



ADVANCING EMISSIONS TRANSPARENCY TO SUPPORT THE DECARBONIZATION OF MINERAL AND INDUSTRIAL SUPPLY CHAINS

THE COMET FRAMEWORK: GREENHOUSE GAS DATA TRANSPARENCY TO ENABLE THE SUCCESS OF EU CLIMATE POLICY

*Martin Dietrich Brauch and Solina Kennedy,
Columbia Center on Sustainable Investment*

Meeting the goals of the 2015 Paris Agreement on Climate Change requires bold action from public and private stakeholders. The European Union (EU)—given its large market, progressive actors, ambitious policy leadership, and commitment to carbon neutrality by 2050—will play a pivotal role in enabling the low-carbon transition. EU policy instruments to reduce greenhouse gas (GHG) emissions include the Emissions Trading System (**EU ETS**), the framework to facilitate sustainable investment (**EU Taxonomy**), and the carbon border adjustment mechanism (**CBAM**) under consideration as part of the European Green Deal.

These instruments require EU corporations to measure their GHG emissions against the **EU ETS product benchmarks**,¹ first adopted by the European Commission in 2011 after private sector consultations² and based on data provided by the industry on a voluntary basis.³ These 54 product benchmarks, expressed in terms of GHG emission intensity—metric tons of CO₂-equivalent emitted per metric ton of product produced—represent “the average performance of the 10% most efficient installations in a sector or subsector in the [EU] in the years 2007–2008,” and cover around 75% of EU ETS emissions.⁴ The benchmarks are accompanied by guidance on emissions accounting.⁵

EU POLICY INSTRUMENTS TO REDUCE GHG EMISSIONS

EU ETS – Established in 2005, it is the world’s first and largest carbon market or cap-and-trade system. Caps, which are reduced over time, limit GHG emissions permitted from over 11,000 power stations, industrial plants (including the production of aluminum, cement, and iron and steel), and airlines, accounting for over 45% of the EU’s GHG emissions.⁶ Companies receive or purchase tradable emission allowances. At year’s end, they must cover their total emissions with their allowances or face steep fines and can either sell excess allowances or reserve them for future use.

EU Taxonomy – To help identify climate-friendly activities and facilitate access to green financing, in June 2020 the EU created the world’s first classification system of sustainable economic activities. By the end of 2020, the Commission will adopt *technical screening criteria* for determining “the conditions under which a specific economic activity qualifies as contributing substantially to climate change mitigation.”⁷ In adopting these performance thresholds, the Commission is expected to take into account the March 2020 report of a Technical Expert Group (TEG) that developed technical screening criteria for 70 activities, including the production of aluminum, cement, iron and steel, and plastics.⁸

CBAM – The European Green Deal states that in the case of persisting discrepant international climate ambition, the EU would propose a carbon tax at the border for certain sectors to protect against carbon leakage and the undermining of EU climate goals.⁹ An inception impact assessment was completed in March 2020,¹⁰ and planning is scheduled for 2021. The mechanism would impose a carbon price on goods produced outside the EU in a more carbon-intensive way to ensure emissions do not occur in other countries and that total emissions are reduced. While its sectoral scope is yet to be determined, it will likely apply to sectors with the highest risk of carbon leakage, which include the production of aluminum, cement, copper, iron and steel, and plastics.¹¹

Despite their widespread use, the EU ETS benchmarks are based on European trends of the late 2000s rather than present-day global data, limiting the comprehensiveness and comparability of the metrics. While the benchmarks cover direct emissions (scopes 1 and 2), they do not include scope 3 emissions, neglecting to capture the carbon or GHG content of inputs used in upstream production processes. In consequence, they fail to build in incentives to encourage recycling or upstream emissions reductions. *The EU Taxonomy's TEG, mindful of the limitations of the EU ETS benchmarks, sought but ultimately failed to "identify equally robust data sources" to recommend to the Commission, and thus encouraged that "where equally robust data [as the EU ETS benchmarks] can be provided these should be considered" in the technical screening criteria to be adopted.*¹²

A universal GHG accounting framework for materials will be fundamental in providing the robust, consistent, and comparable emissions data needed for the success of the EU's policy instruments. The **Coalition on Materials Emissions Transparency (COMET)** was launched in January 2020, with the goal of developing a framework to harmonize the multitude of GHG accounting methods. The COMET Framework, leveraging existing methods, will work across all materials and include sector-specific guidance. It will cover direct and indirect emissions (scopes 1, 2, and 3), considering the full life cycle of a material no matter where it was produced. By tracking embodied emissions of key materials throughout their value chains, it will benefit the EU, its member states, EU-based companies operating within Europe and globally, and companies that export products to the EU.

