each ministry, it could go further to harness the potential of societal stakeholders (German Federal Government, 2016[24]). Plans to establish a standing working group of societal actors ("*Dialoggruppe*") to support the preparation of SSC meetings should thus move ahead (OECD, 2017[25]).

Indicators established to measure transboundary and domestic impacts set a good example for tracking progress on PCSD. The German Sustainable Development Strategy contains 63 key indicators including at least one indicator-backed target for each SDG. An interministerial working group of representatives from the government and the statistical offices develops and adopts new indicators, while the Federal Statistical Office reports on progress every two years. This enables independent continuous monitoring while maintaining the possibility for revision. Thirteen new topics and 30 indicators have been added to the strategy, some of which include transboundary consequences of national policies. Two examples are a target to increase the share of imports from LDCs, and another to increase membership of the Textile Partnership (Destatis, 2017[26]).

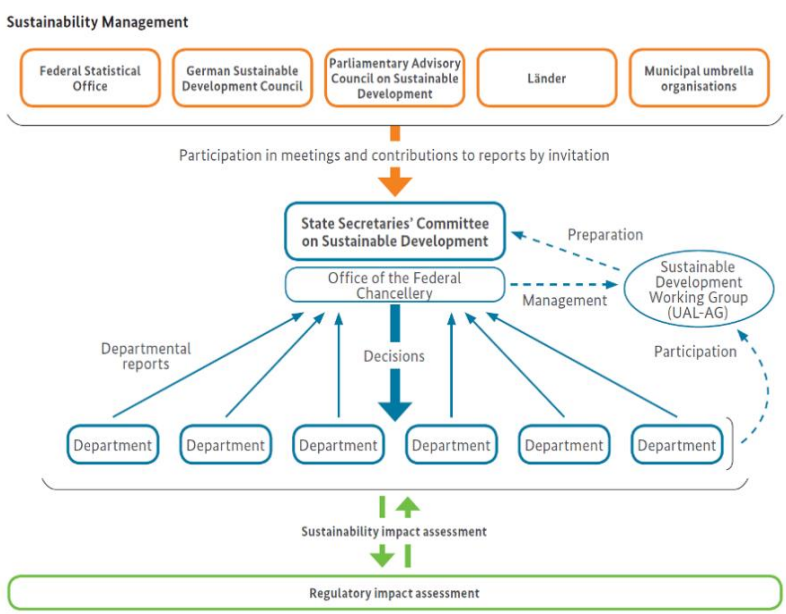
Table 3.6. Institutional mechanisms for PCSD in Germany

Building Block	Germany
Political commitment	The Chancellor has repeatedly stressed Germany's commitment to an ambitious implementation of the 2030 Agenda. The Federal Chancellery is in charge of the German Sustainable Development Strategy, the essential framework for implementation of the 2030 Agenda.
Policy integration	All ministries retain primary responsibility for their own contributions to implementation of the German Sustainable Development Strategy within their respective policy areas. Newly appointed Ministry Coordinators for SD strengthen policy integration and co-ordination within each ministry.
Intergenerational timeframe	There is broad political consensus in parliament and across the main political parties on the importance of SDG implementation and sustainable development. The first management rule of the German SD Strategy includes intergenerational fairness as a core principal. Possible long-term effects of a particular regulation are part of the Sustainable Impact Assessment. Intergenerational aspects are further anchored in the Basic Law for the Federal Republic of Germany (Art. 20a).
Policy effects	All proposals for new laws and regulations are subject to a Sustainability Impact Assessment (SIA).

	The SIA is based on indicators, targets and management rules which include intergenerational and transboundary dimensions. Since March 2018, laws and regulations can be checked against the SIA through an online tool: www.enap.bund.de.
Co-ordination	The State Secretaries' Committee (SSC), headed by the Federal Chancellery, is the central steering institution of the German SD-Strategy/SDG implementation. A standing working group on Sustainable Development (UAL-AG, at deputy director general level), chaired by the Federal Chancellery, prepares the SSC's meetings with participation of all ministries. The SSC meets regularly to address relevant cross-cutting or sectoral topics, e. g. setting a new political frame or announcing concrete actions, with decisions taken on a consensus basis. The co-ordination mechanism aims at decision making, information sharing and consultations.
Local involvement	Representatives of the Länder and municipalities are invited to SSC meetings when relevant. Thirteen out of 16 Länder have drawn up or are currently working on their own SD strategies. The Federal-Länder Experience Exchange on SD offers space for regular communication between the federal and Länder levels. The Sustainable Development Council supports vertical integration by a Sustainability Network of Lord Mayors and the creation of regional hubs. An interministerial working group on sustainable urban development (IMA Stadt), including the Association of German Cities and the German Association of Towns and Municipalities, among others, promotes the 2030 Agenda at the municipal level. The Service Agency Communities in One World (SKEW) provides information on community-level development co-operation.
Stakeholder participation	The independent Sustainable Development Council advises the Federal Government on all sustainability matters. Its 15 members, last appointed in 2016 by the Chancellor for a three-year term, represent the three dimensions of SD based on their professional and personal backgrounds. A Sustainability Forum is organised once a year by the Chancellery to give a selection of important stakeholders the opportunity to comment on SD policy in Germany.
Monitoring and reporting	The GSD Strategy includes domestic and international indicators and targets and defines long-term goals, most until 2030. The Federal Statistical Office continuously monitors the 63 indicators and publishes an independent indicator report every two years in which weather symbols illustrate whether a target is on track. The findings can influence agenda setting and evaluation within the SSC. The Parliamentary Advisory Council on SD monitors the Federal Government's sustainability policy at national, European and international level in the Bundestag. The German Sustainable Development Strategy itself is reviewed every four years. A first update is due in 2018, with a comprehensive review foreseen for 2020.

Source: OECD (2017[25]).

Figure 3.3. Institutional mechanisms for SDG implementation in Germany



Source: (German Federal Government, 2016[22]).

Box 3.4. German initiative on sustainable cocoa

PCSD enables countries to consider transboundary effects of domestic policies. This includes national production and consumption patterns, as well as trade agreements. The German Initiative on Sustainable Cocoa (GISCO) is a multi-stakeholder initiative including policy makers and business stakeholders from the cocoa, chocolate and confectionery industry, the German retail grocery trade and civil society. It brings together relevant actors from Germany with those from producing countries and international initiatives to promote sustainable cocoa production. GISCO currently has more than 70 members and is open to other interested parties.

The goal of GISCO is to improve the lives of cocoa farmers and their families, preserve natural resources and biodiversity in cocoa-producing countries and ultimately increase the proportion of sustainable cocoa production. The Federal Government is represented in the alliance by the Federal Ministry of Food and Agriculture and the Federal Ministry for Economic Cooperation and Development. The initiative exemplifies how national co-ordinated action across ministries, including stakeholders and the transboundary perspectives can create synergies supporting several SDGs simultaneously.

Source: OECD (2017[25]), German Federal Government (2016[22]).

Greece

A new strategy and SDG-aware public service and law making process supports policy integration and coherence during the whole policy cycle. The National Growth Strategy currently under elaboration will provide the framework to implement the SDGs taking into account national circumstances. Policy coherence, integrated planning and co-ordination are recognised as critical means of implementation. Updated guidelines are being developed by the General Secretariat of the Government (GSG) to ensure that Regulatory Impact Assessment Reports, which accompany the draft laws as well as the ex post evaluation of existing legislation, systematically take into account the three dimensions of sustainable development as reflected in the 2030 Agenda and SDGs. In parallel, training seminars for public employees are held by the GSG in collaboration with the National School of Public Administration and Local Government (EKDDA) to raise awareness of the importance of integrating the three dimensions of sustainable development and for building a network of policy makers across sectors and government levels with shared responsibility for PCSD and the SDGs (Box 3.5).

A permanent co-ordination mechanism at the highest level fosters commitment and continuity in policy coherence efforts. In December 2016, the co-ordination of national efforts to implement the SDGs was assigned by law to the GSG. As a permanent mechanism close to the political leadership and working closely with the parliament, the GSG plays a key role in promoting a whole-of-government approach, preventing and resolving overlaps and disagreements, and mainstreaming SDGs into thematic legislation and sectoral policies. An interministerial co-ordination network for the SDGs was established in 2016 to support the work of the GSG. Two ministries take key roles in the co-ordination network: the Ministry of Foreign Affairs remains responsible for the

external dimension of the SDGs, while the Ministry of Environment and Energy is thematically responsible for the implementation of seven SDGs (i.e. 6, 7, 11, 12, 13, 14 partly and 15). At the regional and local levels, the GSG co-operates closely with the Association of Greek Regions (ENPE) and the Central Union of Municipalities of Greece (KEDE) with a view to localising the SDGs. The GSG also engages key stakeholders in the process (e.g. civil society and social partners, the private sector, academia) and monitors SDG implementation in co-operation with ELSTAT (the statistical authority) (OECD, 2017[27]).

Table 3.7. Institutional mechanisms for PCSD in Greece

Building Block	Greece
Political commitment	The Greek National Growth Strategy, currently under elaboration, will be fully aligned to the 2030 Agenda and the SDGs. This strategic framework will emphasise the crucial role of policy coherence in achieving sustainable development. Responsibility for the overall co-ordination and implementation of the SDGs at national level is assigned to the centre of government, i.e. the General Secretariat of the Government (GSG), to ensure commitment at the highest political level and whole-of-government involvement in SDG implementation.
Policy integration	An interministerial co-ordination network for SDGs established in 2016 supports mainstreaming of the SDGs and the integration of the three dimensions of sustainable development into thematic legislation, strategies, policies and initiatives. Two instruments are the Environmental Impact Assessment (EIA), which is required for all small-scale interventions and activities, and the Strategic Environmental Assessment, for large projects. Interministerial committees are set up to identify synergies, interlinkages and obstacles and prepare relevant proposals on specific issues such as the promotion of the circular economy.
Intergenerational timeframe	The GSG is a permanent structure, thus ensuring continuity of commitment and efforts at the highest level for implementing the SDGs.
Policy effects	Potential transboundary and intergenerational effects in the design of domestic and international policies are anticipated through the elaboration of Regulatory Impact Assessment Reports that precede the adoption of new laws. In addition, ex post evaluation of existing legislation should take into account the three dimensions of sustainable development. Unintended negative effects during implementation are mitigated through continuous monitoring, review and reporting.
Co-ordination	The central governmental body responsible for co-ordination is the Office of Coordination, Institutional, International and European Affairs of the General Secretariat of the Government (GSG). The co-ordination work of the GSG is supported by an interministerial co-ordination network bringing together representatives from all line ministries, acting as focal points in charge of working on SDG-related issues within their respective ministries and mainstreaming them in thematic legislation, policies and initiatives. It also comprises representatives from other governmental bodies belonging to the centre of government, including the Vice-Presidency and the General Secretarial for Coordination, as well as the Hellenic Statistical Authority. It plays an important role in reconciling policy priorities, objectives and instruments. Information on financial resource allocation is shared through the Ministry of Finance, which participates along with all line ministries in the interministerial co-ordination network. In the context of implementing the SDGs across sectors and governance levels, the co-ordination mechanism takes into account both domestic and international objectives tailored to national priorities and circumstances.
Local involvement	The GSG works closely with regions and municipalities to achieve the SDGs and PCSD, such as the Association of Greek Regions (ENPE) and the Central Union of Municipalities of Greece (KEDE). In addition, representatives of local and regional governments have actively participated in a number of multi-stakeholder events on SDGs for peer learning and exchange of best practices. The inputs from local and regional government representatives feed into policy formulation.
Stakeholder participation	Consultation and high-level events are used to raise awareness, provide a space for multi-stakeholder interaction, and foster dialogue and partnerships on SDGs. Currently, two additional institutional set-ups for stakeholder participation are being considered: 1) establishment of a parliamentary committee, where all political parties are represented, to discuss SDGs and PCSD on a regular basis, and 2) an online consultation platform to provide a broad forum for participation to discuss, submit proposals and promote stakeholders' good practices on SDG implementation. Currently, the Economic and Social Committee of Greece (ESC), the constitutionally established institution responsible for conducting social dialogue on the country's general policy and in particular on economic and social issues, has assumed an important role in promoting systematic and structured consultation and dialogue on the effective implementation of SDGs at different levels and sectors.

Monitoring and reporting	The GSG monitors the implementation of the SDGs at national level in co-operation with ELSTAT (the statistical authority). A progress report on the implementation of the National Implementation Plan on the SDGs (to be elaborated in 2019) will be submitted to the parliament at regular intervals for review and political guidance. The Hellenic Parliament is envisaged to have an important role in the follow-up and review of the implementation of the SDGs.

Source: OECD (2017[27]).

Box 3.5. Fostering culture change in the public service in support of policy coherence

The Office of Coordination, Institutional, International and European Affairs of the General Secretariat of the Government (GSG), in co-operation with the National School of Public Administration and Local Government (EKDDA), organised in November 2017 a three-day seminar on the SDGs to train senior public employees on the international, European and national dimensions of the SDGs. Another seminar organised by the Better Regulation Office of the GSG seeks to highlight, among others, the importance of integrating the three dimensions of sustainable development (economic, social, and environmental) in the better regulation tools. Through these educational and training seminars, senior officials from line ministries and local and regional administrations become fully aware of the vision, principles and core priorities of the 2030 Agenda. The initiative is also helping to build a network of senior policy makers across sectors and government levels with shared responsibility and commitment to PCSD and SDGs.

Source: OECD (2017[27]).

Japan

Interministerial co-ordination at the highest level backed by a concrete action plan provides a strong basis for policy coherence. In May 2016 the government established the SDGs Promotion Headquarters (Box 3.6). This new body, composed of all cabinet ministers, is led by the prime minister. It acts as a control tower to ensure a whole-of-government approach to SDG implementation and fosters co-operation among ministries (Government of Japan, 2017[28]). In December 2017, the SDG Promotion Headquarters adopted the *SDGs Action Plan 2018*, which focuses on three overarching goals: 1) promoting Society 5.0, which corresponds to the SDGs, 2) vitalising local areas through SDGs, and 3) empowering women and future generations. By setting these three cross-cutting themes, Japan recognises their indivisibility and the need for integrated approaches for implementation (OECD, 2017[29]). The action plan also includes a wide range of specific government projects that are categorised by eight priority areas, along with the *SDGs Implementation Guiding Principles*.

Guiding principles for implementation support policy integration in pursuit of the SDGs. In December 2016, the SDGs Promotion Headquarters adopted *The SDGs Implementation Guiding Principles*. The guidance set out a vision[1]; five implementation principles (universality, inclusiveness, participation, integration, and transparency and accountability); eight priority areas (including 140 specific measures to be implemented both domestically and through international co-operation); and an approach to the follow-up and review process. The *Guiding Principles* provide a framework for

integrating the SDGs into the plans, strategies and policies of ministries and government agencies. They also aim to mobilise all ministries and government agencies by partnering with stakeholders to implement the SDGs, based on an analysis of the present situation in Japan and abroad (Japan Ministry of Foreign Affairs, 2017[30]).

Setting national long-term priorities enables the political leadership to pursue the 2030 Agenda and SDGs more coherently. By translating the SDGs into concrete action at national level, the government has identified eight priority areas in which all ministries are required to contribute: 1) Empowerment of All People; 2) Achievement of Good Health and Longevity; 3) Creating Growth Markets, Revitalization of Rural Areas, and Promoting Science Technology and Innovation; 4) Sustainable and Resilient Land Use, Promoting Quality Infrastructure; 5) Energy Conservation, Renewable Energy, Climate Change Countermeasures, and Sound Material-Cycle Society; 6) Conservation of Environment, including Biodiversity, Forests and the Oceans; 7) Achieving Peaceful, Safe and Secure Societies; and 8) Strengthening the Means and Frameworks for Implementation of the SDGs. A first follow-up and review of progress will be conducted in 2019. According to this outline, Japan plans to enhance policy coherence for sustainable development (target 17.14) at the international level by supporting developing countries in establishing implementation systems for the SDGs (Japan Ministry of Foreign Affairs, 2017[30]).

Table 3.8. Institutional mechanisms for PCSD in Japan

Building Block	Japan
Political commitment	In 2016, the government established the SDGs Promotion Headquarters, headed by the prime minister and composed of all ministers in order to ensure commitment at the highest level. A new national strategy, *The Implementation Guiding Principles*, includes national priorities and indicators. The SDGs Promotion Headquarters agreed on the SDGs Action Plan 2018 in December, 2017.
Policy integration	The Government of Japan/ SDGs Promotion Headquarters is taking an integrated approach to solving issues related to the three dimensions of economy, society and the environment, and fosters interactions and synergies among eight identified priority areas. The *SDGs Implementation Guiding Principles* provide a framework for integrating SDGs into the plans, strategies and policies of ministries and government agencies.
Intergenerational timeframe	The SDGs Promotion Headquarters is a new cabinet body ensuring long-term support.
Policy effects	The SDG Promotion Headquarters consists of all ministries in charge of domestic and international issues and can take into account policy effects from domestic and international co-operation for the SDGs.
Co-ordination	The SDGs Promotion Headquarters holds meetings twice a year to review and decide basic directions, policies and detailed projects for promoting the SDGs. Its central position within the Cabinet can foster close co-operation among relevant governmental agencies and support information sharing.
Local involvement	The national government encourages local governments to incorporate the SDGs into their strategies and policies. The Headquarters sets "vitalizing local areas through promoting the SDGs" as one of the three basic directions of Japan's SDG model in the *SDGs Action Plan 2018*. The Headquarters plans to create a project "SDGs Models of Local Governments" through which the entire central government will provide extensive support to selected local governments in their SDGs implementation, then expand to other local governments based on lessons learnt.
Stakeholder participation	The Headquarters promotes consultations with stakeholders via SDGs Promotion Roundtable Meetings that include representatives from the related governmental agencies, NGOs/NPOs, academia, the private sector and international organisations. The SDGs Promotion Roundtable Meeting also conducts implementation reviews on the achievement of the SDGs. The Headquarters awards the "Japan SDGs Award" to highlight best practices of companies, local governments and CSOs. The first ceremony was held in December 2017. Dialogue at the SDGs Promotion Roundtable Meeting also fed into in the preparation of the *Implementation Guiding Principles*.
Monitoring and reporting	The SDG Promotion Headquarters monitors progress of measures taken in line with the *SDGs Implementation Guiding Principles*. This includes particularly the 140 measures included in the annex of the guiding principles. The first review and follow-up will be conducted in 2019. Japan will make

	proactive use of statistical data and employ key performance indicators (KPIs) including the global SDGs as much as possible. Subsequent to the 2019 HLPF, follow-up and review will be conducted, taking into account the four-year cycle of the HLPF organised by the President of the General Assembly.

Source: OECD (2017[29]), Government of Japan (2017[28]).

Box 3.6. Promoting the SDGs within Japanese society

The SDGs Promotion Headquarters is responsible for raising awareness of the 2030 Agenda and the SDGs Implementation Guiding Principles. It proactively plans and leads communication activities to promote SDGs-related measures as a national movement in order to increase public understanding and support for engagement with the SDGs.

As part of this effort, the government is fostering the sharing of good practices among implementing partners, including the private sector, by giving awards and promoting the use of SDGs logos and branding. The government will further promote Education for Sustainable Development (ESD) as well as encourage learning about SDGs in all settings, including schools, households, workplaces and local communities. The aim is to give children, who will lead society in 2030 and beyond, the competencies to create sustainable societies and a sustainable world.

The SDGs Action Plan 2018 recognises international events such as the HLPF, the G20, the 2019 Tokyo International Conference on African Development (TICAD) in 2019, the Tokyo Olympic and Paralympic Games in 2020 and bidding for 2025 Expo as suitable occasions to further raise awareness of the SDGs and promote their implementation.

Source: OECD (2017[29]).

Lithuania

Commitment to coherence at the national and international levels provides a good basis to pursue more integrated policies. Last amended in 2011, The National Strategy for Sustainable Development (NSSD) is Lithuania's main strategic document ensuring national commitment and implementation of the SDGs and PCSD. It aligns with the SDGs and stresses commitment to policy coherence as a main implementation principle (Government of the Republic of Lithuania, 2011[31]). The long-term strategic document *Lithuania 2030* contains the vision and goal to reach a top ten position in Europe on development and happiness indices (State Progress Council, 2012[32]). The government is currently updating this strategy as well as the body responsible for its supervision: the National Progress Council. Regarding development co-operation, for the first time the government adopted an Inter-Governmental Development Cooperation Action Plan for the period 2017-2019 which defines policy guidelines and implementing measures. The multi-stakeholder forum led by the Ministry of Foreign Affairs (the National Development Cooperation Commission, NDCC), is responsible for PCD in development co-operation. It meets at least twice a year and submits proposals to the MFA on

development co-operation policies. This cross-ministerial collaboration strengthens the interface between internal and external commitment to PCSD.

Updating institutional mechanisms can provide an opportunity to enhance and integrate co-ordination mechanisms for policy coherence at the national level. The Ministry of Environment (MoE) co-ordinates the implementation of the national strategy and functions as secretariat for the National Commission on Sustainable Development (NCSD). The NCSD is chaired by the prime minister and comprises representatives from ministries, municipal institutions, NGOs, academia and business. In August 2016 the NCSD identified six areas of highest importance to Lithuania: combating social exclusion and eradication of poverty; healthy lifestyle; energy efficiency and climate change; sustainable consumption and production; high quality education; and development co-operation. The MoE has established an intergovernmental working group that provides inputs for the implementation of SDGs in Lithuania. Currently in reform, the National Progress Council and NCSD will be merged to create a unified body responsible for the implementation of 2030 Agenda, and include mechanisms for arbitration in the case of conflict. This institutional change will facilitate co-ordination for coherent policies. Lithuania is planning to strengthen the role of the Prime Minister's Office in the future and might consider moving the NCSD from the MoE to a high level. Such actions have facilitated effective co-ordination in other countries (UNDP, 2017[33]).

Current collaboration across ministries provides lessons for future reporting on policy coherence. Aiming to nationalise the SDGs, the MoE along with all relevant ministries has mapped and evaluated the coherence between the 17 SDGs and the national strategy and other relevant strategic documents (OECD, 2017[34]). Currently stakeholders are invited to participate in the meetings of the Inter-institutional Working Group, including the Prime Minister's Office and the MoE (responsible for co-ordinating VNR preparations). The MoE reports every two years on implementation progress of the NSSD, while the national statistics office is responsible for collecting, collating and publishing sustainable development indicators.

Table 3.9. Institutional mechanisms for PCSD in Lithuania

Building Block	Lithuania
Political commitment	The 2011 National Strategy for Sustainable Development (NSSD) lists policy coherence as a main implementation principle (19.6). The National Commission for Sustainable Development (NCSD) is chaired by the prime minister and includes political leaders at minister or vice minister level. Lithuania is committed to further strengthening dialogue with stakeholders and achieving policy coherence at all levels of Lithuanian society.
Policy integration	The integration of economic, social and environmental actions in overarching strategic documents is a key principle of the national strategy to ensure they are coherent and mutually reinforcing. Further, the strategy calls for the main sustainable development provisions to be integrated into special sectorial plans, programmes, regional and municipal planning documents and other legal acts. Trade-offs and synergies are identified through respective sectoral strategies and planning documents of ministries which must into consideration sustainable development aspects outlined in the National Sustainable Development Strategy.
Intergenerational timeframe	The government is planning to update the National Progress Strategy *Lithuania 2030*, its main long-term strategic document, by incorporating the SDGs and principles. New goals may be formulated with a timeline until 2050.
Policy effects	Effects are identified through balanced impact assessments and consultations with stakeholders. In addition, upfront communication is an integral part of environmental assessment procedures. If economic activities are deemed to have potentially adverse transboundary impacts, affected parties will be notified at an early stage.
Co-ordination	The NCSD, chaired by the prime minister, is comprised of representatives from relevant ministries, municipal institutions, NGOs, academia and business. The Commission provides guidance and,

	consisting of high level political leaders, has the necessary political authority to make decisions on conflicting matters. The Ministry of Environment is responsible for co-ordination of the National Strategy for Sustainable Development and works as a secretariat for the NCSD, also providing the platform for information sharing among institutions.
Local involvement	Regions, cities and municipalities are closely involved in the implementation of SDGs. PCSD is especially important in heavily urbanised areas. For example, Integrated Territorial Investments (ITIs) ensure that environmental aspects are integrated into city planning activities of the five major cities.
Stakeholder participation	Representatives from NGOs, business, academia and governmental and municipal institutions are members of the NCSD, making it a useful platform for addressing and solving conflicting interests. Intergovernmental working groups also include input from NGOs. Lithuania's national Non-Governmental Development Cooperation Organisation's Platform (NGDO) brings together 21 development and education NGOs, mainly to raise public awareness and provide civic education on sustainable development issues. Lithuania is currently working on closer and more formal involvement of the private sector, in particular in their international development co-operation activities.
Monitoring and reporting	The Ministry of Environment co-ordinates the implementation of the NSSD and monitors its progress in co-operation with other institutions in their respective fields of competence. Development indicators cover environmental, economic and social aspects of the country's sustainable development. Lithuania has started data collection and analysis and over 50 percent of sustainable development indicators have already been made publicly available. The statistics office is responsible for collecting, collating and publishing these indicators on its website, the Official Statistics Portal (OSP). In addition, the Ministry of Environment reports biennially to the government on the implementation of the National Strategy for Sustainable Development and integrates information about the achievement of indicators into the annual ministerial report published on its website.

Source: OECD (2017[34]), Government of the Republic of Lithuania (2011[31]).

Box 3.7. Cross-ministerial collaboration for coherent environmental policies

Integrated approaches minimise adverse environmental impacts and maximise eco-efficiency. In Lithuania, different governmental institutions co-ordinate their actions in order to increase awareness and ensure the integration of environmental aspects into the implementation measures in their respective policies. Ministries collaborate to approve necessary norms, normative standards and rules as means to achieve environmental objectives. An integral approach is applied to transport, industry, energy, construction, agriculture, housing, tourism, healthcare and other sectors by promoting the use of best available techniques (BAT), effective pollution prevention technologies, and by taking into consideration the life cycle approach to production. Lithuania has implemented an integrated system of pollution prevention and control which includes water, air and soil protection and waste management measures. It ensures compliance via three principles: 1) the BAT is applied and, natural resources are used rationally, economically and energy efficiently; 2) waste is prevented, prepared for reuse, recycled, recovered or disposed of; 3) usage of hazardous substances is reduced and these substances are gradually replaced with less hazardous ones.

Environment and health considerations must be considered as part of an environmental impact assessment of a proposed economic activity before implementation. (Law No I-1495, last amended in April 2016). This set-up prevents environmental deterioration and ensures inclusive and representative decision making on at local, regional and national levels.

Source: OECD (2017[34]).

Luxembourg

With a clearly stated commitment, Luxembourg has engaged in a process to strengthen governance for policy coherence. The approach pursued through the third National Plan for Sustainable Development (NPSD), due in 2018, aims to identify policies likely to have an impact on the three dimensions of sustainable development, in line with the 2030 Agenda, and will further address PCSD (OECD, 2017[35]). The report on implementation of the 2030 Agenda adopted by the government in May 2017 emphasises the need to establish mechanisms and institutions to support SDG17.14. It further outlines the whole-of-government approach envisioned for SDG implementation and the need for enhanced co-ordination and efficiency in order to ensure the mobilisation and use of all available resources (Grand-Duchy of Luxembourg, 2017[36]). The 2017 VNR states the need to ensure the maximum coherence of policies both internally and externally in SDG implementation (Grand-Duchy of Luxembourg, 2017[37]).

New institutional arrangements for collaboration among ministries can help enhance coherence between domestic and international policies for delivering on the SDGs. The Inter-Departmental Commission on Sustainable Development (ICSD), composed of representatives from all ministries and government administrations, is the central co-ordinator of domestic sustainable development policies. Established in 2004, the ICSD will be equipped with the necessary competencies to address PCSD via the NPSD as well as to promote and monitor SDG implementation and draft reports. The Interministerial Committee for Development Cooperation (ICD) meets six times a year to identify and discuss trade-offs and synergies and formulate non-binding recommendations to the government regarding PCD. In 2014 it adopted a new working method involving consultations with civil society, choice of subjects, analysis and findings. Members of the ICSD participate in the ICD and vice-versa (OECD, 2017[35]). Policy coherence efforts can benefit from the introduction of a specific mandate to resolve potential incoherence issues that might arise during SDG implementation (OECD, 2017[38]).

Table 3.10. Institutional mechanisms for PCSD in Luxembourg

Building Block	Luxembourg
Political commitment	The third National Plan for Sustainable Development (NPSD), the implementation strategy of Agenda 2030, is currently being elaborated and will address PCSD. Since 2012, the Interministerial Committee for Development Cooperation (ICD) is mandated by law to deal with PCD and an explicit commitment is made in the current 2013-2018 government development programme.
Policy integration	The National Plan for Sustainable Development (NPSD) is being elaborated by the Inter-Departmental Commission on Sustainable Development (ICSD) in a participatory process with all ministries. The ICSD supports the integration of sustainable development in sectoral policies. Ministries can decide on follow-up PCD actions after recommendations of the ICD in their respective fields.
Intergenerational timeframe	SDG implementation is considered essential among a majority of parties and the population. The trade-offs between short- and long-term interests are decided at government level. Identifying long-term goals can be difficult, however, when tangible benefits are hard to communicate.
Policy effects	The ICD can identify and propose addressing ex ante potential transboundary and intergenerational effects. Once identified, the ICD can discuss unintended effects and formulate unbinding recommendations to government. The government plans to establish a sustainability check to strengthen policy coherence and better understand potential national and transnational effects of policies on sustainable development.
Co-ordination	The Interdepartmental Commission on Sustainable Development (ICSD), composed of representatives from each ministerial department, is preparing the National Plan for Sustainable Development (PNDD) and the national report on the implementation of sustainable development. The Environment Department of the Ministry for Sustainable Development and Infrastructure co-ordinates national SDG implementation and chairs the ICSD. The Interministerial Committee for Development Cooperation

	(ICD) meets every two months to consider international development co-operation including PCD. It shares information, formulates non-binding recommendations to the government, and provides mediation among ministries in potential cases of disagreement. Members of the ICD participate in the ICSD and vice-versa.
Local involvement	The PNDD will be implemented at the national as well as local level. In Luxembourg, many parliamentarians are also mayors so that local concerns can be raised in parliament. The local level can also influence legislation via regular consultation processes.
Stakeholder participation	The launch of the Fair Politics barometer, a report by Luxembourg's national umbrella organisation of NGOs (Cercle.lu), and the subsequent discussion in parliament in December 2017, was a first step towards greater consideration of PCD and the SDGs during the next legislative period. The Ministry of Foreign and European Affairs supports this ongoing advocacy. The ICD invites NGOs active in the development and co-operation sector to participate in its debates, attend its meetings and identify priority topics to be considered. An additional platform for reflection, discussion and advice/opinion on sustainable development, the High Council for Sustainable Development, consists of 15 persons from civil society and the private sector, and submits an annual report to parliament.
Monitoring and reporting	The ICD meets every two months, providing minutes and an annual report which are accessible by the public and presented to parliament. Parliament can also ask for action to be taken on ICD's non-binding recommendations. The close involvement of NGOs in monitoring policy impacts such as through the Fair Politics barometer is highly appreciated and supported financially and politically by the government.

Source: OECD (2017[35]).

