

Prepared by DigitalTrade4.EU



Proposal for Integrating Digital Product Passports into the CBAM Implementing Regulation

Feedback to the EU Commission

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About Us

The **DigitalTrade4.EU consortium** envisions a **seamlessly interconnected Europe** and **neighbouring regions** powered by harmonized standards for the digitalisation of trade documents and processes. By fostering the digital transformation of trade, we aim to promote economic integration, enhance cooperation, and ensure long-term trade facilitation across borders.

Our consortium is made up of **experts in their field**, including **107 full partners**—trade associations, logistics providers, shipping lines, banks and insurances, technology innovators, etc.—**from 17 European Union countries** (*France, Belgium, Netherlands, Austria, Estonia, Finland, Italy, Latvia, Spain, Germany, Sweden, Poland, Luxembourg, Lithuania, Slovenia, Denmark, Bulgaria*) and **22 non-EU countries** (*United Kingdom, Switzerland, Montenegro, Japan, Singapore, Hong Kong, Australia, New Zealand, India, Nepal, Canada, United States of America, Cameroon, Morocco, Egypt, Kenya, Pakistan, Nigeria, Brazil, Uzbekistan, Turkey, Ukraine*).

Our consortium is already **aligned with the fundamentals** of the **EU Competitiveness Compass**. Learn more:

- How DigitalTrade4.EU Can Help Achieve the Objectives of the EU Competitiveness Compass (February 2025)

<https://www.digitaltrade4.eu/how-digitaltrade4-eu-can-help-achieve-the-objectives-of-the-eu-competitiveness-compass/>

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Executive Summary

This proposal recommends **integrating the Digital Product Passport (DPP)**, introduced under the Ecodesign for Sustainable Products Regulation (ESPR), into the implementation of the EU's **Carbon Border Adjustment Mechanism (CBAM)** as set out in Regulation (EU) 2023/956. The integration aims to create a more **streamlined, efficient, and digitalised reporting process** that aligns with the EU's climate and digitalisation ambitions.

The DPP, designed to collect and transmit product-level data on composition, production, and sustainability, can act as a **trusted digital carrier of information** required under CBAM. By leveraging DPP's data structures, the proposal seeks to:

- **Simplify administrative procedures** for economic operators by avoiding redundant reporting.
- **Enhance data accuracy** and transparency in carbon emissions calculations.
- **Support SMEs** and other stakeholders in meeting their reporting obligations with reduced administrative burden.
- **Align with the European Commission's objectives** of a seamless, data-driven Single Market and the Green Deal's sustainability goals.

The proposal includes three core recommendations:

1. Allow **optional use of DPPs** for CBAM declarations.
2. Develop **technical interfaces** between the DPP system and CBAM IT infrastructure.
3. Launch **pilot projects** to assess feasibility, leading towards potential mandatory integration in specific sectors.

This approach reflects the Commission's call for stronger **synergies** between digital and environmental policies and supports the strategic vision presented in "The Single Market: our European home market in an uncertain world." It also aligns with the upcoming **Digital Omnibus** and **Circular Economy Act**.

The proposed roadmap outlines **next steps** including stakeholder consultations, pilot testing, technical specification development, and potential legislative adjustments. By adopting this integrated approach, the EU can position itself as a **global leader in digital sustainability** and ensure a robust, harmonised CBAM implementation.

Introduction

The European Union's **Carbon Border Adjustment Mechanism (CBAM)**, as established in Regulation (EU) 2023/956, aims to prevent **carbon leakage** and support the EU's **climate objectives** by ensuring that **imported goods** bear a **carbon price** equivalent to that applied to EU producers. In parallel, the **Digital Product Passport (DPP)**, introduced under the Ecodesign for Sustainable Products Regulation (ESPR), is designed to support the EU's **circular economy** goals by digitally capturing and transmitting **product-related information** throughout **supply chains**.

