ANALYSIS

# Supporting the Green Transition through Regulatory Cooperation within the Trade and Technology Council (TTC)

2022

# Foreword

The EU and the US has a longstanding history of strong cooperation, especially when it comes to facilitating transatlantic trade and investments.

While there are considerable differences between the EU and the US when it comes to regulatory systems, the two economic giants have engaged in ambitious regulatory cooperation in the past. Among other things, the EU and the US have agreed on Mutual Recognition Agreements on Conformity Assessment and horizontal approaches on information sharing. In other words, there is a solid foundation to build on. A rational for renewed efforts at regulatory cooperation is the fact that existing commitments are becoming increasingly obsolete. This is due to increasing regulatory complexity related to e.g. digitalization, global commitments to combat climate change as well as trade barriers from product requirements. As a result, there is a need to re-evaluate previous commitments and to raise the ambition for green and frictionless transatlantic trade. The urgency to reduce greenhouse gas emissions and current geopolitical developments underline the need for more ambitious transatlantic regulatory cooperation.

Now, more than ever, there is a need to take a fresh look at how the EU and the US can support the green transition through regulatory cooperation within the recently established Trade and Technology Council.

This report by the National Board of Trade Sweden presents recommendations on how a renewed EU-US regulatory cooperation can support a green transition. It also acknowledges that enhanced transatlantic regulatory cooperation has a strong rationale and that the initiative has wide support from the business communities on both sides of the Atlantic.

Ultimately, it is my hope that the TTC will facilitate substantial transatlantic economic integration through regulatory cooperation on both on horizontal and sector specific level, with the aim of coming back to the desirable objective of establishing a transatlantic free trade agreement.

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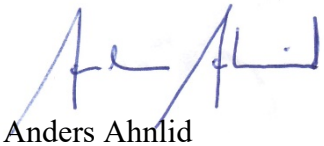
Stockholm, June 2022



Anders Ahnlid
Director-General National Board of Trade Sweden

## Summary

The National Board of Trade Sweden was commissioned by the Swedish Government to analyze the possibilities for transatlantic regulatory cooperation within the Trade and Technology Council that could support the green transition.

To identify possible areas of mutual interest, input has been collected from US, EU and Swedish stakeholders.

The recent invasion of Ukraine will have ripple effects on trade and trade policy, which needs to be considered when analysing the outsets for enhanced transatlantic trade. In this respect, the Board envisages a scenario where like-minded trading partners will seek closer cooperation in response to the war as well as non-market trade and investment policies. In this context, the transatlantic partnership, and the TTC in particular, might gain more importance as a forum for cooperation than estimated from the outset.

In general, the Board envision the TTC to have an important role to play in identifying and reducing unnecessary regulatory barriers to trade for climate-friendly goods and their input goods.

Giving consideration to the input received from various stakeholders and the fundamental differences in the parties regulatory systems, the Board has outlined a number of ideas and recommendations on possible areas for regulatory cooperation within the TTC: The following recommendations touch upon both horizontal and sector specific forms for collaboration:

- Early warning system and transatlantic policy labs
- Consistent measurement, accounting, and verification of greenhouse gas emissions
- Common standards for measurement can ease trade in low-emissions steel
- Supporting green transition in new innovative areas (e.g. autonomous vehicles)
- Facilitating the expansion of the charging infrastructure through the TTC
- Updating existing Mutual Recognition Agreements on Conformity Assessment to support the green transition
- Circular economy initiatives
- Mapping TBTs for low-carbon energy and energy saving goods

# Introduction

The National Board of Trade Sweden is the Swedish government agency for international trade, the EU internal market and trade policy. The Board's mission is to facilitate free and open trade with transparent rules.

The Board provides the Swedish Government with independent analysis, reports and policy recommendations as well as advice on trade-related matters.

The Board was commissioned by the Swedish Government to analyze possibilities for transatlantic regulatory cooperation that could support the green transition. The analysis was to be based on Swedish, American and EU interests. The Board was also asked to consider both horizontal and sector specific alternatives with potential to support the green transition. The views expressed in this analysis are those of the National Board of Trade Sweden and therefore do not represent the official position of the Swedish Government.

This report focuses on the work of working groups 1, 2 and 10 i.e. Technology Standards, Climate and Green Tech and Global Trade Challenges.

To gather more information, we contacted a number of Swedish stakeholders and government agencies[1]. We also consulted the project team leading the new bilateral initiative between Sweden and US, the "Green Transition Initiative". A further source of information has been viewpoints and references provided by the agencies and organisations participating in Sweden's Advisory Council on Innovative and Climate Focused Standardization.

To form an understanding of American priorities we have reviewed the interests expressed by the USTR to the European Commission for WG 10 as well as the Commission's priorities as expressed in a replying document.

The invasion of Ukraine occurred during the time this analysis was undertaken, which has made it necessary for us to reflect on possible implications for regulatory cooperation between the EU and US as well as for the green transition. This analysis is presented in section 2.

[1] Input has been received and meetings held with: Association of Swedish Engineering Industries, Business Sweden, Swedish Iron and Steel producers Association, Swedish Energy Agency, Swedac, Swedish Institute for Standards, Tech Sweden, SEK Svensk Elstandard / Svenska Informations- och Telekommunikationsstandardiseringen (ITS), Swedish Environmental Protection Agency, Swedish Institute for Standards and Vinnova.

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# 1 Trade and Technology Council (TTC)

## 1.1 Overview

The TTC was set up in June 2021 for the EU and the US to coordinate their approaches on issues related to global trade, economic growth, and technology to deepen transatlantic trade and economic relations based on shared democratic values.[2]

The main goals of the TTC are to expand and deepen bilateral trade and investment, avoid new technical barriers to trade, cooperate on key policies on technology, digital issues and supply chains, support collaborative research, cooperate on the development of compatible and international standards, facilitate cooperation on regulatory policy and enforcement, and promote innovation and leadership by EU and US firms. The work is carried out in ten working groups.[3] The working groups of interest for this analysis are 1, 2 and 10 as outlined below.

Recent political developments will likely increase the importance of the TTC and the working group discussions, as outlined in section 2 below.

## 1.2 Working Group 1 – Technology Standards

Working group 1 on technology standards will promote coordination and cooperation in critical and emerging technology standards, for example in AI and other emerging technologies. The working group will, for example, focus on identifying opportunities for cooperation and defending common interests of the EU and the US in international standardization activities for critical and emerging technologies. The working group also aims to develop formal and informal mechanisms to share information regarding technical proposals in certain technology areas and to coordinate international standardization activities.[4]

## 1.3 Working Group 2 – Climate and Clean Tech

Working group 2 focuses on climate and clean tech and aims to identify opportunities, measures and incentives to support development of technology and transatlantic trade and investment in climate neutral technologies, products and services. The work may include for example collaboration in third countries, research and innovation, and analysis of

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[2] EU-US launch Trade and Technology Council (europa.eu).
[3] EU-US relations: EU-US Trade and Technology Council (europa.eu) and EU-US launch Trade and Technology Council (europa.eu).
[4] EU-US Trade and Technology Council Inaugural Joint Statement (europa.eu).

methodologies, tools, and technologies for calculating greenhouse gas emissions in global trade.[5]

## 1.4 Working Group 10 – Global Trade Challenges

In working group 10 on global trade challenges the focus will be on challenges from non-market economic policies and practices, opportunities to avoid new and unnecessary technical barriers in emerging technology products and services, promoting and protecting labor rights, as well as issues related to trade and the environment.[6]

## 1.5 Rationale and areas of interest for the TTC

Both the EU and the US have expressed areas of interest for the upcoming discussions in the TTC a brief summary is outlined below.