POLICY EFFECTIVENESS DEPENDS ON COMPARABLE EMISSIONS DATA WITHIN THE EU AS WELL AS GLOBALLY

Even if EU-based companies monitor and report their GHG emissions based on the EU standards recommended in the EU rules, the data generated will be comparable across the EU, but not globally. Furthermore, the EU ETS benchmarks were developed based on historic trends in industrial processes within the EU, not on global data.¹³

Harmonized emissions accounting, which the COMET Framework seeks to enable, will generate robust and comparable GHG data sources for both EU and non-EU countries and companies. Comparability with industry performance outside the EU and transparency of GHG emissions data from materials produced in other global regions will lead to improved results of EU climate policy. It may also encourage EU leaders to raise ambitions to the level of high performers outside the EU space.

HARMONIZED ACCOUNTING METHODS IS ESSENTIAL TO OBTAINING CONSISTENT GHG DATA

The EU rules for determining and updating the EU ETS benchmarks and for monitoring and reporting GHG emissions establish the principle that data must be consistent and comparable over time, resulting from the application of transparent methodology plans approved by competent authorities.¹⁴ While the same EU rules provide some methodological guidance,¹⁵ they also deal with the dilemma that "each of the circa 10,000 installations [stationary technical units] in the EU ETS is different, and it is virtually

impossible to provide detailed monitoring rules covering all of these situations."¹⁶

Where the rules do not provide for a specific monitoring or accounting method, they require that companies use standards from the European Committee for Standardization (EN standards). Where these are unavailable, companies must apply standards from the International Organization for Standardization (ISO) or the Commission, or national standards. As a last resort, companies may refer to draft standards, industry best-practice guidelines, or other scientifically proven methodologies.¹⁷

Despite the EU's efforts, methods remain non-standardized, and different companies may end up adopting different monitoring methods, undermining the principles of data consistency and comparability. The COMET Framework, by providing a harmonized accounting methodology as well as material-specific guidance on its application, will facilitate compliance with these principles, bolstering the effectiveness of EU climate policy.

TO COMPLETELY ACCOUNT FOR INDUSTRIAL EMISSIONS, SCOPE 3 EMISSIONS FROM MINING MUST NOT BE IGNORED

The EU ETS covers energy-intensive industry sectors,¹⁸ and the TEG recommended including in the EU Taxonomy those energy-intensive and hard-to-abate activities representing "a high share of industrial GHG emissions as a result of scope 1 and scope 2 emissions related to the manufacture of the products," such as aluminum; iron and steel; cement; and petrochemicals.¹⁹ Even though the TEG acknowledged the value-chain link between mining and manufacturing, it did not analyze the mining sector given time constraints and the complexity of the issues.²⁰

Considering that manufacturing is Europe's second largest contributor to CO₂ emissions, it is judicious for EU policy to focus on manufacturing sectors. At the same time, accounting solely for scope 1 and scope 2 emissions from EU manufacturers will provide a limited—and potentially misleading—landscape of overall emissions, in that the carbon content of materials used as inputs by EU industries will not be part of the equation.

COMET will bridge this gap by creating transparency of cradle-to-cradle emissions—scopes 1, 2, and 3—from key materials. It will allow EU authorities to determine the carbon content of imported products and thus facilitate the implementation of a potential CBAM. Using the COMET Framework to generate robust global data capturing life-cycle emissions, the EU could embed into its policies incentives for EU companies to measure the full scope of their emissions, source sustainably produced inputs, and support emissions reductions upstream.

By harmonizing GHG emissions accounting methods, the COMET Framework will be highly useful—if not absolutely necessary—for the success of EU policy instruments such as the EU ETS, the EU Taxonomy, and a potential CBAM, as well as future instruments that build on the EU ETS benchmarks. If supported by the EU, its member states, and EU-based companies, the COMET Framework will lead to accurate, complete, and consistent GHG emissions data across high-emission global value chains. It will enable the EU to meet its ambitious climate change mitigation goals while streamlining processes and reducing the need for trade barriers.

