## Key messages: “Enhancing the interoperability of policy-mandated emission monitoring, reporting and verification systems: Technical summary report”

As climate policies evolve, monitoring, reporting and verification (MRV) rules for carbon accounting that differ across jurisdictions can duplicate **reporting burdens, undermine reliable comparison** of mitigation efforts, and **risk creating trade frictions**. Policymakers increasingly rely, or plan to rely, on product-level carbon intensity metrics for a range of policies including public procurement, industrial transition policies and border measures.

**Enhancing the interoperability of MRV systems can:**

- Reduce compliance burdens for firms that report emissions or emission intensities in multiple jurisdictions.
- Strengthen trust by enabling transparent and comparable carbon intensity metrics.
- Help avoid creating barriers to trade.
- Improve global mitigation effectiveness by helping to quantify and manage international spillovers.
- Enable lead markets for low- and near-zero emission materials, key to decarbonising heavy industry.

### 1. Carbon intensity metrics are central to climate and industrial policy

Carbon intensity metrics quantify **emissions per unit of output or value** at product, installation, sector, or national level.

Product-level metrics matter most for policies like carbon border adjustment policies (such as the EU CBAM), performance standards, and green procurement.

Policymakers must balance **accuracy, timeliness, and compliance cost**— especially for small and medium-sized enterprises and firms in developing countries. Fostering interoperability can help contain the costs of mitigation policies.

### 2. MRV system differences create barriers to comparability

MRV systems are made up of four main components, amongst which there can be wide variations across systems: **coverage, emission estimation methods, reporting and verification frameworks, and data availability.**

**Table 2.2 (in full report) simplified: Components of MRV systems relevant for the interoperability of emission metrics**

| | Component | Feature |
|---|---|---|
| Monitoring | Coverage | Gases ($CO_2$ only or other greenhouse gases [GHG] expressed in $CO_2e$) |
| | | Sectors |
| | | Reporting boundaries (e.g. Scope 1, 2, 3) |
| | Estimation method | Measurement or calculation |
| Reporting and Verification | Reporting and verification framework | Registry |
| | | Reporting requirements |
| | | Verification requirements |
| Monitoring and Reporting | Data availability | Granularity |
| | | Frequency |
| | | Public availability |

Differences in these components across systems **limit the comparability of installation-level emissions** and thus the interoperability of product-level carbon intensity metrics.

### 3. Interoperability does not require full harmonisation

To move towards interoperability, governments can aim for alignment on key components, rather than trying to achieve identical systems.

- **Mutual recognition** of emissions methodologies, verification practices, and reporting frameworks could help ensure that data produced using different approaches can be recognised across jurisdictions.
- **Disaggregation of reported data and transformability** could allow countries to maintain distinct systems while permitting conversions across them.
- **Harmonisation** is only required for coverage when data categories do not overlap at all, for example when a sector or gas is covered in one system but not the other, making comparisons impossible.

### 4. International data governance is essential

International data governance frameworks would facilitate the development of interoperable carbon intensity metrics.

Key requirements for effective international data governance are:

a) **Balance openness and confidentiality:** share granular data only among trusted parties; publish aggregate indicators.
b) Address legal barriers through **data-sharing agreements, mutual recognition of data protection standards, and clear boundaries** on data use.
c) Enable data intermediaries (e.g. **data trusts or decentralised data spaces**) to provide controlled access while ensuring data confidentiality.
d) Create incentives for businesses (especially SMEs) to **collect and share higher-quality data**.

### 5. Using MRV systems to derive product-level metrics requires care

MRV systems contain valuable installation-level emissions data. Mapping these to products requires many elements, including:

- Clear product classification
- Allocation rules for multi-product plants
- Output data

**Calculation-based methods** could constitute a way to allocate emissions among products.

**Benchmarking rules** in ETSs already provide prototypes for collecting product-level output data.

## Policy avenues for enhancing interoperability

#### Cooperation and capacity-building

- Support interoperability work through the Climate Club and the Inclusive Forum on Carbon Mitigation Approaches (IFCMA).
- Expand capacity-building for developing countries and SMEs.

#### Enabling trusted data sharing

- Establish data trusts or decentralised data spaces to share data among members while safeguarding data confidentiality.
- Develop or adopt common digital reporting formats and machine-readable standards.
- Pilot once-only reporting principles across policy instruments.

#### Aligning, integrating and scaling

- Develop correspondence tables for sector and product classifications.
- Align on global warming potential (GWP) values and separate reporting of individual GHGs.
- Increase modularity of MRV reporting templates.
- After achieving sufficient degree of alignment of MRVs systems, move towards mutual recognition of carbon intensity metrics for use in policies.