### 1.5.1 US

The US has e.g. outlined potential trade outcomes for the TTC working group 10.

On a horizontal level, the US suggested the parties agree to publish and exchange information on regulatory initiatives under development in high-tech areas as well as reviewing the status of conformity assessment negotiations.

The US also suggested working together to help ensure that regulations developed by either party do not generate unnecessary trade barriers for new and emerging technologies. This includes technical standards and conformity assessment procedures and should be conducted in cooperation with industry stakeholders in cybersecurity, AI, chemicals, and electric vehicle charging infrastructure on both sides of the Atlantic. Exchanges on the European Commission's proposed Alternative Fuels Infrastructure Regulation could also lead to further collaboration.

Another area of interest for the US is green procurement. The ambition is to discuss and agree on best practices and common grounds for environmental and climate requirements in public procurements.

Lastly, the US proposed working together in plurilateral and multilateral fora to discourage restrictions on trade in remanufactured goods.

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[5] EU-US Trade and Technology Council Inaugural Joint Statement (europa.eu).
[6] EU-US Trade and Technology Council Inaugural Joint Statement (europa.eu).

### 1.5.2 EU

The EU has responded to the American proposal where the Commission outlined where they saw possible openings.

For example, they proposed coming to agreement on the publication and exchange of information on regulatory initiatives under development in high-tech areas. This would maximize opportunities for common approaches to avoid unnecessary barriers to trade.

The Commission also stated that clarification is needed on the type of measures covered as there are several regulatory levels in the US.

The Commission concurred with the US proposal to promote the expansion of electric vehicle charging infrastructure but noted that further internal discussions are needed.

### 1.5.3 Sweden

The Board has contacted and received input from a number of relevant Swedish stakeholders. The comments primarily relate to environmental focus areas covered in working groups 1, 2 and 10 (as well as other working groups where there is a degree of overlap).

The Swedish interests expressed to the Board include cooperation in areas such as reduction of plastics through for example regulatory cooperation on product design standards and cooperation on standardization of definitions for sustainable bio-based materials. Other suggestions include cooperation on extended producer responsibility as well as consumptions-based emissions measurement for national targets.

A level playing field on carbon pricing or equivalent regulatory measures was seen as a potential long-term aim for transatlantic regulatory cooperation. Moreover, the need for comparable accounting methods for embodied emissions, inter alia in relation to fossil-free steel, was also underscored. Charging infrastructure and replacement batteries in vehicles were also raised by stakeholders, as was as cooperation in cybersecurity.

Regarding standardization, the possibility to strengthen the cooperation between the EU and the US in international standardization organizations was also highlighted. However, stakeholders also mentioned a reluctance from US organizations to get involved in some areas due to the differences in number of votes between the EU and the US. Stakeholders also mentioned that for cooperation to be effective the EU must first

ensure the functioning of its own standardization system within the EU system for technical harmonization.

The Board also received general comments on the TTC initiative. Remarks from consulted parties include:

- The business community mentioned that it is difficult to know how business fits into the TTC. This was also raised with the Commissions consultation platform *Futurium* in mind.
- Both the business community and government agencies expressed uncertainty around what the TTC might achieve citing a lack of clarity on specific initiatives.
- Stakeholders also questioned the division of working groups within the TTC as many of the groups seem to overlap. Stakeholders were unsure which working groups would be relevant to them, thus making it difficult to see the benefit of allocating resources to engagement in TTC.

### 1.5.4 Sweden's Advisory Council on Innovative, Climate-Focused Standardization

In autumn 2021, the National Board of Trade Sweden was instructed by the Swedish Government to establish the Advisory Council on Innovative, Climate-focused Standardization.[7]

The Advisory Council strengthens the ability of the public sector to contribute to Sweden's work on climate focused standardization and create the right conditions for innovation in support of the business sector's climate transition. The purpose of the assignment is also to strengthen the government authorities' knowledge and collaboration on standardization to support the business sector's climate transition.

As well as collaborating to identify strategic priorities for standardization, the Advisory Council has also established two working groups:

- fossil free production of steel with a global value chain perspective
- electrification of the transport sector with a focus on charging infrastructure.

[7] The Advisory Council is made up of 15 government authorities, Fossil Free Sweden and the Swedish standardization organizations. The work and led by the Board's Director-General.

The working groups met for the first time in March 2022. The groups aim to understand the challenges faced in each area, define system boundaries, and to undertake a needs analysis. The analyses and working group discussions will form the basis of advice and recommendations to the government.

In addition, Sweden's innovation agency has funded three research projects to support the Advisory Council's work.[8] These will report in late 2022.

The Advisory Council will identify priorities for climate-focused standardization that might be relevant to the work to the Trade and Technology Council. The working groups are in the early stages of their work, so it is not possible to anticipate or to prejudge the outcome of the work being undertaken by the experts involved. However, outputs, priorities and recommendations can be shared, when available, to support the goals of TTC and to contribute to international cooperation on climate-focused standardization.

### 1.5.5 Bilateral cooperation between Sweden-and the US

The Swedish Energy Agency, Sweden's Innovation Agency, the Swedish Embassy in Washington DC and Business Sweden recently launched the Green Transition Initiative,[9] a new bilateral forum between Sweden and the US. The initiative aims to expand Sweden's existing activities and partnerships in the US in relation to key sectors for the green transition.

The objectives are to connect Swedish and US stakeholders within the green energy ecosystem, and to leverage opportunities in sectors such as electromobility, renewable energy, sustainable industry, and green buildings. The initiative aims to contribute to increased bilateral R&D cooperation, trade, and investments between Sweden and the US.

Collaboration between Swedish and US stakeholders has been deemed essential in the initiative. In Sweden, these include governmental agencies, regions and municipalities, universities, research institutes, and other organizations in relevant fields. Within the extensive US clean

[8] Project 1: Investigation of standardization needs linked to the steel industry's climate transition - mapping and evaluating the conditions for using standardization to strengthen market opportunities for steel with a very low carbon footprint.
Project 2: Standardization of charging infrastructure for the maritime transport sector
Project 3: Charging infrastructure and frequency regulation - a case study
[9] Annika Strandhäll launches Sweden-US Green Transition Initiative - Government.se

energy ecosystem, federal and state actors, industry, as well as academia and private corporations will be important.[10]

The initiative covers similar areas as the TTC, meaning there is potential to contribute with valuable Swedish input to the TTC. The bilateral perspective may also assist in identifying and utilizing synergies that could contribute to the Swedish Government's input via the European Commission.

[10] Electric driving (business-sweden.com)

# 2 Effects of the war in Ukraine on the energy and climate policy context

The politics of security and trade have always been closely connected, meaning the dramatic geopolitical changes following Russia's invasion of Ukraine will have ripple effects on trade and trade policy. The Board envisages a scenario where there is a polarizing effect with like-minded trading partners moving closer in response to the war as well as non-market trade and investment policies. This in turn can lead to like-minded trading partners liberalizing trade in areas that up until now have been considered impossible. To some extent, this can be reduced to an issue of trust between trading partners, as they may engage in deeper regulatory cooperation. In this context, the transatlantic partnership, and the TTC in particular, might gain more importance as a forum for cooperation. From this perspective, the TTC is a timely initiative, and the Board believes it has potential to grow in ambition over time.

