



Monitoring progress towards Green Growth The OECD approach

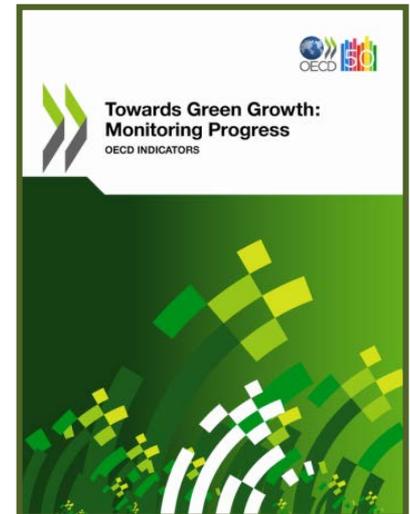
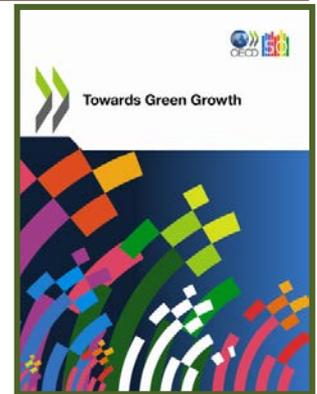
OECD-UNECE Regional workshop for EECCA countries
Shared environmental information system and green growth
Paris, 10-11 March 2015

Myriam Linster, OECD
Environmental Performance and Information Division



Monitoring progress towards Green Growth

- **At the core of the OECD GG Strategy**
 - Conceptual measurement framework
 - Set of indicators
 - Underlying database
- **Drawing upon long-standing experience with indicators**
 - Multi-disciplinary inter-governmental process
 - Horizontal OECD Task Force
- **International cooperation and partnerships**
 - UNEP, UNSD, UNIDO, World Bank, EU, ...
 - GG Knowledge Platform (GGGI, WB, UNEP, OECD)
 - Common approaches & synergies





