

Joint Master in EU Trade and Climate Diplomacy

The Green Diplomacy of the EU: The Impact of the European Green Deal on External Relations: The Cases of the US and China

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Thesis Pitch

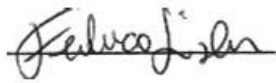
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26.06.2025

A handwritten signature in dark ink, appearing to read 'Federico Gislón', written over a horizontal line.

Federico Gislón

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Abstract

This thesis investigates how the European Green Deal (EGD) – the EU's roadmap to climate neutrality by 2050 – reconfigures the Union's external actorness and shapes its role within global governance, with specific regard to China and the United States. Based on a qualitative, comparative case-study approach, Chapter 1 untangles the EGD's principal instruments (ETS, CBAM, renewable-energy and circular-economy directives, biodiversity and mobility strategies, just-transition and green-finance mechanisms). Chapter 2 explores China's domestic framing, green-technology cooperation plans, and regulatory tensions around CBAM. Chapter 3 addresses EU–US cooperation under Biden, tensions generated by the Inflation Reduction Act, and risks from potential policy reversals under a second Trump administration. The findings demonstrate the EGD's dual role as a normative benchmark—exporting EU standards via the "Brussels Effect"—and as a geoeconomic instrument, while highlighting pushback when perceived as protectionist. The thesis argues that the EGD is an effective yet disputed external instrument whose success depends on diplomatic agility, policy coherence, and inclusive multilateralism. Avenues for future research include following climate-security relations, China's green investments in the Global South, and EU climate diplomacy amid different US administrations.

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Introduction

The European Green Deal (EGD) is the most visionary and revolutionary climate and sustainability policy the European Union has ever launched. In December 2019, the European Commission under the leadership of President Ursula von der Leyen introduced it, and its goal is to make the EU climate-neutral by 2050 with a holistic roadmap to transform the economy, protect the environment, and minimize social disparities. But, as much an internal guide for green transformation, the EGD is rapidly emerging as the EU's outward action and international identity foundation. It redefines the foreign policy of the Union by promoting climate leadership and incorporating sustainability across trade, development, and diplomacy.

In principle, the Green Deal aims to make the EU economy greener by ratcheting up ambition in the Fit for 55 package, Carbon Border Adjustment Mechanism (CBAM), Renewable Energy Directive (RED III), and the European Climate Law. All these tools aim to right internal market balances, stimulate investment transitions, and drive system change in energy, industry, agriculture, and transport. But these steps also have tremendous implications for extraEU players, as they are taking EU standards beyond its geographical borders through so-called "Brussels Effect," forcing trade partners to align or be excluded from the EU market (European Economic and Social Committee, 2021).

The shifting geopolitical landscape, with its features of global warming, intensifying climate disasters, competing over resources, and shifting power bases, situates the EGD beyond a mere environmental policy, it is a foreign policy tool. As such, this thesis asks how the EGD reshapes the EU's actorness internationally, in particular focusing on two major actors: the United States and China. These countries are not only some of the world's biggest greenhouse gas producers and global economic powers, but also different models of the state and responses to the climate emergency.

The US with Biden re-entered the Paris Agreement and passed the Inflation Reduction Act (IRA), emphasizing gargantuan subsidies for clean technology and home production. This meant new avenues of transatlantic cooperation but also tensions over fair competition. Meanwhile, a second Trump administration could reverse these gains,

falling back into climate denialism, fossil fuel production, and protectionist industrial policy. China, on the other hand, has a state-capitalist approach, significantly investing in clean energy and controlling the world supply chain of green technologies. But it has also resisted tools like CBAM and is suspicious of what it perceives as European attempts to impose itself on its trade sovereignty (Chair, 2025).

This thesis responds to the central research question: How does the European Green Deal reshape the external relations of the EU and enhance its influence on global governance, especially in its strategic relationships with China and the United States? It further responds to three sub-questions:

1. Is the EU Green Deal external action an effective mechanism for advancing global governance?
2. How does the EU Green Deal seem to China and how does China respond to it?
3. How is the US viewing and responding to the EU Green Deal?

Through analysis of EU mechanisms of foreign policy, regulatory tools, and diplomatic practice, this study aims to determine if the Green Deal is instigating cooperation, inducing conflict, or reshaping the balance of international environmental governance.

After this general Introduction, the thesis sets out its Methodology, following it addresses influential controversies in the Literature Review. Chapter 1: Decoding Policies for Climate Neutrality and Global Leadership analyses the intranational architecture of the Green Deal in seven thematic fields. Chapter 2: EU–China Relations in the Framework of the European Green Deal examines Beijing's intranational framing and cooperation strategy. Chapter 3: EU–US Relations in the Context of the European Green Deal discusses Washington reactions, ranging from Biden subsidies to renewed Trump-style threats. A General Conclusion looks back at the main and sub-questions and makes use of the Annexes developing Chapter 1's policy analysis.

Methodology

In order to address these questions, this thesis adopts a qualitative comparative case study strategy for the EU's climate diplomacy with the United States and China. A comparative case study analysis is a qualitative method used in examining similarities and dissimilarities between cases; specifically in this thesis, it is applied to examine how China and the United States respond and engage with the European Green Deal. The two cases were selected not merely due to their world emissions trend but also due to the fact that they are different economic systems, regulatory cultures, and strategic interests compared to the EU. The comparison allows one to comprehend in detail how the EGD engages with external partners through diverse governance models and geopolitical constellations (Bartlett and Vavrus, 2017).

The core research methodology involves document and discourse analysis. The document analysis constitutes official EU legislation and strategic communications, and some of the key texts like the CBAM Regulation (EU 2023/956), European Climate Law, Fit for 55 package, Green Deal Industrial Plan, and Critical Raw Materials Act. It also includes external United States policy statements (e.g., Inflation Reduction Act, CHIPS Act, Transatlantic Green Agenda) and China (e.g., 14th Five-Year Plan, China's NDCs under the Paris Agreement, Belt and Road Green Development Plan).

Discourse analysis is applied to evaluate the political framing, narratives, and rhetoric used by key actors in framing the EGD and its external dimensions. These include statements by EU leaders (e.g. Ursula von der Leyen, Frans Timmermans), US leaders (e.g. John Kerry, Gina Raimondo), and Chinese leaders (e.g. Xi Jinping, Ministry of Ecology and Environment). The focus is on how climate leadership, sovereignty, competition, and cooperation are being framed in different institutional spaces, including UNFCCC COP talks, bilateral summits, and multilateral settings.

The analytical framework combines three building blocks of fundamental theory:

- Regulatory Power Europe: quantifying the extent of EU law and standards' influence on global governance through extraterritorial implications.
- Strategic Autonomy: weighing the EU's capacity to act unilaterally in the geopolitics of energy, trade, and industrial policy.

- Geoeconomic Rivalry: investigating the overlap between climate policy and industrial policy with global competition in supply chains, markets, and resources.

Limitations are the rapidly changing character of global events (e.g. Russian conflict in Ukraine, conflict intensification in the Middle East, and US election results) as well as not having access to elite interviews or confidential policy documents. Nonetheless, the methodology is a solid foundation for following policy pathways, framing narratives, and international alignment vis-a-vis the EGD.

Literature review

Introduction

The European Union's most ambitious climate plan framework, the European Green Deal (EGD), aims to make the EU the first carbon-neutral continent by 2050. However, its actions affect international trade, energy security, and most importantly, international relations, both inside and outside the EU borders (European Commission , 2019). This Literature Review examines the foreign implications of the EGD with a particular focus on the US and China, two of the world's largest economies and key players in global climate governance.

The main sources of information for the literature review included a range of scholarly publications and official websites. By combining different sources and drawing links between the results, it develops a theoretical framework that makes it easier to comprehend what is currently known about the external consequences of the European Green Deal. It also identifies research gaps that this study seeks to address.

The reviewed literature delves into various interrelated issues. First, it looks at the EU's green diplomacy, namely how the EGD incorporates sustainability into its foreign policy, trade agreements, and development aid. Scholars emphasise the importance of climate diplomacy as a strategic instrument for defining the EU's interaction with both industrialized and poor countries. Second, research on EU-US relations investigates how the Biden administration's Inflation Reduction Act (IRA) coincides with or contradicts the EGD, notably in terms of green subsidies and carbon pricing. Studies also analysed how Trump's return may undermine transatlantic climate cooperation.

Thirdly, studies on the relationship between the EU and China concentrate on the cooperative and competitive aspects of their climate policies, specifically with regard to supply chains for green technologies, trade disputes over the Carbon Border Adjustment Mechanism (CBAM), and the geopolitical implications of China's hegemony in vital raw materials.

The research on international responses to the EGD also looks at how third countries, especially emerging economies, react to EU trade and climate policy. This paper offers a

thorough grasp of how the EGD shapes the future of global climate governance by serving as both an environmental commitment and a geopolitical tool by examining these viewpoints.

The EU Green Deal as a Foreign Policy Instrument

Climate change has a significant influence on both national and global economies. It may lead to disruptions and real consequences from climate-related threats. In order to mitigate these risks, a shift to a greener economy is required. This shift would entail both economic risks - the loss of thousands of jobs and potential competitiveness loss - and opportunities, the development of new sustainable industries and an increase in global competitiveness. Countries do, in fact, employ sectoral strategies to obtain a competitive advantage while adhering to the globally acknowledged objectives of the Paris Agreement. The European Green Deal, for instance, was developed by the European Union as a strategy to advance strategically beforehand and start to benefit ahead of time (Romanian Journal of European Affairs (RJEa) and Munteanu, 2024, pp.87–107).