The recent invasion of Ukraine has led to a quick reassessment of strategies for trade, energy and environment policies on both sides of the Atlantic. The common threat of disrupted energy supplies may increase the will to cooperate with like-minded partners to decrease the dependence of important commodities from countries that are viewed as less dependable from a resilience perspective. It is difficult to predict how events will unfold but we already see factors that affect the context of the TTC in relation to energy and the environment.

## 2.1 Reducing Dependence on Russian Fossil Fuels

The first factor is the EU's dependence on Russian exports of fossil fuels which account for 14 per cent of the EU's energy and in particular natural gas[11]. The EU quickly developed a plan to reduce demand, diversify supply and cut reliance on Russian gas exports.[12] The recent announcement of a deal between the EU and the US on liquified natural gas (LNG) is a concrete example of how transatlantic cooperation can assist in relation to the energy and environmental aspects of the crisis. Natural gas is described as a "bridge technology" for the transition as it can replace dirtier fuels like coal and oil to buy time in transitioning to a low emission energy system based on for example renewables, sustainable biofuels and hydrogen technologies.

[11] The EU imported 58 per cent of its energy in 2020 - Products Eurostat News - Eurostat (europa.eu)
[12] REPowerEU: Joint European action for more affordable, secure and sustainable energy Joint European action for more affordable, secure energy (europa.eu)

A reduction in Russian gas imports will create a supply gap. In the best-case scenario, this can be managed through diversification of supply and reduction of demand.[13] However, we already see signs of increased use of coal[14] as a response to the situation with high energy prices. This will increase greenhouse gas emissions in the near term and further reduce the remaining carbon budget, creating the need for a faster transition. Increased energy prices and the policies to reduce dependence on Russian fossil fuels will therefore have consequences for the climate transition and by extension what areas will be prioritized within the TTC.

The shift to renewable energy sources can be expected to speed up at EU level. [15] This will increase demand for the hardware of the climate transition (e.g., wind turbines, solar panels, grid infrastructure, energy storage, electrified transportation). These goods are complex and rely on inputs in the form of goods and services traded in global value chains. The TTC can play an important role by seeking to identify and reduce unnecessary regulatory barriers to trade for climate-friendly goods and their input goods.

## 2.2 Securing critical inputs for the climate transition

Critical inputs for the climate transition include rare earth minerals, semiconductor chips and sustainable metals which are already politically prioritized areas. These inputs to climate-relevant goods are traded in markets where Russia and Ukraine have significant global shares (e.g. Ukraine supplies 50 per cent of the worlds neon[16] which is a component in chip manufacturing, Russia has a 13 per cent share in the world nickel market[17]), or have been indirectly effected via shifts in global commodities and energy prices. The overall effect of these trends is likely to be increased costs for the green transition. Discussions in working group 10 could seek to address approaches to secure supplies of important inputs by identifying those of most relevance to the decarbonization of energy systems.

A further area of interest in both sustainability (e.g. circular material flows, due diligence, lifecycle analysis) and security areas is the

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[13] The REPowerEU scheme aims to reduce demand and the IEA have set out a 10-Point Plan to Reduce the European Union's Reliance on Russian Natural Gas A 10-Point Plan to Reduce the European Union's Reliance on Russian Natural Gas – Analysis - IEA

[14] Climate graphic of the week: Coal mining revival threatens global warming targets | Financial Times

[15] Joint European action for more affordable, secure energy (europa.eu)

[16] Russia's invasion of Ukraine adds to pressure on chip supply chain | Financial Times (ft.com)

[17] Tillgången till kritiska produkter - Tillväxtanalys (tillvaxtanalys.se)

technologies for tracking and traceability. These could be covered under TTC working group 2. Furthermore, the services that underpin critical energy goods and networks, as well as other mitigation options such as smart buildings and transport networks, are often delivered digitally. This means security in relation to IT becomes ever-more pertinent in the context of the climate transition (see section 5.3 for further discussion).

## 2.3 Reducing unnecessary technical barriers to trade

One tentative observation on the effects of the ongoing crisis is that the energy and climate transitions will need to happen faster and at a higher expected cost. The unified and coordinated response to the war in Ukraine by the EU and US is a positive development and can hopefully provide a precedent for coordinating actions in relation to transatlantic trade. Indeed, using the regulatory cooperation toolbox to drive forward work on removing and reducing non-tariff barriers on climate-relevant goods can help speed up and reduce the costs of climate action.

The Board proposes the TTC map out unnecessary technical barriers to trade (TBTs) affecting climate-relevant goods on both the demand and supply side in the energy sector. This would have the potential to facilitate trade and improve access to green technologies, thus contributing to lower energy costs for households and industry. The mapping could prioritize the areas with the most potential for carbon emission reductions and energy savings and contribute to a discussion on what actions could be taken to reduce TBTs in prioritized areas. A starting point for the mapping, from the EU side, are ongoing STCs within the TBT Committee as well as barriers brought up in the EU Market Access Advisory Committee (MAAC). As all barriers are not reflected in these fora, consultation with the private sector and regulatory authorities within the framework of the TTC could support the identification of additional barriers. The Board notes for example that the Commission has an ongoing initiative to survey EU businesses on perceived barriers related to MRAs.

The product focus on the supply side could include goods for low-carbon energy production, distribution and storage, while on the demand side, energy-saving technologies could reduce dependence on fossil fuels while reducing fuel bills. This could include heat pumps, smart thermostats[18], as well as a range of other energy saving devices like

[18] As mentioned in the Task Force to Reduce Europe's Dependence on Russian Fossil Fuels statement FACT SHEET: United States and European Commission Announce Task Force to Reduce Europe's Dependence on Russian Fossil Fuels | The White House

smart lighting and heating technologies. Reducing TBTs in these areas would align to the aims of the Task Force to Reduce Europe's Dependence on Russian Fossil Fuels.[19] Given the high degree of political agreement, a targeted exercise to focus on reducing unnecessary TBTs in these product areas could help reduce prices, lower carbon emissions, drive specialization, contribute to energy independence and promote transatlantic green trade.

[19] Ibid.

# 3 Horizontal approach to transatlantic regulatory cooperation

An efficient way to address unnecessary costs and burdens associated with differences between regulatory systems is through Good Regulatory Practices (GRP) and International Regulatory Cooperation (IRC).

IRC can also support the green transition through commitments to a certain level of protection in joint standards related to sustainability and increased regulatory quality supported by increased sharing of information.[20] Depending on the approach chosen by the EU and the US, the work of the TTC therefore has the potential to support green transition objectives and at the same time help reduce technical barriers to trade.

However, regulatory cooperation between the EU and the US is complicated by different systems for stakeholder consultation[21] on new technical regulations, standards,[22] views on international standards and also different systems for conformity assessment and enforcement of product safety[23]. The results of the TTC and its eventual commitments are therefore highly dependent on ambition levels set by the parties.[24]

Given the differences in regulatory systems between the EU and US, agreeing on regulatory tools within the framework of the TTC is a viable approach that has the potential to eliminate and prevent trade barriers in sectors of importance for a green transition.

This type of horizontal approach is not new for the EU or the US, as the parties share a long history of joint efforts[25] to achieve stronger

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[20] OECD, 'Greening Regional Trade Agreements on Non-Tariff Measures through Technical Barriers to Trade, and Regulatory Cooperation' (OECD Trade and Environment Working Papers 2020/04) <https://www.oecd-ilibrary.org/docserver/dfc41618-en.pdf?expires=1640169744&id=id&accname=guest&checksum=960017FA579DFB95A52370955DB21937>

[21] US:Notice and Comment, EU: notification procedure for technical rules

[22] EU: One standard, one product and regional standards, US: acceptance of several parallel standards.