Monitoring progress towards green growth

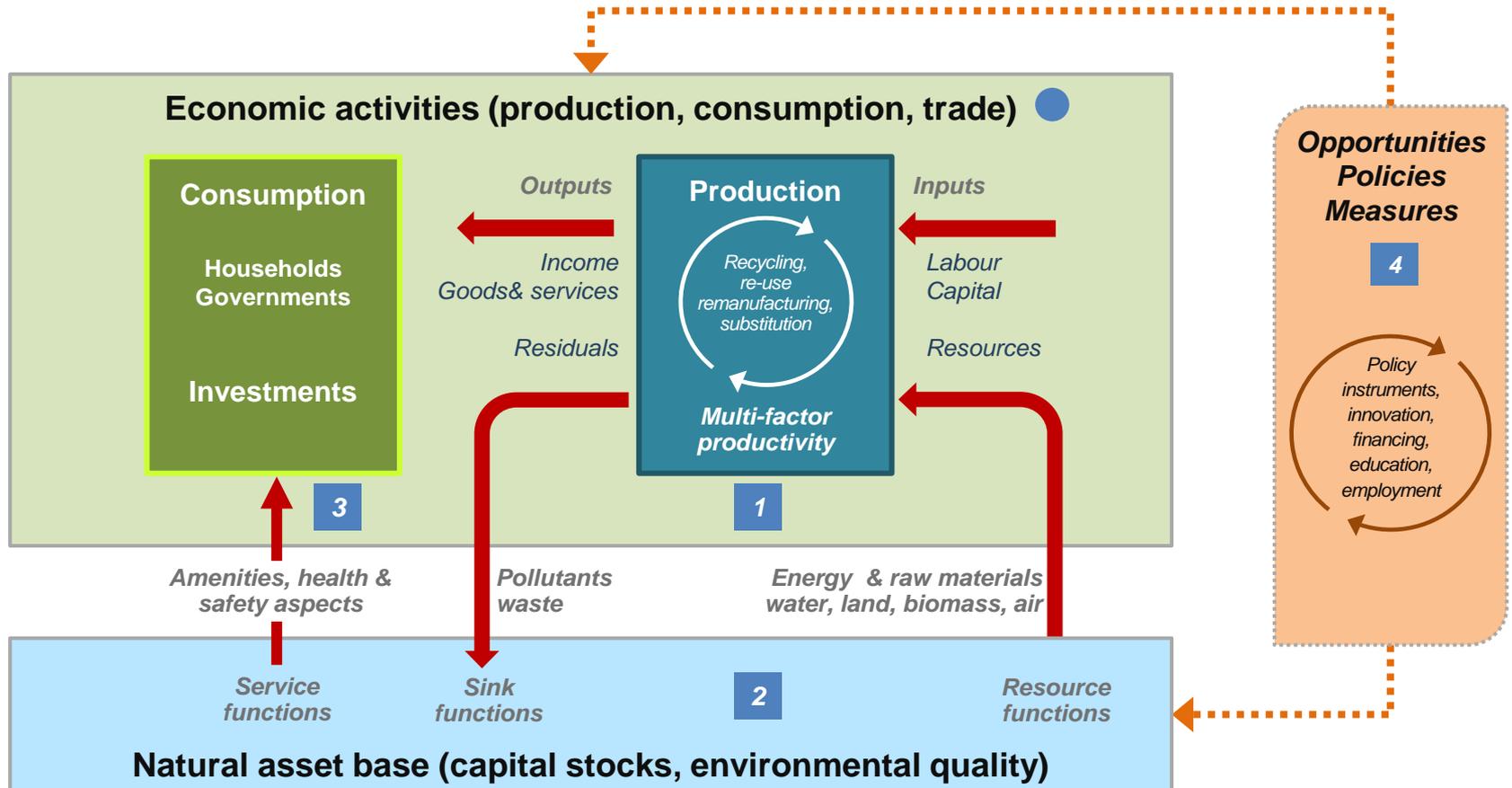
OECD approach

- **Flexible**
 - easy to adapt to countries' circumstances
 - easy to apply at macro-, meso-, micro-levels
 - easy to improve and develop further
- **Pragmatic**
 - No composite indicator, rather a set of internationally comparable indicators of manageable size
- **Balanced**
 - Balanced coverage of “green” and “growth”
 - Representative of key issues of common relevance to green growth in OECD countries and in partner countries
 - Balance between relevance for international work and relevance for countries





Monitoring progress towards green growth Measurement framework





Monitoring progress towards green growth

Indicator groups and topics

1	The environmental and resource productivity of the economy	<ul style="list-style-type: none">• Carbon and energy productivity• Resource productivity: materials, nutrients, water• Multi-factor productivity
2	The natural asset base of the economy	<ul style="list-style-type: none">• Renewable stocks: water, forest, fish resources• Non-renewable stocks: mineral resources• Biodiversity and ecosystems
3	The environmental dimension of quality of life	<ul style="list-style-type: none">• Environmental health and risks• Environmental services and amenities
4	Economic opportunities and policy responses	<ul style="list-style-type: none">• Technology and innovation• Environmental goods & services• International financial flows• Prices and transfers• Skills and training• Regulations and management approaches
	Socio-economic context and characteristics of growth	<ul style="list-style-type: none">• Economic growth and structure• Productivity and trade• Labour markets, education and income• Socio-demographic patterns





Monitoring progress towards green growth

Indicator selection

- **The foundations**
 - Selected from existing indicator sets
 - Refined and amended
- **Criteria for selecting indicators and validating their choice**
 - Policy relevance
 - Analytical soundness
 - Measurability





Monitoring progress towards green growth

The foundations and the overall indicator architecture

Measuring well-being and the progress of societies – GDP and beyond

Monitoring progress towards Green Growth

Socio-economic context & growth characteristics

Environmental and resource productivity

Natural asset base

Environmental quality of life

Economic opportunities and policies

UNEP, WB

EU

GGKP

National indicators

Review & selection:

