Prepared by DigitalTrade4.EU

Strengthening EU Leadership in Green-Digital Trade

KEY DEVELOPMENTS AND STRATEGIC RECOMMENDATIONS

May 2025

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 **105 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/

Web page: www.digitaltrade4.eu

EU Transparency Register: 355266197389-94

Contact person: Riho Vedler

Email: riho.vedler@ramena.ee

DIGITAL TRADE 4EU

Executive Summary

Recent developments highlight the EU's **leadership** in integrating **green** and **digital agendas** in trade. In April 2025, the EU and Singapore signed a landmark **Digital Trade Agreement (DTA)**, a cornerstone of EU **digital trade diplomacy** in **Asia**. This agreement builds on the 2019 **FTA**, reinforcing EU standards on **cross-border data flows**, **e-identification**, and **cybersecurity**, while eliminating "unjustified barriers to digital trade. By providing greater **legal certainty** for consumers and businesses on both sides, the **Singapore DTA** deepens **connectivity** with a trusted partner and serves as a model for future **digital pacts**. The **EU** is Singapore's **fifth-largest goods trading partner**, with bilateral **trade in goods** growing to over **$100 billion** in **2024**, representing **7.8%** of Singapore's total goods trade. The bloc is also the **second-largest services trading partner** of Singapore, with bilateral **trade in services** reaching over **$110 billion** in **2023**.

At the same time, the EU's strategy for **sustainable supply chains** is converging with global efforts. The **UNECE's new Recommendation No. 49**[1] – "Transparency at Scale" – codifies a **UN standard** for **Digital Product Passports (DPPs)** and **traceability** of sustainability data.

Like the EU's forthcoming DPP rules and **CBAM-linked incentives**, Rec. 49 calls for every product to carry **verifiable sustainability** and **carbon-intensity** information at each trade stage. In sum, the EU's green-digital trade framework – from **DEPA/FTAs** to **DPPs** and **digital infrastructure** – is reinforced by these developments.

The European Commission must now translate them into concrete action: it should intensify **international coordination**, deepen **digital trade partnerships** (especially in Asia through **DEPA**), and champion global **interoperability** of laws and standards (**MLETR**[2], **eIDAS 2.0**, etc.) in the coming MFF period.

*This document is part of the **DigitalTrade4.EU** input to the **European Commission** on the **Multiannual Financial Framework (MFF)**[3] and the **Connecting Europe Facility 2014-2020 – evaluation**[4].*

---

[1] United Nations Economic and Social Council. Recommendation No. 49: Transparency at Scale – Fostering Sustainable Value Chains (March 2025) https://unece.org/sites/default/files/2025-05/ECE-TRADE-C-CEFACT-2025-03E.pdf

[2] UNCITRAL. Model Law on Electronic Transferable Records https://uncitral.un.org/en/texts/ecommerce/modellaw/electronic_transferable_records

[3] European Commission. EU's next long-term budget (MFF) – implementing EU funding with Member States and regions, Public Consultation https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14520-EUs-next-long-term-budget-MFF-implementing-EU-funding-with-Member-States-and-regions_en

[4] European Commission. Connecting Europe Facility 2014-2020 – evaluation, Public Consultation https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14245-Connecting-Europe-Facility-2014-2020-evaluation_en

Introduction

Global trade is being reshaped by the dual **green** and **digital transitions**, with the EU taking a **leadership** role. Through initiatives such as **DigitalTrade4.EU** — the EU's flagship program to modernize **digital trade infrastructure** — along with the **Digital Economy Partnership Agreement (DEPA)** in the **Asia-Pacific** and the **Global Gateway** in **Central Asia**, the EU is establishing new, resilient corridors for **clean energy**, **infrastructure**, and **digital services.** The **EU's intensified engagement** with **Asia** through **digital trade** is highlighted by the new **EU-Singapore Digital Trade Agreement (DTA)**, which aims to provide greater **clarity** and **legal certainty** for consumers and businesses to transact **online** more seamlessly.

Most recently, EU leaders have emphasized the need for "trusted, sovereign partnerships" that combine **sustainability** with **digital innovation**. For example, EU President von der Leyen's April 2025 address in Central Asia highlighted the region's potential as a **Eurasian trade** and energy hub. Alongside these efforts, the EU has taken a major step in **digital trade diplomacy**: on 14 April 2025, the Council adopted a decision to conclude the **EU–Singapore Digital Trade Agreement (DTA)**[5]. The Singapore DTA – the EU's first bilateral agreement devoted solely to **digital trade** – will remove unjustified barriers, facilitate **secure cross-border data flows**, and promote trustworthy **AI**, while preserving the EU's **privacy** and **cybersecurity standards**. This breakthrough treaty exemplifies how the EU extends its **rule-based approach** beyond its borders. It complements **DEPA** (Singapore is a founding member) and advances **interoperability** of **digital norms**. At the same time, the EU is integrating environmental goals: tools like **Digital Product Passports** and **carbon accounting** are now being embedded in **trade policy**.

Notably, **UNECE Recommendation No. 49** ('**Transparency at Scale**') – finalized in 2025 – provides a **global protocol** for sharing **supply-chain ESG data**, aligning closely with the EU's vision of **traceable**, **sustainable trade**. In the sections below, we analyse these developments and outline how the EU can consolidate its **green-digital trade strategy** in concert with partners.

[5] European Commission. EU and Singapore sign landmark digital trade agreement (May 2025) https://ec.europa.eu/commission/presscorner/detail/en/ip_25_1152

Digital Trade Diplomacy and Connectivity in Asia

The EU's **digital trade engagement** with **Asia** is intensifying. The new **Singapore DTA** is a key result of this strategy, designed to provide "greater clarity and **legal certainty** for consumers and businesses" to engage in **online transactions**. By establishing **global standards** for **digital trade** — including **data flows**, **digital identities**, **e-signatures**, **cybersecurity**, and **anti-spam measures** — the DTA removes and prevents unjustified barriers to **digital trade**. In practice, this means that **Singaporean** and **EU firms** will benefit from **streamlined processes** (e.g., no forced **data localization**) underpinned by **EU-grade rules**. The agreement supplements the **EU-Singapore Free Trade Agreement (EUSFTA)**[6] that entered into force in **2019** and aims to set **global standards** for **digital trade** and **cross-border data flows** without **unjustified barriers**.

Crucially, the DTA embeds the EU's **privacy** and **consumer-protection framework** into an **Asia-Pacific context**, allowing Europe to export its **regulatory model** to trusted partners.

This agreement strengthens **connectivity** and **rule-setting** with Asia in several ways:

- **Trusted digital partnership:** By concluding the DTA with Singapore (a DEPA founding member), the EU locks in a **high-trust corridor**. Singapore is a key hub for **services** and **data**, and over half of its trade in services with the EU is digitally delivered. The DTA therefore cements Singapore's role as a **digital bridge**, not just as an end-market, and signals to other DEPA members (e.g. New Zealand, Chile, and prospective members like South Korea and Japan) that **EU standards** are the template for future FTAs.
- **High-standard rulebook:** The agreement ensures that both parties retain the right to **regulate** in the public interest while committing to **interoperability** of **digital rules**. It codifies EU priorities such as **free data flows** (with safeguards), **cross-border e-signatures**, and **anti-spam/cyber rules**. As a result, it amplifies the EU's influence on the **global digital rulebook**. In particular, it enforces the EU's vision of **human-centric technology**, ensuring that **AI governance** and other frontier issues are addressed in line with European values.

[6] Enterprise Singapore. European Union – Singapore Free Trade Agreement (EUSFTA) https://www.enterprisesg.gov.sg/grow-your-business/go-global/international-agreements/free-trade-agreements/find-an-fta/eusfta

- **Deepened market access:** By reducing **paperwork** and **legal uncertainty**, the DTA lowers costs for businesses and promotes **services trade**. As Việt Nam News noted[7], this should particularly benefit **SMEs** and **digital innovators** on both sides. It also makes EU and Singapore regulations more **compatible**, which can spur **investment** (the EU is already a major investor in Singapore).
- **Building resilience and autonomy:** In an era of **digital fragmentation**, the EU aims to secure reliable **digital supply chains**. The Singapore agreement complements this goal by diversifying the EU's **digital partnerships** (including with the UK, another DEPA observer) and by fostering jointly governed infrastructure. Mechanisms like the UK's **ETDA** (Electronic Trade Documents Act) and the EU's **ETD** (electronic/digital versions of trade documents) frameworks can now be extended to link with Asia under **common standards**.

In sum, the **EU–Singapore DTA** is emblematic of **digital trade diplomacy**: it not only ties Singapore closer to the EU's **digital single market**, but also reinforces broader **interoperability**. It lays down a marker that trusted partners in Asia will adopt **EU-style digital governance** – a stepping-stone towards **regional rule-making initiatives**, and a boost for the EU's **global competitiveness**.

Digital Sustainability and Supply-Chain Traceability

The EU's **green** and **digital agendas** align around the concept of a digitally transparent, **sustainable value chain**. A key component of this is the **Digital Product Passport (DPP)**, which requires products to carry verifiable data on their **composition**, **origin**, and **environmental impact**. The EU has proposed **DPPs** as part of its **Sustainable Products Initiative** (targeting many goods by 2030) and is tying them to incentives like **CBAM rebates** and **green finance**. In practice, this means every consignment would come with a traceable dossier of **compliance** and **emissions data**. The concept of **Digital Product Passports (DPPs)** emerged from the growing need for greater **supply chain transparency** and **sustainability**. This initiative was spearheaded by the **European Commission** as part of the broader **European Green Deal**, aimed at fostering a **circular economy** and reducing **environmental impacts**.

---

[7] Việt Nam News. Accelerating digital transformation to benefit SMEs (February 2023) https://vietnamnews.vn/economy/1487078/accelerating-digital-transformation-to-benefit-smes.html

This vision is reinforced by recent **UNECE** work. In March 2025, **UN/CEFACT** put forward **Recommendation 49 – "Transparency at Scale"** as a **global framework**. Rec. 49 stipulates that key **supply-chain documents** and credentials should be issued as **verifiable digital credentials**, with traceable events at each logistic step. For example, it recommends making **DPPs** mandatory: *"Digital Product Passports designed to carry **sustainability information** about each product's shipment at each step of the value chain."* This exactly mirrors the EU's approach of encoding **carbon footprints** and **material data** into DPPs. Rec. 49 also envisions **digital conformity certificates** (trusted by export authorities) to attest that goods meet **environmental standards**. Notably, it urges that traditional **export documents** (like **certificates of origin**) be extended to include **verified sustainability attestations**, such as **carbon intensity measures**. This aligns squarely with the EU's **Carbon Border Adjustment Mechanism (CBAM)**, which requires importers to declare embedded emissions. In effect, UNECE is endorsing a form of **carbon traceability** that the EU is already moving toward via **CBAM** and **supply-chain due diligence**.