[23] The EU system is governed by Regulation 765/2008 with one accreditation body per Member State, the US has a number of competing accreditation bodies in competition.

[24] For comprehensive analysis of the regulatory differences as well as the outsets for enhancing transatlantic regulatory convergence see e.g. Regulatory Co-operation and Technical Barriers to Trade within Transatlantic Trade and Investment Partnership (TTIP) (kommerskollegium.se) and How TTIP can Address Technical Barriers to Trade (kommerskollegium.se)

[25] Transatlantic Business Dialogue (TABD) in 1995/1996, the Transatlantic Economic Partnership (TEP), from 1998 in the High Level Regulatory Forum (HLRF) and the Transatlantic Economic Council (TEC) from 2005 and 2007

regulatory coherence. The US has also expressed an interest in discussing horizontal approaches in the TTC.

With these considerations in mind, the Board proposes a number of horizontal approaches for possible inclusion in the TTC discussions.

## 3.1 Information sharing on planned regulations

As mentioned above, GRP and IRC have the potential to reduce technical barriers to trade as well as promoting sustainability objectives. There are a number of measures available to improve regulatory cooperation, many of which are used in trade agreements. Among such measures are commitments to share information on planned major regulatory initiatives in advance with the other party. A commitment on major regulatory activities for a green transition and new technologies could promote and facilitate regulatory cooperation in these areas. In comparison to other more encompassing approaches, using early information sharing could be considered a relatively easy to achieve first step in this context. When investigating methods and possible new regulatory tools to support the green transition between EU and the US it is important to try to avoid systems that risk creating unnecessary administrative burdens for the parties (e.g. systems, databases or processes for information exchange that duplicate existing ones).

## 3.2 Transatlantic Policy Labs

Based on the Board's consultation with stakeholders there is a strong interest from the Swedish business community to be included in the work of the TTC. This is also prioritized by the group of digitally advanced EU countries (the D9+ countries).[26] The main challenge is how to foster discussions where regulators, researchers and the business community can meet on equal terms to discuss regulatory approaches within a sector.

An approach that has been frequently used in both Europe and the US in recent years is arranging *policy labs*.

The idea of a policy lab is that you gather a group of representatives from business, policy and research and use a set of user-centric methods to test, experiment and learn with the aim of developing new policy solutions.[27] Policy labs are especially efficient and can speed up

[26]D9+ consists of; Czech Republic Belgium, Denmark, Estonia, Ireland, Finland, Luxembourg, the Netherlands, Poland, Spain and Sweden. Chairs-Summary_D9_Prague.pdf (vlada.cz)
[27] What is a policy lab? | Vinnova

processes for sectors experiencing rapid technological development and in areas that are relatively unregulated.[28]

Given the interest from the business community and the areas chosen for the TTC the Board suggests *Transatlantic Policy Labs* are piloted, where representatives from business, policymakers and standards developers from both the US and the EU can test and experiment to jointly develop solutions that may be applicable to both regulatory systems.

Participation of key regulators with sector specific expertise from both sides of the Atlantic will be essential if outcomes from policy labs are to be taken forward into policy development and legislation.

[28] Policy Lab for policy and regulatory development | RISE

# 4 Sectors of particular interest for cooperation within the TTC

## 4.1 The Fossil Free Steel Value Chain

Sustainability criteria in minerals and metals resource classification are important for calculating embedded emissions in the steel value chain as well as for other sustainability and due diligence requirements. Transparency and traceability of minerals and metals are key issues where improved standardization can contribute. Cooperation on standardization on these topics could draw on the United Nations Framework Classification system.

The Swedish Agency for Growth Policy Analysis has published several reports[29] of relevance to the steel value chain and which highlight issues that could potentially be relevant to working group 2. Carbon content is not a visible characteristic of products so to increase demand for, and sales of goods that are produced in a climate-friendly manner it is necessary to have trustworthy information for customers. This could include a need for standardized marking based on consistent traceability and measurement which can be verified and certified.

Recycling of metals to reduce the carbon footprint also represents a challenge for standardization, particularly where metals are blended and perhaps only comprise a small share of consumer products. Sampling and testing are important in this context to enable quality control for recycling. Product passports and other traceability tools can assist by providing information on how recyclable products are. An additional area in relation to recycled steel are economic policies in the form of subsidies or trade distorting policies that tend to bias market outcomes against recycling. This could potentially fall under working group 10.

There are different technologies for producing low carbon steel and the importance of technologically neutral standards is often raised by industry. Consistent measurement can enable a lifecycle and product perspective so that technology-neutral standards can be developed.

[29] Examples include: Rapport AU 2022:03:01 - Marknadsbarriärer för återvinning av metaller - En omvärldsanalys av vad som hindrar och främjar konkurrensen mellan utvinnings- och återvinningsindustrin; Metaller och deras betydelse för produkters klimatavtryck 2018/073; Hur kan staten bidra till processindustrins gröna omställning genom att främja resurseffektiva system för material och metaller?

The energy mix in countries' electricity networks is also a crucial factor for embedded carbon and thus of importance for the definition and measurement of low-carbon steel products.

The Swedish Iron and Steel Producers Organization see the development of comparable accounting methods as critical so that emissions are measured and accounted for on a consistent basis. As steel is often an intermediate good, customers require credible, verifiable, comparable data and a common methodology for calculating embedded emissions. A starting point for discussions could be European Product Environmental Footprints (PEF), ISO greenhouse gas measurement standards (ISO 14064) and the Greenhouse Gas Protocol.[30] There are also international initiatives for sustainability and climate reporting such as those led under the Sustainability Standards Board (SSB) and Taskforce on Climate-related Financial Disclosures (TCFD).

## 4.2 Transport sector

Sweden is often highlighted as a role model when it comes to decarbonizing the transport system and is the only country with a downwards emissions trend in the transport sector. Electrification is also occurring faster than expected.[31]

### 4.2.1 Electrification of the Transport Sector with a focus on Charging Infrastructure

The decarbonization of transport requires, amongst other things, an effective charging infrastructure for light and heavy vehicles. Standards are highly relevant in the development of charging infrastructure and there are many actors involved who have important perspectives for standardization.[32] Different charging standards have emerged across transport segments and countries.[33] Areas for priority might include energy measurement, charging connectors and sockets, grid connection and communication, data provision and security and payment systems. Both the EU and US have expressed interest in discussing the expansion of electric charging infrastructure within the TTC. The Biden

[30] clim_03nov21-6_e.pdf (wto.org)
[31] Trots allvaret – Sverige står för ljusglimtar i FN:s klimatrapport | SVT Nyheter
[32] E.g. grid operators, local authorities, residential and commercial building managers, vehicle and charging point manufacturers, data providers, providers of charging facilities and end-users.
[33] AR6 Climate Change 2022: Mitigation of Climate Change — IPCC

administration also recently revealed they are awarding nearly 5 billion USD towards expanding the charging infrastructure.[34]

An area with opportunities for closer cooperation and possibly standardization within the TTC are International Organization of Legal Metrology (OIML) recommendations for electrical energy. OIML recommendations were an important tool in creating standards for measurement of fluids such as petrol[35] but have not yet been developed for electrical energy for vehicles. The problem of not regulating meters at charging stations is that they may display a different amount than the meters in vehicles. This reduces consumer confidence and is a barrier to investing in the infrastructure. The legal metrology authorities and bodies in Denmark, Finland, Norway, Sweden and Switzerland are currently involved in an initiative to develop a guide for related legal metrology requirements. The guide is intended for manufacturers, importers and distributors of charging stations products intended for charging electrical vehicles.[36] The Board believes it is essential to address these issues on a global level to counteract the current development of fragmented charging standards.

