# Analysis of the achievement of the SDGs by the Federal Government and potential spillovers

## Spillover analysis

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# 1. Context & objectives of the spillover analysis

## 1.1. Context

In addition to a conventional gap analysis that maps the progress of the federal government's efforts to achieve the SDGs, FIDO requests an overview of the impact of federal actions and policies on third countries, specifically on partner countries and least developed countries, the so-called spillovers.

To achieve sustainable development, it is essential to gain insight into spillover effects and minimise the potential negative effect of policy actions aimed at sustainable development. After all, the United Nations adopted the Sustainable Development Goals (SDGs) as a collective framework for advancing social, economic, and environmental progress globally. The achievement of the SDGs necessitates concerted efforts and policy coherence, particularly in the promotion of sustainable trade systems based on responsible consumption and production practices.

While countries regularly evaluate their progress towards the SDGs, there is often a lack of consideration regarding how their actions may impact the implementation efforts of other nations. However, with an increasing number of member states reporting spillovers, such as the Netherlands, Finland, France and Iceland, it is time to scale up ambitions.

As a significant participant in the multilateral system, Belgium holds a pivotal role in advancing the 2030 Agenda and managing its global responsibilities. Therefore, it is imperative to examine the positive and negative spillover effects of Belgium's actions on other countries worldwide. This study aims to provide a qualitative analysis of such effects, shedding light on Belgium's contributions and challenges in facilitating the collective pursuit of the SDGs on a global scale.

This is also in line with the 3rd Federal Plan for Sustainable Development (FPSD), which proposes strengthened policy coherence, taking into account mutual coherence and undesirable effects of policy actions. This plan puts more emphasis on the so-called 'leave no one behind' principle, reforming the Belgian production and consumption model, and addressing international priorities such as respecting human rights, democracy, and fighting global inequality.

## 1.2. Main components of the analysis

The primary objective of this study is to assess different types of spillover effects from Belgium, to identify which ones should be addressed first, thereby facilitating a comprehensive approach to sustainable development. Furthermore, the study aims to identify and explore indicators and information sources to gain further insight into these spillover effects, with an assessment of how to operationalise these for the federal government. By undertaking this analysis, we aim to provide actionable insights and recommendations that will assist policymakers in effectively managing spillover effects and advancing the SDGs.

The analysis presented in this report is based on elaborate document research and in-depth interviews with the Directorate-General for Development Cooperation (DGD), The Belgian Development Agency Enabel and the Advisory Committee for Policy Coherence. It starts with a scoping overview of the most common spillovers and their link with the international context, followed by a categorisation exercise to classify the Belgian spillovers through two well-known international spillover indexes: the SDG Index and the Global Commons Stewardship (GCS) Index. We present a comparative assessment of theses indexes and their usability in federal Belgian context. We provide an initial overview of relevant indicators available through STATBEL as Belgian statistical services and other (regional) sources, as well as a view on preliminary work by the Federal Planning Bureau on carbon footprints.

This is followed by a description and assessment of current mechanisms and practices in the implementation of the FPSD, as well as an overview of EU-level and national efforts to develop indicators to better capture and manage spillover effects (mainly through consumption-based footprint indicators).

This results in a view of the possibilities to explore paths for the federal government to tackle spillovers in its sustainable development policies. We elaborate on these paths on the final section with recommendations on monitoring of spillovers and management of spillovers.


# 2. Spillovers & Sustainable Development Goals

## 2.1 Spillovers as concept in the SDG Agenda

The SDGs are a global responsibility. Therefore, the Belgian implementation of the SDGs should not hinder other countries' progress in achieving them (Schmidt-Traub, Hoff, and Bernlöhr 2019). Practices such as unsustainable consumption, exporting toxic waste, engaging in illicit trade, promoting unfair tax competition, maintaining tax havens, and generally poor implementation of SDG 17 (Partnerships for the Goals) can cause negative international spillovers.

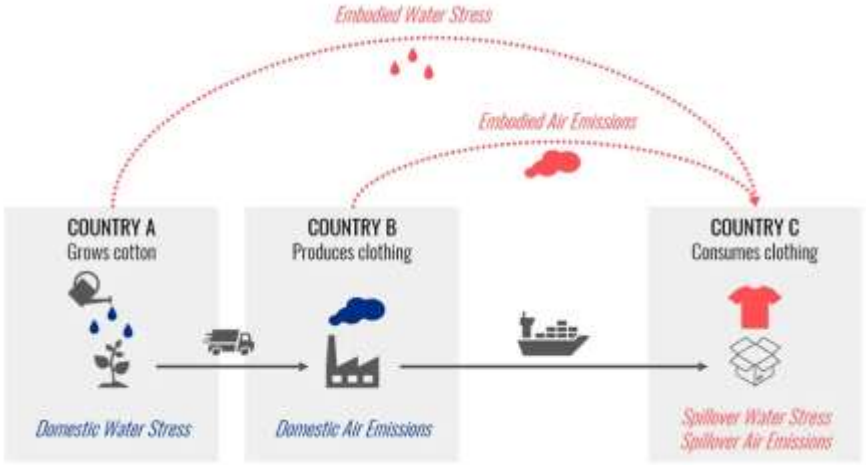
Spillovers are the impacts that policies and strategies in one region have on other regions, transcending geographical boundaries and interconnected global systems. However, the pursuit of the SDGs often entails complex interactions and interdependencies among countries and sectors, giving rise to a myriad of spillover effects.

Most commonly categorized as economic, environmental, and social spillovers, these negative impacts can arise from unsustainable behaviour or specific policy initiatives of a country. These are also referred to as transboundary effects, occurring when one country's actions create benefits or impose costs on another country.

Global trading relationships and international financial investment streams can facilitate the exchange of environmental, social, and economic best practices, leading to more ambitious criteria in business models and policies. This can indirectly foster relationships between countries based on sustainability criteria. However, these interactions can also result in social, economic, and environmental degradation.

For instance, our demand for raw materials (such as palm oil) in one country can fuel deforestation in other countries. But trade-offs also include poor labour standards in international supply chains that harm the poor in many developing countries. The image below (from the SDG Transformation Center) clearly shows how (in this case) country C has negative effects on country A and B, through the demand and consumption of clothing.

*Figure 1: Example negative spillovers*




Apart from negative effects of these 'classic' non-sustainable practices, it is important to take account of the potential spillovers of policies aimed at sustainable development and transitions (e.g. circular economy, material & energy transition, …). Policies aimed at promoting clean energy adoption in one country may lead to increased demand for renewable technologies, triggering shifts in global supply chains and influencing market dynamics worldwide. Similarly, investments in education and healthcare infrastructure can enhance human capital development domestically while fostering knowledge spillovers and capacity-building in neighbouring regions.

In light of this understanding, prof. Jeffrey D. Sachs (SDSN) proposed a framework for achieving the SDGs by 2030 through six key transformations. These transformations address not only the immediate challenges within individual countries but also acknowledge the broader global impacts, offering a systematic approach to mitigating spillover effects and fostering sustainable development on a global scale. Since 2018, the Sustainable Development Solution Network (SDSN) has mobilized its global network to track government efforts and commitments for the SDGs.

Using the 'Six Transformations Framework', SDSN produces sectoral policy scorecards to track the evolution of investment and legislative frameworks for each major transformation. SDSN also evaluates the participation of countries in formal SDG review processes, notably the submission of Voluntary National Reviews (VNRs). The methodology and databases from past editions are available online (Lafortune, Woelm, and Valentiny 2022; Sachs et al. 2023). The six transformations are represented in the figure below.

*Figure 2: The six SDG Transformations underpinned by the principle of Leaving No one Behind*

In general, High-Income Countries (HICs) often produce significant adverse effects on other nations, primarily due to unsustainable consumption patterns, financial opacity, and the presence of tax havens. These impacts are consolidated into an 'International Spillover Index', as shown in Figure 3, which presents a comparative view of international spillover index outcomes categorized by income levels. The figure demonstrates that while high-income countries perform well in fulfilling the SDGs, they also score the worst on the spillover index, indicating negative effects on other countries (Sachs, J.D., Lafortune, G., Fuller, G., 2024).

*Figure 3 SDG Index scores versus International Spillover Index scores, 2024*


This year's Sustainable Development Report (SDSN, 2024) includes 16 spillover indicators, one of which is a new indicator measuring countries' support for UN-based multilateralism. In figure 4, it is shown that the indicators are organized into three categories of international spillovers: 1) environmental and social impacts embodied into trade; 2) economy and finance and 3) UN-based multilateralism, peace and security. The International Spillover Index score is calculated as the arithmetic average of a country's score on all of the indicators, weighted equally. The score ranges from 0 to 100, where a lower score denotes more negative spillover impacts and a higher score denotes fewer negative spillover impacts (Sachs, J.D., Lafortune, G., Fuller, G., 2024).

*Figure 4 Spillover indicators and categories, 2024*

| Spillover Categories | SDG | Indicator |
|---|---|---|
| Environmental and social impacts embodied into trade | 2 | Exports of hazardous pesticides (tonnes per million population) |
| | 6 | Scarce water consumption embodied in imports ($m^3$ $H_2O$eq/capita) |
| | 8 | Fatal work-related accidents embodied in imports (per million population) |
| | 8 | Victims of modern slavery embodied in imports (per 100,000 population) |
| | 12 | Air pollution associated with imports (DALYs per 1,000 population) |
| | 12 | Nitrogen emissions associated with imports (kg/capita) |
| | 12 | Exports of plastic waste (kg/capita) |
| | 13 | GHG emissions embodied in imports ($tCO_2$/capita) |
| | 14 | Marine biodiversity threats embodied in imports (per million population) |
| | 15 | Imported deforestation ($m^2$/capita) |
| Economy and finance | 17 | For high-income and all OECD DAC countries: International concessional public finance, including official development assistance (% of GNI) |
| | 17 | Corporate Tax Haven Score (best 0–100 worst) |
| | 17 | Financial Secrecy Score (best 0–100 worst)* |
| | 17 | Shifted profits of multinationals (US$ billion)* |
| UN-based multilateralism, Peace & Security | 16 | Exports of major conventional weapons (TIV constant million USD per 100,000 population) |
| | 17 | Index of countries' support to UN-based multilateralism (worst 0–100 best) |

Belgium is performing well on the general SDG Index, securing the 17th position, reflecting its strong commitment to achieving the Sustainable Development Goals domestically. However, Belgium's performance is notably poor regarding international spillovers, indicating negative impacts on other countries. More specifically, Belgium ranks 126th on the latest 2024 Index of Countries' Support to UN-Based Multilateralism (UN-Mi). This disparity highlights the need for Belgium to address its transboundary effects and enhance its contributions to global sustainability efforts.

In the next sections, we will explore further the position and priorities of Belgium in relation to various spillovers.

## 2.2 Other types of spillovers

Apart from environmental, economic and social spillovers arising from production methods, trade practices and financial flows, other types of spillovers can manifest in various areas, ranging from cultural and technological to institutional and geopolitical.

### Cultural spillovers

Cultural exchanges between countries can have unintended effects on both receiving and source countries. These spillovers can manifest in the form of language dissemination, spread of art and culture, and adoption of social norms and values (Fleming Creative Consultancy, 2015)[1]. However, cultural spillovers can also have negative consequences, such as the erosion of local traditions and identities, and the imposition of dominant cultural norms which may lead to cultural homogenization.

### Technological spillovers

Technological advancements in one country can have spillover effects on other countries, both positive and negative. Revising SDG 17 under chapter 2.4 indicates that positive technological spillovers can occur when knowledge, innovation, and technologies are shared and adopted by other countries, stimulating productivity and economic growth. On the other hand, negative technological spillovers can occur when harmful technologies or practices are disseminated, such as polluting production methods or cyber-attacks.

### Institutional spillovers

As SDG 16 aims for peace, justice & strong institutions, institutional arrangements and policy measures in one country can affect institutional capacity and governance in other countries. For example, transparency and anti-corruption measures in developed countries can serve as models for institutional reforms in developing countries, which can have positive spillover effects on the effectiveness of government institutions and the rule of law. The effect of institutional spillovers is mirrored within the SDG-index, as it encompasses the assessment of public finance and financial secrecy.

### Geopolitical spillovers

Changes in the geopolitical landscape, such as international conflicts, migration flows, and geopolitical rivalries, can have spillover effects on neighbouring countries and the broader region. These spillovers can have economic, social, and security implications, affecting the stability and development of affected countries. For example, a conflict in a neighbouring country can lead to a refugee crisis and economic disruption in adjacent countries, undermining regional stability (Bouri, Gabauer, Gupta & Kinateder, 2023)[2].

[1] Fleming Creative Consultancy (2015), Culturele en creatieve spill-overs in Europa, rapport
[2] Bouri, E., Gabauer, D., Gupta, R. & Kinateder, H. (2023) Global geopolitical risk and inflation spill-overs across European and Noth American economies

## 2.3 SDG 17 & the Leave No One Behind - principle

In this study, SDG 17 and the UN's 'Leave No One Behind' (LNOB) principle serve as the background for assessing Belgian spillovers. By focusing on these principles, the study aims to develop a comprehensive understanding of the challenges Belgium faces and to provide actionable policy recommendations.

### 2.3.1 SDG 17

Sustainable Development Goal 17 (SDG 17) emphasizes the importance of partnerships for the successful implementation of all Sustainable Development Goals (SDGs). It recognizes that achieving sustainable development requires collaboration among governments, the private sector, civil society, and other stakeholders. SDG 17 aims to strengthen global partnerships to support and achieve the ambitious targets set forth in the 2030 Agenda for Sustainable Development. This by setting out subgoals that focus on finance, technology, capacity building, trade and systemic issues.

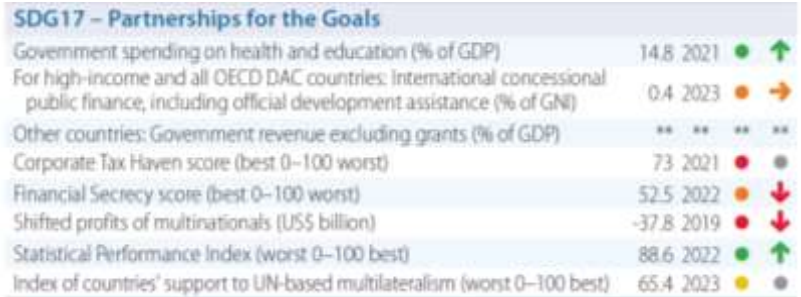
In doing so, SDG 17 recognizes the interconnectedness of global challenges and the need for coordinated action to mitigate spillovers and maximize positive impacts, by addressing systemic issues. These issues can only be solved through the promotion of cross-sectoral collaboration and knowledge-sharing within technology and trade but also healthy and transparent financial institutions. Another important aspect of SDG 17 is its emphasis on capacity-building and institutional strengthening in partner countries.

