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## TRANSATLANTIC COOPERATION ON THE CLEAN TRANSITION – NO TIME TO STAND STILL

### PRIORITIES FOR THE US AND EU AHEAD OF 2024 ELECTIONS

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Presidents Biden and Von der Leyen will be plunging into electoral mode in 2024, but still have time to bring home key transatlantic agreements to accelerate the clean transition. This would lock in the progress achieved during the last three years and help restore fractured politics ahead of risky elections. The clean transition remains the best basis for a new consensus across the Atlantic that modernises our economies and revamps our international leadership.

Both leaders should focus on tangible outcomes:

1. Standards for decarbonising industry via climate-aligned trade measures.
2. Sustainable and secure supply chains for critical minerals.
3. Cooperation on research and development in emerging clean technologies.

Relaunching the transatlantic climate partnership will be a key legacy of both leaders' current tenures. They have reinforced the G7's climate leadership, established the Trade and Technology Council (TTC), revived the EU–US Energy Council, and built the basis for deep domestic transformations. The clean transition is now underway on both sides of the Atlantic and cannot be stopped.



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However, several agreements still need to be wrapped up that would further accelerate the transition. Negotiations over trade arrangements aimed at decarbonising the steel and aluminium sectors and build sustainable supply chains for critical minerals have stalled. Meanwhile, the window to achieve substantial progress on the shared goal of creating a transatlantic cleantech marketplace – announced at the last TTC in May 2023 – is closing quickly.

The recent EU–US Summit on 20 October would have been a great opportunity to reach agreements in all three areas, but failed to deliver significant progress, focusing predominantly on the wars in Ukraine and the Middle East.<sup>1</sup>

There is still time for Presidents Biden and Von der Leyen to reach an agreement on these three key issues. Doing so would help align their respective clean economy strategies, lowering the transition’s costs and increasing the opportunities for investments across the Atlantic. It would also consolidate their political coalitions ahead of elections next year. At the next TTC, negotiating teams should focus on reaching agreements that allow for different approaches within a joint framework, and avoid entrenchment on technical details. Failing to do so risks jeopardising the mutual trust built during the last three years and slowing down the transatlantic clean transition.

## Common approaches to climate-aligned trade and industrial policy instruments

### **We need a common understanding on greening our industries**

The EU and US lack interoperable standards that are crucial to decarbonising energy-intensive industries:

1. How to measure the greenhouse gas emissions related to the production of industrial goods, or “embedded emissions”.
2. A normative definition of what counts as a clean or dirty good.

These standards are needed to be able to differentiate in favour of cleaner industrial goods in public procurement, domestic regulation, and subsidy design, or to protect them against more polluting imports.

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<sup>1</sup> European Union and United States, 20 October 2023, **U.S.-EU Summit Joint Statement**; Laura Dubois, 20 October 2023, **Why the EU-US summit won't yield any breakthroughs on trade**



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Different objectives would necessitate different solutions – which suggests that no single standard will cover all potential use cases. Nonetheless, reaching an effective interoperability between EU and US approaches will minimise compliance costs for companies trading across the Atlantic and facilitate shared investments in decarbonisation, including from third countries. Moreover, such standards could develop into a global norm, either at the WTO or in other fora.

### **Steel and aluminium as timid pathfinders**

The transatlantic discussion on decarbonising industry is the most active and advanced for the steel and aluminium sectors, in the shape of negotiations for a Global Arrangement on Sustainable Steel and Aluminium (GSA). The GSA has the dual ambition to promote the decarbonisation of these energy-intensive sectors and to address the overcapacity resulting from state support in countries such as China.

Unfortunately, these two goals are very hard to address through a single policy instrument – particularly if both sides have very different political expectations of the instrument. The US has primarily focused on overcapacity, while also seeking a “solution” for US exports covered by the EU’s Carbon Border Adjustment Mechanism (CBAM). Meanwhile, the EU has prioritised a complete removal of all US tariffs on the EU under Section 232 of the Trade Expansion Act.

In this context, the GSA negotiations have at best muddled through the last two years. Both partners increasingly lost their initial focus on decarbonising the steel and aluminium sectors and expanding the deal to other countries, as overcapacity took the centre stage. The negotiations were expected to be concluded by the latest EU–US Summit on 20 October but have been extended until the 1<sup>st</sup> of January 2024.