Beyond these specifics, Rec. 49 shares the EU's commitment to **standardized**, **inclusive digital infrastructure**. It explicitly leverages **open**, platform-neutral protocols (such as **W3C Verifiable Credentials**) so that **data can be shared securely** without a central repository. Importantly, it recognizes that **value chains** include actors with very different **digital capacities**. Rec. 49 therefore recommends **user-friendly tools** (e.g. intuitive apps, human-readable data) so that **small suppliers** can participate. This is fully consistent with EU policy: the Commission has stressed support for **SMEs** and **developing-country exporters** in meeting new **green trade requirements** (through funding, guidance and proportionate rules). In short, the **UNECE Recommendation** provides a **global blueprint** that *reinforces EU goals*: it embeds **DPPs** and **carbon metrics** into cross-border trade flows, promotes **data integrity** and **anti–greenwashing** (boosting **consumer trust**), and suggests **interoperability** measures that mirror Europe's own legal initiatives (like **eIDAS 2.0** with digital identity).

By aligning on these standards, EU **policy-makers** can accelerate the **twin transition**. For instance, EU-funded pilot projects on **DPPs** (such as envisaged with Singapore electronics exports) would complement **Recommendation 49**'s guidelines. Likewise, the **Commission** can leverage **UNECE** processes (**CEFACT**) to push for **mutual recognition** of **digital credentials** and **signatures**. In the long run, the synergy means that an **EU-made product** with a verifiable **eco-**

label and **digital passport** will be readable and trusted in markets worldwide – exactly the outcome **Recommendation 49** envisages.

Funding the Future

To operationalize the EU's green-digital trade strategy, the **2026–2034 Multiannual Financial Framework (MFF)** should prioritize investments in three key areas (amounts are estimated and subject to further analysis):

1. **Digital Infrastructure in Asia**:
    - Allocate ~€2 billion under **NDICI-Global Europe**[8] to fund **secure digital corridors** and **interoperable DPP platforms** with Asian partners (e.g., Singapore, Japan, South Korea, Australia, New Zealand).
    - **Co-finance** ASEAN-wide digital customs systems and blockchain-based traceability tools.
2. **SME Support and Capacity Building**:
    - Dedicate ~€800 million to upskilling Asian and EU SMEs on **DPP compliance, carbon accounting,** and **e-signature adoption** via the **COSME** programme.
    - Launch a **Green-Digital Trade Academy** under Erasmus+ to train officials and businesses on emerging standards.
3. **Interoperability and Standards Harmonization**:
    - Fund pilot projects (~€500 million) to align Asian digital trade rules with **MLETR** and **eIDAS 2.0**, focusing on mutual recognition of e-documents.
    - Establish an **EU-Asia Digital Standards Taskforce** to streamline certification processes for sustainability data.

[8] European Commission. Neighbourhood, Development and International Cooperation Instrument – Global Europe (NDICI – Global Europe) https://enlargement.ec.europa.eu/funding-technical-assistance/neighbourhood-development-and-international-cooperation-instrument-global-europe-ndici-global-europe_en

Next Steps for the Commission

1. **Digital Standards and Interoperability.** The **Commission** should prioritize aligning **EU trade policies** with **global digital standards**, adopting frameworks like **MLETR** and **eIDAS 2.0**. This will promote **cross-border data flows**, **e-identification**, and **cybersecurity** while preserving **EU privacy standards**. Strengthening **digital rule interoperability** through **trade agreements**, such as the **EU–Singapore Digital Trade Agreement**, will further solidify **EU influence** globally. Worth also mentioning the **analysis**[9] we carried out, following the mandate by the **French Ministries of Justice** and **Finance** on **MLETR**:
    a. **Enhanced Legal Certainty:** The MLETR analysis emphasizes the importance of providing greater legal certainty for businesses engaged in digital trade, which aligns with the EU's goal of fostering a trusted and secure digital economy.
    b. **Interoperability of Digital Rules:** The report highlights the need for interoperability of digital rules and standards, which is crucial for the EU's strategy to promote cross-border data flows and digital trade.
    c. **Consumer Protection and Data Privacy:** The analysis underscores the significance of consumer protection and data privacy in digital trade agreements, reflecting the EU's commitment to upholding high standards in these areas.
    d. **Support for SMEs:** The MLETR analysis suggests measures to support small and medium-sized enterprises (SMEs) in adapting to digital trade, which resonates with the EU's focus on enhancing digital tools and technology for SMEs.
    e. **Regulatory Alignment:** The report advocates for regulatory alignment and cooperation between the EU and its trading partners, which is essential for the EU's efforts to deepen digital trade partnerships and promote global interoperability of laws and standards.
    f. **Promotion of Digital Innovation:** The analysis emphasizes the role of digital innovation in driving economic growth and competitiveness, aligning with the EU's vision of fostering a secure and inclusive digital economy.

[9] French Ministry for the Economy, Finance and Industrial and Digital Sovereignty, "Speeding up the Digitalisation of Trade Finance", 2023. https://www.economie.gouv.fr/files/files/2023/rapporttrade-EN.pdf

   g. **Cybersecurity and Trust:** The MLETR analysis stresses the importance of cybersecurity and trust in digital trade, which is a key priority for the EU in its digital trade diplomacy and partnerships.

2. **Trade Finance** and **ESG**: Discuss the role of **trade finance digitalisation** in supporting the **EU's efforts** in terms of **ESG**, **CSRD**, and **CS3D**. It is worth mentioning here the **EU's commitment** to simplifying **reporting obligations** under the **CSRD** and the potential impact on **trade finance**. In particular, the **EU's push** for a more **sustainable** and **circular economy**, with **trade finance digitalisation** playing a crucial role in achieving these goals, could be summarized as follows:
   a. **Simplification of Reporting Obligations**:
      i. The **EU** has proposed increasing the **employee threshold** for **CSRD reporting companies** to **1,000 employees** and revising the standards to "substantially" reduce the number of data points companies would be required to collect.
      ii. The **EU's "stop-the-clock" proposal** postpones reporting under the **CSRD** for **Wave 2** and **3 companies** by 2 years, respectively to **2028** and **2029**, providing companies with more time to adapt to the new requirements.
   b. **Impact on Trade Finance**:
      i. The simplification of **reporting obligations** under the **CSRD** is expected to reduce the **administrative burden** on companies, making it easier for them to access **trade finance** and invest in **sustainable projects**.
      ii. The **EU's push** for a more **sustainable** and **circular economy** is driving the demand for **green finance**, with **trade finance digitalisation** playing a crucial role in facilitating the flow of **capital** towards **sustainable investments**.
   c. **Promotion of Sustainable and Circular Economy**:
      i. The **EU's Green Deal** aims to make **Europe** the first **climate-neutral** continent by **2050**, with **trade finance digitalisation** playing a key role in achieving this goal by facilitating the transition to a **low-carbon economy**.

ii. The **EU's commitment** to **sustainability** is reflected in its efforts to promote the use of **Digital Product Passports (DPPs)**, which will provide consumers with information on the **environmental footprint** of products, driving demand for **sustainable goods** and **services**.

d. **Role of Trade Finance Digitalisation**:

i. **Trade finance digitalisation** is expected to enhance the **efficiency** and **transparency** of **trade transactions**, making it easier for companies to comply with the **CSRD's reporting requirements** and access **sustainable finance**.

ii. The **digitalisation** of **trade finance** is also expected to reduce the **cost** and **complexity** of **trade transactions**, making it more accessible for **SMEs** to participate in **international trade** and contribute to the **EU's sustainability goals**.

Why it matters: **ESG transformation** is often associated with **inflationary pressure**, at a time where corporates and consumers are unwilling to pay extra for **ESG**, after several years of high **inflation**, denting purchasing powers. The opportunity of **trade finance digitalisation** consists of providing companies that are willing to boost their **ESG performance** with additional **funding** at cheaper rates, hence increasing immediately the very **profitability** of **Buyers** and their **Suppliers**, thus increasing our **EU competitiveness** and the very **resilience** of our companies.

3. **Trade Policy for Sustainability.** The Commission must integrate **environmental goals** into trade agreements by promoting **digital traceability tools** like **Digital Product Passports** and **carbon-accounting mechanisms**. By advancing global protocols, such as UNECE's "**Transparency at Scale**," the EU can embed its **green standards** across supply chains, reinforcing its **Carbon Border Adjustment Mechanism** and **circular economy** objectives.
4. **Leadership in Global Governance.** The EU should leverage forums like the **G7**, **G20**, and **WTO** to shape global **digital** and **green trade** standards. Championing **e-commerce rules** and **sustainability targets** will ensure EU values on **data protection**, **AI ethics**, and **environmental accountability** are upheld in global trade governance.

5. **Strengthening EU-Asia Partnerships.** The Commission should deepen partnerships in **Asia-Pacific** through **DEPA** and the **EU–Singapore DTA**. Extending these agreements to other key partners like **Japan**, **South Korea**, and **Vietnam** will enhance **digital** and **green trade corridors**, ensuring EU standards on **data**, **AI**, and **sustainability** are integrated into regional markets.
6. **Platform Interoperability and Digital Sovereignty:** The Commission should ensure that **dominant online platforms** allow **interoperability** with **third-party applications**, to **avoid vendor lock-in**. The Court of Justice of the European Union recent ruling (Case C-233/23[10]) confirms that refusing to provide **interoperability** can amount to an **abuse of dominance**. Enforcing this will empower SMEs and strengthen the **EU's digital sovereignty**, complementing initiatives like **DEPA** and **eIDAS 2.0** that promote **open, interoperable digital infrastructures**.
7. **Global Digitalisation Projects and Funding**: The **EU** co-funds **digitalisation projects** in non-European countries, leveraging **EU standards** and technical frameworks (financed by **CEF**, **Digital Europe Programme**, etc.). These initiatives aim to extend **EU digital infrastructure** and promote **interoperability** across borders. By integrating **EU-led standards**, such as **DPPs** and **eIDAS 2.0**, these projects ensure that **digital transformation** in global markets aligns with **EU regulatory** and **sustainability goals**.

[10] Judgment of the Court (Grand Chamber) of 25 February 2025. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:62023CJ0233

Conclusion

The **European Commission** must now translate them into concrete action: it should intensify **international coordination**, deepen **digital trade partnerships** (especially in **Asia** through **DEPA**), and champion **global interoperability** of **laws** and **standards** (**MLETR**, **eIDAS 2.0**, etc.) in the coming **MFF period**. It is worth highlighting here the **EU's leadership** in linking **trade** with **green** and **digital agendas**. Besides, the significance of the **EU-Singapore Digital Trade Agreement** and the role of **DPPs** in promoting **sustainable trade** should be emphasized:

1. **EU-Singapore Digital Trade Agreement (DTA)**:
    - The **EU-Singapore DTA**, signed in **May 2025**, is the **EU's first bilateral agreement** devoted solely to **digital trade**, aiming to provide greater **clarity** and **legal certainty** for consumers and businesses to transact **online** more seamlessly.
    - The agreement supplements the **EU-Singapore Free Trade Agreement (EUSFTA)** that entered into force in **2019** and aims to set **global standards** for **digital trade** and **cross-border data flows** without **unjustified barriers**.
    - The **EU** is Singapore's **fifth-largest goods trading partner**, with bilateral **trade in goods** growing to over **$100 billion** in **2024**, representing **7.8%** of Singapore's total goods trade. The bloc is also the **second-largest services trading partner** of Singapore, with bilateral **trade in services** reaching over **$110 billion** in **2023**.
2. **Digital Product Passports (DPPs)**:
    - The concept of **Digital Product Passports (DPPs)** emerged from the growing need for greater **supply chain transparency** and **sustainability**. This initiative was spearheaded by the **European Commission** as part of the broader **European Green Deal**, aimed at fostering a **circular economy** and reducing **environmental impacts**.
    - The **EU** has proposed **DPPs** under its **Sustainable Products Initiative**, aiming to cover many goods by **2030** and linking them to incentives like **CBAM rebates** and **green finance**. In practice, this means every consignment would come with a traceable dossier of **compliance** and **emissions data**.