In conclusion, SDG 17 plays a crucial role in addressing spillovers from sustainable development work by fostering partnerships, promoting collaboration, and strengthening institutions. By leveraging collective action and shared responsibility, SDG 17 contributes to building a more inclusive, equitable, and sustainable world for present and future generations.

In the latest SDG index (Sachs, J.D., Lafortune, G., Fuller, G., 2024), major challenges remain for Belgium regarding SDG 17. Significant and major challenges remain on the following indicators (see also Figure 5):

- International concessional public finance, including official development assistance
- Corporate Tax Haven score
- Financial Secrecy score
- Shifted profits of multinationals

*Figure 5 Belgium, performance by indicator, SDG 17, 2024*




**When comparing SDG 17 with the spillover effects of the SDG Index, it becomes evident that SDG 17 can exert both positive and negative impacts on these spillover effects.**

Firstly, the subgoal 'Finance' within SDG 17 has the potential to positively augment the spillover of international public finance through various initiatives. Actions such as bolstering domestic resource mobilization, fulfilling official development assistance commitments, mobilizing additional financial resources, aiding developing countries in achieving sustainable long-term debt management through coordinated policies, and implementing

investment promotion regimes for least developed countries are likely to yield positive spillover effects in public finance. This could entail an increase in the proportion of official development assistance relative to Belgium's gross national income. Given Belgium's persistent challenges and its 2022 score of 0.45 against the OECD's target of 1, exploring these avenues could prove beneficial.

Secondly, the subgoal 'Technology' has the potential to mitigate adverse spillover effects associated with CO2 emissions, nitrogen, and SO2 emissions by enhancing access and promoting the development and transfers to science, technology and innovation.

Thirdly, the subgoal 'Trade' can have a great impact on spillovers. The subgoals of promoting universal, rules-based and open multilateral trading system under WTO can prevent negative spillovers that fall under tax havens and financial secrecy. Unfortunately, the possible negative impacts of the trade actions under SDG 17 seem to promote the possibility of negative spillovers because increasing the exports of developing countries could cause more negative spillovers for scarce water consumption, fatal work-related accidents, modern slavery, greenhouse gas emissions and biodiversity loss in water but also on land. Next to that, the implementation of duty and quota free market access could also have perverse effects and create a negative spill-over on tax havens and shifted profits for multinationals.

Finally, the subgoal 'Systemic Issues' has the potential to amplify positive spillover effects, as advocating for global macroeconomic stability may indirectly foster transparency in tax havens and financial secrecy. Additionally, implementing data monitoring systems in developing countries, focusing on income indicators, could offer deeper insights into modern slavery, thereby aiding efforts to combat this issue.

In summary, most of the spillovers can indirectly be matched with SDG 17. Only the spillover effects of pesticide exports cannot be directly attributed to SDG 17. Moreover, SDG 17 fails to address spillovers through its actions concerning capacity building and most measures pertaining to systemic issues, such as enhancing policy coherence, respecting national policy autonomy and leadership, fostering global partnerships, and measuring sustainable development progress.

The SDG framework also explicitly encapsulates the importance of 'Policy Coherence for Sustainable Development' (PCSD) under SDG 17.14, as an integral mechanism to the implementing the SDGs. The OECD[3] distinguishes three main components of this mechanism:

- Foster synergies across economic, social and environmental policy areas (internal)
- Identify trade-offs and reconcile domestic policy objectives with internationally agreed objectives
- Adress the negative spillovers of domestic policies

This implies that policies with negative spillover effects are by definition not sustainable, and thus not optimally contributing to the SDGs. This is in turn again closely linked to the application of the 'Leave No One Behind' (LNOB) principle in SDG policies.

PCSD thus presents itself as a crucial approach and policy tool to systematically integrate the economic, social and environmental dimensions of sustainable development at all stages of domestic and international policymaking. We will explore this topic in greater detail further in the report.

### 2.3.2 Leave no one behind

The concept of 'Leave no one behind' (LNOB) stands as a pivotal commitment within the framework of the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs). It embodies the resolute pledge of all UN Member States to eradicate poverty in its entirety, eliminate discrimination and exclusion, and

[3] https://read.oecd-ilibrary.org/development/policy-coherence-for-sustainable-development-2018_9789264301061-en#page85

mitigate the inequalities and vulnerabilities that perpetuate marginalization and hinder the potential of individuals and humanity.

LNOB entails not only reaching the most impoverished segments of society but also addressing discrimination and escalating inequalities within and among nations and generations, along with their underlying causes. LNOB urges us to confront discrimination and inequalities, often intertwined and intersecting, which undermine individuals' agency as rights holders. Many of the obstacles' individuals encounter in accessing services, resources, and equal opportunities stem not merely from chance or resource scarcity but rather from discriminatory laws, policies, and social norms that perpetuate the marginalization of specific groups of people.

The main concepts LNOB focuses on in its framework are equality (i.e. the imperative of moving towards substantive equality of opportunity and outcomes for all groups), non-discrimination (i.e. the prohibition of discrimination against individuals and groups on the grounds identified in international human rights treaties) and equity y (i.e. fairness in the distribution of costs, benefits and opportunities).

According to the United Nations Sustainable Development Group, the LNOB principle requires (UNSDG, 2019a)[4]:

- "...disaggregating data to identify who is being excluded or discriminated against, how and why, as well as who is experiencing multiple and intersecting forms of discrimination and inequalities.".
- "...supporting legal, policy, institutional and other measures to promote equality and reverse the trend of rising inequalities."
- "...free, active and meaningful participation of all stakeholders, particularly the most marginalised, in review and follow-up processes for ensuring accountability, recourse and remedies to all."

Leaving no one behind entails:

- "...identifying unjust, avoidable or extreme inequalities in outcome and opportunities, and patterns of discrimination in law, policies and practices."
- "...addressing patterns of exclusion, structural constraints and unequal power relations that produce and reproduce inequalities over generations and moving towards both formal and substantive equality for all groups in society."

In summary, SDG 17 and the 'Leave No One Behind' (LNOB) principle are crucial when measuring potential spillover effects. SDG 17 emphasizes global partnerships, which are essential for addressing transboundary challenges and fostering sustainable development. The LNOB principle ensures that efforts are inclusive and equitable, setting a high standard for ambitions in areas without explicit SDG targets. Applying these principles in the development of the next federal plan on sustainable development will help set ambitious yet attainable goals, ensuring that Belgium's actions contribute positively to global sustainability and minimize negative spillovers.

[4] UNSDG (2019a). Leaving no one behind – A UNSDG operational guide for UN country teams. Interim draft. UNSDG.

# 3. Belgian spillovers based on international indexes

This chapter presents an analysis of the two main international indexes of spillover effects, including relevant spillovers for Belgium. By examining the various indicators used to compile these indexes, we assess their utility and feasibility for strengthening the monitoring of spillover effects by the federal government.

## 3.1 SDG spillover index

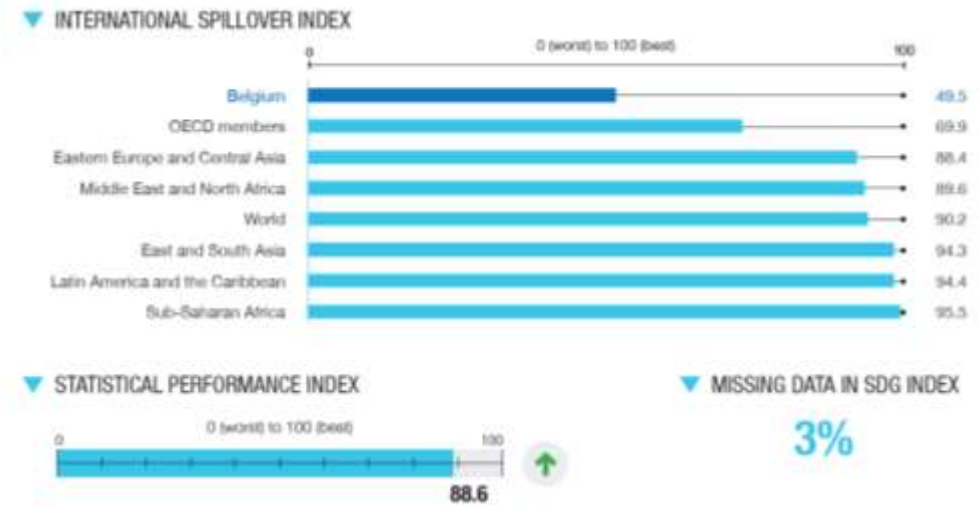
The stride towards controlling and mitigating adverse ripple effects of sustainable development between countries involves their quantification - comprehending their origins and extent. Embedded within the SDG Index, the International Spillover Index serves as a tool crafted to monitor these multifaceted manifestations of spillovers. The SDG Index uses a standardized scoring system across all indicators, but the scales may vary depending on the specific indicator being measured. For our study, we explored data in the 2023 and 2024 SDG Index report.

Similar to the SDG Index, the spillover index evaluates national performance on a spectrum spanning from 0 to 100. A score of 0 reflects the poorest performance, indicative of pronounced negative spillovers, whereas a score of 100 denotes optimal performance. The spillover index measures along four dimensions, each linked to a number of parameters:

- Ecological and social spillovers, linked to international trade;
- Financial spillovers
- Transboundary physical flows of pollutants through air and water
- Externalities linked to peacekeeping and international security;

In 2023, Belgium received a spillover score of 50.57 out of 100, ranking 160th out of 166 countries. In 2024, Belgium's score slightly decreased to 49.5. With 0 as the worst score and 100 as the best score, Belgium has some major challenges. Especially compared to other OECD countries who score with an average of 69,9, Belgium scores below average. Eastern Europe, the Middle East and North Africa, Latin America and the Carribean, East and South Asia, Sub-Saharan Africa and Oceania all score above 88 on the spillover index. The score indicates that Belgium creates more negative spillovers than the other G7 countries and the rest of the world more generally.

Figure 6*: SDSN Spillover index, comparative situation for Belgium, the Sustainable Development Report 2024*



The diagram below shows some of the parameters on which Belgium shows significant negative spillovers.

*Figure 7: Belgian scoring on specific types of spillover effects*


To facilitate meaningful comparisons, spillover indicators undergo standardization, such as being adjusted by population size, to ensure that large countries are not disadvantaged solely due to their magnitude. Generally, small high-income countries with extensive trade openness tend to exhibit relatively stronger performance on *production-based indicators*. These indicators consist of aspects like greenhouse gases, water and land use. These countries show weaker performance on *consumption-based metrics*, as they heavily rely on imported goods for consumption that were produced in other countries where they don't have a say in greenhouse gases, water and land use. In absolute terms (without adjusting for population), the United States, China, Japan, and Germany emerge as the top generators of trade-related spillovers globally (SDSN, Yale Center for Environmental Law & Policy, and Center for Global Commons at the University of Tokyo, 2023). In the next section, we explore further the various impacts for Belgium.

### 3.1.1 Environmental and social impacts embodied in trade

The environmental and social impacts are influenced by imported products that contain water consumption out of scarcity & terrestrial and freshwater, SO2, CO2, Nitrogen, but also the exports of plastic waste. Significant challenges are victims of modern slavery and the export of hazardous pesticides. Finally, there are also some marine biodiversity treats based within imports. The indicator monitoring modern slavery is newly added to the SDG Index. In the tables below, we describe the spillover, the objective used in the SDG spillover index, data for Belgium, and any relevant sources related to the specific spillover. For more details of the relevant sources used, we refer to the publications of SDSN, and specifically the SDG Index 2023 and 2024 (Sachs, J.D., Lafortune, G., Fuller, G. (2024).

*Table 1: Relevant spillover effects embodied in trade (Sachs, J.D., Lafortune, G., Fuller, G. (2024).*

| Spillover | Description | Objec-tive | Data SDG-Index for Belgium | Source SDG Index | Other potential sources |
|---|---|---|---|---|---|
| Export of hazardous pesticides | Pesticides deemed hazardous to human health | 0 | 39.98 in the year of 2020 which means that significant challenges remain | FAO | Federal department for health & environment following up on REACH |

| | | | | | |
|---|---|---|---|---|---|
| Scarce water consumption | water consumption vs renewable water resources | 100 | 6802.08 in 2018 which means that major challenges remain | UNEP | Federal department Economy following up the CSRD |
| Victims of modern slavery | victims of forced labor | 0 | 138.15 in the year of 2018 which means that signifi-cant challenges remain | Study from 2021 | Federal department Economy following up the CSRD |
| SO2 emissions embodied in imports | Emissions of SO2 in good & services | 0 | 11.94 which means major challenges remain | Study from 2022 | Federal department Economy following up the CSRD |
| Nitrogen emissions embodied in imports | Emissions of ammonia, nitrogen oxides, nitrous oxide & reactive nitrogen | 0 | 61.42 in the year of 2018 which means major challenges remain | UNEP | Federal department Economy following up the CSRD |
| Export of plastic waste | Amount of plastic waste exported | 0 | 28.69 in the year of 2021 which indicate that major challenges remain | UN Comtrade | OVAM (Flanders) |
| CO2 emissions embodied in imports | CO2 emissions embodied in goods & services | 0 | 5.18 in the year of 2018 which means major challenges remain | Study from 2022 | Federal department for health & environment following up the CSRD |
| Marine Biodiver-sity threats embodied in imports | Threats to marine species embodied in imports of goods and services | 0 | 0.23 in the year of 2018 which means challenges remain | Study from 2018 | UN BBNJ |
| Terrestrial & fresh water biodiversity threats embodied in imports | Threats to terrestrial and freshwater species embodied in imports of goods and services | 0 | 4.72 in the year of 2018 which means major challenges remain | Study from 2018 | IUCN Red List Index |

Belgium faces several critical spillover effects embodied in trade that require targeted policies and actions from federal public services and policy domains. The following analysis identifies these priorities and links them to appropriate federal policies.