Box 3.8. Aligning efforts to finance climate actions

To strengthen the coherence and the whole-of-government approach to fight climate change, several ministries work closely together, including the Department of Environment of the Ministry of Sustainable Development and Infrastructure, the Directorate for Development Cooperation and Humanitarian Affairs of the Ministry of Foreign and European Affairs, and the Ministry of Finance.

Cross-representation of sector experts has been introduced to promote coherence. The Department of the Environment is represented in the Interministerial Committee for Development Cooperation (ICD), in the Lux-development executing agency and in its audit committee. The Directorate for Development Cooperation and Humanitarian Affairs is represented in the Interdepartmental Commission on Sustainable Development (ICSD) and in the Climate and Energy Fund (FCE).

There is greater co-operation in strategy and criteria. In May 2017, FCE adopted its strategy and eligibility criteria for international climate financing in collaboration with the Directorate for Development Cooperation and Humanitarian Affairs. The ICD has also adopted a set of criteria for environmental and climate policy.

Vertical coherence has also increased. A climate pact between the municipalities and the Luxembourg state guides municipalities in the implementation of their energy and climate policy, and municipalities agree to establish an "energy accounting system" for buildings, public lighting and communal vehicles. This partnership and the participation of various actors at the municipality level have helped to intensify efforts in energy and climate policies.

Source: OECD (2017[35]).

Mexico

An explicit commitment of the State towards the 2030 Agenda, backed by an implementation strategy, provides the basis for aligning efforts at federal, state and municipal levels. In 2016, Mexico's president affirmed in his statement to the 71st UN General Assembly that his country had embraced implementation of the 2030 Agenda as a "commitment of the State".[2] A National Council for the 2030 Agenda for Sustainable Development, chaired by the president, was established in 2017 as a bonding mechanism between the federal and local governments, civil society, the private sector and academia. Its main purpose is to "coordinate the actions for the design, execution and evaluation of [...] policies [...] for the compliance with the… 2030 Agenda."[3] A National Strategy for the implementation of the 2030 Agenda will be developed under the coordination of the President's Office. The new strategy will set out national priorities, targets, public policies, concrete actions and indicators based on a broad consultation process involving stakeholders at the federal, state, and local levels. The National Governors' Conference (CONAGO) has established an Executive Committee for Compliance with the 2030 Agenda: so far, 21 out of 32 states have established local councils to implement the 2030 Agenda at the state level. Practical guidelines have also been developed to this effect in state and municipal development plans (Government of Mexico, 2017[39]). Finally, the Senate has set up a Working Group for the Legislative Follow-up of the SDGs.

Leadership at the highest level is helping to lay institutional foundations to ensure that commitment towards the 2030 Agenda transcends government administrations. Co-ordination for national implementation is led by the Office of the President. The National Council for the 2030 Agenda, chaired by the president himself, has been established as a mechanism for improving national planning with a clear strategic vision. The new National Strategy for the implementation of the 2030 Agenda will incorporate a long-term vision to guide the elaboration of future National Development Plans (NDP).

National planning and budgetary processes provide essential tools for policy integration and coherence. The National Planning Law was updated in 2017 and now mandates current and upcoming federal administrations to take into consideration the principles of the 2030 Agenda. It also integrates the three dimensions of sustainable development (economic, social and environmental). Finally, the updated Planning Law mandates to take a 20-year perspective into consideration. The SDGs Specialised Technical Committee (CTEODS), led by the Office of the President and the Institute of Statistics and Geography, developed a framework with the Ministry of Finance to integrate planning, public finance management, policy making and oversight to support the achievement of the SDGs. Within this framework, the Ministry of Finance has identified mechanisms in collaboration with UNDP to link budget allocations with the SDGs with a view to strengthening strategic planning, monitoring and evaluation (Box 3.9).

Table 3.11. Institutional mechanisms for PCSD in Mexico

Building Block	Mexico
Political commitment	Mexico approaches implementation of the 2030 Agenda as a "commitment of the State". A new National Council for the 2030 Agenda was established in April 2017. The federal government will launch a National Strategy to implement the 2030 Agenda, which is being developed by the Office of the President in collaboration with more than 50 different offices of the Federal Public Administration. The new strategy will set out national priorities and targets based on a broad consultation and dialogue

	with stakeholders.
Policy integration	The National Planning Law was updated during the second half of 2017 with a view to integrating the three dimensions of sustainable development and key principles of the 2030 Agenda in national development planning. It will also serve as a reference for future governmental actions. A new provision for linking the authorised programmes of the public administration with the SDGs was incorporated into the Guidelines for the Programming and Budgeting Process for the Fiscal Year 2018. The Mexican Development Cooperation Agency (AMEXCID) has also adjusted the design and monitoring of development co-operation projects and improved its information systems in order to align them to the Sustainable Development Goals.
Intergenerational timeframe	The National Council for the 2030 Agenda aims at improving planning with a clear strategic vision in the medium- and long-term that transcends sexennial presidential terms. The new national strategy for implementing the 2030 Agenda will incorporate a long-term vision to guide the elaboration of future NDPs. In addition, the updated planning law mandates a long-term planning horizon that allows a strategic vision in sexennial planning based on a 20-year perspective.
Policy effects	The adjustment of policies in light of their potential negative effects is the responsibility of each government body. The new National Council for the 2030 Agenda can provide a forum to identify in a co-ordinated manner policy choices that may affect other countries.
Co-ordination	Co-ordination for implementation is led by the Office of the President. The National Council for the 2030 Agenda, chaired by the president, is composed of heads of all Ministries. It acts as a bonding mechanism between the federal and local governments, civil society, the private sector and academia. The National Council will be responsible for implementation of the new National Strategy. The Senate has set up a Working Group for the Legislative Follow-up of the SDGs composed of 34 committees to accompany government's efforts in SDG implementation. The Specialized Technical Committee for the SDGs (CTEODS), established in 2015, is tasked with co-ordinating joint inter-institutional actions for collection, integration, production, processing, systematisation and dissemination of information that can be useful for designing and evaluating public policies aimed at compliance with the SDGs. The CTEODS is led by the Office of the President, the National Institute on Statistics and Geography (INEGI) and the National Population Council of Mexico. It involves 25 government agencies.
Local involvement	The National Council for the 2030 Agenda provides a platform for fostering dialogue and aligning efforts at the federal, state and municipal levels. The existing National Governors' Conference (CONAGO) has established an Executive Committee for Compliance with the 2030 Agenda. So far 21 states under the CONAGO have created state commissions to support SDG implementation at the regional and local levels. The existing National Conference of Municipalities of Mexico (INAFED), which brings together 2,456 municipalities, has also been used as a mechanism to engage local actors.
Stakeholder participation	Civil society, academia and the private sector participate as observers during sessions of the National Council for the 2030 Agenda. They contributed to developing the official position of Mexico during the negotiation process of the SDGs. The Office of the President has organised a series of regional forums in several states with more than 300 representatives from civil society, as well as the consultation for developing the National Strategy involving multiple stakeholders. AMEXCID launched the "Alliance for Sustainability" as a platform for dialogue and action including more than 50 leading enterprises in sustainability (sustainable production and consumption, climate change, energetic transition, water, financial inclusion, etc.), business organisations and business foundations to exchange information on how to integrate the SDGs into business models and design international co-operation projects based on the 2030 Agenda. In the context of international development co-operation, a first stage is being initiated through the mapping of civil society capabilities and, subsequently, training for strengthening capacities of society.
Monitoring and reporting	Mexico has developed a National Platform for Tracking the Sustainable Development Goals, which aims to measure and track progress on the SDGs in Mexico (www.agenda2030.mx). This platform is under the responsibility of the CTEODS and administered by INEGI, and is based on the Information System of the SDGs (SIODS). It provides disaggregated and georeferenced data at the national, state and municipal levels as well as data visualisation tools. Another website has been created to provide documents and information regarding SDGs in Mexico: www.gob.mx/agenda2030.

Source: OECD (2017[40]).

Box 3.9. Aligning Mexico's budget with the SDGs

The Office of the President, the National Institute of Statistics and Geography and

the Ministry of Finance, with the support from the United Nations Development Programme, have sought to define and develop mechanisms to link Mexico's budget with the SDGs. The purpose was to identify specific budget items and estimate the allocation sufficient to contribute to progress on the SDGs, using a results-based management perspective.

Given the current indirect link between budgets and SDGs, Mexico used key elements of its institutional architecture to strengthen the connection: 1) national planning; 2) programmatic structure based on budgetary programmes; 3) the performance evaluation system; and 4) accounting harmonisation. Building on this, two main steps have been taken:

1) Linking: each ministry has applied the performance evaluation system and national planning to match their programmes to the SDGs;
2) Quantifying: programmes that contribute to each SDG target were identified indicating a direct or indirect contribution in order to estimate the total investment per target and overall. 102 SDG targets were further disaggregated by different topics (sub-goals), allowing a more precise indication of any sub-goal to which a programme is linked.

As a result of this process, Mexico has improved information to:

- identify the link between the current national planning (medium-term) and the long-term SDGs;
- assess the percentage of SDGs linked to government programmes and, conversely, the number of programmes linked to each SDG;
- communicate the country's starting point and what has been achieved;
- make public policy decisions and budget allocations based on an initial analysis of how much is currently invested in each SDG.

Source: Mexican Ministry of Finance (2017[41]).

The Netherlands

Commitment and experience in delivering coherent policies for development abroad can provide lessons for applying a PCSD lens to domestic policies. The 2017-2021 Dutch Coalition Agreement *Confidence in the Future*, which has a strong focus on sustainability, proposes policies and actions that are in substance strongly aligned with the SDGs. Moreover, it stresses the importance of coherence both internally and externally. Regarding international commitments, the forthcoming policy note on foreign trade and development co-operation takes the SDGs explicitly as the guiding framework (Government of The Netherlands, 2017[42]). The national action plan on policy coherence for development, stemming from 2016, includes goals linked to the SDGs focusing on eight priority areas: international trade agreements; access to medicine; tax avoidance; sustainable value chains; remittance transaction costs; climate change; investment protection; and food security (OECD, 2017[43]). This issues-based approach helps to identify synergies and trade-offs, and to monitor the coherence of policies (Dutch Ministry of Foreign Affairs, 2017[44]). The adoption of the 2030 Agenda renewed attention to policy coherence including persistent challenges (Kingdom of the Netherlands, 2017[45]). To this end, the Netherlands engaged in discussions to concretise the concept and co-financed a discussion paper (Dutch Ministry of Foreign Affairs, 2017[44]).[4]

Policy coherence is ensured by the Council of Ministers, while SDG implementation is co-ordinated by the Minister for Foreign Trade and Development Cooperation. As the executive council of the Dutch government, the Council of Ministers initiates laws and policies and is in a position to take into account transboundary and inter-generational interests as well as to achieve a balanced approach to the economic, social and environmental dimensions of sustainable development. Led by the prime minister and including the deputy prime minister, it meets every week to debate proposed decisions (OECD, 2017[46]). In a further effort to increase effectiveness and enhance policy coherence, particularly between aid, trade and foreign affairs, two ministers notably have cross-cutting mandates: the Minister of Economic Affairs and Climate Policy and the Minister for Foreign Trade and Development Cooperation (OECD, 2017[43]). Responsibility for SDG implementation is assigned to all relevant ministers in accordance with their existing responsibilities. This provides a sound basis on which to proceed. This approach does require clear co-ordination and assessment of policy proposals in order to avoid conflicts or overlaps (Netherlands Court of Audit, 2017[47]).

Whole-of-society engagement and expertise contribute to effective monitoring processes. Statistics Netherlands (CBS) identifies actors and data sources for SDG monitoring in *Measuring the SDGs: An Initial Picture for the Netherlands* (Statistics Netherlands, 2017[48]). The report's second edition, published in March 2018, acknowledges possible difficulties to quantify SDG 17.14 (Statistics Netherlands, 2018[49]). Two additional annual reports to parliament exist: one on SDG implementation and the other on policy coherence. A multi-stakeholder online platform, the SDG Charter and its SDG Gateway, link companies, NGOs, knowledge institutes and philanthropists who wish to partner for the SDGs. In addition, many municipalities give visibility to local initiatives online and encourage the participation by society, as illustrated by best practices in the country's 2017 VNR.

Table 3.12. Institutional mechanisms for PCSD in the Netherlands

Building Block	The Netherlands
Political commitment	In 2016 the Netherlands adopted an action plan on policy coherence for development with time-bound goals and actions aligned with the SDGs focusing on key areas of trade agreements, tax evasion/avoidance, investment protection, climate change, cost of remittances, sustainable value chains (including responsible business conduct), access to medicines and food security.
Policy integration	Ministers are responsible for implementing the SDGs within their respective policy areas. Focal points for SDG implementation exist at each ministry. Notably two ministers with cross-cutting mandates support coherence across policy domains: the Minister of Economic Affairs and Climate Change and the Minister for Foreign Trade and Development Cooperation.
Intergenerational timeframe	The VNR states that previously agreed policy and allocation decisions might be reconsidered in case of a new coalition agreement.
Policy effects	Government future plans generally contain a trend analysis. Transboundary effects on (developing) countries are included in the Dutch PCD Action Plan of 2016, which links the country's eight priority themes to the SDGs. Further action is taken if necessary to avoid/reduce unintended effects.
Co-ordination	SDG implementation by ministries is overseen by the Minister for Foreign Trade and Development Cooperation and supported by a special SDG coordinator. The coordinator chairs regular meetings of the interministerial working group of ministerial SDG focal points including a representative of municipalities to discuss progress on SDG implementation. Arbitration, if necessary, takes place at a higher policy level (Director General level) and ultimately within the Council of Ministers. Here trade-offs between policy domains of different Ministries are discussed and, if necessary, voted upon. In addition, since 2015 a project group of thematic experts led by the PCD focal point for the Bureau for International Cooperation at the Directorate General for International Cooperation co-ordinates international policy coherence work. This group sets the agenda, proposes objectives and guides discussions with respective ministries. The mandate of the SDG coordinator includes stakeholders, who also report to parliament in a joint and differentiated manner.

Local involvement	A representative of Dutch local authorities (VNG International: the International Cooperation Agency of the Association of Netherlands Municipalities) is present at the meetings of the interministerial working group of SDG focal points. Decentralised government bodies (municipalities, provinces and water authorities) have written their own chapter in the first SDG report to parliament. A separate statistical report on the SDG performance of all 388 municipalities will be included in the future.
Stakeholder Participation	An SDG Charter was established by the Ministry of Foreign Affairs – a growing multi-stakeholder platform of over 130 Dutch companies, NGOs, knowledge institutes and philanthropists who wish to contribute to the SDGs in partnership. A recently launched SDG Gateway forms an online community of active stakeholders across sectors enabling collaboration.
Monitoring and reporting	The annual SDG report to parliament (before Accountability Day) and the annual PCD report to parliament serve as reporting mechanisms. Netherlands Statistics (CBS) monitored the Dutch starting position in November 2016. In March 2018 it published its second measurement with wider data coverage (50% of the UN indicators), which provides a cross-European comparison and an overview of progress to date. The website www.sdgnederland.nl informs the public about the SDGs, ongoing initiatives and ideas on how everyone can actively contribute.

Source: OECD (2017[46]).

Box 3.10. A proposal for coherent assessments of policies: the SDG Test

The Minister for Foreign Trade and Development is looking into the feasibility of introducing a "SDG test" (or "check") across government departments in response to a request from Parliament. Such an instrument, carried out in collaboration with other ministries, could potentially contribute to enhancing policy coherence by allowing for an ex ante assessment of whether new policy proposals are in line with the SDGs. The pros and cons of such a test have already been communicated to Parliament in a policy letter in September 2017. The Ministry reported back to Parliament (Foreign Trade and Development Cooperation budget discussion – 23 November 2017).

Source: OECD (2017[46]).

Poland

A national strategy and the Multiannual Development Cooperation Programme provide a strong basis for coherent SDG implementation. The Strategy for Responsible Development (SRD), adopted by the Council of Ministers in February 2017, aims to support implementation of the 2030 Agenda. It outlines the principles, priorities, objectives and implementation instruments of a new model for Poland's economic, social and spatial development with perspectives up to 2030 (OECD, 2017[50]). It also provides a system for co-ordinated and integrated implementation defining the roles of respective public institutions and ways of collaboration with other stakeholders. The SRD introduces a wide variety of initiatives and is being implemented with a project approach. The second Multiannual Development Cooperation Programme 2016-2020 incorporates policy coherence as a principle of development co-operation with an explicit link to support SDG implementation and ensure consistency with the global goals (Ministry of Foreign Affairs, 2015[51]). Poland has established two priority areas for policy coherence: 1) addressing illicit financial flows, in particular tax avoidance/evasion and money laundering and 2) promoting standards and principles of Corporate Social Responsibility and Responsible Business Conduct. Both priorities are implemented according to annual

action plans in co-operation with all relevant ministries (OECD, 2017[52]) (Ministry of Foreign Affairs, 2016[53]).

An effective interface between different interministerial mechanisms will be instrumental in ensuring a coherent implementation, both domestically and internationally. The Ministry of Entrepreneurship and Technology co-ordinates national SDG implementation. The Ministry of Foreign Affairs (MFA) is responsible for co-ordination of the coherence of domestic policies focusing on developing countries within the two established priority areas for PCD. Contact points in ministries support efforts to promote PCD, while ministries remain responsible for coherence between the SDGs and sectoral policies (Ministry of Foreign Affairs, 2015[51]). PCD challenges are discussed in several institutional structures. The Development Cooperation Programme Board defines and discusses annual action plans on PCD priority areas (Ministry of Foreign Affairs, 2015[51]). The Economic Committee of the Council of Ministers (ECCM) and the Coordinating Committee for Development Policy (CCDP) provide additional platforms for exchanging information and seeking consensus in the case of divergent positions. Furthermore, the government has created a special Task Force for Cohesion of the SRD with the 2030 Agenda within the CCDP, consisting of representatives from national and local government, academia and the socio-economic community. The MFA is represented in this task force, thus allowing for PCD issues to be raised and discussed during its meetings (OECD, 2017[50]).

Regulatory impact assessments can be instrumental in considering transboundary impacts of national policies. Poland has adapted its Guidelines for Regulatory Impact Assessments to include a question about the transboundary impact of national regulations on social and economic development in Poland's priority countries (OECD, 2017[52]). This is an important step towards monitoring PCSD, applicable in the future to other policies and countries. The Minister of Investment and Economic Development reports annually on SRD implementation progress. The report is submitted for comments to the CCDP and for consideration to the Council of Ministers that oversees implementation and conducts periodic inspections of the monitoring process. Poland will submit a report on ministerial actions for PCD and a report on the performance of annual action plans to their Development Cooperation Programme Board, the OECD and the EC (Ministry of Foreign Affairs, 2015[51]).

Table 3.13. Institutional mechanisms for PCSD in Poland

Building Block	Poland
Political commitment	The Strategy for Responsible Development (SRD), adopted in February 2017, is Poland's current framework for achieving the SDGs. The principle of policy coherence for development was incorporated in the Multiannual Development Cooperation Programme 2016-2020 and adopted by the Council of Ministers.
Policy integration	Government administration bodies (ministries) are responsible for ensuring that sectoral policies are consistent with the SDGs and contribute to global development.
Intergenerational timeframe	The SRD of 2017 has a perspective through 2030, and the country plans to prepare a long-term National Development Concept in 2018. Multi-annual budgetary planning is being strengthened and the Economic Committee of the Council of Ministers (ECCM) is tasked with preventing ad hoc political decisions that could conflict with long-term sustainability goals.
Policy effects	Poland uses tools to assess policy effects, including ex ante environmental impact assessments, assessments of compliance with the SRD, and evaluations of the impacts of Poland's domestic policies on priority countries for development co-operation. The guidelines for RIAs thus include consideration of transboundary impacts of national regulations on social and economic development in Poland's priority countries. .
Co-ordination	The Ministry of Investment and Economic Development co-ordinates implementation of the SRD, and

	the Ministry of Entrepreneurship and Technology is responsible for co-ordination of national SDG implementation. The MFA co-ordinates development co-operation and ensures the coherence of domestic policies and the SDGs with a focus on developing countries (within established priority areas). It is supported by a National Coordinator for International Development Cooperation, appointed from the group of (under-) secretaries of state, who also head the Development Cooperation Programme Board (DCPB), composed of representatives from different ministries (including the Ministry of Investment and Economic Development and the Ministry of Entrepreneurship and Technology), parliamentarians, NGOs, employers' organisations and academia. The DCPB defines and discusses development co-operation priorities and takes up conflicts of interest and inconsistencies. The Economic Committee of the Council of Ministers (ECCM) and the Coordinating Committee for Development Policy (CCDP) provide additional platforms to exchange information and search for consensus in the case of divergent positions. The CCDP contains a task force for representatives of national government including the MFA, local governments, academia and the socio-economic environment. PCD contact points in ministries are responsible for in-house co-ordination of PCD.
Local involvement	Development projects (from the SRD and other strategies) are planned in consultation with local government units, social and economic partners, and the Joint Government and Territorial Self-Government Committee (KWRiST), a forum to identify common positions of the national and local governments. The task force for cohesion of the SRD with the 2030 Agenda (at CCDP) is composed of representatives of local governments, among others.
Stakeholder Participation	Dialogue with stakeholders takes place through forums such as the Social Dialogue Council at central level and the Regional Social Dialogue Councils. Tripartite industry teams (representing the government, employers and trade unions) meet in these forums discuss and reconcile diverging interests related to the functioning of a given sector/industry. The Councils also help to implement and monitor flagship projects of the SRD within the regions.
Monitoring and reporting	The Minister of Investment and Economic Development reports annually on SRD implementation progress and submits it for consideration to the CCDP and Council of Ministers. Implementation of PCD priorities is monitored by reports prepared by co-ordinators in priority areas and submitted to the Development Cooperation Programme Board. New annual action plans for implementation of PCD priority areas incorporate ideas to strengthen SDG implementation.

Source: OECD (2017[52]), Ministry of Foreign Affairs (2015[51]).

Box 3.11. Supporting regional development with integrated solutions

The Polish government, with the Ministry of Investment and Economic Development taking a leading role, has proposed the Program for Silesia as one of the strategic projects of its Strategy for Responsible Development (SRD). The programme, adopted by the Council of Ministers on 14 February 2018, was subject to consultations with other ministers (i.e. Ministry of Energy) and stakeholders, e.g. the Voivodeship Council of Social Dialogue (VCSD) in Katowice and other Silesian partners. The starting point for the development of goals, activities and identification of the most important development projects in this document was the "Agreement on the Integrated Development Policy of the Silesian Voivodship" signed by members of the VCSD in 2016.

Silesia is recognised in the SRD as one of the key areas of intervention at national level, struggling with adaptation and restructuring difficulties. It is one of the strongest economic regions in Poland, but has recently experienced a slowdown in growth and decline in the quality of life of its inhabitants. The Government's Program for Silesia includes an integrated set of investment and soft operations.

This is the first programme in the regional government policy that co-ordinates funding sources from both national and European programmes and institutions. The main objective of the Program is to change the economic profile of the region and to gradually replace traditional sectors of the economy such as mining and

metallurgy with new ventures in more productive, inclusive, innovative and technologically advanced sectors.

Source: (OECD, 2017[52]).

Portugal

New guidelines are being developed to strengthen policy coherence in support of SDG implementation, building on existing legislation. The 2030 Agenda has created new momentum for policy coherence at the highest level of government. Political commitment, as anchored in existing legislation and mechanisms to promote policy coherence for development (PCD), is being reaffirmed with the introduction of new intra-governmental guidelines aligned to the 2030 Agenda. Since 2010, the Council of Ministers Resolution 82/2010 has provided a legal framework for ensuring coherence between national policies that may impact on other countries, while the Strategic Concept for Portuguese Co-operation 2014-2020 has promoted policy coherence with regard to development co-operation. Following the adoption in 2015 of the 2030 Agenda, in 2016 the Council of Ministers adopted intra-governmental guidelines that take into account the need to closely align domestic and international dimensions of SDG implementation. These guidelines will further enhance PCSD, as will the importance attributed to PCSD in Portugal's 2017 Voluntary National Review (Ministry of Foreign Affairs Portugal, 2017[54]).

Institutional mechanisms are being adapted to better co-ordinate the internal and external dimensions of SDG implementation and foster policy integration. The Ministry of Foreign Affairs co-ordinates overall implementation of the SDGs, together with the Ministry of Planning and Infrastructures, in line with intra-governmental guidelines adopted in 2016. Two supporting bodies are responsible for co-ordinating the internal and external dimensions, respectively: the Interministerial Commission of Foreign Policy (CIPE) and the Interministerial Commission for Co-operation Policy (CIC). A network of focal points from different government departments, led by the Institute for Co-operation and Language (Camões I.P.), seeks to facilitate information sharing on policy implications; mainstream policy coherence concerns into sectoral policies; and identify potential synergies and trade-offs between different policy objectives. Ongoing efforts to establish PCSD priorities, together with a National Plan for Policy Coherence for Development, will further strengthen cross-sectoral collaboration and integration (OECD, 2017[55]).

The National Institute for Statistics (Statistics Portugal) identifies appropriate data sources and helps facilitate consistency across different levels of monitoring and reporting. Statistics Portugal works closely with the statistical departments of different ministries and other national authorities involved in SDG implementation at the national level. It also monitors regional and global SDG initiatives, together with e.g. the United Nations Economic Commission for Europe (UNECE) and Eurostat. These processes have enabled national and international mapping of available indicators and data sources for monitoring the SDGs in Portugal. All existing information is made available on a single SDG platform on Statistic Portugal's website in order to give the public easy access and an overview of identified indicators (OECD, 2017[55]).

Table 3.14. Institutional mechanisms for PCSD in Portugal

Building Block	Portugal
Political commitment	The Council of Ministers Resolution 82/2010 provides a legal framework for policy coherence for development (PCD). Mechanisms have been in place for PCD since 2010. This legal framework recognises the need to ensure coherence between national policies which directly or indirectly affect developing countries. The Strategic Concept for Portuguese Cooperation 2014-2020 also states a political commitment to PCD. The importance of PCSD is affirmed in Portugal's 2017 VNR.
Policy integration	The government's overall legislative procedure contributes to policy integration, whereby Council of Ministers' Resolutions and Resolutions of Secretaries of State are circulated by all ministries. The Institute for Co-operation and Language (Camões I.P.) leads a network of focal points from all ministries in order to stimulate information-sharing and interministerial dialogue around policy implications, synergies and trade-offs. Ongoing efforts to establish PCSD priorities aim to strengthen integrated policy analysis.
Intergenerational timeframe	Political commitment towards the SDGs is long-term and goes beyond electoral cycles, with public scrutiny supporting this ambition. In the context of Portuguese development co-operation, long-term geographical commitments are safeguarded so as to support structural reforms in partner countries.
Policy effects	Camões I.P. is responsible for signalling potential negative effects. It does this through existing mechanisms of dialogue and co-ordination and by promoting conciliatory measures with the ministry responsible for the policy in question. The aforementioned efforts to establish PCSD priorities are also expected to facilitate the identification of negative impacts.
Co-ordination	The Ministry of Foreign Affairs assumed overall responsibility for co-ordinating and developing intra-governmental guidelines for implementation of the 2030 Agenda, adopted in 2016, together with the Ministry of Planning and Infrastructures. The Interministerial Commission for Foreign Policy (ICFP) is responsible for co-ordinating domestic implementation, while the Interministerial Commission for Cooperation (ICC) – with a clear mandate for PCD – is responsible for co-ordinating the external dimension related to Development Cooperation policy. Additionally, each SDG has been allocated to a co-ordinating ministry responsible for its implementation, monitoring and review.
Local involvement	Portugal's 2017 VNR recognises the importance of local authorities for implementing the 2030 Agenda within their territory through various initiatives with local autonomy. Portugal has set as one of its priorities the development of innovative partnerships with different actors, including local authorities (Ministry of Foreign Affairs Portugal, 2017[1]).
Stakeholder participation	The preparation of the 2017 VNR benefited from a public consultation on implementation of the 2030 Agenda held in 2016. This process, which was led by a group of non-governmental CSOs with the support of Camões I.P. and the UN regional Information Centre for Western Europe, collected input on the operationalisation, evaluation and monitoring of the 2030 Agenda for the purpose of preparing periodical "shadow reports". Several multi-stakeholder workshops and seminars, as well as an online enquiry to reach more citizens, have also been organised.
Monitoring and reporting	The National Institute for Statistics (Statistics Portugal, INE) is the central institution for the production and dissemination of official statistics. In this capacity, it co-ordinates closely with other ministries' statistical departments and other national authorities involved in the implementation of the 2030 Agenda. A continuously updated SDG file is available on Statistics Portugal's website to allow an easy overview of SDG indicators.

Source: *OECD* (2017[55]).

Slovak Republic

Policy coherence is one of the guiding principles of the Slovak 2030 Agenda implementation strategy, adopted in July 2017. The country is currently defining a limited number of national priorities for achieving the SDGs. This process involves all relevant line ministries and will set long-term priorities and measurable goals. PCSD is viewed as an integral part and enabling mechanism of SDG implementation. The government acknowledges the need for co-ordinated action horizontally and vertically.

Co-ordination mechanisms help to operationalise the policy coherence guiding principles. The Deputy Prime Minister´s Office for Investments and Informatization (DPMO) is responsible for Agenda 2030 implementation at the national level. It seeks to engage political leaders and co-ordinate government policies for sustainable development

through the Government Council for Agenda 2030. The mechanism allows for information sharing and arbitration in the case of disagreement in the process of defining long-term national priorities, and takes into consideration both domestic and international objectives related to implementation of the SDGs. The DPMO is currently working to present a final draft of priorities acceptable for all by mid-2018. The Ministry of Foreign and European Affairs is responsible for the external dimension of Agenda 2030 and co-operates closely with the DPMO.

Table 3.15. Institutional mechanisms for PCSD in the Slovak Republic

Building Block	Slovak Republic
Political commitment	Policy coherence is one of the guiding principles in the national Agenda 2030 implementation strategy adopted by government in July 2017. National priorities will be presented by mid-2018.
Policy integration	Representatives of the Deputy Prime Minister´s Office for Investments and Informatization (DPMO) prepare national strategic documents in working groups.
Intergenerational timeframe	The suggested monitoring framework of Agenda 2030 implementation will take into account the need to go beyond electoral cycles, as it obliges the co-ordinating body (DPMO) to carry out biannual assessment of progress towards long-term priorities. An assessment at the end of each electoral cycle will focus on the contribution of each government.
Policy effects	Ways to assess and address spill-over effects of domestic policies on other countries are being discussed.
Co-ordination	The DPMO is responsible for PCSD as a part of the SDG agenda. It seeks to engage political leaders through the Government Council for Agenda 2030, which includes key stakeholders (employer associations, academia, NGOs). The Council discusses sustainable development issues and aims to improve co-ordination among government policies. The DPMO supports cross-ministerial work at the expert level through its Working Group on Agenda 2030 and the National Investment Plan, which meets on an issue basis.
Local involvement	The process of defining long-term national priorities is aligned with the preparation of a Regional Development Strategy.
Stakeholder participation	In the ongoing process of defining national priorities for achieving sustainable development, Slovakia aims to involve a wide range of stakeholders, which should contribute to achieving lasting commitments. This includes academia, NGOs, the private sector, employer associations, city associations and civil society. Currently, stakeholders participate via an ongoing stakeholder participation process.
Monitoring and reporting	The DPMO will carry out biannual progress assessment towards long-term priorities.