- The **EU's push** for a more **sustainable** and **circular economy** is driving the demand for **green finance**, with **trade finance digitalisation** playing a crucial role in facilitating the flow of **capital** towards **sustainable investments**.

3. **Strengthening Digital Trade Partnerships**:
    - The **EU's engagement** with **Asia** through **digital trade** is intensifying, with the new **Singapore DTA** serving as a concrete result of this policy. The agreement aims to provide greater **clarity** and **legal certainty** for consumers and businesses to transact **online** more seamlessly.
    - The **EU's strategy** for **sustainable supply chains** is converging with global efforts, with the **UNECE's new Recommendation No. 49** – "**Transparency at Scale**" – codifying a **UN standard** for **Digital Product Passports (DPPs)** and **traceability** of **sustainability data**.
4. **Championing Global Interoperability of Laws and Standards**:
    - The **EU's strategy** for **sustainable supply chains** is converging with global efforts, with the **UNECE's new Recommendation No. 49** – "**Transparency at Scale**" – codifying a **UN standard** for **Digital Product Passports (DPPs)** and **traceability** of **sustainability data**.
    - The **EU's green** and **digital agendas** converge on the idea of a digitally transparent, **sustainable value chain**, with the **Digital Product Passport (DPP)** concept playing a central role.
5. **Integrating Environmental Goals into Trade Agreements**:
    - The **EU's green** and **digital agendas** converge on the idea of a digitally transparent, **sustainable value chain**, with the **Digital Product Passport (DPP)** concept playing a central role.
    - The **EU's commitment** to integrating **environmental goals** into **trade agreements** is reflected in its efforts to promote the use of **Digital Product Passports (DPPs)**, which will provide consumers with information on the **environmental footprint** of products, driving demand for **sustainable goods** and **services**.

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 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.	- €2B allocated via NDICI-Global Europe - 10+ blockchain-based traceability pilots by 2027	NDICI-Global Europe, ASEAN digital customs systems, EU Customs Data Hub
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. 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

activity	objective	indicative metrics	tools/enablers
6. 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
7. Enforce Platform Interoperability	Prevent vendor lock-in and empower SMEs.	- 100% compliance with CJEU rulings by 2026 - 50% reduction in platform dominance	CJEU Case C-233/23, DEPA, eIDAS 2.0, Digital Markets Act (DMA)
8. 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
9. 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 CEFACT, W3C Verifiable Credentials, EU CBAM registry
10. 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

For a more detailed overview, including relevant **legislation**, **implementation timetables**, and **KPIs** with pilots, please refer to the attached document "***How the EU budget (MFF) can accelerate the competitiveness of green and digital trade***".

Funding the Future: How EU Budget (MFF) Can Accelerate Green & Digital Trade Competitiveness

May 2025

*As the **European Union** navigates a **pivotal moment** in shaping its **economic** and **geopolitical** future, aligning **financial resources** with **strategic priorities** has become more urgent than ever. The upcoming **Multiannual Financial Framework (MFF)** represents a **vital opportunity** to strengthen the EU's **competitiveness**, **resilience**, and **global leadership** in an era increasingly defined by **digital innovation** and **sustainability**.*

*This paper, developed by the **DigitalTrade4.EU consortium**, is a response to the **European Commission's public consultation** on the EU's next **long-term budget**. It presents a **forward-looking blueprint** to leverage the MFF as a **catalyst** for **green** and **digital trade competitiveness**. Our proposal is guided by the belief that the EU's **budgetary framework** must go beyond addressing **immediate challenges**—it must also lay the foundation for a **seamlessly interconnected**, **sustainable**, and **rules-based global trade system**.*

DigitalTrade4.EU Team

Keywords: *Digital Trade, Green Economy, Multiannual Financial Framework (MFF), Digital Product Passport (DPP), Carbon Border Adjustment Mechanism (CBAM), UNCITRAL MLETR, DEPA (Digital Economy Partnership Agreement), EU Competitiveness, Circular Economy, TradeTech*

Executive Summary

This policy framework offers a comprehensive roadmap for aligning the EU's trade governance with global digital and green standards, particularly through the **Digital Economy Partnership Agreement (DEPA)** [1] and the **EU's Global Gateway** initiative in Central Asia. It focuses on **three** interlinked pillars:

1. **International cooperation** (DEPA, UNCITRAL MLETR, WTO e-commerce)
2. **Legislative adaptation** (MLETR, eIDAS 2.0, eFTI, PSR/PSD3, MiCA, CSRD, FiDA)
3. **Implementation** through secure digital infrastructure, Digital Product Passports (DPPs), utilizing FiDA to automate access to green finance (e.g., CBAM rebates, EIB loans) and enhance sustainability tracking in logistics

As trade corridors evolve, the **Digital Product Passport (DPP)**, combined with **Carbon Border Adjustment Mechanism (CBAM)** incentives, offers a mechanism for transparency and compliance—making supply chains more resilient, efficient, and environmentally aligned.

This document introduces measurable indicators such as **80% adoption of ETDR by 2030** and **60% DPP usage by logistics operators by 2029** to **support EU evaluation benchmarks**.

Policy Anchors (*click to the anchor to read more*):

EU–Central Asia Global Gateway | Digital Product Passport Policy

DEPA Protocols | UNCITRAL MLETR | EU eFTI Regulation

This vision drives our **global initiative**, creating a **future** where **trade digitalisation** and **Environmental, Social, and Economic (ESE) integration** seamlessly align. By prioritizing **sustainability** in a way that **supports—rather than hinders—business growth**, we ensure that **environmental objectives** are achieved alongside **economic resilience** and **social progress**.

Why **ESE**? **ESE integration** ensures **sustainability** drives **competitiveness**, not **compliance burdens**, by aligning **environmental goals** with **business incentives** like **CBAM rebates** and **green finance**.

---

[1] Digital Economy Partnership Agreement (DEPA) https://www.mti.gov.sg/Trade/Digital-Economy-Agreements/The-Digital-Economy-Partnership-Agreement

Introduction

As global trade undergoes **profound transformation**—driven by **climate imperatives**, **digitalisation**, and **shifting alliances**—the **European Union** is asserting a **leadership role** in shaping **open, sustainable, and secure trade**. This is increasingly evident in its deepening engagement with **Asia-Pacific economies** through the **Digital Economy Partnership Agreement (DEPA)** and, more recently, its growing **strategic focus on Central Asia**.

At the **EU–Central Asia Summit** (April 2025, Samarkand), **European Commission President Ursula von der Leyen** highlighted the region's emerging role as a **geostrategic trade corridor**, calling for **trusted, sovereign partnerships** and signalling the EU's intent to support **infrastructure**, **clean energy**, and **digital connectivity**. This **forward-leaning vision** aligns closely with the EU's broader goals for **greening logistics**, **securing digital trade routes**, and fostering **resilient, rule-based supply chains** across both the **Pacific** and **Eurasian land corridors**.

This evolving framework builds on the **foundational principles** outlined in the *White Paper on a Security and Defence Strategy for the European Union*[2], which emphasizes the need to bolster **economic resilience**, **digital trust**, and **strategic autonomy**.

It complements the **New Zealand–Singapore–Chile digital trade blueprint** under **DEPA**, aligning it with the EU's **green and digital trade governance priorities**, while incorporating **Central Asia's potential** as a **transit and transformation hub**. In this context, the EU's engagement reflects not only **geopolitical foresight** but also a **commitment** to shaping the **digital and environmental standards** of **21st-century trade**.

Importantly, the EU is now moving closer to finalizing its first bilateral digital trade agreement with a DEPA founding member—Singapore. On **April 14, 2025**, the **Council of the European Union** adopted the **decision to conclude the EU–Singapore Digital Trade**

[2] European Commission. Joint White Paper for European Defence Readiness 2030 (March 2025) https://defence-industry-space.ec.europa.eu/document/download/30b50d2c-49aa-4250-9ca6-27a0347cf009_en?filename=White%20Paper.pdf

Agreement (DTA)[3], marking a significant step in the EU's strategy to deepen **digital connectivity** with **trusted partners** in the **Asia-Pacific**. This agreement will **modernize trade** by removing **unjustified barriers to digital transactions**, facilitate **secure cross-border data flows**, and promote **trustworthy and human-centric artificial intelligence (AI)**—while preserving the EU's **regulatory autonomy** and **high standards** on **data protection** and **cybersecurity**.

Why EU–Asia Cooperation Based on DEPA Matters:

1. **Strategic Alignment with EU Digital Strategy.** The **EU's International Digital Partnerships**[4] policy promotes **trusted, secure, and human-centric digital transformation**. DEPA offers a practical framework to implement these principles in the Asia-Pacific, enabling collaboration on **data governance, AI, digital trade facilitation**, and **digital inclusion**.

2. **Rule-Based Digital Trade.** DEPA supports the EU's goal to establish **interoperable digital rules and standards**, including on **cross-border data flows**, **digital identities**, and **cybersecurity**. This aligns with the EU's emphasis on protecting fundamental rights while fostering innovation.

3. **Bridge for Asia–EU Digital Integration**. As interest in DEPA grows (e.g. South Korea, Vietnam, Japan), the agreement serves as a **flexible, plurilateral platform** for deeper **EU–Asia digital cooperation**—without requiring full-scale free trade agreements (FTAs).

4. **Green and Inclusive Digital Economy**. DEPA and the EU both embed **sustainability and inclusiveness** in digital trade. This includes cooperation on **sustainability standards (ESE)**, **green tech innovation**, and **MSME empowerment**—key pillars of the EU's **Digital Decade** and **Green Deal** agendas.

---

[3] European Commission. Council moves one step closer to concluding the Digital Trade Agreement with Singapore https://www.consilium.europa.eu/en/press/press-releases/2025/04/14/council-moves-one-step-closer-to-concluding-the-digital-trade-agreement-with-singapore

[4] European Commission. Digital Partnerships https://digital-strategy.ec.europa.eu/en/policies/partnerships

5. **Resilience and Trusted Connectivity**. Amid rising digital fragmentation, DEPA-based collaboration supports the EU's pursuit of **open strategic autonomy**, enhancing the **security and resilience** of digital infrastructure and supply chains across Eurasia.