### Export of hazardous pesticides & pesticides deemed hazardous to human health

- **Priority**: Reduce the export of hazardous pesticides and those harmful to human health.
- **Federal policy link**: The Federal Public Service (FPS) for Health, Food Chain Safety, and Environment can strengthen regulations and enforcement on pesticide exports, ensuring compliance with international safety standards and promoting safer alternatives.

### Scarce water consumption vs.renewable water resources

- **Priority**: Manage water consumption effectively, especially concerning scarce water resources.
- **Federal Policy Link**: The FPS Environment can implement stricter water usage policies, promote water-saving technologies, and support international cooperation on sustainable water management.

### Victims of modern slavery & forced labor

- **Priority**: Eliminate modern slavery and forced labour in supply chains.
- **Federal Policy Link**: The FPS Employment, Labour and Social Dialogue can enhance labour rights inspections, enforce anti-slavery laws, and promote ethical labour practices in trade agreements.

SO2 emissions embodied in imports & emissions of SO2 in goods and services

- **Priority**: Reduce SO2 emissions associated with imports and the production of goods and services.
- **Federal Policy Link**: The FPS Public Health can set stricter emission standards and incentivize cleaner production technologies.

Nitrogen emissions embodied in imports & emissions of ammonia, nitrogen oxides, nitrous oxide & reactive nitrogen

- **Priority**: Minimize nitrogen emissions from imports and domestic production.
- **Federal Policy Link**: The FPS Environment can implement policies to reduce nitrogen emissions, such as promoting sustainable agricultural practices and reducing the use of nitrogen-intensive fertilizers.

Export of plastic waste & amount of plastic waste exported

- **Priority**: Decrease the export of plastic waste.
- **Federal Policy Link**: The FPS Environment and FPS Economy can promote circular economy initiatives, improve waste management practices, and regulate plastic waste exports more strictly.

CO2 emissions embodied in imports & emissions in goods and services

- **Priority**: Reduce CO2 emissions from imports and the production of goods and services.
- **Federal Policy Link**: The FPS Environment can enforce carbon footprint reduction measures, support renewable energy adoption, and integrate CO2 reduction targets in trade policies.

Marine biodiversity threats embodied in imports

- **Priority**: Protect marine biodiversity from threats posed by imports.
- **Federal Policy Link**: The FPS Environment and FPS Public Health can work together to enforce stricter regulations on marine biodiversity protection, promote sustainable fishing practices, and limit the import of goods threatening marine species.

Terrestrial & freshwater biodiversity threats embodied in imports

- **Priority**: Safeguard terrestrial and freshwater biodiversity from import-related threats.
- **Federal Policy Link**: The FPS Environment can enhance regulations to protect biodiversity, support conservation initiatives, and encourage the import of sustainably sourced goods.

By aligning federal policies with these priorities, Belgium can effectively address the negative spillover effects embodied in trade, ensuring sustainable and ethical practices that align with SDG 17 and the 'Leave No One Behind' principle.

### 3.1.2 Economy and finance

Belgium still has a major challenge on preventing its structures to be a corporate tax haven and how profits of multinationals shift. The goal is to minimize the potential to poach the tax base of others, as enshrined in its laws, regulations and administrative practices. Another significant challenge is the financial secrecy and international concessional public finance. The latter want to improve official development assistance through grants and soft loans.

Table 2: *Relevant spillover effects related to economy and finance (Sachs, J.D., Lafortune, G., Fuller, G. (2024).*

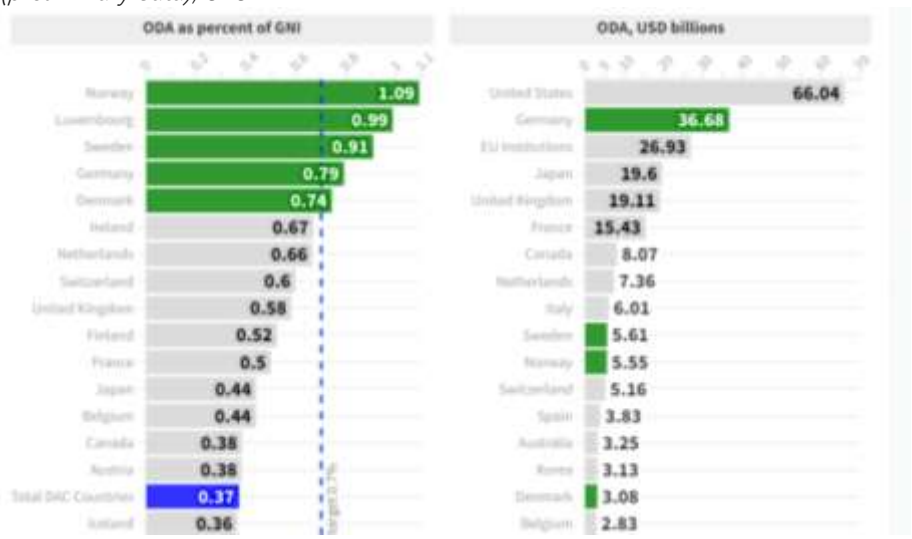
| Spill-over | Description | Objective | Data SDG-Index for Belgium | Source SDG Index | Other potential sources |
|---|---|---|---|---|---|
| Public finance | Amount of official development assistance as a share of gross national income | 1 | 0.45 in 2022 which means significant challenges remain | OECD | Enabel |
| Tax Haven | A jurisdiction's potential to poach the tax base of others, as enshrined in its laws | 40 | 73.00 in 2021 which means major challenges remain | Tax Justice network | FOD Finance & Statbel Corruption Index |
| Financial secrecy score | Each jurisdiction to financial secrecy | 42.7 | 52.53 in the year of 2022 which means significant challenges remain | Tax Justice Network | FOD Finance |
| Shifted profits multinationals | Estimation of how much profit is shifted into tax havens and how much non-haven countries lose in profits from such shifting | 0 | -37.79 in the year of 2019 which means major challenges remain | Missing profits | FOD Finance |

Belgium faces significant public finance-related spillover effects that require focused policies and actions from federal public services and policy domains. The following elements identify these priorities and link them to appropriate federal policies.

### Amount of official development assistance as a share of gross national income

- **Priority**: Increase official development assistance (ODA) to meet international commitments.
- **Federal Policy Link**: The FPS Foreign Affairs, Foreign Trade, and Development Cooperation can work to increase Belgium's ODA, aligning it with the UN target of 0,7% to GNI. According to data of the OECD, Belgium only reaches 0,44 % to GNI. The target of 0,7% can be achieved through enhanced budget allocations and more effective aid distribution strategies.

Figure 8: *Official Development Assistance (ODA) in 2023, by members of the Development Assistance Committee (preliminary data), OECD*




### Tax haven

- **Priority**: Address the issues related to tax havens and their impact on global tax fairness.
- **Federal Policy Link**: The FPS Finance can implement stricter regulations to prevent tax evasion and aggressive tax planning. Collaboration with international bodies to reform tax laws and close loopholes that allow base erosion and profit shifting is crucial.

A jurisdiction's potential to poach the tax base of others

- **Priority**: Minimize the potential for tax base poaching by jurisdictions.
- **Federal Policy Link**: The FPS Finance, in coordination with international tax organizations, can advocate for and adopt global standards that limit harmful tax practices. Strengthening domestic laws to prevent tax base poaching and ensuring compliance with international agreements is essential.

Financial secrecy score

- **Priority**: Reduce Belgium's financial secrecy score to improve transparency.
- **Federal Policy Link**: The FPS Finance can enhance transparency in financial transactions by enforcing stricter reporting requirements and sharing financial information with international tax authorities. Promoting open financial practices and participating in global initiatives like the OECD's Common Reporting Standard (CRS) can further reduce financial secrecy.

Shifted profits multinationals

- **Priority**: Address the shifting of profits by multinationals to tax havens.
- **Federal Policy Link**: The FPS Finance can work to prevent profit shifting by multinational corporations through robust transfer pricing regulations and participation in international tax reforms like the OECD's Base Erosion and Profit Shifting (BEPS) project. Implementing measures to track and penalize profit shifting activities will ensure fair tax practices.

Estimation of how much profit is shifted into tax havens and how much non-haven countries lose in profits from such shifting

- **Priority**: Accurately estimate and address the financial impact of profit shifting to tax havens.
- **Federal Policy Link**: The FPS Economy and FPS Finance can collaborate to conduct comprehensive studies on profit shifting, using the data to inform policy decisions. Developing tools to monitor and assess the impact of profit shifting on Belgium's economy and working with international bodies to combat these practices will help mitigate losses.

By aligning federal policies with these priorities, Belgium can effectively address the negative spillover effects related to public finance, ensuring fair and transparent financial practices that support sustainable development goals and promote global tax equity.

### 3.1.3 Positive spillovers: security & fatal work-related accidents

According to the spillover index, Belgium has made progress in mitigating some spillover effects. However, we advise maintaining a critical perspective and developing additional indicators to continue monitoring these impacts effectively.

#### Fatal-work related accidents

The first spillover that has been achieved is fatal work-related accidents embodied in imports. With a score of 0.49 Belgium is close to the objective of 0. However, this score (based on a single study in 2018) may not be fully representative. Focusing solely on fatal accidents results in a relatively small number. However, when attention shifts to non-fatal incidents and the associated lost workdays and wage losses, Belgium could exhibit a significant negative spillover in this area.

### Security

The second positive indicator and the only indicator that measures security within the spillover index is the export of major conventional weapons. This is assessed using a five-year average based on the latest ten years of data. According to the spillover index, Belgium has successfully reduced this spillover to near zero, achieving a score of 0.30.

The security of a country cannot be measured solely by the import and export of weapons. This spillover should be complemented by additional indicators. To accurately measure security and monitor SDG 16, which aims for peace, justice, and strong institutions, it is essential to include indicators such as disarmament, violence, conflict, political stability, human rights, peace-building strategies, extremism, military expenditure, organized crime, corruption, economic stability, and natural and climate disasters.

According to the Stockholm International Peace Research Institute (SIPRI), further questions should be considered to measure a country's security. These include identifying the suppliers and recipients of major conventional weapons, the types of weapons exported, the sources of weapons, control regulations, and the relationship between access to natural resources and arms transfers.

### 3.1.4 Shortfalls of the SDG spillover index

Data for every country is based on 65% of official data and 35% on non-official data. The latter is used to bridge some of the data gaps in official statistics. Finding those data gaps for Belgium is important to be able to fully capture a holistic way of monitoring spillovers. What those data gaps are, will be difficult to track as the SDG Index only includes countries in their monitoring if they provide at least 80% of the data to cover for the indicators.

Moreover, a significant portion of the indicators relies on data derived from isolated studies, thereby causing non-rigorous reporting practices and complicating the task of monitoring such data at the national level.

Overall, the scoring methodology for the SDG Index is designed to provide a comprehensive assessment of countries' progress toward sustainable development goals. While most scores fall within the 0 to 100 range, variations can occur based on the complexity of the issue being measured and the specific methodology applied.

As a result of alterations in indicators and enhancements in methodology, comparisons between SDG Index rankings and scores from different editions are not viable. To ensure well-informed decision-making and strategy development regarding SDGs, governments and the international community should bolster investments in SDG data and monitoring systems.

In addition to delays in international statistics reporting, the current edition neglects to comprehensively consider the diverse impacts of recent conflicts on the SDGs. Furthermore, it overlooks the ramifications of other geopolitical and security crises that have emerged in the past 12 to 18 months. This oversight could contribute to the critique within this study regarding positively rated spillovers.

## 3.2 Global Commons Stewardship Index

The Global Commons Stewardship (GCS) made an index in 2022 to give more insights on countries' domestic and spillover impacts on global commons. The index does not track the state or vulnerability of our global commons. By categorizing impact in six pillars (see image below) each country has been analysed after rescaling all the different data. The index focuses on production and consumption and uses geospatial technologies to monitor CO2 emissions stemming from land-use change embodied intro trade.

The GCS evaluates countries both in absolute terms, focusing on the total impacts of a country, and in proportional terms, adjusting for the population size. Belgium has been rated as having an 'extreme impact' on the global commons, with a proportional score of 11.6 and an absolute score of 46.4 in terms of overall negative impacts.

At the domestic level, Belgium's impact on global commons is rated as 'very high,' with a proportional score of 34.1 and an absolute score of 50. The spillover index for Belgium is 4.0, indicating a concerning trend in the wrong direction. In absolute terms, Belgium scores 43, reflecting insufficient progress.

For the United States, China, Japan, and Europe, the primary spillovers generated are greenhouse gas (GHG) emissions, deforestation, and water stress. While a specific breakdown for Belgium is not provided, conducting a MRIO (Multi-Regional Input-Output) analysis could serve as a valuable follow-up exercise to further explore Belgium's spillover impacts.

