Industrial policy for the Sustainable Development Goals

In 2015, the Member States of the United Nations (UN) adopted 17 Sustainable Development Goals (SDGs) (Figure 1). Devised as an agenda for global sustainable development with a 2030 horizon, the SDGs reflect the commitment of stakeholders to eradicate poverty, respect human rights, empower women and girls, and bring prosperity and peace — while tackling climate change and working to preserve oceans and forests. In its 2020 report on the SDGs, five years after their adoption, the UN warned that the global response to the 2030 Agenda has not been sufficiently ambitious, despite progress in some key areas. The UN noted that all stakeholders urgently need to increase the pace of action to achieve the SDGs by 2030.

The global societal challenges reflected in the SDGs require both a public impetus and large-scale private investment. The COVID-19 crisis has highlighted the urgency of tackling the SDGs and the role of the private sector in addressing global societal challenges. In this context, new OECD work (Industrial Policy for the Sustainable Development Goals) (OECD, forthcoming) investigates the contribution of firms to the SDGs, using novel techniques and data sources. Based on this evidence, it provides recommendations on industrial policies to enhance the contribution of businesses to the SDGs.

The quick read

Firms and industry hold tremendous capacity to contribute to a wide range of SDGs, in particular through their core business activities by providing goods and services that help achieve the SDGs in their domestic market and abroad. The forthcoming report illustrates this by analysing new data sources, such as descriptions of firms’ actions on sustainability, survey data, and detailed production and export data at the sectoral and product-level. It relies on advanced analytical techniques, e.g. natural language processing/machine learning, and inter-country input-output analysis, thus taking account of inter-sectoral linkages and global value chains.

In addition, the report points to barriers that must be overcome to unlock this potential, and the need for supportive policies along the path to greater sustainability. Small firms, which make up the majority of firms, typically need more assistance or resources to make sustainable shifts that rely heavily on intangibles — for example shifting to a new business model for a more circular economy. Based on the results of a benchmark analysis on industrial policies for the SDGs in seven countries and the European Union, the report shows that governments must look beyond regulations and need to implement industrial strategies to foster the business sector’s contribution to the SDGs to support both the continued innovation of sustainability frontrunners, and the development and adoption of alternative business models for all firms.
The private sector has a significant role to play in the achievement of the SDGs, along with governments, non-governmental organisations (NGOs), households and international organisations. An increasing share of firms consider it to be economically viable to develop sustainable products and services linked to their core business (Shinwell and Shamir, 2018; Bénabou and Tirole, 2010). As the SDGs gain in importance, this may expand both business opportunities and create value for society. Case studies and surveys show that firms of all sizes can find a business case to align their core business with the SDGs.

For firms focusing on the SDGs, sustainability can be regarded as an investment in an intangible asset, complementary to other types of tangible and intangible capital. As with any other type of capital, this investment capital can bear fruit in both the short and long run. For instance, in the short run, it may improve consumer satisfaction and hence enhance a firm’s reputation; in the long run it may lead to a more productive workforce and a larger market share. However, shifting to sustainability requires a comprehensive approach and structural changes in the firm’s culture. It entails a strong commitment by corporate leaders, a demonstration of a business case to stakeholders, the adaptation of business models and efficient communication with customers about sustainable strategies and practices.

The private sector has the potential to contribute to a wide range of SDGs

The contribution of a firm to the SDGs can be closely related to the core business of the firm (e.g. producing new drugs) or pervasive in the firm’s operations but not directly related to its products (e.g. reducing greenhouse gas emissions in the production process or using the firm’s human or financial resources to support NGOs), as illustrated in Figure 2.

SDG 9 – Industry, Innovation and Infrastructure, followed by SDG 11 – Sustainable Cities and Communities, SDG 8 – Decent Work and Economic Growth, SDG 3 – Good Health and Well-Being, SDG 12 – Responsible Consumption and Production, and SDG 2 – Zero Hunger can be linked to the core business of a significant share of economic activities. The report identifies sectors whose core business is related to SDGs using a machine learning algorithm which has been trained on a set of around 6 000 labelled examples of firms’ sustainability actions to automatically identify the SDGs in a short text. This innovative methodology allows to identify economic activities which are related to the SDGs, where the value of these activities is measured using granular sectoral data for Canada, Denmark, Korea, Japan and New Zealand (Figure 3).

