**PeerCo’s CBAM Co-Pilot**

**Introduction**

Through an SMDH funded Rapid Demonstrator, PeerCo has delivered CBAM reports for companies within the SMDH community. PeerCo is sharing the most relevant parts of our learning with the SMDH community. This document is not an authoritative document on CBAM, rather it is intended to highlight the types of data that companies should start collecting to be ready for future carbon regulations relevant to manufacturing. Not all companies will need to make a CBAM declaration but the overall direction of travel is clear from both UK and EU policy that carbon will be further regulated and priced. Businesses need to prepare for this shift by understanding the data requirements and ways to collect it.

**What is CBAM?**

The Carbon Border Adjustment Mechanism (CBAM) is the European Union’s new regulation to address the problem of carbon leakage within the EU. Today, European companies, in the most energy-intensive sectors, must already report their carbon emissions and pay for carbon allowances through the EU ETS (EU Emissions Trading System), Europe’s Cap and Trade system. CBAM has been created to ensure a level playing field for the European companies that pay for carbon emissions by making non-European exporters into the EU pay a similar carbon price.

CBAM is part of the EU’s Fit for 55 package, which is a climate measure, however CBAM is being implemented by individual National Competent Authorities (by country), Taxation and Customs department. The policy requires an importing company of energy intensive goods, those products already covered by EU ETS, to make a declaration on the embodied carbon of those products. From January 2026, the importers will have to pay a per-tonne fee based on the EU ETS price. The sectors covered by CBAM regulation include: aluminium, steel, iron, hydrogen, fertilisers, electrical energy and cement.

**CBAM in the UK**

Since leaving the EU, the UK has continued its own ETS programme so the largest manufacturers in the same core EU ETS sectors are already paying for carbon allowances. If these producers are also exporting simple goods to the EU, then there would be a CBAM declaration to make and, in the future, a payment of any differential in carbon prices. Whether a product needs a CBAM declaration depends upon its Combined Nomenclature (CN) code. For smaller UK companies operating in those same sectors, which due to their size were not captured by EU ETS, they will have to make a CBAM declaration if exporting goods worth more than €150. Furthermore, the UK government announced in December of 2023 that it is creating a CBAM for imports, which will also have an effect on your upstream supply chain.

**Getting Ready for CBAM – Data Collection**

CBAM data requirements focus on what is happening at the facility/installation level and upstream supply chain that produces the CBAM product. Downstream data is out of scope.

Upstream data requirements focus on the embodied carbon of key precursor products, but, for example, excludes transport. It is the responsibility of the manufacturer to obtain information about the embodied carbon of their precursors (inputs) from their suppliers.

The following broadly outlines these data collecting needs.

* **EU CBAM Data Collection Template** – EU companies are asking suppliers to complete this template. The data requirements change for different segments but broadly the follow the following:
* **Reporting time period:** establishing the time period required for the reporting with the importer is important, a quarter is the minimum length of time needed as a reporting period and annual is the target.
* **Monitoring Methodology Documentation (MMD):** document that businesses should create to document calculation methods used, monitoring process and schedule for revision and updating.

**Overall**

* Total facility production of goods: tonnes produced of each type of CBAM good and by installation
* Target calculation: tonnes of CO2e per tonne of CBAM good produced

**Direct emissions (product level)**

* Source Stream Emissions: data on the amounts of raw materials, fuel types or a product used that creates emissions of one or more Greenhouse Gases (GHGs). Data will be required on the amount used and the type of process (combustion, chemical reaction, etc). Data is also required on the calorific content of the inputs.
* Perfluorocarbons: quantification of these emissions from process leakage are targeted.

**Indirect emissions (facility level)**

* Electricity consumed from the grid – kWh consumed and emissions factor from a publicly available data source.
* Electricity or heat consumed from any on-site sources – consumption data and emissions factor is needed. Biomass has very specific calculations to determine its emissions factor. Technical proof of connection required
* Heat or steam that is purchased or imported
* Electricity purchased via a Power Purchase Agreement (PPA) – zero carbon electricity purchased through a PPA is allowed and must be documented
* Natural gas consumed – default value of emissions factor allowed
* Embodied carbon of any purchased precursors. Precursors are raw materials used in the manufacturing process.

**Preparing for CBAM Data Collection**

CBAM is capturing both the product level emissions for the actual CBAM good as well as the indirect facility level carbon, which needs to be apportioned to the CBAM products. CBAM reporters need to understand and document the actual process that the CBAM product is going through and distinguish its boundaries from the production of other types of products or those same products that are not being exported to the EU. Guidance suggests having a schematic of the process.

**Smart controls and monitoring (sub-metering)** – data requirements for CBAM are high and sub-metering at the product level will make it simpler and more accurate to document source stream emissions. Sub-meters could be a range of technologies, including weight measures, flow meters or electricity consumption meters. The more granular the data, the more straightforward it is to separate out what is a CBAM-linked emission and what is not. Sub-metering creates the baseline for further decision-making and if reviewed and acted upon, could further reduce carbon, energy and save money.

**Smart Utility Meters** – calculating of consumption (gas and electricity) for the specific reporting period is critical, and can be automated by having a smart meter. Smart meters offer hourly and half-hourly levels of granularity. This level of granularity is not yet a CBAM requirement, but it will enable more accurate baselining and speed up evaluations of further technology investments. Importantly, if there is any on-site solar or other low carbon energy source, having the ability to digitally link consumption and generation to the same time will improve the robustness of your claim and likely reduce the carbon footprint of the product.

**Continuous Emissions Monitoring (CEMS)** – technologies can simplify reporting by automatically providing precise emissions data.

PeerCo’s View

CBAM is in the early days of its implementation and there will be ongoing changes to reporting requirements. Already, the reporting requirements have stepped-up, for example, previously published default values for emissions can now only be used to fill in a reporting gap for 20% of total product emissions. PeerCo is confident that carbon pricing is here to stay. UK manufacturers who want to retain or gain customers in the EU, in CBAM sectors, will likely have more success if they can demonstrate an understanding of the regulation and collect the right data. Collecting data may even be able to help your company reduce its own carbon footprint. Energy reduction combined with the UK having a relatively low grid carbon intensity, means that CBAM could be an opportunity for UK manufacturers to distinguish themselves within a competitive and global marketplace.