Performance by Indicator

| Indicator | Proportional Value | Units | Score | | | Absolute Value | Units | Year |
|---|---|---|---|---|---|---|---|---|
| **Aerosols** | | | | | | | | |
| Domestic $SO_2$ emissions | 4.78 | kg/capita | 60.8 | | | 54.57 | Gg | 2018 |
| Spillover $SO_2$ emissions | 19.55 | kg/capita | 8.9 | | | 220.45 | Gg | 2015 |
| Domestic $NO_x$ emissions | 17.43 | kg/capita | 74.3 | | | 199.19 | Gg | 2018 |
| Spillover $NO_x$ emissions | 23.74 | kg/capita | 3.8 | | | 267.68 | Gg | 2015 |
| Domestic black carbon emissions | 0.30 | kg/capita | 81.7 | | | 3.43 | Gg | 2018 |
| Spillover black carbon emissions | 0.88 | kg/capita | 4.4 | | | 9.93 | Gg | 2015 |
| **GHG Emissions** | | | | | | | | |
| Domestic GHG emissions | 12.51 | t $CO_2$e/capita | 28.9 | | | 143.78 | Tg | 2019 |
| Spillover GHG emissions | 13.04 | t $CO_2$e/capita | 2.7 | | | 149.01 | Tg | 2018 |
| $CO_2$ emissions embodied in fossil fuel exports | NA | t $CO_2$e/capita | NA | | | NA | Tg | NA |
| **Terrestrial Biodiversity Loss** | | | | | | | | |
| Unprotected terrestrial biodiversity sites | 75.60 | % | 25.7 | | | 75.60 | % | 2020 |
| Unprotected freshwater biodiversity sites | 85.64 | % | 15.8 | | | 85.64 | % | 2020 |
| Domestic land use related biodiversity loss | $4.98 \times 10^{-12}$ | global PDF/capita | 99.4 | | | $5.69 \times 10^{-6}$ | global PDF | 2018 |
| Spillover land use related biodiversity loss | $1.42 \times 10^{-11}$ | global PDF/capita | 17.7 | | | $1.63 \times 10^{-4}$ | global PDF | 2018 |
| Domestic freshwater biodiversity threats | 0.01 | spp./million | 82.3 | | | 0.14 | species | 2018 |
| Spillover freshwater biodiversity threats | 0.74 | spp./million | 3.2 | | | 8.52 | species | 2018 |
| Domestic deforestation | 0.56 | % | 58.2 | | | $4.95 \times 10^{3}$ | hectares | 2020 |
| Spillover deforestation | $5.94 \times 10^{-5}$ | ha/capita | 15.0 | | | $6.79 \times 10^{4}$ | hectares | 2018 |
| Red List Index of species survival | 0.98 | scale 0 to 1 | 98.5 | | | 0.98 | scale 0 to 1 | 2021 |
| Biodiversity Habitat Index | 0.34 | scale 0 to 1 | 8.2 | | | 0.34 | scale 0 to 1 | 2020 |
| Domestic export of endangered terrestrial animals | $9.66 \times 10^{-4}$ | WOE/million | 99.9 | | | $1.11 \times 10^{2}$ | WOE | 2019 |
| Spillover endangered terrestrial animals | $3.43 \times 10^{-4}$ | WOE/capita | 99.6 | | | $3.94 \times 10^{2}$ | WOE | 2019 |
| **Marine Biodiversity Loss** | | | | | | | | |
| Domestic export of endangered marine animals | 0.00 | WOE/million | 100.0 | | | 0.00 | WOE | 2019 |
| Spillover endangered marine animals | $5.89 \times 10^{-4}$ | WOE/capita | 96.2 | | | $6.77 \times 10^{2}$ | WOE | 2019 |
| Unprotected marine biodiversity sites | 94.01 | % | 6.9 | | | 94.01 | % | 2020 |
| Domestic marine biodiversity threats | 0.00 | spp./million | 100.0 | | | 0.03 | species | 2018 |
| Spillover marine biodiversity threats | 0.23 | spp./million | 19.8 | | | 2.68 | species | 2018 |
| Fish caught from overexploited or collapsed stocks | NA | % | NA | | | NA | % | NA |
| Fish caught by trawling | 12.97 | % | 79.0 | | | 12.97 | % | 2018 |
| Domestic vulnerable fisheries catch | 0.42 | tonnes/capita | 79.9 | | | 0.00 | Tg | 2018 |
| Spillover vulnerable fisheries catch | 30.52 | tonnes/capita | 15.6 | | | 0.35 | tonnes | 2018 |
| **Nutrient Cycles** | | | | | | | | |
| Sustainable Nitrogen Management Index | 0.72 | scale 0 to 1.4 | 38.1 | | | 0.72 | scale 0 to 1.4 | 2015 |
| Domestic nitrogen surplus | 19.11 | kg/capita | 46.3 | | | 215.49 | Gg | 2015 |
| Spillover nitrogen surplus | 15.22 | kg/capita | 8.3 | | | 171.62 | Tg | 2015 |
| Domestic phosphorus fertilizer | 1.69 | kg/capita | 78.3 | | | 19.37 | kt | 2018 |
| Spillover phosphorus fertilizer | 7.09 | g/capita | 8.6 | | | 81.02 | kt | 2018 |
| **Water Cycle** | | | | | | | | |
| Domestic scarce water consumption | 5.96 | $m^3$ $H_2O$-eq./capita | 42.2 | | | 68.05 | $Mm^3$ $H_2O$-eq. | 2018 |
| Spillover scarce water consumption | 5.90 | $m^3$ $H_2O$-eq./capita | 96.0 | | | 116.54 | $Mm^3$ $H_2O$-eq. | 2018 |
| Domestic water stress | 0.14 | ML $H_2O$-eq./capita | 62.0 | | | 1.58 | $Bm^3$ $H_2O$-eq. | 2018 |
| Spillover water stress | 0.23 | $m^3$ $H_2O$-eq./capita | 95.8 | | | 4.62 | $Mm^3$ $H_2O$-eq. | 2018 |

### 3.2.1 Shortfall of the Global Commons Stewardship Index

The Global Common Stewardship Index has the same difficulty in obtaining refined data to quantify the impacts on the Global Commons. To bridge data deficiencies, this report has endeavoured to fill gaps and activate new

and improved datasets to monitor countries' impacts on the Global Commons to the best of its ability. However, despite the extensive consultation with a network of expert consultants for this report, limitations and data gaps persist. This underscores the requirement for additional statistical efforts, particularly with the collaboration and backing of international organizations.

In this study, it is observed (as attachment A.1 points out as well) that the GCS-Index overlooks social and economic spillovers, which are equally vital. Apart from the comparison of the GCS-Index with a country's GDP, specific economic or social aspects are not discussed. This limitation makes it challenging for the GCS-Index to align with the LNOB principle. It is essential to address not only environmental spillovers but also other socio-economic aspects to determine Belgium's sustainable development trajectory comprehensively. This broader perspective will facilitate prioritization and guide Belgium towards a more holistic approach to sustainable development.

## 3.3 A comparison between the SDG index & GCS-index

A comparison between the SDG-index and the GCS-index can't be made based on the calculation of the spill-overs itself because these two indexes measure different aspects of spill-overs. The SDG-index consists of indicators that measure to what extent the achievement of SDG's is causing spill-overs. The GCS-index measures how countries are affecting the global commons, the latter to which no direct connection is made to the SDG's. This also explains why the GCS-index does not take into account social and institutional aspects.

Based on the comparison of the SDG-Index and the Global Commons Stewardship Index as seen in attachment A.1, we summarized the spillovers as categorized below.

Table 3*: Summary of spillovers*

| Type of spillover | Description |
|---|---|
| Environmental spillovers | Environmental spillovers predominantly arise from the insufficient valuation of environmental impacts, especially concerning natural resources. A significant catalyst for these spillovers is the tendency of nations to formulate policies based solely on domestic priorities, often neglecting the imperative to mitigate spillovers and protect global resources. This poses a formidable challenge in tackling environmental spillovers effectively (Sustainable Development Report, 2023).<br>Export of pesticides, water consumption, SO2, NOx, Export of waste, CO2, loss of biodiversity on land and in water, nutrient cycles |
| Financial spillovers | Profit of multinationals, financial secrecy, tax haven, public finance in development, financial stability |
| Social spillovers | Modern slavery, work accidents, export of weapons |

## 3.4 STATBEL & the Federal Planning Bureau

In this section, we provide an initial overview of relevant indicators available through STATBEL as Belgian statistical services and other (regional) sources, as well as a view on preliminary work by the Federal Planning Bureau on carbon footprints.

### 3.4.1 Incorporating the work of STATBEL to measure spillover effects

On Belgian level, STATBEL is getting close to monitoring spillovers. A quick glance at attachment A.2 shows a first summary of indicators Belgium is tracking to monitor the impacts of their imports and exports. STATBEL has been mapping data on greenhouse gases, production of electricity, number of (electric) cars, meat consumption,

pesticides, oil spills, fishery at sea, nitrate in the river and soil, corruption, supporting the international climate agenda and international aid. These are all indicators that measure indirect spillovers or activities causing spillovers. Getting a holistic view on these possible spillovers would require some sort of factor to multiply the existing indicators with, which can also raise questions about the accuracy of the final spillovers. It is important is to utilize the rich database of STATBEL as a starting point for monitoring spillovers resulting from policies of the federal government.

By combining the insights and used spillover indicators of the SDG spillover index and the GSC index with indicators measured by STATBEL, we see many opportunities to create a set of comprehensive indicators specific to Belgium to monitor the main spillover effects. These indicators should cover economic, environmental, and social dimensions, including natural capital and resource use. In what follows, we provide an approach to how this can be done:

### Identify and categorise indicators

Firstly, organize the existing indicators into relevant categories such as economic, environmental, and social dimensions. For example:

- **Economic Indicators:**
  - Corruption
  - International aid
  - Trade balances
- **Environmental Indicators:**
  - Greenhouse gas emissions
  - Electricity production (including renewable sources)
  - Number of electric cars
  - Meat consumption
  - Pesticide use
  - Oil spills
  - Fishery at sea
  - Nitrate levels in rivers and soil
- **Social Indicators:**
  - Public health impacts
  - Education levels related to environmental awareness
  - Employment in green sectors

### Develop composite indices

Using the categorized indicators, develop composite indices for each dimension. This can be done through normalization and aggregation techniques. For instance:

- **Normalization:** Convert all indicators to a common scale (e.g., 0 to 1) to allow comparison and aggregation.
- **Aggregation:** Combine normalized indicators using weighted sums. The weights can be determined based on the relative importance of each indicator, which might be informed by expert opinions or statistical methods like principal component analysis (PCA).

### Factor multiplication for spillover estimation

To estimate spillovers, multiply existing indicators by factors reflecting their broader impacts. These factors can be derived from:

- **Lifecycle analysis (LCA):** Assess the full environmental impact of products and services from production to disposal.
- **Input-output analysis:** Evaluate how economic activities in Belgium drive environmental and social impacts globally through supply chains.
- **Expert elicitation:** Use expert knowledge to estimate the indirect effects of Belgian policies and activities.

For example, to estimate the spillover effect of greenhouse gas emissions, you might multiply domestic emission data by a factor that reflects the global warming potential of these emissions beyond Belgium's borders.

#### Data integration and monitoring framework

Create a monitoring framework that continuously integrates new data from STATBEL and other sources. This involves:

- **Data collection:** Regularly update datasets to reflect current conditions.
- **Data integration:** Combine datasets in a cohesive manner, ensuring consistency and comparability.
- **Visualization and reporting:** Develop dashboards and reports to visualize spillover effects clearly.

#### Policy feedback loop

Implement a feedback loop where the insights from the monitoring framework inform policy decisions:

- **Policy assessment:** Evaluate existing policies based on their spillover effects.
- **Policy adjustment:** Modify policies to mitigate negative spillovers and enhance positive ones.
- **Stakeholder engagement:** Involve stakeholders, including government agencies, NGOs, and the public, in the decision-making process.

#### Continuous Improvement

Finally, adopt a dynamic approach to continuously improve the monitoring framework:

- **Research and development:** Invest in R&D to refine indicators and spillover estimation methods.
- **International collaboration:** Work with international bodies to harmonize indicators and share best practices.

#### Example of implementation

Suppose you want to monitor the spillover effect of Belgium's electricity production:

- **Indicator collection:** Gather data on electricity production, including the share of renewables, from STATBEL.
- **Normalization:** Convert data to a 0-1 scale.
- **Spillover estimation:** Use LCA to determine the global environmental impact of Belgium's electricity production.
- **Visualization:** Create a dashboard showing trends and spillover impacts.
- **Policy feedback:** Adjust energy policies to enhance positive spillovers (e.g., increase support for renewable energy exports).

By following these steps, Belgium can create a robust system for monitoring and managing the spillover effects of its policies, thereby contributing to sustainable development both domestically and internationally. The list of relevant indicators in Annex 2 might serve as a basis.

### 3.4.2 Valorising the work of the Federal Planning Bureau

The Federal Planning Bureau (FPB) has analysed the Federal Plan for Sustainable Development in a recent study (Federal Report 2024). The analysis shows that halfway through the plan's term, 50% of the measures are being

implemented, 22% are in preparation, and 2% are being monitored. 25% of the measures have had no follow-up, and for 1% there is insufficient information to assess them. Compared to last year, the federal government has made progress in implementing the plan, but to achieve the SDGs, the next plan will need to be more ambitious, and the SDGs should be used as a guiding framework for all policies (FBP, 2024).

According to a recent publication of the FBP (and the task force sustainable development) and the examination of 51 indicators in an earlier study from February 2024, Belgium will achieve less than one-third of those goals by 2030. The Federal Plan for Sustainable Development of 2021 provides some initiatives to help realize the SDGs, but this is not sufficient. Therefore, the next federal government should adopt a more ambitious sustainable development plan with concrete goals for Belgium. According to the Sustainable Development Act, this plan must be adopted within a year of the formation of the government.

To frame the next Federal Plan for Sustainable Development, it will be very relevant to utilize the findings from the FPB's study to identify which SDGs are on track and which are lagging. This will help in:

- **Identifying priorities:** Focus on the goals where the progress is most lacking.
- **Understanding challenges:** Analyse the reasons behind the lagging indicators to address underlying issues.

Another relevant study executed by FPB (working paper 01-23), presents the production-related CO2 emissions and the carbon footprint of the three Belgian regions for the year 2015. The production-related CO2 emissions are derived from the regional air emission accounts (which were compiled for this study), while the carbon footprint of the regions is calculated using an input-output model that includes CO2 emissions. The results show that for all three regions, the carbon footprint is larger than the production-related emissions. This means that their contribution to global emissions is greater when assessed from a consumption perspective rather than from a production perspective.

Belgium can use the insights from this study to delve deeper into the 'consumption perspective' by adopting several strategic actions to better measure and manage potential spillover effects. In what follows, we propose an approach to how this can be done:

### Expand and refine input-output models

- **Detail consumption patterns:** Use more detailed input-output models to track the specific consumption patterns within each region. This involves mapping out how various goods and services are consumed and their associated CO2 emissions.
- **Sector-specific analysis:** Conduct a sector-specific analysis to identify which sectors contribute most to the carbon footprint. This helps in pinpointing areas with significant spillover effects.

### Enhance data collection and integration

- **Comprehensive data sources:** Incorporate data from multiple sources such as trade statistics, household consumption surveys, and business production reports to get a holistic view of consumption patterns.
- **Integration of environmental accounts:** Combine regional environmental accounts with national and international trade data to better understand the environmental impact of imported goods and services.

### Develop and utilize carbon footprint indicators

- **Regional carbon footprint indicators:** Develop specific carbon footprint indicators for each Belgian region based on their consumption patterns.
- **Comparative studies:** Conduct comparative studies between regions to understand the differences in consumption-related emissions and to identify best practices.