Survey data shows that other SDGs are also important to firms, though typically not linked to their core business (as is notably the case for SDG 5 – Gender Equality and SDG 13 – Climate Action. Some SDGs can be linked both to core and non-core business activities). For instance, SDG 9 – Industry, Innovation and Infrastructure is directly linked to the core business activity of some sectors (manufacturing, infrastructure or research and development
(R&D)) and is more broadly a concern for a large number of firms (e.g. through innovation, integration into value chains, etc.). Other SDGs such as SDG 6 – Clean Water and Sanitation or SDG 14 – Life Below Water are less frequently cited by firms as one of their concerns.

**Figure 2. SDGs and their relationship with firms’ core business**

Despite this potential, firms face hurdles in their sustainability transition. Despite their capacity to contribute to a wide array of SDGs, firms also face obstacles that slow down their progress towards sustainability. A lack of access to the right information, which translates into limited understanding about the subject of sustainability, is a large barrier to the adoption of sustainable measures. Further factors such as the absence of strong incentives to make the transition to greater sustainability, insufficient financial resources or poorly designed regulations may have a similar impact on businesses.
Survey data show that, even among frontrunners, the share of firms taking actions on the SDGs differs across countries, sectors and the size of firms. Firm size, in particular, is found to be a major determinant of actions, the development of SDG-related products and target setting. Small firms tend to be at a disadvantage in their transition to sustainability compared to large firms because of the large investments required, that are partly independent from firm size.

As illustrated in Figure 4, among United Nations Global Compact (UNGC) participants, very large firms of more than fifty thousand employees are much more likely to declare taking action on 9 out of the 17 SDGs compared to small firms of less than 250 employees. Remarkably, the results show that large firms are 12.5 times more likely to take action on SDG 13 – Climate Action, and 6 times more likely to take action on SDG 11 – Sustainable Cities and Communities and SDG 17 – Partnerships for the Goals compared to small firms.

**Figure 4.** Likelihood of very large firms (>50 000 employees) declaring taking action on SDGs compared to small firms (<250)

Odds ratio of very large firms taking action on each SDGs compared to small firms, adjusted for firm size, region and sector

Notes: “Odds ratio = 1” implies that action by large firms is just as likely as in the comparison group (small firms (<250). The results are based on self-reported data by participating firms for the year 2020. Data for SDG 6 are unavailable. Bars not shown on this graph correspond to non-significant differences between small and very large firms. See Figure 1 for a description of the various SDGs.


**Sustainability questions are cross-sectoral and international in nature**

In the context of the rise of globalisation and integration via global value chains (GVCs), it is crucial to assess firms’ impact on the SDGs at a global level, taking into account their networks of cross-border suppliers and customers. Taking into account upstream sectors in Figure 3 almost doubles the value added that can be linked to the SDGs. This result points to the importance of taking a whole-of-value chain approach.

International trade provides opportunities for firms to contribute to the SDGs in other countries. Empirical evidence shows that there is significant heterogeneity across countries in terms of value added and exports linked to each SDG. This points to strengths and gaps at the national level, but also sheds light on the potential for mutually beneficial trade on a global scale.

To uncover the cross-sectoral and cross-border impacts of economic activities on SDGs, the analysis in the report focuses on four indicators, the last three coming directly from the Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs): agricultural and food processing, manufacturing, medium and high-tech industry (MHTI) and R&D value added. These linkages are analysed by using the OECD’s *Inter-country Input Output (ICIO) Tables* (OECD, 2021a) and TiVA (OECD, 2021b) databases. Figure 5 shows the shares of domestic and foreign MHTI and R&D value added embodied in domestic final demand. It highlights the prominent role of international trade in advancing SDG-related economic activity since it shows that countries’ final demand for SDG-related goods and services relies to a significant extent on foreign value added, with the notable exception of final demand for R&D, which remains largely domestic.
Figure 5. Domestic and foreign value added of medium and high-tech industries and R&D embodied in domestic final demand in 2015

A. MHTI value-added embodied in domestic final demand

B. R&D value-added embodied in domestic final demand

Note: MTHI = medium and high-tech industry.

