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# The costs of sustainability-driven regulations: Pathways for a fair distribution

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## Abstract

International trade has brought significant opportunities for economic diversification and development. Global supply chains, however, have also long been associated with environmental degradation and human rights abuses. Since voluntary commitments have proven insufficient to end harmful practices in their entirety, **countries around the world are adopting sustainability-driven regulations, imposing mandatory requirements for more sustainable production and trade.** Adapting to these new requirements comes at a cost, both for businesses and at the country level and there are increasing concerns, particularly in industrializing countries, about the burden that these costs may represent. This policy brief contextualizes current discussions, by distinguishing between different types of sustainability-driven supply chain regulations and associated costs of compliance. Identifying which stakeholders currently shoulder these costs, the policy brief provides **recommendations for a more equitable distribution of the costs and benefits of sustainable trade,** ensuring that all supply chain actors have the resources needed to transition to sustainable practices.

## Key Messages

1. Sustainability-driven regulations are essential tools to reduce the environmental and social impacts of global supply chains.
2. The cost of complying with new regulations is unevenly distributed across different countries and tiers of the supply chain.
3. Ensuring a more equitable distribution of value in global supply chains is a crucial lever to achieve a fair distribution of compliance costs.

## From voluntary standards to mandatory requirements

Over the past few years, there has been a proliferation of sustainability-driven supply chain regulations, ranging from border carbon adjustment (BCA) mechanisms, that price embedded greenhouse gas (GHG) emissions in imported commodities, to due diligence requirements which make businesses responsible for human rights violations or unsustainable environmental practices in their operations and supply chains. The emergence of these regulations is related to enhanced ambitions for supply chain sustainability, the limited effectiveness of existing voluntary approaches in this field, and a desire to level the playing field between imported and

domestic products. Empirical evidence<sup>1</sup>, as well as consultations with stakeholders<sup>2</sup>, have made it clear that sustainability-driven regulations are needed to address environmental and social concerns in global supply chains.

Yet many of these mandatory sustainability-driven regulations have been subject to criticism, especially from businesses and governments in developing countries, who have expressed concern, inter alia, about the costs of compliance. **While sustainability-driven regulations are necessary, they must be implemented equitably.**

## The sustainability-driven regulations governing global supply chains

While sustainability-driven regulations differ in design, structure, and scope, they can roughly be classified into **three broad categories: (i) transparency, (ii) due diligence, and (iii) market access requirements**, as detailed in Table 1.<sup>3</sup> Many regulations fall within more than one category. For instance, the European Union's (EU) Regulation on Deforestation-free Products (EUDR) restricts market access for commodities associated with

deforestation, while also including due diligence requirements. Switzerland's Code of Obligations contains both due diligence requirements and transparency obligations.<sup>4</sup> The categorization below is nevertheless helpful as a basis to understanding different types of obligations imposed by regulations, which in turn are associated with different costs of compliance.

## Unpacking the costs of sustainability-driven regulations

The costs of complying with the obligations distinguished above can be divided into two main categories: (i) compliance costs for businesses

directly or indirectly affected by regulations and (ii) country-level costs incurred both by the regulating country and its trading partners.

Delaying the implementation of sustainability-driven regulations engenders environmental and social costs due to the continuation of harmful practices. This policy brief focuses primarily on

the costs for indirectly affected businesses and for regulating countries' trading partners. It will briefly touch upon the costs of delay as highlighted in Figure 1.