- Policy relevance
- Analytical soundness
- Measurability

SEEA

OECD indicators and statistical databases

Economic performance
National accounts
Productivity

Employment
Education

Environmental performance
Material flows & resource productivity

Science & Technology
Innovation
Entrepreneurship

Energy
Agriculture
Transport

Development aid
Investment
Trade

Member countries

IGOs



Monitoring progress towards green growth

The foundations and the overall indicator architecture

Measuring well-being and the progress of societies – GDP and beyond

Monitoring progress towards Green Growth

Socio-economic context & growth characteristics

Environmental and resource productivity

Natural asset base

Environmental quality of life

Economic opportunities and policies

UNEP, WB

EU

GGKP

National indicators

Review & selection:
• Policy relevance
• Analytical soundness
• Measurability

SEEA

OECD indicators and statistical databases

Economic performance
National accounts
Productivity

Employment
Education

Environmental performance
Material flows & resource productivity

Science & Technology
Innovation
Entrepreneurship

Energy
Agriculture
Transport

Development aid
Investment
Trade

Member countries

IGOs



Monitoring progress towards green growth

Work in progress

- **A dynamic process**
 - The list of indicators in the OECD set is **not necessarily final**.
 - Some of the proposed indicators are not yet fully measurable, but were retained nonetheless to drive the measurement agenda
 - As the work progresses, new and better data may become available and the list of indicators **may need to evolve** accordingly.
 - About 20 indicators are measurable at **varying degrees of quality**
 - Regularly published (2011, 2014, 2017)
 - Used in OECD work: policy analysis; country peer reviews
- **Further efforts needed to**
 - Improve interpretation and communication → **headline indicators**
 - Improve the quality of measurement → **measurement agenda**



Monitoring progress towards green growth

Headline Indicators

- **Purpose**
 - Facilitate communication with policy makers, the media and citizens
 - Track a few central elements of GG
 - Select headlines from full set
- **Specific selection criteria**
 - Easy to communicate for different users and audiences;
 - Capture the interface between the environment and the economy;
 - Measurable and comparable across countries;
 - Reflect key global environmental issues
 - In line with GG measurement framework
- **Reflection Group composed of country representatives with expertise in economics, statistics, environment**



Monitoring progress towards green growth

Headline indicators

Environmental and resource productivity	
Carbon productivity	1. CO₂ productivity (<i>production-based, demand-based</i>)
Resource productivity	2. Non-energy material productivity (<i>production-based, demand-based</i>)
Multifactor productivity	3. Multifactor productivity including environmental services
The natural asset base	
Renewable and non-renewable stocks	4. Natural resource index
Biodiversity and ecosystems	5. Changes in land use and cover
Environmental quality of life	
Environmental health and risks	6. Air pollution (population exposure to PM 2.5)
Economic opportunities and policy responses	
Technology and innovation, environmental goods and services, prices and transfers, etc.	<i>Placeholder – no indicator specified</i>

*“Green” difficult to isolate
Diversity of country circumstances, of instruments
→ countries to choose*





Monitoring progress towards green growth

The measurement agenda

- **Fill data gaps**
 - Consistent environmental-economic data
 - Sectoral and industry level data → structural changes
 - Data on biodiversity and ecosystem services
 - Data on natural assets (stocks, flows, physical, monetary) and on material flows
 - Data on quality of life [“well-being”]
- **Capture better the growth contribution of natural assets**
 - Embed green growth measurement into existing growth accounting frameworks and productivity measures: complete balance sheets; adjusted productivity measures
- **Monitor progress at sectoral level**
 - Measure the “greening” of economic sectors
 - Capture better economic opportunities
 - Measure innovation, investments, employment
- **Role of accounting frameworks**



Monitoring progress towards green growth

Ongoing work

- **Implement environmental accounting: the System of Environmental-Economic Accounts (SEEA)**
 - Key for consistent information on environment-economy interface
 - Key for enabling a breakdown by industry
 - Key for better capturing the growth contribution of natural assets
 - *OECD Task Force on the SEEA implementation*
 - *OECD-UNECE workshop on SEEA implementation* (October 2015, Geneva)
- **Further develop the indicators**
 - Priority given to headline indicators
 - Calculation methods, underlying statistics and data sources
 - Review of relevance and interpretation, guidance for use, . . .
- **Main areas**
 - Carbon productivity, Material productivity
 - Environmentally adjusted multi-factor productivity growth
 - Natural resource index
 - Land use and cover, Population exposure to air pollution
 - Nitrogen flows and indicators
 - Policy response indicators: innovation, taxation, ...





Green growth indicators

Thank you!

Ivan Haščič
Myriam Linster

For more information, see
www.oecd.org/greengrowth
www.oecd.org/greengrowth/indicators