AUTHORS

Martin Dietrich Brauch is Senior Legal and Economics Researcher at the Columbia Center on Sustainable Investment.

Solina Kennedy is Special Assistant to the Director at the Columbia Center on Sustainable Investment.

COMET PARTNERS



NOTES

¹ DG TAXUD Unit C2, *Inception Impact Assessment: Carbon border adjustment mechanism* (European Commission, March 2020), <https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12228-Carbon-Border-Adjustment-Mechanism>.

² Commission Decision of 27 April 2011 determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC of the European Parliament and of the Council, OJ L 130, 17.5.2011, p. 1, <http://data.europa.eu/eli/dec/2011/278/2014-01-14>.

³ European Commission, *EU ETS Handbook* (European Commission, 2015), 47, https://ec.europa.eu/clima/sites/clima/files/docs/ets_handbook_en.pdf.

⁴ European Commission, *EU ETS Handbook*, 49.

⁵ Directive 2003/87/EC, Art. 10a(1)–(2). Commission Delegated Regulation (EU) 2019/331 of 19 December 2018 determining transitional Union-wide rules for harmonised free allocation of emission allowances pursuant to Article 10a of Directive 2003/87/EC of the European Parliament and of the Council, OJ L 59, 27.2.2019, p. 8–69, http://data.europa.eu/eli/reg_del/2019/331/oi [hereafter, FAR]; Commission Regulation (EU) No 601/2012 of 21 June 2012 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council, OJ L 181 12.7.2012, p. 30, <http://data.europa.eu/eli/reg/2012/601/2019-01-01> [hereafter, MRR].

⁶ "EU Emissions Trading System (EU ETS)," Climate Action, European Commission, accessed August 19, 2020, https://ec.europa.eu/clima/policies/ets_en.

⁷ Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088, EU Doc. PE/20/2020/INIT, OJ L 198, 22.6.2020, 13–43, Art. 10(3)(a), <http://data.europa.eu/eli/reg/2020/852/oi>.

⁸ EU Technical Expert Group on Sustainable Finance, *Taxonomy Report: Technical Annex – Updated Methodology & Updated Technical Screening Criteria* (European Commission, March 2020), https://ec.europa.eu/info/sites/info/files/business_economy_euro/ba

[nking_and_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy-annexes_en.pdf](https://ec.europa.eu/info/law/legislation/taxonomy_en.pdf).

⁹ DG TAXUD Unit C2, *Inception Impact Assessment*.

¹⁰ DG TAXUD Unit C2, *Inception Impact Assessment*.

¹¹ Commission Decision of 27 October 2014 determining, pursuant to Directive 2003/87/EC of the European Parliament and of the Council, a list of sectors and subsectors which are deemed to be exposed to a significant risk of carbon leakage, for the period 2015 to 2019, OJ L 308, 29.10.2014, p. 114–124, <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32014D0746>.

¹² EU Technical Expert Group on Sustainable Finance, *Taxonomy Report*, 156.

¹³ EU Technical Expert Group on Sustainable Finance, *Taxonomy Report*, 156.

¹⁴ MRR, Art. 6; FAR, Arts. 6–7.

¹⁵ See, for example, FAR, Annex VII.

¹⁶ European Commission, Directorate-General on Climate Action, Directorate B – European and International Carbon Markets, *Guidance Document No. 5 on the Harmonised Free Allocation Methodology for the EU ETS Post 2020: Guidance on Monitoring and Reporting in Relation to the Free Allocation Rules* (European Commission, February 22, 2019), https://ec.europa.eu/clima/sites/clima/files/ets/files/allowances/docs/p4_gd5_mr_guidance_en.pdf.

¹⁷ See, for example, MRR, Arts. 32, 42, and FAR, Annex VII.

¹⁸ "EU Emissions Trading System (EU ETS)," Climate Action, European Commission, accessed August 19, 2020, https://ec.europa.eu/clima/policies/ets_en.

¹⁹ EU Technical Expert Group on Sustainable Finance, *Taxonomy Report*, 155.

²⁰ EU Technical Expert Group on Sustainable Finance, *Taxonomy Report*, 159.