Media reports ahead of the EU-US Summit signalled growing alignment on dealing with China’s steel overcapacity.<sup>2</sup> The drive has come from the White House’s goal of addressing US steel and aluminium producers’ demands for increased protection against Chinese competitors. Meanwhile, President Von der Leyen seems increasingly willing to risk further trade tensions with China to maintain geopolitical alignment with the US. Beijing’s ambiguous position regarding Russia’s invasion of Ukraine and growing concerns over unfair Chinese

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<sup>2</sup> Sarah Anne Aarup & Camille Gijis, 17 October 2023, **EU-US metals talks go down to the wire ahead of Friday summit**.



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competition against EU wind energy and electric vehicle producers is contributing to this realignment.<sup>3</sup>

It remains unclear how the GSA will address the decarbonisation of the steel and aluminium industries. The EU and US could supplement their measures against non-market excess capacity with additional tariffs that ratchet up according to the difference in emissions intensity between the importer and exporter. Alternatively, it could be an interoperable system that allows the EU to apply CBAM instead of such emissions-based tariff rates.

### **But what about cooperation on standards?**

The question remains whether the EU and US will cooperate on the two core standards listed above: measuring embedded emissions and defining clean goods. Work on the former – how to measure embedded emissions – is much more advanced. The G7 commissioned the IEA to find an international solution, which is being addressed within the Working Party on Industrial Decarbonisation.<sup>4</sup> The Climate Club also aims to provide a political space to discuss and build support for such ongoing technical work.<sup>5</sup>

However, it is increasingly unclear whether a shared approach to embedded emissions will be part of the GSA deal in January 2024, even though it was initially part of the negotiations.<sup>6</sup> Leaders should at least mandate their teams to make their current standards interoperable and equivalent.

An agreement on how to set a normative boundary between green and dirty goods is much more complex. It is however a necessary component of the GSA's credibility as a climate tool. Simply discriminating against relatively dirtier imports does not ensure the EU and US take the lead in decarbonising their steel and aluminium sectors. There are several ways the GSA could include this, such as linking a sliding tariff structure to compliance with domestic product requirements.

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<sup>3</sup> European Commission, 4 October 2023, **Commission launches investigation on subsidised electric cars from China**.

<sup>4</sup> Group of 7, 16 April 2023, **G7 Climate, Energy and Environment Ministers' Communiqué**

<sup>5</sup> Group of 7, 28 June 2022, **G7 Statement on Climate Club**

<sup>6</sup> This is not only due to the increased focus on overcapacity, but also because the US Trade Representative is awaiting an assessment by the US International Trade Commission on the emissions intensity of US steel and aluminium industries, due January 2025. More details [here](#).



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This question has far-ranging repercussions: a common EU–US standard to define green steel would pave the way for a global norm. Any steps hinting at veiled protectionism by the EU and US will further erode international trust and have impacts across many policy fields, including climate negotiations. So far, the Biden administration has been strongly conditioned by the political economy of steel and aluminium industries in the US. While the EU has done more to engage with other countries, its trailblazing CBAM has added to the existing mistrust towards trade and climate policies among developing countries.

### **Meanwhile, the EU CBAM is already here**

The CBAM has started its two-year-long pilot phase during which data about embedded emissions in covered products will be collected.<sup>7</sup> Starting in 2026, importers will have to gradually pay for CBAM certificates priced at the weekly average of the EU Emissions Trading System (ETS). EU producers will also face a growing price on carbon as their allocation of free ETS permits shrinks.

US exports of goods covered by the CBAM, mostly steel and aluminium, will not be significantly impacted because their carbon intensity is relatively close to the EU's. This means the CBAM fees they will incur will be similar to the carbon price paid by their EU competitors, and far lower than what other foreign exporters will pay – giving them a considerable competitive edge in the EU market.

Nevertheless, the US has been looking for an exemption for its steel and aluminium exports under the CBAM. US negotiators have also argued that the EU CBAM fees should deduct the costs of non-price climate regulations as an implicit price on carbon. The EU resists these exemptions as they consider this would undermine the WTO-compatible design of its CBAM.

In parallel, partially in response to the EU CBAM but mostly driven by its strategy of containment towards China, the US is also contemplating a range of options for carbon border measures that do not necessarily rely on adjusting against domestic regulations, such as a price on carbon. Countries like the UK and Canada are also contemplating their own versions of a CBAM, largely inspired by the EU's design. And several countries in the Global South are considering expanding the use of carbon pricing or even starting their own version of a CBAM to retain the revenue in their countries.<sup>8</sup>

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<sup>7</sup> Including the steel and iron, aluminium, fertiliser, cement, hydrogen and electricity sectors.