The **Carbon Border Adjustment Mechanism (CBAM)** is part of the EU's 'Fit for 55' package, which aims to **reduce greenhouse gas emissions by 55% by 2030**. The **Digital Product Passport (DPP)** stems from the **Circular Economy Action Plan**, which seeks to promote **sustainable product design** and **resource efficiency**. Despite their different origins, both frameworks share a **common goal**: enhancing **transparency** and **sustainability in supply chains**.

This paper proposes a **practical approach** to integrate **DPP functionalities** into the **CBAM reporting** and **compliance processes** as part of the upcoming **CBAM Implementing Regulation**.

Note: In this document, the terms Small and Medium-sized Enterprises (SMEs) and Micro, Small and Medium-sized Enterprises (MSMEs) are used interchangeably and carry the same meaning and weight. This clarification is important because different sources and contexts may refer to these groups using either acronym, but both encompass the full range of smaller business categories critical for economic development.

Expectations from the Commission's Side: The Objectives

The European Commission has emphasised, in its communication *Strategy for making the Single Market simple, seamless and strong (COM(2025) 500 final)*¹, the need for a **simple**, **seamless**, and **strong Single Market**. This vision underscores several key objectives that directly align with the integration of **DPP** into **CBAM**:

- **Fewer Barriers:** Addressing administrative and regulatory obstacles, including redundant documentation requirements, to enable smooth circulation of goods and services across Member States.
- **More Digitalisation:** Transitioning from paper-based to **data-driven processes**, where digital tools like **DPP** can facilitate **real-time information sharing** between economic operators and authorities.
- **Support for SMEs:** Creating a business environment where **SMEs** can scale and operate across the Single Market with reduced **administrative burdens** and enhanced access to digital systems.
- **Simplification and Efficiency:** Leveraging digital solutions such as DPP to lower costs, increase productivity, and ensure a better functioning Single Market without adding layers of rules.
- **Effective Implementation:** Encouraging Member States to use innovative tools to prevent fragmentation and ensure uniform application of Single Market rules.

¹ European Commission, Internal Market, Industry, Entrepreneurship and SMEs. The Single Market: our European home market in an uncertain world (May 2025)
https://single-market-economy.ec.europa.eu/publications/single-market-our-european-home-market-uncertain-world_en

The Commission's call for a **new paradigm of synergy** between digitalisation and sustainability measures presents a timely opportunity for CBAM and DPP integration. This integration would embody the Commission's goals by enabling:

- **Automated compliance processes** supporting climate targets.
- **Reduced reporting burden** for businesses, especially SMEs and mid-caps.
- **Enhanced resilience** against trade disruptions by ensuring robust data flows.
- **Alignment with the upcoming Digital Omnibus and Circular Economy Act**, which aim to harmonise digital and environmental reporting.

By positioning DPP as a **trusted digital carrier** for CBAM data, the EU can advance its strategy of a **"seamless European market"** and reinforce the Green Deal objectives through smarter, digitally enabled regulation.

Approach and Recommendations

Rationale for Integration

The integration of **DPP** into **CBAM reporting** offers significant benefits for **businesses**, **authorities**, and the EU's **climate** and **digitalisation** agendas:

- **Simplification of Processes:** Leveraging **DPP data structures** would reduce **redundant reporting** by enabling **automatic data transfer** for **CBAM declarations**. For instance, a steel importer could use a DPP to automatically transmit carbon intensity data verified during production, eliminating the need for duplicate documentation and reducing administrative costs.
- **Enhanced Data Accuracy:** **DPPs** contain **verified information** on **product composition** and **production processes**, supporting robust **carbon intensity calculations** for **CBAM**.
- **Support for SMEs:** A unified **reporting interface** lowers **administrative burdens**, particularly for smaller **economic operators**.
- **Alignment with Digital Transition:** Integration reflects the EU's ambition to lead in **digital customs** and **sustainable trade facilitation**.