Firstly, the European Green Deal (EGD) should be framed as a rhetorical framework rather than just an EU plan for climate action. It provides tools and mechanisms to enhance EU political and economic dominance worldwide. Here are the listed policies stated in the EGD:

- Carbon Border Adjustment Mechanism (CBAM), designed to impose a carbon tax on imports coming from third countries which impose lower environmental standards. Initially it targets carbon-intensive industries such as steel, aluminium, cement, fertilizers, and electricity. It is perceived as a protectionist measure by many countries (taxation-customs.ec.europa.eu, 2021).
- The Fit for 55 Package created a set of legislative proposals which aim at lowering emissions by 55% by 2030, including renewable energy targets, modifying the Emission Trading System, energy taxation, altering the global energy trade by lowering EU reliance on fossil fuels (European Economic and Social Committee, 2021).

- Renewable Energy Directive (RED III) encourages green hydrogen and raises the EU's binding renewable energy objective to 42.5% by 2030, expanding the global market for renewables (Parliament, 2025).
- European Climate Law legally binds the EU to meet to net-zero target by 2050, enhancing the EU's climate diplomacy and increases its legitimacy in global discussions (European Commission, 2024).
- Circular Economy Action Plan (CEAP) aims at minimizing waste and encourage environmentally friendly product design, with an emphasis on electronics, textiles, and plastics (European Commission, 2023a).
- Sustainable Finance Strategy establishes green taxonomy regulations for financial markets and focuses EU financing on sustainable enterprises, forcing multinational corporations to comply with EU green investment rules and reveal their carbon footprints (European Commission, 2021).
- Farm to Fork Strategy reduces greenhouse gas emissions from agriculture, fertilizers, and pesticides in an effort to make EU food systems more sustainable (European Commission, 2020).

However, the EGD is not only an internal sustainability plan but also establishes tools and instruments which enhance the regulatory and economic authority in the international sphere. Indeed, trade agreements, investment programmes and climate diplomacy strengthen the European Union's position worldwide by externalising its climate policies through leveraging diplomatic and financial channels. These current diplomatic changes are demonstrated by the Council Conclusions on Climate Diplomacy and the European Climate Diplomacy Action Plan. Consequently, global supply chains are impacted by the EU's ability to employ regulatory standards as a kind of economic leverage due to the EGD, this impacts are interlinked with policies such as the Carbon Border Adjustment Mechanism (CBAM).

Moreover, as a consequence of the Russian invasion of Ukraine, the three primary goals of the EGD -decreasing reliance on fossil fuels, securing access to essential raw commodities and establishing alliances for sustainable energy with third nations – have become pivotal to accomplishing EU energy security. Accordingly, Council Conclusions on Climate and Energy Diplomacy (2023) emphasized the need to bolster EU embassies

and delegations for climate diplomacy, while extending collaborations on climate security with nations that rely on fossil fuels.

Additionally, Climate Security has been incorporated into the 2016 Global Strategy for EU Foreign and Security Policy (EUGS) while being eventually formalised as a crisis management and peacebuilding strategy in 2021 with the EU Concept on Climate Change and Security.

According to the European Union, the EU climate diplomacy currently includes human rights concerns. Indeed, water, food, shelter and climate displacement are linked in the EU Action Plan on Human Rights and Democracy (2020–2024) which frames them as Human Rights concerns. Hence, the EU aims to reduce emissions worldwide while tackling poverty, through different accords such as the EU-Africa Initiative. However, critics highlight that the EGD could enhance global inequality worldwide through the externalisation of costs for the Global South while restricting the abundant source countries sovereignty through the imposition of investment terms and trade agreements.

Lastly, leading UNFCCC (United Nations Framework Convention on Climate Change) discussions, the EU establishes international climate standards and provides funding for climate action in developing countries, highlighting the importance of multilateralism in tackling climate change (Honkonen, 2024).

In general, the EGR should be seen as a plan that strengthens the EU's worldwide position, particularly with regard to climate priority. A developed strategic autonomy, diplomatic involvement, and financial support should all be used to achieve this objective. The EU uses a variety of strategies in its foreign operations, including financial assistance and diplomatic pressure. Additionally, in order to establish deeper commitments on climate initiatives, the EU seeks to fill primary responsibilities in global events like COP summits. There are still issues, though, since powerful international players like China, India, and the OPEC+ nations frequently oppose bold policies because of worries about energy and economic security. Although the EGD raises the EU's profile internationally in the field of climate policy, internal conflicts, geopolitical rivalries, and opposition from powerful nations like the US and China restrict its efficacy (Tkachuk, 2024).

Moreover, the EGD can be examined via colonial and neo-colonial rhetorics, which results in a general perception of the Deal as strengthening international inequality while defending European interests, creating an overall framework of criticism towards the EGD .

According to this view, climate change is also framed as an economic opportunity. Indeed, the EGD enables European financial markets and businesses to benefit from the green transition, while the Neoliberal approaches to sustainability are reinforced by the European Green Deal Investment Plan (EGDIP), which promotes private capital investment in green projects.

Moreover, the EGD shapes the EU as a moral actor in the international sphere of green policies. The usage of the Carbon Border Adjustment Mechanism (CBAM) is employed as a means of pressuring non-EU governments to embrace comparable climate rules, which disadvantages less economically developed countries and strengthens economic inequalities.

Another tool which faces Eurocentric criticism is the Green Taxonomy Regulation, which determines what should be framed as “sustainable” while prioritizing European financial interests. Finally, it is argued that the EGD secures access to natural resources through Trade Agreements and resource extraction policies, maintaining developing countries in a condition of subordination. As a consequence, many critics of the Plan argue that by externalizing economic and environmental costs on non-European nations, the EGD perpetuates current global disparities despite its promises to support an equitable transition (Vela Almeida et al., 2023).

The EU-US-China Relationship: Green Cooperation and Tensions

To analyse specifically the singular relations between the EU-US and EU-China in the context of the Green Deal, it is necessary to evaluate the effectiveness of existing domestic and international policies tackling climate change while pointing out the gaps in policy processes, economic ramifications, and carbon reduction pledges.

The Paris Agreement is the main cornerstone in the context of multilateral agreement addressing climate change, its main objective is to "limit the temperature increase to 1.5°C above pre-industrial levels" and keep "the increase in the global average temperature to well below 2°C above pre-industrial levels" (UNFCCC, 2015). However, the 165 signatory parties as of September 17, 2021, went through a revision of their voluntary National Determined Contribution (NDCs) leading to a shift of temperature between 2.1-2.9 C° predicted by 2100 according to the United Nations Climate Change Annual Report of 2021; surpassing by far the initial target set by the Paris Agreement.

While in Canada, US, UK and the EU might reduce by 30% the electricity and energyintensive trade-exposed (EITE) industries (Romanian Journal of European Affairs (RJEa) and Munteanu, 2024, pp.87–107), other Asian counterparts such as India, China and Japan are expected to reduce between just 5-15% (IMF Working Paper, Asia and Pacific Department, 2022).

Moreover, the EU has developed a system of carbon pricing like cap-and-trade systems, emissions taxation, and border adjustments. This general policy raises revenue aiming at re-investing in subsidising sectors which lead to social transition and greener economy. According to the world Bank, as of March 1, 2024, 73 carbon pricing initiatives were in effect across 39 jurisdictions, covering 11.66 GtCO₂e (Agnolucci et al., 2023).

Additionally, another major issue is the creation of sustainable supply chains, which implicates in the relations with third countries for what regards foreign trade and industrial policies. A general trend of de-globalisation and the relocation of production with like-minded and politically stable countries -through offshoring, nearshoring, and friend-shoring- is enhancing geopolitical fragmentation worldwide. This tendency is most noticeable in the US-China relationship, as the US began to safeguard its own manufacturing while lowering its reliance on China.

There are various viewpoints regarding the theoretical framework of supply chains, but the main ones include Thomas Friedman's Dell Theory of Conflict Prevention, which contends that supply chains economically connect nations, reducing the likelihood of conflict (Thory, 2012), and Michael Porter's Competitive Advantage Theory, which asserts that global supply chains boost efficiency and competitiveness (Stonehouse and

Snowdon, 2007). This idea is called into question by recent geopolitical shifts, though, as countries that anticipate conflict occasionally cut off supplies before fighting begins.

The primary shortcoming of the Paris Agreement is that it permits a customized strategy to decarbonization, which may result in geoeconomic disintegration. Additionally, one of the primary issues is that capital and technological resources may simply flow more to established economies, widening the gap between developed and poor countries and generating questions about a fair and equitable transition (International Energy Agency, 2023). The interaction between industrial and competition policies may also be a cause of conflict; the former encourages supply chain security and market stability, while the latter forbids anti-libertarian actions like monopolistic behaviour and state assistance (United Nations, 2023).

Moreover, the rivalry that results from the need to acquire essential raw materials for the transition is another important issue to address. Consequently, the US, China, and the EU are constantly working to draw in clean technology investments in addition to these needs. In fact, as a response to the US Inflation Reduction Act and CHIPS Act, it is evident from the EU Critical Raw Materials Act (2023) that the EU wants to lessen its need on imported vital technologies, particularly those originating from China (European Commission, 2023b). The failure of the EU-US negotiations on the Global Arrangement on Sustainable Steel and Aluminium (GASSA), which would have created a joint tariff zone of nations imposing import duties on steel and aluminium from "nonmarket economies" like China, is another indication of the conflict at play here. EU concerns about US compliance with international trade norms are partly to blame for this failure (Jain et al., 2024). One way to summarize the US-EU relationship in the green transition is that both countries want to be at the forefront of the industry, but they do so in very different ways. The US favors a subsidized strategy, while the EU advocates for a regulatory framework instead of direct market intervention. These two disparate and occasionally incompatible approaches may intensify tensions and perhaps split the market (Machin, 2025).

Lastly, the primary inconsistency between the pledges made by nations at the Paris Agreement and their financial support for the fossil fuel sector surpassed \$7 trillion

worldwide in 2022; in particular, the European Union provided up to €60 billion in 2023, despite pledges to implement green policies (Black et al., 2023).