Source: OECD (2017[56]).

Slovenia

A new national development strategy aligned with the SDGs lays the foundation for enhancing policy coherence for sustainable development. The *Slovenian Development Strategy 2030*, adopted by the government in December 2017, builds on the Vision of Slovenia and incorporates the SDGs. With an overarching objective to provide a high quality of life for all, it sets out five strategic orientations and 12 interlinked national goals mapped to each SDG: highly productive economy that creates added value for all; resilient, inclusive, safe and responsible society; well-preserved natural environment; efficient and competent governance driven by co-operation; and learning for and though life. The strategy highlights the need to consider interconnections and cross-cutting elements and integrate policies at the national level. It also emphasises the need to establish better mechanisms for horizontal and multilevel co-operation. Implementation will be guided by a four-year national development policy programme (NDPP) and a medium-term fiscal strategy, as well as corresponding horizontal and sectoral, regional

and municipal strategies, programmes and operational measures (Government of the Republic of Slovenia, 2017[57]).

New institutional mechanisms aim to strengthen co-ordination, stakeholder involvement and policy coherence. At the beginning of 2017 the government established the Permanent Interministerial Working Group on Development Policies (IMWG) to foster an integrated approach and promote policy coherence. The group is co-ordinated by the Government Office for Development and European Cohesion Policy, and consists of two representatives from each ministry who act as focal points for development policies and the 2030 Agenda. Representatives of the National Statistical Office and the Institution for Macroeconomic Analysis and Development are also members of the IMWG (Government of the Republic of Slovenia, 2017[58]). The group operates as a mechanism for horizontal collaboration in preparing the *Slovenian Development Strategy 2030* and the VNR. Policy coherence efforts could be enhanced by giving the IMWG a policy arbitration mandate (OECD, 2017[59]). The government plans to establish a new special advisory body, the Council for Development, to oversee delivery of the Slovenian Development Strategy 2030. The Council will include a range of stakeholders including private sector, civil society, representatives of regional and local communities and the government. The Court of Audit follows implementation gaps, considering them to be one of the key criteria for deciding on what to audit, and points out areas where problems might occur (OECD, 2017[60]).

Table 3.16. Institutional mechanisms for PCSD in Slovenia

Building Block	Slovenia
Political commitment	Commitment to more coherent and centralised policy planning for sustainable development is expressed in the new Slovenian Development Strategy 2030, adopted in December 2017. Slovenia further outlined its long-term development plans in its Vision of Slovenia 2050. A public financing act was renewed to ensure that sustainable development planning (implementation of the Slovenian Development Strategy 2030 through preparation of the Action Plans) is integrated into the budgeting cycle.
Policy integration	A Council for Development will be established to make policy proposals that take into account interlinkages between economic, social and environmental dimensions of policy, as well as to ensure consistency with international engagements. The Slovenian Development Strategy 2030 is supported by sectoral, regional and municipal strategies. A medium-term fiscal strategy will support integrated implementation through budgeting processes.
Intergenerational timeframe	Vision of Slovenia 2050 and the Slovenian Development Strategy 2030 have been elaborated through an open, transparent and inclusive approach stressing the universality of the 2030 Agenda with objectives going beyond the present governmental term. The Interministerial Working Group on Development Policies was established as a permanent body.
Policy effects	Policy effects are considered as part of environmental and regulatory impact assessments, as well as through assessments of economic values. Mechanisms are currently being developed to adjust policies in light of new information on potential negative impacts during implementation.
Co-ordination	The Government Office for Development and European Cohesion Policy takes overall responsibility for implementation, co-ordination and monitoring of the 2030 Agenda in Slovenia. It is supported by the permanent Interministerial Working Group on Development Policies, which meets on a monthly basis and promotes policy coherence by sharing information and solving policy conflicts. The Group is composed of two representatives from each ministry working as focal points for development policies for the 2030 Agenda, and also includes representatives of the National Statistical Office and the Institution for Macroeconomic Analysis and Development. The Government Office advises the government and manages the implementation of EU documents. This co-ordination mechanism aims to consider both domestic and international objectives related to SDG-implementation in close collaboration with the Ministry of Foreign Affairs.
Local involvement	The national organisation of municipalities was involved in drafting the Vision of Slovenia 2050 and Slovenian Development Strategy 2030 and will be part of the Council for Development being established to foster an open and transparent dialogue with stakeholders. Local actors can currently take part in meetings/briefings and through co-organising events and conferences.

Stakeholder participation	The new National Development Strategy commits the government to establish a Council for Development that will bring together all stakeholders and act as an advisory board to the Interministerial Working Group, a forum and watchdog for sustainable development policies.
Monitoring and reporting	The Council for Development will be responsible for monitoring implementation of the 2030 Agenda and publishing annual reports. The Slovenian Development Strategy 2030 includes five strategic orientations and 12 development goals that are mapped to each SDG and provide a first set of performance indicators. The supreme audit institution (SAI) supports national monitoring and implementation efforts. The Court of Audit identifies implementation gaps for making decisions on what to audit and points out areas where problems might occur. Reports are critical towards past issues but also visionary about the future.

Source: OECD (2017[60]), Government of the Republic of Slovenia (2018[61]).

Figure 3.4. Slovenian development planning model

Source: Government of the Republic of Slovenia (2017[57]).

Spain

A new high-level interministerial mechanism is increasing the relevance of the SDGs in the national policy agenda and helping to mobilise the government. A High-Level Group for 2030 Agenda (HLG) was created in September 2017, under the authority of the Government Delegated Commission for Economic Affairs, to co-ordinate SDG

implementation. The HLG is chaired by the Minister of Foreign Affairs, with the Minister for Agriculture, Fisheries, Food and Environment and the Minister of Public Works serving as vice-chairpersons. The HLG is composed of representatives of all ministries at director-general level, along with the Director of the Economic Office of the prime minister, the State Secretary for International Cooperation and Ibero-America, the State Secretary for Territorial Administration, and the National Statistics Institute. It is open to participation of the private sector, civil society organisations, parliaments, academia and experts. Its main functions are to: foster integration of the SDGs and targets into national public policy frameworks; co-ordinate and ensure coherence between diverse sectoral policies and legislative initiatives; promote the elaboration of a national strategy for sustainable development, prepare national reviews of Spain for the UNHLPF, and define and co-ordinate the Spanish position on the 2030 Agenda and SDGs in international forums (BOE, 2017[62]).

A longstanding tradition of promoting policy coherence for development is paving the way for establishing a policy coherence system adapted to the 2030 Agenda. Spain is one of a handful of countries that has written its commitment to PCD into its legal framework (OECD, 2013[63]).[5] It has also put in place the three elements of PCD: political commitment backed by a legal basis; co-ordination mechanisms with specific mandates for promoting PCD (including a dedicated unit for PCD and a network of focal points, the Inter-territorial Commission of Cooperation, Interministerial Commission of Cooperation and Development Cooperation Council); and the obligation to report biennially to the parliament and the public (OECD, 2016[64]). Building on this experience, Spain is currently shifting from PCD towards PCSD. The newly-created HLG for 2030 Agenda has enhancing coherence between sectoral policies and among legislative initiatives for SDG implementation as one of its main functions.

Existing consultation bodies at different levels of government will be essential for ensuring vertical coherence in SDG implementation. There are diverse consultation bodies among different levels of government which will address implementation of the 2030 Agenda and can help enhance coherence. These include:

- The Conference of Presidents operates at the highest level of the executive power (presidents of regions, in the remit of their competences and territories, have functions comparable to those of prime ministers in the national context). This assembly provides a forum for dialogue between presidents both of the national government and the regions.
- Sectoral conferences at ministerial level. This structure is replicated at the regional level to engage cities and municipalities.
- Territorial bodies called provincial councils that aim to optimise services of small cities and municipalities, and that operate in an intermediate stage between regions and municipalities.
- The Senate, as a territorial upper chamber in which a certain number of senators have been appointed by Regional Chambers. This chamber is the last instance for the approval of laws in Spain. In 2017, the Senate established a study group that is preparing a report on the SDGs and its implications at national, regional and municipal levels.

Table 3.17. Institutional mechanisms for PCSD in Spain

Building Block	Spain

Political commitment	Spain has been actively engaged in the 2030 Agenda and the promotion of policy coherence. It developed national positions for the international conferences of 2015 based on broad national consultations. A high-level interministerial group has been created to co-ordinate and ensure coherence in SDG implementation. It is tasked with preparing the first Voluntary National Review, and developing an Action Plan and a new National Sustainable Development Strategy (NSDS). Other mechanisms have been created to support SDG implementation, such as the Joint Commission of the Congress of Deputies-Senate for co-ordination and follow-up of the NSDS, and the new General Directorate for Sustainable Development established within the Ministry of Foreign Affairs and Cooperation. An Ambassador for 2030 Agenda has also been appointed. A 2030 Action Plan is currently under development which will be presented at the HLPF in July 2018. The V Master Plan for Spanish Cooperation (2017-2020) has been aligned to the 2030 Agenda and emphasises the commitment to shift from PCD to PCSD.
Policy integration	A main function of the recently created High Level Group for 2030 Agenda is to foster integration of the SDGs and targets into national policy frameworks. Mapping exercises of policies against SDGs aimed at defining an implementation roadmap, goals and targets for Spain will help to identify potential synergies and trade-offs.
Intergenerational timeframe	A formal non-binding request supported by all parliamentary groups in the Congress was passed in December 2017 emphasising the need for policy coherence for sustainable development and consensus regarding the long-term vision for sustainable development in Spain. It calls for political driving of the government to: issue a National Sustainable Development Strategy for achieving the 2030 Agenda in Spain; establish a planning and monitoring system; ensure territorial co-ordination, and specifically enhance PCSD.
Policy effects	In the process of policy design, implementation and evaluation for the 2030 Agenda in Spain, key steps are being considered such as: ex ante impact analysis; mechanisms for solving conflicts of interest; follow-up and evaluation; ex post analysis in order to correct deviations; and adjustment or correction mechanisms. Existing mechanisms such as the official parliamentary control will also be applied. Other mechanisms range from the participation of civil society organisations (e.g. "Future en común" http://futuroencomun.net/), to the setup of transparency control mechanisms (e.g. "Poletika": http://poletika.org/), and private sector engagement (e.g. "Forética": http://www.foretica.org/).
Co-ordination	A High-Level Group for 2030 Agenda (HLG) has been created to co-ordinate SDG implementation. Its main functions include fostering integration of the SDGs and targets into national public policy frameworks and ensuring coherence between diverse sectoral policies and legislative initiatives. Existing mechanisms for information sharing and co-ordination supporting coherent implementation of the SDGs also include the focal points network for policy coherence, the Interministerial Commission for Development Cooperation, and the Development Cooperation Council.
Local involvement	The newly-established High-Level Group for 2030 Agenda takes into account the relevance of regions, cities and municipalities in the intergovernmental structure. It is involved in co-ordinating, monitoring and evaluating implementation of the 2030 Agenda. There are diverse consultation bodies among different levels of government to achieve coherence which will address the 2030 Agenda implementation, such as the Conference of Presidents of regions.
Stakeholder participation	A Global forum will be held in 2018 with the purpose of creating a multi-level institutional alliance along with CSOs, private enterprises and academia to promote SDG localisation.
Monitoring and reporting	The High-Level Group for 2030 Agenda is mandated to report every other year to Congress on policy coherence for development (ODA and non ODA) that impacts developing countries. The HLG is also commissioned to develop baselines and indicators for tracking progress and reporting periodically to the UN, EU and the OECD.

Note: On political commitment see Senado de España. Sesión plenaria número 31, miércoles 21 de febrero de 2018. Comisión Mixta de los Diputados-Senado para la Coordinación y Seguimiento de la Estrategia española para alcanzar los Objetivos de Desarrollo Sostenible (ODS): http://www.senado.es/web/actividadparlamentaria/actualidad/video/index.html?s=12_S000040_031_01&ig=640637.
Source: OECD (2017[65]).

Sweden

A new National Action Plan will apply the Policy for Global Development (PGD) as a key tool for mobilising coherent whole-of-government action. The PDG mandated all ministries for the first time to develop internal action plans with concrete goals and clear responsibilities for the work of the PGD linked to the 2030 Agenda (Government of

Sweden, 2017[66]). This process provided an opportunity to anticipate and manage potential conflicts of interest between sectors and between domestic and international priorities in 2014–2016. The most recent government communication, *Sweden's policy for global development in the implementation of Agenda 2030,* sets out the government's work for 2016-2017 covering and reporting on all SDGs. The government reports examples of its work with the PGU under the 2030 Agenda and the Global Goals. One section of this communication is a more in-depth report of five areas where the Government has expressed a particular ambition during the period – feminist foreign policy; sustainable business; sustainable consumption and production; climate and sea; and capital flight and tax evasion – identifying areas where conflicting objectives within and across government might limit opportunities to achieve equitable and sustainable global development and where alignment and synergies are present. The communication further outlines the responsible ministries for each PGD area under the respective global goals. Policy coherence is thereby considered as the backbone of PGD (Government Offices of Sweden, 2018[67]).

Reports to parliament every two years enhance transparency in the handling of conflicts of interest and strengthen co-ordination for policy coherence. The Minister for Public Administration at the Ministry of Finance is responsible for co-ordinating national implementation of the 2030 Agenda. All ministries at the level of policy officers/analysts participate in a monthly interministerial working group. In addition, a consultation group for the 2030 Agenda meets three to four times a year with participation of state secretaries from the Ministry of Finance, the Ministry of Foreign Affairs, the Ministry of Environment and Energy, the Ministry of Social Affairs and the Ministry of Enterprise and Innovation. The Minister for International Development Cooperation and Climate at the MFA is responsible for Sweden's contribution to international SDG implementation. A PCSD co-ordination team at the MFA guides the ministries by checking documents and decisions for the degree of mainstreaming and PCSD in the 2030 Agenda. Each ministry, however, retains responsibility within its respective policy domain to adopt policies and raise potential conflicts to a political level.

Table 3.18. Institutional mechanisms for PCSD in Sweden

Building Block	Sweden
Political commitment	The Policy for Global Development (PGD), relaunched in 2014, underlines the centrality of policy coherence to promote sustainable development. It means raising ambitions and involves a knowledge boost within the Government Offices of Sweden and its agencies.
Policy integration	All ministries have developed internal action plans for working on global development policy – and PCSD - to support decision processes linked to the SDGs.
Intergenerational timeframe	The PGD is well anchored across all parties. The Government needs to report to Parliament every two years, ensuring long-term support.
Policy effects	The task to identify potential transboundary and intergenerational effects in policies is a part of the action plans that all ministries have drawn up.
Co-ordination	The Minister for Public Administration at the Ministry of Finance is responsible for national SDG coordination and implementation. The government has set up an interdepartmental consultation group for the 2030 Agenda consisting of those responsible for global development policy at Head of Department level from all relevant ministries under the leadership of the MFA's Director-General for international development co-operation. The MFA is responsible for international SDG implementation. The PCSD coordination team at the MFA provides competence development and methodological support to the ministries for international implementation. When requested, it checks documents and decisions for mainstreaming of the 2030 Agenda, and sometimes PCSD, and can thus contribute to communications and action plans. However, each ministry retains responsibility to adopt policies within its domain and raise potential conflicts to a political level.
Local involvement	The government appointed a Multi-stakeholder National Committee to promote the implementation of

	the 2030 Agenda throughout Swedish society. The Committee has put forward several reports, including a proposal for a comprehensive action plan. A survey of 206 municipalities and 19 county councils found that about half of respondents use the 2030 Agenda as a tool in their sustainable development work.
Stakeholder participation	Civil society organisations are invited to open hearings by the Multi-stakeholder National Committee, including also municipalities, academia, private sector and trade unions. The Scientific Council for Sustainable Development, established 2015, includes a panel of prominent researchers and provides a forum for dialogue between the government and the scientific community. Sweden held ambitious stakeholder consultation processes leading up to and following the 2017 HLPF. These consultations are also a part of the process to prepare a National Action Plan for the implementation of the 2030 Agenda, using PGD as a tool.
Monitoring and reporting	A new reporting model that links PGD to the SDGs will provide a more in depth account of these areas. Every second year, the PCSD team at the MFA produces a report to Parliament, which includes actions and results of the period 2016-2017, as well as a forward looking section. PGD is seen as a tool in the implementation of the 2030 Agenda and an interdepartmental consultation group is being formed.

Source: OECD (2017[68]), Government Offices of Sweden (2018[67]).

Box 3.12. Promoting sustainable business models

The Government expects Swedish companies to use international sustainable business guidelines as a basis for their work, in Sweden and in other markets. In December 2015 it submitted a Communication to the Parliament on its policy for sustainable business (Communication 2015/16:69). The communication sets out the Government's expectations of companies' work on sustainability and practical recommendations on how to achieve them.

The international guidelines incorporate primarily the OECD's Guidelines for Multinational Companies, the UN Global Compact, the UN's Guiding Principles on Business and Human Rights, the fundamental conventions of the ILO and tripartite declarations as well as the 2030 Agenda. On the basis of this Communication, the Government created a platform in 2016 to provide guidance for sustainable business geared towards Swedish companies.

The Government has additionally drawn up a national Action Plan for business and human rights that contains about fifty measures to put the UN's Guiding Principles in this area into practice. The Action Plan urges Swedish companies, and others, in line with the UN's Guiding Principles, to adopt company policies that take into account respect for human rights in their operations, put in place an internal process to survey and control risks in the value chain with regard to human rights infringements (due diligence) and, ensure transparency by reporting on risks.

Source: OECD (2017[68]).

Switzerland

A shared strategic framework with clear guidelines is instrumental for pursuing policy coherence. The Sustainable Development Strategy (SDS) 2016–2019, adopted by the Federal Council, is an important instrument and reference framework for implementation of the 2030 Agenda. It includes an action plan with nine thematic areas

explicitly linked to each SDG. Furthermore, new legislative projects and processes must reference the SDGs. PCSD is an important instrument for integrating sustainable development into sectoral policies, and one of five Federal Council guidelines (Swiss Federal Council, 2016[69]). Political commitment to PCSD is thus expressed at the highest federal level. The Swiss decentralised governance system and culture of consensual decision making means, however, that the SDS has limited practical implication at the local level (OECD, 2017[70]). Instead, it will be crucial to strengthen alignment or vertical policy coherence between the Confederation, cantons and communes.

Co-ordination and consultation across and within levels of government can support coherent policies. The Federal Council, a seven-member executive council heading the federal administration and operating as a collective presidency and a cabinet, promotes PCSD through a regularly two-tiered consultation mechanism. First, the office in charge of a policy organises a technical consultation to gather and consolidate comments from other offices. Thereafter, political consultation among Federal Councillors prior to and in view of final decisions balances out different perspectives, trying to take into account concerns of sustainable development. Nevertheless, the political consultation reflects political interests and power structures and outcomes are not always in line with sustainable development (OECD, 2017[70]). Implementation of the SDS and the SDGs in domestic policy is co-ordinated by an interdepartmental committee of directors and the associated management office, co-led by the Federal Office for Spatial Development (ARE) and the Swiss Agency for Development and Cooperation (SDC). They co-ordinate work on national and international SDG implementation and include representatives from relevant Federal Offices, such as the Federal Offices for the Environment, Health, Agriculture, Statistics, Economic Affairs, Foreign Affairs and Federal Chancellery (Swiss Confederation, 2018[71]). This co-leadership arrangement by the MoE and MFA helps to take into consideration both domestic and international objectives and foster coherence in the implementation of the SDGs.

Current systems can be adapted to monitor policy coherence as part of overall SDG implementation. Switzerland envisions reporting progress on implementing the 2030 Agenda and the national SDS every four years starting in 2018. The Federal Council will take stock of its progress midway through the four-year legislative term, using the opportunity to discuss and – if necessary – adjust future actions and priorities. Current ongoing work includes efforts of the Inter-Agency and Expert Group (IAEG) on Sustainable Development Goal Indicators to link the MONET indicators with the SDGs and to prepare for the comprehensive assessment of its actions towards each SDG at the target level, including SDG 17.14 (Box 3.13). The results will also be presented as part of the countries' second VNR at the HLPF in 2018.

Table 3.19. Institutional mechanisms for PCSD in Switzerland

Building Block	Switzerland
Political commitment	The current Sustainable Development Strategy (SDS) 2016–2019,is part of the government legislative plan and highlights Switzerland's commitment to use PCSD for 2030 Agenda implementation. Decision makers at all levels of government are tasked to enhance their engagement and to launch relevant initiatives.
Policy integration	The sectorial federal departments implement the SDGs nationally following technical and political level consultations. This process helps to identify trade-offs and synergies and promote PCSD.
Intergenerational timeframe	The Swiss governance system is characterised by stability and not prone to immediate strong responses to electoral results. By law, the Federal Council is obliged to consider long-term intergenerational effect in legislative proposals to the Parliament. The goals of the SDS depict Switzerland's priorities for sustainable development until 2030.

Policy effects	Some policy instruments exist to assess ex-ante and ex post effects, such as VOBUs for evaluating policies and regulatory impact assessments (RIA), but the political will is lacking to use them more systematically including for transboundary effects.
Co-ordination	The Federal Council can promote PCSD within its regular governing framework. Two additional federal bodies, the Interdepartmental Sustainable Development Committee (ISDC) and the National 2030 Agenda Working Group, help to promote coherence through information sharing and arbitrage. The final decision rests with the Federal Council. Coordination between national and international levels is assured by means of a regular exchange between the ISDC and the Working Group.
Local involvement	The major policy decision-making competencies lie within sub-national entities. Cantons and communes have their own strategies and implementation entities. A dialogue with cantons is therefore an important part of the implementation process. In addition, municipalities co-operate among themselves and are represented in cantonal and federal decision making.
Stakeholder participation	NGOs and civil society can influence government decisions via direct democracy in the form of referendums and people's initiatives. In addition, a platform on SDG implementation has been created for dialogue and arbitrage with non-state actors including private sector, science community, environmental, social and development NGOs, and youth. Their inputs are taken into account but decision making rests with the federal government
Monitoring and reporting	Switzerland plans to report every four years on the status of implementing the 2030 Agenda and the national SDS, starting in 2018. The country will build on its comprehensive sustainable development monitoring system (MONET) to track progress on both national and international implementation. Field-level resources of the SDC are consulted to substantiate and inform the policy coherence dialogue in Switzerland. The SDC currently examines the feasibility of a non-governmental PCD Observatory to monitor and assess strategically important upstream policy decisions taken on an annual basis by the Swiss Government and the Federal Parliament. The upcoming VNR 2018 will also report progress on SDG17.14.

Note: The Federal Assembly (the Swiss parliament) elects the seven members of the Swiss government, the Federal Council. Each council member heads a federal department, roughly equivalent to ministries with a broader scope.
Source: OECD (2017[70]), Swiss Confederation (2016[72]) and (2018[71]).

Box 3.13. Using the MONET indicator system to monitor SDG implementation

Since 2003 the MONET indicator system assesses whether Switzerland is on the path to sustainable development. The Federal Statistical Office (FSO) publishes 73 regularly updated indicators measuring SD in a holistic manner. The indicators integrate the three dimensions of sustainable development, consider interaction between them as well as intergenerational and transboundary dimensions ("here and now"; "later"; "elsewhere").

In May 2016, the system's reference framework was amended laying the foundation for both national and international reporting on SDG implementation. A selection of 36 indicators is used for monitoring progress in the implementation of the SDS 2016–2019. To allow a broader analysis, the indicators were linked with the goals instead of targets. To facilitate the communication of this first analysis, four indicators maximum have been selected for each goal. In 2017 the MONET indicator system was extended to MONET+ to match the SDG targets.

The nine example indicators for monitoring the global dimension of sustainable development as presented in Switzerland's 2016 VNR are: material footprint of imports; greenhouse gas emissions; energy dependence; remittances by migrants; direct investments in developing countries; carbon footprint, official development assistance; multilateral treaties and duty-free imports from developing countries.

Source: Swiss Confederation (2016[72]).

Contributions by Policy Coherence for Sustainable Development Partners

The opinions expressed and arguments employed in the contributions below are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries

Institutional Coherence for SDG Implementation in Nepal

NGO Federation of Nepal (NFN)

In 2017, the Federal Government of Nepal formed a three-tier structure for implementation of the SDGs: 1) a national-level steering committee led by the Prime Minister, 2) an implementation co-ordination and monitoring committee led by the Vice-Chair of the National Planning Commission (NPC), and 3) nine thematic working groups co-ordinated by members of the NPC. These bodies are responsible for providing oversight and political direction, co-ordination and implementation of SDG-related works, aligning the SDGs into the government's plans, policies and budgets, and consolidating outcomes.

Efforts are already being made at the federal level to promote horizontal policy coherence by aligning different sectoral plans and strategies with the SDGs. Including senior level government officers from different ministries in the steering and co-ordination committees would help promote horizontal policy coherence. Promotion of vertical policy coherence has not yet started, as provincial and local level governments are yet to come in.

Lack of awareness about the SDGs is the major challenge at the local level. Province and local governments have recently been formed in the country for the first time and are working towards their own institutional set-ups, laws and regulations, so specific mechanisms for SDG implementation have not yet been created.

Stakeholder engagement has been limited so far. Representation of civil society organisations is not provided for in the national steering committee, and CSOs participate in the implementation and co-ordination committee and thematic working groups on an "invited member" basis. This has implications for institutional memory and limits voice and influence in SDG processes including integration, implementation, and co-ordination and monitoring. It is particularly critical that there is no provision to include representatives from Dalits (low-caste groups), women, people living with disability and indigenous peoples – groups at the margins of society needing utmost priority for their development – in any of these committees. The objective of "leave no behind" cannot be met if people from all interest groups are not given space to participate in multi-stakeholder forums to help improve understanding of the specific issues they face.

Despite this, Nepalese CSOs have formed Nepal SDGs Forum for effective engagement in the SDG implementation process. It has been engaging with government and other stakeholders. NGO Federation of Nepal is co-ordinating and facilitating CSOs' efforts at the national level and is forming Nepal SDGs Forums at the local level. As province and local level governments are still forming, CSOs are likely to establish Nepal SDGs Forum in co-ordination with municipalities and rural municipalities. Nepal SDGs Forums at different levels are becoming a common platform for CSOs and MGoS to participate in institutionalisation of the SDGs.

Pakistan: Implementation of the 2030 for Sustainable Development

Social Policy and Development Centre (SPDC)

Pakistan has demonstrated a strong political commitment toward adoption and implementation of the 2030 Agenda for Sustainable Development. It was the first country to adopt SDGs as its national development agenda through a unanimous resolution of the national parliament in February 2016. The Prime Minister has constituted a parliamentary task force on SDGs, and a secretariat in the parliament has been established that enables the parliamentarians to access the data needed for an effective oversight of policy implementation.

At the governmental level, the Ministry of Planning, Development and Reforms is in-charge of coordinating the implementation of SDGs within federal ministries and with the provincial governments, as well through the Planning Commission, a financial and public policy development institution of the ministry.

Pakistan Vision 2025 provides a policy framework and roadmap for achieving inclusive growth and sustainable development. Approved in May 2014 by the National Economic Council (NEC), it is a high level constitutional body chaired by the Prime Minister, composed of all provincial chief ministers and mandated to advise the federal and provincial governments on financial, commercial, social and economic policies. Vision 2025 has been termed by the government as a launching pad for achieving the SDGs – with seven pillars[6] of its development strategy aligned with the SDGs. Thereafter, the Planning Commission prepared a national framework of SDGs which has helped in prioritizing the SDGs and targets by transforming the global agenda into a national context. The NEC approved the framework in March 2018 and advised federal ministries and provincial governments to align their policies and plans and allocate the required resources in line with the national framework.

Pakistan Vision 2025 offers an integrated strategy for inclusive and sustainable development. The national framework for the SDGs has been developed in line with the same vision. A special SDGs Monitoring and Coordination Unit has been established within the Planning Commission to serve as a national coordinating body. Similar units have been established in the provinces to create synergies among the federal and provincial governments and also to ensure integration, policy coherence, mainstreaming and localisation of the SDGs. So far these units are functional in two of the four provinces (Punjab and Sindh), while the process is underway in the other two (Khyber Pakhtunkhwa and Balochistan). These units are housed in the Planning and Development Departments of their respective provinces[7] and are working on developing province-specific plans, policies and implementation strategies in line with the 2030 Agenda. Provincial governments have constituted parliamentary task forces to oversee and support legislation needed to implement the SDGs.

To create broad-based ownership, the involvement of all relevant stakeholders has been a key element in the development of Pakistan Vision 2025 – a practice which is also being followed at the provincial level. Provincial governments have formed advisory bodies for oversight and strategic guidance of provincial SDGs units. These bodies include representatives from government, academia, development practitioners and civil society who will review provincial development plans and growth strategies for alignment with the SDGs. A cluster-based approach – including social, economic, environment and governance – is being followed for the localisation of SDGs. Involvement of multiple stakeholders has been ensured by constituting cluster groups to

provide guidance to the SDGs units in prioritizing goals and indicators, in identifying the data gaps and strategies required, creating inter-intra and forward-backward linkages among the clusters, and developing policies and implementation plans. The provinces of Punjab and Sindh have already initiated work on all of these aspects. Federal and provincial governments have also initiated consultations with the private sector. The federal government has commissioned a study to determine how the private sector can be effectively involved in the achievement of the SDGs in Pakistan.

Being a federal state, Pakistan requires a greater degree of integration and co-ordination among its three tiers of government. The 18th Constitutional Amendment introduced in 2010 is a major charter of political rights as far as devolution of political, fiscal and administrative powers are concerned; under this amendment legislative authority and responsibility for social service delivery was devolved to the provinces. Consequently, the role of provincial governments in the implementation of SDGs has been substantially enhanced. Similarly, provincial governments are required to establish a local government system and devolve authority and responsibility to local government representatives. In 2017 the Planning Commission held a Local Government Summit on Sustainable Development Goals where elected heads of district and sub-district levels of local governments were invited to discuss the prospects of SDGs at the local level and ways to enhance inter-governmental coordination. The process has now been taken up by the provinces and SDGs units are holding consultations with various stakeholders including local governments, think tanks and civil society organisations.

Currently, federal and provincial governments have their own monitoring and reporting mechanisms as part of regular government business. No such mechanisms are in place for the SDGs. However, led by the Planning Commission, federal and provincial SDGs units are working to develop an integrated monitoring and reporting framework.

Pakistan's commitment to the 2030 Agenda is manifested through the concrete actions mentioned above. However, a lot more is to be done to maintain and to increase the pace of progress. Resource constraints being a common challenge for developing countries in achieving the development goals, Pakistan is no exception. Concerted efforts are required to enhance inter-governmental co-ordination. In particular, greater focus would be required to enhance the institutional capacity of provincial governments in view of their increased functional responsibility following the 18th constitutional amendment. Moreover, the structure of local government is different in all the four provinces, with varying degrees of devolution of powers and functions. For instance, functional responsibility of education and health services delivery in the province of Khyber Pakhtunkhwa lies with the district government, which is not the case in other provinces. Similar differences exist in the extent of financial powers. Given its proximity with the people, local government can play a pivotal role in the implementation of SDGs framework. Thus, repositioning of their role, responsibility and authority would be instrumental in achieving the sustainable development goals.