**Table 1.** Types of sustainability-driven regulations

Type	Description	Examples
Transparency	Require corporate reporting on specific sustainability indicators.	<ul style="list-style-type: none"> <li>Regulations requiring reporting on forced labour. E.g., Australia Modern Slavery Act, California Transparency in Supply Chains Act.</li> <li>Environmental reporting requirements. E.g., UK Streamlined Energy &amp; Carbon Reporting, New Zealand's Financial Markets Conduct Act 2013.</li> </ul>
Due diligence	Mandate businesses to identify and assess risks of adverse environmental and social impacts in their operations and supply chains. May also require businesses to prevent or mitigate such risks.	<ul style="list-style-type: none"> <li>Regulations imposing due diligence obligations on the importation of certain minerals from conflict areas. E.g., Switzerland's Code of Obligations, the US Dodd Frank Act, and the EU Conflict Minerals Regulation.</li> <li>Regulations requiring businesses to conduct both environmental and human rights due diligence. E.g., EU CSDDD and Republic of Korea's Human Rights and Environmental Protection for Sustainable Business Management (proposed).</li> </ul>
Market access	Condition market access on products or production methods meeting certain requirements.	<ul style="list-style-type: none"> <li>Prohibition on importation of goods from forced labour. E.g., the US Uyghur Forced Labor Prevention Act, Mexico's Forced Labour Regulation.</li> <li>BCAs require importers to pay for the embedded GHG emissions in certain imported goods as a condition for market access. E.g., EU CBAM and UK CBAM (proposed).</li> <li>Prohibition on import of certain products linked to deforestation. E.g., EUDR.</li> </ul>

**Note:** Abbreviations of supply chain regulations: EU Corporate Sustainability Due Diligence Directive (CSDDD), Greenhouse gas (GHG) emissions, Border Carbon Adjustments (BCAs), EU/UK Carbon Border Adjustment Mechanism (CBAM), EU Deforestation-free Products Regulation (EUDR).

**Source:** Authors' own elaboration.

**Figure 1.** Overview of costs associated with sustainability-driven regulations



**Source:** Authors' own elaboration.

### Compliance costs for businesses

Businesses based in the regulating country are typically the ones legally obliged to comply with regulations. However, in practice, they often pass compliance requirements onto their upstream suppliers who may not be legally responsible under these regulations, yet incur costs to meet buyer demands. For example, if a business must demonstrate that its products are deforestation-free, it may require its supplier to prove that no deforestation occurred during production. As a result, the costs of compliance fall not only on the businesses directly in scope of regulations, but also on suppliers, often located in third countries. These costs can further be differentiated into: the costs of changing production processes and methods (PPMs) to comply with market access requirements, and the costs related to due diligence and reporting.

Many sustainability-driven regulations within the “market access” category require businesses to modify their PPMs or products. For example, anti-deforestation regulations require that the production of certain agricultural commodities does not contribute to deforestation. This could necessitate, for instance, changes to existing practices of clearing forests to expand cropland. Regulations establishing ecodesign and performance requirements, necessitate changes to both the production process and the final product to ensure, for example, that a garment contains recycled textile materials. By pricing embedded emissions, BCA schemes incentivize businesses with carbon-intensive production methods to modify their production methods to reduce GHG emissions.

Regulations that fall within the “transparency” and/or “due diligence” categories set out above create a different set of costs. Specifically, these costs come in two forms: (i) one-off costs to develop and implement a due diligence policy, set up the necessary monitoring and reporting systems, and inform and train staff and supply chain partners; and (ii) recurring costs including expenses for dedicated employees, system maintenance, and activities like data collection and

analysis. Both costs – one-off and recurring – can vary for businesses, depending on complexity of operations and value chains, business size, and the stringency of regulations.<sup>5</sup> Moreover, the costs of compliance depend on whether a business has already established systems for sustainability reporting or assessing and mitigating risks in their supply chains, for instance to comply with a voluntary sustainability standard.<sup>6</sup> Costs for indirectly affected upstream suppliers are difficult to estimate given significant variance in local conditions, as well as existing regulatory frameworks and practices. In a case study on human rights and environmental due diligence in the agricultural sector, annual costs were estimated at around USD 20,000 for a cooperative of 200 farmers.<sup>7</sup>

Reporting and due diligence costs increase when countries develop similar regulations with varying requirements, as businesses must adapt to multiple frameworks. For example, countries and trade blocs like the EU, United Kingdom (UK), Canada, and Australia have adopted or are considering implementing BCAs. In the absence of coordinated efforts, differing requirements across jurisdictions will force businesses to navigate varying calculation methodologies, reporting formats, and compliance deadlines, leading to significant administrative burdens and higher costs. The challenges are likely to be further compounded by the proliferation of private voluntary sustainability standards in certain sectors, that may become de facto mandatory due to buyer requirements, investor demands, and competitive pressures.