It is plausible to argue that the United States and China together are responsible for over half of the world's carbon emissions; as a result, the EU must establish and preserve climate diplomacy with them (Wu et al., 2022). It is feasible to list the three distinct patterns that the US, China, and EU established in their approaches to turn carbon neutral. While the US places a higher priority on market-driven viewpoints and subsidies, the EU emphasizes a more regulative approach, while China, on the other hand, places greater emphasis on central economic planning and direct state-led investments (Evro, Babalola Aisosa Oni and Olusegun Stanley Tomomewo, 2024).

Hence, we can observe the distinctions between China's top-down method and the US's bottom-up approach, which also relies on private sector involvement. Both parties have geopolitical and economic power, which has a direct impact on global climate governance and, consequently, on EU climate diplomacy (Wu et al., 2022).

The development of carbon capture and storage technology and the shift to renewable energy sources are two elements that all three players have in common, but the extent to which these cutting-edge technologies may be expanded may vary depending on political, financial, and infrastructure limitations. Indeed, while the EU enforces greater rules both domestically and abroad, the US and China generally seek to transform their respective industries (Evro, Babalola Aisosa Oni and Olusegun Stanley Tomomewo, 2024).

The EGD extends much beyond its own borders by influencing supply chains, political alignments and worldwide markets. Its external dimension is outlined by diverse key strategies such as:

- Climate objectives are included in foreign relations with third countries, this includes trade agreements and access to EU's market. A concrete example can be found in the ongoing MERCOSUR agreement;
- There is an emphasis on regulatory power, through the Carbon Border Adjustment Mechanism (CBAM) the EU influences Countries outside the EU to comply with European sustainability standard, reinforcing the concept of the

“Brussels effect” and inspire others to do the same;

- Investments are directed towards energy infrastructures and green technologies;
- Global supply chains are influenced by the critical raw material act, especially in resource-rich nations (Smol, 2022).

There are areas of cooperation and areas of tension in US-EU relations. There is the EU-US Transatlantic Green Agenda that supports cooperation in carbon pricing, reductions of emissions, and green technology efforts. There is also promotion of strategic autonomy through cooperative action in green technologies and supply chain resilience for strategic minerals. At the same time, the Inflation Reduction Act (IRA), on the one hand, manipulates the market and strains relationships by providing subsidies to American companies. Furthermore, the transatlantic cooperation would be derailed by the CBAM that could expose extra taxation for US imports.

In the same way, the EU perceives China as both a key partner and competition in the realm of the green transition. The EU-China High-Level Environment and Climate Dialogue is one of several discussions on climate action that the EU and China have participated in.

In the cooperative areas we see how both parties cooperate for the development of green-technology innovation with a string emphasis on solar panel production and battery supply chain from the Chinese counterparts. Moreover, for what regard the multilateral realm there is a collaboration in setting and advocating ambitious emission reductions targets especially during the Paris Agreement (Wu et al., 2022). However, considering that China's output is mostly dependent on fossil fuels and carbon-intensive sectors, it is feasible to argue that the Carbon Border Adjustment Mechanism (CBAM) threatens Chinese production. In response, Chinese firms stepped up their own decarbonization efforts to be competitive, demonstrating to third nations the efficacy of EU measures. However, this move would exacerbate tensions and cause China to view EU rules as trade restrictions on their goods, which would ultimately result in conflicts over green industrial policy (Machin, 2025).

Broader Global Implications of the EGD

Moreover, for what regards other countries, many concerns have been raised by different actors. First, initiatives like the EU's Deforestation Regulation and the Carbon Border Adjustment Mechanism are being criticized by developing nations. These policies are typically seen as "green protectionism" and "carbon colonialism" in the Global South. Tensions between developing nations and the EU are further exacerbated by the fact that resource exporting nations, who are primarily from Latin America and Africa, find it extremely difficult to adapt their extraction and production practices to EU standards. Lastly, the issue with Russia must also be mentioned. The EU began diversifying its energy sources in an effort to move away from fossil fuels in February 2022 after the invasion of Ukraine, which exacerbated geopolitical tensions.

Summing up, there are key external implications of the EGD:

- By using tools like the Carbon Border Adjustment Mechanism (CBAM) and Green Diplomacy Network, the EU seeks to bring third nations into line with its regulatory authority, also through its market size, and influence (Vela Almeida et al., 2023);
- Although the Transatlantic Green Agenda under the Biden administration improved US-EU relations, IRA subsidies exacerbated tensions by favouring local US businesses (Wu et al., 2022). Furthermore, several studies believe that the Trump administration might potentially destabilize the long-term, sustainable relationship between the US and the EU (Zettelmeyer et al., 2025).
- China and the EU work together on clean technology and climate governance, but there are conflicts on trade protectionism, essential raw commodities, and CBAM. The EU's market-based regulatory strategy is put to the test by China's state-driven green revolution, which might cause geoeconomic fragmentation (Wu et al., 2022).
- For emerging economies, in particular the case of African and South-Asian but also Latin American countries, the EGD is perceived as a form of modern neocolonisation and green-protectionism, which could limit their potential economic growth (Buzogány, Parks and Torney, 2025).

Either by pushing other nations to adopt EU standards in order to ensure market access or by serving as a model of sustainable policy-making, the European Green Deal (EGD) is a successful instrument of exerting influence at the global level, as seen through the "Brussels Effect." By pushing other international actors to adhere to its sustainability agenda, the EU reinforces its global stature through the EGD.

The EGD offers a theoretical foundation for increasing the EU's global influence, but its implementation is essential to its success. Applying its policies strategically and with precision is essential to avoiding opposition from international partners. Without proper implementation, the EGD runs the risk of being seen as a neo-colonial or protectionist project that serves the interests of the EU at the expense of true global sustainability.

Differentiated interaction with diverse global players is also required. To avoid being perceived as placing unjust climate obligations on emerging nations, the EU must approach them with adaptable, cooperative procedures. However, maintaining a significant worldwide influence on climate action still depends on cooperation with the US and China. The success of global decarbonization is largely determined by these two economic heavyweights, therefore their collaboration is crucial to accomplishing the EGD's more general objectives.

Ultimately, the EGD's long-term success will depend on how the outside world views it, even while it establishes the framework for bolstering the EU's leadership in green diplomacy. Achieving broad international support and averting geopolitical conflicts require striking a balance between ambition and practicality.

Gaps in the Literature and Future Research Directions

Although the literature offers a solid basis for comprehending the European Green Deal's external action and its application as a geopolitical tool, there are still a lot of unanswered questions about how it affects US-China and US-US relations, especially in light of the current shifting global dynamics. More research is required to determine

how these two significant international entities will influence the future of the EU Green Deal given the rising uncertainty surrounding US climate action, which has been made worse by the second Trump administration, and China's changing trade strategy.

Concerning the first of the two, the United States, the majority of the extant research is tied to the previous Biden administration and its climate programs, such as the Inflation Reduction Act and the EU-US Transatlantic Green Partnership. However, it lacks an understanding of how the second Trump administration might significantly disrupt and transform EU-US ties, particularly in the area of sustainability. Indeed, my future study should focus on how the EU reacted to the United States' exit from the Paris Agreement and its return to fossil fuel growth, as well as the elimination of the previous administration's renewable energy subsidies.

Furthermore, CBAM might heighten tensions between the EU and the US, perhaps leading to punitive measures and outright rejection of European policies by the present American government. What other diplomatic or commercial approach could the EU pursue? Furthermore, if US oil and gas exports to Europe increase, how should the EU respond? Finally, if the US disengages from the EU on climate issues, should the EU enhance climate cooperation with China or other global actors as a counterbalance?

On the other hand, the literature extensively discusses EU-China collaboration, but it does not focus on China's response to CBAM, for which it is a main complainant, or the EGD's broader foreign trade policy. My future research should look at whether China would adjust to carbon pricing, given its interest in the EU market, or if it will seek and form other trade partnerships. Furthermore, China plays an important role in the export of crucial materials required for the green transition, such as lithium, rare earths, and solar panels. Could these crucial resources be used as leverage to resist EU restrictions, perhaps resulting in a "green trade war"?

Additionally, China's Belt and Road Initiative, which invests in the Global South, should be object of more study since it might be used to challenge the EU's leadership in green diplomacy.

Finally, these gaps reflect the uneven and unclear course that European green diplomacy is taking. US political volatility and Trump's potential retaliatory measures, together with China's probable reaction to the EGD's overall external action, result in a comprehensive comprehension and analysis of the European Green Deal's entire external framework. The research should help us understand whether the EU can successfully manage competitiveness and collaboration with the world's two largest economies while maintaining its ethical position as a global climate leader.

Chapter 1: Decoding Policies for Climate Neutrality and Global Influence

Its core policies, plans, strategies, and regulations of the EGD are examined cautiously in this chapter and their contributions to modifying the EU's industrial, diplomatic, and green environment. The Fit for 55 package, strengthening sectoral instruments like the Emissions Trading System (ETS II) and the Carbon Border Adjustment Mechanism (CBAM), supplements the European Climate Law (2021) with legally binding targets: net-zero greenhouse gases by 2050 and 55% reduction by 2030.

In programs like the Circular Economy Action Plan (CEAP), these policies intend to decarbonize transport, industry, energy, and agriculture while stimulating a circular economy.

The impact of EGD goes beyond internal transformation; it uses tools like the Global Gateway and CBAM to influence global sustainability and trade norms. Through its twin push of internal transformation and external projection, in spite of some issues, like trade wars with allies like the US and China, the EU emerges as a green diplomacy leader. To address climate action, clean energy, sustainable industry, biodiversity, and just transition, this chapter explores these processes and how policy is intertwined. It gives the basis of understanding the EGD's capacity to re-imagine the EU's role in a world that is fast evolving by deconstructing its complex architecture.

Climate Action & Emissions Reduction

This section will analyse the European Green Deal policies focusing on Climate action and Emission Reduction.