A case study on vertical policy coherence applied to legislation at the municipal level in Brazil

Patricia Almeida Ashley, Núcleo Girassol (Universidade Federal Fluminense)

Making the SDGs a reality requires a combination of both vertical and horizontal coherence in policies for sustainable development. Núcleo Girassol, at Fluminense

Federal University (Uff), has been focusing on discussions on the issue of vertical policy coherence at the international, national and subnational levels observed from the specific context of the Federated Republic of Brazil, considering its size and the complexity of dealing with coherence of policies among its three governmental tiers (federal government at national level, 27 states and 5.570 municipalities).

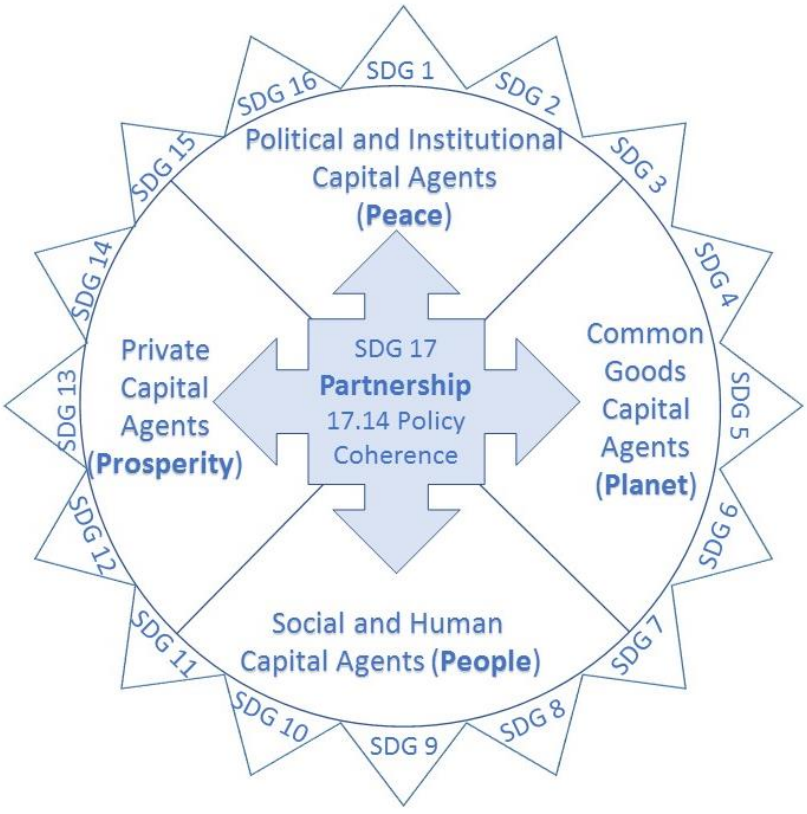
Vertical policy coherence implies both multi-level and multi-actor partnerships. Partnerships for policy coherence could be better reinforced when applied both to territories defined by physical or juridical boundaries (i.e. nations and municipalities) or territories defined by relations (network territories, as supply chains or transnational corporations), as we currently live in a time and space of combined zone and network territories (multiterritoriality) as part of our current technological, political, economic, cultural and social patterns of human civilisation (Figure 3.5).

To illustrate a collection of current public policies with long-term perspectives for achieving sustainable development, a three-year case study of municipal legislation was done in Brazil. The study sampled 12 cities representing capitals in all five regions (North, Northeast, West Centre, Southeast and South). The original method generated a database of more than 500 municipal laws, available both method and results for SDGs 6, 7, 11, 12 and 15 at https://goo.gl/UhSt9b.

The study showed that several laws could be adapted from one municipality to another without needing to be "invented from scratch", thus contributing to learning and sharing of best practices between municipalities. It also pointed out that vertical policy coherence for sustainable development, especially in nations organised as federations, as in the case of Brazil, would require:

- Both the Legislative Branch and the Executive Branch in Federated Republics such as Brazil being jointly responsible for proposing public policies for sustainable development, especially with a long-term perspective beyond the current mandates of elected representatives.
- The collection, consolidation and updating of municipal laws that do not yet take sustainable development into consideration and that could be hindering coherence towards sustainable development
- The effective implementation of public policies in the municipalities in the long term, as established in the content of local legal frameworks towards sustainable development, would be more effective if there are national, state and municipal levels of funding coherently for the Agenda 2030, offering mutual learning and collaboration at federation levels and complementarity among the sustainable development goals.
- An open, publicly accessible database on policies and legislation in each level of institution of the public sphere (municipal, state, national, international and transnational) may better signal and attract potential partnerships with agents who are looking towards contracts for trade, investment, employment, training and/or other means of cooperation towards sustainable development patterns.

Figure 3.5. Five Ps and Capitals towards Agenda 2030



Note: The five Ps of Agenda 2030 (Planet, People, Prosperity, Peace and Partnership) describe policy contents and processes as interlinked agents for the achievement of sustainable development. Policy coherence implies a coalition of actors and agents from political/institutional, economic, common goods, social and human capitals at transnational, international, national, regional, municipal, community, private and citizen levels.
Source: Patricia Almeida Ashley, 2018.

Notes

[1] Japan has established the following vision to guide SDG implementation: "Become a leader toward a future where economic, social and environmental improvements are attained in an integrated, sustainable and resilient manner while leaving no one behind."

[2] Statement by Mr. Enrique Peña Nieto, President of Mexico, during the General Debate of the 71st Session of the UN General Assembly, 20 September 2016: https://gadebate.un.org/en/71/mexico.

[3] Decreto por el que se crea el Consejo Nacional de la Agenda 2030 para el Desarrollo Sostenible. DOF: 26/04/2017. Diario Oficial de la Federación: http://www.dof.gob.mx/nota_detalle.php?codigo=5480759&fecha=26/04/2017.

[4] For the discussion paper displaying the Dutch approach to PCD see: Mackie, J., M. Ronceray and E. Spierings. *Policy Coherence & the 2030 Agenda: Building on the PCD experience.* Maastricht: ECDPM, 2017.

[5] For legislation see: https://www.boe.es/buscar/act.php?id=BOE-A-1998-16303.

[6] These include: putting people first; achieving sustained, indigenous and inclusive growth; democratic governance; institutional reform and modernisation of the public sector; water, energy and food security; private sector and entrepreneurship led growth; developing a competitive knowledge economy through value addition; and modernizing transportation infrastructure and greater regional connectivity.

[7] All these federal and provincial units are established under a project in collaboration with UNDP Pakistan called the National Initiative on SDGs. The initiative aims to bring together the planning, finance and statistical institutions to work collectively for SDG implementation.

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Chapter 4. Tracking progress in policy coherence for sustainable development

Sustainable Development Goal (SDG) target 17.14 calls on all countries to enhance policy coherence for sustainable development (PCSD). The purpose of this chapter is to support government efforts to monitor this target at the national level, as well as to contribute to the development of the global methodology for indicator 17.14.1. It applies the Framework for Policy Coherence for Sustainable Development to the five thematic SDGs under review by the United Nations High-Level Political Forum (HLPF) in July 2018. Specifically, the framework advises countries to consider three elements of the policy making process: institutional mechanisms; policy interactions; and policy effects on other countries and future generations. It also encourages them to identify different sets of indicators depending on national context, priorities and long-term policy objectives. The chapter concludes with three contributions by member institutions of the Partnership for Enhancing Policy Coherence for Sustainable Development that have developed or are using analytical tools for coherent implementation of the SDGs.

Introduction

Informed decision making is critical for enhancing policy coherence for sustainable development (PCSD). It requires monitoring systems that collect information about: 1) the performance of institutional mechanisms to co-ordinate policy and foster more integrated approaches for implementation; 2) critical trade-offs and synergies between policies in different domains; and 3) transboundary and long-term impacts of domestic actions.

Such monitoring systems would help decision makers address fragmented government action and adjust policies in light of their potential negative effects on sustainable development both domestically and abroad. Ultimately, they should aim to ensure that no one is left behind, the fundamental principle of the 2030 Agenda. This requires different benchmarks of progress and disaggregated data to show how parts of the population such as children, women, persons with disabilities and indigenous people are faring. This challenge, however, goes far beyond the policy coherence agenda: it needs to be kept in mind by everyone attempting to track progress in the implementation of the Sustainable Development Goals (SDGs). An important first step is to identify appropriate indicators at the national level. This is true also for SDG target 17.14, which calls on all countries to enhance policy coherence for sustainable development.

At the global level, progress on this target will be assessed against indicator 17.14.1, "Number of countries with mechanisms in place to enhance policy coherence for sustainable development" (UN, 2016[1]). But the 2030 Agenda also states that all global targets are aspirational, with each government setting its own national targets taking into account national circumstances.

The purpose of this chapter is to support government efforts to monitor SDG target 17.14 at the national level, while also contributing to the development of the global methodology for 17.14.1. Drawing on existing OECD measurement frameworks, it suggests indicators or indicator sets that are relevant for tracking countries' progress to enhance PCSD from a policy and institutional perspective. It also illustrates the need for each country to identify its own indicators and tracking methods in line with national priorities and contexts.

The chapter first presents **a three-part framework for tracking progress on PCSD** and provides examples of the types of indicators that can be used for assessing each element. It then explores ways to identify priority areas for PCSD and how to use combinations of indicators to track progress on PCSD in areas related to the goals under review by the United Nations High-Level Political Forum (HLPF) in 2018:

- SDG 6. Ensure availability and sustainable management of water and sanitation for all.
- SDG 7. Ensure access to affordable, reliable, sustainable and modern energy for all.
- SDG 11. Make cities and human settlements inclusive, safe, resilient and sustainable.
- SDG 12. Ensure sustainable consumption and production patterns.

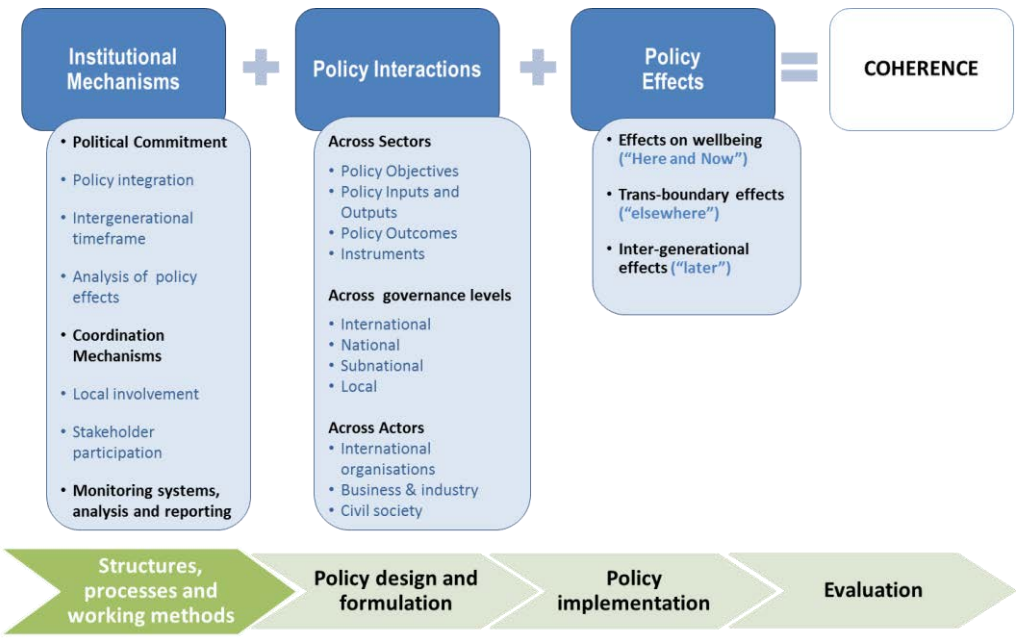
- SDG 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation.

The chapter concludes with inputs from three members of the Multi-stakeholder Partnership for Enhancing Policy Coherence for Sustainable Development (the PCSD Partnership), who are developing or using analytical tools for tracking progress in SDG implementation.

A framework for tracking progress on policy coherence

The PCSD Framework developed by the OECD (2016[2]) encourages countries to focus on three interrelated elements of the policy coherence cycle: 1) **institutional mechanisms**, to ensure that structures, processes and methods of work are conducive to higher degrees of policy coherence; 2) **policy interactions**, to examine how sectoral policies in different domains complement each other to achieve a larger goal; and 3) **policy effects**, to consider the economic, social and environmental impacts of policies on sustainable development "here and now", "elsewhere" and "later" (Figure 4.1).

Figure 4.1. Elements for tracking progress on PCSD



Source: OECD PCD Unit, adapted from (OECD, 2015[3]).

Indicators for assessing institutional mechanisms for policy coherence

The PCSD Framework emphasises the need to align existing institutional mechanisms for coherence with the nature and principles of the 2030 Agenda and the SDGs. It suggests considering how different institutional mechanisms are contributing towards higher degrees of policy coherence. This performance can be assessed in terms of **eight building blocks** presented in Chapter 2: 1) mobilising whole-of-government action; 2) balancing economic, environmental, and social concerns; 3) reconciling short- and long-term priorities; 4) addressing potential negative impacts of domestic policies beyond borders;

5) ensuring co-ordinated and mutually supporting efforts across sectors; 6) involving subnational and local levels of government; 7) engaging key stakeholders beyond the government; and 8) using monitoring and reporting systems to inform coherent policy-making.

These building blocks represent key institutional dimensions that underpin coherent SDG implementation. They refer to structures, processes and working methods conducive to higher degrees of policy coherence in governments, regardless of their different administrative and political traditions. The next step is to develop **process indicators** to assess coherence and track progress on each of these eight institutional dimensions. Table 4.1 proposes qualitative indicators that could be developed for this purpose together with a scale to illustrate degrees of performance.

A longer-term project could be to further develop this tentative set of indicators and integrate it into a **self-assessment tool** (i.e. dashboard) to illustrate how a country is enhancing PCSD at the national level in line with SDG target 17.14. These indicators could also serve to take stock of existing coherence mechanisms and identify institutional gaps, as well as to share information on country approaches, institutional practices and concrete measures applied to enhance and track progress on policy coherence.

Recent OECD work has applied a very similar approach in the area of water governance, resulting in the OECD Water Governance Indicator Framework (OECD, 2018[4]). The indicators for Water Governance Principle 3 on Policy Coherence could be drawn upon for tracking progress in institutional mechanisms for PCSD in the implementation of SDG 6 on Water. They could also inspire the development of complementary indicators beyond the water sector.

Table 4.1. Suggested indicators for assessing institutional mechanisms for policy coherence in SDG implementation

Building Block	Indicator	Degrees of performance	Rationale
Political commitment	The commitment to PCSD is formally incorporated into domestic law and/or national strategic framework and/or action plan.	**Low:** The government makes public, but not binding, statements supporting PCSD. **Medium:** A formal institutional "catalyst" (interministerial committees, centralised oversight body, ministry or unit) is mandated to promote PCSD. **High:** PCSD is explicitly included in the national strategy / plan / legislation. And/or: A time-bound plan for PCSD is developed, implemented and monitored through formal interministerial and multi-stakeholder mechanisms.	Experience shows that progress towards policy coherence starts with strong leadership and commitment at the highest level backed by clear mandates and time-bound action plans. Political commitment is needed to build ownership across institutions and guide whole-of-government action.
Policy integration	The government has mechanisms (interministerial, multi-stakeholder) with the power to take strategic decisions to influence and align planning, budgeting, legislation, sectoral programmes and policies.	**Low:** The mechanism can modify sectoral programmes and policies taking into account their interlinkages and/or sets out guidelines to integrate SDGs and PCSD. **Medium:** The mechanism can merge two or more sectoral programmes, considering synergies and trade-offs. **High:** The mechanism can integrate SDGs and PCSD into the mandate of each institution, involving budgetary processes, and develops multi-sectoral strategies or programmes.	Signatories to the 2030 Agenda emphasised that "the interlinkages and integrated nature of the SDGs are of crucial importance in ensuring that the purpose of the new Agenda is realised"… and "committed to achieving sustainable development in its three dimensions – economic, social and environmental – in a balanced and integrated manner". (UNGA, 2015[5]).
Inter-generational timeframe	The government has mechanisms in place to consider the long-term effects of policies and	**Low:** The government has a long-term vision/strategy for sustainable development as a framework for overall SDG implementation. **Medium:** The vision or strategic framework defines	A basic tenet of sustainable development is to balance the needs of current and future generations. Signatories of the

	take precautionary decisions and maintain commitment to SDGs and PCSD over time.	concrete long-term challenges and contains objectives, benchmarks and indicators related to economic, social and environmental inter-generational issues where policy coherence is required. **High:** The government has mechanisms to ensure sustained commitment and implementation efforts beyond electoral cycles, and provisions to ensure that future government programmes and budget preparations include SDG and PCSD considerations.	2030 Agenda committed to "implement the Agenda for the full benefit of all, for today's generation and for future generations"… and "to protect the planet from degradation… sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations" (UNGA, 2015[5]).
Policy effects	The government has mechanisms to systematically assess negative impacts of domestic policies on sustainable development at home and abroad, and develops measures to maximise synergies and mitigate negative effects	**Low:** The national strategic framework includes measures to address negative impacts of policies on other countries (particularly least developed countries, and globally) but has not yet established a mechanism to do so. **Medium:** Assessments of sustainable development linkages and potential positive and negative effects of policy proposals (including transboundary effects) and legislative proposals are regularly conducted before and after implementation. **High:** Policies are adjusted in light of new information on negative effects.	Experience has shows that mechanisms to anticipate, detect and resolve policy inconsistencies early in the policy-making process help exploit synergies and reduce incoherence between domestic policies and internationally agreed goals.
Coordination	The government has mechanisms that allow ministries and public sector agencies to share information, distribute responsibilities, allocate resources, and resolve conflicts of interest or inconsistencies	**Low:** Ministries and public sector agencies regularly share information on their programmes, plans and policies for SDGs. **Medium:** Ministries and public sector agencies align their implementation strategies, plans and policies based on common goals and targets, but work individually and with separate resources. **High:** Ministries and public sector agencies work jointly, based on systematic exchange of information and shared resources, to develop joint programs, plans and policies. The government has an arbitration mechanism to solve policy conflicts.	Co-ordination structures are needed in areas where policies are intrinsically cross-sectoral, such as in the implementation of integrated SDGs.
Local involvement	There is a mechanism that allows for systematic consultation, collaboration and alignment of efforts at the national, subnational and local levels	**Low:** National, subnational and local decision makers regularly share information on their respective efforts to achieve SDGs. **Medium:** National, subnational and local levels of government align their implementation plans based on shared information and work individually using their own resources to contribute to country's commitment towards the SDGs. **High:** National, subnational and local levels of government collaborate, considering their respective competencies and based on systematic exchange of information to develop joint action plans. There is an arbitration mechanism to solve conflicts of interest between different levels of government.	SDG implementation calls for aggregated actions at the local, subnational and national levels. The 2030 Agenda emphasises that "governments and public institutions will work closely on implementation with regional and local authorities" (UNGA, 2015[5]).
Stakeholder engagement	The government has mechanisms to ensure participation of stakeholders (civil society, business and industry, science and academia) in the development of plans and policies	**Low:** The government regularly organises public events involving multiple stakeholders to raise awareness and foster dialogue on PCSD/SDG implementation. **Medium:** The government has established mechanisms to consult and work directly with key stakeholders throughout the policy-making process. **High:** The government develops partnerships with stakeholders for SDG implementation.	The 2030 Agenda states that "all countries and all stakeholders, acting in collaborative partnership will implement this plan" (UNGA, 2015[5]). Stakeholders such as business and industry, civil society, science and academia have important roles to play ranging from resource mobilisation, provision of solutions and innovations, advocacy to voice the concerns and needs of underrepresented communities and helping to ensure accountability.

Monitoring and reporting	The government has monitoring and reporting systems that are used to inform changes in policy which maximise synergies and minimise negative transboundary effects and benefit developing countries	**Low:** The government has monitoring and reporting system in place, but there is no clear evidence of policy change. **Medium:** The government regularly reports on SDG17.14 and has monitoring and reporting systems with indicators for assessing institutional mechanisms for coherence and screening domestic and international policies that could adversely affect sustainable development in other countries or regions. There are mechanisms or provisions that allow the monitoring and reporting system to feed back into the decision making process. **High:** The government makes policy changes which address negative transboundary impacts.	Monitoring mechanisms are essential to ensure that sectoral policies supporting SDGs can be adjusted in light of potential negative effects identified during implementation or changing circumstances.

Source: Adapted from (Soria Morales and Lindberg, 2017[6]).

Box 4.1. OECD Water Governance Indicator Framework

Since the adoption of the *OECD Principles on Water Governance* in 2015, the OECD Water Governance Initiative has developed an implementation strategy based on: 1) an indicator framework to allow self-assessment of the governance system; and 2) a number of good practices to foster peer learning. The indicator framework does not investigate progress against a defined framework, nor is it intended to provide benchmarking across countries, basins, regions and cities, as governance responses are highly contextual and hardly comparable. Its primary objective is to stimulate dialogue across stakeholders on what works, what does not, and what should be improved. While indicators can be helpful in tracking and measuring relevant water governance dimensions, they are not the assessment itself and should be complemented by in-depth evaluations.

Principle 3 on Policy Coherence: Indicators and checklist

Indicators

3.a Existence and level of implementation of cross-sectoral policies and strategies promoting policy coherence between water and key related areas, in particular environment, health, energy, agriculture, land use and spatial planning.

3.b Existence and functioning of an interministerial body or institutions for horizontal co-ordination across water-related policies.

3.c Existence and level of implementation of mechanisms to review barriers to policy coherence and/or areas where water and related practices, policies or regulations are misaligned.

Checklist

- Is there a dedicated policy or high-level political support to water management as a driver to economic growth as called for in the SDGs?
- Are data and projections on water demand from agriculture, industry (including energy) and households available and guiding decisions about handling competing uses now and in the future?
- Is there an assessment of the distributional impacts on water management of decisions taken in other areas such as energy subsidies, spatial development,

agriculture or environment?

- Are costs due to absent/poor water-related policy coherence evaluated and available to decision makers?
- Are benefits from policy coherence and policy complementarities evaluated and communicated to decision-makers and key stakeholders?
- Are there provisions, frameworks or instruments to ensure that decisions taken in other sectors are water-wise?
- Are there horizontal co-ordination mechanisms at subnational and national levels?
- Are there conflict mitigation and resolution mechanisms to manage trade-offs across water-related policy areas?

Source: (OECD, 2018[4]).

Indicators for assessing policy interactions[1]

The integrated and indivisible nature of the SDGs calls for policies that systematically consider interactions between economic, social and environmental spheres. Policy coherence is essential to ensure that progress achieved in one goal area contributes to progress on other goals, and to avoid the risk that progress achieved on one goal or target occurs at the expense of another.

There is a vast range of economic, social and environmental indicators – many of them developed by the OECD – which can inform policy makers about the linkages, trade-offs and trends implied in achieving the SDGs. These include:

- **Resource indicators** related to capital stocks (i.e. natural, economic, human and social), which provide information on how countries are maintaining the asset base from which the well-being of current and future generations is derived;
- **"Flow" indicators** related to investment in and depletion of capital stocks, which provide information on how they are being used in countries;
- Indicators related to **policy responses**, which provide information on how public policies shape sustainable development outcomes.

Table 4.2 illustrates these indicators as they relate to natural capital (see Table 4.5 for additional indicators related to human, economic and social capital).

Table 4.2. Examples of indicators for capturing policy interactions

Natural asset base	Resource indicators	"Flow" indicators	Policy responses
Land	▪ Contribution of primary land cover types to total	▪ Conversion between primary land cover types ▪ Conversion from agricultural and semi-natural land cover classes to artificial land	▪ Land-use zoning ▪ Terrestrial protected areas
Forest	▪ Forest resource stocks	▪ Intensity of use and sustainable management certification of forest resources	▪ Sustainable forest management certification
Freshwater	▪ Total renewable freshwater per capita	▪ Freshwater abstractions per capita ▪ Total renewable freshwater per capita	▪ Robust water allocation regimes
Biodiversity	▪ Fish stocks within safe biological limits ▪ Threatened species	▪ Capture fisheries diversity index (change over time) ▪ Wild birds population index (change over time)	▪ Marine protected areas ▪ Terrestrial protected areas

Source: Adapted from (OECD, 2017[7]).

Using a combination of indicators helps to assess how sectors or policy priorities might be competing for the same resources, and to gauge whether the aggregate demand for satisfying sectoral priorities or human needs is within the constraints of ecosystems. For example, data on freshwater abstractions and total renewable freshwater provide an indication of water stress (or intensity of freshwater resource use) – an important measure for signalling over-abstraction due to human activities such as agriculture, industry and households. In turn, data on freshwater abstractions by sector can help to identify opportunities for more efficient water use.

Furthermore, countries are likely to prioritise and monitor interactions depending on their specific national contexts. A number of **tools for identifying and mapping SDG interactions** are currently available or being developed by different stakeholders; our work seeks to translate this research into government action, combining it with OECD data, evidence and policy advice.

One example, a seven-point scale of interactions proposed by Nilsson et al. (2016) and applied by ICSU (2017), provides an intuitive framework for mapping and identifying SDG interactions with high potential impact, including where synergies could be exploited and fundamental trade-offs need to be managed (Table 4.3).

Table 4.3. Goals Scoring

Interaction	Name	Explanation
+3	Indivisible	The strongest form of positive interaction in which one objective is inextricably linked to the achievement of another
+2	Reinforcing	One objective directly creates conditions that lead to the achievement of another objective.
+1	Enabling	The pursuit of one objective enables the achievement of another objective.
0	Consistent	A neutral relationship where one objective does not significantly interact with another or where interactions are deemed to be neither positive nor negative.
-1	Constraining	A mild form of negative interaction where the pursuit of one objective sets a condition or a constraint on the achievement of another.
-2	Counteracting	The pursuit of one objective counteracts another objective.
-3	Cancelling	The most negative interaction, where progress in one goal makes it impossible to reach another goal and possibly leads to a deteriorating state of the second.

Source: (ICSU, 2017[8]).

Indicators for assessing policy effects

Supporting the needs of present and future generations, as called for by the 2030 Agenda, will depend on how society uses and manages its natural, economic, human and social capital resources. The more efficiently and sustainably these resources are used and the better they are managed in the "here and now", the more capital is left for people "elsewhere" on the planet and "later" for future generations. Enhancing PCSD thus entails a more systematic consideration of the potential trade-offs between these three conceptual dimensions of sustainable development, which were first introduced by the Conference of European Statisticians (UNECE, 2014[9]).

Transboundary effects

National approaches to sustainable development usually offer limited insights into transboundary effects or the impact of countries on global sustainability. Domestic-level indicators need to be complemented by measures of economic, social and environmental externalities imposed beyond national borders. In a highly interconnected world, transmission channels are numerous – for example through financial flows, imports and exports of goods and services, migration or knowledge transfers – and countries' policies necessarily impact on one another.

In this sense, **economic externalities** might be captured by data on e.g. aid flows, trade, and domestic support measures; **social externalities** by data on e.g. foreign-born doctors and nurses; and **environmental externalities** by "footprint indicators", which calculate the environmental pressure attributable to consumption in one country on resources or conditions in another (Table 4.4). Water and carbon footprints are commonly used measures: they are discussed in more detail in the sections on SDG 6 on Water and SDG 7 on Energy. An ecological footprint, in turn, measures the *demand* on and *supply* of nature. As such, it is also an important indication of long-term (intergenerational) sustainability. The ecological footprint is discussed in more detail in the sections on SDG 11 on Sustainable Cities and Communities; SDG 12 on Responsible Consumption and Production; and SDG 15 on Life on Land.

When considering indicator development and data collection for a cross-border project or strategy – as well as its impacts – it is important to have a comparable set of measurements for both countries. A limited core set of indicators applicable to all local regions (and compatible with those at higher policy levels) can be combined with a more flexible set of indicators from which regions can choose additional indicators that best suit their situation (Martinez-Fernandez et al., 2013[10]).

Ultimately, any attempt to measure environmental impact at anything lower than a global scale should focus on consumption rather than production (OECD, 2013[11]). This is because of international trade flows (imports and exports), which are increasingly shaped by global value chains. For example, falling carbon intensity of production (due to e.g. a shift from manufacturing to services) needs to be compared with potentially increasing carbon intensity of consumption (due to e.g. increased imports of energy-intensive goods). This is discussed in more detail in the section on SDG 7 on Energy.

Table 4.4. Examples of indicators for capturing transboundary effects

Externality	Theme	Indicators	Related SDG targets
Economic	Development co-operation	▪ Official Development Assistance (ODA)	17.2
	International trade	▪ Data on tariffs and non-tariff measures ▪ Trade Facilitation Indicators (TFIs) ▪ Services Trade Restrictiveness Index (STRI)	2.b; 3.b; 8.a; 10.a; 14.b; 17.10; 17.11; 17.12
	Agricultural support	▪ Producer Support Estimates (PSE) ▪ National Protection Coefficient (NPC)	2.b
	Tax transparency	▪ Number of agreements on exchange for information for tax purposes between OECD and developing countries	17.1
Social	Migration	▪ Data on migration flows and stocks ▪ Share of foreign-born health workers ▪ Remittances	3.c; 10.7; 10.c
Environmental	Carbon footprint	▪ Consumption-based CO_2 emissions ▪ Consumption-based CO_2 productivity ▪ Food waste	8.4; 12.3
	Water footprint	▪ Imports of water-intensive products	6.4

Source: (OECD, 2017[12]).

Intergenerational effects

Monitoring the stocks and trends of resources that exist today but that are necessary to maintain well-being over time provides a first step towards understanding the prospects for future well-being. This implies looking at indicators that reflect **natural capital** (energy and mineral resources, land and ecosystems, water and air quality, climate), **economic capital** (physical, financial, knowledge), **human capital** (knowledge, skills, competencies and attributes embodied in individuals) and **social capital** (the quality of interpersonal relationships and institutions) (Table 4.5).

These different types of capital share a number of common characteristics. Each of them influence a broad range of well-being outcomes, have some degree of persistence over time, and require investment and careful management to be maintained. It is important to monitor the evolution of capital over time, as well as to consider information about inflows (e.g. investments), outflows (e.g. depletion or degradation of resources) and other risk factors that can affect the value of these capital stocks and their resilience to shocks. This provides insights on some of the levers through which decision makers can take action today to improve the prospects for well-being in the future (OECD, 2015[13]).

Table 4.5. Examples of indicators for monitoring resources for future well-being

Type of capital stock	Indicators related to the "stock" of capital	"Flow" indicators (investment in, and depletion of, capital stocks)	Indicators related to risk factors
Natural capital	▪ Exposure to $PM_{2.5}$ air pollution* ▪ Forest area ▪ Renewable freshwater resources ▪ Threatened species	▪ GHG emissions from domestic production ▪ CO_2 emissions from domestic production ▪ Freshwater abstractions	
Human capital	▪ Young adults' educational attainment (aged 25-34) ▪ Cognitive skills at 15* ▪ Adult skills* ▪ Life expectancy at birth*	▪ Educational expectancy	▪ Long-term unemployment* ▪ Smoking prevalence ▪ Obesity prevalence
Economic capital	▪ Produced fixed assets ▪ Intellectual property assets ▪ Household net wealth* ▪ Financial net worth of government	▪ Gross fixed capital formation ▪ Investment in R&D	▪ Financial net worth of the total economy ▪ Banking sector leverage ▪ Household debt
Social capital	▪ Trust in others ▪ Trust in the police ▪ Trust in the national government	▪ Volunteering through organisations ▪ Voter turnout* ▪ Government stakeholder engagement	

Note: * denotes indicators that are also included in OECD's indicator set for *current well-being*.
Source: (OECD, 2017[14]).