### Compliance costs at the country level

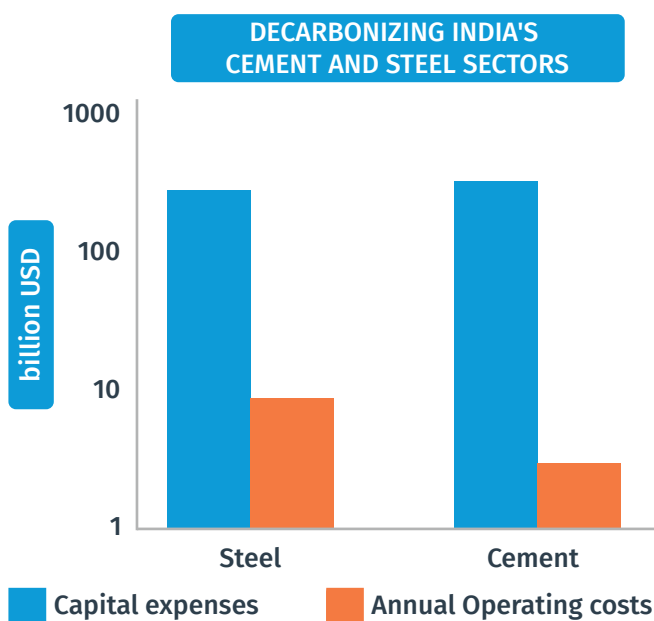
Industrializing countries are likely to face macro-economic challenges due to sustainability-driven regulations. The extent of these challenges depends on a country’s exposure – the share of its production covered by a sustainability-driven regulation; and vulnerability – determined by the country’s capacity to adapt to new requirements.<sup>8</sup> This capacity depends on factors such as existing sustainable practices, the ease of changing

production methods, the country's ability to diversify exports, the presence of monitoring, reporting and verification systems (MRV) and domestic institutions and regulations.

For example, India's exposure to BCAs in energy-intensive sectors like steel and cement is relatively low, since these goods are predominantly produced for the domestic market. Vulnerability, however, is high, as decarbonizing these sectors would require significant investments. Figure 2 illustrates the estimated costs of decarbonizing the cement and steel industries – both sectors covered by the EU CBAM – in India.

Furthermore, the emergence of divergent standards applying in different markets may also pose risks at the country level. Notably, as requirements become more stringent in some countries, dirty products may increasingly be sold in less-regulated markets, engendering social and environmental costs.

**Figure 2** Estimated costs of decarbonizing cement and steel industries in India



**Source:** Authors' elaboration based on Kartheek Nitturu et al.(2023). [Evaluating Net-zero for the Indian Cement Industry: Marginal Abatement Cost Curves of Carbon Mitigation Technologies](#). CEEW.

**Who pays? An unequal distribution of compliance costs**

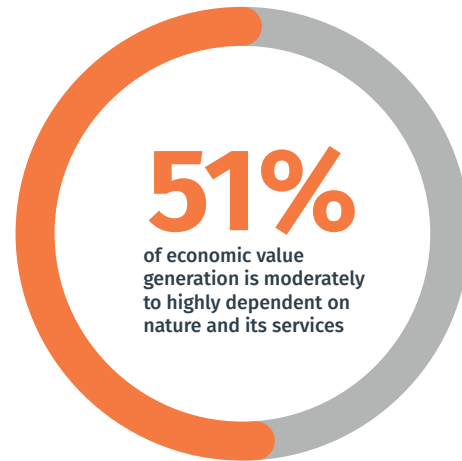
The costs of implementing more sustainable practices to comply with regulations varies significantly both between companies and across countries. Typically, small- and medium-sized enterprises (SMEs) are more heavily impacted by sustainability-driven regulations than larger firms. SMEs tend to operate on tight profit margins, making it difficult for them to absorb the one-off costs described above. They also often lack the financial resources to invest in infrastructure upgrades or training programmes needed to implement more sustainable PPMs and reporting. Moreover, for SMEs any price premiums or sales increases associated with more sustainable practices are less likely to be sufficiently high to cover costs of compliance when compared to larger businesses.<sup>9</sup> This makes it harder for SMEs to compete. While compliance could lead to investment opportunities and access to premium markets, non-compliance can exclude SMEs, further widening the gap.<sup>10</sup>