The European Union enacted the European Climate Law in July 2021, requiring the Union to commit to net-zero greenhouse gas (GHG) emissions by that year and to negative emissions beyond that year. The EU should restrict its reliance on carbon sinks and reduce its greenhouse gas emissions by at least 55% by 2030 as compared to 1990 levels. Member states are required to align their national policies with the EU climate targets, and the European Commission is tasked with developing a five-year progress report beginning in 2023. Furthermore, it must release decarbonization roadmaps for

important sectors while guaranteeing a reasonable and equitable transition for workers and regions that face the greatest challenges in adopting more sustainable practices.

Additionally, the European Scientific Advisory Board on Climate Change is made up of 15 independent scientists who support monitoring and evaluation by offering evidencebased recommendations on goals, regulations, and GHG budgets. In addition, the law mandates national resilience and adaptation plans to address climate hazards including heat waves and floods. The law also offers broad recommendations for effectively managing financial risk associated with climate change. Finally, in addition to being the initial step in aligning with the Paris Agreement, the European Climate Law also has to be updated following every UN global summit (Erbach, 2021).

This legislation's significance stems from the legally enforceable character of long-term policy planning, which enables governments, corporations, and investors to prepare for a more low-carbon economic system in the long run while simultaneously seeking to set the example worldwide.

While the European Climate Law lays out the broad principles and objectives for reducing greenhouse gas emissions, Fit for 55 offers the precise and tangible legislative instruments to turn those goals into reality by enshrining the aspirations in sectorspecific laws and updating current laws pertaining to the energy and climate sectors (Schlacke et al., 2022). More specifically the sector-specific amendments pertain:

- The EU Emissions Trading System (ETS)
- Effort Sharing Regulation (ESR)
- Land Use, Land-Use Change and Forestry (LULUCF)
- Renewable Energy Directive (RED)
- Energy Efficiency Directive (EED).

Particularly, Fit for 55 expanded the industries covered by the EU Emission Trading System (ETS), upgrading the ETS, launched in 2005, into ETS 2. With the 2027 release of the revised version, ETS 2 will additionally regulate buildings, road transportation, and small businesses. The new updated version will not replace the old one, rather, it must be presented as an addition to ETS 1. As a result, industries

including power, heavy industry, and aviation, which cover around 45% of the overall GHG emissions of the EU, will still be governed by the current laws.

Feature	ETS 1	ETS 2
Sectors Covered	Power, heavy industry, aviation	Buildings, road transport, small businesses
Feature	ETS 1	ETS 2
Emissions Coverage	45% of EU GHG emissions	Additional 25% of emissions
Price Range	€30 - €100 / tCO ₂	€71 - €261 / tCO ₂ by 2030
Annual Reduction	4.3% per year	5.1% per year from 2027

Another core element of the European Green Deal is the Carbon Border Adjustment Mechanism (CBAM)(*See Annex “Carbon Border Adjustment Mechanism (CBAM)” for further details*), introduced via regulation (EU) 2023/956, in 2023. CBAM is integrated in the Fit for 55 package, its main principle lies in expanding EU climate legislation beyond of its boundaries by binding imported commodities to a carbon price equal to the EU's Emissions Trading System (ETS). CBAM is a prime example of the “Brussels Effect” – the EU’s unilateral use of regulatory authority to influence the behaviour of international markets. It encourages other nations to change their emissions policies by using the EU's market size to enforce climate standards worldwide.

CBAM has directly impact on global trade dynamics by imposing a *de facto* carbon price on imports. Moreover, even though it is still harshly debated, CBAM has been found WTO-compatible based on statutory equality and non-discrimination. However, it may lead to trade retaliation or stimulate more environmentally friendly manufacturing and supply chains worldwide (Bevilacqua, 2024).

The Effort Sharing Regulation (ESR)(See Appendix “Effort Sharing Regulation” for further information) governs over 60% of EU emissions, particularly those not covered by the Emission Trading System, particularly sectors like road transport, buildings, agriculture, and waste. It can be considered a concrete example of internal policy coherence that makes possible for the EU to portray leadership and credibility externally. The ESR , EPR plays a major role in supporting a circular economy by ensuring that manufacturers are held accountable for the whole lifespan of their products, notably in terms of waste management and recycling.

Despite its domestic emphasis, the ESR offers a regulatory model for global climate governance through its open and legally enforceable climate governance framework. This architecture establishes a global standard for equitable climate action across many economies and strengthens the EU's normative authority. Furthermore, the diversified, rule-based framework of ESR offers a paradigm for federal or multinational collaboration, while contributing to the “Brussels Effect” demonstrating how organized climate regulation and governance may extend EU influence internationally. This effort is demonstrated through CBAM, connecting ESR integrity to trade (Hanoune, 2024).

Another milestone of the EU Green Deal is the policy principle of Extended Producer Responsibility (EPR), which aims to shift the environmental costs of products on the manufacturers.

Through guaranteeing that producers are held responsible for the whole lifespan of their products, with particular emphasis on waste management and recycling processes, the EPR principle advances the circular economy mechanisms under the European Green Deal.

Considered as a cornerstone for reaching climate neutrality by 2050, the EPR also influence via trade. Non-EU producers are seeking access to the EU market must abide by EU regulations regarding product responsibility and sustainability; enhancing the overall “Brussels Effect”.

The EPR model is promoted as a mechanism for establishing norms that might strengthen the EU's influence by assisting in the harmonization of international environmental standards and product laws (Pravin Kumar Mallick et al., 2024).

The role of the Land-Use, Land-Use Change and Forestry (LULUCF) sector is fundamental for the European Union's low-carbon emission strategies. The revised LULUCF Regulation (EU/2023/839) and Member States' Long-Term Strategies (LTSs) are aligned with the EU's ambitious 55% -compared to 1990 levels- decrease in GHG emission by 2030 target (*See Annex "Land Use, Land-Use Change and Forestry" for further details*).

This sector encompasses forests, croplands, grasslands, wetlands, and settlements through compulsory Member States targets, totalling up to 310 MtCO_{2e} of net removals by 2030, elevating the EU's 2030 GHG reduction objective from the original 55% aim to 57%.

The revised regulation allocates objectives based on 2016-2018 ability of an MS to improve carbon sinks through land-use changes or better management techniques, reflected in its managed land area and mitigation performance (Lallo et al., 2023).

The promotion of renewable energy through the Renewable Energy Directive (RED)(*See Annex "Renewable Energy Directive (RED III)" for a deeper analysis*), has the potential to come into conflict with the overall environmental protection goals. This internal environmental conflict is highly relevant for the European Green Deal framework, reflecting on the capacity of the EU to project its image as a green global leader.

Generally RED III strengthened the EU's pledge to achieve carbon neutrality by 2050 by increasing the regulatory renewable energy target to the whole of the European Union to 42.5% by 2030.

The internal implementation of this policy supports both energetic autonomy but also reduce geopolitical vulnerability, lowering the dependability from countries like Russia. These actions reinforce EU's leadership model globally by demonstrating workable, expandable decarbonization strategies (Onori et al., 2024).

A cornerstone of the 2050 climate neutrality goal created by the EU is the Energy Efficiency Directive (EED) – Directive (EU) 2023/1791 (*See Annex "Energy Efficiency Directive (EED)" for more details*). Through this measure, legally binding targets have

been introduced together with comprehensive measures with the aim of enhancing energy efficiency across the EU. This measure is integral to the European Green Deal and the REPowerEU. Energy efficiency shifted from being just a principle to an effective legal requirement.

The Directive generally mandates a 11,7% decrease in energy consumption by 2030, compared to the projections made in 2020, equivalent to limiting energy use at 763 million tonnes of oil equivalent (Mtoe) and primary energy consumption at 992.5 Mtoe by 2030 (European Commission, 2023b).

The EU aims to progressively decarbonise the aviation sector and, through the ReFuelEU Aviation Regulation (EU) 2023/2405, which mandates a gradual introduction of Sustainable Aviation Fuels (SAFs) into the European aviation fuel supply, strengthening the commitment to lowering the green houses gas emissions. The ReFuelEU regulation establishes a minimum share of SAF in the overall aviation fuel, starting with a 2% in 2025, proceeding with 6% by 2030 and 20% by 2035, while peaking at 2050 with an overall 70%. According to this regulation, sustainable aviation fuels consist of: synthetic aviation fuels created from renewable hydrogen and recovered carbon, advanced biofuels made from residues, biofuels created from oils and fats and from recycled carbon. Current research certifies for up to 50% of blend of SAFs which are compatible with current aircraft technology, while ongoing research aims at increasing their usage up to 100%.

Moreover, the stakeholders are obliged to ensure the availability of SAF while facilitating its access (European Commission, 2023c).

Clean Energy Transition

This section will concentrate on clean energy transition policies

The European Union's Hydrogen Strategy plays a crucial role in advancing EU's climate neutrality while positioning the EU as a global leader in the green field. The Strategy is composed by a stepwise renewable hydrogen deployment while being supported by a substantial financial investment in innovation and infrastructure. The

strategy started in 2024 with a deployment of 6 GW of electrolyser capacity, scaling up to at least 40 GW by 2030.

Moreover, hydrogen sub-classification and certification creates the background for potential global norms, aligning with the EU broader strategy of the “Brussels Effect”, aiming at exporting regulatory frameworks globally. Potentially, this developing sector could depict the EU as not only a standard-setting actor but also a more technological leader.

In the context of its foreign relations, the EU has the possibility to strengthen the relations with key partners like the US and China in sector such as R&D for clean tech. Therefore, by encouraging green coalitions, enhancing energy security, and increasing the EU's geopolitical role in the global energy transition, the EU's hydrogen agenda strengthens the Green Deal's external component (Vivanco-Martín and Iranzo, 2023).

Complementary, the Renovation Wave initiative launched in 2020 as part of the European Green Deal, has the objective of doubling the annual building renovation rate by 2030, targeting more than 35 million buildings. By doing so, the EU should address the roughly 40% of total energy usage which goes toward buildings, while also addressing around 36% of the total GHG emissions. Renovations reduce energy poverty by increasing energy efficiency, lowering emissions, and lowering energy expenses. The primary strategies include making sure there is enough money, encouraging the use of digital technology and renewable resources, and fortifying laws (European Commission, 2020c).