Applying the framework to identify national priorities and indicators for policy coherence

This section applies the monitoring framework to the five goals being reviewed by the 2018 UN High Level Political Forum. It complements the broader context-setting analysis in Chapter 1. For each goal, examples from both OECD and partner countries are used to illustrate the need to identify and use different indicators to track progress in PCSD, depending on national context, priorities and long-term policy objectives.

Goal 6. Water and sanitation for all

Sustainable Development Goal 6 calls on all countries to ensure availability and sustainable management of water and sanitation for all. There are multiple interactions between the water targets and with many other goals. Global competition for water is increasing among different uses and users, of which agriculture and electricity generation are the largest. Tracking progress in policy coherence in the implementation of SDG 6 requires monitoring these competing demands and considering their implications on water quantity and quality, both domestically and internationally. It also requires assessing the positive contributions that progress on SDG 6 can make towards the achievement of other goals, for example food security and agriculture, health, energy and biodiversity.

Countries' and regions' freshwater endowments and abstraction rates vary, implying different interactions and degrees of urgency to address them. A water scarce country will strive to maintain its total freshwater stock in the immediate- to short-term, aiming to ensure that it first and foremost satisfies basic human needs. A country with abundant freshwater resources, on the other hand, may focus on exploring the most water efficient

and least costly way to grow food or produce energy. Each PCSD challenge will require its own set of indicators for tracking progress. The following examples aim to illustrate this in practice. For relevant indicators and data sources, see Table 4.7.

In **Cape Town, South Africa**, ensuring that people have access to safe and affordable drinking water while not depleting freshwater stocks is a pressing issue. The ongoing water crisis has also highlighted the vast divide between rich and poor: wealthy people are able to pay for privately dug boreholes and wells, while poor people are dependent on government solutions that often take longer time to implement (Sieff, 2018[15]). For example, the increase in public dam water storage has not nearly kept up with the city's rapidly growing population, exacerbating the already severe impacts of climate change and severe droughts on all dimensions of sustainable development. Monitoring freshwater abstraction rates and freshwater storage capacity in parallel would therefore be critical for a PCSD assessment. It would contribute to more environmentally sustainable water management and also help to ensure a more stable water supply for all.

In the **US Southwest**, one of the world's most productive agricultural regions, almost 75% of total cropland depends on supplemental irrigation (Cooley et al., 2016[16]). This puts pressure on already scarce water supplies and calls for synergistic policy solutions that reduce water shortage risks for agriculture. Improving agricultural water-use efficiency, for example, contributes to maximising the productivity of limited water resources. Shifting from higher water-use to lower water-use crops is another way of keeping agricultural land in production with less total water demand. Data on agricultural freshwater withdrawals, irrigated land area, and irrigation water application rates – available as part of OECD's Agri-Environmental Indicators[2] – can support efforts to track progress in enhancing policy coherence for achieving more sustainable food production systems, while reducing water stress.

Considering transboundary water issues is important for identifying if actions in one country cause impacts in another. This can be linked to both quality (e.g. through pollution and climate change) and quantity (e.g. through dam construction or trade in virtual water). Rivers that flow across national boundaries create significant interdependencies between the riparian countries through which they flow. Countries down-river are vulnerable to the activities of those up-river in a variety of ways, from over-extraction of water or the building of dams (depriving countries down-river of water), or from pollution and water-borne diseases (depriving countries down-river of clean, safe water). Conversely, activities down-river can contribute to flooding up-river (OECD, 2013[17]).

The Nile is the longest river in the world, passing though eleven developing countries. The Nile Basin's population is expected to double in the next 25 years. This will further deplete the region's already scarce water supplies as demands from agriculture, industry and domestic use rise (Nunzio, 2013[18]). Monitoring each basin country's impact on the river could contribute to improving policy coherence in the region. The *Transboundary River Basins Assessment* uses indicators of "stressors" to provide a comprehensive picture of the state of transboundary waters, organised around five themes, as per Table 4.6 (UNEP-DHI and UNEP, 2016[19]).

Table 4.6. Core indicators for assessing the state of transboundary river basins

Thematic group	Indicators	Annotation
Water quantity	▪ Environmental water stress ▪ Human water stress ▪ Agricultural water stress	Stress indicators highlight competition for water between different sectors and between countries.
Water quality	▪ Nutrient pollution ▪ Wastewater pollution	Pollution indicators illustrate water quality issues in basins and their receiving coastal waters.
Ecosystems	▪ Wetland disconnectivity ▪ Ecosystems impacts from dams ▪ Threat to fish ▪ Exctinction risk	Ecosystems indicators represent pressures which can result in species extinction risk.
Governance	▪ Legal framework ▪ Hydropolitical tension ▪ Enabling environment	Governance indicators show e.g. the existence of basin treaties and ongoing or planned construction of new water infrastructure.
Socio-economics	▪ Economic dependence on water resources ▪ Societal well-being ▪ Exposure to floods and droughts	Socio-economic indicators identify basins where human vulnerability to a range of climate and development impacts is high.

Source: (UNEP-DHI and UNEP, 2016[19]).

Considering water management from a local, national or river basin perspective can be insufficient, however, since many water problems are linked to international trade. So-called footprint indicators can be used to shed light on how the impacts of trade in virtual water are generated and transmitted across borders. The virtual water content of a product (a commodity, good or service) can be defined as "the volume of freshwater used to produce the product, measured at the place where the product was actually produced" (Hoekstra and Chapagain, 2007[20]). This gives an indication of a country's water use and dependence on external water resources, helping governments to better understand the links between domestic water consumption, economic development, food security and international trade (http://www.waterfootprint.org). As such, it forms part of the broader discussion on SDG 12 on Sustainable Consumption and Production.

Virtual water trade generates water savings for importing countries, but also incurs "losses" for exporting countries. Many countries in the Middle East save their scarce water resources by importing water-intensive products, thus largely "externalising" their water footprint. **Jordan**, for example, imports five to seven billion m^3 of water in virtual form per year, to be compared with only one billion m^3 withdrawn annually from domestic water sources (Hoekstra, 2010[21]).

In contrast, Asian countries are the primary sources of global water use for crop supplies. Lee et al. (2016[22]) evaluated the virtual water export of several crops from Asia between 2000 and 2012 and found that the largest discharge of virtual water was derived from the wheat and rice trade, with more than 50 percent of it exported outside of Asia. **Thailand**, for instance, exported approximately 110.7 Gm3 (green water) and 22.8 Gm3 (blue water) to non-Asian countries, while 44.5 percent of the total virtual water export was traded within Asia via crop trades.[3]

The latter example shows that a PCSD assessment seeking to monitor and attribute water footprints in any one country must also distinguish between the virtual water export (the sum of the virtual water export from domestic resources and the re-exported virtual water of foreign origin) and the external virtual water rate, which indicates the amount of virtual water export outside a boundary (e.g. Asia).

Managing trade-offs and synergies will contribute to the long-term sustainability of the planet's freshwater bodies and wetlands. It can help restore and protect water-related ecosystems and halt or reverse freshwater biodiversity. Monitoring the different aspects of biodiversity (e.g. species, habitats) can help governments make informed decisions on resource use and protection (WWF, 2016[23]). For instance, data on the number of known and threatened amphibians are considered good bio-indicators as they provide early warning signs of deteriorating ecological conditions (OECD, 2017[7]).

Table 4.7. Indicators for tracking progress on PCSD in relation to SDG 6

SDG 6. Ensure availability and sustainable management of water and sanitation for all

	PCSD priorities	Relevant indicators	Data sources
Trade-offs	*Ensuring access to safe and affordable drinking water for all (SDG 6.1) without exceeding sustainable withdrawals of freshwater (SDG 6.4)*	▪ Freshwater abstractions per capita (1000m^3/capita) ▪ Freshwater storage capacity per capita (1000m^3/capita) ▪ Proportion of population using safely managed drinking water services (%)	▪ OECD Green Growth Indicators 2017 ▪ FAO Aquastat ▪ WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation
Synergies	*Improving agricultural productivity (SDG 2.3) by increasing agricultural water-use efficiency (SDG 6.4)*	▪ Agricultural yields (e.g. tonnes/hectare) ▪ Water abstraction per hectare (megalitres) ▪ Share of irrigated area in total agricultural area (%) ▪ Irrigation water application rates (megalitres per hectare of irrigated land)	▪ OECD Agriculture Statistics ▪ OECD Agri-Environmental Indicators
Transboundary policy effects	*Limiting the impacts of domestic water use on other countries' access to water (SDG 6.1)*	▪ Environmental water stress ▪ Human water stress ▪ Agricultural water stress	▪ Transboundary Waters Assessment Programme
	Minimising cross-border impacts of domestic water pollution (SDG 6.3)	▪ Nutrient pollution ▪ Wastewater pollution	▪ Transboundary Waters Assessment Programme
	Limiting the water footprint in exporting countries of domestic water-intensive imports (SDG 6.4)	▪ Water footprints (litres/kg) ▪ Water saving as a result of imports (m^3/year) ▪ Water loss as a result of exports (m^3/year) ▪ Ratio of net water saving to use of domestic water (%)	▪ Water Footprint Network ▪ Hoekstra, A. (2010)
Intergenerational policy effects	*Protect and restore water-related ecosystems (SDG 6.6)*	▪ Number of known amphibian species ▪ Percentage of amphibians threatened	▪ OECD Green Growth Indicators 2017

Note: These are illustrative examples. Each country will need to identify and monitor the interactions and policy effects that are most relevant to its own national context and sustainable development objectives.
Source: OECD PCD Unit.

Goal 7. Affordable and clean energy for all

Sustainable Development Goal 7 calls on all countries to ensure access to affordable, reliable, sustainable and modern energy for all. Energy production, supply and use have different environmental effects depending on energy source, with various impacts on air, land and water. Tracking progress in policy coherence in the implementation of SDG 7 requires monitoring the stocks, efficiency and productivity of these sources (e.g. fossil fuels versus renewables) and energy consumption by use (e.g. water distribution versus agricultural production), as well as assessing their positive or negative economic, environmental and social impacts domestically and abroad.

A country's energy profile is determined by several factors: its economic structure (e.g. presence of large energy-consuming industries); physical size (influencing demand from the transport sector); local climate (affecting demand for heating or cooling); and outsourcing of goods produced by energy-intensive industries (OECD, 2017[7]). Understanding this profile will allow policy makers to identify national PCSD priorities and select the indicators needed for tracking progress. The following examples aim to illustrate this in practice. For relevant indicators and data sources, see Table 4.8.

In a country like **Malawi**, where over 95% of the electricity supply is generated from hydropower and agriculture is the backbone of the economy (Malawi Water Partnership, 2016[24]), monitoring the relationships between energy, water and food production is critical for a PCSD assessment. Data on water use by sector and energy technology would allow policy makers to monitor competition for water between energy and other sectors, as well as to identify opportunities for more efficient water use within the energy sector itself. Such insights would also support Malawi's efforts to achieve food security for all: more water could be made available for growing food and freshwater bodies that supply fish would be less likely to dry out.

In the **Slovak Republic**, bioenergy is the biggest source of renewable energy. The growth in bioenergy use is driven by the country's energy targets for 2020 and supported by various policy incentives. The amount of wood used for energy purposes almost doubled between 2005 and 2015: in some regions consumption of wood for energy exceeds what can be supplied from sustainable sources such as waste wood from industrial processes or landscape management. As a result, more and more whole trees are being used for energy, thus raising concerns of deforestation (Birdlife Europe and Central Asia and Transport and Environment, 2016[25]). In this case, tracking progress in policy coherence would imply comparing national data on support schemes for bioenergy, the net change in CO_2 emissions, and developments in the stock and use of forest resources. A useful indicator for assessing the long-term viability of a country's forest resources more broadly is the intensity of use of forest resources, which relates actual harvest or tree fellings to the annual productive capacity of forests.

Access to clean energy, in particular for cooking, provides direct health benefits, but progress in many developing countries is slow. In **India**, for example, an estimated 780 million people still rely on biomass for cooking. Globally, the use of fuels such as kerosene, solid biomass and coal for cooking is responsible for an estimated 2.8 million premature deaths per year (IEA, 2017[26]).

The International Energy Agency defines energy access as "a household having reliable and affordable access to both clean cooking facilities and to electricity, which is enough to supply a basic bundle of energy services initially, and then an increasing level of electricity over time to reach the regional average".[4] Access to clean cooking is defined as "a household primarily relying on cooking facilities which are used without harm to the health of those in the household and which are more environmentally sustainable and energy efficient than biomass cook-stoves and the three-stone fires currently used in developing countries". Monitoring access to clean energy and reliance on various cooking fuels can support countries' efforts to reduce premature deaths from exposure to $PM_{2.5}$ and ozone. It can also inform synergies with other SDGs, e.g. on climate (via a reduction of GHG emissions) and women's empowerment (via a reduction in time spent collecting fuel wood).

Transboundary impacts from energy production and consumption can be captured by assessing a country's carbon footprint. Typically, emissions statistics are compiled according to production-based or territorial emission accounting methods, which measure emissions occurring within sovereign borders. However, these estimates do not reflect production chains that extend across borders: multiple countries may be responsible for emissions associated with the production of a given good and/or service. To account for the origins of CO_2 emissions embodied in final demand, policy makers need to also consider consumption- or demand-based carbon emissions. These refer to the distribution across economies of final consumption of embodied carbon that has been emitted anywhere in the world along global production chains (OECD, 2016[27]) (Wiebe and Yamano, 2016[28]).

Data shows that **OECD countries** in total are net importers of embodied carbon, while non-OECD countries are net exporters[5]. In other words, OECD countries "consume" more CO_2 than they actually emit within their own borders. Similarly, in many developed countries falling carbon intensity of GDP and lower emissions of other environmental "bads" in recent decades have been driven mainly by structural changes such as the shift from manufacturing to services. As a result, the carbon intensity of production in these countries falls while the carbon intensity of consumption rises, due to the increasing share of energy-intensive imported goods (OECD, 2013[11]).

This type of finding often fuels arguments that living standards enjoyed by people in the most developed countries come in part due to CO_2 emissions produced with less advanced technologies in less developed countries. Tracking such information can help raise awareness of the potential or actual transboundary impacts of domestic consumption patterns and inform policy making for sustainable development outcomes in all countries.

Since the 2000s, **China** has been a notable net exporter of emissions, as its industrial base has expanded to meet worldwide demand for its output (OECD, 2016[29]). Even so, despite its massive expansion of exports, China's emissions are still mostly due to domestic consumption. This yields a similar coherence problem at the national level: Feng et al. (2013[30]) finds that up to 80% of the emissions related to goods consumed in the country's highly developed coastal provinces are imported from less developed provinces in central and western China, where many low-value-added but high-carbon-intensive goods are produced.

Hence, consumption-based emissions are of critical importance for assessing transboundary impacts – both between and within countries – when tracking progress in policy coherence for the implementation of SDG 7. The OECD's Inter-Country

Input-Output (ICIO) Database[6], when combined with IEA's statistics on CO_2 emissions from fuel combustion and other industry statistics, can provide this information.

Incentives to use one energy source over another can have unintended negative impacts domestically and abroad. For example, biofuel support schemes (subsidies, mandates etc.) could lead to deforestation and biodiversity loss not only domestically, but also in other countries if the feedstock is imported. This is discussed in more detail in the section on SDG 15 on Life on Land. Increased biofuels production could also affect food prices. This is of particular concern for poor consumers in developing countries who spend a large share of their disposable income on food. The transmission channels are many and complex, however, and any correlation between support levels and food prices needs to be interpreted with care. Rather than suggesting attribution of impacts to one country or another, a PCSD assessment could aim to identify and raise awareness about the possible impact domestic biofuel policies could have on other countries.

Fossil fuel subsidies, in turn, not only undermine global efforts to mitigate climate change, but also aggravate local pollution problems, causing further damage to human health and the environment.

The OECD's Well-being Framework categorises CO_2 emissions from domestic consumption, together with GHG emissions from domestic production, as "flow indicators" for the depletion of natural capital. Fossil fuel combustion continues to be a leading contributor to global man-made GHG emissions – subsidies are thus inconsistent with the well-being of future generations and should be rationalised and phased out over time. To assist governments in their reform efforts, the OECD Inventory of Support Measures for Fossil Fuels[7] brings together the estimates of subsidies and other forms of support for fossil fuels that the OECD and the IEA regularly produce for a great number of countries around the world.

Table 4.8. Indicators for tracking progress on PCSD in relation to SDG 7

SDG 7. Ensure access to affordable, reliable, sustainable, and modern energy for all

	PCSD priorities	Relevant indicators	Data sources
Trade-offs	*Increasing access to energy for all (SDG 7.1) without limiting access to drinking water for all (SDG 6.1)*	▪ Water withdrawal by sector (e.g. energy production, agriculture, human consumption) (km^3) ▪ Water use by energy technology (litres/MWh)	▪ FAO Aquastat ▪ IEA Energy Access Outlook ▪ OECD Green Growth Indicators ▪ OECD-FAO Agricultural Outlook
	Increasing the production of bioenergy (as part of SDG 7.2), without increasing deforestation (SDG 15.2)	▪ CO_2 emission reductions from bioenergy use ($MtCO_2$ avoided) ▪ CO_2 emissions caused by land-use change (Mt CO_2) ▪ Intensity of use of forest resources (timber, ratio)	▪ OECD Environmental Outlook to 2050 ▪ IEA Renewables Statistics ▪ OECD-FAO Agricultural Outlook ▪ OECD Environment Statistics: Forest Resources
Synergies	*Reducing the number of deaths and illnesses from air pollution (SDG 3.9) by facilitating access to clean energy technologies (SDG 7.a)*	▪ Concentration of $PM_{2.5}$ and ozone ($\mu g/m^3$) ▪ Premature deaths from exposure to $PM_{2.5}$ and ozone ▪ Share of population with access to clean cooking (%)	▪ OECD Environment Statistics: Air and Climate ▪ IEA Energy Access Outlook
Transboundary policy effects	*Limiting the adverse impacts on other countries from domestic reliance on energy-intensive*	▪ Demand-based (consumption) CO_2 emissions	▪ OECD Inter-Country Input-Output (ICIO) Database ▪ IEA CO_2 emissions from fuel

	imports (SDG 7.b)		combustion data
	Ensuring that domestic biofuel subsidies (SDG 7.2) do not lead to higher food prices in developing countries	▪ Biofuel production from agricultural feedstocks (toe) ▪ Biofuels support levels (USD) ▪ Food prices (USD)	▪ OECD Agri-Environmental Indicators ▪ OECD Fertiliser and Biofuels Support Policies Database ▪ FAO Food Price Index ▪ Agricultural Market Information System (AMIS)
Intergenerational policy effects	*Reducing reliance on fossil fuels (SDG 7.2, SDG 12.c) to improve future well-being for people and planet*	▪ Share of energy from fossil fuels (%) ▪ CO_2 emissions from fuel combustion (Mt CO_2) ▪ Support to fossil fuels (USD)	▪ IEA World Energy Outlook ▪ OECD Environment Statistics ▪ OECD Inventory of Support Measures for Fossil Fuels

Note: These are illustrative examples. Each country will need to identify and monitor the interactions and policy effects that are most relevant to its own national context and sustainable development objectives.
Source: OECD PCD Unit.

Goal 11. Sustainable cities and communities

Sustainable Development Goal 11 calls on all countries to make cities and human settlements inclusive, safe, resilient and sustainable. This implies that the growth, jobs and service functions generated by cities must be balanced against the pressures they exert on natural resources, the climate and the environment. Similarly, cities' positive and negative effects on human well-being (e.g. accessibility versus congestion) must be taken into account. Tracking progress in policy coherence in the implementation of SDG 11 therefore requires assessing the costs and benefits of urban agglomerations and monitoring their long-term viability and impacts domestically and internationally. One challenge, however, is that cities and regions that want to transition to more sustainable growth paths and have stated objectives to this effect often lack the information and data needed to track the progress of this transition (OECD, 2013[11]).

Similar forces shape urbanisation across the world (OECD, 2015[31]). The OECD Metropolitan Database[8] provides a set of economic, environmental, social and demographic estimated indicators that are comparable across countries, and which offer useful information for a PCSD assessment (Table 4.9).

Table 4.9. OECD Metropolitan Database: Comparable urban indicators

Economic	Environment	Social	Demographic
GDP/capita (USD)	CO_2 emissions/capita (tonnes/inhabitant)	Labour force (persons)	Population density (people/km^2)
Labour productivity	Green area per million people (m^2 per million persons)	Unemployment (%)	Population growth (%)
PCT patent applications (count)	Avg. exposure to air pollution (PM2.5)	Crime statistics (to be developed)	Population share of national value (%)

Note: Data is available for 281 OECD metropolitan areas.
Source: OECD Metropolitan Database (OECD,(n.d.)[32]).

Yet, different countries have different urbanisation challenges (OECD, 2015[31]). For example, a highly urbanised developed country will face different sustainability challenges than a less urbanised developing country: this implies different PCSD priorities for which to track progress. The following examples aim to illustrate this in practice. For relevant indicators and data sources, see Table 4.10.

New Zealand is one of the least densely populated countries in the world, but also one of the most urbanised. Sustained population growth in all major cities is putting pressure on infrastructure and the environment, particularly in **Auckland**, the country's largest city. In one effort to halt this trend, the *Auckland Plan* sets out a long-term (30-year) direction for the region's land use, transport, housing and infrastructure in an integrated manner, and includes goals, principles and quantified targets that allow for tracking progress (OECD, 2017[33]). Many of the indicators used (e.g. waste generation, recycling rates) would need to be part of a PCSD assessment, aiming to ensure that the achievement of individual urban priorities does not impact negatively on others, on other societal objectives or on other countries and regions.

Africa has one of the highest urbanisation rates globally, although remains the least urbanised region in the world – with strong disparities in urbanisation levels across the continent (OECD, 2015[31]). Additionally, over 60% of Africa's urban population is packed into slums (Lall, Somik Vinay, J. Vernon Henderson, 2017[34]). Kibera in **Nairobi, Kenya**, is the largest urban slum in Africa, with serious water, sanitation and hygiene challenges. Comparing data on mortality rates attributed to unsafe water with shares of the urban population with access to an improved water source and/or connection to wastewater treatment can inform efforts to track progress in PCSD.

Sustainable and inclusive cities can contribute to the achievement of other SDGs. Ahrend and Schumann (2014[35]) show that between 1995 and 2010, **European regions** with large cities (>500 000 inhabitants) experienced significantly higher per capita GDP growth than regions without large cities once average national growth rates are taken into account. To track progress in PCSD, correlations between data on urban agglomerations, regional GDP and population, as well as travel time and distance, can be used to illustrate and monitor this positive relationship.

A city's ecological footprint is an important indicator for understanding and monitoring its sustainability and potential impacts on surrounding areas. The ecological footprint measures the land and water area a city requires to produce the resources it consumes and to absorb its wastes. Research by the Global Footprint Network shows that in many countries, large urban centres are major contributors to the national ecological footprint and also have higher per capita footprints than the national average. For instance, the resource demands of **Athens, Greece**, exceed the biocapacity of the entire country. The ecological footprint of **Moscow, Russia**, is 84.2 million global hectares[9], while the city itself has just 324,000 global hectares of biocapacity. In other words, Moscow demands 260 times as much from nature as nature within its borders can regenerate (Boev et al., 2016[36]).

On the other hand, cities can also present an opportunity to reduce individual footprints. For example, the carbon footprint[10] of household energy consumption in **Beijing's** urban areas is lower than that of its rural areas, since urban inhabitants have access to extensive public transportation systems and to central heating systems for their homes. In contrast, rural areas are challenged by energy demands for heating and cooling of individual homes, increasing use of private vehicles, and the difficulty of adequately serving dispersed rural populations through public transportation networks (Gong et al., 2012[37]).

The section on SDG 12 on Responsible Consumption and Production explores the ecological footprint concept in more depth.

Table 4.10. Indicators for tracking progress on PCSD in relation to SDG 11

SDG 11. Make cities and human settlements inclusive, safe, resilient and sustainable

	PCSD priorities	Relevant indicators	Data sources
Trade-offs	*Ensuring that urbanisation (SDG 11) does not impact negatively on waste reduction efforts (SDG 12.5)*	▪ Urban population growth (%) ▪ Municipal waste generation (kg/person/year) ▪ Urban recycling rates (%)	▪ Green Growth in Cities
Synergies	*Reducing the number of deaths and illnesses from water pollution and contamination (SDG 3.9) by upgrading slums (SDG 11.1) and improving access to safe and affordable drinking water (SDG61.)*	▪ Mortality rate due to unsafe water, unsafe sanitation, lack of hygiene (%) ▪ Share of urban population with access to an improved water source (%) ▪ Share of urban population connected to wastewater treatment (%)	▪ WHO Global Health Observatory ▪ World Development Indicators, World Bank
	Sustaining per capita economic growth (SDG 8.1) by enhancing inclusive and sustainable urbanisation (SDG 11.3) and transport systems (SDG 11.2)	▪ Per capita GDP growth rate (%) ▪ Inhabitants, metropolitan areas (thousands) ▪ Travel time and distance	▪ OECD National Accounts Statistics ▪ OECD Metropolitan Database
Transboundary policy effects	*Minimising the ecological footprint of a city on its surrounding regions*	▪ Ecological footprint (global hectares)	▪ Global Footprint Network
Intergenerational policy effects	*Expanding sustainable public transport (SDG 11.2) to reduce cities' carbon footprint over time*	▪ Public transport accessibility in cities (% of population within 1 km from public transport stops) ▪ CO_2 emissions from fuel combustion in the transport sector (% of total)	▪ International Transport Forum ▪ IEA CO_2 emissions from fuel combustion data ▪ OECD Environment Statistics

Note: These are illustrative examples. Each country will need to identify and monitor the interactions and policy effects that are most relevant to its own national context and sustainable development objectives.
Source: OECD PCD Unit.

Goal 12. Responsible consumption and production

Sustainable Development Goal 12 calls on all countries to ensure sustainable consumption and production patterns (SCP). This will require a strong national SCP framework that is integrated into national and sectoral plans, sustainable business practices and consumer behaviour, together with adherence to international norms on the management of hazardous chemicals and wastes (United Nations, 2017[38]). Identifying national PCSD priorities and indicators can help countries create more value using fewer natural resources in a way that does not compromise the needs of future generations. The following examples aim to illustrate this in practice. For relevant indicators and data sources, see Table 4.11.

Monitoring natural resources should be an important part of efforts to track progress in policy coherence for the implementation of SDG 12. This includes looking at the way natural resources are used in economic activity and contribute to economic outputs, and how their use impacts on the environment. Indicators based on Material Flows Analysis (MFA)[11] can be used to measure progress on resource productivity. They provide information on material inputs taken from the environment into the economy (e.g. resources extracted or harvested from the surrounding natural environment or imported from other countries), the transformation and use of inputs within the economy (from

production to final consumption) and material outputs from the economy to the environment as residuals (waste, pollutants) or to other countries in the form of exports. The data are compiled from available production, consumption and trade data and from environment statistics (OECD, 2014[39]).

A commonly used indicator is material productivity (or intensity), relating economic output to the amount of materials (or raw materials) used as inputs. It is defined as GDP per Domestic Material Consumption (DMC) or per Domestic Material Input (DMI)[12]. It can be derived from Economy-Wide Material Flow Accounts that cover the economy as a whole and distinguish between various material types and groups. Water as a resource is not covered in such accounts and needs to be reported separately (OECD, 2014[39]).

Reducing food loss and waste can contribute to positive environmental outcomes. The FAO has estimated that each year as much as one-third of all food produced in the world for human consumption is lost or wasted. This represents a missed opportunity for both the economy and food security, and a waste of natural resources used to grow food. For example, the total carbon footprint of food wastage is around 4.4 $GtCO_2$ equivalents per year globally – with the per capita footprint of high-income countries being more than double that of low-income countries (FAO, 2013). This type of quantifiable impact provides important input to a PCSD assessment and can help monitor interactions with other SDGs.

Policy coherence for sustainable consumption and production patterns also requires identifying and monitoring national footprints abroad. **Switzerland**, for example, performs better than the OECD average in terms of production-based resource productivity, but remains among OECD countries with a relatively high per capita consumption-based environmental footprint. It is the largest producer of municipal solid waste in Europe and among the highest per capita consumption-based carbon dioxide emitters in the OECD. Switzerland also has a large environmental footprint associated with unsustainable consumption patterns. As a result of the country's relative trade openness, it is estimated that one-half to three-quarters of its environmental impact results from the import of goods and services (OECD, 2017[40]).

Therefore, the indicator set identified by Switzerland to report progress against its Green Economy Action Plan (GEAP) contains absolute environmental demand-based footprints (e.g. greenhouse gas, biodiversity, material and energy) in addition to productivity-related metrics (Eidgenössisches Departement für Umwelt, 2016[41]). This allows Switzerland to address and monitor the environmental impact of its domestic consumption, in particular on developing countries.

The ecological footprint complements other footprint indicators. It measures how much area of biologically productive land and water an individual, population or activity requires to produce the resources it consumes and to absorb the waste it generates, using prevailing technology and resource management practices. The ecological footprint is usually expressed in global hectares (gha) – globally comparable, standardised hectares with world average productivity (Global Footprint Network[42]).

Because trade is global, an individual or country's ecological footprint includes land or sea from all over the world (Global Footprint Network[42]):

- The *Ecological Footprint of Consumption (EFC)* is defined as the area used to support a defined population's consumption. The consumption footprint (in gha) includes the area needed to produce the materials consumed and the area needed to absorb the carbon dioxide emissions.

- The *Ecological Footprint of Exports (EFE)* is the footprint embodied in domestically produced products which are exported and consumed in another country.
- The *Ecological Footprint of Imports (EFI)* is the footprint embodied in domestically consumed products which are imported from other countries.
- The *Ecological Footprint of Production (EFP)* is the sum of footprints for all of the resources harvested and all of the waste generated within the defined geographical region.

This means that if a population's ecological footprint exceeds the region's biocapacity, that region runs an ecological deficit and will need to import extra resources from other countries to meet its demand. Conversely, if a region's biocapacity exceeds its ecological footprint, it has an ecological reserve (Global Footprint Network[42]).

The per capita ecological footprint of high-income nations dwarfs that of low- and middle-income countries (WWF, 2016[23]). The Asia-Pacific's demand for resources has expanded particularly rapidly compared to most other regions. In **Korea**, for instance, the population's ecological footprint is eight times larger than the country's biocapacity per capita, representing a nearly five-fold increase in just over 50 years (WWF-Korea, 2016[43]). Imports require countries to also pay close attention to the ecological footprint and biocapacity of its trading partners, in order to ensure that any negative transboundary impacts can be identified and reduced. In Korea, one of the main importers of crops in Asia, trade structures are related to the exporter's water resources in terms of virtual water trade (the section on SDG 6 on Water identified Thailand, India, and Pakistan as the main virtual water exporters in Asia due to their rice trade).

The environmentally sound management of chemicals and hazardous wastes will contribute to the future well-being of people and planet. The chemical industry is one of the world's largest, with products worth more than EUR 4 000 billion annually. **OECD countries** account for about 60% of global chemical production and have a major responsibility for ensuring that chemicals are produced and used as safely as possible (OECD, 2013[44]).