Source: OECD (forthcoming), Industrial Policy for the Sustainable Development Goals: How to Increase the Private Sector’s Contribution to the SDGs.
Governments are implementing policy packages to achieve the SDGs

The report not only explores new evidence, but also looks at the policy environment. A policy benchmarking exercise conducted for seven countries (Costa Rica, Canada, France, Germany, Japan, Korea and New Zealand) and the European Union reveals that countries are already implementing policy packages — often referred to as “strategies” — to adhere to their commitment to the 2030 Agenda. These policy packages and strategies are composed of an array of complementary instruments targeting specific objectives, typically one SDG. In total, 173 policy instruments were collected under the policy benchmarking exercise. These were then categorised by policy type, namely “rewards and incentives”, “government assistance” and “mandatory compliance”.

Rewards and incentives consist of subsidies, loans, or equity investments, the objective of which is to reduce the cost or the risk associated with investing in sustainability. Government support policies enable firms to access relevant information or provide the legal framework to foster their contribution to the SDGs. Mandatory compliance instruments are comprised of regulations to deter firms from producing in way that might be costly to society (e.g. safety at work requirements), to oblige firms to disclose information on the impact of their operations on SDGs (e.g. non-financial disclosure requirements) or to price negative externalities (e.g. CO2 emissions or fuel taxes).

The analysis shows that there is heterogeneity in the types of instruments used for specific policy objectives or to target SDGs. Figure 6 sorts the instruments collected by type, and by their targeted goal, namely; those addressing multiple types of SDGs; those addressing health, well-being and safety related SDGs; those addressing equity-related SDGs; and those addressing environment-related SDGs. Policy packages often include specific support to start-ups and innovative small and medium-sized enterprises (SMEs) in SDG-oriented sectors. Beyond innovative firms, governments also provide more generic support to firms’ sustainability actions. This support is in general available for all firms, but some instruments especially target small firms.

Figure 6. Number of instruments collected, by target SDGs and policy instrument type

![Figure 6](image)

Note: Numbers in the bars refer to the number of policy instruments collected in 2021 for the policy benchmarking exercise of Canada, Costa Rica, the European Union, France, Germany, Japan, Korea and New Zealand.

Source: OECD (forthcoming), Industrial Policy for the Sustainable Development Goals: How to Increase the Private Sector’s Contribution to the SDGs.
Key messages

This note highlights the role of industrial policies (including innovation and general business framework policies) to foster the contribution of firms to the SDGs through their core business. Governments need to implement industrial strategies to foster the business sector’s contribution to the SDGs, and its coordination with the public sector and civil society. The key policy messages are:

Although mandatory compliance instruments are a key component of policy packages, they may be insufficient to trigger sustainability shifts alone and need to be complemented with other types of policies, including:

- **Innovation support.** Rewards and incentives, especially aimed at start-ups and entrepreneurs, can be an effective tool to promote a vibrant ecosystem that fosters innovation and the development of SDG-related sectors where achievement of the SDGs is core to business activities (Anderson, et al., 2021).

- **Support to other firms**, and especially SMEs, which typically face more difficulties in adopting a sustainable business model. These firms are less likely to make such a shift, given their resource constraints. Government assistance instruments could be pivotal here, in reducing the high fixed costs associated with the sustainability transition.

Sound business framework conditions are also needed to support the market for sustainable products and services. The inter-country analysis in OECD (forthcoming) stresses the importance of trade policies for the achievement of the SDGs, linked to the cross-border impacts of trade in increasingly connected global value chains. Demand-side instruments, such as public procurement, may also be useful in some instances to create new markets for sustainable products and services.

Governance of SDG-oriented industrial strategies is key. To limit the risks of policy capture in previous waves of industrial policies, a particular emphasis should be placed on the inclusion of all types of firms, including young and small ones, rigorous policy evaluation and regular adjustment of policies.

Note

1. ICIO tables shed light on the mix of inputs required from home and abroad, to generate one unit of output in a given industry and country. In turn, they allow for the tracing of value added origin (direct and indirect) generated in global value chains. The direct contribution to value added captures the value added of a given industry in a specific country related to the production of goods or services for exports or final demand. The indirect contribution represents the value added of other upstream industries whose output enters into the production of the aforementioned goods or services for exports or final demand.

Further reading


Directorate for Science, Technology and Innovation Policy Note

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