To accelerate the energy renovation in buildings in the EU building sectors, 5 pathways have been identified:

1. Institutionalization;
2. Clusterization;
3. Capitalization;
4. Digitalization;
5. Exploitation;

By addressing barriers such as a lack of coordination and stakeholders' fragmentation, these paths aim at fostering a structural change in the ecology of the building industry.

By doing so the EU may improve the Renovation Wave's efficacy and encourage innovation and stakeholder cooperation by combining these strategies (Lassandro et al., 2025).

Another milestone for the EU strategy in the Clean Energy Transition is the European Union's Offshore Renewable Energy Strategy adopted in 2020, to expand the ocean and offshore wind energy resources. The main objectives of the strategy are scaling up to 300 GW and 40 GW of offshore wind and ocean energy by 2050, while reaching at least 60 GW of offshore wind and 1 GW of ocean energy by 2030. This strategy is part of the fit for 55 package for 2030.

The main areas covered by the Offshore Renewable Energy Strategy are boosting research and innovation, strengthening regulatory frameworks, coordinating grid development, improving maritime spatial planning, and raising investment. Moreover, regional cooperation is enhanced in particular regions like North Sea, Baltic Sea, and Atlantic Ocean, emphasising the different sea basins with the final aim of optimizing resource utilization and infrastructure development (energy.ec.europa.eu, n.d.).

Moreover, the review underlines the importance of constant innovation in maritime spatial planning, grid connectivity, storage, and floating wind, requiring significant investments. This strategy creates the opportunity to participate in technological transfers and joint ventures with international partners, strengthening both the industrial and sustainable diplomacy.

Thus, this strategic vision supports the EU's goal of climate neutrality, as well as its initiatives to strengthen energy sovereignty and lessen reliance on imported fossil fuels, which are particularly pertinent in light of Russia's invasion of Ukraine (Lüth and Dogan Keles, 2024).

Sustainable Industry, Circular Economy & Green Innovation

This section will focus on industrial decarbonization and resource-efficiency strategies, while trying to analyse how green industrial standards affect global supply chains and EU competitiveness abroad.

European Union's Circular Economy Action Plan (CEAP), adopted in March 2020, is a pillar of the EGD overall strategy. Its primary goal is to decouple economic development from resource usage in order to turn the EU economy into a competitive, resource-efficient, and sustainable system.

The comprehensive framework of this plan promotes circular economy principles across the entire life cycle of products.

In 2023 the EU Commission revised the circular economy monitoring framework incorporating new metrics on resource productivity, consumption footprint, and material footprint to evaluate policy efficacy and pinpoint optimal practices. The CEAP includes 35 actions to be implemented by the EU Commission, of both legislative and nonlegislative nature (*See Annex “Circular Economy Action Plan (CEAP)” for deeper analysis*).

The new development addresses microplastics, boosts products repairation and regulated packaging and packaging waste (European Commission, 2020a).

Introduced in February 2023, the EU Industrial Strategy is fundamentally interlinked with the EGD. It has the scope of establishing Europe as a centre for industrial innovation and sustainable technologies in order to reach net-zero emissions by 2050. It enhances EU competitiveness of European net-zero companies vis-à-vis competition from both China and the US.

In line with the EGD's objective of making Europe the first continent to achieve climate neutrality, the Green Deal Industrial Plan (GDIP) establishes the EU as a pioneer in clean-tech innovation. By showcasing a proactive industrial policy, this enhances the EU's green diplomacy and may encourage or exert pressure on the US and China to improve their own net-zero plans (Im et al., 2024).

Another milestone for this section is the EU Batteries Regulation (Regulation (EU) 2023/1542), adopted on 12 July 2023. This regulation aims at ensuring that the batteries that enter the EU's market are sustainable throughout their whole life-cycle, from procurement and production to use, gathering, recycling, and reusing (European Commission, 2023a) (*See Annex “EU Batteries Regulation (2023/1542) for a more extensive analysis*).

Other policies such as the Ecodesign for Sustainable Products Regulation (ESPR), which establishes sustainability standards for almost all EU-sold goods, enhancing practices like green public procurement standards, prohibitions on the destruction of unsold items, and digital product passports all contribute to the global supply chain's circular economy and lessen its environmental effect (European Commission, n.d.). Additionally, the EU's Sustainable and Circular Textiles Strategy aims to improve textiles' resilience, recyclability, and durability by 2030 (European Commission, 2022a). These regulations are essential to the adoption of green innovation, the circular economy, and sustainable industry.

Agriculture, Biodiversity & Sustainable Food Systems

This section will focus on nature protection and food system strategies to emphasise how EU sustainable agriculture influences trade.

The EU Biodiversity Strategy 2030 (EU BDS) is central at combating biodiversity loss and restoring existing ecosystems, which makes it a fundamental pillar for the EGD (*See Annex “EU Biodiversity Strategy (EU BDS)” for more information*). It is structure in four main areas:

1. Protecting nature through legally mandates with at least 30% of EU land and sea areas, with 10% under strict protection. This strategy provides a blueprint for conservation frameworks to be used also with strategic partners such as Latin America and Africa.
2. Restoring nature through legally binding targets to restore degraded ecosystems, while aiming at planting 3 billion of trees by 2030 and improving soil and pollinator populations.
3. Enabling transformative change by addressing the drivers of biodiversity loss like unsustainable consumption, pollution and harmful subsidies, especially in sectors such as agriculture and fisheries.
4. Strengthening the global biodiversity agenda with the objective of establishing the EU as a global biodiversity champion, while shaping the post-2020 GBF and

integrating biodiversity into all external relations through multilateral fora and trade mechanisms enhancing the Brussels effect externally (Viti et al., 2024).

Another fundamental strategy is the EU Forest Strategy for 2030, a cornerstone for the enhancement for the quantity and quality of forests within the European Union. It developed from the EU Biodiversity Strategy 2030 focusing more on protecting, restoring, and managing forests sustainably to fight climate change and biodiversity loss.

Firstly, the protection and restoration of EU forests come through legally binding nature restoration targets, protecting remaining primary and old-growth forests, planting 3 billion of tree and finally also providing financial incentives to forest owners or managers to enhance both the quality and the quantity. Secondly, the strategy promotes sustainable forest management by encouraging a sustainable use of wood-based resources, it encourages the bioeconomy industries that do not rely on timber forests. Thirdly, it enhances forest monitoring and governance through strategic implementation of reporting and data collection, while developing a strong research and innovative agenda to improve forest knowledge and simultaneously developing a coherent EU forest governance framework.

In the same way the EU Biodiversity Strategy 2030 created specific monitoring tools, the EU Forest Strategy designed respectively the Strategic Forest Monitoring Framework – a suggested rule to establish a EU wide framework for monitoring forests. Concurrently, the EU Commission published guidelines for the tree planting, reforestation, and biodiversity-friendly afforestation, as well as on identifying, mapping, closely observing, and rigorously safeguarding EU old-growth and primary forests; supporting the MSs in implementing and reporting actions (European Commission, 2022b).

With this approach, the EU contributes to global goals like the Kunming-Montreal Global Biodiversity Framework and the UN Sustainable Development Goals in addition to addressing domestic environmental aims.

According to the Farm to Fork strategy the EU should improve its food system to make it more equitable, wholesome, and ecologically sustainable. The goals are the following:

by 2030, cut the usage of pesticides by half. Reduce nutrient losses by 50% and fertilizer consumption by 20%. Raise the percentage of EU acreage used for organic farming to 25%. Reduce food waste by half for both consumers and retailers and encourage environmentally friendly food production, labeling, and packaging. The F2F affects US, Chinese, and developing country agricultural exports raising questions regarding regulatory alignment and market access (European Commission, 2020b). However, there has been criticism of the new, dominating innovation-investment narratives that obscure the two primary goals of restoring the food system's power balance and bolstering farmers' influence. According to the criticisms, organizations that advocate for agribusiness interests have had a big impact on how policies are made. Because of this impact, financial and technical fixes have taken precedence over structural changes meant to rectify power disparities in the food system (Jesús LópezSantiago et al., 2024).

Transport, Mobility & Emission-Free Infrastructure

This section will group together the transport related and infrastructure initiatives.

The Alternative Fuels Infrastructure Regulation (AFIR), enacted in April 2024, is part of the overall EU “Fit for 55” approach towards the development of a extensive infrastructure that supports alternative fuels for use in a variety of transportation modes, such as automobiles, ships, and airplanes. The main key provisions are the following:

- AFIR requires the installation of electric charging stations that are open to the public for light-duty vehicles (cars and vans) with power output requirements that are determined by the number of registered vehicles
- Installation of hydrogen refueling stations along the TEN-T core and extensive networks at intervals of no more than 200 km, guaranteeing that by 2030 there is at least one station in each metropolitan node.
- Developing targets for providing electricity to stationary airplanes at TEN-T core and comprehensive network airports, as well as shore-side power for seagoing passenger and cargo ships at marine ports.

- Promoting interoperability and non-discriminatory practices by establishing standards for payment methods, pricing transparency, and consumer information at alternative fuel stations in order to improve the customer experience (European Commission, 2024).

By ensuring that the infrastructure required to facilitate the shift to low-carbon and renewable fuels is in place, AFIR's comprehensive framework helps the EU achieve its larger climate goals. The rule promotes smooth cross-border travel and transportation by requiring consistent standards and deployment goals throughout Member States, therefore reaffirming the EU's dedication to sustainable mobility (Position paper of the European Clean Trucking Alliance on the Alternative Fuels Infrastructure (AFIR) proposal Summary, 2021).

The transport sector is one of the most contributors to the green houses gas emissions, counting up to 28,9% of the GHG emissions as of 2022 in the EU area, totalling around 1.044 million tonnes of CO₂ equivalent. Specifically, road transport accounts for 73,2% of overall transport emission and generally equating to 21,1% of the overall EU emissions (Europa.eu, 2024).