Table 4.11. Indicators for tracking progress on PCSD in relation to SDG 12

SDG 12. Ensure sustainable consumption and production patterns

	PCSD priorities	Relevant indicators	Data sources
Trade-offs	*Achieving higher levels of economic productivity (8.2) without undermining the sustainable management and efficient use of natural resources (SDG 12.2)*	▪ Non-energy material productivity ▪ Domestic Material Consumption (DMC) ▪ Domestic Material Input (DMI) ▪ Environmentally Adjusted Multifactor Productivity (EAMP)	▪ OECD Environment Statistics: Material Resources ▪ OECD productivity Statistics ▪ IEA World Energy Outlook ▪ OECD Green Growth Indicators
Synergies	*Reducing CO_2 emissions (SDG 13) by halving per capita global food waste (SDG 12.3)*	▪ Food waste (tonnes) ▪ Food waste carbon footprint (kilograms of CO_2 equivalent)	▪ FAO Food Wastage Footprint (FWF) model
Transboundary policy effects	*Limiting the footprints on other countries from domestic consumption*	▪ Demand-based (consumption) footprints ▪ Ecological footprint of consumption (gha)	▪ Global Footprint Network
Intergenerational policy effects	*Achieving environmentally sound management of chemicals and wastes throughout their life cycles*	▪ Hazardous waste generated per capita and proportion of waste treated, by type of treatment	▪ UN Environment (forthcoming indicator; based on data from OECD, UNSD, Eurostat and BRS Secretariat)

Note: These are illustrative examples. Each country will need to identify and monitor the interactions and policy effects that are most relevant to its own national context and sustainable development objectives.
Source: OECD PCD Unit.

Goal 15. Life on land

Sustainable Development Goal 15 calls on all countries to protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss. While countries will have different challenges depending on their geographic location, natural attributes and climate, the drivers of ecosystem change and biodiversity loss are the same: land use and cover change; air and water pollution; intensification of agriculture; climate change; introduction of alien species; and biofuel production/combustion technologies. These drivers or threats also interact, which can exacerbate the effects on species. For example, habitat destruction and overexploitation might compromise a species' ability to respond to climate change (Dirzo et al., 2014[45]).

Changes in land cover are considered the best available proxies for pressures on biodiversity and ecosystems. Ongoing work at the OECD seeks to develop policy-relevant indicators to measure land cover and land cover changes at national and sub-national levels (OECD, 2016[46]). In developing countries, where people rely on land-based resources to generate most of their income, implementing sustainable land use and management practices can also contribute to reducing poverty. An important part of tracking progress in PCSD for the implementation of SDG 15 will therefore be to assess competing demands for land, and the trade-offs between different land uses and the impacts they have on the environment (e.g. biodiversity), the economy (e.g. incomes) and society (e.g. well-being) both domestically and in other countries. The following examples aim to illustrate this in practice. For relevant indicators and data sources, see Table 4.12).

Agriculture and related support measures can have adverse impact on biodiversity and ecosystems. The unique geography in **Chile** results in a variety of climates, ecosystems and vegetation, and a large number of endemic species that are found nowhere else in the world. Many of its ecoregions are considered significant to global biodiversity, but are also under intense pressures from land-use change, fishery, mining, urban and infrastructure development. The use of fertilisers and pesticides, for example, poses considerable risks to soil and water. While support to Chilean farmers has declined and is modest compared to other OECD member countries, remaining support indirectly encourages agricultural production and increases the risk of overuse or misuse of water and potentially harmful inputs (OECD/ECLAC, 2016[47]). Here, tracking progress in PCSD would call for joint monitoring of the potentially most environmentally harmful agricultural support[13] on the one hand, and indicators related to biodiversity and biodiversity loss due to agriculture on the other.

Mexico faces similar problems: some national support programmes for farmers work against national REDD+ initiatives that aim to reduce emissions from deforestation and forest degradation (OECD, 2013[48]). In this case, tracking progress in policy coherence requires monitoring and balancing support to agriculture with support aimed at reducing emissions. Monitoring forest gains and losses through land-use change can help a government to gauge forests' ability to reduce net greenhouse gas emissions (FAO, 2016[49]).

Imports can lead to deforestation and/or desertification in exporting countries. It has been estimated that commercial agriculture accounts for almost three quarters of the destruction of tropical rainforests. (Lawson Sam, 2014[50]). This is closely linked to the earlier discussion on SDG 12 on sustainable consumption and production, with large impacts on people, welfare and carbon storage.

The **United Kingdom** – as the world's fifth largest economy – is a major importer and consumer of "deforestation-risk commodities". A recent study commissioned by the WWF and Royal Society for the Protection of Birds attempts to quantify the scale of the potential overseas impact linked to the UK's imports of seven commodities often linked with forest loss: beef and leather, cocoa, palm oil, pulp and paper, rubber, soy, and timber. Its findings suggest that supplying the annual UK demand for these seven commodities alone requires a land area more than half the size of the UK: a total of 13.6 hectares. More than 40 percent of the UK's overseas land footprint is in countries at high or very high risk of deforestation, weak governance and poor labour standards (Jennings, Sheane and Mccosker, 2017[51]).

A quantification of the proportion of imports that are environmentally certified would provide useful input to a PCSD assessment, but data are limited.

Illicit trade in wildlife products impacts negatively on countries of origin. Many criminal economies in **West Africa** centre on indigenous natural resources, including flora and fauna. Their diversion represents a loss of potential benefit to the region's citizens and challenges the region's ability to achieve its biodiversity goals and generate sustainable livelihoods (OECD, 2018[52]). Markets in Asia are frequently the destination economies for illegally trafficked species and wildlife products (including ivory and rhino horn), but OECD countries including countries such as Japan and members of the European Union and the United States are also are also involved as transit, destination, and even source countries for rare species and illegal products (OECD, 2018[53]).

Combatting illegal financial flows and protecting vulnerable populations from their damaging impacts calls for coherent and co-ordinated policy action across countries (OECD, 2018[52]). Data on illicit trade and associated policy responses is needed to track progress in policy coherence in order to limit negative transboundary impacts.

Indicators on terrestrial and marine protected areas can provide an indication of countries' conservation efforts, including for achieving the Aichi Targets and the SDGs. New work by the OECD seeks to develop a methodology for calculating the extent of terrestrial and marine protected areas by country, type and IUCN management categories. This will allow summarising the data on protected areas in a more detailed and harmonised way across countries than has previously been possible (OECD, 2016[46]). It will also aid efforts to track progress in PCSD in the implementation of SDG 15.

Table 4.12. Indicators for tracking progress on PCSD in relation to SDG 15

SDG 15. Protect, restore and promote sustainable use of terrestrial ecosystems

	PCSD priorities	Useful indicators	Data sources
Trade-offs	*Improving agricultural productivity (SDG 2.3) without impeding efforts to halt biodiversity loss (SDG 15.5)*	▪ Potentially most environmentally harmful agricultural support ▪ IUCN Red List Index	▪ OECD Green Growth Indicators for Agriculture ▪ International Union for Conservation of Nature
	Improving agricultural productivity (SDG 2.3) without impeding efforts to reduce emissions (SDG 13) from deforestation (SDG 15.2)	▪ Potentially most environmentally harmful agricultural support ▪ Support to REDD+ (USD) ▪ CO_2 emissions caused by land-use change (Mt CO_2)	▪ OECD Green Growth Indicators for Agriculture ▪ OECD Environment Statistics
Synergies	*Increasing the incomes of small-scale food producers (SDG 2.3) by restoring degraded land and soil (SDG 15.3)*	▪ Food production per unit of agricultural land (tonnes/hectare) ▪ Average income of small-scale food producers (forthcoming)	▪ OECD Agriculture Statistics ▪ FAO AGRIS Project
Transboundary policy effects	*Limiting deforestation (SDG 15.2) in producing countries resulting from domestic imports of e.g. palm oil/soybeans*	▪ Palm oil/soybean production (tonnes or cultivated area) ▪ Imports/exports of palm oil (tonnes) ▪ Rate of deforestation (%) ▪ Share of certified imports (%)	▪ Oil World Database ▪ OECD-FAO Agricultural Outlook ▪ National Trade Statistics ▪ FAO Global Forest Resources Assessments
	Reducing illicit financial flows to and from other countries resulting from trade in illegal wildlife products (SDG 15.7)	▪ Trade in e.g. elephant ivory and rhino horn (USD) ▪ Illicit financial flows (USD) ▪ General Trade-Related Index of Counterfeiting for products/economies (GTRIC-p and GTRIC-e)	▪ WWF-IUCN TRAFFIC Wildlife Trade Monitoring Network ▪ Global Financial Integrity ▪ The Economic Impact of Counterfeiting and Piracy (OECD, 2008)
Intergenerational policy effects	*Maintaining (or reversing the loss of) terrestrial biodiversity (SDG 15.5)*	▪ IUCN Red List Index ▪ Terrestrial and marine protected areas	▪ International Union for Conservation of Nature ▪ OECD Environment Statistics

Note: These are illustrative examples. Each country will need to identify and monitor the interactions and policy effects that are most relevant to its own national context and sustainable development objectives.
Source: OECD PCD Unit.

Contributions by Policy Coherence for Sustainable Development Partners

The opinions expressed and arguments employed in the contributions below are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries

Adapting the Commitment to Development Index to new global realities

Anita Käppeli, Center for Global Development

Successful implementation of the SDGs requires reliable analytical tools. Putting such tools in place will enable stakeholders of the 2030 Agenda to learn from each other and track their progress in implementing the targets. We at the Center for Global Development (CGD) have experience with tracking countries' policies through our annually published Commitment to Development Index (CDI). In line with the 2030 Agenda for Sustainable Development, the CDI covers the three dimensions of sustainability: economic, social and environmental. Our experiences with the CDI provide some important lessons for actors involved in the implementation of the global goals. We highlight these lessons below, and describe how the CDI itself will change in the coming year.

Measuring countries' sustainable development policies

Since 2003, the CDI – a composite set of quantitative indicators – has been measuring the policy efforts of 27 OECD countries and how they impact the lives of people in lower- and middle-income countries. The CDI measures policy coherence in seven dimensions: aid, finance, technology, environment, trade, security and migration. With its annual ranking, it aims to provoke conversations and enable learning processes between civil society and policy makers within and among countries. The CDI highlights that high-income countries can support sustainable development globally in ways beyond generous and high-quality aid policies.

Through its scoring system, the CDI acknowledges countries that enable financial transparency and comply with the international investment framework. It encourages countries to invest in technological research and development, and to put in place policies that protect the environment and prevent overfishing. It also takes into account open trade policies, contributions to the global security regime and peacekeeping efforts, as well as open immigration policies. Scores are reduced for imposing barriers to sharing technology with or importing from developing countries, selling arms to poor and undemocratic nations, and for maintaining policies that harm global public goods.

In line with the SDGs, the CDI takes a holistic approach covering the economic, environmental and social dimensions of development. Its distinctive role is to assess *policies* rather than outcomes and looks at how these policies contribute to or hinder other countries' development. Consequently, the CDI highlights spillover effects of high-income countries' policies.

Lessons learnt from 15 years of the CDI

Fifteen years of publishing the CDI and tracking progress in countries' policy efforts enables us to share a few lessons learnt. Five recommendations could be applied to the way we deal with measuring and tracking progress in implementing the global goals:

- ***Transparency**:* Credibly tracking policies – or in the case of the SDGs, outcomes – requires transparency about methodology and data sources. Equally important is clarity regarding the comparability of results and dealing with the lack or sparsity of data.
- ***Comprehensibility**:* Many countries are willing to discuss their CDI results and learn from each other. However, to be valuable, compelling and used frequently by its target audience, this information should be easily comprehensible for all stakeholders.
- ***Awareness and communication**:* A set of composite indicators is an excellent tool to draw attention to critical policy issues and start conversations with possible agents for change. A communication strategy for effectively targeting the main audience should be put in place.
- ***Evidence**:* As data availability evolves and evidence improves on how best to achieve outcomes, there is a need to continuously adapt methods for tracking progress. The development of monitoring tools can itself foster more data collection and research.
- ***Interlinkages**:* Tracking the implementation of the SDGs raises questions regarding interlinkages between individual goals and targets. When dealing with CDI outreach we are often confronted with the question of interlinkages between different policy fields. While we are unable to provide a definite answer to the interlinkages between the SDGs, monitoring individual targets and raising awareness about policy coherence and trade-offs between different goals and targets can be a valuable contribution to the discussion about the 2030 Agenda. It raises awareness with decision-makers and decision-shapers about how individual policies and actions are linked to outcomes affecting the global goals.

How do we plan to adapt the CDI to new global realities?

For a decade and a half, the CDI has highlighted the policy efforts of powerful development actors and illustrated leadership in development efforts. While the CDI remains a valuable tool for measuring policy coherence, the environment in which it is produced has changed: the SDGs have replaced the MDGs, new global issues have appeared, and emerging middle-income countries have diversified the donor community. Also, protectionist sentiments have recently emerged in some countries, while global issues such as climate change, gender, inequality and migration are rightly receiving more attention. The Center for Global Development will revise the Index over the next three years to make sure it remains at the cutting edge of research. By involving leading thinkers, policy makers from both high-income and middle/low-income countries and interested civil society groups in our fundamental review process, we will ensure the inclusion of a variety of views and perspectives.

Achieving the SDGs and building resilient societies – the overarching theme of this year's HLPF – can best be achieved through a learning process fostered by communication of best practices and exchange of ideas between practitioners, policy makers and civil society, something we want to profit from in our review.

With these efforts, the new CDI will complement the SDGs rather than compete with them. In the spirit of leaving no one behind, the SDGs draw attention to each country's progress toward and path to sustainable development, rightly so. Still, within the

universal transformations envisaged in the SDGs, major economies – whose policies have the biggest spillovers to others – should have higher ambitions for their efforts and can expect increased scrutiny of their contribution. By tracking and comparing these policies consistently and comprehensively, the CDI will help accelerate progress on the SDGs.

Lessons learnt from applying network analysis to SDG 7 on Energy in Sri Lanka

Navam Niles, Janathakshan Gte Ltd and Karin Fernando, Centre for Poverty Analysis

Agenda 2030 and the Sustainable Development Goals (SDGs) are designed to be indivisible and interconnected amongst various dimensions. While their implementation is a global process, the main responsibility falls upon governments, thus requiring government action to achieve this purpose. Public policies are a central tool for implementation of Agenda 2030, and coherence between public policies will determine their effectiveness. In order to encourage governments and other entities to work towards policy coherence, it is necessary to provide background evidence, tools and processes to assist their efforts.

In Sri Lanka, the Centre for Poverty Analysis (CEPA) and Janathakshan Gte Limited experimented with a framework for studying interconnectivity and balance using network analysis. The study examined national policies linked to SDG 7 on energy and how they aligned to achieve the objective of "clean energy security".

As a first step, it was necessary to define the elements of clean energy security within the SDG agenda. This was done by linking literature on clean energy to the three dimensions of sustainable development. For the environmental dimension, elements used were: renewable energy (7.2), energy efficiency (7.3), and electrification. For the social dimension, elements used were: energy access (7.1) and energy affordability (7.1). For the economic dimension, elements used were: energy reliability (7.1) and efforts to reduce fossil-fuel subsidies. These formed the basis of the analysis to determine balance of the polices to the three dimensions of sustainable development. This was done by taking each policy statements in a set of selected policies related to energy and referencing the alignment of each statement with the clean energy elements. The exercise demonstrated the usefulness of defined criteria for clean energy security by which to assess the statements.

Furthermore the analysis also looked to establish interconnectivity with other SDGs. First, a baseline was developed by surveying the literature on interconnectivity (Le Blanc, 2015[54]) and balance (Cutter, 2015[55]). The baseline established a disproportionate balance between the environmental, social, and economic dimensions – 44%, 33% and 22% respectively. The baseline established a minimum interconnectivity with seven SDGs: 1, 8, 9, 10, 11, 12 and 13. Next, the set of policies were surveyed for alignment with various SDG targets.

The result showed that in the context of balance, the policies were distributed disproportionately across the environmental, social, and economic dimensions – 50%, 33%, and 17% respectively, similar to the baseline. In the context of interconnectivity, the policies were linked to all the expected SDGs but also other SDGs, such as SDG 2 and SDG 15.

The results and visualisation for this study was done using network analysis and it showed that this type of exercise can help policy makers identify crosslinks and ripple

effects. It demonstrates the need to examine the skew in the orientation of environment policy, for example, against economic elements that still rely on fossil fuels to meet energy reliability objectives. It thus highlights the importance for policy makers to use such coherence tools to help identify and promote synergies and, more importantly, recognise and reconcile trade-offs amongst the different dimensions of sustainable development.

The exercise also shows that existing policies are a good starting point from which to work on coherence, but that the strength of the analysis is dependent on the thoroughness of the policies. Policies made by different parties using different logic models and objectives provide varying depth and description that can limit the analysis. The exercise also shows the need for stakeholders, who are the implementers, to be involved in such scoring exercises in order for the analysis to be able to go beyond policy prescriptions and to ground the scoring in the practical aspects of operationalisation.

The study indicates that tools such as network analysis can be used successfully to identify crosslinks but require further work in order to improve the rigour of analysis and the practicality of its application.

This study was possible due to the support and guidance received from the Southern Voice Network on the post MDG Development Goals. The full paper, "Implementing the SDGs Responding to the Challenges of Interconnectivity and Balance" can be downloaded here. (http://southernvoice.org/implementing-the-sdgs-responding-to-the-challenges-of-interconnectivity-and-balance/)

Tracking SDG activity in national parliaments: a technological answer

Research Center on Policy Coherence for Development (CIECODE)

The cross-cutting nature of the Sustainable Development Goals (SDGs) presents a unique opportunity to approach the main social, environmental and economic challenges humanity is facing in a way which truly reflects their real complexity. At the same time, the transversality of goals and targets represents a challenge for the implementation, evaluation and monitoring of Agenda 2030 for public institutions, civil society organisations or media outlets that have organised their processes and structures according to the traditional "vertical" distribution of thematic policies.

In some countries, policy makers are not yet able to link the SDG goals to the public policies they work on due to a lack of knowledge and understanding of the thematic patchwork behind the Agenda. This complexity also hampers efforts to track and gather information on SDG-related political activity proposed or approved so far. The transversal nature of the SDGs is also likely behind the widespread lack of explicit references to the SDGs by the media, who have traditionally covered news related to issues included in Agenda 2030 (i.e. pollution, gender equality, food waste and forced labour, among others).

In many countries, this situation adds to the already problematic availability of and open access to relevant public information. Many public institutions have not yet understood their duty to proactively make accessible, in a reusable format, all data they produce. This complicates monitoring of countries' advances and setbacks in implementation of the SDGs and contributes to the disaffection and detachment of citizens from the basic functioning of decision-making processes related to the SDGs at the local, national and international levels.

Overcoming obstacles with technology

In order to help overcome these obstacles, CIECODE (a Spanish think-tank specializing in policy coherence for development) is adapting its innovative technological tool TiPi to the framework of Agenda 2030.[14] TiPi – which stands for Transparency, Information, Participation and Influence – gathers all SDG-related information published by the Spanish national parliament into a database and, through an automatic process of massive-tagging, classifies it according to linkages to specific SDG goals or targets. It then offers this information freely and openly through an online browser for users to search, find and download.

Through an intuitive and attractive interface, TiPi provides relevant information about parliamentarian SDG-related activity which might not be obvious at first sight. Which SDGs are affected by a certain legislative initiative? Which receive the most attention by MPs, and which are being left behind? Which MPs are most active in the implementation of the 2030 Agenda, and who is neglecting it? More importantly, TiPi provides a cost-efficient means of analysing political activity from a PCSD perspective by detecting all legislative initiatives related to a goal or target being proposed and discussed at the same time across different parliamentary committees.

TiPi combines advanced computer science – needed to scrap thousands of PDF files where legislation is published and transform them into a structured database – with the more traditional knowledge of policy makers, CSOs and academia, which is needed to build an SDG thesaurus that can automatically link political initiatives with their related goals and targets. By transferring this expert knowledge to users, TiPi helps them overcome the complexity of the SDG's structure and to observe political activity from a qualified perspective. TiPi also helps to close the existing gap between public information and accessible and useful information. With its online search engine, key information needed for monitoring and reporting of SDG-related policies will now be available, free and tidy, just one click away.

Open parliaments, policy coherence and the Agenda 2030

National parliaments have a key role in the SDG implementation process. They are the most relevant and best-positioned public institutions to ensure coherence with sustainable development in the hundreds of thousands of laws, legislative initiatives, public plans and budgets that will be passed in each country in the years to come. By opening and structuring the information of national parliaments, TiPi will facilitate this fundamental task and, at the same time, help CSOs, journalists and individual citizens hold national parliaments accountable for their responsibility to achieve it.

TiPi will also make it easier for the executive branch to evaluate the implementation of the SDGs in legislation. This potential has recently been acknowledged by the Spanish government, which will use TiPi as part of the official monitoring and accountability system that the country is currently designing to evaluate Spanish implementation of the SDGs. But TiPi could also expand outside Spain. The tool's code is open and published, and it has been built using open-source software, which will facilitate its replicability and adaptation to other national, subnational or supranational parliaments. Whether it is a country in another continent, a German Länder or the European Parliament who shows interest, TiPi could potentially be implemented in all these contexts and start tracking their SDG-related activity in a short period of time.

In conclusion, the goal behind TiPi is to foster public policies that will lead to the accomplishment of the Agenda 2030 at the regional, national and international levels. In order to achieve this, there are four indispensable ingredients which TiPi facilitates: 1) active, informed and demanding citizens; 2) empowered civic society organisations; 3) capable and critical media; and 4) responsible politicians and public servants, subject to public control. Through better access to information, TiPi helps citizens and CSOs strengthen their capacity to participate in and influence decision making processes. It also provides new specialised sources of information to media in order to foster informed public debate on the 2030 Agenda. Finally, TiPi creates an incentive system for politicians and public servants through the recognition of good practices and more exposure to public pressure and accountability.

Notes

[1] The two sections on policy interactions and policy effects are based upon the *Coherence for Development Report* "Tracking progress on policy coherence for sustainable development at the national level: What and how to measure?", published by the OECD PCD Unit in July 2017.

[2] The OECD Agri-Environmental Database includes indicators related to water resources; water quality; agriculture and land area; soil erosion; ammonia, NOx and SOx emissions; greenhouse gas emissions; energy use and biofuel production; pesticides sales; and farm birds index. The complete database can be accessed at http://www.oecd.org/tad/sustainable-agriculture/agri-environmentalindicators.htm.

[3] Green water is soil moisture from precipitation, used by plants via transpiration. It is part of the evapotranspiration flux in the hydrologic cycle. Blue water is freshwater (surface and groundwater), stored in lakes, streams, groundwater, glaciers and snow.

[4] For more on IEA's energy access methodology, visit www.iea.org/energyaccess/methodology.

[5] A country with higher production-based emissions than consumption-based emissions is a net exporter of emissions; a country with lower production-based emissions than consumption-based emissions is a net importer of emissions.

[6] The OECD's Inter-Country Input-Output (ICIO) Database is the principle source of the indicators produced under the joint OECD-WTO project to measure Trade in Value Added (TiVA). It also contributes to environmental analyses by being a main input into the measurement of CO_2 embodied in international trade. The Database can be accessed at http://www.oecd.org/sti/ind/inter-country-input-output-tables.htm.

[7] The complete data base on fossil fuel support can be accessed at http://www.oecd.org/site/tadffss.

[8] The OECD Metropolitan Database, as well as the OECD Regional Database, can be accessed at http://www.oecd.org/cfe/regional-policy/regionalstatisticsandindicators.htm.

[9] Globally comparable, standardised hectares with world average productivity.

[10] In ecological footprint accounts, CO_2 emissions associated with fossil fuel use are converted into biologically productive areas necessary to absorb them. The carbon footprint is added to the ecological footprint because it is a competing use of bio-productive space, as increasing CO_2 concentrations in the atmosphere is considered to represent a build-up of ecological debt (Global Footprint Network).

[11] Material flows accounts are part of the family of physical flow accounts described in the Central Framework of the System of Environmental Economic Accounts (SEEA), which covers measurement in three main areas (https://seea.un.org):

- Environmental flows. The flows of natural inputs, products and residuals between the environment and the economy, and within the economy, both in physical and monetary terms.
- Stocks of environmental assets. The stocks of individual assets, such as water or energy assets, and how they change over an accounting period due to economic activity and natural processes, both in physical and monetary terms.
- Economic activity related to the environment. Monetary flows associated with economic activities related to the environment, including spending on environmental protection and resource management, and the production of "environmental goods and services".

[12] DMI measures the material inputs into an economy, accounting for the domestic extraction of materials and imports. DMC measures the amount of materials consumed in an economy (i.e. the direct apparent consumption of materials). DMC is composed of two elements, namely the domestic extraction and the physical trade balance (which equals imports minus exports). DMC equals DMI minus exports.

[13] The potentially most harmful support to farmers comprises market price support; payments based on commodity output without imposing environmental constraints on farming practices; and payments based on variable input use without imposing environmental constraints on farming practices.

[14] Information about the adaptation of TiPi to the Agenda 2030 is available at: www.parlamento-ods.org.

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Chapter 5. Aligning domestic and international agendas for Agenda 2030

National governments are ultimately accountable to their citizens for delivering on their international commitments. Effective implementation of the 2030 Agenda, however, requires collective action and policy coherence at multiple levels. The SDGs, and SDG 17.14 on PCSD in particular, recognise the importance of a balanced approach between the economic, social and environmental dimensions of sustainable development. They also call for an effective interface between the national and international dimensions of implementation, consistency among the different international agreements globally, and alignment of the different sources of finance where fragmentation can undermine effectiveness. This chapter comprises external contributions, including from six member institutions of the PCSD Partnership, which look at these broader dimensions of PCSD.

Introduction

Effective implementation of a universal, integrated and transformative 2030 Agenda calls for enhancing policy coherence for sustainable development at multiple levels. While governmental action at the national level will remain the key driver, progress cannot be achieved without stakeholder engagement, collective action across national boundaries and collaboration among international processes and institutions. Collective efforts are at the heart of SDG 17 to strengthen the means of implementation and revitalise the global partnership for sustainable development.

There are a number of ways in which the OECD is fostering partnerships and raising awareness of the importance of policy coherence at the international as well as national and sub-national level. One is through the Multi-stakeholder Partnership for Enhancing Policy Coherence for Sustainable Development (The PCSD Partnership), launched as part of the United Nations Partnerships for the SDGs Platform and hosted by the OECD. The Partnership, now with 33 members, provides a forum for exchange of knowledge and expertise among governments, international organisations, civil society, think tanks and the private sector on the policy implications of SDG implementation. It aims to help governments and stakeholders to strengthen their capacities for analysing policy coherence challenges; adapt institutional mechanisms, policy making processes, and policy coherence monitoring and reporting systems to the needs and vision of the 2030 Agenda and the SDGs; and support national efforts for reporting progress on the SDG Target 17.14 to "enhance policy coherence for sustainable development". Importantly, it also serves to inform coherence among international frameworks including the Addis Ababa Action Agenda, the Paris Climate Agreement, G20 and T20, the Samoa Pathway, Sendai and others. Coherence at this level of international institutions and processes is particularly important for developing countries who receive financial support and/or capacity building. They have to manage a number of different international frameworks, interlocutors, sources of (sometimes fragmented) finance and reporting requirements, often with very limited capacities. Against this background, we have asked our PCSD Partners, as in previous years, to contribute a number of insights and opinion pieces. These pieces are been included throughout this publication. In this chapter, we have included those which highlight some of the challenges and tensions in addressing policy coherence at the international level.

Another way in which the OECD helps to inform policy at the international level is to foster policy dialogue with a wide range of stakeholders. One such opportunity arose to organise an OECD conference (PCD Unit with the Economics Department) jointly with the Agence Française de Développement on 27 October 2017, on the topic "Policy coherence, the SDGs and the UN 2030 Agenda: Grappling with policy interactions and transboundary spill-overs in the global economy". This conference sought to identify a series of systemic issues that relate to the global partnerships tasked with implementing the 2030 Agenda.

The SDG framework brings together global macroeconomic policy co-ordination and coherence (SDG 17.13), enhancing policy coherence for sustainable development (SDG 17.14) and the need to create policy space (SDG 17.15), taking into account different national realities, capacities and levels of development. These SDG Targets recognise the importance of an enabling international environment and global governance framework as essential conditions for "working in partnership" to achieve the Goals. The conference sought to identify the tensions between the national and international levels of

SDG implementation and consider how the system of global institutions can respond to the primacy of domestic politics over global co-operation.

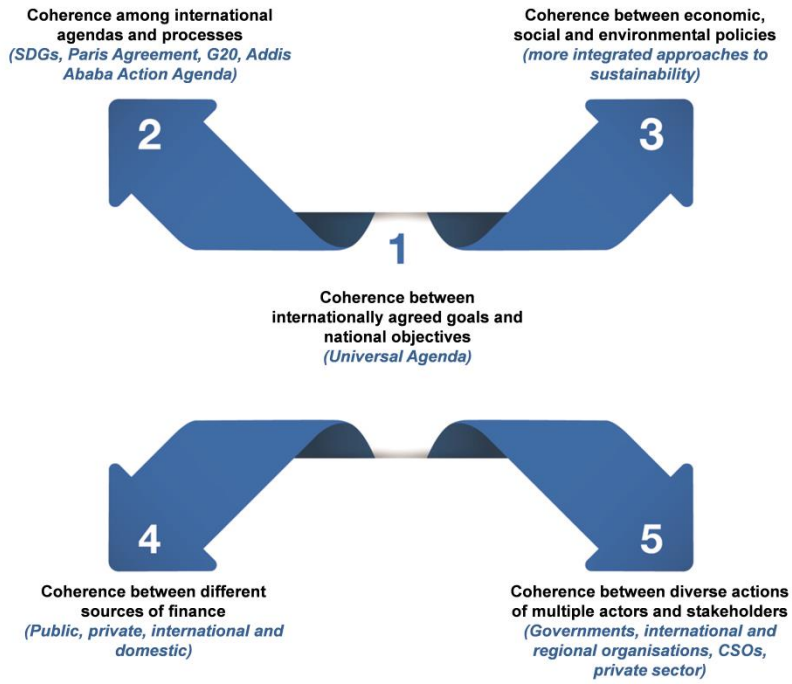
Policy makers have numerous constraints to grapple with, as a result of factors linked to national politics but also to global trends such as geo-economic change, the emergence of global value chains and global warming. In this respect, it is important to consider what paths of implementation are possible, as opposed to simply desirable, and how they are affected by global-domestic linkages.

We have followed up with some of the presenters to the conference to continue the dialogue and asked for guest contributions. The first such contribution, by Colin I. Bradford, Non-Resident Senior Fellow at The Brookings Institution, is presented below in a piece entitled "Long Term Visioning of Systemic Transformation in Agenda 2030 in the Context of Resurgent Primacy of Domestic Politics".

A second contribution, by Jorge Moreira da Silva, Director of the OECD Development Co-operation Directorate, considers policy coherence from the perspective of the sources of finance, entitled "Targeting the Trillions: The Need for a Common Compass to Implement the 2030 Agenda". This highlights some of the challenges raised at a DAC Roundtable discussion on "Bridging international and domestic agendas to achieve the SDGs" held on 13 March 2018.