### Policy frameworks and regulations

- **Consumption-based emission targets:** Establish consumption-based emission reduction targets that complement production-based targets. This encourages policies that not only focus on reducing emissions from production but also from consumption.

By following these steps and use the insights of the relevant studies done by the FPB, Belgium can develop a more comprehensive understanding of the spillover effects (from a consumption perspective) and implement effective strategies to mitigate these impacts.

# 4. Policy coherence for (sustainable) development in the federal government

As explained, spillovers are intrinsically linked to the principle of policy coherence for sustainable development (SDG 17.14). Integrating the principle into the sustainable development strategies should ensure that possible negative spillovers on third (developing) countries are taken into account in the implementation of such strategies.

The Belgian government agreement of 2013 already from early on recognized the importance of policy coherence for *development* and took steps to incorporate this principle into policy. This agreement established specific measures and objectives to enhance the coherence of Belgian policy regarding development cooperation and to ensure that other policy domains did not undermine the objectives of development cooperation (trade, agriculture, migration, and climate change,...). It among others instated a Interministerial Conference for Development to this end, and attributes an important role to the instrument of regulatory impact assessment (RIA).

In subsequent Federal Plans for Sustainable Development (FPSD) the importance of policy coherence for development (PCD) *and* sustainable development (PCSD) was stressed, and concrete actions and mechanisms was described to ensure this, both politically and administratively.

Below we provide a brief overview of the various bodies currently involved in policy coherence for sustainable development in Belgium, before delving into the challenges faced by these policy bodies.

## 4.1 PCSD in practice – different federal bodies to guard it

### The Interministerial Conference on Sustainable Development (IMCSD)

In 2016, just after the approval of 2030 Agenda, the Interministerial Conference for Sustainable Development was reinstated with a new mandate. The creation of the IMCSD was motivated by the recognition of the need for integrated action and cooperation in sustainable development between the various levels of governance in Belgium. It is a response to the complex nature of sustainability issues, which often require multiple parties to work together to find effective solutions. It was established in Belgium as a platform for collaboration and coordination among the different levels of government (federal, regional, and community) in the field of sustainable development.

*The core tasks of the IMCSD usually include:*

- Responsible for coordinating sustainability policies between federal, regional, and community levels. This involves exchanging information, setting common goals, and aligning measures to prevent duplication and promote synergies.
- Monitors the implementation of sustainability policies at various governance levels and evaluates progress towards established objectives. This entails gathering data, analysing trends, and identifying areas where additional measures are required.
- Promotes participation and dialogue between stakeholders, including civil society organizations, businesses, academic institutions, and citizens. This includes organizing meetings, consulting with stakeholders, and involving diverse voices in decision-making processes.
- Represents Belgium in international forums and promotes cooperation with other countries and international organizations in sustainable development. This includes sharing best practices, encouraging joint projects, and contributing to international initiatives.

The IMCSD's tasks and priorities may change over time depending on changing policy contexts, emerging challenges, and new opportunities in the field of sustainable development.

### Interdepartmental Commission for Sustainable Development (ICSD)

The ICSD is charged with overseeing the administrative coordination mainly between federal entities (FODs, etc) in the implementation of the FPSD. It coordinates federal policies contributing to sustainable development, for ex. the coordination of the preparation, the implementation and the monitoring of the FPSD. It is the formal body in which transversal approach is developed that encourages cooperation between federal public services and with other organizations. The coherent implementation of the federal plan is thus very much dependent on mechanisms in place under management of this ICSD. Other cooperation mechanisms between federal departments are coexisting such as interdepartmental coordination gender-mainstreaming, network of federal poverty civil servants, network federal diversity, ,...

### The Advisory Council for Policy Coherence in Development (ABCO)

The advisory council on policy coherence for development was instated in 2014 with focus on promoting policy coherence for development (cooperation). Their primary role is to advise the Belgian government on how to develop and implement policies that promote development objectives, both nationally and internationally.

*The advisory council is responsible for the following tasks:*

The primary responsibility of the Council is to provide guidance to the Belgian federal authorities in achieving greater policy coherence for development in accordance with Article 208 of the Lisbon Treaty and Article 8 of the Law of March 19, 2013, concerning Belgian Development Cooperation.

- Responding to inquiries from the Minister of Development Cooperation regarding federal measures within his jurisdiction that impact developing countries.
- Developing proposals that could inform the work of the Interministerial Conference on Policy Coherence for Development.
- Upon request, they advise the government and Belgian entities responsible for policy coherence for development on implementing recommendations on policy coherence for development from international entities or on Belgium's positions during international meetings.
- Pronouncing, upon the request of the relevant government member, on impact assessments pertaining to policy coherence for development, as stipulated in Chapter 8, Article 31 of the Law of March 19, 2013, concerning Belgian Development Cooperation.

## 4.2 Challenges of Policy coherence for (sustainable) development

While these bodies were specifically set up to guard over policy coherence, it appears difficult to maintain structural attention for the principle in policy and governance practice. The Court of Audit reported in 2020[5] that the IMCSD did not meet since late 2017, and that its role remained limited to procedural tasks without a clear strategic role or objective[6]. Therefore, the newest version of the FPSD intended to relaunch the IMCSD to strengthen the coherent political commitments to the objectives of the federal plan. In May 2022; it was decided to relaunch the IMCSD with a specific mandate on the preparation of a second Voluntary National Review and to reestablish a rotating presidency. In 2023, the federal level conducted the activities, followed by the Walloon Region in 2024..

Furthermore, the third FPSD announced the establishment of a new working group on policy coherence within the ICSD, with the aim to also coordinate the monitoring of the PCD principle, as central part of the PCSD-principle. Under responsibility of DGD this WG should liaise with different departmental focal points as well as with the ABCO to improve coordinated application of the mentioned coherency principles. However, such a WG is currently not formally in place.

[5] https://www.ccrek.be/sites/default/files/Docs/2020_22_SDG_Persbericht.pdf
[6] Follow-up of the recommendations in the Court of Audit report is published here https://www.ccrek.be/nl/publicatie/sustainable-development-goals

This situation also reflects on the activity pattern of the Advisory Council for Policy Coherence in Development; between 2016 – 2019 only limited activity or publication is observed. In the year 2021, the council underwent a restructuring and revitalization process, resulting in a fresh composition. Since 2022, there has been a substantial increase in the issuance of advisories.

However, interviews with both the ABCO and DGD demonstrate it remains difficult to systematically integrate the principle of coherence for development in policy making. A number of clear reasons become apparent for this:

- PCD is still considered functionally separated from PCSD, even though the FPSD recognises both are intrinsically linked. However, efforts to ensure policy coherence in the FPSD are focused almost exclusively on internal coordination between policy domains and related FODs (and others) and not on potential negative spillovers to (developing) third countries. Nevertheless, the SDG framework itself considers that policies that generate such spill-over are by definition not in line with achieving the SDGs, and thus not sustainable.

  This makes that inputs and efforts from the ABCO and DGD on this front are not fully understood or captured in policy processes.

- Secondly, there is a lack of systemic data and information gathering or comprehensive monitoring methodologies capable of providing an overarching view of (potential) spillovers in context of PCSD. PCSD and potential spillover impacts are often assessed based on a qualitative basis of indirect information on a case-by-case, policy-by-policy basis. Mostly data and observations from partner nations in development cooperation are used to evaluate the impact on local populations of specific Belgian policies. This delivers valuable insights for subsequent decision-making, but a structural overall quantified picture of such negative effects and their underlying mechanisms of federal policies is lacking.

  The Regulatory Impact Assessment (RIA) is a tool that facilitates the initial assessment of Policy Coherence for Development (PCD) within the services, thereby promoting awareness on the subject. However, this instrument appears not very effective in this regards, as necessary information and expertise to effectively assess regulatory impacts is currently lacking, and follow-up after the implementation of the regulation is not in place.

- Thirdly, PCD and spillovers remain too much the individual responsibility concern of the Directorate-General for Development Cooperation (DGD). They serve as the focal point for policy coherence for development within the Ministry of Foreign Affairs, and dedicatedly seeks collaboration with other services to direct efforts towards Policy Coherence for Sustainable Development (PCSD). This includes collaboration with the Migration Service to reduce transition costs, facilitate remittances from migrants to third countries, and optimize remittances. Furthermore, cooperation with the private sector and partner countries is undertaken to address deforestation in the cocoa sector, aiming for fair incomes, combating child labor, and promoting fair supply chains.

  Other relevant PCD dossiers were the effects of the increased demand for biofuels on food prices and security and the export of pesticides for developing countries.

  Nevertheless, thematic expertise on PCSD is dispersed throughout the organisation, encompassing diverse specialised services, and the formal mechanisms to follow-up and coordinate with relevant other policy entities are lacking (with the announced WG within the ICDO not in place yet)

- This leads to the final fundamental challenge to the application of PCSD and taking into account of potential spillovers: the lack of formal mechanisms and authority to enforce PCSD by the different bodies established to guard over this principle. They formulate recommendations and advice to comply with the principle, and can exert pressure on the competent federal entities, but the actual implementation goes beyond their own jurisdiction and competencies. Therefore the application of PCSD remains relatively weak in practice.

In 2021, the DGD formulated two significant recommendations in their annual report[7], which are largely also included in the FPSD. The first recommendation stating, *"To ensure the effectiveness of policy coherence for development, the Sustainable Development Plan suggests the establishment of a ministerial conference, or at least a working group on policy coherence for development within the inter-ministerial conference on foreign policy or sustainable development. The primary objective of such a body could, for example, be the adoption of a joint high-level declaration on policy coherence for development, as was the case in May 2014."*

A second recommendation, sourced from the DGD, pertains to evaluating new polices and regulations on policy coherence through a Regulatory Impact Assessment (RIA). It emphasizes the Directorate-General for Development Cooperation's crucial role in overseeing the implementation of policy coherence for sustainable development, contingent upon collaboration with all Federal Public Services, preferably within the existing framework of the Interdepartmental Commission on Sustainable Development. The RIA serves as a tool for ex-ante assessment of policy coherence for development, providing an integrated evaluation of the potential impacts of legislative proposals, including on developing countries, among other policy domains. Legally grounded in Title 2 of Chapter 2 of the Law of 15 December 2013 on various provisions regarding administrative simplification, the RIA aims to enhance the quality of public policy by analysing potential project impacts in advance, encompassing economic, social, and environmental dimensions. It stresses that such analysis cannot be a mere administrative routine.

## 4.3 Enabel's potential role in tackling spill-overs

As the development agency of Belgium's federal government Enabel's mission is to implement the policy priorities of Belgian governmental cooperation and to promote international sustainable development. Its functioning is based on partnerships and co-creation and thus in line with SDG 17 that focuses on partnerships to realise the Sustainable Development Goals (see figure below).

*Figure 9: Enabel's positioning and role*


Within this functioning enable works 6 main ambitions with its local partners linked to major global challenges

- Peace & security: creating stable environment as a pre-condition for stable development perspectives, to foster inclusive and fair but also well-distributed economic development
- Climate change: reduce critical root causes of climate change and increase resilience.
- Social & economic inequality: to foster an inclusive, fair, well-distributed economic development and reduce inequalities.
- Human mobility: to develop win-win-win and human rights-based solutions for people on the move.

[7] https://diplomatie.belgium.be/sites/default/files/2022-06/Jaarverslag-OS-NL-2021_final.pdf

- Urbanisation: to develop sustainable and inclusive secondary cities
- Social responsibility: to create public support.

Enabel uses an extensive set of indicators to monitor the progress of their actions and their results in the partner countries, and deploys sophisticated evaluation methods to capture the effects and impacts of their work, including unintended effects. As its focus is on the partner countries themselves, Enable does not focus on monitoring or countering possible negative spillovers of (other) Belgian policies and / or behaviour. Only 4 from the 33 indicators from Enabel can be directly linked to the spill-overs from the SDG- & GCS- indexes (export of pesticides, water consumption, loss of biodiversity, nutrient cycles, work accidents, modern slavery and export of waste).

At the same time, the challenges Enabel works on and their impact in the partner countries are obviously linked to and influenced by spillover effects from industrialised and most-advanced economies, such as Belgium. Working on strengthening PCD of Federal policies from a development point of view could thus also contribute to achieving Enabel's (and overall Belgians) objectives in their development work with partner countries. This shows how the achievement of the SDGs overall, minimising spillovers and (federal) development policies are interlinked, and the importance of involving DGD and Enabel in the federal sustainable development strategy and policies to at least also ensure coherence with the development policy objectives.

# 5. Further initiatives & possibilities to capture & monitor spillover effects

As highlighted in the previous chapters, there is a clear need to further explore and develop methods to capture and monitor the spillover effects of Belgian production and consumption practices, as well as the impact of sustainable development policies. This should be done in a more structured and specific manner tailored to Belgium's context. In this section, we highlight some examples from other countries and provide some further insights which can be used in future federal action plans.

The attention to spillovers has visibly increased internationally, as well as the awareness to obtain a better view and understanding of them in context of achieving the SDGs in a coherent way. On European as well as national level, efforts have been undertaken to this end, experimenting with different approaches and measurements for different types of spillovers.

The main evolution on this front is a shift from production-based to a consumption-based approach, building on the OECD recommendation from 2013 that measurements of environmental (transboundary) impacts should focus on consumption rather than production. 'Production-based' means, for example, direct observation of CO2 emissions as they are generated, while 'consumption-based' refers to, for example, CO2 emissions that are generated throughout the supply chain and are hence 'embedded' in the products and services consumed. These CO2 emissions are generated before the products are consumed, in different locations, and scattered across supply chains that may involve many countries.

In what follows, we describe several efforts, and assess the potential of these exercises to be further explored by the federal government to apply to the Belgian situation:

- An analysis of Germany's international spillovers (building further on the SDSN-index)
- Eurostat's work on spillover indicators & 'footprint' indexes
  - SDG cross-cutting issues – indicators for estimating spillover effects caused by EU consumption (2022)
  - Spillover effects of EU consumption – based on the 2024 edition' of Eurostat's 'Sustainable development in the European Union — Monitoring report on progress towards the SDGs in an EU context'.
- More specific studies from the Netherland with focus on the circular economy
  - International impact of the Dutch circular transition
  - External implications of the Dutch circular transition

The three initiatives all aim to map international spillovers and environmental impacts of national consumption, but they differ in their approaches and focus areas. They each serve as examples for the Belgian federal government to invest in studying and developing monitoring indicators of spillover effects linked to Belgian consumption, as well as devote dedicated attention to potential international effects of sustainable development policies such as the transition to a circular economy.