As a response, already in 2020, the EU created its Sustainable and Smart Mobility Strategy, with the goal of making the EU's transportation system a robust, digital, and sustainable network. This strategy lays forth a plan to cut greenhouse gas emissions associated with transportation by 90% by 2050, guaranteeing everyone has access to safe, reasonably priced mobility.

The strategy is composed following three main objectives:

1. The first is focused on sustainable mobility in order to reduce the effect on the environment by promoting sustainable alternatives, internalising external expenses, and accelerating the transition to zero-emission automobiles.
2. Secondly, smart mobility is tackled with automation and digitisation to improve the transportation system's effectiveness and security.

3. Thirdly, resilient mobility should be developed with the aim of surviving future crises, strengthening the Single Market, guaranteeing equitable and just mobility, and enhancing transportation security and safety.

4.

Specifically, precise dates have been assigned to implement the strategy step by step. By 2030, there should be at least 30 million zero-emission cars, a hundred climate-neutral cities and doubled high-speed railway traffic. By 2035, the European market should be ready for zero-emission large aircrafts while for 2050, the EU aims at creating almost nearly all net-zero vehicles while doubling again the rail freight traffic. To achieve so, the main initiatives entail promoting the adoption of electric vehicle, supporting the transition of airports and ports to zero emission operations, enhancing urban and inter-urban sustainable mobility, providing more efficient mechanism for carbon pricing, but also facilitating seamless multimodal transport through digital solutions (Putting european transport on track for the future #mobilitystrategy, n.d.).

Policies pertaining to transportation, mobility, and emission-free infrastructure typically have a tangible external impact on third nations through market-based and normative influence. Indirectly, these rules establish global norms for pollution, alternative fuel use, and transportation infrastructure. In reality, non-EU nations and automakers vying for access to the EU's sizable market are encouraged to conform to EU norms, particularly in the areas of fuel, battery, and automobile technology. As a result, EU-aligned transport and mobility standards are encouraged to spread globally. Moreover, concerns about sustainability are also raised by the EU's growing demand for raw, essential minerals, which creates opportunities for new trade agreements with other nations, particularly in Africa, Latin America, and Southeast Asia. In addition to competing with China's industrial policies and the US Inflation Reduction Act (IRA) to set the pace for the global mobility transformation, the EU's clean transport policy strengthens its position in this geopolitical contest by luring green investment and demonstrating climate leadership.

Fair Transition and Green Finance

This section will merge social justice and funding sources, highlighting the need for financial and inclusive support for the green transition both locally and internationally.

The Just Transition Mechanism is a fundamental policy instrument in the context of the EGD. This mechanism ensures that the transition to a climate-neutral economy is equitable, avoiding the marginalisation of communities or regions.

Launched in 2020 as part of the EGD, the JTM aims to assist EU regions, enterprises, and workers that would be most impacted by the shift to a climate-neutral economy by 2050. It addresses socioeconomic issues including job losses and regional economic decline by focusing on areas that are largely dependent on carbon-intensive industries or fossil fuels (such as coal, lignite, and oil shale) (Europa.eu, 2025). The JTM is a cornerstone for the social dimension of the EGD, it aligns with its broader goal of facilitating the phase-out of fossil fuels by directly supporting initiatives such as the LULUCF's focus on carbon sinks but also raising investments in renewable energy and energy efficiency, especially in solar and wind energy.

The JTM finances employment creation and economic diversification, such as clean tech SMEs, in order to alleviate inequalities in carbon-intensive areas like Poland and Romania. Generally, by demonstrating a dedication to inclusive climate action, a crucial story in interacting with the US and China, the JTM strengthens the EU's green diplomacy, in this way the JTM ensures policy coherence to the EGD, fostering its overall success. However, members states' misaligned strategies hinder its effectiveness (*See Annex "Just Transition Mechanism (JTM)" for more insights*).

The EU's climate policy differs from China's state-led green investments or the US's market-driven IRA because to the JTM's emphasis on social equality. In order to appeal to audiences throughout the world at events like the COP or the G7, the EGD, including the JTM, projects soft power by advocating for a "human-centered" change. Hence, the JTM strengthens the EU's credibility in promoting global fair transition frameworks by defending workers and regions against claims that climate measures are elitist (Sandmann et al., 2024).

Another cornerstone for a fair transition is the EU Taxonomy Regulation, adopted on June 18, 2020, and published on June 22, 2020. The regulation creates categorisation schemes for economically and sustainable practices in order to help the EGD achieve its 2050 carbon neutrality objective. It lays out standards for actions that support the following six environmental goals: (1) mitigating the effects of climate change, (2) adapting to them, (3) using water and marine resources sustainably and protecting them, (4) moving toward a circular economy, (5) preventing and controlling pollution, and (6) protecting and restoring ecosystems and biodiversity (*See Annex “EU Taxonomy Regulation” for more details*).

The activities need to make a significant contribution to at least one goal, they need not to seriously hurt other people (DNSH), they must observe the UN Guiding Principles on Business and Human Rights and other minimal social protections and also they must fulfill technical screening requirements (such as the climate objectives of Commission Delegated Regulation (EU) 2021/2139).

Moreover, the participants in the financial markets, big businesses covered by the NonFinancial Reporting Directive (Directive 2014/95/EU), and EU/Member State (MS) sustainability initiatives are all subject to the Taxonomy, which mandates disclosures on actions that are in line with it. Transparency in green investments will be improved by 2025 when more than 50,000 businesses submit reports in accordance with the Corporate Sustainability Reporting Directive (CSRD, Directive (EU) 2022/2464). The Taxonomy ensures that workers, communities, and regions are not left behind by allocating resources to initiatives that promote a fair transition to a low-carbon economy (Europa.eu, 2020).

By establishing a global standard of green financing, the Taxonomy Regulation increases the soft power of the EU and attracts foreign investors and decision-makers to multilateral platforms such as COPs or G7. It increases the credibility of the EU as a supporter of global sustainable finance standards and pushes the story of an EGD human-centred transition well-aligned with just transition aims.

Green Deal Diplomacy & Global Leadership

This final sub-chapter presents the EU as a green powerhouse and illustrates how the EGD operates internationally. Emphasize trade conflicts, collaborations, and narratives related to climate diplomacy.

On the climate leadership level, by combining trade policy and climate aims, CBAM positions the EU as a leader in carbon pricing. Through the prevention of less strict international requirements from undermining ambitious EU programs (like the ETS), it enhances the "Fit for 55" package. Furthermore, CBAM tackles economic competitiveness by levelling the carbon cost for domestic and imported goods it protects EU industries transitioning to net-zero frameworks and technologies, supporting the Green Deal Industrial Plan (GDIP) in order to increase the competitiveness of clean technology (*See Annex "Green Deal Industrial Plan (GDIP)" for more extensive information*). Finally, CBAM influences third countries to encourage stricter climate regulations in order to have complete access to the EU market, reinforcing the "Brussels Effect" worldwide (European Commission, 2025).

However, CBAM is objected to by developing nations, but also by major producing nations like China and India as a discriminatory trade barrier that arbitrarily impacts their exports. To less developed nations with green technology, CBAM's carbon pricing raises costs, which may stifle economic growth. The objection by China and India is due to competitiveness issues in exports. Additionally, there are problems with the dependence of CBAM on correct emissions reporting, notably in confirming information from non-EU companies. Actually, importers and non-EU providers, especially developing country SMEs, are hindered by the intricacy of CBAM's verification and reporting process.

For example, environmental effectiveness of CBAM is undermined by exclusions for aluminium scrap, under which foreign companies (like China) can manipulate emissions figures. Transitional period flexibility can postpone strict enforcement until 2026. Disagreements with major trading partners could rise as a result of CBAM. The US and China perceive CBAM as protectionist, which may lead to retaliatory duties. The main

risk of this policy is related to the Paris Agreement's CBDRRC principle can be violated by CBAM's one-size-fits-all approach since it equally addresses cooperative and non-cooperative nations and raises doubts about the justice.

In closing, the UK's 2027 rollout of CBAM demonstrates that it is able to lead international carbon pricing, and its WTO-compatible form and open reporting put the EU at the forefront of combining trade and climate policy. It also increases the EU's standing in venues such as COP and G7. Protectionism arguments are met by the EU's assistance to LDCs via CBAM training and offsets for foreign-paid carbon prices, putting CBAM on the podium as a tool of equitable global decarbonization. This strengthens EU soft power and is consistent with the EGD's human-centered narrative (Choudhury, Tiwari and Rakshit Jakhar, 2024).

As of December 2021, the EU launched the Global Gateway flagship strategy aiming to mobilize €300 billion invested in sustainable infrastructure in poor nations between 2021 and 2027, turning the European Green Deal into a “Global Green Deal”, enhancing its external action. The Global Gateway projects emphasizes the fields of technology, energy, transportation, health, and education in line with the Paris Agreement and the UN's 2030 Agenda.

The overall projects should be funded by the European Union, Member States, and the European Investment Bank, with the European Fund for Sustainable Development Plus (EFSD+) contributing €135 billion (European Investment Bank, n.d.).

As a "geopolitical response" to the Belt and Road Initiative (BRI), the Global Gateway seeks to provide a substitute model founded on sustainability and democratic principles. The BRI's \$1 trillion investment is far larger than the Global Gateway's €300 billion, and rivalry is heightened by China's hegemony over crucial raw materials (CRMs) and infrastructure in Africa (for example, 70% of African railway projects).

On the other hand, the Global Gateway and the US's Build Back Better World (B3W) initiative, which was introduced by the G7 in 2021, have similarities in their support of sustainable infrastructure. Although B3W is comparable to US IRA investments (\$369 billion), the Global Gateway is more competitive due to its smaller scale and absence of centralized funding, which depends on G7 cooperation. However, US businesses could

perceive EU investments in developing nations such as Latin American Countries as a diversion of opportunities, leading to conflict (Soleir i Lecha, 2024).