The chapter also includes a number of shorter pieces by our PCSD Partners, all written in the context of the theme, aligning domestic and international agendas for Agenda 2030 – challenges for global governance.

Figure 5.1. Five complementary levels of coherence



Source: Adapted from OECD (2014), Better Policies for Development 2014: Policy Coherence and Illicit Financial Flows, OECD Publishing. doi: http://dx.doi.org/10.1787/9789264210325-en.

Long-term visioning of systemic transformation in Agenda 2030 in the context of resurgent primacy of domestic politics

Colin I. Bradford, Non-Resident Senior Fellow, The Brookings Institution

The world is now facing increasing friction between internal political primacy for domestic issues and increasing global interconnectivity and interpenetration that transcend national boundaries. Global awareness and linkages are ascendant along with resurgent nationalism. These conflicting force fields raise new questions about how to manage the global-domestic interface and how the global system of international institutions can respond to the primacy of domestic politics over global co-operation.

This conjuncture is occurring at the same moment that there is increasing awareness of the limits of conventional macroeconomic policy management, the core policies at the centre of global co-ordination since the formation of the G5-7 summits in the 1970s, to achieve social inclusion, economic security and a sense of the economy working for the many rather than the few. The systemic transformation necessary for achieving a better balance and more coherence between economic, social and environmental outcomes forces the policy community to reach beyond conventional economic policies to broader, more eclectic and more integrated policies and processes.

The global system of institutions needs to respond to the exigencies of the need for holistic policy and institutional approaches to generate systemic change. Better social and environmental outcomes will only be achieved by integrating across a broad array of sectors, policy tools and institutional processes and by working horizontally across domains, highlighting linkages and externalities. International institutions can help force forward new integrated approaches beyond the conventional economic policy tool box.

The long-term challenges are now clearly evident. It is urgent now to give priority attention to social coherence issues rising on national agendas due to the globalisation backlash, to the surge in urbanisation anticipated over the next twenty years, and to threats to planetary survival due to convulsive climate change and to economic security due to digitalisation by mid-century. Economic, social, political and environmental sustainability are at risk. Systemic transformation to address these long-term challenges is required to manage systemic sustainability domestically and globally. Whereas much of the political initiative and policy innovation must come from internal processes, international institutions have a crucial role to play in stimulating, encouraging and spreading new integrated approaches to systemic transformation.

Politics is a forbidden subject in the international arena. Economics has masqueraded as a technical discipline, devoid of political content. As a result, economics as a discourse has been widely accepted as a professional mode of communications in global policy forums and international institutions. The question is, now that domestic politics has risen in urgency and primacy, can international institutions forge new roles for themselves in relating to domestic political debates and adapt their international functional responsibilities to the new domestically driven context.

"To bridge challenging divides in our economies and societies" (OECD, 2017[1]), international institutions will now have to wrestle with tough political questions in response to the fact that most countries now face systemic risks to their institutional foundations. Governments appear dysfunctional, and markets seem to have failed to generate social outcomes that are politically sustainable. To overcome polarisation of politics and paralysis in policy making, the large political questions are:

- Can centrists politics produce progressive results? Specifically, can governments with strong support from business and the private sector make markets work for all and produce progressive results by achieving greater inclusion and social cohesion? Another way to put this is: can those with the greatest stake in restoring public confidence in markets put in place policies that deliver better social outcomes?
- Can progressive politics respect conservative values and principles? In other words, can leaders with progressive values be inventive in proposing reforms and policies which also enhance core conservative values of individual liberty, property rights, competition, and freedom?
- Can decentralisation, dispersion and subsidiarity produce solidarity? That is, can progressive and conservative leaders frame policy initiatives which can be implemented in ways that involve civil society and the private sector rather than relying entirely on government actions?
- Can the global system of international institutions absorb, translate, formulate and contribute to domestic political debates on values-discourses-politics-policy dynamics without appearing to be technocratic and elitist, distancing themselves from the people and the public arena? Can international institutions adjust to the primacy of domestic politics with new language, style and modalities which are effective in providing knowledge-based innovations without seeming to insist on converting public discourses to global policy technical jargon?

To advance ways toward global institutional adaptation to the new political context, it is first necessary to examine the importance of values in driving domestic politics and determining the foundations of the global order.

Values – domestic discontent and the global order

Most domestic political struggles pivot around the inherent tensions between individualism and community. This tension is also reflected in basic (oversimplified but still relevant) cultural differences between the West, committed to individual freedoms and liberty, and the East, with long civilisational adherence to community (Allison, 2017[2]). Also, many of the global_tensions today pivot around geopolitical competition and global co-operation and co-ordination.

The assumption of neoclassical economics is that atomised units compete with each other in a *laissez faire*, hands-off context of a market economy in which individual liberty is the primary value. These *laissez faire* values define the space where individualism and competition intersect.

After the Second World War, the notion of market economies competing with each other yielded to the need to increase international co-operation among market economies to co-ordinate overlapping policies and manage shocks and spillover effects. The Bretton Woods era was founded on adherence to market economics extended to new understandings of interdependence. This shift toward co-ordination after the Second World War defines the space where co-operation and individualism overlap. Market economies can achieve better economic outcomes by engaging in international economic co-ordination than by relying solely on competition between them.

The rise of the emerging market economies, first in East Asia, then elsewhere, brought to the fore experiments in mixed economy formulations of public-private sector interactions

which modified the "ideal type" of the market economy based on individualism and competition. This emergence of mixed economies based on combinations of market and state rather than choices between them defines the space where community and co-operation converge.

The gaping hole in the world political economy landscape is precisely where the force fields of the competitive market economy and community meet, in which social responsibility is built into the political economy of the market. The current crisis of confidence in the market economy is its failure to produce social outcomes which are politically sustainable This hole clarifies the degree to which there is a void in the political centre and an empty box in the political economy landscape, domestically and globally. The policy tool box in this space is empty because there are very few economic tools for achieving social equilibrium necessary for systemic sustainability and because the failure so far of most economies to achieve social inclusion despite successful periods of economic growth.

The current political tensions between domestic and global issues are exacerbated by the fact that the overwhelming response to public discontent has not been from the left, centre-left or the political centre, but from the extreme right. *The political crisis of today is that there has as yet not been an adequate policy or political response from the political centre.*

Toward 21st-century values

The central challenge facing most societies today is that the market economy is not generating social outcomes that are politically sustainable. One pathway to achieving better social outcomes for greater social cohesion is to formulate a new set of values as the basis for developing political discourses that can be used to formulate innovative policies and a new politics for mobilising support.

The foundations of the post war global order were based on faith that individual liberty for persons, property rights, and competition among economic entities would lead to market-driven socially optimal outcomes. Freedom manifested itself in the institutionalisation of democracy. Confidence in competitive markets and the legitimacy of democratic government were based on these values. The international system is based on sovereignty being vested in the nation states.

The set of post-war values – liberty, property rights, freedom and sovereignty – buttressed competition, the market economy, democracy and the nation-state as normative contexts for action during the last half of the twentieth century.

To achieve greater social cohesion requires a comprehensive approach to stimulate transformational systemic change. For this to occur, there need to be processes for envisioning the future, social engagement, new politics, innovative policies, and co-ordination, none of which were important when the market by itself seemed to promise *deus ex machina* results. These new processes embody means by which humanity can assert social responsibility for better outcomes.

Liberty, property rights, freedom and sovereignty are important, but not sufficient by themselves. The ascendant social values that need to play stronger roles in the future are *fairness*, *respect*, *trust* and *responsibility*. These values lead in turn to core operational instrumentation which can facilitate actions to achieve social cohesion, such as public access, social mobility, economic security and sustainability.

Fairness, for example, implies equal access for all to education, health, nutrition, energy, water and sanitation, and justice. These are basic elements for human development which provide the capacitation of persons for modern life. Social inclusion requires that all people have access to these ingredients for being flexible, useful, productive and capable of contributing to society and the economy, understanding the nature of the civic life and how to manage the fluidity, rapidity and connectivity of living in a globalised world. Fairness is also the right to non-discrimination and equal treatment in social and economic relations. Access is the prerequisite for social mobility and economic security, two of the other operational instruments needed to advance social cohesion.

Respect can have economic meaning by signifying respect for the value of workers by ensuring that their real wages rise as labour productivity increases, breaking the recent patterns wherein rising productivity gains have been accompanied by declining returns to labour as a share of GDP (Trapp, 2014[3]). Reversing these recent patterns is absolutely essential. Social mobility for workers can be achieved through increasing skills development, technical training and bargaining processes to achieve commensurate returns to the increasing value of labour. Mutual respect is also critical within contemporary societies where "difference" is the basis for realising complementarities and understanding rather than the basis of frictions and defensive claims for the upper hand.

Trust means deepening respect to a sufficient level of understanding to enter into economic and strategic commitments in which there is predictability, stability and continuity. Trust is the fundamental glue in economic, trade and investment agreements within and between nations. Individuals in a cohesive society need to trust that there will be economic security in their old age from inter-generational pension systems that are forged on a sound basis. And trust among individuals from very different cultures and backgrounds enables complementarities to be realised which otherwise are foregone by sticking to like-minded participants. Chinese and American policy thinkers and officials agree that strategic trust between the two countries is the most crucial attribute for their relationship to function effectively as a contribution to the global order (Lieberthal and Jisi, 2012[4]).

Responsibility is perhaps the most important public aspect of the new social values. The 20th-century value system relied on confidence in the market to produce equilibrium outcomes, thereby removing the need to assert public responsibility. Responsibility follows from the recognition of interconnectedness and the awareness that social fractures and failures threaten the market economy itself and the governability of societies. Cultivating leadership at all levels of society from both the private and public sector is required to take public responsibility for better social outcomes as the basis for systemic sustainability. Economic, financial, social, environmental and political sustainability depend upon multiple actors taking social responsibility for public outcomes that lend credibility to national institutional arrangements and the governability of nation-states.

Restoring trust and confidence in markets, institutions, governments and leaders could be accelerated by the formulation of a new set of 21st-century values which translate into new political discourses and policy innovations for achieving social cohesion, inclusive markets, and legitimate forms of governance.

The SDGs as embodiments of new values and as supportive frameworks for domestic initiatives to achieve social cohesion

The SDGs taken together can be seen to embody a new set of values which are shared across a wide variety of different cultures. The SDGs are fundamentally a strategy for greater benefits for the many over the few. This strategy implies rectifying the disequalising distributional results from excessive reliance on the supposedly optimal outcomes of free market forces and addressing frontally the failure of economies to be sufficiently inclusive.

The fundamental values embodied in the SDGS for achieving more overall **fairness** through greater social cohesion are:

- **Access** (i.e. infrastructure investment and provisioning of social services): SDG 1 (No Poverty); SDG 2 (Zero Hunger); SDG 3 (Good Health and Well-Being); SDG 4 (Quality Education); SDG 6 (Clean Water and Sanitation); SDG 7 (Affordable and Clean Energy).
- **Social mobility** (i.e. investment in human capital for social mobility and fairness in the workplace*)*: SDG 8 (Decent Work and Economic Growth); SDG 9 (Industry, Innovation and Infrastructure) SDG 3 (Good Health and Well-Being); SDG 4 (Quality Education); SGD 5 (Gender Equality).
- **Economic security** (i.e. deep rooted reforms for systemic transformation): SGD 5 (Gender Equality); SDG 8 (Decent Work and Economic Growth); SDG 10 (Reduced Inequalities); SDG 16 (Peace, Justice and Strong Institutions).
- **Sustainability** (i.e. investment in_natural capital for planetary sustainability): SDG 11 (Sustainable Cities and Communities); SDG 12 (Responsible Consumption and Production); SDG 13 (Climate Action); SDG 14 (Life below Water); SDG 15 (Life on Land).

The core values of *access, social mobility, economic security, and sustainability* lie at the centre of the policy space, defining a sweet spot where domestic political norms of individualism and community and global competition and international co-operation meet. New values for achieving social coherence define a policy space in which a variety of mixed economy modalities can position themselves, avoiding the ideological tension in the 20th century between free markets and state-run economies. As Martin Albrow has pointed out, "a world of harmonious societies each base around different core values" is fundamentally different from universal values articulated by the West (Albrow, 2017[5]).

Note, too, that each of the four clusters of SDGs that are most closely aligned with each of the four core values imply four different types of policies for achieving them, namely investment in infrastructure and social services to achieve access, investment in human capital for achieving fairness in the workplace by increasing social mobility, deeply rooted reforms to achieve institutional change and systemic transformation and economic security, and investment in natural capital for planetary sustainability, Infrastructure investment is the essential driver of systemic transformation.

These are values that expand opportunities and benefits for individuals and at the same time strengthen the social fabric in which individuals have their livelihoods. They are both individualistic and communitarian goals, unencumbered by ideological content. They promise "better futures" and better social *and* environmental outcomes. They fill in the gaps and missing elements that the market economy on its own has left behind. There

is every reason why all societies would benefit from using the SDGs as a framework for national conversations about how to improve the social and environmental benefits of the market economy.

Taken together, the SDGs do constitute a "shared strategic vision" which could fill in the empty political space left by modern experience in managing the tensions between individualism and community, on the one hand, and competition and co-operation/co-ordination, on the other. They are *an* answer to disenchanted publics who feel left out or left behind, but they cannot be *the* answer, which must come from domestically driven political processes.

The supportive work of the global system of international institutions with officials from national governments to advance Agenda 2030 and the SDGs is now largely a technocratic conversation about monitoring and evaluation, targets and indicators, and key areas for action. It reflects the political process, but is separate from it. It is easier to grasp how domestic political forces would re-shape the global order than it is to see how global goals could enter domestic political processes overtly as the principal drivers of internal politics.

The result is that in the international arena, politics is not the accepted discourse, whereas economics with the cloak of apparent neutrality bestowed by economic jargon passes as a technical discourse, which is patently not the case. Faith in market prices as reflecting true value (shadow prices), the assumption that market forces generate equilibrium outcomes and beliefs that financial markets are self-regulating have brought the world to the place it is in today, which is that carbon has been seriously under-priced (exacerbating climate change to the level of planetary risk), that social outcomes are inadequate to sustain political stability and that financial risk is under-regulated putting the world economy at risk once again.

This current situation exceeds the boundaries of economic technicity and is now the political challenge of our time: how to manage market economies for the benefit of the planet, people and societies as a whole and not advantage the few over the many. The role of global institutions now is how to provide knowledge, research, innovative ideas and fresh thinking for publics and policy makers, including political leaders, to chart pathways toward systemic sustainability from the current context of tension, disruption and disequilibrium. International institutions need to be sounding boards, creative caldrons and sources of innovation for national leaders seeking new pathways forward toward "better futures". International institutions also provide "walkways" between domains which make clear the interconnectedness of the social, environmental and economic issues in peoples' lives and in policy practice.

Perhaps new co-ordination mechanisms are needed to intensify co-operation among international institutions. More important is that all actors have a mindset of broad engagement, horizontal integration, collaboration and co-operation driven by a keen awareness of the conjunctural nature of these challenges globally, nationally and locally.

Implications of prioritising social cohesion for global governance and the global order

Policy coherence in the practice of governance is a high aspirational goal that competitive politics and bureaucratic manoeuvring tend to overwhelm. The co-ordination of diverse national governmental bodies to achieve policy coherence requires first and foremost a common vision to mobilise domestic public and private sector efforts. Without filling the

void in the policy and political space left by inadequate social outcomes with a shared strategic vision, it is hard to see how national societies can regain confidence in the market economy and mobilise the internal policy coherence within governments to achieve politically sustainable social outcomes.

Sergio Bitar has written that effective global "governability" depends on effective national governments capacity to govern effectively (national "governability"). As a result, filling the empty box for the global order depends first and foremost on filling the empty box for national societies (Bitar, 2018[6]). For the global order to function effectively, national governments will have to bring new national experiences and new values into global governance as foundations for a new global order. Without national foundations of common values and shared visions, a fractured global order based on geopolitical conflict, national advantage and competing doctrines will be the result.

Prioritising domestic social cohesion based on shared core values of access, social mobility, access, economic security and sustainability could provide a new foundation for the global order that would still be based on the market economy, expanded international trade and open societies, but does not enshrine competition, free markets and free enterprise as mechanisms for optimising social and environmental outcomes. The social content generated by new values, new politics and new policies could fill the empty box where market competition meets social imperatives for communitarian and co-operative behaviours and better social outcomes.

Whereas more attention by G20 leaders to the SDGs as domestic priorities is a political necessity and would also strengthen the global order, highlighting the SDGs as an entry point into domestic debates on social cohesion could appear to be an outside-inward process which risks being perceived as the global imposing priorities on national societies. Therefore, the important role for the SDGs would be more as a frame of reference with which national officials can communicate among themselves in global platforms such as the G20, UN, OECD, IMF, World Bank and others. This global architecture already provides important opportunities to compare experiences, engage in peer reviews, selectively borrow from each other policy innovations that can be adapted to differing domestic contexts, and, with the support of international organisations and think tanks, develop and consider alternative pathways to sustainability and social cohesion.

The essential ingredients for the new global order are new values, new political discourses and new politics from which emerge new policies for generating better social outcomes for the many rather than the few. The impetus must come from domestic political processes for visioning the future, engaging society, developing policy innovations, creating new politics and co-ordinating national efforts. The political primacy of domestic hurt requires that the responses to it originate from the domestic sources of public pain. Nation-state domestic politics and value articulation will need to drive new politics and new policies which in turn would form the basis for a new global order.

Policy coherence is an attribute of visioning the future in a coherent way such that the key elements move from menu to vision. But strategic vision, once adopted, then becomes the driver of the internal policy co-ordination and coherence needed to implement the vision to achieve systemic transformation. Politics is the public process between leaders and societies needed to create the vision and to mobilise support for its implementation. Governmental processes kick in once the politics of national visioning and mobilisation have been successful, at which point international institutions once again can be helpful

in guiding internal co-ordination efforts based on the policy coherence embedded in the strategic vision. These are institutional processes of governance involving governments, rather than political dynamics involving relations between leaders and publics, in which international institutions have important roles to play. The OECD's work on policy coherence over the last twenty years has come a long way and provides very useful resources for strengthening national government practice.

This sequence from SDGs to domestic politics to international institutional support can be extended to the three major strategic challenges before the global community: social cohesion, urbanisation and climate change. Each of these challenges is being managed globally by a peak level informal network of senior officials under the umbrella of the United Nations: the UN High-level Political Forum on Sustainable Development (UN HLPF) to assess global progress toward achieving the SDGs and fulfilling the promise of Agenda 2030; the UN Special Envoy on Cities and Climate Change headed by Michael Bloomberg; and the United Nations Framework Convention on Climate Change (UNFCCC) in charge now of following up on the Paris Agreement.

But in each of these major arenas there are multiple actors and platforms for co-ordination, with the OECD, the World Bank and the regional multilateral development banks playing significant substantive, financial and co-ordination roles on social cohesion, cities and climate change. The G20 Summits and other G20 ministerial groupings and engagement groups are also continuously involved in issue development, implementation assessment and oversight on these three global challenges, among others. Infrastructure investment and investments in human, natural and social capital on a massive scale are crucial for the transformational change necessary to achieve systemic sustainability which requires co-ordination among international institutions as well as engagement with private sector businesses and financial institutions.

The effort to orchestrate the myriad of players at different levels within and between these three major domains must be a constant preoccupation for success, which means that the mindset of broad engagement, horizontal integration, collaboration and global co-operation must be continuously on high alert. The global system of international institutions and global governance mechanisms like the G20 are indeed at the centre of meeting these three global challenges even as other major players are significant and even primary on the ground in cities and countries around the world.

Targeting the Trillions: The need for a common compass to implement the 2030 Agenda

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Remarkably, in crafting the 2030 Agenda, the international community was able to set a consistent, ambitious, and coherent set of objectives to address three of our most pressing global challenges – climate change, universal sustainable development, and finance for development. To implement this set of agreements and in response to the USD trillion dollar annual funding shortfall for the SDGs alone, an international call was issued to transform assistance from "billions into trillions."

In part, the appeal was practical: doubling since 2000, Official Development Assistance (ODA) remains a strong funding pillar for the SDGs, standing at USD 146.6 billion in 2017, and a backbone for least developed country partners – where it represents over 70% of total external finance (OECD, 2017[7]). However, as strong as ODA is, it cannot fully

address the objectives set forth in the 2030 Agenda. New financial sources must be harnessed.

But the call to mobilise new partners is broader than funding alone. Global challenges such as climate-related natural disasters, forced migration, and the financial crisis have made us increasingly interconnected. Pressure for a coherent strategy to help developing countries build resilience has crossed all borders. The invitation for new resources is also an expression of the shared responsibility of the global goals, including among national governments, multinational companies, philanthropy, and citizens. Inherent in the 2030 Agenda is the acknowledgement that achieving inclusive growth in all countries requires leaving no one behind, especially in countries most in need.[1]

Action followed the call: today, there is an understanding that the trillions exist for sustainable development. We have identified significant sources of finance for development beyond ODA, with new tools to track providers outside OECD Development Assistance Committee (DAC) countries – such as through the TOSSD measurement framework – and to estimate South-South co-operation and triangular co-operation activity. These estimates show how even small amounts of funding can drive co-created solutions to overcome today's toughest environmental, economic and social barriers to development. Also, OECD DAC countries are using ODA in new ways to mobilise additional resources, such as through blended finance, social impact investing, and green finance. An OECD survey showed that ODA was used to drive USD 81 billion in additional private finance to developing country partners over four years.[2]

Now, we need to ensure that the trillions are targeted most effectively. How will we use additional finance for sustainable development to drive coherence, versus fragmentation? For example, only a small share of investments mobilised from the private sector by development finance providers has yet been applied to LDCs. Answering this question, we face a race against the clock: will need to double the pace of poverty reduction – from 48 to 96 people a minute – to eliminate poverty by 2030 (OECD, 2017[8]). Three years after Addis, we have an urgent need to co-ordinate the diverse finance flows and actors by implementing holistic finance for sustainable development policies.

To direct additional finance to support coherent programmes and achieve development results, we need a common compass for implementing the 2030 Agenda. To advance this, we call for three paradigm shifts: on data, on policies, and on actions, which the OECD is supporting through a forthcoming *Global Outlook for Financing for Development*.

Data is central to our ability to measure impact and results and gather better evidence on what works. We need coherent polices to map partner countries' needs that is aligned with SDG financing gaps to make sure that additional finance actually responds to national needs. Essential to this effort, we need to invest in stronger national data systems in developing countries. The OECD *Development Co-operation Report 2017* exposed alarming data breaches: 51 countries do not have the capacity to produce core, basic statistics (OECD, 2017[9]). We also need to better capture the "development footprint" of the different implementing actors of the global goals. One dollar of Foreign Direct Investment (FDI) spent on child labour or polluting activities currently equates to one dollar spent on clean energy. In this context, how will we be able to make aid 100% Paris compatible?

On policies, we need to better understand interactions of all finance flows, and the catalytic effects of new sources of finance for development. This means investing in the enablers, from aid for trade, to domestic resource mobilisation, ICT and infrastructure.

Development co-operation approaches must prioritise helping developing countries improve their domestic policies to use all finance for development most strategically. This extends to the OECD's work to improve tax collection, track illicit financial flows, improve business and competition environments and promoting due diligence in the extractive sector, among others. We also need to support the provider behaviour, for example, by better equipping them to measure development results of programmes involving multiple sources of finance, and with policy frameworks like the *OECD DAC Blended Finance Principles* (OECD, 2018[10]) and through the Global Partnership for Effective Development Co-operation. The forthcoming Global Outlook will review a number of OECD countries' domestic policies in light of the Addis Agenda and their impact on finance for development and development effectiveness. The Global Partnership's 2018 Monitoring Report will, building on a strengthened and updated framework, provide new evidence on the effectiveness of development co-operation, looking at governments and beyond. It also works towards forming new principles on the effectiveness of private sector engagement through development co-operation.

Finally, on action, we need to bring holistic approaches to the field and operationalise Addis, though a three-pronged approach: first, by promoting finance for sustainable development approaches at all levels through better leadership; second, by better aligning finance strategies with country development strategies through improved diagnostic and co-ordination tools; and, third, by better grasping the specificity of each SDG sector and how it affects the roles of various actors and the choice of instruments for development finance strategies.

With the international community taking stock of the 2030 Agenda in 2019, the successful implementation of the 2030 Agenda will ultimately depend on our ability to preserve the coherence and consistency of the three agreements, both at the level of national implementation and in the context of the ongoing international negotiations and follow-up discussions.

Contributions by Policy Coherence for Sustainable Development Partners

The opinions expressed and arguments employed in the contributions below are those of the author(s) and do not necessarily reflect the official views of the OECD or of the governments of its member countries

Strengthening integrated approaches for promoting the SDGs: What role for the High-level Political Forum?[3]

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There is no Planet B. Humanity needs to acknowledge this and work together to implement the 2030 Agenda and its 17 Sustainable Development Goals (SDGs) in a relatively short time.

The 2030 Agenda lays out a unique vision for the future of humanity. Its central challenge lies in combining climate change mitigation and environmental protection with social and economic development to ensure human prosperity. Finding this balance requires fundamental change in the substance and implementation of public policy, but equally so for the process through which such policies are determined. The inclusion of a dedicated target for promoting policy coherence for sustainable development (PCSD) in

the 17 SDGs emphasises the need for integrated approaches to promoting global sustainable development. Doing so involves synergies and trade-offs, with dialogue at an early stage across policy areas being essential, as well as adequate assessment of the potential impact of various policy options.

As the term implies, integrated approaches require bringing together various policy communities and domains which have until now lived rather separated lives. Most of us have long held the idea that distinct policy domains serve distinct target groups, to the extent that in some countries the minister for agriculture may be colloquially referred to as the "minister of the farmers". Moving towards a setting in which there is broad-based ownership within a society – as well as beyond, by considering cross-border effects – entails rebalancing such policies while retaining the identities that sustain them.

Learning trajectories towards integrated policies differ strongly from one country to the next, as well as in the regional and international organisations through which they operate. For some countries, promoting integrated approaches requires reconsidering policy hierarchies and arbitration processes. For others, it necessitates further investment in promoting dialogue across departments and stakeholder groups. For all, it requires new, more and better information and research as the need to identify interactions across policy areas – whether intended or actual – increases exponentially.

Given this shared learning trajectory, the annual UN High-level Political Forum (HLPF) provides a key platform for discussing progress and current challenges in implementing the 2030 Agenda. In 2017, the second HLPF saw the number of participating countries' national progress reports doubling to 44. This increasing interest was also reflected in the joint statement by all the G20 states at the Hamburg summit that reiterated the importance of the United Nations and the HLPF for implementation of the 2030 Agenda.

The two weeks of reporting in New York are the conclusion to an intensive preparatory phase at national level involving supporting publications, multi-stakeholder dialogue and panels of civil society experts. These preparations represent countries' actual contributions to implementing the 2030 Agenda in that year.

The 2017 HLPF was the first time that national reporting was supplemented by "thematic reviews" of selected SDGs. Under the heading of "Eradicating poverty and promoting prosperity", the HLPF took an in-depth look at the topics of poverty (SDG 1), hunger (SDG 2), health (SDG 3), gender equality (SDG 5), infrastructure (SDG 9), marine ecosystems (SDG 14) and global partnerships (SDG 17). Less-developed countries could set their own priorities in their reports or concentrate on the seven selected SDGs. Because of this narrower thematic approach, the discussions developed a strong focus on the social and economic dimensions of the 2030 Agenda, with the environmental dimension fading into the background.

Narrowing the discussion to a smaller range of topics proved helpful from a practical perspective. It enabled the poorest nations and those with lack of capacity in particular to share the reporting burden and, where relevant, form thematic partnerships with other countries. It also allowed discussions to reach beyond the level of generalities and touch upon the actual policy substance promoted under the selected SDGs, even though they still covered very large areas.

Thematic reviews could be a very useful way of moving the discussion towards a focus on critical interdependencies between sector policies. For instance, increased evidence on cross-sector impacts could inform reconsidering market-distorting or environmentally unsustainable subsidy schemes. As such, thematic reviews have the potential to identify

particularly critical trade-offs among development, growth and environmental protection and to facilitate information sharing on experiences and challenges in systemic change processes. This potential did not come to fruition at the 2017 HLPF, however; the thematic reviews rather lost sight of the interactions between individual policy areas.

Future thematic reviews should therefore be redesigned to take account of the integrated nature of the 2030 Agenda. Instead of looking for isolated approaches in individual policy areas, we need to find mechanisms that forge links among social, economic, environmental and political matters. Only then can we talk about trade-offs and synergies, winners and losers, and the sticking points in the implementation of the 2030 Agenda.

Knowing that the transition towards sustainable development implies increased and competing demands for natural resources, we see strong potential for thematic reviews that look at a subset of interlinked SDGs. From one year to the next, a given set of selected social and economic SDGs could be connected with its environmental foundation (i.e. SDG 6 and SDG 15). This approach would facilitate informed debate as to what has been achieved in various sectors and how it relates to a country's or region's biophysical condition, directly contributing to the aforementioned process of dialogue and learning across policy sectors at the global level. In this context, the agreements concluded by the G20 states in Hamburg on setting up a voluntary learning mechanism for the 2030 Agenda in which countries outside of the G20 can also participate, and on consolidating dialogue with non-state actors, are also a positive step.

It is now necessary to push ahead with dialogue on improving the design of thematic reviews. Progress must be measured against individual countries' complex challenges and the aspiration of gaining systemic knowledge and translating it into recommendations for policy action. Thematic reviews which take on the cross-cutting character of the SDGs can encourage recommendations for systemic action and promote understanding across policy sectors.

National reviews stand to complement thematic reviews by providing grounded reality checks. The open and diplomatic setting of the HLPF will probably not encourage many countries to openly admit political hurdles and other stumbling blocks towards implementing an Agenda all signed up to. Still, reporting countries may enrich the discussion on integrated approaches by presenting good practices and detailing processes through which broad-based and long-term sustainable development solutions have been found.

Multi-level SDG policy coherence: Aligning intergovernmental agendas with the 2030 Agenda

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Policy coherence at the national level requires political commitment, backed by action plans, to pursue a particular policy direction. National governments are also responsible for ensuring policy coherence at the intergovernmental level. In this space, states party to multilateral environmental agreements (MEAs) and other international treaties and organisations are the principals – essentially board members – for the respective agreement bodies or organisations. The secretariats and work streams adopted and pursued under the intergovernmental arrangement are agents of the principal, and must follow the mandates set by the parties.

The mandates of many MEAs overlap with targets and goals in the Sustainable Development Goal (SDG) framework. In some cases, these overlaps were intentionally built into the SDGs, such as targets under Goal 15 (Life on Land) that incorporate the year 2020 for achieving similar action on the Aichi Biodiversity Targets under the Convention on Biological Diversity. In other cases, overlaps between the SDGs and existing MEA work streams may be (and in most cases have been) mapped according to the SDGs, showing the extent to which the work streams and 2030 Agenda align. While such an effort is a start towards bringing the work under an MEA in line with the SDG framework, true policy coherence will require agendas and mandates to be specifically aligned so that principals can clearly articulate their SDG-related mandates, specific linkages and challenges related to the SDGs can be identified, and the agents can truly transform their approach to SDG implementation.