The EU–Singapore DTA—closely aligned with **DEPA principles**—not only serves as a **model** for future **digital trade agreements** but also reinforces the EU's capacity to shape **interoperable norms** and safeguard **ethical digital practices** on the **global stage**.

Expanding the EU's digital trade borders is increasingly feasible through collaboration with strategic partners—most notably the United Kingdom. By engaging the UK in DEPA–EU initiatives, the **Electronic Trade Documents Act (ETDA)** [5] provides a robust legal and operational foundation for advancing **paperless trade** and enhancing **regulatory convergence**.

As a former **EU member** and a global **digital leader**, the United Kingdom plays a pivotal political role—not only as a **wider bridge between EU and DEPA economies**, due to its deep **regulatory alignment** with the EU and strong **trade**, **digital**, and **political ties** with DEPA members like **Singapore**, **Chile**, and **New Zealand**, but also as a **catalyst for wider alignment** across the **Commonwealth** and **G7 partners**. In particular, the UK's close ties with **Australia** and **Canada** — both **DEPA observers** — position it to amplify momentum for **transregional cooperation**, accelerate **legal harmonization**, and reinforce a trusted, **rules-based digital trade architecture** that spans **Europe**, **Asia-Pacific**, and **North America**.

[5] UK. Electronic Trade Documents Act 2023
https://www.legislation.gov.uk/ukpga/2023/38/contents

Circular Economy Integration: Enabling Sustainable Digital Trade

The DigitalTrade4.EU framework recognizes the **circular economy** as a cornerstone of **sustainable competitiveness** in global trade. By leveraging **digital solutions**—including **traceability systems**, **Digital Product Passports (DPPs)**, and **resource efficiency platforms**—it bridges the gap between **environmental accountability** and **trade digitalisation**. This approach is fully **aligned with key EU frameworks**, such as the **Circular Economy Action Plan (CEAP)** and the **Digital Product Passport initiative** under the **Ecodesign for Sustainable Products Regulation (ESPR)**. These tools empower businesses to:

- **Track materials and lifecycle data** (e.g., **recyclability**, **repairability**) through **DPPs**, ensuring compliance with the **ESPR** and the **Carbon Border Adjustment Mechanism (CBAM)**.
- **Optimize resource flows** via **IoT-enabled circular supply chains**, reducing **waste** and **emissions** across logistics corridors such as the **EU–Central Asia Global Gateway**.
- **Unlock green finance** by linking **circularity metrics** to **environmental, social, and economic (ESE)-aligned incentives**, including **EIB green loans** and **CBAM rebates**.

Why It Matters:

Circular economy principles are not just **regulatory requirements**—they are **strategic enablers**. By embedding **digital traceability** and **closed-loop systems** into **trade infrastructure**, we:

- **Future-proof compliance** with evolving **EU Green Deal regulations**, including the **Corporate Sustainability Reporting Directive (CSRD)** and the **Waste Framework Directive**.
- **Enhance market access** for exporters embracing **sustainable practices**, especially in **DEPA partner markets** where **green standards** are rapidly advancing.
- **Drive cost efficiency** through **resource optimization** and **reduced regulatory burden**, in line with the EU's **"less is more"** governance philosophy.

By integrating **circular economy principles** into **digital trade governance**, we ensure that **sustainability fuels competitiveness**—turning **compliance** into a catalyst for **innovation**, **resilience**, and **cross-border growth**.

Foundational Governance Roles

Secure Technological Infrastructure

International Agreements

- Leverage **DEPA protocols** on digital identity, trade document trust, and data sharing
- Align with **UNCITRAL Model Law on Electronic Transferable Records (MLETR)**[6] and **WTO e-commerce**[7] provisions

Legislative Adaptation

- EU-wide adoption of **MLETR by 2026**, synchronized with the rollout of **eIDAS 2.0**
- Legal basis for recognizing **DPP** as part of **CBAM compliance**

Implementation Tools

- Create **EU TradeTech Sandboxes** for testing:
  - Enables interoperability between **digital identity frameworks** to support the mutual recognition of diverse trust services.
  - Secure, interoperable **DPPs** for tracking product-level sustainability footprint, materials, and repairability (using distributed ledger technology, cryptographic verification, or other trusted systems).
  - Integrate **FIDA APIs** to enable real-time financial health checks for green loan approvals and automate CBAM rebate processing.
  - IoT-enabled sustainability **monitoring** for logistics chains in Central Asia and DEPA economies.
  - Ensure data compliance with **GDPR**, the Data Act, the Data Governance Act, the Digital Services Act, and other relevant regulations, as well as **cross-border DEPA standards**.
  - Apply **AI** for predictive analytics, supply chain optimization, sustainability monitoring, and compliance, building a smarter and greener logistics network.

---

[6] UNCITRAL. Model Law on Electronic Transferable Records
https://uncitral.un.org/en/texts/ecommerce/modellaw/electronic_transferable_records
[7] WTO. Agreement on Electronic Commerce
https://www.wto.org/english/tratop_e/ecom_e/information_on_agreement_ecom.pdf

TradeTech Ecosystem Acceleration

International Coordination

- Develop joint **EU–DEPA innovation labs** for supply chain digitalisation, **DPP** standardization, and **ESE** linked finance
- Advance logistics digitalisation in Central Asia under the **Global Gateway** and DEPA knowledge exchange

Legislative Framework

- Embed trade finance APIs into **PSD3/PSR + FiDA**, linking payments to sustainability data and DPPs
- Legal harmonization for **port authorities and customs** to accept digital logistics documents and product passports

Implementation Mechanism

- EU TradeTech Catalogue
    - Certify compliant TradeTech and DPP solutions
    - Prioritize, support, foster logistics applications for **micro, small and medium-sized enterprises (MSMEs)** freight operators and customs brokers
    - Shared data enabled by FiDA to facilitate **access to green finance**:
        - Automated ESG reporting (linking DPPs to bank records)
        - Dynamic logistics pricing based on carbon footprint

The Role of a European Union Trade Services Governance

Ensure the existence of secure technological solutions accessible to the whole ecosystem, especially banks and businesses.

Support the creation of a conducive framework for digitalisation of international trade documents at European Union level, notably when it comes to certification and management of open and interoperable ledgers.

Foster the European TradeTech ecosystem, the solutions of which are often mature and can help achieve the goals of the reform.

Ensure that technical standards and requirements are clear and normative, as with PSD3 / PSR on payments, eIDAS 2.0 on digital identity and trust services, or e-FTI on electronic information on the transport of goods.

Source: *French Ministry for the Economy, Finance and Industrial and Digital Sovereignty, "Trade and Globalization: The State of Play and the Way Forward", 2023.* *https://www.economie.gouv.fr/files/files/2023/rapporttrade-EN.pdf*

Regulatory & Standards Framework

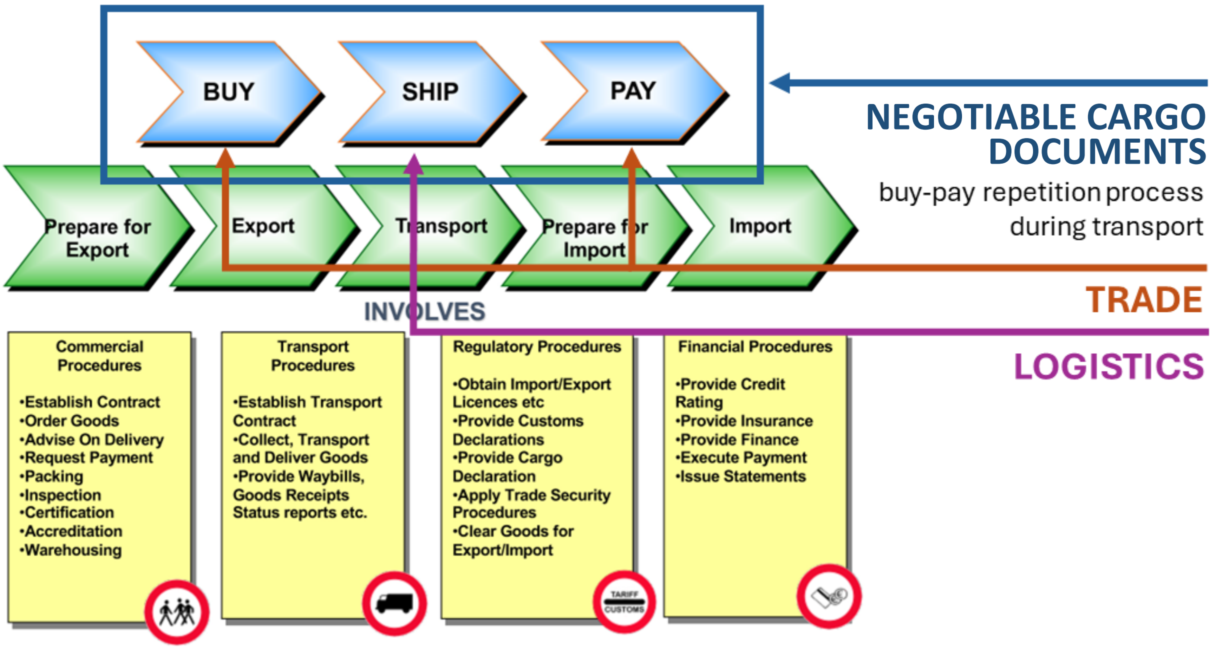

Figure 1. *Source: UNECE. The UN/CEFACT Buy-Ship-Pay Supply Chain Model offers an effective framework for analysing the relationships between trade, logistics, and key financial documents — including bills of lading, promissory notes, and bills of exchange.*

Interoperable Digital Trade Documents

Global Agreement Alignment

- Alignment between EU laws and global agreements (e.g., eFTI ↔ MLETR ↔ DEPA)
- Coordinate EU–DEPA–WTO efforts to ensure DPPs are **recognized across jurisdictions**

EU Legislative Standards

Standard	EU Equivalent	Implementation Milestone
MLETR	eFTI Regulation	Legal use of negotiable cargo and financing documents (eg. e-bills of lading, promissory notes, bills of exchange) by 2027
DPP Sustainability Tracking	CSRD / ESRS / Ecodesign	Mandatory DPPs for key sectors by 2027
Financial Data Sharing	PSD3/PSR + FIDA	Auto-approval of green loans by 2028
CBAM Carbon	Data MiCA + ETS Phase IV	IoT-integrated carbon tracking for import flows

Governance Tool

- Establish the **EU Trade Document Registry (ETDR)**
  - Includes **verified cross-border trade documents** and **DPPs**, secured through a zero trust architecture
  - Built on the **concept of a qualified electronic ledger**, such as the European Blockchain Services Infrastructure (EBSI)
  - Linked to **DEPA's Green Trade Hub** and logistics networks in Central Asia

Conducive Policy Levers

Legislation-Informed Design

1. **Risk-Based Certification**
   - Tiered compliance for sustainability reporting (e.g., simplified DPP entries for low-volume importers)
2. **Incentives for DPP & CBAM Adoption**
   - **CBAM Rebate Scheme:** ~5% tariff rebate for importers using EU-verified DPPs and low-sustainability logistics
   - **EIB Green Discount:** ~0.5-3.0% interest rate reduction for supply chain loans with integrated DPP tracking
   - **ESE Incentive Mechanisms**: CBAM rebates, EIB green loans, and DPP adoption targets to harmonize sustainability with economic growth