Country-level factors also play a role. Generally, costs associated with modifying production methods pose greater challenges for businesses in industrializing countries, given high interest rates associated with borrowing. In industrializing countries, the cost of capital for low-carbon projects is approximately 15-17%, compared to approximately 4% in industrialized countries.<sup>11</sup> This is exacerbated by limited access to environmentally sound technologies (ESTs), which are predominantly concentrated in developed countries.<sup>12</sup> The lack of sufficient investment in industrializing countries to support the transition to more sustainable practices makes it harder to bridge this technology gap and meet the standards of importing markets.<sup>13</sup>

The other side of the coin: The cost of  
delaying action

While implementing sustainability-driven regulations comes at a financial cost, **delaying or withdrawing these regulations, will have much greater negative impacts on people, the planet, and economic prosperity.** If implemented effectively, regulations can mitigate harmful effects of global supply chains on the climate, biodiversity, human health, and other factors. The cost of delaying such regulations can be measured, firstly, in terms of tangible social and environmental consequences. Decarbonization-related regulations, for example, are essential not only to address the urgent issue of climate change, but also in light of the nearly 7 million deaths per year attributed to air pollution caused by fine particles.<sup>14</sup> Further, the cost of delay takes the form of economic losses resulting from environmental degradation or climate change. It has been found, for instance, that over half of the world's GDP is moderately or highly dependent on nature and its services. These economic activities either rely on the extraction of natural resources or on ecosystem services such as healthy soils, clean water, or a stable climate, making them vulnerable to risks, for example, from resource depletion or climate change.

Figure 3 Global GDP dependent on nature and its services



Source: Authors' own elaboration based on: WEF and PwC (2020). [Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Businesses and the Economy.](#)

On 30 January 2025, UNIDO hosted the event “Who Pays? ... for the Implementation of Sustainability-Driven Regulations” in Vienna. The event brought together representatives from the public and private sectors, civil society and advocacy organizations, certification schemes as well as academia to explore the costs of implementing sustainability-driven regulations. A series of recommendations arose out of the discussions held that day, representing the views of a wide range of stakeholders from both producer and consumer countries. These recommendations are summarized on the next page.

## Policy Recommendations

Given pressing environmental and social issues in global supply chains, mandatory regulations are an essential instrument to improve the sustainability of production and consumption. The impact of regulations, however, is uneven across countries and tiers of the supply chain. To address this imbalance, **accompanying measures and institutional frameworks are needed to ensure that the implementation of sustainability-driven regulations is both effective and fair:**

- 1. Investing in skills development and value addition:** Empower producers and businesses in industrializing countries to engage in higher-value activities and capture their fair share of the benefits of sustainable production. By raising revenues and incomes, this enables businesses to invest in sustainable practices and meet standards without being burdened by regulatory requirements. Better skills and green production also contribute to sustainable development objectives benefiting countries and societies as a whole.
- 2. Leveraging knowledge and data on supply chains:** Use reporting and due diligence requirements as an opportunity to collect and share supply chain information at national and sectoral levels. Mobilize shared data to reduce businesses' costs of monitoring, reporting, and verification and make data accessible for all, so that especially upstream suppliers can identify challenges and opportunities in their supply chains.<sup>15</sup>
- 3. Assessing impacts of regulations:** Regulating countries should systematically conduct impact assessments of both new and existing legislation to evaluate social and environmental effects including in third countries and for upstream suppliers. Supply chain data and inclusive stakeholder consultation should feed into these assessments.
- 4. Deploying innovative financing:** Governments, multilateral development banks, and the private financial sector should combine forces to support countries and businesses in the transition to more sustainable supply chains. Blended finance and impact investing are key tools to jointly unlock new pools of capital.
- 5. Building the business case for sustainable supply chains:** Policymakers should incentivize businesses to move beyond a "tick-the-box" compliance approach and commit to transforming their sourcing and production practices. Necessary policy signals include: (i) eliminating environmentally harmful subsidies; (ii) promoting sustainable investment; and (iii) implementing sustainable public procurement.
- 6. Moving towards harmonized standards:** Align different regulatory requirements to simplify compliance, for example, through mutual recognition agreements, equivalence agreements, or harmonized technical standards. Establish shared guidelines and recognition schemes to help manage the development of private voluntary sustainability standards across countries.

### Endnotes

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