Alignment with Annex Data Requirements

The **Annex** to the CBAM Implementing Regulation defines detailed **data requirements**, including:

- **Recipient identification** (name, address, EORI, CBAM account number)
- **Goods information** (commodity codes, country of origin, mass, quantity, description)
- **Supporting documents** (certificates, authorisations, invoices)
- **Receipt declaration authentication** (date, name, signature)

These requirements align with data that can be structured and transmitted via the **Digital Product Passport (DPP)**. The DPP framework already provides capabilities for storing

commodity codes (CN, TARIC), country of origin codes, and associated documentation in electronic format. Integrating DPP would directly support the **electronic receipt declaration** format outlined in **Annex I** and enable smoother data exchange.

Proposed Recommendations for the Implementing Regulation

To achieve these benefits, it is recommended that the **Implementing Regulation** include provisions to:

1. **Optional Use of DPP for CBAM Declarations** Introduce a clause permitting **economic operators** to use **DPPs** as an alternative or supplementary channel for submitting required **CBAM data elements**.

Proposed wording: *"Where available, the **recipient** or **declarant** may submit the information required under Articles X and Y of this Regulation through the **Digital Product Passport (DPP)** system established under Regulation (EU) 2024/1781 (ESPR), provided the **DPP** includes all data elements required for compliance with Regulation (EU) 2023/956 and its **Annexes**."*

2. **Development of Technical Interfaces** Mandate the **European Commission** to explore technical solutions (APIs, interoperability frameworks) between the **DPP system** and **CBAM's IT infrastructure**, ensuring seamless **data exchange** and compliance with **Annex I technical specifications**.

Proposed wording: *"The **Commission** shall develop, in cooperation with relevant stakeholders, technical specifications to enable **interoperability** between the **Digital Product Passport** system and **CBAM reporting tools** for the purpose of simplifying **reporting obligations** and improving **data accuracy** in line with the data structures set out in **Annex I** and **Annex II**."*

3. **Pilot Projects and Future Mandatory Use** Encourage **pilot projects** in selected sectors (e.g., steel, cement) to test the feasibility of **DPP-based CBAM reporting**, including testing **Annex-defined data fields**.

Proposed wording: *"The **Commission** shall assess the feasibility of utilising **Digital Product Passports** as a primary **reporting tool** for **CBAM compliance** and may, by*

*delegated act, mandate their use in specific **sectors** following successful **pilot projects**, ensuring alignment with the data and formats specified in the **Annexes**."*

Expected Outcomes

The proposed integration will:

- Enable a more **efficient, transparent, and harmonised CBAM reporting process**.
- Reduce **administrative complexity** for **businesses**.
- Strengthen the EU's leadership in **digitalising customs** and **sustainability reporting**.
- Prepare the **regulatory landscape** for future **technological advancements** and **data-driven policymaking**.

Conclusion and Next Steps

Integrating the **Digital Product Passport system** into the **CBAM Implementing Regulation** represents a **forward-looking** and **pragmatic step** towards **harmonised** and **digitalised trade sustainability measures**. It aligns with both the **Green Deal** and **Digital Europe objectives**, reinforcing the EU's position as a global leader in **climate action** and **digital innovation**.

The inclusion of enabling provisions in the **Implementing Regulation** will provide **legal certainty** and a roadmap for achieving this integration without delaying **CBAM's implementation timeline**, while supporting the **data formats and requirements** detailed in the Regulation's **Annexes**.

To move forward, the following **next steps** are proposed:

- **Step 1: Stakeholder Consultation and Technical Assessment** – Initiate dialogues with Member States, industry stakeholders, and digital infrastructure experts to assess technical and legal feasibility.
- **Step 2: Development of Pilot Projects** – Launch sector-specific pilots (e.g., steel, aluminium) to test DPP-enabled CBAM reporting.
- **Step 3: Technical Specifications and API Design** – Develop interoperable technical standards and APIs between DPP and CBAM systems, ensuring data security and regulatory compliance.
- **Step 4: Legislative Adjustment (if needed)** – Review outcomes of pilots and propose delegated acts or amendments for mandatory DPP integration in selected sectors.
- **Step 5: EU-wide Implementation** – Roll out full-scale integration as part of the EU's Digital Single Market and Green Deal ambitions.

This roadmap will ensure that integration is **incremental**, **tested**, and aligned with the EU's broader **digital and environmental strategies**, while providing a clear path towards **long-term harmonisation** of reporting obligations.