The EU green diplomacy narrative is shaped by the Global Gateway. It establishes the EU as a leader in green financing by emphasizing sustainable, high-quality infrastructure, which influences global standards at the G7 and COP, emphasizing its importance in "exporting EU normative power" through climate-aligned investments. Moreover, the initiative's emphasis on equitable partnership counters neo-colonialism critiques, strengthening EU soft power while proving consistency with the EGD's human-centered narrative. A strong and fast and precise project execution is fundamental to maintain credibility in the context of a battle of the narratives, reinforcing the overall EU green diplomacy.

In short, as the EU marches towards being carbon neutral by 2050 and takes its position on the world stage, the European Green Deal (EGD) emerges as a bold and complex policy strategy. With the sector-specific measures like ETS 2 and CBAM under the Fit for 55 package to the legally binding greenhouse gas emission targets under the European Climate Law, this chapter has examined the essential elements of the EGD as an integrated but ambitious plan. By combining climate action with social and economic interests, laws like the Just Transition Mechanism (JTM), Circular Economy Action Plan (CEAP), and Renewable Energy Directive (RED III) illustrate the EU's dedication to sustainability, innovation, and justice. Externally, the EU's green foreign policy is complemented through mechanisms like the Global Gateway and CBAM that look to develop international standards for sustainability and trade.

However, the EGD has enormous challenges. Internal inconsistency threatens policy coherence, such as poorly defined national objectives for the LULUCF sector or the possible ecological trade-offs of RED III. Although essential to guaranteeing that the transition is fair, the belated introduction and lack of finance of the JTM puts socioeconomic inequality in carbon-intensive areas at risk. Externally, EU leadership ambitions are challenged by China's Belt and Road Initiative and the US's Inflation Reduction Act, and CBAM carbon pricing has also led to trade tensions with the US and China, which perceive it to be protectionist. These conflicts reveal how thin is the line that separates economic competitiveness, diplomatic relations, and climate ambition.

Notwithstanding these obstacles, the EU can well position itself to be a green superpower given the EGD's comprehensive strategy, combining financial incentives, legislative mandates, and normative influence. Still, overcoming outside concerns, marshaling finance, and synchronizing Member States' agendas are needed to make it a reality. The EGD can increase the EU's role in evolving into a sustainable future by filling these gaps.

Chapter 2: EU-China Relations in the Context of the European Green Deal

The European Green Deal influenced the relations between the EU and China. The multifaceted dynamics between these two blocs emphasise rivalry and competition, but also partnerships and possible opportunities shaped by the EGD ambition and the Chinese technological development in green technologies.

Domestic discourses and challenges

Many EGD policies, especially CBAM, are framed in China's domestic discourses as protectionist measures which focus on hindering and reducing its economic competitiveness. Chinese authorities and businesses expressed their contrariness, particularly for CBAM's carbon pricing, which raises prices for exporting steel and aluminium in the EU market. According to the Chinese perspective, China's export-driven economy is undermined by EU's strategies to unilaterally enforce its regulatory norms. Additionally, concerns regarding the EU's aspiration to develop a strategic autonomy by lowering the dependency level on Chinese key raw materials have been extensively expressed in both public and official narratives. On top of that, the EU Global Gateway strategy is perceived as a direct challenge to the Chinese Belt and Road Initiative, expressing the EU's geopolitical aspiration to diminish China's worldwide influence (Brinza et al., 2024) (*See Annex "EU Global Gateway" for a deeper analysis*).

According to Chinese media and academic circles perceive the EGD and especially CBAM and the EU Taxonomy as covert trade restrictions. Criticism is mainly formulated on the basis of an alleged disproportionate effect on Chinese carbon-intensive industries threatening their export market, with a potential of cost increase reaching €146/tonne for aluminium by 2034. Hence, the risk for the EU is to be perceived as a Western economic coercer. On the other hand, China counters EU criticisms regarding its environmental standards by leveraging on its own green investments. Chinese commentators reject the Global Gateway as a symbolic gesture and claim that its €300 billion expenditure is insignificant in comparison to the \$1 trillion BRI budget (Ling and Chuanxin, 2024).

Between the late 1970s and 2025, China's environmental discourses about Europe and EU-China cooperation under the EGD underwent significant change, reflecting China's evolving role in global climate governance. From a developing nation that prioritised historical responsibilities to a proactive leader in green markets and policy frameworks, China's environmental discourses have changed significantly. It can be divided in three main time frames: pre-2009, with an emphasis on green-focused practices, to post 2010, with the principles of economic modernization and liberal markets, and finally to post 2020, the transition discourse dominated the debate.

- Prior to 2009, the green rhetoric, wherein environmental protection and scientific research were prioritized, was the dominant one. Several Scholarly articles concentrated on EU climate science and ecosystems, positioning the EU as a leader in environmental governance. Despite the absence of economic or policy material in this rhetoric, it coincided with early EGD precursors such as the EU Biodiversity Strategy. During this time, China emphasized the Common but Differentiated Responsibilities and Respective Capabilities (CBDRRC) principle and portrayed itself as a "victim" of climate governance. Between 2004 and 2010, a change toward economic pragmatism was brought about by China's increasing industrial development. Already by 2005, there were worries that EU policies were driving up prices for Chinese. Tensions with EGD's CBAM were hinted at by this discussion, which framed environmental challenges via commerce and markets. Though trade obstacles generated mistrust, emerging EU carbon markets (ETS) and green finance stimulated Chinese conversation.
- Post-2010, due to domestic initiatives like carbon trading, China's role in global climate governance changed from "victim" to "stakeholder." By 2015, the transition discourse became central, and focused on state-driven green transitions. Policy conversations were highlighted in formal publications such as the 2015 EU-China Joint Statement. As a result of government collaboration through programs like the High-Level Environment and Climate Dialogue (HECD), NGOs started to report on EU-China projects.
- From 2020 onwards, both the transition discourse and the liberal-market one intensified amid global challenges. Scholarly publications examine EU laws, presenting the EGD as a standard for policy. As a reflection of elite rule,

state-driven narratives eclipse the voices of civil society. Concerns about CBAM's costs are voiced by the media and academia, who portray it as a trade barrier. Critiques are dominated by CBAM and ETS, whereas green funding and Global Gateway are recognized but treated with suspicion (Wang and Yang, 2024).

The Chinese paradigm proposes a high level of financial investments into environmentally sustainable projects, significantly promoting high-quality development (HQD) while maintaining a moderate role for environmental regulations. This strategy aims at coupling economic advancement with support for environmental objectives. However, the actual effectiveness of this approach for HQD is not linear, its efficacy has been found to be directly depending on regulatory intensity. Green financing has little to no beneficial effects if environmental rules are too lax, diminishing the overall effect due to a lack of regulatory pressure. Oppositely, in the case in which regulations reach a sufficient level of stringency, the positive effects of green financing become significant, creating the necessary market signals and pressure for compliance for the investments to be effective. Moreover, regional heterogeneity within China has a direct impact on the overall effectiveness, where the eastern more economically developed regions succeed in capitalising more from the investments compared to the western and central regions (Zhang et al., 2024).

Through 2025, Chinese domestic discourse presents a realistic state-driven and market-oriented strategy in EU-China relations within the EGD. China upholds its green civilization discourse by stressing commercial opportunity and policy harmonization with the EU. Yet, the EU CBAM prices (steel and aluminum) contribute to the EU protectionism narrative, creating the narrative of cooperation and competition. With limited involvement by the wider public and civil society, discourses are dictated by elites (state, state-associated NGOs, and government). Inadequate public involvement might contribute to slowing grassroots backing of EGD programs, thus solidifying China's vertical environmental cooperation model. Geopolitical pessimism is spurred by competition through BRI with the Global Gateway, in addition to EU de-risking, while CBAM is still a controversial topic perceived to be breaching the CBDRRC and jeopardizing exports.

Joint Initiatives and Cooperation

A number of high-level discussions have been created between the EU and China to coordinate their environmental and climate policies. A key forum for exploring ways to get carbon neutrality is the EU-China High-Level Environment and Climate Dialogue, which was started in 2020. The EU wants to reach carbon neutrality by 2050, whereas China wants to do so by 2060. These discussions make it easier to share best practices in fields including green financing, renewable energy deployment, and emissions trading systems (ETS)(See Annex “*Emissions Trading Systems (ETS 1 & ETS 2)*” for a more in depth analysis). China's national carbon market, which was introduced in 2021 and is currently the largest in the world by volume, was developed with input from the EU's ETS experience.

Furthermore, collaboration on global platforms such as the United Nations Framework Convention on Climate Change (UNFCCC) is emphasized by the EU-China Partnership on Climate Change, which has been strengthened through summits and bilateral agreements. Under the Paris Agreement, both parties have pledged to improve their Nationally Determined Contributions (NDCs), with the EU offering China technical assistance to increase emissions reporting transparency.

Cooperation between the EU and China is centered on joint green technology efforts. China, a world leader in the production of renewable energy, is a vital partner of the EU's Green Deal, which places a strong emphasis on innovation in clean energy. Research and development (R&D) in solar, wind, and hydrogen technologies are examples of collaborative initiatives. The EU-China Energy Cooperation Platform facilitates partnerships that take use of China's industrial prowess and the EU's regulatory framework experience, such as the creation of offshore wind farms and smart grid technology.

Additionally, China and the EU have collaborated on urban sustainability initiatives. Low-carbon city planning is encouraged by the EU-China Urbanization Partnership, which has pilot projects in places like Shenzhen and Lisbon that concentrate on sustainable transportation and energy-efficient structures. These programs promote waste reduction and resource efficiency, which is in line with the Green Deal's emphasis on the circular economy.