We are following efforts to align agendas that are underway, and note that decision making processes on this scale of participation and action take time, to ensure that the voices of relevant actors are heard and proposals for new mandates are carefully constructed. A prime example is the current consideration by the highest decision making body in the United Nations to align its own development system with the 2030 Agenda for Sustainable Development.

In December 2016, the UN General Assembly adopted the Quadrennial Comprehensive Policy Review (QCPR), a periodic policy instrument that was used to align the UN development system with the 2030 Agenda. In line with a mandate from the 2016 QCPR resolution, the UN Secretary-General developed proposals for reforms to the UN development system, which UN Member States are now discussing. As host of the negotiations to adopt the SDGs in the first place, it is highly symbolic and critical for the United Nations to model a coherent policy approach to implementing the SDGs.

Many MEA Conferences of the Parties (COPs) meet only every two or three years, so it has taken time to place the 2030 Agenda on the COP agenda, to explore linkages and options under the Convention and move forward with actionable decisions. An example of one MEA's efforts is the process organised by the UN Convention to Combat Desertification (UNCCD), which has led the way to develop a scientific basis for assessing and measuring land degradation neutrality (LDN) – the subject of SDG target 15.3. The UNCCD began organising discussions on the concept of LDN in the lead-up to the 2012 UN Conference for Sustainable Development (Rio+20), which considered and ultimately agreed to call for achieving a "land degradation neutral world". The UNCCD facilitated a scientific evaluation of the concept and what it would mean to achieve LDN on the ground, followed by pilot projects in several countries to provide a proof of concept, before expanding the effort to more countries on a voluntary basis.

In October 2015, at UNCCD COP 12, one month after the SDGs were adopted, the Parties agreed that striving to achieve SDG target 15.3 "is a strong vehicle for driving implementation of the UNCCD." However, reaching this alignment was several years in the making. This multi-year process demonstrates that many actors pulling in the same direction can move policy forward, but also points to the time necessary to align agendas.

As with the eight building blocks for policy coherence for sustainable development, engaging stakeholders, learning through an iterative process of policy development, implementation, monitoring and reporting, and renewing commitments to pursue new paths will be a continuous process. At its centre is the requirement that national-level policies and commitment are consistent with regard to the SDGs, to ensure that the SDGs, which were adopted at the intergovernmental level and then translated into consistent

national approaches, are guided by consistent national approaches to intergovernmental engagement.

Thematic connections of the Paris Climate Agreement and the 2030 Agenda

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The adoption of the 2030 Agenda for Sustainable Development and the conclusion of the Paris Agreement in the closing months of 2015 represented a significant moment in the global movement towards sustainable development. There is enormous potential for co-benefits to arise from the mutually supportive implementation processes of the 17 Sustainable Development Goals (SDGs) elaborated in the 2030 Agenda and the Nationally Determined Contributions (NDCs) underpinning the legally binding Paris Agreement.

Contrary to what the name implies, countries' NDCs often go far beyond presenting their intended contributions to mitigating greenhouse gas emissions to address many other actions relevant to sustainable development. Despite many thematic overlaps and common areas promoted under the NDCs and the SDGs, these two processes are kept separate, the shared objective of achieving sustainable development as a global common good notwithstanding.

A structured analysis of over 160 NDCs informs an overview as to how climate activities in the NDCs contribute to the SDGs and their targets. Climate activities in the NDCs support the achievement of a multitude of SDGs and their targets, going far beyond "climate action" (SDG 13) and "affordable and clean energy" (SDG 7) to cover many other important fields of sustainable development. NDC climate activities also underline the interlinked character of the SDGs.

Our analysis mapped over 7000 climate activities contained in 161 NDCs through the lens of the 17 SDGs, and is visualised in the interactive tool *NDC-SDG Connections* (www.ndc-sdg.info). The tool shows to what extent, where and how these NDC activities can contribute to reaching SDGs and their targets. The findings are based on highly disaggregated NDC analyses that allow users to go beyond the target level and explore which SDG-relevant climate measures are contained in the NDCs. NDCs cover – and thus have the potential to contribute to – all 17 SDGs.

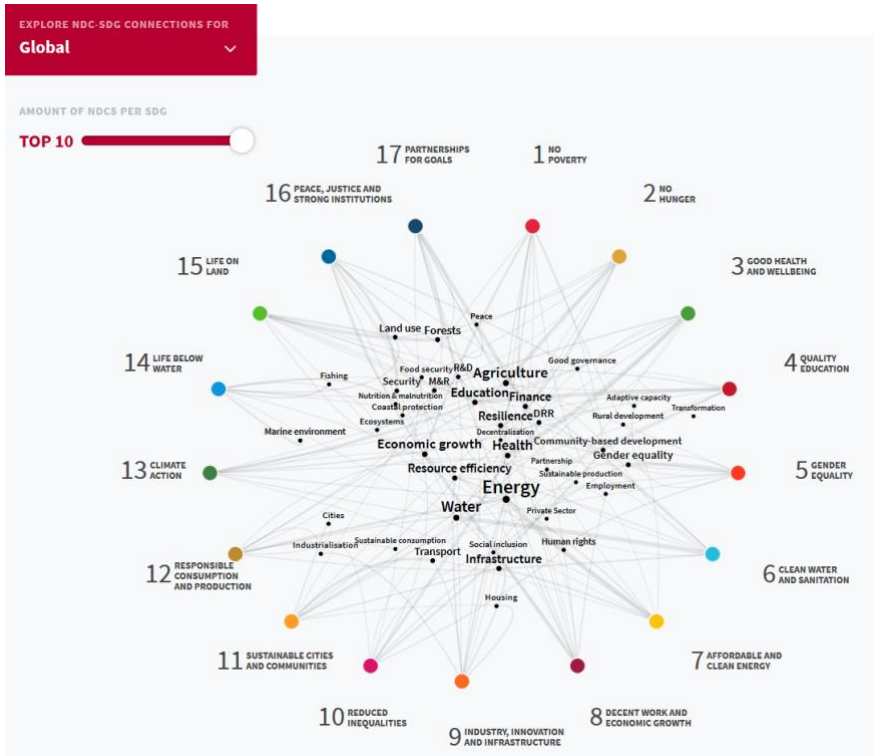
Figure 5.2. How NDC climate activities correspond to each SDG

Source: DIE, 2018.

Moreover, *NDC-SDG Connections* allows users to investigate the networked character of the SDGs in the context of the NDCs. The website not only provides an overview of SDG coverage in the NDCs at the global level, but also enables users to zoom in to individual countries to explore to what extent and how their NDC activities are connected to the SDGs. This network analysis demonstrates how numerous NDC activities entail synergies that may promote several SDGs at once. It shows that SDG themes such as energy, agriculture and water are particularly relevant in this context, representing the most important cross-cutting themes.

While detecting synergies will inform planning and interconnected implementation, our analysis does not allow for identifying trade-offs, since these are not referred to in the policy documents from which it derives. For successfully promoting PCSD, increased evidence and consideration of these trade-offs is equally important in decision making. The trade-offs between different goals must be understood in order to mediate them over time horizons, at all levels of implementation and across regions. Analysis of both synergies and trade-offs will facilitate political mediation and contribute to managing expectations, as promoting PCSD may be beneficial for all in the long term, yet in the short term may produce both winners and losers among different interest groups.

Figure 5.3. Synergies and trade-offs between the NDCs and SDGs



Source: DIE, 2018.

To generate co-benefits, NDC and SDG implementation processes should be co-ordinated to 1) prevent duplication, thereby reducing costs, and 2) achieve a more systematic implementation of the 2030 Agenda at country level that utilises already committed activities in NDCs to leverage synergies between both agendas.

Moving forward, the opportunity to connect the Paris Agreement and the 2030 Agenda should be exploited to promote policy coherence by maximising co-benefits and systematically mediating trade-offs for a more efficient implementation.

- In the context of the Paris Agreement, countries should use future NDC updates to more closely align their climate activities with the SDGs.
- In the context of the 2030 Agenda, sustainable development strategies should meaningfully complement NDCs.
- Co-benefits have the potential to increase countries' motivation to fulfil commitments, but trade-offs should be anticipated early on in order to implement both agendas more effectively.

In short, the Paris Agreement and the 2030 Agenda review processes provide important instruments to monitor and advance the alignment of policies related to NDCs and the SDGs. Connecting the thematic implementation of both agendas holds the potential to identify and support leverage points, identify critical gaps and shortcomings and foster a truly integrative implementation of their social, economic and ecological dimensions. Ultimately, the analysis of interconnections between both agendas reaffirms that climate

policy is crucial for human development, and that a sustainable development lens is indispensable for a climate policy with a human face.

Successful financing of the SDGs through PPPs requires building capacities for a PCSD approach[4]

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To achieve the 17 goals of the 2030 Agenda, very substantial financial investment will be required. According to the 2014 World Investment Report by the United Nations Conference on Trade and Development (UNCTAD), approximately USD 4 trillion will be needed every year in developing countries alone for the SDGs to be achieved by 2030. Given current levels of investment in all SDG-related sectors by both public and private bodies, developing countries face a funding gap of USD 2.5 trillion per year.

It is unlikely that government budgets and official development aid will be able to fully compensate for this funding gap. Many developing countries face fiscal constraints due to high levels of debt or inability to collect taxes, and most donor aid is channelled towards current traditional spending needs. Therefore, private sector investment will be crucial in assisting the realisation of the SDGs.

However, the UNCTAD report also states that private sector involvement is not without its difficulties. First, the lack of an adequate risk-return profile in many developing countries makes it difficult to garner additional private sector investment. This can arise from factors that increase investment risk: at country level, the presence of weak institutions and, at market level, the degree of demand uncertainty.

Second is the nature of the SDGs themselves. As many of the SDGs involve the provision of quality services that are both accessible and affordable to others, the risk-return ratio is further eroded. In addition, dilemmas still exist about the acceptable level of private ownership of public assets, as governments have the ultimate responsibility for providing basic services.

SDG 17.17- Partnerships

It is important to acknowledge the need to ensure availability of sufficient financial resources to implement the SDGs – be this through better tax collection or other forms of project financing such as public procurement, privatisations, concessions or public-private partnerships (PPP).

SDG Goal and Target 17.17, "Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships", expands the traditional notion of PPP from public and private actors to include civil service organisations (for the sake of abbreviation, PPP+). The related weak indicator 17.17.1 suggests measuring PPP+s by the "the amount of US dollars committed to public-private and civil society partnerships". In reality, achieving successful PPP+s is very much linked to co-ordination among government entities and on governments' ability to consult private sector and CSO stakeholders, hence the importance of capacity building among key stakeholders for achieving policy coherence.

Many developing country governments are not aware of the legal implications of PPP+s, the potential risk in regard to financial liabilities nor of the potential alternative financing instruments available to finance SDG-related physical and social infrastructure projects.

A case in point is the diversity of PPP+ instruments at their disposal, such as Build & transfer (BT), Build-lease & transfer (BLT), Build-operate & transfer (BOT), Build-own & operate (BOO), Build-transfer & operate (BTO), Contract-add & operate (CAO), Develop-operate & transfer (DOT), Rehabilitate-operate & transfer (ROT) and Rehabilitate-own & operate (ROO), to name the most common PPP+ financing options.

Without mastery of institutional knowledge of the various financing instruments and modalities, governments remain vulnerable to potential further debt and possible collusion of interest by public and private parties.

PPP+ and the importance of PCSD

To give an example in the field of social infrastructure, PPP+s in the health field normally consist of close policy co-ordination between the ministry of health and other governmental stakeholders such as the state planning authority (macroeconomic planning), ministry of finance (budgetary issues), public procurement agency (supervising tenders), privatisation agency (implementation, TOR, concessions), administration, line ministries (BTO, BOO, BLT etc.) and municipalities (implementation).

The MoH often lacks the necessary PPP+ unit to implement project cycles, approve feasibility studies and contracts. Thus, the bidding process for the first PPPH contract can lead to misunderstandings about the PPP+ project, unpredictability, allegations of bias concerning pre-requirements and lack of transparency. It is unclear who will implement the monitoring and evaluation and which performance indicators will be assessed to keep a PPP+ in the health sector on course financially, equitably, and professionally. Equally important is the government's ability to consult concerned stakeholders such as the medical profession, health sector labour unions, patient organisations and pharmaceutical companies.

Multi-actor partnerships further deepen PCSD challenges

To continue with the health sector, SDGs and multi-party partnerships, PPP+s exist that include local partnerships (government, local NGOs) + international aid agencies involved in the health sector (USAID, DFID, SDC etc.) + academic research institutions developing new vaccines or diagnostics (to combat malaria, polio, aids etc.) + philanthropic organisations (Bill Gates Foundation, Aga Khan Foundation, Hewlett Packard Foundation) + international organisations (WHO, UNICEF, World Bank) + intermediary PPPs (GAVI, Global Fund, MMV) + multinational or local companies.

The challenge of co-ordinating in order to avoid duplication of efforts, contradictory policy initiatives, high transaction costs, favouritism in patient treatment based on economic, social or ethnic background and cherry picking by the various donors and partner organisations is very high and requires competent policy making and PPP+ policy management and evaluation.

Developing countries without government staff that understand the complexities of PPP+ often become dependent on what is being offered by partner organisations. An option is to create sufficient indigenous know-how and sound legal institutions or, in the absence of this, to agree at an international level to create a PPP+ observatory which could provide information about modalities and serve as a centre of training and advice. Such an observatory could go far to identify coherence gaps, strengthen capacities for co-ordination and consultations, monitor progress and achieve more coherent outcomes, all with a view to leaving no one behind.

Good Enough Coherence

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> *"Complex systems comprise many moving parts that interact with one another and change together, triggering outcomes that cannot be precisely controlled or predicted." Yuen Yuen Ang, How China Escaped the Poverty Trap*

Policy Coherence for Sustainable Development (PCSD) has made it into the architecture of the Sustainable Development Goals. It is not an objective as such, but rather a conduit to achieve this comprehensive set of goals. Countries and stakeholders committed to the 2030 Agenda who seek to operationalise PCSD are struck by the sheer complexity and extreme level of ambition. In this sense, a parallel can be drawn between PCSD and an earlier experience with another ambitious development proposition, the good governance agenda. Good governance (GG) resonated strongly within the donor community, but was soon criticised for its unwieldy ambitions, poor development theory and for being detached from country realities such as the deeply political nature of needed reforms. This piece draws six relevant lessons for PCSD from the shift from good governance to the more politically grounded and actionable agenda of good enough governance.

Background

The good governance paradigm of the nineties focussed on institutional preconditions to underpin economic and political development. It presupposed a range of essential and ambitious public sector reforms for development and poverty reduction. This "essentialist" agenda included a comprehensive list of all positive public sector features "from institutions that set the rules of the game for economic and political interaction, to decision making structures that determine priorities among public problems and allocate resources to respond to them, to organisations that manage administrative systems and deliver goods and services to citizens" (Grindle, 2004[11]).

With her 2004 paper "Good Enough Governance: Poverty Reduction and Reform in Developing Countries", Harvard international development professor Merilee Grindle stirred up debate around the consensus on good governance. Grindle criticised GG for mistaking ends for means and saddling reformers and their external supporters with an impossible reform agenda. Her "good enough" approach squarely dismissed the idea that GG is a precondition for development, economic growth, democratisation etc.

The GG agenda, moreover, was deemed to be over-designed and unrealistic, failing to answer the basic question: "Given limited resources of money, time, knowledge, and human and organisational capacity, what are the best ways to move towards better governance in a particular country context?" (Grindle, 2004[11]).

Moving from good governance to good enough governance

Since 2004, the body of evidence and the good enough governance (GEG) agenda have expanded and brought about some major shifts away from GG assumptions about development. Two major shifts are:

Shift 1: From good governance to good fit

The emphasis shifted from blueprint, ideal-type governance solutions to analysing *why* things are the way they are. Various academic disciplines were purposefully combined to

understand *where a country is,* rather than imagine where it *ought to be.* The resulting political economy analysis focused more sharply on power, politics, ideas, institutions and incentives, as well as on foundational factors in specific country contexts and particular sectors, and in relation to solving policy issues or development puzzles.

Shift 2: From technically feasible to politically grounded

There is increased recognition that policy effectiveness comes about when the technically feasible is aligned with the politically grounded. This implies a greater sensitivity as to what brings about political traction for particular policies and implementation arrangements. More attention is also devoted to analysing and understanding what accounts for administrative pockets of effectiveness, as these help develop policy effectiveness. One of the findings is that, even in the absence of comprehensive public sector reforms, there is potential in weak governance systems for incremental, step-by-step reforms.

The World Bank's landmark World Development Report 2017 on *Governance and Law* (World Bank, 2017[12]) presents a valuable synthesis of "post good governance" thinking. It stresses that effective policies are driven by key institutional functions shaped by context-specific bargaining, power plays, coalition building and trade-offs between ruling elites, state bureaucrats and sector actors. These domestically shaped policy arenas evolve over time and are further influenced by globalisation and other external factors. Comprehensive, best-practice institutional blueprints have lost some of their attractive glow, as they have failed to grow capabilities through policy experimentation, self-correction and incremental learning for policy effectiveness – and potentially policy coherence (Booth and Cammack, 2013[13]) (ESID, 2017[14]) .

From policy coherence to good enough coherence

Why is this relevant for PCSD?

A concern with policy coherence in the development discourse has existed for some time. The concept rose to new prominence in the SDG debate as PCSD, where it is seen as a "means of implementation" and a target (17.14) of the 2030 Agenda. The multi-faceted and integrated nature of the SDG agenda, however, makes PCSD more complex than its uni-directional precursor, policy coherence for development (PCD) (Mackie, Ronceray and Spierings, 2017[15]). The findings and lessons emerging from the GEG agenda and its criticism of good governance can be useful for the PCSD agenda.

First, Grindle recognised that good governance is a powerful idea. Who does not want institutions that are fair, judicious, transparent, accountable, participatory, responsive, and effectively and efficiently managed (Grindle, 2010[16])? In a similar way as GG was seen as a "mighty beacon of what ought to be", PCSD is also a powerful and seductive idea, suggesting that all policies should be coherent with each other. But projecting a need for ideal-type good governance institutions and ideal types of policy coherence does not show the way to reaching them. Good governance created high expectations and an unwieldy agenda, without offering guidance on the steps required for a country to become like "Sweden or Denmark on a good day".[6]

Grindle's critique of overly elastic and aspirational concepts "that grow in inclusiveness as they become popular" (Grindle, 2010[16]) can also be applied to PCSD. Rather than getting stuck on what ought to happen, GEG pushes for answers to the question of which policy measures deserve priority in a particular context. Both GEG and the generation of

political economy approaches to context analysis that followed in its wake unashamedly embrace complexity. In analysing the interactions between structural factors, institutions, incentives, political power games, agency and external variables affecting domestic change trajectories, context analysis provides clues to gauge the technical and political feasibility of change and reform trajectories.[7] This approach recognises that not all governance deficits and reforms can or need to be tackled at once, and takes into account that achievements can also be reversed.

Implications for Good Enough Coherence

There are thus six lessons from the good enough governance proposition that can be useful in promoting policy coherence and tackling the PCSD target of the 2030 Agenda.

First and foremost, **do not allow visions of ideal end states to cloud realism about feasible pathways** to improving policies and policy implementation. This is the main lesson that promoting policy coherence can learn from the shift from GG to GEG. As with the GEG approach, explicitly prioritising good enough coherence may help policy makers practice the art of the possible and reach "the sweet spot between what is technically sound and what is politically feasible" (Kossoff, 2015[17]). In other words, policy makers tackling the integrated policy world of the SDGs should not be blinded by the sheer impossibility of making all policies coherent with each other, but rather focus on two or three other key sectoral policies where good enough coherence with their own policy area can make a real difference.

A second lesson is the importance of **recognising that context matters**, however attractive best-practice models for institutional reforms or policy coherence may seem. Good enough coherence could shift the focus from blueprint models to context-specific conditions in which certain degrees of policy coherence are feasible, but a more ambitious alternative may not be.

The third and fourth lessons relate to **the importance of understanding two basic dimensions that shape the contextual conditions for policy effectiveness and policy coherence**. One dimension relates to how patterns of power, incentives and bargaining between ruling elites and society influence public authority and the ability of institutions to deliver credible outcomes (World Bank, 2017[12]). In other words, **do core state institutions have both the capability and the authority** to provide public goods, or to engage in the incremental processes of developing pockets of coherent policies which are often the product of deeply political processes (Andrews, Pritchett and Woolcock, 2017[18]).

Another basic dimension that sets boundaries for or influences the course of the bargaining process and the decision logics of ruling elites is **structural factors and external variables beyond the control of domestic actors**. These include, for example, natural endowments, climate change, the effects of globalisation, etc. Deepening insights into these interacting dimensions may help identify the margins of manoeuvre, the agency of relevant stakeholders, potential coalitions and pockets of bureaucratic capabilities that can support policy coherence in particular policy arenas.

A fifth implication relates to the reality that **all policy choices involve stakeholders and aim to encourage or block change to a greater or lesser extent.** They therefore inevitably create winners and losers and generate contestation. Only rarely can solutions be found whereby everyone gets what they want. Thus, rather than achieving "perfect" coherence, compromises need to be made, synergies found and optimal balances crafted.

Policy solutions that emerge are therefore clearly in the domain of "good enough coherence".

The last insight in line with GEG thinking is that dynamics shift and change over time in unpredictable or contingent ways. This implies that **good enough coherence should be adaptive and flexible over time**. Current conditions may allow for a certain level of GEC now, but in a couple of years or even just a few months, conditions may change and a more effective or higher level of good enough coherence may be become feasible.

The daily realities of managing the Sustainable Development Goals

Pedro Rodrigues de Almeida, Miguel Coleta and Livio Vanghetti
Philip Morris International

Background

Philip Morris International joined the sustainability movement to ensure the highest standards of corporate social responsibility and to be able to operate under a recognised sustainability framework that helps businesses regardless of their size, complexity, and societal challenges. Smoking cigarettes causes serious disease, and the best way to avoid the harms of smoking is never to start, or to quit. But much more can be done to reduce the health risks for the world's 1.1 billion smokers. In 2014, after a decade of scientific studies and a cumulative investment of US$ 3 billion in R&D, Philip Morris International released its first smoke-free product. This is the biggest shift in the company's history and unprecedented in the sector.

Despite past isolation and perceived opacity, it is now important to rebuild institutional trust and engage all key stakeholders in the sector's effort towards sustainability. A clearly articulated approach to policy coherence for sustainable development is essential to better inform public policies across all sectors. Traditional approaches to tackling complex problems have been based on goal seeking and viability. While the SDG framework offers a systematic thinking tool that is very compelling for public engagement, it may not fully cater to the needs of extremely complex problems that private sector companies face as their *raison d'être* changes in a profound manner.

One of the areas most critical to Philip Morris International's business strategy that requires a strong policy coherence lens is that of sustainable consumption and production patterns (SDG 12). The approach now being tested and briefly illustrated here is to tackle the complex nexus of sustainable and resilient societies using policy coherence analysis and systemic thinking (Hester and Adams, 2014[19]).

Challenges and opportunities

While the demand for tobacco has declined over the years, Philip Morris International is cognizant that over two million people live or work on 380 000 farms it sources from. As a smoke-free future becomes a reality, so does the anticipation of a decline in tobacco leaf demand compared with its current level over the course of the next 10 to 15 years, which will have an impact on farmers' income and livelihoods and affect ancillary industries.

For several years the company has been supporting smallholder farmers to grow food crops alongside tobacco. For example, in Mozambique, Malawi and Tanzania, this support includes technical assistance and financing for food crop inputs (fertiliser and seeds for mainly maize). In 2016 the total amount of food production supported by Philip

Morris International in these countries (over 260 000 tons) already surpassed the production of tobacco, with the programme reaching 60 000 farmers. In 2017, it is expected that direct support for food crop production would have reached approximately 150 000 smallholder farmers across the three countries.

The company has witnessed a significant improvement in food crop yields, up by nearly fourfold in the case of maize, which is strengthening food security and oftentimes generates a surplus for sale at local markets. Together with selected suppliers, Philip Morris International is currently exploring with other international food crop buyers possibilities to create a route to market for surplus food crops produced by tobacco growers in these countries, leveraging on the infrastructure and logistics already in place.

This joint effort is of paramount importance in ensuring that these rural communities are resilient to the impact of tobacco crop replacement and that it does not trigger economic migration to urban areas. This vision should help mobilise all key stakeholders to collectively think through the balancing of challenges and opportunities to transform the market and achieve positive economic, societal and environmental impact.

Moving towards more sustainable systems and successfully replacing tobacco crops requires connectability (Simons, 2015[20]) – in other words, that key stakeholders make an effort to work together to deal with economic, societal and environmental complexities that individual actors would not be capable of. Philip Morris International is committing to mobilising financial resources and capabilities for a number of projects. It is well understood that only in joint collaboration with farmers' communities will it be possible to secure a transition to sustainable livelihoods currently dependent on tobacco crops.

Agricultural transformation in low and middle-income countries, particularly as described by the African Union Agenda 2063, foresees a relatively rapid transition from subsistence agricultural practices led by smallholder farmers to a highly efficient, intensive, value added sector. This transition could be severely hindered due to a number of policy constraints, including basic infrastructure investment (transportation, irrigation, and power generation) and the development of new commodity demand profiles. However, achieving a sustainable and resilient society undergoing deep transformation requires pivoting the public interest and the nature of social interaction from a market model to a polis model of the society (what is good for the community) (Stone, 2013[21]) and hence that of sustainable consumption and its production patterns.

Systemic thinking and policy coherence

Systemic thinking and Markov models (Howard, 2007[22]) could be extremely powerful tools to analyse complex problems in the field of policy coherence for sustainable development. It is known that the behaviour of systems of problems depends more on how the various solutions interact with one another than on individual solutions to a given SDG. Philip Morris International's approach to policy coherence for sustainable development is, in the sense of systemic thinking, exploratory rather than prescriptive.

Philip Morris International strives to consider a timely balancing of challenges and opportunities that each individual SDG poses and the range of rational choices available within a severely constrained environment. This timely balancing is known as a satisficing mechanism or, simply put, making rational choices that can satisfy and suffice the overall SDGs objectives. Given the specificities of individual SDGs, government, private sector and civil society have a natural preference to work on problems in parallel or in sequence but restricted to their subject matter expertise, or with limited overlap. It is

therefore necessary to articulate policy coherence for sustainable development through a transdisciplinary lens and carefully avoid the phenomenon of being trapped in a single SDG – for example, poverty eradication as a goal in itself without understanding the necessary effort and cost in land use and irrigation infrastructure.

The way forward

The SDGs are not mutually exclusive, and they should not be treated in isolation. Achieving progress in one could have unintentional negative consequences for another, which is why a systemic approach is needed when managing the program as a whole. We must never lose sight of the bigger picture. For instance, tobacco accounts for 7.2 million deaths every year, according to the World Health Organization's factsheet of June 2017. SDG 3 is the only goal with a tobacco target; overall, non-communicable diseases kill 40 million people each year. However, achieving a smoke-free future does not only depend on cigarette manufacturing companies and requires systemic thinking and collaboration with all key stakeholders. At the same time, new products must be marketed in a responsible way and should not be offered to people who have quit smoking or never smoked.

Philip Morris International is committed to catalyse pre-competitive collective action and preparing a comprehensive case study on sustainable agricultural transformation through policy coherence analysis and systemic thinking, and outlining the sectoral implications in terms of long-term economic development (2030-2063). The case study will identify the key barriers to this transition, document leading practices and illustrate the most likely economic development scenarios in the years 2030 and 2063. It will emphasise the unique strength of policy coherence analysis and systemic thinking to address the nexus of sustainable and resilient societies, and its societal impact on good health and well-being.

SDGs 6, 7, 11, 12, 15 and Cultural and Creative Industries: Building cultural landscapes for the Sustainable Development Goals

Lady Lawyer Foundation

Culture and its diverse manifestations have the power to transform societies. Heritage constitutes a source of identity and cohesion for communities facing challenges such as climate change, the financial crisis, growing inequalities and globally increasing urban populations. Creativity contributes to building open, inclusive and pluralistic societies (UNESCO, 2018[23]).

On the basis that policies responsive to cultural contexts can yield better, sustainable, inclusive and equitable development outcomes, and that both the economic and social dimensions of poverty can be addressed through cultural heritage and the cultural and creative industries (CCIs), UN Resolution 70/214 on "Culture and Sustainable Development" – adopted by General Assembly in December 2015 – reaffirms the role of culture as an enabler of sustainable development, encouraging all Member States and other relevant stakeholders to raise awareness on the importance of culture in sustainable development and to ensure its integration into development policies (UNESCO, 2018[23]).

The importance of culture and heritage is explicitly mentioned in SDG Target 11.4: "Strengthen efforts to protect and safeguard the world's cultural and natural heritage".

Innovative approaches are needed and the 2016-2020 phase is a decisive period in the SDGs context, representing a window onto a broader approach to PCD that cannot be missed. Within the track of the outcomes of *Law for Creativity* study and its comprehensive approach to address all aspects of Cultural and Creative Industries (CCI) sector within the 2030 Agenda, since 2017, focusing on fashion and heritage, the Lady Lawyer Foundation has put in place the assessment of the fashion collection named Lady Lawyer Fashion Archive (https://ladylawyerfashionarchive.wordpress.com) that has brought to the 2018-2020 *Lady Lawyer Village Fun Plan (*https://ladylawyerfashionarchive.wordpress.com/2018/02/28/lady-lawyer-village-fun-plan-launch-en-soufflant-le-chaud/), which – among the deliverables – lays out an updated instrument on PCSD taking into account the 2017 analysis of the results of the internal '*War and Fashion*' consultation (http://war-and-fashion.tumblr.com/), launched in 2015 in the perspective of a cultural-natural-social-economic model that is alternative to the linear one.

Notes

[1] The OECD defines countries most in need as either Least Developed Countries (LDCs), Land-Locked Developing Countries (LLDCs), Small Island Developing States (SIDS) or fragile and conflict-affected states.

[2] OECD Mobilisation Survey: http://www.oecd.org/dac/stats/mobilisation.htm.

[3] This contribution concerns an adapted and extended version of an op-ed originally published on DIE's website on 24 July 2017: Janetschek, Hannah / Imme Scholz (2017), "Taking stock of 2030 Agenda: are we making progress with integrated implementation?" Bonn: German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) (The Current Column of 24 July 2017).

[4] This contribution has been adapted from the following policy brief Brandi/Dzebo/Janetschek (2017), "The case for connecting the implementation of the Paris Climate Agreement and the 2030 Agenda for Sustainable Development", Bonn: German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE). https://www.die-gdi.de/en/briefing-paper/article/the-case-for-connecting-the-implementation-of-the-paris-climate-agreement-and-the-2030-agenda-for-sustainable-development/.

[5] ECDPM - European Centre for Development Policy Management - www.ecdpm.org.

[6] Matt Andrews, a student of Grindle, provided this analogy of Good Governance: *Sweden or Denmark on a good day.* In: Andres. M. 2008, *The Good Governance Agenda: Beyond Indicators without Theory.* Oxford Development Studies, Volume 36, 2008 - issue 4 (pages 379-407).

[7] See among others: Levy, B. (2014), *Working with the Grain: Integrating Governance and Growth in Development Strategies;* Levy, B. and Fukuyama, F. (2010), *Development Strategies: integrating Governance and Growth,* Policy Research Working Paper No. 5196, World Bank.

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