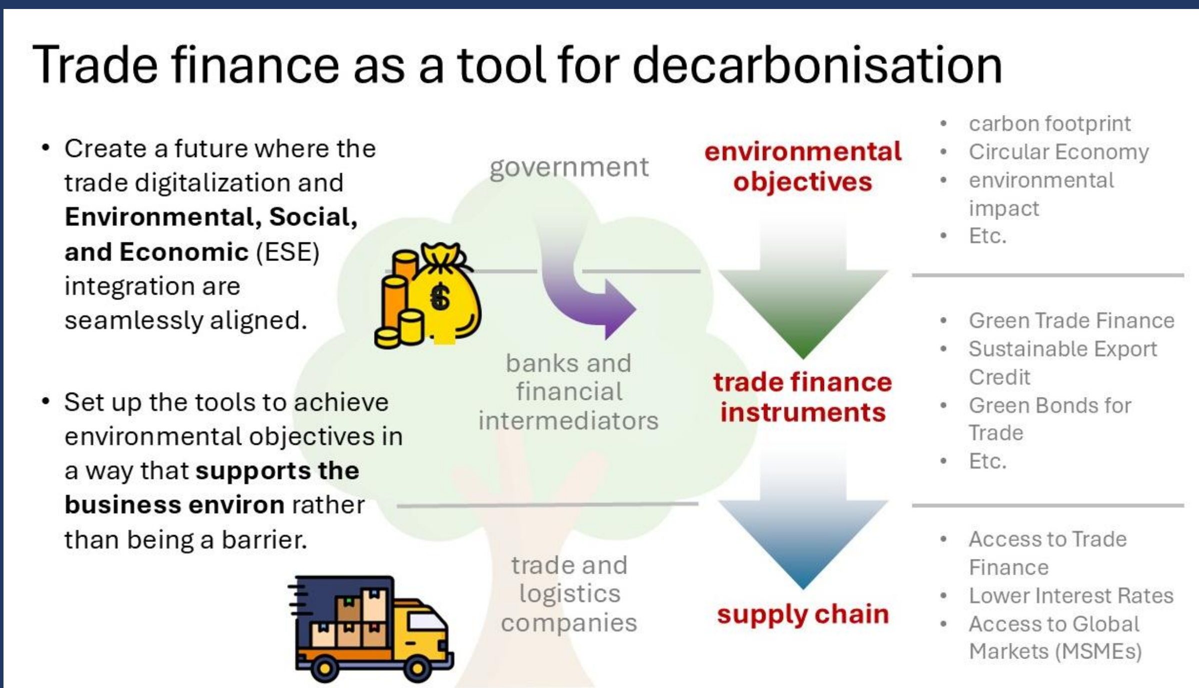

Figure 2. *Source: Riho Vedler, DigitalTrade4.EU. Icons by Flaticon*

Implementation Roadmap

2025–2026: Foundation Phase

- **Q4 2025:** Launch **EU–Central Asia Digital Trade Pilot**
    - Focus on integrating negotiable cargo and financing documents (eg. e-bills of lading, bills of exchange and promissory notes), DPPs, and sustainability tracking in rail/road freight
- **Q2 2026:** Publish **EU–DEPA TradeTech Certification Guidelines**
- **Q4 2026:** Start **CBAM Digital Twin Pilots**
    - Textile/logistics chains in EU–Uzbekistan–Singapore–Chile–New Zealand using DPP-based emissions declarations
    - Enable green loans based on FiDA, linked to DPP data

2027–2030: Scaling Phase

- **2027:** 100% paperless trade enabled in EU–Kazakhstan–Singapore corridor
- **2028:** CBAM-linked green finance covers 40% of EU MSME logistics transactions
- **2030:** DPP interoperability across all Global Gateway corridors and DEPA partners

Monitoring & KPIs

Joint EU–DEPA Performance Metrics

Metric	Target	Tool
% trade documents on ETDR	80% by 2030	Eurostat TradeTech Dashboard
% logistics operators using DPPs with verified economic benefits (cost savings, tariff rebates)	60% by 2029	EU DPP Registry Reports
Avg. CBAM compliance cost reduction	40% by 2027	ECB MSME Surveys + ETDR data
TradeTech adoption among EU MSMEs	50% by 2029	Digital Europe Programme Reviews

Challenges & Mitigation Measures

Challenge 1: Data Sovereignty Conflicts and Fragmented Digital Norms. **Data localization rules** force companies to duplicate IT infrastructure and navigate conflicting regulations, **raising costs and limiting market access**—directly counter to the EU's push for a unified **digital economy**.

Mitigation: Advance **interoperable data governance** via **DEPA**, grounded in **GDPR** and the **EU–ASEAN Digital Partnership**. Promote **Data Free Flow with Trust (DFFT)** using **GDPR-compliant sandboxes** and **EU model clauses**.

Challenge 2: Technological Lag and Digital Divide in Central Asia and ASEAN. Insufficient **digital infrastructure** and **cybersecurity** restrict MSME access to the **EU digital economy**.

Mitigation: Utilize **Global Gateway** investments for **connectivity** and **cloud infrastructure**. Expand **digital skills** through **EU twinning**, **training**, and **tech incubators**.

Challenge 3: Legal Fragmentation around Paperless Trade & E-Transactions. Limited **MLETR adoption** creates **legal uncertainty** in digital commerce.

Mitigation: Promote **MLETR** through **EU technical assistance**, **regulatory dialogues**, and leverage **EU–Singapore** and **EU–Vietnam FTAs**.

Challenge 4: Inconsistent Cybersecurity Protocols. Divergent **cybersecurity standards** weaken **EU–ASEAN supply chain security**.

Mitigation: Foster **mutual recognition** using **ENISA**, **NIS2**, and the **Cybersecurity Act**. Support **incident response** training and **EU Cyber Diplomacy Toolbox**.

Challenge 5: Gaps in Digital Financial Infrastructure for Inclusive Trade. Weak **digital finance** ecosystems limit MSME access to **e-payments**, **e-invoicing**, and **ESE-aligned financing**.

Mitigation: Expand **e-KYC**, **open banking**, and **digital identity (ID Card, Digital Wallet)** via **DEPA–EU sandbox projects**. Align these initiatives with the **EU Digital Finance Strategy** and mobilize **blended finance** to enhance access to capital for **green MSMEs**.

Challenge 6: Limited Integration of Circular Economy in Trade Ecosystems. Digital trade often excludes **circular economy** and **Green Deal objectives**.

Mitigation: Promote **digital product passports**, **green finance, eco-design**, and **blockchain traceability**. Fund pilot projects via **Horizon Europe** and **LIFE**.

Conclusion

The golden triangle of modern trade governance: seamless tech, clear rules, and smart incentives.

Adapted from "Less is More"

The European Union is **strategically bridging international trade norms and technological tools** to create a digital-first, low-sustainability logistics and easily financeable ecosystem. Through **international cooperation (DEPA, Central Asia)**, **legislative alignment (MLETR, eFTI, eIDAS 2.0, CSRD, CBAM, FiDA)**, and **practical implementation tools (DPPs, ETDR, TradeTech certification)**, the EU enables a future of trade that is **trusted, transparent, and interoperable**.

With **Digital Product Passports** at the core, this framework ensures that every traded good carries its **carbon footprint**, compliance history, and sustainability credentials—supporting **greener markets, efficient trade routes, and economic resilience**.

By harmonizing **ecological stewardship**, **social equity**, and **economic viability**, this framework delivers a **triple win**—ensuring trade digitalisation benefits the planet, people, and prosperity equally.

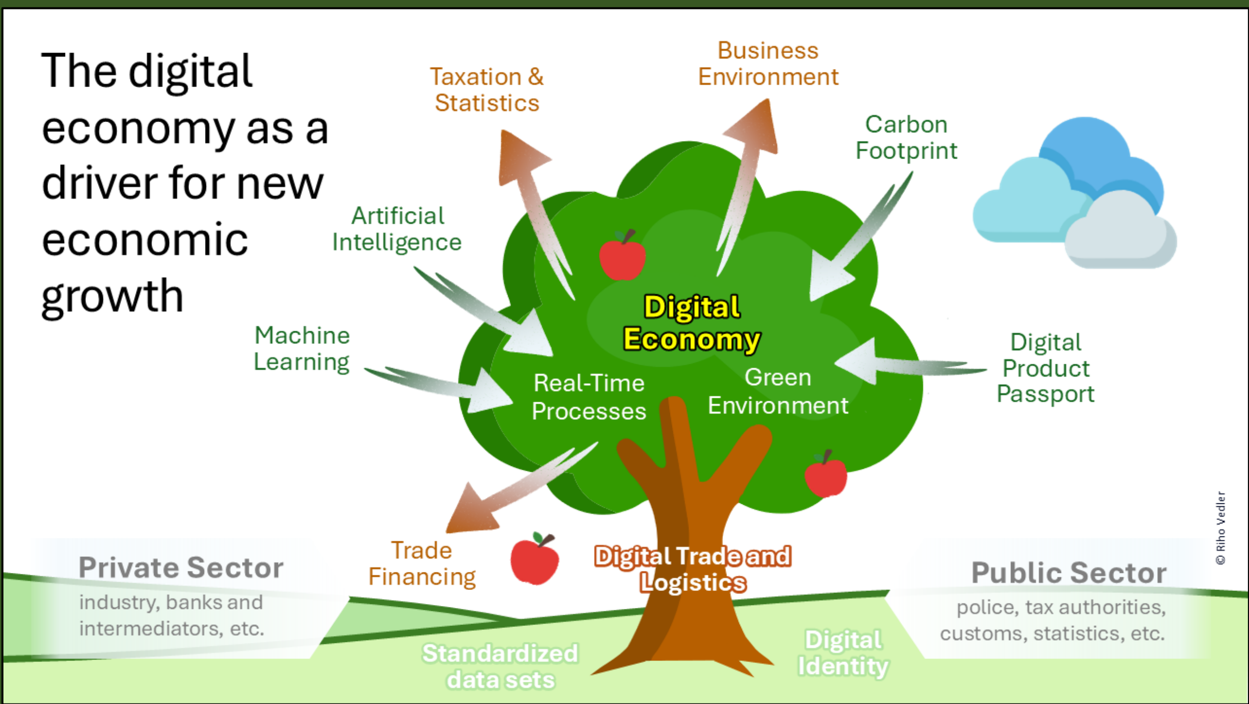

Figure 3. *Source: Riho Vedler, DigitalTrade4.EU. Digital trade and logistics are the trunk of the tree, and will provide the foundation and power for the green area. This is where the digital economy, with its green environment and real-time processes, will develop and grow. Through ESE integration, digital trade becomes the trunk supporting green growth (leaves) and economic prosperity (fruits). Icons by Flaticon*

Annexes

Annex 1. Possible Case Studies with Implementation

Case Study 1: EU–Singapore DPP Pilot for Electronics

Objective: Test full-cycle **Digital Product Passports (DPPs)** for consumer electronics exports from Singapore to the EU.