Appendix 1. EU Green-Digital Trade Leadership Roadmap (DigitalTrade4.EU, 2025)

activity	objective	indicative metrics	tools/enablers
1. EU-Singapore DTA & Expand DEPA Partnerships	Strengthen digital trade diplomacy in Asia through high-standard agreements.	- 5+ new digital trade agreements with key Asian partners (e.g., Japan, India, ASEAN) by 2030 - 15% increase in EU-Asia digital services trade by 2028	DEPA framework, EU-Singapore DTA, Global Gateway Initiative, eIDAS 2.0
2. Implement Digital Product Passports (DPPs)	Ensure traceable, sustainable supply chains aligned with EU Green Deal.	- 50% adoption of DPPs by 2030 - 20% reduction in supply-chain carbon intensity by 2030	EU Sustainable Products Initiative, CBAM incentives, UNECE Recommendation 49
3. Fund Secure Digital Corridors in Asia	Build interoperable digital infrastructure for EU-Asia trade, prioritizing cybersecurity resilience	- ~€2B allocated via NDICI-Global Europe - 10+ blockchain-based traceability pilots by 2027	NDICI-Global Europe, ASEAN digital customs systems, EU Customs Data Hub, ENISA threat intelligence platforms
4. Harmonize Digital Standards (MLETR/eIDAS 2.0)	Enable cross-border recognition of e-documents and digital identities.	- 90% mutual recognition of e-signatures by 2028 - 70% SME adoption of eIDAS wallets	MLETR framework, eIDAS 2.0, EU Transport Law updates, UN/UNECE protocols
5. Implement LEI and vLEI for Supply Chain Trust	Harmonise and simplify legal entity identification across borders	- 90% entity coverage with LEI by 2030; 50% vLEI use in customs and eFTI transactions	ISO 17442, vLEI, eIDAS 2.0, UNECE UID
6. Launch Green-Digital Trade Academy	Upskill SMEs and officials on DPPs and carbon accounting.	- 40% increase in SME participation by 2027 - 60% cost savings for SMEs	Erasmus+ grants, COSME programme, tiered compliance thresholds
7. Integrate ESG into Trade Finance	Link trade finance to sustainability metrics for cheaper capital access.	- €10B/year unlocked for green trade finance - 30% lower Scope 3 emissions by 2030	InvestEU guarantees, CSRD-aligned reporting, FinTech platforms
8. Enforce Platform Interoperability	Prevent vendor lock-in and empower SMEs.	- 100% compliance with CJEU rulings by 2026 - 50% reduction in platform dominance	Court of Justice of the European Union (CJEU) Case C-233/23, DEPA, eIDAS 2.0, Digital Markets Act (DMA)
9. Global Digitalisation Projects with EU Standards	Extend EU digital infrastructure and norms globally.	- 20+ co-funded projects by 2030 - 80% interoperability with EU systems	Digital Europe Programme, CEF funding, EU-Asia Digital Standards Taskforce
10. Advance UNECE Transparency Protocols	Globalize EU sustainability standards for supply chains.	- 100% alignment with UNECE Rec. 49 by 2028 - 30% reduction in greenwashing claims	UNECE CEFAC, W3C Verifiable Credentials, EU CBAM registry
11. Pilot CBAM-DPP Corridors	Link trade finance to verifiable ESG metrics for tariff incentives.	- 20% CBAM compliance cost reduction - 50% DPP adoption by 2030	IoT carbon trackers, CBAM rebate schemes, EU Customs Single Window

Table 1. The roadmap above, DigitalTrade4.EU's input to the European Commission's "International Digital Strategy" operationalises the recommendations outlined in this document. For instance, Activity 1 (EU-Singapore DTA & Expand DEPA Partnerships) directly supports the harmonisation of international digital standards, while Activity 8 (Global Digitalisation Projects with EU Standards) aligns with efforts to promote dual-use infrastructure globally. These activities collectively reinforce the EU's ability to leverage digital trade diplomacy as a tool for both economic growth and strategic security.