Another area within charging infrastructure that could be considered within the TTC is connectors and sockets. Vehicles must have connectors that fit those of the charging stations. Having compatible connectors across automakers and at charging stations is necessary for the structure to work. However, different standards have emerged across transport segments and countries with a variation in charging connectors and sockets.[37] The Board recommends the consideration of interoperability standards within the TTC.

### 4.2.2 Autonomous vehicles (trucks)[38]

The motor vehicle sector is important for Sweden and Swedish truck manufacturers are frontrunners in digitalization and the use of new technologies that can reduce the carbon footprint of the sector such as AI and electrification. However, there are fundamental differences in the regulatory approaches between the EU and the US for vehicles in

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[34] U.S. unveils $5 bln plan to fund EV charging network | Reuters

[35] https://www.oiml.org/en/publications/recommendations/publication_view?p_type=1&p_status=1.

[36] NordCharge, Guidance on metrological requirements for electrical vehicles, 17 December 2021.

[37] IPCC_AR6_WGIII_FinalDraft_FullReport.pdf

[38] Input to this chapter has been provided by Einride, Scania, Volvo and Mobility Sweden (former BIL Sweden) in March 2022.

general.[39] The Board consulted representatives of the Swedish truck manufacturers and suppliers of transport services (e.g. driverless trucks) on current transatlantic regulatory challenges from a green transition perspective.

In general, the representatives pointed out that varying national requirements, have a decisive negative impact for manufacturers that operate globally. As a result, the companies would like to see coordination of new regulatory requirements, e.g. for next generation emission requirements, in the TTC at an early stage.[40]

Representatives of the sector also see opportunities for transatlantic regulatory dialogue on approval procedures and testing methods as the EU and US have chosen differing approaches (the US states also have regulatory variations). The representatives also point out that there are national variations and differing approaches between EU Member States. Harmonization within the EU is needed which would provide a better outset for transatlantic and later international harmonization (through UNECE).

The Swedish companies acknowledge that the transport sector needs to reduce its climate emissions, particularly heavy transport. As one company put it "Today, these vehicles account for a large part of the emissions from the transport sector and the pace of change must increase". Several companies named electric and autonomous vehicles as having potential for cost effective emission reductions.

One of the companies consulted for this analysis provides transport as a service, selling innovative logistics services. As an example, the company has hired the world's first remote truck driver in the US. The company described the challenges of doing business in the US. Autonomous vehicle providers need to acquire an US import permit[41]. The permits are today time-limited and administratively burdensome. Manufacture in the US is deemed unsuitable as the rules limit the company's ability to manufacture to their green standards. The

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[39] See How TTIP can Address Technical Barriers to Trade (kommerskollegium.se) and Regulatory Co-operation and Technical Barriers to Trade within Transatlantic Trade and Investment Partnership (TTIP) (kommerskollegium.se)

[40] The EU is e.g. currently preparing specific requirements for automated and fully automated ('driverless') vehicles and the systems they employ currently under consultation. See: Automated cars – technical specifications (europa.eu) and work is also underway within UNECE, see: Main achievements | UNECE.

[41] Import permit 591

difficulties in importing and manufacturing autonomous electric vehicles might be a possible area for regulatory EU-US dialogues.

Another aspect related to digitalization is IT-security and cybersecurity where there is a benefit to having a harmonized approach to regulation and conformity assessment as well as mutual recognition.

## 4.3 Digital sector

Dataflows across borders are a prerequisite for the continued digitalization of the economy and all forms of digital trade. This is something that the US and EU agree on politically. The challenge lies in the different starting points for data regulation in the EU and US, particularly the protection of personal data. This makes it challenging to find compromises respecting each bloc's priorities. Even though dataflows as such are not included in the TTC, it is a necessity for the EU and US to find a clear solution on how to transfer (personal and non-personal) data in a safe, predictable, and efficient manner to allow for both digital services and traditional goods to be traded. This also has an environmental aspect as digital infrastructures and solutions can help reduce emissions across all the sectors responsible for GHG emissions.[42]

In terms of areas within the digital sector, AI, consumer safety and online trust are of mutual interest to the EU and US.[43] AI is still relatively unregulated, but the regulatory as well as technological developments are moving rapidly. Online trust mechanisms are to some extent challenging old approaches to regulation, with new technology rendering many existing regulations unnecessary or unsuitable. All of the areas mentioned could benefit from an increased dialogue between businesses, civil society and public institutions, for example through *Transatlantic Policy Labs,* as outlined in section 4.2. For this to be successful, functioning international schemes and frameworks for cybersecurity certification and mutual recognition are essential, while simultaneously respecting each other's choices on the ethical use of AI.

Intellectual property rights may also be relevant, for example regarding e-commerce and the application of intellectual property rights in the digital environment, within platform regulation for example. It is also

[42] The National Board of Trade Sweden report "Trade and Climate Change" identifies climate-relevant services in the main emitting sectors. Many of the services are delivered digitally or rely on digital enablers. Available at: Trade and Climate Change (kommerskollegium.se)

[43] IPCC lists mitigation options under various sectoral categories including energy supply systems, transport, buildings, industry and waste, and agriculture forestry and land use

relevant in terms of new phenomenon relevant for the 4th industrial revolution (e.g. AI, 3D printing).

## 4.4 Mutual Recognition Agreements (MRA) and digitalization of conformity assessment

There are MRAs between the EU and the US for the following sectors[44]: telecommunications equipment, electromagnetic compatibility (EMC), marine equipment, Good Manufacturing Practices (GMP), medicines and medical devices.[45] However, not all of them are operational due to a lack of designated conformity assessment bodies.

Previous efforts have been undertaken to update the MRAs, and the US has indicated that they are open to revisiting those discussions in the context of the TTC. The Board agrees with the American approach, as the previous efforts did not include regulatory cooperation on sustainable trade and green technology.

As several of these sectors include products that could have a positive impact on the green transition and/or new technology the Board believes there can be opportunities to re-open discussion.

The EU Circular Economy Action Plan aims to make sustainable products the norm in the EU with products lasting longer, being easier to reuse, repair and recycle.[46] Focus is on sectors that use the most resources and with a high potential for circularity: electronics, ICT, batteries, packaging, plastics, textiles, construction and food. In these areas the Commission will launch concrete action, including *Extended Producer Responsibility (EPR) Schemes*.[47] These schemes would be more effective if they covered products on sale in the EU and the US markets. Convergent legislation on the properties of products would be the ideal from a trade perspective, but if this cannot be achieved, an MRA where producers can access to product and management system certification will increase the effectiveness of EPR systems. This would allow exporters can obtain the documentation they need in their home country as well as making it easier to set up collection systems. It can also reduce leakage, where products that are to be returned to the

[44] Mutual Recognition Agreements (europa.eu),
[45] https://www.ema.europa.eu/en/human-regulatory/research-development/compliance/good-manufacturing-practice/mutual-recognition-agreements-mra , https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:01999A0204(01)-20200205.
[46] https://ec.europa.eu/commission/presscorner/detail/en/ip_20_420.
[47] https://ec.europa.eu/commission/presscorner/detail/en/qanda_20_419.

producer are accidentally considered waste or sold on a second hand marked out of reach for the responsible producer.