<sup>8</sup> Amiti Sen, 15 October 2023, **CBAM: EU ready to consider India's offer to collect carbon tax but after detailing**; You Xiaoying, 6 February 2023, **How will EU's 'green tariff' impact China's carbon market?**; Lauri



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Although it remains unclear whether and when these options will come to fruition, they heighten the importance of EU–US cooperation on standards related to industrial decarbonisation. This could happen within a broader EU–US discussion on principles for the design and implementation of carbon border measures, including on the equivalence between implicit and explicit carbon pricing.

Based on a bilateral agreement, the EU and US could better coordinate their work with partner countries to overcome challenges related to data gathering, monitoring and verification, either in trilateral cooperation or in fora like the OECD Inclusive Forum on Carbon Mitigation Approaches. This will require putting aside technical differences to prioritize a political agreement that ensures interoperability and synchronicity between different systems.

## Winning critical minerals for the clean transition

### **There is a substantial strategic overlap**

The EU and the US have similar strategic objectives regarding critical raw materials (CRMs). Both partners want to ensure there are sufficient minerals available worldwide for the energy transition, to secure their own industries' access to such minerals, and to reduce their current dependencies on strategic rivals like China. There is thus great potential for bilateral cooperation on this issue.

To achieve their goals both partners must cooperate with third countries. Neither the EU nor the US hold sufficient CRM deposits in their territories to sustain their energy and digital transitions, and so depend on imports. China is well ahead in that respect and currently enjoys almost complete dominance of CRM supply chains across the globe.

### **Success hinges on close diplomatic coordination**

Countering China's dominance in this sector will require close coordination of EU and US engagement with producing countries.

Many supplier countries are experiencing a tide of “resource nationalism”. Eager to learn lessons from economic history, large CRM producers are exploring how

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Myllyvirta, 18 October 2023, **China moving forward with preparations to include steel, cement and aluminum into carbon market**



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to retain more value from their domestic reserves. Certain EU and US stakeholders could view these policies as a threat and pressure their governments to confront them. However, unlike with fossil fuels, a temporary disruption of raw mineral supplies would not be a threat to national or economic security. Stockpiles, diversified value chains, material efficiency and the development of substitutes would be effective hedges against prolonged disruptions.

The EU and US governments should instead view these strategies as a foreign policy opportunity, acknowledging and supporting developing partners' economic aspirations. The EU and US have tools at their disposal to help producing countries retain a greater share of the minerals' value in their economies. They can support investments in new processing and cleantech industries and work to ensure high social and environmental standards in new mining projects. This support would represent a much better economic and political deal for producing countries than is currently available, helping differentiate EU and US engagement from that of China and other competitors.

Establishing such win–win partnerships would earn partners' trust and long-term cooperation, increasing the EU and US's geopolitical clout and eventually proving more beneficial than a narrow focus on outdated concerns for security of supply. Such a cooperative offer would also help consolidate EU and US political and regulatory influence in new cleantech supply chains, increasing their economic resilience. It will also provide real economic incentives to accelerate partners' climate transitions and lock in support for higher climate ambition.

### **Tools already exist to build ambitious win–win partnerships**

The EU and US already have a large toolbox at their disposal to support partner countries. They can expand current infrastructure investment plans – such as the EU's Global Gateway and the Partnership for Global Infrastructure and Investment (PGII) – beyond the extraction of commodities like raw minerals to support downstream industries, such as manufacturing components for solar panels and batteries.

Such support can include technical assistance projects, plans to facilitate joint ventures and private investments, and support in aligning with concessional climate finance and export credit strategies. Trade policy can also support the addition of more local added value via rules of origin provisions.



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The EU and US can also support raising the social and environmental standards of mining to ensure projects increase the welfare of affected communities. Benefits can go beyond creating quality jobs to include access to energy, new skills, preservation of natural resources, and meaningful participation in decision making. To be truly transformative, efforts to set standards should go together with enhancing the traceability of minerals and leveraging new digital tools and solutions. It is key to engage not only miners but also downstream industries to adopt and uphold such standards, both at home and abroad.

### **Do not let short-term distractions get in the way**

Unfortunately, tensions caused by the requirements to source or process minerals domestically in the Inflation Reduction Act (IRA) have distracted both partners from this larger international agenda. The IRA's requirements have caused an outsized political stir. Despite both sides' commitment to finding a solution, the political window has remained small.

Both partners are exploring a bilateral agreement on CRMs to fully exempt EU EV exporters from the IRA's requirement to source or process minerals within the US. Beyond this circumvention, the EU–US CRM Agreement may end up being rather meaningless. There is no realistic scenario in which actual trade in raw or processed minerals across the Atlantic becomes relevant. There are potential barriers to trade in services in the mining and processing industries, but these are not on the agenda.