Scope:

- Track product lifecycle data (e.g., material origin, repairability, carbon footprint).
- Integrate with customs via the **EU Trade Document Registry (ETDR)**.

Stakeholders: EU Customs, Singapore Infocomm Media Development Authority, logistics firms, electronics manufacturers.

Outcome Goal: Demonstrate feasibility of DPPs for high-value, high-turnover goods. Set baseline for cross-border DPP interoperability.

Case Study 2: CBAM Digital Twin – Uzbekistan – EU Textile Corridor

Objective: Simulate **sustainability tracking and tariff adjustment** for textiles moving via rail from Uzbekistan through Central Asia to the EU.

Scope:

- Use IoT-linked sustainability monitors in freight.
- Apply CBAM logic to test a **5% rebate scheme** for verified low-emission shipping, demonstrating how ESE integration reduces compliance costs.

Stakeholders: EU CBAM Authority, Uzbekistan Textile Association, DEPA Green Trade Hub, EIB.

Outcome Goal: Prove incentive design for **low-sustainability trade corridors** under Global Gateway strategy.

Case Study 3: Legal Harmonization Sandbox – DEPA + UK + Baltic States

Objective: Test **MLETR-based recognition of negotiable electronic trade documents** across DEPA and EU-adjacent jurisdictions (e.g., UK, Estonia, Latvia).

Scope:

- Pilot e-bills of lading and promissory notes under the **Electronic Trade Documents Act (UK), Data (Use and Access) Bill [HL] (UK)**[8] and **eIDAS 2.0**.
- Engage fintech and port authorities to validate enforceability.

Stakeholders: UK Law Commission, Estonian Ministry of Economic Affairs, Baltic logistics startups, DEPA secretariat.

Outcome Goal:

- Create a scalable **"trust bridge"** model for legal convergence on digital trade.
- Quantify **cost savings** from paperless trade for MSMEs to underscore **ESE** value.

Case Study 4: FIDA-Enabled Green Loans for French MSMEs

Objective. Demonstrate how **FIDA** accelerates green financing for French exporters by linking **Digital Product Passports (DPPs)** with real-time financial data. Validates FIDA as key infrastructure for France's green transition, aligning with **AGEC Law** and **France 2030** investment plan.

Scope:

- **French MSMEs** in fashion, food processing, and renewables
- **FIDA + DPP integration** for real-time financial/sustainability data
- **BPI France green loans + AGEC tax credits** as incentives

Stakeholders: Banks, French FinTech Association, Tech ecosystem, Exporters, French government (DG Trésor, France's Ministry of Ecological Transition).

Outcome goals:

- **Accelerated financing access.** Reduce loan approval times for MSMEs using FIDA-linked DPP data (~60%).
- **Sustainability adoption.** Increase DPP usage (~40%).
- **Cost efficiency.** Cut compliance costs via automated FIDA/DPP reporting (~25%).

---

[8] UK Parliament. Data (Use and Access) Bill [HL]
https://bills.parliament.uk/bills/3825

Annex 2. Mapping Key Elements of the Supply Chain (Business-to-Business)

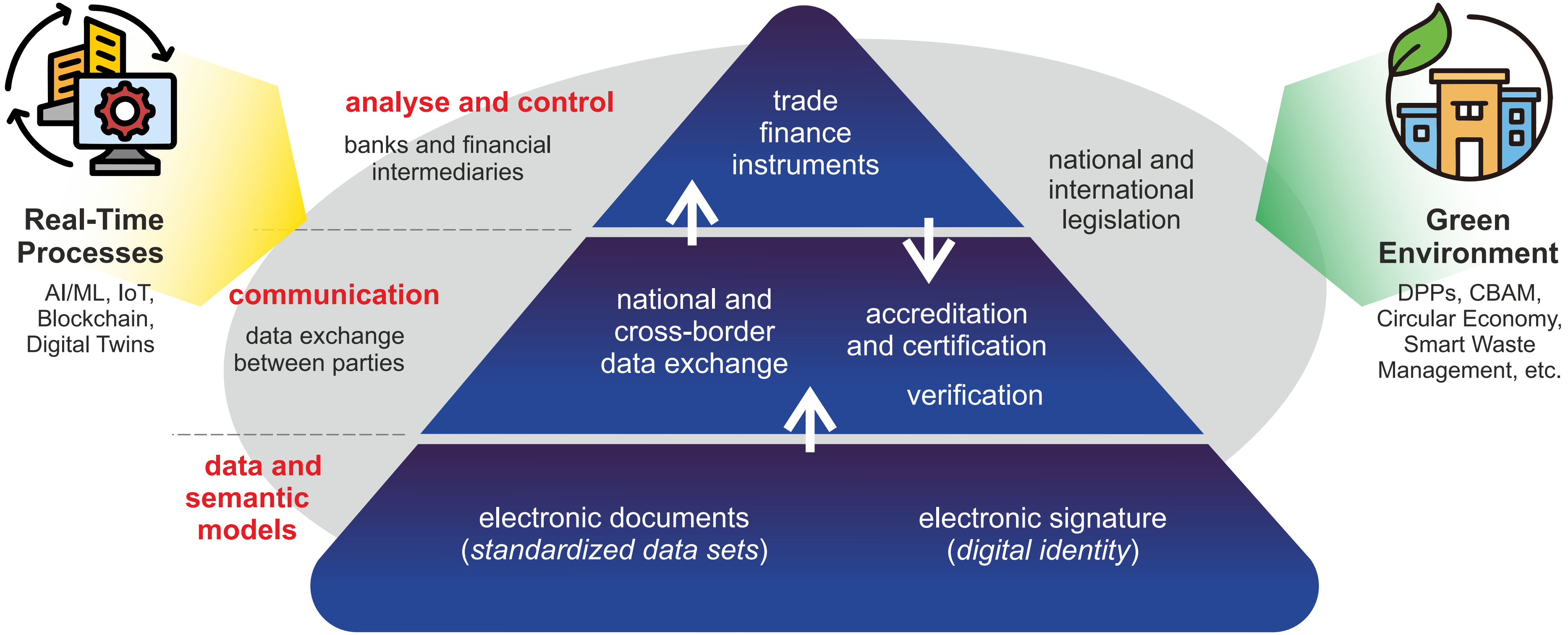

Figure 4. Source: Riho Vedler, DigitalTrade4.EU. Icons by Flaticon.

Four Conditions for Digitalisation Success

1. Legal Harmonisation

Ensure cross-border recognition of **electronic transferable documents** through widespread adoption of frameworks like **MLETR** and the **EU eFTI Regulation**, driven by EU leadership or coordinated national action.

2. Standardisation

Align and streamline existing standards (e.g., UN/CEFACT, GS1, DCSA, SWIFT, ISO) to ensure interoperability, reducing fragmentation and supporting initiatives like **DEPA** and **WTO e-commerce agreements**.

3. Certification

Establish a **globally recognized certification framework** to validate that digital platforms (e.g., ETDR, DPPs) comply with MLETR requirements, ensuring seamless cross-border interoperability and legal enforceability.

4. Open Platforms

Promote **public-private partnerships** to develop **secure, open platforms** (e.g., EU TradeTech Sandboxes) for seamless data exchange, sustainability tracking, and cross-system compatibility.

Annex 3. Technology as a Tool to Support Diverse Metrics Across Green Deal Standards

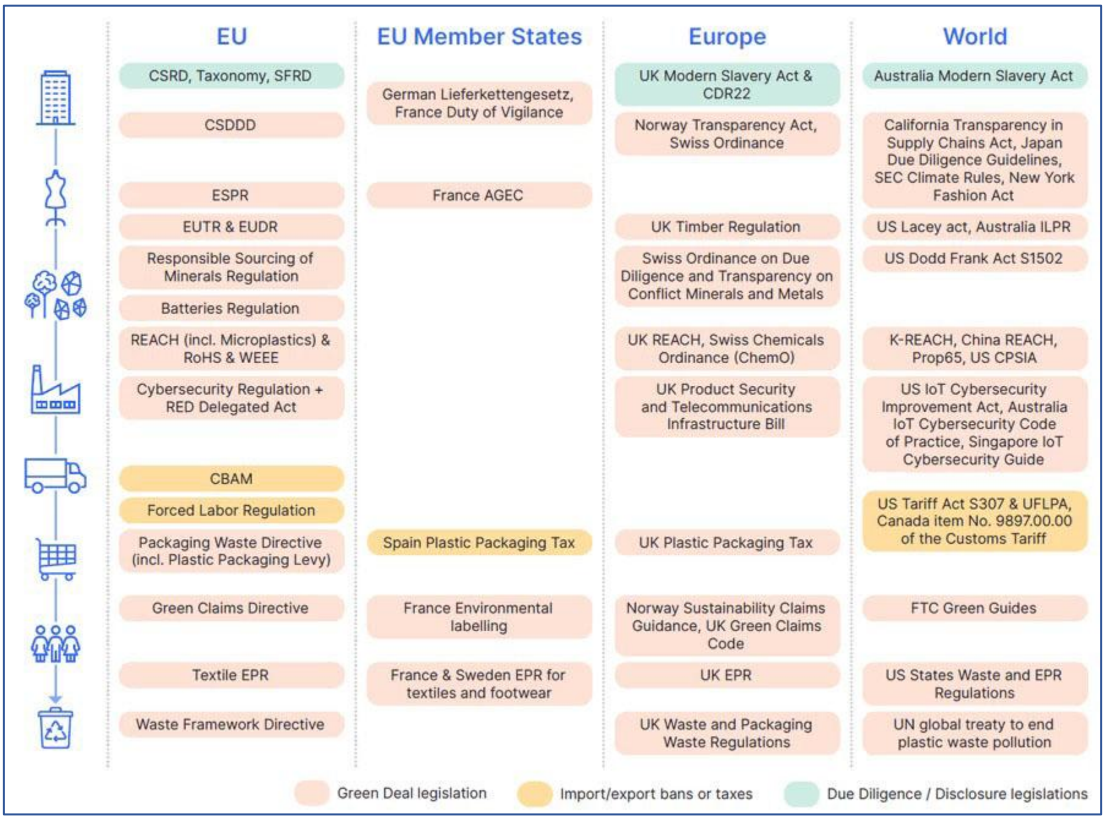

Figure 5. *Understanding The EU Green Deal: A Comprehensive Guide for Businesses. Qima 2023*

The **EU Green Deal** sets **ambitious sustainability benchmarks**, yet key **gaps** remain compared to **global frameworks**, including those emerging in **Asia**:

1. **Scope & Enforcement**
   - The **EU's CSRD** and **CSDDD** require **broad ESE reporting** and **due diligence**, while the **UK Modern Slavery Act**, **US Dodd-Frank Act**, and many **Asian regulations** (e.g., **Japan's voluntary ESG disclosures**) focus on **narrower issues**.
   - The **EUDR** mandates **strict anti-deforestation checks**, unlike the **lighter enforcement** of the **US Lacey Act** or **ASEAN timber regulations**.
2. **Transparency & Supply Chains**
   - **France's AGEC Law** mandates **eco-labeling**, while the **FTC Green Guides** (US) and several **Asian frameworks** (e.g., **Singapore's Green Claims guidelines**) are **voluntary**.