*Digitalization of conformity assessment*

Sampling and testing are important to enable quality control for recycling. Product passports and other traceability tools can assist by providing information on how recyclable products are.

When discussing MRAs it is also important to provide support for the importance of addressing conformity assessment in relation to green transition. IoT, smart manufacturing, and the use of AI put totally new requirements on national quality infrastructures, especially on digitalized conformity assessment and risk-based enforcement. It could be beneficial to evaluate possible digital tools to allow conformity assessment better to embrace existing market conditions within the TTC. E.g. blockchain technology could be used to add digital certification and testing-related content to the existing conformity assessment system. If this type of work is carried out in the transatlantic context the outsets for solving challenges are better than if separate systems are developed, especially as the conformity assessment systems are currently different in the EU and US markets. A common approach may also better address IT-security and cyber vulnerabilities.

# 5 Methodologies and tools for the climate transition

Working group 2 calls for a joint exploration of the methodologies, tools, and technologies for calculating embedded greenhouse gas emissions in global trade. This section covers specific topics mentioned by the stakeholders we consulted with that might be relevant focus areas for working group 2.

## 5.1 Definitions and measurement

One basic but fundamental aspect of transatlantic cooperation within standardization and technical regulations is the requirement for a mutual understanding of what we mean when using definitions such as "sustainable" or "circular". How do we know when a product is "eco-friendly", "carbon neutral" or "green", what do we measure and how do we define a product in a way that is comparable?

The need for definitions and what to measure has been discussed in other fora and the matter has also been raised in our consultation with stakeholders. The lack of a common vocabulary and methods for measuring sustainability is identified by the Board as a challenge when it comes to mutually recognising sustainable goods between the US and the EU. A similar initiative to tackle the challenge of definitional aspects of sustainability is the current work within ISO on the circular economy which "intends to produce a set of internationally agreed principles, terminology, a framework of what a circular economy is, and develop a management system standard. It also will work on alternative business models and method for measuring and assessing circularity."[48]

Defining the sustainability aspects of products in a comparable manner is not an easy or a quick task but is something that is necessary to achieve a level playing field for sustainable goods and develop consumer confidence for product comparisons. Preferably such work should be conducted within the international standardization system, but perhaps the TTC could be used to lay the stepping stones for such work.

[48] Cited from https://www.iso.org/news/ref2402.html 2022-03-30

### 5.1.1 Consistent measurement, accounting and verification of GHG emissions

A view that has been repeatedly expressed by Swedish stakeholders from the business community, academia and the public sector is the need for consistent measurement and accounting of greenhouse gas emissions.

A recent report by the WTO[49] emphasizes the importance of using the same yardstick for measuring carbon emissions and explains that a wide range of policy approaches to tackle global warming require measurement of carbon emissions, products' carbon content or energy efficiency. The use of different measurement standards and scopes creates unpredictability and can impose burdensome costs on producers. This regulatory divergence can unnecessarily restrict international trade, for example, where a producer needs to adapt carbon measurements to several different methodologies. The use of international standards in technical regulations, as encouraged by the TBT agreement, can help avoid barriers to trade and facilitate the transition to low carbon economies. Ideally, emission measurement approaches should be based on international standards that are agreed by consensus. Common standards could provide a framework for calculation of carbon emissions or the embedded carbon for both the public and private sectors. Transatlantic cooperation could aim for harmonization of standards and help build critical mass to establish consensus international standards in this area.

As a product's carbon content is not visible to purchasers, verification is essential to allow trust in data and communication about the carbon content of products and processes. On completion, verification has to be communicated along the value chain to provide trustworthy data on emissions to contribute the carbon accounting. Digital or physical labelling is a common measure, and the TBT Agreement encourages the use of international guidance. Labelling should not contribute unnecessary barriers to trade or be discriminatory. Third party accreditation can be a useful tool in building trust. Harmonization of procedures for verification and accreditation can thus help increase confidence and promote trade. Discussions in the WTO TBT Committee include "best practices related to technical regulations and standards, based on available scientific and technical information, and conformity

[49] WTO, "What yardstick for net-zero? How WTO TBT disciplines can contribute to effective policies on carbon emission standards and climate change mitigation"

assessment procedures that support the attainment of environmental goals and contribute to addressing climate change".[50]

Aiming for harmonization and recognition of conformity assessment for the measurement, accounting, and verification of greenhouse gas emissions in trade-related climate change measures is in line with WTO disciplines and could form a worthwhile aim for transatlantic cooperation.

### 5.1.2 Consumption-based emissions

Cooperating on methodologies for measuring embedded greenhouse gas emissions in international trade can support national measurement frameworks, research and policy goals. National consumption-based measures cover the emissions generated from public and private demand for products and services in a country including emissions embedded in imports. Domestic emissions related to the production of export goods are excluded under this approach as these emissions contribute to other countries' consumption-based emissions.

Sweden was the first country in the world to introduce a consumption-based emissions target (net zero by 2045) and is one of the few countries that calculates and reports consumption-based greenhouse gas emissions. Statistics Sweden provides statistics on emissions from public and private demand in Sweden and also leads a consortium of researchers on the broader environmental impact of Swedish consumption domestically and abroad. This includes the development of indicators on GHG emissions, material use, land use, and water use. A consumption approach reveals that in Sweden's case, environmental impacts are much larger than based on the impacts of domestic production and pollution. The effects of trade are therefore very important to assessing the environmental externalities of the Swedish economy.

Sweden is therefore well-positioned to contribute with expertise and experience in developing consumption-based measures and is already contributing to ongoing standardization work in various European and international bodies.

The Board consider consumption-based emissions measurement as an important complement to production based measurements and an area that would be relevant to working group 2. Swedish consumption-based

[50] Ninth Triennial Review of the Operation and Implementation of the Agreement on Technical Barriers to Trade under Article 15.4, G/TBT/46, 17 November 2021, p. 7. , Cited in What yardstick for net-zero? Ibid.

measures at national level show where consumption generates emissions and can lead to public and private action to lower imported emissions. This might benefit the US exporters that can credibly demonstrate low-carbon product credentials and innovative approaches.

## 5.2 Digital tools

As mentioned above, Working Group 2 suggests focus could be on, amongst others, tools for calculating greenhouse gas emissions in global trade.

For consistent measurement and accounting of emissions across global value chains to be viable a lot of information about the emissions embodied in production and transportation of goods will need to be collected. Traceability is essential. This can be done via physical tracking or paper-based chain of custody documentation or with digital alternatives like blockchain[51], which have the potential to make the communication and labelling of products cheaper.

Digital product passports can hold the relevant information for products released on the market and are already a feature of the EU proposal for a Battery Directive and the proposal for a Sustainable Products Regulation. An additional advantage of the digital passport model is that as well as providing information on first release of products on the market, they can also convey information to operators that might refurbish, repair or recycle materials.

[51] It is also important to consider the climate impact of the digital service as blockchain technologies based on coal powered electricity would likely have a negative effect on GHG emissions.

# 6 Other standardization priorities

## 6.1 Pre-normative research

The Association of Swedish Engineering Industries (The engineering industries) expressed that they would rather see a strategic approach in TTC related to cooperation on research and development, such as pre-normative research across sectors, than to have a focus on limited and defined product-areas. The engineering industries believes this would encourage development in new areas with frontrunning standards that are relevant for the industry and that also could support legislators in drafting legislation that supports innovation.