## 5.1 Consumption-based spillovers – a German application

### GEOGRAPHIC AND SECTORAL DISAGGREGATION OF GHG EMISSIONS

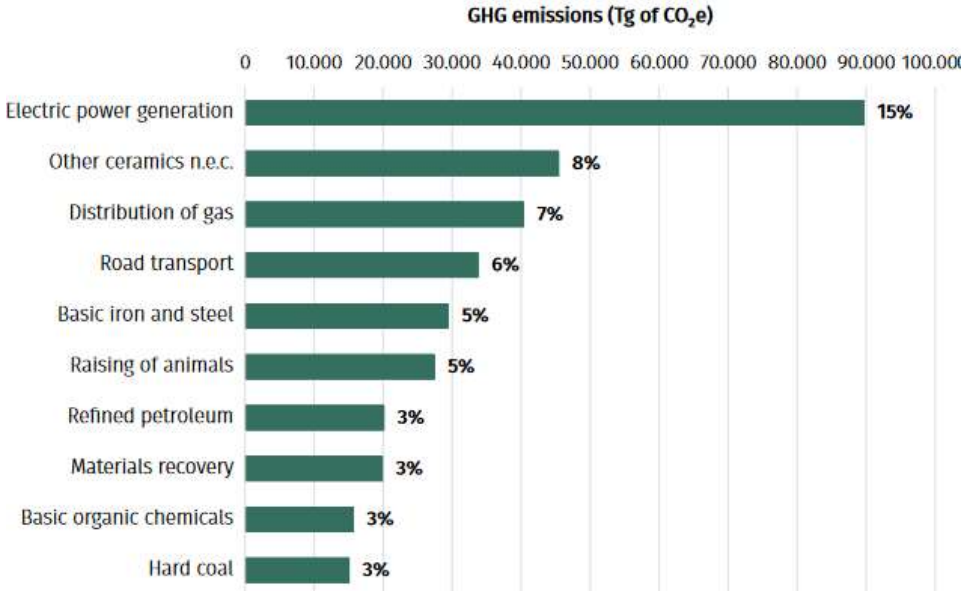
With the aim of further understanding the bad scoring of Germany in the SDSN spillover index (comparable with Belgium), the German Federal Ministry for Economic Cooperation and Development ordered an analysis to obtain deeper insight in their share in these spillovers based on their imports and exports, building on the SDSN index (Fuller & Bermont-Diaz, 2024)[8].

[8] Fuller, G. and Bermont-Diaz L. (2024). International Spillover Effects and Germany: An analysis of Germany's performance on spillovers and the policy options to manage them. Paris: SDSN, 2024

The analysis specifically outlines the environmental and social spillovers stemming from Germany's export and import within G7 context, but also makes *a geographic and sectoral disaggregation of GHG emissions* as one of the main trade-related spillovers. This provides insight into the areas where German (import) consumption causes negative spillovers (in this case GHG-emission) and from which sectors of the economy.

This analysis is based on the Multi Regional Input Output (MRIO) tables, as they allow for identifying the countries where the spillover effects occur, namely those that export commodities directly or through trade partners to Germany. Moreover, MRIO models identify the indirect impacts of international exchanges across approximately 120 different economic sectors. Such analyses of sectoral impacts enable policymakers to capture complex interdependencies between countries and sectors, facilitating more informed decision-making and prioritizing of spill-over mitigation strategies and actions. This type of analysis can be done with other consumption- or trade-based spillovers as well, such as occupational hazards, forced labour, deforestation and pollution.

*Figure 10: Top 10 Sector of origin for Germany's GHG emissions spillovers (2021)*




A sectoral division of consumption-based spillovers from import and export could also provide insight for the Belgian federal government on how to prioritise action to counter spillovers, and address and tackle spillovers throughout the whole supply chain - production, distribution, and consumption. The Multi Regional Input Output (MRIO) tables are very suitable to replicate such an analysis on the Belgian level/situation, as an in-depth follow-up of earlier efforts of the Federal Planning Bureau on the Belgian Carbon Footprint.

Such sectoral analysis provides a stable framework for addressing spill-over effects, regardless of political fluctuations or changes in government priorities. By embedding analysis within government departments, continuity and consistency in addressing spill-over challenges can be maintained over time. Finally, a division in import and export is in line with SDG 17 which also focuses on more sustainable and fair-trade relations and partnerships.

In general, an evident global pattern emerges of environmental spillover effects stemming from the imports of goods and services. Another clear example is the carbon flow, as the table below illustrates. On average, OECD countries tend to serve as net importers of embodied carbon, whereas non-OECD nations predominantly function as net exporters of $CO_2$ emissions (Yamano & Guilhoto, 2020[9]). This becomes clear in the table below where the share of CO2 emitted and so environmental spill-over outside Belgium is increasing throughout the years to above 45%.

[9] Yamano, N., & Guilhoto, J. (2020). $CO_2$ emissions embodied in international trade and domestic final demand. Methodology and results

*Table 4: Share of CO2 emitted abroad in total CO2 embodied in domestic final demand, 2005 and 2015*

| Country or Region | Year | | Country or Region | Year | | Country or Region | Year | |
|---|---|---|---|---|---|---|---|---|
| | 2005 | 2015 | | 2005 | 2015 | | 2005 | 2015 |
| *OECD* | *17.4%* | *18.1%* | Mexico | 22.7% | 26.9% | Croatia | 38.5% | 32.4% |
| Australia | 25.4% | 29.9% | Netherlands | 36.2% | 35.1% | Cyprus* | 37.6% | 42.6% |
| Austria | 46.9% | 52.6% | New Zealand | 42.8% | 44.3% | Hong Kong, China | 61.2% | 64.7% |
| Belgium | 43.5% | 46.4% | Norway | 57.6% | 56.6% | India | 13.8% | 13.1% |
| Canada | 31.3% | 29.8% | Poland | 18.7% | 22.8% | Indonesia | 20.4% | 20.6% |
| Chile | 39.4% | 36.0% | Portugal | 33.4% | 33.8% | Kazakhstan | 17.9% | 15.2% |
| Czech Republic | 26.3% | 31.8% | Slovak Republic | 43.5% | 54.3% | Malaysia | 31.3% | 28.3% |
| Denmark | 43.6% | 52.0% | Slovenia | 39.9% | 39.0% | Malta | 39.9% | 44.3% |
| Estonia | 27.7% | 28.6% | Spain | 34.1% | 33.1% | Morocco | 26.2% | 26.5% |
| Finland | 44.3% | 42.6% | Sweden | 55.4% | 58.7% | Peru | 32.4% | 36.6% |
| France | 43.9% | 45.6% | Switzerland | 57.2% | 64.7% | Philippines | 24.7% | 32.7% |
| Germany | 31.7% | 32.8% | Turkey | 34.5% | 30.1% | Romania | 23.1% | 28.2% |
| Greece | 30.5% | 27.4% | United Kingdom | 37.0% | 40.1% | Russian Federation | 8.0% | 9.0% |
| Hungary | 32.9% | 35.1% | United States | 19.9% | 20.6% | Saudi Arabia | 17.3% | 21.1% |
| Iceland | 65.0% | 59.8% | *Non-OECD* | *4.9%* | *4.9%* | Singapore | 60.6% | 60.9% |
| Ireland | 38.1% | 43.6% | Argentina | 16.7% | 18.3% | South Africa | 12.8% | 13.7% |
| Israel | 33.8% | 34.3% | Brazil | 20.4% | 21.7% | Chinese Taipei | 37.3% | 35.3% |
| Italy | 35.0% | 34.9% | Brunei Darussalam | 29.2% | 29.2% | Thailand | 34.3% | 34.1% |
| Japan | 29.8% | 26.0% | Bulgaria | 21.8% | 26.5% | Tunisia | 27.3% | 24.4% |
| Korea | 32.9% | 29.7% | Cambodia | 59.9% | 44.8% | Viet Nam | 37.5% | 38.4% |
| Latvia | 50.8% | 48.9% | China, PR | 6.6% | 7.9% | Rest of the World | 21.5% | 24.6% |
| Lithuania | 47.8% | 54.7% | Colombia | 29.6% | 34.0% | | | |
| Luxembourg | 33.7% | 36.0% | Costa Rica | 49.8% | 52.1% | | | |

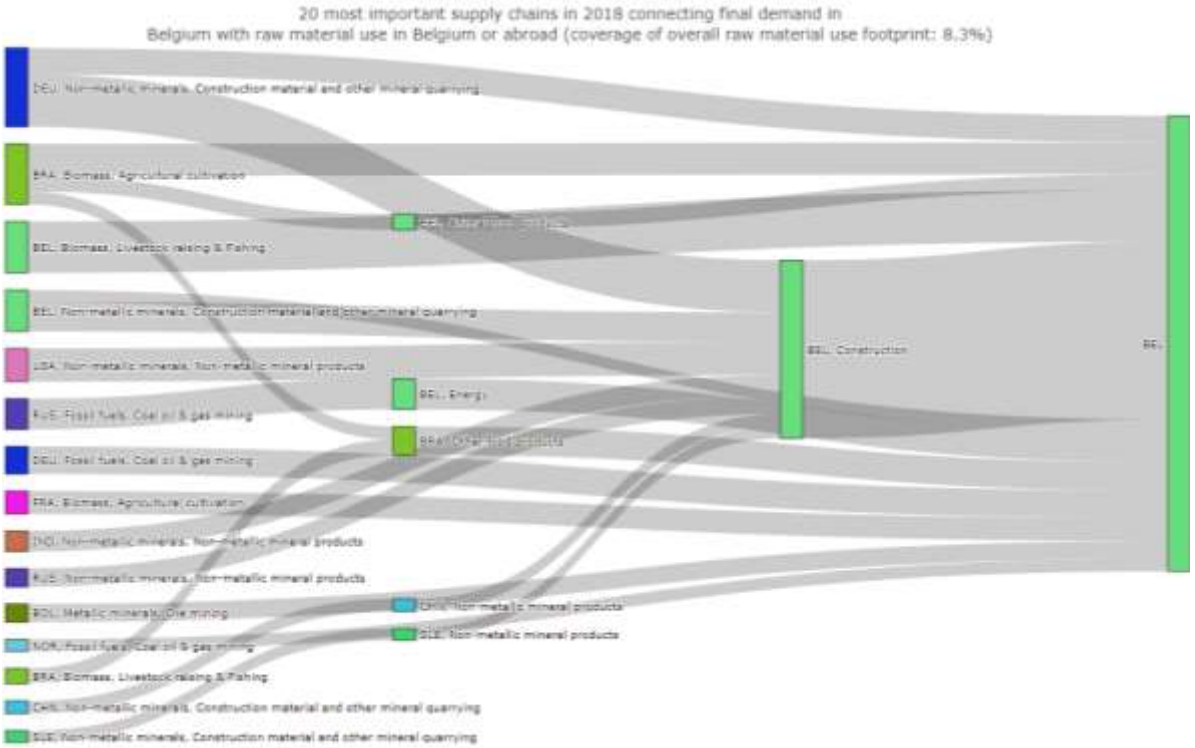
### Consumption footprint of German households

Additionally, Germany is one of few countries to integrate at least one consumption-based indicator into its national SDG indicator set. The indicator *Global environmental impact by private household consumption* tracks the consumption footprint of German households in terms of 1) use of raw materials 2) energy consumption and 3) $CO_2$-emissions. The Federal Statistical Office developed this footprint indicator on behalf of the German Environment Agency as part of the research project "Global Environmental Consumption by Production, Consumption and Imports". The footprints are calculated from indicators in the environmental economic accounts managed by the German Federal Statistical Office using environmentally extended input-output analysis. These accounts present among others estimates of the global extraction, harvest and use of raw materials and water (+ resulting wastewater) for German consumption, energy consumption for production, transport and households, and GHG-emissions during the production or use of energy and beyond

The determination of indirect environmental impacts is challenging, which is why there is a delay in the data provision for the indicators, and efforts are still ongoing to finetune and extend them. The German example demonstrates the possibilities to develop structural monitoring of this, but also show that it requires substantial dedicated research investment, which will also be the case for the Belgian federal government.

A relevant starting point for Belgium is to capture the Belgian supply chains of raw materials. The figure below illustrates the range of Belgian international supply chains of raw materials. These come with an impact (or footprint). By exploring the diverse manifestations of spillovers associated with these supply chains influenced by the SDGs, we gain insights into the broader implications of Belgian SDG policy and its role within the global development landscape. Understanding these spillover dynamics is essential for formulating effective strategies that maximize positive impacts while minimizing unintended consequences, advancing progress towards a more sustainable and resilient future for all.

*Figure 11: Illustration of Belgian supply chains of raw materials – SDG Hotspot analysis*




*This standard report provides insights into a country's SCP performance related to different environmental categories. We recommend contacting the Science Partner for Belgium to get support in using the information provided for SCP policy development.*

## 5.2 Eurostat efforts on monitoring consumption-based spillovers

On European level this consumption-based approach is adopted and further refined by Eurostat, aiming to better capture where and how spillovers are generated from consumption- and trade-patterns. It acknowledges that consumption-based spillover indicators are currently less developed, as statistics of cross-border flows are currently limited to direct flows, such as imports and exports of goods and services, whereas measuring spillover effects also requires data on the socioeconomic and environmental impacts of specific products and sectors throughout the entire supply chain. The data on these (often indirect) impacts are more difficult to obtain because of their qualitative nature and assumptions coming along with them, but also lack of uniformity within EU countries on the monitoring of these data itself.

This means that spillover measurements are often model-based estimates, which are beyond the reach of most national statistical offices and lay in the realm of research projects and planning bureau's rather than official statistics as such. However, Eurostat, as a supra-national statistical office, has invested in the measurement of transboundary environmental impacts by modelling footprint indicators based on official statistics, and has published results for 2022 and 2024. This is clearly part of ongoing work as different footprints and different methods have been presented for the two years.

### Three environmental footprint indicators

Based on data availability, Eurostat explores and presents four environmental footprint indicators primarily related to SDG 13 (Climate action), SDG 8 (Decent work and economic growth) and SDG 12 (Responsible consumption and production), as highlighted by ESTAT

- **The material footprint**, quantifying the worldwide demand for material extraction (biomass, metal ores, non-metallic minerals, and fossil energy materials/carriers) triggered by consumption and investment by households, governments, and businesses in the EU.