- The **EU Forced Labor Regulation** enforces **import bans**, compared to **disclosure-only models** like the **California Transparency Act** and emerging **Asian standards**.

3. **Waste & Circular Economy**
   - The **EU Packaging Waste Directive** and **plastic levy** are **stricter** than the **UK Plastic Tax** and **Asia's varied waste strategies**, where **targets differ by country**.
   - The **EU Waste Framework Directive** imposes **binding recycling goals**, while the **UN Plastic Treaty** and many **Asian agreements** are still **evolving**.

4. **Global Inconsistencies**
   - The **EU Batteries Regulation** and **Cybersecurity Regulation** establish **broad requirements**, whereas the **US** and most **Asian economies** regulate these sectors **more narrowly** or **only for government projects**.

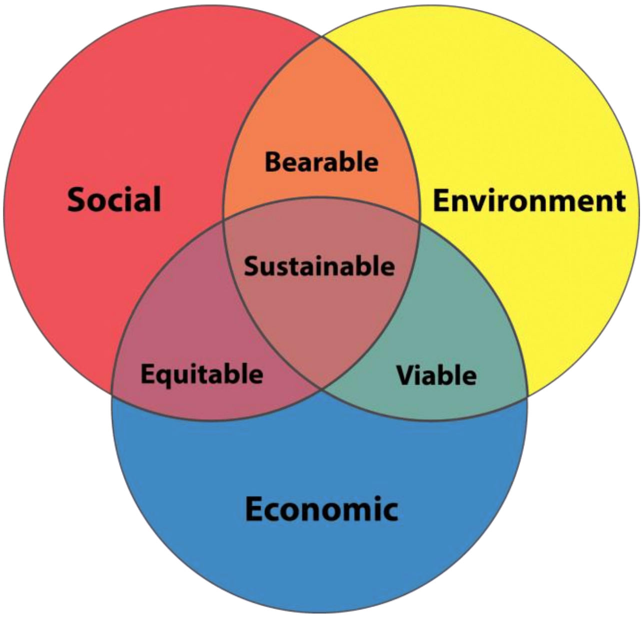

Figure 6. *This Venn diagram demonstrate how ESE principles connect. The overlaps highlight win-win solutions—like green jobs and circular supply chains—where environmental, social and economic benefits work together.*

Divergences in **scope**, **enforcement**, and **sectoral coverage** create major **compliance challenges** for **exporters**. However, **full harmonization** is neither **feasible** nor **desirable**, as **environmental objectives** must reflect **local ecosystems**, **economic priorities**, and **cultural specificities**. **Standards** and **IT systems** should therefore support **different environmental drivers** across regions.

Traders must understand these **variations** when **exporting**, but **compliance procedures** should be **simplified** to reduce complexity and foster **global sustainable trade**.

It is **crucial that environmental objectives** become **embedded** in the **culture** of every organization, not treated as **barriers** to growth. **Financial resources,** effectively **mobilized**, remain one of the most powerful **levers** to **lead** and **drive this transformation**.

Glossary

AI (Artificial Intelligence)

The capability of computer systems to perform tasks that typically require human intelligence, such as **learning**, **reasoning**, **problem-solving**, and **decision-making**. In the **EU policy context**, AI is governed by the **AI Act**, which introduces a risk-based regulatory framework. The Act classifies AI systems by **risk level**—from minimal to unacceptable—and establishes corresponding **compliance requirements** to ensure safety, transparency, and fundamental rights protection.

AGEC Law (*in French Loi Anti-Gaspillage pour une Économie Circulaire*)

Enacted in **France** in **February 2020**, the AGEC Law is a **landmark regulation** aimed at **reducing waste** and promoting a **circular economy**. It addresses the entire **lifecycle of products**—from **production** to **disposal**—by imposing new **requirements** on **manufacturers**, **retailers**, and **consumers**.

ASEAN Timber Regulations

Regional policies (e.g., **Malaysia's MYTLAS**, **Indonesia's SVLK**) aimed at combating **illegal logging** by requiring **legal verification** for timber exports. Aligns with the **EU's FLEGT-VPA** program but faces challenges due to **weak enforcement** and **corruption** in some member states.

California Transparency Act

Requires **large retailers and manufacturers** (with **global revenues >$100M**) to disclose efforts to eliminate **slavery and human trafficking** from their **supply chains**. Though **enforcement is limited**, non-compliance can lead to **reputational damage** and **lawsuits** under **California's unfair competition laws**.

Circular Economy Action Plan (CEAP)

A strategic policy framework introduced by the **European Union (EU)** to promote the transition from a **linear (take-make-dispose) economic model** to a **circular economy**. The CEAP outlines measures to **reduce waste**, **enhance resource efficiency**, and encourage **sustainable production and consumption**. Key focus areas include **eco-design**, **waste reduction**, **recycling**, and **extending product life cycles**. The plan supports the EU's broader **climate and sustainability goals** under the **European Green Deal**.

CBAM (Carbon Border Adjustment Mechanism)

The EU's pioneering policy tool to **prevent carbon leakage** by imposing carbon costs on imports of selected goods (e.g., steel, cement, aluminium). Aligns with EU climate goals by ensuring foreign producers face equivalent carbon pricing to EU manufacturers under the **Emissions Trading System (ETS).**

Commonwealth

An intergovernmental organization of **56 member states**, most of which are former territories of the British Empire. It promotes democracy**, human rights, economic development, and digital trade cooperation**, serving as a platform for geopolitical and regulatory alignment.

CSRD (Corporate Sustainability Reporting Directive)

An EU rule (effective 2024) expanding **mandatory ESG disclosures** for companies, requiring detailed reporting on **environmental, social,** and **governance** impacts.

CSDDD (Corporate Sustainability Due Diligence Directive)

Mandates **human rights** and **environmental due diligence** across **global supply chains**, with **fines** for violations. Approved in **2024** after prolonged negotiations. It also imposes **fines** for non-compliance, holding businesses accountable for their supply chain practices.

DEPA (Digital Economy Partnership Agreement)

A **plurilateral digital trade agreement** pioneered by **New Zealand, Singapore, and Chile**, focusing on **data flows, AI governance, digital identities,** and **SME inclusivity**. Serves as a modular template for **EU-Asia-Pacific digital trade integration**.

DFFT (Data Free Flow with Trust)

A **policy framework** that promotes the **unrestricted movement of data across borders**, while ensuring that such flows are **anchored in strong privacy, security, and governance standards**. Introduced by **Japan at the 2019 G20 Summit**, DFFT seeks to **balance economic openness** with the **protection of personal data, intellectual property, and national security**, enabling countries to **build mutual trust** and **interoperability** in their digital regulations. It supports the development of **global digital trade** through **transparent, accountable, and human-centric data governance**.

DPP (Digital Product Passport)

An initiative led by the European Union under the **Ecodesign for Sustainable Products Regulation (ESPR)**, the **Digital Product Passport** (DPP) requires standardized digital records detailing a product's **environmental impact**, **material composition**, and **lifecycle information**. The DPP aims to promote **transparency**, support **sustainable production and consumption**, and advance **circular economy practices** within the EU and across global supply chains.

Ecodesign for Sustainable Products Regulation (ESPR)

An EU initiative setting **minimum sustainability requirements** for products (e.g., energy efficiency, durability) to advance circular economy principles.

eFTI (Electronic Freight Transport Information)

A regulatory framework established by the European Union to **digitalize freight transport documents**, enabling the electronic exchange of cargo-related information between businesses and authorities. Implemented under the **Digital Freight Transport Corridors** initiative, eFTI aims to **replace paper-based processes**, improve **logistics efficiency**, and support **sustainable, interoperable, and secure supply chains** across the EU.

EIB (European Investment Bank)

The **European Investment Bank** is the **financial institution** of the **European Union**, established to provide long-term **financing** for **sustainable development** and **investment projects** that contribute to **EU policy goals**. It funds projects across sectors like **infrastructure**, **innovation**, and **environmental sustainability**.

eIDAS (Electronic Identification, Authentication, and Trust Services)

An EU regulation that establishes a **uniform legal framework** for **electronic identification**, **authentication**, and **trust services** across Member States. eIDAS enables individuals, businesses, and public authorities to **securely access online services** and conduct **legally recognized digital transactions** across borders. It supports key trust services such as **electronic signatures**, **seals**, **timestamps**, and **website authentication**, facilitating **trusted, interoperable digital interactions** within the EU Digital Single Market.

ENISA (European Union Agency for Cybersecurity)

ENISA is the **EU's central agency for cybersecurity**, established to **enhance network and information security** across the Union. It supports **member states, EU institutions, and businesses** by providing **cyber threat intelligence**, developing **cybersecurity policies**, and promoting **best practices**. ENISA plays a key role in the implementation of EU-wide cybersecurity legislation, including **NIS2**, and in building a **trusted and resilient digital ecosystem**.

ESE (Ecological, Societal, and Economic Sustainability)

A **sustainability framework** that assigns **equal importance** to **ecological**, **societal**, and **economic outcomes**. ESE ensures that **environmental policies** are designed not only to **protect natural resources** and **promote social well-being** but also to **support sustainable business growth** and **economic resilience**.

ESG (Environmental, Social, and Governance)

A framework for assessing **sustainability and ethical impact** in business and investment. Central to EU regulations like the **CSRD**, it drives corporate accountability in:

- **Environmental** (carbon footprint, circularity)
- **Social** (labor rights, inclusion)
- **Governance** (transparency, anti-corruption)

Clarify "ESE" vs. "ESG"

Unlike ESG, which often emphasizes governance over economic outcomes, ESE explicitly prioritizes **balanced sustainability**—ensuring environmental and social policies **enhance**, not hinder, business growth.

ESRS (European Sustainability Reporting Standards)

The **reporting framework under CSRD**, specifying how companies must disclose sustainability data (e.g., carbon emissions, labor practices) to ensure comparability and transparency. It provides **standardized metrics** and **disclosure requirements**, enabling stakeholders to assess and compare companies' **environmental and social impacts** more effectively.

ETDA (Electronic Trade Documents Act)

A **UK law (2023)** granting legal recognition to electronic trade documents (e.g., bills of lading, promissory notes), enabling **paperless trade**. It aligns with global digital trade frameworks like **DEPA**, reducing costs and accelerating cross-border transactions.

ETDR (EU Trade Document Registry)

A **digital platform** that stores and manages **trade-related documents** and/or **verifiable credentials** within the **European Union**. It facilitates the efficient **exchange**,

authentication, and **storage** of **trade documents** for **regulatory compliance**, **customs clearance**, and other **international trade** processes.

ETS Phase IV (EU Emissions Trading System, 2021–2030)

The fourth phase of the European Union's **cap-and-trade carbon market**, designed to support the EU's **climate neutrality goals** by 2050. Phase IV introduces a more ambitious trajectory by **tightening the overall emissions cap**, **reducing free allowances**, and **expanding the system's scope** to include additional sectors and gases. It also strengthens market stability mechanisms and incentivizes innovation through dedicated funding instruments such as the **Innovation Fund** and **Modernisation Fund**.