Pre-normative research is also one of the areas the EU's standardization strategy identifies as having untapped potential and that pre-normative research can help Europe to take the lead in international standardization. Pre-normative research can be used to identify and anticipate standardization needs at an early stage and from many different stakeholders such as industry, actors in innovation ecosystems and standardization organisations.

The Board believes that EU and the US should consider exploring further cooperation by coordinating pre-normative research prior to standardization. This could help to identify common interests and priorities associated to new innovations where regulatory cooperation or cooperation within standardization could be beneficial.

## 6.2 Regulatory cooperation for a more circular economy

A more resource efficient and circular economy can be promoted in various ways; legislation, regulation, public procurement and by market led initiatives.[52] Current goods regulations are generally not adapted to policy goals and strategies for a more circular economy and legislative tools can be difficult to interpret when applied to circular processes.

International standards and schemes for conformity assessment have an important role to play to address trustworthiness and verification of what products can be considered "circular".[53] Circular economy policy initiatives can be undermined by a divergence of international regulatory approaches and standards. For example, extended producer responsibility (EPR) schemes are less effective if goods are traded and discarded

[52] There are for example proposals for labelling (see New proposals to make sustainable products the norm (europa.eu))
[53] Standards such as ISO/IEC 17029 for verification may have a decisive role.

overseas and a lack of consistent categorizations and standards for recycled material limits the cross-border flow of secondary materials. Harmonized standards for eco-design, eco-labelling and quality in second hand and remanufactured goods can facilitate trade in these areas and thus contribute to reduced environmental impacts. Standards on recovery facilities and end-of-life products can also contribute by allowing demonstration and verification of sound environmental management.[54]

The US has mentioned refurbished goods as an interest under Working Group 10. In addition, resource efficient and circular products can help to reduce emissions and other environmental impacts and are therefore of relevance to the goals of the TTC. Regulatory cooperation on circular economy can thus be justified in the transatlantic TTC dialogues.

[54] Within the EU, the EU Eco-design directive has been focusing on product energy efficiency in use, product life span (e.g. LED lights and parts of vacuum cleaners) and designing for reparability and information to independent repair shops from the producers.

# 7 Conclusions

Given the urgency to reduce greenhouse gas emissions,[55] and the fast pace of technological development, there is a clear rationale for increased transatlantic cooperation to support the climate transition and for new technologies within the framework of the TTC. In addition, the recent invasion of Ukraine affects the political and economic context for regulatory cooperation efforts between the EU and US with an increased focus on energy security, policies to reduce dependence on Russian fossil fuels and a clear need to speed up the deployment of renewables. In this context, the transatlantic partnership and the TTC in particular are likely to be of increase importance as a forum for cooperation. A viewpoint raised by stakeholders and shared by the Board is that the TTC is a relatively new initiative and the exact scope and focus are still unclear. The TTC is however a timely initiative and as already stated, the Board believes it has great potential to grow to an even more ambitious cooperation over time, possibly encompassing also other areas to facilitate transatlantic trade. In the end, the success of the TTC is highly dependent on the mutual gain that cooperation can bring as well as willingness to compromise on both sides.

Previous analyses by the National Board of Trade Sweden has shown that there are fundamental differences between the EU and the US when it comes to systems for technical regulations, standards, conformity assessment and enforcement of product safety. These differences represent a major challenge for regulatory cooperation between the two partners and limit the possibilities to provide recommendations on areas of cooperation. This also means that longstanding transatlantic technical barriers to trade remain and should not be overlooked in the TTC discussions. This is of particular importance as functioning systems for conformity assessment and related mutual recognition are essential for an efficient promotion of green transition.

Nevertheless, as this report demonstrates, enhanced transatlantic regulatory cooperation has a strong rationale and wide support from the business communities on both sides. To proceed from policy to action it is important to have clear expressions of interest. In this respect, the Board notes that the US has provided explicit statements on possible areas for transatlantic regulatory cooperation. These areas coincide to a large extent with input that the Board has gathered from Swedish stakeholders. The common denominator is supporting the green transition, as well as addressing digitalization, cybersecurity and new

[55] Climate Change 2022: Mitigation of Climate Change (ipcc.ch).

technologies such as AI. The recommendations outlined by the Board below, aim to support transatlantic regulatory cooperation in these areas.

This analysis has generated new information and insight for merging policy aspects related to the green transition with the traditional regulatory components related to TBT. This results in a broader perspective on increasing regulatory convergence.

## 7.1 Recommendations

This section presents recommendations that the Board believes could support the green transition on both sides of the Atlantic, if incorporated within the TTC. The areas highlighted should benefit EU-US trade and Sweden which is in the forefront in research, innovation, technology and product development to support the green transition.

### ➡ Early warning system and transatlantic policy labs

Firstly, the National Board of Trade Sweden has identified possibilities for the EU and the US to cooperate at horizontal level. The American and European standardization systems are fundamentally and structurally different, which is why cooperation and coordination at a technical level to address product related barriers is challenging. Given these differences, a horizontal approach to regulatory cooperation within the TTC has the potential to eliminate and prevent barriers to trade in areas of importance for the green transition.

The National Board of Trade Sweden therefore suggest that the EU and the US commit to sharing information on upcoming major regulatory measures for the green transition and for new technologies. Such procedures would not duplicate those of the WTO TBT Agreement but would instead include a broader consultation of stakeholders in the TTC.

*Transatlantic Policy Labs* are recommended by the Board. The idea is to have participants from industry, standardization-organisations and policy from the EU and the US. Through such a forum the parties can jointly test and develop solutions that may be applicable to both regulatory systems. The National Board of Trade Sweden sees that one of the most valuable ways forward for cooperation in regulatory and standardization matters is through different fora for dialogue and information-sharing to build trust, understanding and to identify common priorities. The TTC could also benefit from the experience shared by Swedish businesses within the newly established bilateral green transition initiative between Sweden and the US.

### Consistent measurement, accounting, and verification of greenhouse gas emissions

A view that has been repeatedly expressed by Swedish stakeholders from the business community, academia and the public sector is the need for consistent measurement and accounting of greenhouse gas emissions. Traceability, verification, and accreditation are also essential to the credibility of reporting. The use of different methods and standards imposes costs on producers and can unnecessarily restrict international trade. Harmonized approaches based on international standards would be the ideal model to aim for through TTC (perhaps via working group 2). If a harmonized approach cannot be agreed then information sharing, guidelines and support could help minimize the costs of adapting to different systems.

Consistent approaches to measurement are of benefit to exporters and importers. Sweden was the first country in the world to introduce a consumption-based emissions target (net zero by 2045). Demand for low-carbon inputs, services and products is therefore likely to rise which could benefit US exporters that can credibly demonstrate low-carbon production credentials and innovative approaches. The greater the degree of harmonization on measurement and accounting, the easier it will be to trade in low carbon technologies that lower the cost of the climate transition for both partners.

### Common standards for measurement can ease trade in low-emissions steel

Nations and companies are increasingly making net-zero emission pledges. However, embedded carbon dioxide emissions are not a visible characteristic, meaning it is necessary to have trustworthy information for purchasers on embedded emissions. This is of particular relevance to low-emission steel. As steel is often an intermediate good, customers require credible, verifiable, comparable data and a common methodology for calculating embedded emissions. Transatlantic cooperation through discussions in working group 2 should aim for harmonization of measurement, reporting, verification and accreditation of greenhouse gas emissions which would make it easier for companies to compare and credibly demonstrate emissions embedded in their value chains.

Standardization can also contribute to lower emissions in the steel sector through improving recycling via standards for sampling, testing, traceability and marking. Discussions in working group 10 could aim for

cooperation on standards for recycling of metals to contribute to lower embedded emissions.