Nonetheless, there may be openings to deliver a better agreement. The EU's negotiating mandate would accommodate an agreement on higher levels of environmental and social protection in mining projects, cooperation with third countries to diversify supply chains, and key standards related to traceability and circularity.<sup>9</sup>

What is lacking is a clear political mandate to prioritise a joint EU–US engagement with third countries. The next Trade and Technology Council (TTC) meeting could deliver such impetus, while the Minerals Security Partnership, the EU's proposed CRM Club, or existing platforms on energy cooperation like the JETPs could serve as platforms for such engagement.

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<sup>9</sup> Council of the EU, 20 July 2023, **Trade with the United States: Council authorises negotiations on EU–US Critical Minerals Agreements**





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## Leading the next phase of the cleantech revolution

### **The EU and US are playing catch-up in the cleantech race**

This year has been marked by efforts in both the US and EU to win the global cleantech race. Between the US's Inflation Reduction Act (IRA) and the EU's Green Deal Industrial Plan, there is increasing competitive tension between the partners and their diverging approaches. In a bid to manage this tension and ensure tangible outcomes on climate and trade, the two launched the Transatlantic Initiative on Sustainable Trade (TIST) work program to promote the creation of an integrated cleantech marketplace across the Atlantic.

EU and US manufacturers in well-established industries like solar are struggling to play catch-up with Chinese producers. Shared transatlantic standards in these sectors may give EU and US firms a slight competitive edge but will not be enough to dislodge well-established supply chains. These efforts could be more effective in other heavily traded sectors like batteries or electric vehicles. The development of shared standards for EV charging stations under the TTC marks a good start of this workstream.

### **They should focus on winning the next phase**

What is crucially lacking is a shared plan to lead the next phase of the cleantech revolution. The IEA's Net Zero Roadmap estimates that 35% of the technology needed to deliver net zero by 2050 is still under development.<sup>10</sup> The US and EU account for nearly 50% of global research and innovation funding and yet they find themselves challenged by China's leadership in 37 out of 44 critical technologies, including the 8 most mature clean technologies.<sup>11</sup>

Despite mutual investment in research and development in clean technologies, a lack of transatlantic cooperation is undermining the speed of development and uptake of new technologies. The ability of the EU and US to make scientific and research breakthroughs will play a crucial role in gaining a first-mover advantage in the world's most critical clean technologies, many of which are still in their early emergence stage.<sup>12</sup> They must "develop and manufacture the technology that will be the foundation of tomorrow's economy".<sup>13</sup> This will require greater and deeper collaboration between these research powerhouses.

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<sup>10</sup> IEA, September 2023, **Net Zero Roadmap: A Global Pathway to Keep the 1.5 degrees Goal in Reach**

<sup>11</sup> Australian Strategic Policy Institute, March 2023, **ASPI's Critical Technology Tracker**

<sup>12</sup> Victor, D.G, Geels, F.W., Sharpe S, 2019, **Accelerating the Low Carbon Transition: The Case for Stronger, More Targeted and Coordinated International Action**

<sup>13</sup> Ursula von der Leyen, 17 January 2023, **Special Address at the World Economic Forum**



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### **The investment and opportunities are already there**

The EU and US are already preferential partners for clean technology innovation, facilitated by the EU–US Agreement on Scientific and Technological Cooperation, renewed in October 2023.<sup>14</sup> According to the European Commission, the US is the top non-EU participant in Horizon Europe, the EU’s research and innovation framework.<sup>15</sup> Investors are also increasingly engaging in transatlantic cleantech deals, with US investors participating in twice as many EU deals in 2022 as in 2017.<sup>16</sup> The size of these deals has also increased ten-fold.

The flow of private investments into cleantech sectors will continue to accelerate. The world is on track to invest a record \$1.8 trillion in clean energy in 2023.<sup>17</sup> Combining the IRA, the CHIPS Act and the Infrastructure Investment and Jobs Act, the US has the world’s largest clean technology investment package. Across these three packages, the Biden administration’s proposed 2024 budget allocates \$11 billion for clean energy R&D.<sup>18</sup>

The EU’s response to the IRA, the Net Zero Industry Act (NZIA), is still progressing through the legislative process. It will include scaling up of support for R&D in strategic net zero technologies in the EU. This effort will be funded largely by Horizon Europe, which encompasses nearly €100 billion in R&D funding 2021 to 2027, including €40 billion in research and innovation for the European Green Deal.<sup>19</sup>