EU Forced Labor Regulation

A **2024 ban** on all products made with **forced labor** from entering the **EU market**. Authorities will conduct **customs checks** and **investigations**, focusing on high-risk sectors like **textiles, solar panels, and mining**. Unlike the **U.S. UFLPA**, it does not yet have a **presumptive ban list**.

FiDA (Financial Data Access)

A **proposed regulatory initiative** under the **EU Financial Data Access Regulation** (**expected adoption: 2024–2025**), aimed at enabling **secure** and **standardized access** to **financial data** across the EU. It seeks to **empower consumers and businesses**—particularly **stakeholders in international trade**—by allowing them to **share their financial data** with **authorized third-party providers** (e.g., **fintechs**, **banks**, or **financial advisors**) in a **controlled** and **transparent** manner. The initiative is designed to foster **innovation**, enhance **competition**, and promote **consumer- and business-centric financial services** that support **cross-border transactions** and **global trade operations**.

France's AGEC Law

A **2020 anti-waste law** that bans **single-use plastics**, introduces **repairability scoring** for electronics, and cracks down on **greenwashing**. Companies must use **Triman labeling** and disclose **recycled content percentages** in products.

FTC Green Guides

U.S. Federal Trade Commission guidelines (last updated in **2012**) to prevent **misleading environmental claims** (e.g., "recyclable," "biodegradable"). While not legally binding, they are used by **regulators** and **courts** to penalize **false advertising**. Critics argue they need **stricter updates** to match modern sustainability standards.

G7 (Group of Seven)

An intergovernmental forum of advanced economies (**Canada, France, Germany, Italy, Japan, UK, US, and the EU**) coordinating policy on trade, security, and technology. **Critical for shaping digital governance standards** and **green supply chain initiatives**.

GDPR (General Data Protection Regulation)

The EU's **binding data privacy and security law**, enacted in 2018. It regulates the processing of personal data within the EU and imposes strict requirements on cross-border data transfers, influencing global digital trade frameworks.

IoT (Internet of Things)

A network of physical devices—such as sensors, appliances, and machines—connected to the internet, enabling them to collect, exchange, and act on data without human intervention. **In the supply chain, using IoT data is crucial not only for improving efficiency and visibility, but also for identifying the original data creator—whether an individual or a company—ensuring traceability, accountability, and data ownership.**

MiCA (Markets in Crypto-Assets Regulation)

The EU's **first comprehensive crypto-asset framework** (effective 2024), regulating issuers, exchanges, and stablecoins to ensure market integrity and investor protection.

MLETR (Model Law on Electronic Transferable Records)

A legal framework developed by the United Nations Commission on International Trade Law (UNCITRAL) to facilitate the use of **electronic transferable records** that are functionally equivalent to traditional paper-based documents, such as bills of lading, promissory notes, and warehouse receipts. MLETR ensures that such digital documents maintain **legal validity, uniqueness, and control**, enabling the secure and efficient digitization of trade documents.

MLETR enhances **legal interoperability** across jurisdictions by offering a harmonized framework for the recognition and cross-border transfer of electronic records, thereby reducing legal uncertainty and supporting seamless digital transactions.

Key Features:

- Recognized by **DEPA** as foundational to digital trade frameworks
- Adopted by jurisdictions such as the **United Kingdom (ETDA)** and **Singapore**
- Enables **paperless trade** across common law legal systems
- Serves as a critical legal instrument for **DEPA implementation** in cross-border e-commerce

MSME (Micro, Small, and Medium Enterprises)

Businesses with fewer than 250 employees and limited revenue, as defined by EU. They are a key focus of EU trade policy, supported through:

- **Digital empowerment** (DEPA's SME provisions)
- **Green transition support** (funding, skills programs)
- **Supply chain integration** (eFTI simplification)

Negotiable Cargo Documents

A proposed legal instrument aimed at establishing a new category of **documents of title**—referred to as *negotiable cargo documents*—that function similarly to **maritime bills of lading**, but are applicable across **all modes of transport**, whether **multimodal** or **unimodal**. These documents are intended to facilitate the transfer of ownership and control of goods during transit.

The instrument also provides a legal framework for the **recognition and use of electronic negotiable cargo records**, enabling their use in **digital and paperless trade environments**, in alignment with principles from **MLETR** and digital trade initiatives such as **DEPA**.

NIS2 Directive (Directive (EU) 2022/2555)

NIS2 is the **EU's revised directive on cybersecurity**, replacing the original **NIS Directive (2016)**. It sets **minimum cybersecurity standards** for **critical and essential entities** across sectors like **energy, transport, health, and digital infrastructure**. NIS2 strengthens **incident reporting obligations**, **supply chain risk management**, and introduces **stricter**

supervisory measures to ensure a **harmonized and resilient cybersecurity framework** across the EU.

PSD3 (Payment Services Directive 3) / PSR (Payment Services Regulation)

Upcoming EU legislation to modernize **digital payment systems**, enhancing security, open banking, and fintech innovation while ensuring consumer protection and interoperability. These reforms will harmonize payment rules across the EU, reduce fraud risks, and strengthen oversight of emerging payment services and technologies.

Singapore's Green Claims Guidelines

2023 regulations by the **Competition and Consumer Commission of Singapore (CCCS)** requiring **environmental claims** to be **specific, evidence-based, and scientifically verified**. Prohibits vague terms like "eco-friendly" without **lifecycle assessment** proof.

Sustainability

In **supply chain management**, **sustainability** refers to the integration of **environmental stewardship**, **social responsibility**, and **economic viability** across end-to-end operations—from **raw material sourcing** to **production**, **logistics**, and **end-of-life product management**. A sustainable supply chain actively **measures** and manages impacts such as **carbon footprint**, **water usage**, **energy consumption**, and **waste generation** to ensure transparency and accountability. It ensures that **business growth** aligns with **planetary boundaries**, **ethical labor practices**, and long-term **resilience**.

UK Modern Slavery Act

A 2015 law requiring **large businesses** (with **annual turnover ≥ £36 million**) to publish **annual transparency statements** on efforts to eliminate **modern slavery** in their operations and **supply chains**. While compliance is mandatory, there are no financial penalties for non-compliance. Companies must conduct **risk assessments**, provide **staff training**, and perform **supplier audits** to meet reporting requirements.

UN/CEFACT (United Nations Centre for Trade Facilitation and Electronic Business)

A subsidiary body of the United Nations Economic Commission for Europe (UNECE), **UN/CEFACT** is dedicated to improving the ability of business, trade, and administrative organizations to exchange products and services effectively and efficiently. It develops global standards, recommendations, and technical specifications to support **trade facilitation** and the **digitalisation of cross-border trade processes**.

US Dodd-Frank Act

A 2010 **financial reform law** that includes **Section 1502**, requiring companies to disclose whether their products contain **conflict minerals** (tin, tungsten, tantalum, or gold) sourced from **high-risk areas** like the **Democratic Republic of Congo (DRC)**. The goal is to disrupt funding for **armed groups**, but enforcement weakened after the **SEC** scaled back requirements in 2017.

US Lacey Act

A **1900 conservation law** (amended in **2008**) that bans trade in **illegally sourced plants and wildlife**, including timber and paper products. Importers must submit **declarations** detailing **species, origin, and legality**. Violations can lead to **product seizures, fines, or criminal charges** for deliberate offenses.

Related links

- European Commission. Joint Declaration following the First European Union-Central Asia Summit (April 2025) https://ec.europa.eu/commission/presscorner/detail/en/statement_25_980
- Summary by DigitalTrade4.EU with recommendations. Less is More: Proposals to Simplify and Improve European Rule-Making in the Financial Services Sector (March 2025) https://www.digitaltrade4.eu/streamlining-eu-financial-regulations-in-the-digital-economy-insights-from-the-less-is-more-report/
- DigitalTrade4.EU. Advancing Green Economy and Digital Trade Frameworks (March 2025) https://www.digitaltrade4.eu/wp-content/uploads/2025/03/NZ-Green-Economy-and-Digital-Trade-2025-03.pdf
- DigitalTrade4.EU. EU-Singapore Digital Trade Agreement Embraces MLETR for Digital Trade Efficiency (February 2025) https://www.digitaltrade4.eu/eu-singapore-digital-trade-agreement-embraces-mletr-for-digital-trade-efficiency/
- Scientific Reports. Impact of the digital trade on lowering carbon emissions in 46 countries (October 2024) https://www.nature.com/articles/s41598-024-76586-5
- EMA. A Playbook on Scope 2 Emissions Reduction for Singapore Businesses (2024) https://www.ema.gov.sg/content/dam/corporate/resources/industry-reports/playbook-on-scope-2-emissions-reduction-for-sg-businesses/EMA-Resources-Industry-Report-Playbook-on-Scope-2-Emissions-Reduction-for-SG-Businesses.pdf
- South Asia Center of Pacific Excellence. Digital Horizons: Unlocking New Zealand's Digital Trade Potential with Southeast Asia (2024) https://static1.squarespace.com/static/5509e925e4b0555ed6d0b70e/t/670d61d50717597ebd45f2f7/1728930267847/Digital+Horizons.pdf
- ADB Institute. MSME Access to Digital Finance Study In Selected EMDE Countries In Asia (January 2025) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5107872

- ACITI. Achieving Australia's Digital Economy Strategy for Trade by 2030 (November 2024) https://cdn.prod.website-files.com/5f1f9c5241c5c983b83b0216/67a33cc3020a63fbed914316_Achieving%20Australia%27s%20Digital%20Economy%20Strategy%20for%20Trade%20by%202030%20%20.pdf
- New Zealand International Business Forum. Ratification of New Zealand-UAE Comprehensive Economic Partnership Agreement (CEPA) (February 2025) https://www.tradeworks.org.nz/submission-to-the-foreign-affairs-defence-and-trade-select-committee/
- Economic Research Institute for ASEAN and East Asia. Enhancing E-authentication and E-signature across ASEAN: Building Interoperable Frameworks for Seamless Digital Transactions (January 2025) https://www.eria.org/uploads/Enhancing-E-authentication-and-E-signature-across-ASEAN.pdf
- APEC. A Path to Paperless Trade: Analysing the Legal Gaps and Economic Benefit of Adopting or Maintaining a Legal Framework that Takes into Account the UNCITRAL Model Law on Electronic Transferable Records (MLETR) (February 2025) https://www.apec.org/publications/2025/02/a-path-to-paperless-trade--analysing-the-legal-gaps-and-economic-benefit-of-adopting-or-maintaining-a-legal-framework-that-takes-into-account-the-uncitral-model-law-on-electronic-transferable-records-(mletr)
- DigitalTrade4.EU. UNCITRAL's Framework for Negotiable Cargo Documents: Modernizing International Trade (October 2024) https://www.digitaltrade4.eu/uncitrals-framework-for-negotiable-cargo-documents-modernizing-international-trade-and-shipping-practices/