### ➡ Supporting green transition in new innovative areas (e.g. vehicles)

Digitalization has an important role to play in supporting the green transition through for example electrification and smart transport systems. However, regulations for high-tech areas such as automated driving using AI are moving slower than the innovation process and are often fragmented across markets. As a result, the use of new technology is often based on specific approvals and testing or using regulatory exceptions to launch products or services. To support innovation and ensure market access regulatory dialogues need to be conducted at an early stage. Based on Swedish interests, specific regulatory dialogues on vehicles (trucks) and products and services for automated driving are recommended. A first step should be to for the EU to analyze the eventual regulatory variations between Member States in order to proceed with finding common ground for transatlantic and global (UNECE) dialogues.

### ➡ Facilitating the expansion of the charging infrastructure through the TTC

Both the EU and US have expressed an interest in discussing charging infrastructure within the TTC. The Board sees opportunities for closer cooperation on recommendations for measuring electrical energy for vehicles as well as connectors and sockets.

Consistent measurement is an essential pre-condition for an effective charging infrastructure. Different charging standards have emerged across transport segments and countries.[56] There are therefore initiatives to address these issues, e.g. within the Nordic countries and Switzerland, where a guidance on metrological requirements for Electrical Vehicles Charging Systems has been developed. The Board believes it is of outmost importance to also address these issues at a global level. Given the interests expressed by both the EU and the US as well as Swedish stakeholders, the Board recommends including consistent systems for the charging of electric vehicles in the TTC discussions.

[56] AR6 Climate Change 2022: Mitigation of Climate Change — IPCC

As for connectors and sockets, the Board recommends the consideration of interoperability standards to address the problem of variation in national standards.

### ➡ Updating existing Mutual Recognition Agreements to support the green transition

Mutual Recognition Agreements (MRAs) between the EU and US have previously been agreed for various goods. New opportunities for EU-US negotiation on MRAs have emerged since the last overview with the potential to benefit transatlantic trade.

As efforts to update existing Mutual Recognition Agreements have yet to include regulatory cooperation on sustainable trade and green technologies the Board proposes this is explored in more detail. Even though mandates for an update need to be discussed and decided among EU member states and go through the regular channels, there is potential to outline possible areas with stakeholders within the TTC. This could include identifying products that have a lower environmental impact in production, use and disposal.

One example might be in support of the Extended Producer Responsibility (EPR) as envisaged in the EU Circular Economy Action Plan. These schemes would be more effective if they covered products on sale in the EU and the US markets. An MRA where producers can access product and management system certification will increase the effectiveness of EPR systems. This would allow exporters can obtain the documentation they need in their home country as well as making it easier to set up collection systems.

### ➡ Circular economy

Circular Economy initiatives can support the climate transition by reducing the climate impact of raw material extraction, processing and transportation. Our review confirms that the regulatory outset and supporting processes in general are far from straight forward. It would be beneficial to embrace circular economy within TTC with a specific focus on terminology, measurements and tools for trustworthiness, for example by agreeing on a common approach to standards for verification in specific areas.

### ➡ Mapping TBTs for low-carbon energy and energy saving goods

Against the background of high energy prices and the international reaction to the war in Ukraine, the Board proposes the TTC map out unnecessary TBTs affecting trade in climate-relevant goods on both the demand and supply side in the energy sector. This would have the potential to facilitate trade and improve access to emission reducing technologies thus contributing to lower energy costs for households and industry. The mapping could prioritize the areas with the most potential for carbon emission reductions and energy savings and contribute to a discussion on what actions could be taken to reduce TBTs in prioritized areas. A starting point for the mapping, from the EU side, is ongoing STCs within the TBT Committee as well as barriers brought up in the EU Market Access Advisory Committee. As all barriers are not reflected in these forums, consultation with the private sector and regulatory authorities within the framework of the TTC could support in identifying additional barriers. The Board notes that the Commission for example has an ongoing initiative with a survey to businesses within the EU on perceived barriers related to MRAs.

The product focus on the supply side could include goods for low-carbon energy production, distribution and storage, while on the demand side, energy-saving technologies could reduce dependence on fossil fuels while reducing fuel bills. This could include heat pumps, smart thermostats[57], as well as a range of other energy saving devices like smart lighting and heating technologies. Reducing TBTs in these areas would align to the aims of the Task Force to Reduce Europe's Dependence on Russian Fossil Fuels.[58]

Given the high degree of political agreement, a targeted exercise to focus on reducing unnecessary TBTs in these product areas could help reduce prices, lower carbon emissions, drive specialization, contribute to energy independence and promote transatlantic green trade.

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[57] As mentioned in the Task Force to Reduce Europe's Dependence on Russian Fossil Fuels statement

[58] Ibid.

# Sammanfattning på svenska

*Summary in Swedish*

Utrikesdepartementet har gett Kommerskollegium i uppdrag att utreda möjligheter för transatlantiskt grönt regulativt samarbete av svenskt intresse på områden inom det nya initiativet för transatlantiskt regulativt samarbete, Trade and Technology Council (TTC) som kan sammanfalla med områden som lyfts som intressanta av USA. Särskilt fokus ligger på att identifiera hur Sverige kan bidra med framåtblickande förslag avseende de sakfrågor som lyfts såväl under TTC som av Rådet för innovativ och klimatfokuserad standardisering som leds av kollegiet enligt ett annat regeringsuppdrag.

Kommerskollegium har under arbetets gång fört dialog med ett antal svenska bransch- och intresseorganisationer samt myndigheter för att få information om vilka svenska intressen som finns avseende det kommande samarbetet i TTC.

Vi menar att TTC kan komma att fylla en viktig funktion i kommande diskussioner om samarbete som kan främja en grön omställning.

Kommerskollegium har i rapporten tagit fram ett antal rekommendationer:

- Tidigt varningssystem för kommande regleringar samt införande av transatlantiska policy-labb.
- Konsekvent mätning och verifiering av utsläpp av växthusgaser.
- Gemensamma standarder för mätning kan underlätta handel med fossilfritt stål.
- Stöd till grön omställning på nya innovativa områden t.ex. fordon.
- Facilitera expansionen av laddinfrastruktur genom TTC.
- Uppdatera befintliga avtal för ömsesidigt erkännande för procedurer för bedömning av överensstämmelse så att det ger stöd för en grön omställning.
- Initiativ för en grön omställning.
- Kartläggning av tekniska handelshinder för lågkoldioxid energi och energisparande varor.

**The National Board of Trade Sweden** is the government agency for international trade, the EU internal market and trade policy. Our mission is to facilitate free and open trade with transparent rules as well as free movement in the EU internal market.

Our goal is a well-functioning internal market, an external EU trade policy based on free trade and an open and strong multilateral trading system.

We provide the Swedish Government with analysis, reports and policy recommendations. We also participate in international meetings and negotiations.

The National Board of Trade, via SOLVIT, helps businesses and citizens encountering obstacles to free movement. We also host several networks with business organisations and authorities which aims to facilitate trade.

As an expert agency in trade policy issues, we also provide assistance to developing countries through trade-related development cooperation. One example is Open Trade Gate Sweden, a one-stop information centre assisting exporters from developing countries in their trade with Sweden and the EU.

Our analysis and reports aim to increase the knowledge on the importance of trade for the international economy and for the global sustainable development. Publications issued by the National Board of Trade only reflects the views of the Board.

The National Board of Trade Sweden, June 2022.

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