### **Making R&D cooperation a priority**

Despite interest and investment, cooperation on R&D projects continues to present challenges, including administrative barriers, regulatory complexity, and policy divergences. US partners have often pointed to inadequate funding, access conditions, operational differences, and legal hurdles such as

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<sup>14</sup> Council Decision (EU) 2023/2073, 25 September 2023, **Concerning the Extension of the Agreement for Scientific and Technological Cooperation between the European Community and the Government of the United States of America.**

<sup>15</sup> 162 of Horizon Europe Projects involve one or several US-based participants, totalling 196 US participants in all. Science Business, October 2022, **US and EU officials agree to boost R&D ties in cancer, climate, aviation.**

<sup>16</sup> CleanTech Group, June 2023, **Moving Towards a Green Transatlantic Marketplace**

<sup>17</sup> IEA, September 2023, **Net Zero Roadmap: A Global Pathway to Keep the 1.5 degrees Goal in Reach**

<sup>18</sup> Tobin, W., August 2023, **The IRA supercharged US R&D. But does it go far enough?**

<sup>19</sup> European Commission, March 2023, **Research & Innovation to Support Net-Zero Industrial Technologies.**



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disadvantageous IP rules as reasons for their lack of participation in EU research and innovation programs.<sup>20</sup>

In their joint statement following the EU–US Summit, Biden and Von der Leyen recognised “the importance of expanding research collaboration” for critical and emerging clean technologies such as renewable energy.<sup>21</sup> However, the TIST work program is lacking a focus on cooperation to promote the emergence of new technologies. Efforts to improve R&D collaboration and cooperation would accelerate the emergence of new technologies and consolidate the benefits of a green transatlantic marketplace.

For example, although much of the technology needed to decarbonise steel production is still in the early emergence phase, bilateral discussions under the GSA have not included a focus on sharing lessons or cooperating on fast-tracking deployment and scaling up R&D cooperation. Low-emissions virgin steel demonstration projects lack support and innovative near-zero emission technologies face low levels of industrial maturity. Moreover, there is a need to develop forward-looking clean technologies, including those necessary to promote circularity of steel products, such as advanced recycling and waste collection technologies.

Similarly, the EU and US have both acknowledged that CRM supply chains are an R&D priority for promoting the circular economy. Common R&D projects that enhance the material efficiency of cleantech or develop substitutes to critical minerals should be prioritized under the CRM bilateral agreement.

### **Making R&D part of the green transatlantic marketplace**

Even amid policy differences, the US and EU can take proactive steps to make transatlantic cooperation in cleantech research and development easier.

To address and eliminate the barriers that researchers face in cooperating with transatlantic partners, the active participation of cleantech innovators in policy discussions is essential. This can be arranged through structured and regular exchanges between policymakers and researchers.

Implementing joint education programs, conferences, and researcher exchanges can enhance collaboration and knowledge sharing. The transatlantic exchange of

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<sup>20</sup> Ziegler, O. & Meyer, G., April 2021, **EU-U.S. Research and Innovation Cooperation – A Window of Opportunity**.

<sup>21</sup> European Union and United States, 20 October 2023, **U.S.-EU Summit Joint Statement**.



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talent can be supported through visa exchanges and reciprocal access to funding mechanisms to provide financial support for collaborative research projects across borders. Both regions identified enabling transatlantic research funding activities as a priority to “allow for both US and EU researcher leadership” in the joint statement following their late October summit.<sup>22</sup>

Establishing joint research programs through public–private partnerships and common research agendas would allow streamlining of collaboration efforts. In sectors like steel, developing shared methodologies, such as those for calculating embodied greenhouse gas emissions, would encourage the compatibility of approaches.

Finally, it is critical that the EU and US develop their technologies in an inclusive way and emphasise technology flows to developing countries. The EU and US take part in several international initiatives on research and innovation in the steel sector, including Mission Innovation’s Net Zero Industries Mission, IEA’s Industrial Energy-related Technology and Systems TCP, and the Global Low-Carbon Metallurgical Innovation Alliance. The TIST should help coordinate EU and US efforts under these initiatives to maximise their impact.

## About E3G

E3G is an independent climate change think tank with a global outlook. We work on the frontier of the climate landscape, tackling the barriers and advancing the solutions to a safe climate. Our goal is to translate climate politics, economics and policies into action.

E3G builds broad-based coalitions to deliver a safe climate, working closely with like-minded partners in government, politics, civil society, science, the media, public interest foundations and elsewhere to leverage change.

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<sup>22</sup> European Union and United States, 20 October 2023, **U.S.-EU Summit Joint Statement**.