This footprint is calculated by converting the weight of processed goods traded internationally into the corresponding raw material extractions they would have required – the so-called Raw Material Equivalents (RME) of imports and exports. This enables users to compare the material footprints of imports and exports and the material footprint of extractions made in the EU and demonstrates that the EU was a net importer of raw materials in 2018 (7.8 tonnes RME per capita imported, vs 5.3 tonnes RME per capita exported).

This can then be broken down by product groups (construction, food, agriculture, electricity, and petro-products) by material categories (metal ores, fossil energy materials and carriers…) and by country/region of origin

- The carbon footprint is based on estimations of CO2-emissions generated from the EU's imports. In 2022, Eurostat estimated the volume of emissions 'avoided' on the EU territory through imports, i.e. hypothetical emissions that would have taken place if the imported goods had been produced in the EU, based on its air emission accounts. This volume per capita can at the same time be considered an approximation of the emissions occurring in the rest of the world, even though the 'real' emissions occurring abroad depend on the technologies and energy used in the countries that export to the EU.

  This method is different from the CO2-emission spill-over measurements by the above-mentioned MRIO, that seeks to estimate the 'real' emissions in the rest of the world for goods delivered to the EU.

  Where Eurostat argued in 2022 that this approach was too challenging due to limited information about local production technologies, it did adopt this method in 2024 using the FIGARO input-output model (extension of MRIO).
- The land footprint refers to the estimated amount of land needed to produce one unit of a given final product consumed in a country, regardless of where in the world the land was. While land use itself does not show concrete and direct environmental impacts, it may serve as a proxy for the pressure on ecosystems and biodiversity stemming from production and consumption systems. This footprint focuses on cropland that is used to cultivate crops, with data modelled based on land use coefficients of imported agricultural products.
- The air pollution footprint is based on 'real' sulphur dioxide (SO2) and nitrogen oxide (NOx) emissions from MRIO data, estimating the embedded air pollution in the production of EU-imported goods and services

Eurostat also covers both social and economic spill-over effects, operationalised into employment and income generated from EUs trade flows based on MRIO data. Both are considered positive spillovers as EU consumption generates jobs and wages & salaries linked to those jobs in global supply chains. it does not consider however the circumstances of those jobs (e.g. excludes child labour), and the 'fairness' of the wages etc.

## 5.3 Consumption-based spillovers & circular economy – case from the Netherlands

On request of the Dutch Ministry of foreign affairs, the Netherlands Environmental Assessment Agency (PBL) delved into the potential Dutch consumption-/trade related spillovers for low- and middle-income countries (LMICs) in context of its circular economy transition.

Given that the circular economy is specifically aimed at reducing environmental impact (e.g. combatting climate change and environmental pollution and reducing biodiversity loss) and improving the security of supply of material resources, this transition present significant risks and opportunities to countries that are connected to the Dutch economy through international supply chains.

The study applies the consumption-based footprint approach to gain insight into the strong linkages of the Dutch economy with global trade in raw materials and resources as well as new and discarded products and waste. It finds that:

- 40% of consumption-related GHG-emissions took place outside the Netherlands, 17% of which in LMICs
- 90% of consumption-related land use took place outside the Netherlands, 40%–45% of which in LMICs

- Total exports of waste (plastics, minerals from the construction sector and waste from the food industry) and discarded products (textiles and electronic equipment) is significant.

  Around 20% of all discarded electrical and electronic equipment in 2018 was exported, half of which for the purpose of re-use, mostly to Eastern EU Member States and Western Africa (Ghana and Nigeria). Around one quarter was legal and registered export of e-waste, mostly to countries within the European Union. Another quarter was exported illegally, most likely to other EU Member States and Western Africa.

  Around 35% of post-consumer textiles was exported, ending up in African countries where it is reused or discarded (this includes imported discarded clothing from neighbouring countries) (Brink et al., 2021b).

The studies further highlight the potential positive and negative implications of increasing demand for critical & strategic raw materials (cobalt, lithium, also bioresources) from LMICs and the trade/export of reusable goods and waste. Economically, the circular transition potentially leads to employment losses in current mining and the manufacturing industries, but also to growing demand for repair/remanufacturing, waste collection, sorting and recycling and renewable resources. Export in discarded products thus creates development opportunities, as in many LMICs, there is a lively trade in reusable goods and significant employment in in repair and refurbishment, as well as collection and recycling jobs.

However, the latter are associated with low incomes and unsafe working conditions, as handling e-waste and discarded textiles often involve hazardous and toxic substances that can be released into the air, water and soil if not dismantled and recycled properly (in Western Africa only 0.4% of the e-waste generated domestically in 2018 was managed in an environmentally sound manner).

PBLs study thus concludes that evolving consumption and production patters in the circular economy, including waste streams, present significant risks to LMICs, and that such international impacts should become a much more integral part of circular economy policies in order to avoid repeating the negative environmental and socio-economic impacts of the linear economy in the circular economy. The reports emphasise traceability and due diligence to encourage more sustainable practices in supply chains.

# 6. Conclusions and recommendations

This study has highlighted the critical importance of understanding and addressing spillover effects as part of the federal government's efforts to achieve the Sustainable Development Goals (SDGs). By examining the impacts of Belgium's policies and actions on third countries, particularly partner and least developed countries, we underscore the necessity of policy coherence for sustainable development. Our findings indicate that negative spillovers, driven by unsustainable consumption, production and investment patterns, pose significant barriers to global SDG achievement. Despite international recognition of this issue, Belgium scores poorly on the SDG Spillover Index, reflecting substantial challenges in mitigating these effects.

Through a qualitative assessment of various spillover types and the exploration of potential indicators, we provide insights that can guide the federal government in effectively managing these impacts. In this last part, we distinguish two blocks of recommendations to strengthen the monitoring and management of spillovers. The first one involves **developing new institutional indicators that consider new challenges such as consumption-based indicators.** The second block are recommendations linked to **adopting robust monitoring and policy coherence mechanisms**. As evidenced by initiatives from Eurostat, Germany, and the Netherlands, a comprehensive and coordinated effort is essential to minimize negative spillovers and promote sustainable practices globally.

## 6.1 Recommendations

### 1. Develop comprehensive indicators to measure spillover effects

- **Action: Create a set of comprehensive indicators specific to Belgium to monitor the main spillover effects. These indicators should cover economic, environmental, and social dimensions, including natural capital and resource use.**
- **Benefit: Provides a detailed and accurate picture of how Belgium's actions affect global sustainability and addresses gaps in natural capital accounting.**

For this first recommendation block, we foresee three sub-recommendations, with an emphasis on the first element:

**A. Integrate negative spillovers for all environmental indicators by using consumption-based, in addition to production-based, indicators for GHG emissions.**

We recommend that the federal government adopts a consumption-based approach (in addition to production-based) to develop indicators, carry out analyses, and gain insight into its spillovers. Consumption- or supply chain based (modelled) 'footprint' indexes, both from an import but also export perspective, specified by sector or product group, could also provide relevant insights for the Belgian federal government. The international examples mentioned can serve as models for this.

Such sectoral analysis provides a stable framework for addressing spill-over effects, regardless of political fluctuations or changes in government priorities. This approach is also in line with SDG 17, which also focuses on more sustainable and fair-trade relations and partnerships.

Our recommendation is in line with the most recent report launched by the European Commission (Directorate-General for Research and Innovation) in April 2024: 'New Metrics for Sustainable Prosperity: Options for GDP+3'. *"To ensure that we have relevant indicators to choose from, we also recommend the following developments in terms of key indicators for sustainable prosperity: Integrate negative spillovers for all environmental indicators by using consumption-based, in addition to production-based, indicators for GHG emissions."*

We recommend leveraging existing data sources and tools, such as the SDG Index and International Spillover Index , to gather further insights. Next, enhance these with additional data on natural capital and resource use.

Drawing on existing indicators, the following are the most pressing metrics and key data points. For Belgium, some key data points to measure various consumption-based spillovers could include:

Ecological spillovers:

a. CO2 / GHG emissions, both domestically and imported through consumption.
b. Water consumption by sector and the origin of imported water.
c. Air & water pollution, including cross-border emissions, both domestically and imported through consumption.
d. Land use and deforestation, including the origin of imported products contributing to it.
e. Material footprints – extraction of raw materials based on Belgian consumption
f. Waste management and recycling rates for various materials, including export of waste.
g. Cross-border transport/export of waste & hazardous materials/products (plastic, textiles, electronics, cars, ...), including monitoring health and environmental risks.

Social spillovers:

h. Work-related accidents and safety standards in the labor market, including import of products related to unsafe labor conditions.
i. Modern slavery and labor conditions in supply chains, including data on imported goods possibly produced through forced labor.

Financial spillovers:

j. Multinational profits and tax payments, incl. reporting on tax transparency and the impact of tax havens.
k. Public financial support to developing countries and contributions to international aid funds.

External effects on peace and security:

l. Export of military goods and technologies, including potential involvement in conflicts, human rights abuses and regional destabilization.
m. Engagement in peacekeeping missions and international security initiatives, including contributions to peacebuilding and conflict prevention.

As mentioned in chapter 3, Belgium faces several critical spillover effects embodied in trade that requires targeted policies and actions from federal public services and policy domains. We recommend focussing on these priorities and link them to appropriate federal policies.

On Belgian level, STATBEL is getting close to monitoring spillovers. A quick glance at attachment A.2 shows a first summary of indicators Belgium is tracking to monitor the impacts of their imports and exports. STATBEL has been mapping data on greenhouse gases, production of electricity, number of (electric) cars, meat consumption, pesticides, oil spills, fishery at sea, nitrate in the river and soil, corruption, supporting the international climate agenda and international aid. These are all indicators that measure indirect spillovers or activities causing spillovers. Getting a holistic view on these possible spillovers would require some sort of factor to multiply the existing indicators with, which can also raise questions about the accuracy of the final spillovers. It is important is to utilize the rich database of STATBEL as a starting point for monitoring spillovers resulting from policies of the federal government.

By combining the insights and used spillover indicators of the SDG spillover index and the GSC index with indicators measured by STATBEL, we see many opportunities to create a set of comprehensive indicators specific to Belgium to monitor the main spillover effects.

Further, we recommend embracing relevant studies such as working paper 01-23 which presents the production-related CO2 emissions and the carbon footprint of the three Belgian regions for the year 2015. As mentioned in chapter 3.4.2, it is important to valorise the work of the Federal Planning Bureau to delve deeper into the 'consumption perspective' by adopting several strategic actions to better measure and manage potential spillover effects.

Belgium could adopt a holistic approach by clustering SDSN SDG transformations (such as the energy transition, circular economy) and systematically identifying potential spillover effects across various domains. This approach involves proactively integrating spillover considerations into policies and development initiatives to mitigate negative impacts on third countries.

We also recommend looking into the Dutch practice of thoroughly analysing the international effects of shifts in supply chains of raw (strategic) materials and resources, and flows of reusable goods and waste (resource & circular transition). The Dutch case underscores the critical need for transparency in production chains. Regulations ensuring transparency in these chains are essential, as without it, we cannot obtain an accurate understanding of spillovers. Mapping these production chains requires comprehensive study and diplomatic coordination. Without transparency, efforts to assess and mitigate the negative spillover effects of policies and actions aimed at sustainable development remain incomplete and ineffective.

Ideally all such efforts are not limited to each country individually, but include coordination on international level, for instance through Eurostat or other international networks of planning agencies. These challenges are intrinsically international, and to be interpreted and managed/countered on that level. However, Belgium can anticipate and show leadership by integrating these efforts in public policy making. Monitoring and analytical efforts thus require harmonisation among countries to be able to interpret them through joint understanding.

Attention must be paid to interpretation, as the indexes may inadvertently mask certain issues. For instance, negative effects of trade policies will be most apparent with the main trading partners (E.g. in Asia & Latin America), while they may also be substantial for African countries with limited current trade engagement, resulting in a comparatively smaller footprint. This underscores the importance of thorough analysis and inter-national coordination to ensure comprehensive understanding and effective management of such challenges.

Furthermore, we recommend involving both DGD and Enabel in these efforts, as these are the entities with most experience and direct insight into the effects of Belgian (and EU) policies on partner countries. Enabel's recent efforts to further modernise and refine its evaluation practices and methods, focussing on intended as well as **unintended effects** of their actions could provide highly relevant insight for the monitoring and evaluation of the FPSD. We can assume after all that negative spillover effects are unintended and managing them requires entangling the intricacies and complexities of the multidimensional and -faceted framework of the SDG-oriented policies.

**B. Ensure that disaggregation is possible, as this is key to informing actionable policy options and to responding to societal concerns on multidimensional inequality.**

Ensuring disaggregation of data is crucial as it enables the identification of disparities across various population groups and sectors, which is essential for informing actionable policy options and addressing societal concerns regarding multidimensional inequality.

By developing gap indicators that highlight differences among different demographics (such as age, gender, socioeconomic status, and urban/rural location) as well as sectors and factors of production (such as labor

and capital), policymakers can better understand where inequalities exist and tailor interventions accordingly.

This approach not only enhances the effectiveness of policy responses but also promotes inclusivity and fairness in addressing spillover effects and sustainable development challenges. This requires the development of gap indicators, showing differences between different population groups (e.g. according to age, gender, socioeconomic status, urban/rural location), sectors and factors of production (labour/capital).

C. Increase the frequency of publication and international comparability of indicators.

Belgium should find alignment with the EU in terms of data management, including quarterly updates and international comparability of spillovers. This would ensure complementarity between headline indicators informing top-level policies and the larger set of indicators that inform sectoral or thematic policies.

Belgium can influence the EU by actively participating in EU-level discussions and negotiations on data management and spillover indicators. Here are some strategic approaches:

Engage proactively in EU policy forums: Belgium should participate in relevant EU committees, working groups, and consultations focused on data management and spillover indicators. By contributing expertise and perspectives, Belgium can shape EU policies that align with its national priorities.

Advocate for consistency and compatibility: Belgium can advocate for quarterly updates and international comparability of spillover data within the EU framework. Emphasizing the importance of these practices for informed decision-making and policy coherence across member states can garner support.

Demonstrate leadership and best practices: Belgium can lead by example by implementing robust data management practices and demonstrating the benefits of quarterly updates and international comparability. Showcasing successful outcomes and impacts can inspire other EU member states to adopt similar approaches.

Form alliances and coalitions: Belgium can form alliances with like-minded EU member states that share similar interests in effective data management and spillover indicators. Collective advocacy within the EU can amplify Belgium's influence and strengthen its negotiating position.

Promote transparency and accountability: Emphasizing the importance of transparency and accountability in data management practices can resonate with EU stakeholders. Highlighting how enhanced data management contributes to better policy outcomes and public trust can garner support for Belgium's proposals.

By employing these strategies, Belgium can effectively influence the EU agenda on data management and spillover indicators, ensuring alignment with EU standards while promoting its national interests and priorities.

## 2. Strengthening policy coherence for (Sustainable) development

- Action: Set up a centralized system within the Federal government to coordinate and streamline the monitoring of spillover effects.
- Benefit: Enhances coherence and efficiency in data collection and analysis, and addresses the inadequacies in current nature data and accounting systems.

For this second recommendation block, we foresee two sub-recommendations:

A. Continue to collaborate with the national and international community to ensure the coherence of indicators, through UN SDG processes dedicated to the improvement of data and other relevant processes.

The strengthened monitoring and analytical capability can and should be used to strengthen the application of the principle of Policy Coherence of (Sustainable) Development, with renewed emphasis on the international coherence next to internal coherence. This is necessary to ensure SD-oriented policies are in line with SDG 17,

focusing on sustainable and fair trade relations and partnerships to support broader sustainable development objective, and with the LNOB-principle.

This implies instating the ICSD working group on PCSD, with a clear role for DGD to liaise with relevant antenna at each Federal public service (FPS) to coordinate the way this is taken into account into policy processes. Countering negative spillovers is the responsibility of the federal government as a whole, and of each FPS for its policy domains. The PCSD can thus function as a leverage for each policy domain to contribute to (international) sustainable development goals, and truly make this a joint responsibility and effort, beyond the strict realm of development cooperation.

Moreover, the introduction of the members of the working group as PCSD ambassadors, can further facilitate communication and collaboration between different FPS, ensuring a cohesive approach to identifying and mitigating negative spillover effects. By promoting cross-sectoral dialogue and cooperation, PCSD ambassadors can foster a culture of shared responsibility and collective action towards the spillovers.

To bolster policy coherence for sustainable development within the federal government, it is crucial to enhance the Regulatory Impact Assessment (RIA) process. While currently serving as a mandatory compliance tool, the RIA presents an opportunity for integrating spill-over indicators. Applying the RIA as an dynamic, continuously updated resource is essential. Consequent and coherent completion of the RIA should bridge administrative and political domains, moving beyond the current pro forma approach. Although the RIA includes a Policy Coherence for Development (PCD) inquiry, the lack of evidence necessitates ongoing reform efforts. Modernisation should integrate the RIA more extensively into policy formulation processes, positioning it as an ex ante tool. This evolution requires comprehensive guidelines for each RIA question, incorporating data, evidence, and examples. Additionally, obligatory discussions on the RIA's findings within interdepartmental working groups would ensure comprehensive consideration across governmental bodies.

Furthermore, there is a general need for additional capacity (knowledge and resources) within the Directorate-General for Development Cooperation (DGD) and across the federal government to execute this effectively. As stated above, drawing from extensive evaluation practices of Enabel, there is a valuable opportunity to enhance capacity building. Enabel's comprehensive evaluation practices offer insights into effective methodologies and strategies that can be adapted and implemented.

To effectively integrate the principle of policy coherence for sustainable development (PCSD) and address potential negative spillovers on third countries, it is essential to enhance international cooperation, particularly at the EU level. The FPS Foreign Affairs should play a pivotal role in this effort by actively engaging in and promoting collaboration with European and international counterparts. Belgium should advocate for a stronger alignment of sustainable development strategies with EU policies to ensure that negative spillovers are systematically addressed. PFS Foreign Affairs should lead Belgium's participation in EU networks focussing on mitigating negative spillovers from EU policies on third countries. This includes advocating for EU-wide regulatory frameworks that support sustainable development goals and minimize adverse impacts on developing nations. Via this way it could also establish mechanisms for sharing data and best practices on managing spillovers within the EU. This can facilitate the development of comprehensive monitoring and evaluation frameworks that are consistent across member states.

B. Test the policy and budget responsiveness of indicators in order to select indicators that can lead to concrete policy changes, to incentivise uptake by policymakers.

For this last recommendation, we provide a step-by-step approach to test the policy and budget responsiveness of indicators for measuring the spillover effects.

- Establish pilot projects: Initiate pilot projects in selected policy areas to test the responsiveness of different indicators. Measure how policymakers react to specific indicators and their impact on policy decisions.

- **Conduct impact assessments**: Regularly conduct impact assessments to evaluate the effectiveness of indicators in influencing policy changes and budget allocations. Use quantitative and qualitative data to assess outcomes.
- **Engage stakeholders**: Involve policymakers, experts, and stakeholders in the process of selecting and refining indicators. Ensure their input and buy-in to increase the likelihood of indicators being utilized in policymaking.
- **Link indicators to performance metrics**: Integrate indicators into performance metrics used for evaluating government programs and initiatives. Tie funding or incentives to achieving desired outcomes indicated by the selected indicators.
- **Promote transparency**: Ensure transparency in how indicators are chosen, monitored, and reported. Publish findings and results from testing phases to foster public and stakeholder trust.

By implementing these recommendations, Belgium can effectively utilize indicators to drive concrete policy changes.

# Annexes

## Annex 1: Comparing the SDG - & GCS spill-over index

The final spill-overs taken into account for this study is based on the comparison of the SDG - & GCS indexes resulting in environmental, social and financial spill-overs.

| Achievement on SDG | | Negative impact on the global commons | |
|---|---|---|---|
| achieved | | no negative impact | |
| challenge remain | | low negative impact | |
| significant challenges remain | | medium-low impact | |
| major challenge | | medium-high | |
| | | high impact | |
| | | very high impact | |
| | | extreme impact | |
| | | | |
| | | | |

| SDG spill-over index | Result | GCS-Index | Result |
|---|---|---|---|
| Export of hazardous pesticides | 39.98 | / | |
| Scarce water consumption | 6802.08 | Spill-over water consumption | 96 |
| | | Spill-over water stress | 95.8 |
| Fatal work-related accidents embodied in imports | 0.49 | | |
| Victims of modern slavery | 138.15 | / | |
| SO2 emissions | 11.94 | Spill-over SO2 | 8.9 |
| Nitrogen emissions | 61.42 | Spill-over NOx | 3.8 |
| | | Spill-over nitrogen surplus | 8.3 |
| Export of plastic waste | 28.69 | | |
| CO2 emissions | 5.18 | | N/A |
| Marine biodiversity threats embodied in imports | 0.23 | Spill-over endangered marine animals | 96.2 |
| | | Spill-over marine biodiversity threats | 19.8 |
| | | Spill-over vulnerable fisheries catch | 15.6 |
| Terrestrial & fresh water biodiversity threats embodied in imports | 4.72 | Spill-over land use related biodiversity loss | 17.7 |
| | | Spill-over freshwater biodiversity threats | 3.2 |
| | | Spill-over deforestation | 15 |
| | | Red list index of species | 98.5 |
| | | Biodiversity habitat index | 8.2 |

| | | | |
|---|---|---|---|
| | | Spill-over endangered terrestrial animals | 99.6 |
| Public Finance | 0.45 | / | |
| Tax Haven | 73 | / | |
| Financial Secrecy | 52.53 | / | |
| Shifted profits of multinationals | -37.79 | / | |
| | | Black carbon | |
| Export of major conventional weapons | 0.30 | Spillover greenhouse gas | |

## Annex 2: Comparing the spill-over indexes to the departments and accessible data sources

Chapter 3.2 points out the Belgian government already monitors quite some indicators that track the impact of the Belgian economy via STATBEL. These indicators don't measure spill-overs but can indirectly be linked to spill-overs as they measure activities and impacts causing spill-overs. This base could be a first step in taking action to transform to a more holistic approach in monitoring spill-overs.

| SDG spill-over Index | Global commons stewardship index | bevoegdheden FOD & regionale overheden die data zouden moeten hebben | Andere bronnen voor data / indirecte subindicatoren die niet de spillovers zelf meten |
|---|---|---|---|
| aerosols | aerosols | Klimaat, Leefmilieu, Green Deal en Duurzame Ontwikkeling, mobiliteit, landbouw, volksgezondheid | |
| SO2 | SO2 | FED: ?<br>Vl: vlaamse milieumaatschappij, departement omgeving<br>BXL: Brussels Environment<br>WL: DPC (departement de la police et des controles), environement de wallonie | statbel uitstoot broeikasgassen en niet-ets broeikasgassen<br>statbel elektriciteitsproductie<br>statbel personenwagens |
| NOx | NOx | FED: ?<br>Vl: vlaamse milieumaatschappij, departement omgeving<br>BXL: Brussels Environment<br>WL: DPC (departement de la police et des controles), environement de wallonie | statbel elektriciteitsproductie<br>statbel personenwagens<br>statbel uitstoot broeikasgassen en niet-ets broeikasgassen<br>statbel nox |
| Koolstof-emissies | koolstofemissies | FED: ?<br>Vl: vlaamse milieumaatschappij, departement omgeving<br>BXL: Brussels Environment<br>WL: DPC (departement de la police et des controles), environement de wallonie | statbel elektriciteitsproductie<br>statbel personenwagens<br>statbel uitstoot broeikasgassen en niet-ets broeikasgassen |
| GHG | GHG | Klimaat, Leefmilieu, Green Deal en Duurzame Ontwikkeling | |
| Broeikasgassen | Broeikasgassen | FED: ? | statbel elektriciteitsproductie<br>statbel personenwagens |

| | | | |
|---|---|---|---|
| | | Vl: vlaamse milieumaatschappij, departement omgeving<br>BXL: Brussels Environment<br>WL: DPC (departement de la police et des controles), environement de wallonie | statbel uitstoot broeikasgassen en niet-ets broeikasgassen |
| **Biodiversiteit op land** | **Biodiversiteit op land** | **landbouw & veiligheid voedselketen** | |
| | verlies bio-diversiteit | | vleesconsumptie via Indicators.be |
| | ontbossing | FED: dep leefmilieu<br>Vl: agentschap natuur en bos, departement omgeving, departement landbouw en visserij<br>BXL: e | vleesconsumptie via Indicators.be |
| | dieren in gevaar | Vl: agentschap natuur en bos, departement omgeving | vleesconsumptie via Indicators.be<br>statbel elektriciteitsproductie<br>statbel pesticiden |
| **marine biodiversiteit** | **marine bio-diversiteit** | **Klimaat, Leefmilieu, Green Deal en Duurzame Ontwikkeling** | |
| mariene fauna in gevaar | mariene fauna in gevaar | fod marien leefmilieu | statbel zeevisserij<br>statbel elektriciteitsproductie<br>statbel uitstoot broeikasgassen en niet-ets broeikasgassen<br>statbel olieverontreiniging<br>statbel zee opp natura 2000<br>statbel hernieuwbare energie |
| bedreigingen mariene biodiversiteit | Bedreiging mariene bio-diversiteit | fod marien leefmilieu | statbel zeevisserij<br>statbel uitstoots broeikasgassen en niet-ets broeikasgassen<br>statbel olieverontreiniging<br>statbel zee opp natura 2000<br>statbel hernieuwbare energie |
| | visvangst | fod marien leefmilieu<br>vl: departement landbouw & visserij | statbel zeevisserij |

| | | | |
|---|---|---|---|
| **Nutriënten-cyclus** | **nutrienten cyclus** | **Klimaat, Leefmilieu, Green Deal en Duurzame Ontwikkeling** | |
| | overschot nitraat | vl: departement landbouw & visserij | statbel pesticiden<br>statbel nitraat in rivier en grondwater |
| | overschot (kunst)mest | vl: departement landbouw & visserij | statbel pesticiden<br>statbel nitraat in rivier en grondwater |
| export gevaarlijke pesticiden | | | statbel pesticiden |
| **watercyclus** | **watercyclus** | **Klimaat, Leefmilieu, Green Deal en Duurzame Ontwikkeling** | |
| consumptie water | consumptie water | vl: departement landbouw & visserij | statbel waterverbruik |
| | droogte | | |
| **werk** | **werk** | **Buitenlandse Zaken, Europese steden en buitenlandse handel** | |
| werk incidenten | werk incidenten | | |
| slachtoffer van moderne slavernij | / | | |
| **afval** | **afval** | **Klimaat, Leefmilieu, Green Deal en Duurzame Ontwikkeling** | |
| export van plastic afval | | OVAM | statbel: afvalproductie |
| **economisch** | **economisch** | **Economie, binnenlandse zaken, politie, justitie, financien fiscaliteit en fraude, institutionele hervormingen, democratische vernieuwing** | |
| publieke financiering en ontwikkelingshulp | | enabel | bijdrage aan internationale klimaatfinanciering<br>officiële ontwikkelingshulp<br>**-> minstens 0,7% van het bruto nationaal inkomen aan ontwikkelingshulp**<br>**-> minstens 0,15% aan minst ontwikkelde landen**<br>**indicator die meet welke bijkomende financiële middelen voor** |

| | | | |
|---|---|---|---|
| | | | ontwikkelingslanden worden gemobiliseerd (17.3)<br>indicator rond gecoordineerde beleids-lijnen rond schuldhoudbaarheid (17.4)<br>indicator die meet hoe kennis, weten-schap, technologie en innovatie wordt gedeeld (17.6 - 8)<br>indicator rond export uit ontwikkelings-landen (17.11) |
| Belasting-paradijs | | | corruptieindex |
| financiële geheimhouding | | | |
| winst van multinationals | | | corruptieindex |
| **veiligheid** | **veiligheid** | **defensie, internationale solidariteit, politie, justitie, buitenlandse zaken** | |
| export wapens | export wapens | export wapens = regionaal<br>WL:<br>SPW DGO6<br>Direction Licences Armes<br>VL: departement buitenlandse zaken, dienst controle strategische goederen<br>BXL: Gewestelijke Overheidsdienst Brussel - Brussel International<br>Cel vergunningen wapens en dual-use goederen | corruptieindex |