To foster the agenda of the Green Deal, green investment and trade have become the focus between China and the EU. Bridging political barriers, the Comprehensive Agreement on Investment (CAI) between the EU-China is set to achieve market opening for green industries like the production of batteries and electric vehicles (EVs). China's dominance in EV battery supply chains forms the basis of the EU's Green Deal fostered electrification drive. This convergence is illustrated by such joint ventures as Chinese battery producers and European car makers. Green finance is the second important area of collaboration. By establishing such platforms as the International Platform on Sustainable Finance (IPSF), the EU and China have attempted to align calls for sustainable investments. By promoting green bond taxonomy, this platform facilitates cross-border investment in energy efficiency and renewable energy plans. The EU's leadership in regulating green finance has assisted in raising China's issuance of green bonds considerably.

Despite these developments, there are still obstacles to EU-China collaboration, like as conflicting interests and geopolitical issues. Deeper cooperation is hampered by China's coal dependence and the EU's worries about human rights and market distortions. Nonetheless, the reciprocal advantages of tackling climate change offer a compelling motivation to surmount these challenges. The Green Deal gives the EU the chance to set an example and push China to quicken its shift to a low-carbon economy (Elpidio da Silva, 2024).

Conclusion

A complex mix of rivalry, collaboration, and mutual adaptation characterizes the EU-China partnership under the European Green Deal (EGD). Because of China's growing position as a worldwide leader in green technology and the EU's goal of being carbon neutral by 2050, the EGD has changed EU-China relations by promoting both rivalry and cooperation, as discussed in Chapter 2. Tensions have been raised by EU policies, particularly the Carbon Border Adjustment Mechanism (CBAM), which Chinese players view as protectionist measures that might raise prices by €146/tonne by 2034 and jeopardize export-driven industries like steel and aluminum. Geopolitical tensions are further increased by the EU's Global Gateway policy, which is seen as a response to China's Belt and Road Initiative. These views, which are reinforced by

Chinese academics and media, cast the EGD as a means of economic pressure and go against the Common but Differentiated Responsibilities (CBDRRC) tenets.

Initiatives for cooperation have thrived in spite of these conflicts. Policy alignment has been made easier by the EU-China Partnership on Climate Change and the EU-China High-Level Environment and Climate Dialogue. China has developed its own carbon market, which is the largest in the world by volume, by utilizing the EU's experience with emissions trading systems. Through initiatives like the International Platform on Sustainable Finance, joint ventures in the fields of renewable energy, urban sustainability, and green finance show the potential for synergy by bringing China's manufacturing skills into line with the EU's regulatory expertise. Deeper cooperation is complicated by ongoing issues, such as China's reliance on coal and the EU's worries about human rights and market distortions.

From a pre-2009 emphasis on ecological conservation to a post-2020 emphasis on statedriven, market-oriented green transformations, China's domestic discourse on the EGD has undergone substantial change. However, civil society's limited influence on these narratives runs the danger of weakening popular support for collaborative projects. In the future, the EU and China will have to manage these conflicting narratives of cooperation and competitiveness while striking a balance between their geopolitical goals and the pressing need to address climate change. By encouraging China to expedite its low-carbon transition and promoting mutual advantages through trade, innovation, and policy convergence, the EGD provides a framework for the EU to set an example. A sustainable global future will need persistent communication and practical collaboration.

Chapter 3: EU-US Relations in the Context of the European Green Deal

In the United States, the European Green Deal has set off a multidimensional controversy across political, industry, academic, media, and public domains, ranging from initial fascination to a polarized mix of economic scepticism, regulatory wariness, geopolitical tension, and modest environmental honors. The conditioning determinants comprise competition from the Inflation Reduction Act (IRA, 2022), new energy export realities, and the second Trump administration's (Trump 2.0) fossil fuel-driven policies in 2025 (Elder, Zusman and Hengesbaugh, 2025).

Domestic discourses and challenges

The European Green Deal, and particularly CBAM, is widely condemned in US discourse as a protectionist measure, threatening economic interests. CBAM's carbon tariffs, estimated at €40–€120 per ton of CO₂ in 2030 for imported products like steel and cement, are perceived as penalising US exporters, especially in coal-reliant states without federal carbon pricing, such as Ohio and Virginia (Zettelmeyer et al., n.d.). During the Biden administration era (2021-2025), trade associations warned that cost compliance could reach €80 per ton for aluminium exports, threatening jobs and inflating costs in manufacturing hubs (Buzogány, Parks and Torney, 2025). Moreover, media voices denounce potential interruption in supply chains and question the fairness of tariffs within international trade law, while the current Trump administration's discourse depicts CBAM as “European tax” on US exports aiming at strangling economic growth, responding with potential retaliatory taxes on EU imports, especially in sectors such as machinery and automotive (Elder, Zusman and Hengesbaugh, 2025).

Furthermore, the liquefied natural gas (LNG) sector, which is central in US export dynamics with the EU, totalling up to 7.1 billion cubic feet per day in 2023, heightens the tensions. CBAM's standards on methane emissions could increase the price between €5–€10 per MMBtu, leading to accusations of "stealth tariff" for the 60% of US LNG fuelling EU markets in 2024. With Trump 2.0 aiming for 100 billion cubic meters of LNG exports by 2030, a surge of around \$10 billion, in demand for exemptions or counter duties on EU clean tech imports has been observed in the same year (Giulia

Signorelli and Leonardi, 2025). Moreover, conservative media depicted the EGD as a trade war incitement, in contrast to the IRA's \$500 billion in domestic green subsidies, benefiting US companies (Chair, 2025). This fuelled public opinion on social media, which started to build up against such EU measures, forecasted to raise energy prices and competitiveness losses (Elder, Zusman and Hengesbaugh, 2025).

Regulatory tensions increase US distrust, like in the case of the EU Taxonomy's Do Not Significant Harm (DNSH) criteria. This benchmark excludes natural gas from being eligible to enter the EU market. As of 2022, natural gas in the US accounted for around 37% of US domestic energy, this regulation is perceived as limiting investment choice, compared to the IRA's \$300 billion clean tech incentives (BRIEFING Energy cooperation with non-EU countries, n.d.). Consequently, firms lament the inflexibility of the Taxonomy, compared with the IRA's EV and solar incentives (Chair, 2025). On the other hand, while California welcomes EGD-type emissions regulation, Trump 2.0 dismisses such impact as a bureaucratic overreach by removing environmental monitoring (Buzogány, Parks and Torney, 2025).

In 2024, EU gas prices were around five times the U.S. level, leading most U.S. commentators to question the attainability of the Fit for 55 package's projected €1 trillion cost by 2030 (Elder, Zusman and Hengesbaugh, 2025). U.S LNG producers, facing an estimated \$1–\$2 billion annually in compliance expenses under new methane regulations, have joined voices calling for a "reciprocity clause" with the aim of shielding American gas from EU

climate politics or to allow retaliatory tariffs on EU solar products (Giulia Signorelli and Leonardi, 2025). Additionally, the EGD is frequently depicted in rightleaning policy networks and social media as a "globalist" project that undermines national sovereignty and ignores norms of fair trade. Compared to this, the U.S. Inflation Reduction Act (IRA), which incited a 9% renewable energy share in 2023, is often hailed as a smarter, more domestic substitute for the European regulatory strategy (Elder, Zusman and Hengesbaugh, 2025).

Geopolitically, the European Green Deal (EGD) is received skeptically in U.S. media and policy communities. The EU's Global Gateway €300 billion initiative, described as a green infrastructure equivalent, has been largely discounted as a diluted response to the U.S.-led Partnership for Global Infrastructure and Investment (PGII) with a comparable \$200 billion ambition (Zettelmeyer et al., n.d.). Supporters of a second Trump's mandate, denigrated the EU's ambitions in doubling down its reliance on fossil fuels, while continuing to import oil from the U.S, weighting for an overall 18% of total EU imports (Elder, Zusman and Hengesbaugh, 2025). Furthermore, the EU's Critical Raw Materials Act (CRMA) brought forth an uncomfortable situation for Washington. With the Inflation Reduction Act channelling \$50 billion into domestic EV battery manufacturing, policymakers view the CRMA both as a supply chain issue but also as a potential counterweight to Chinese market dominance (Chair, 2025)(Zettelmeyer et al., n.d.).

The tensions are further provoked by growing U.S. liquefied natural gas (LNG) exports to Europe, which surged to meet Russian supply shortfalls. The "America First Energy Plan," credited to Trump's 2024 manifesto, suggests a 2030 goal of 150 billion cubic meters exports, which is squarely contradictory to the EU's Carbon Border Adjustment Mechanism (CBAM). This has led a few to propose a "Transatlantic Energy Pact" to negotiate tariff relief and preserve energy trade relations. Meanwhile, right-of-centre think tanks and media imply the EGD hides an EU agenda to dominate the energy market and threatens the spectre of tariff war that would jeopardize the \$400 billion worth of gas imports the EU purchased in 2022 (Giulia Signorelli and Leonardi, 2025). Social media websites, on the other hand, repeat the message, depicting the EGD as geopolitical extravagance and calling instead for greater U.S. energy independence (Elder, Zusman and Hengesbaugh, 2025)

And yet, there are voices in the US favouring the EGD's ambition. The ETS and the Fit for 55 are celebrated by environmental groups as decarbonising milestones, urging synergies with the U.S. IRA (Zettelmeyer et al., n.d.)(Buzogány, Parks and Torney, 2025). Transatlantic exchange, like the EU-US Energy Council 2024 dialogue, is hoping for renewable convergence, fuelled by US solar growth to 161 gigawatts in 2023 (BRIEFING Energy cooperation with non-EU countries, n.d.).

Moreover, clean tech firms covet the EGD's \$50 billion low-carbon economy, focusing on green hydrogen and wind projects (Giulia Signorelli and Leonardi, 2025). Additionally, there is the possibility for forward thinking retailers to learn from the EGD's impact on the IRA's \$300 billion renewable project (Chair, 2025).

However, the possible collaboration frameworks collapse in the face of the current U.S. withdrawal from the Paris Agreement and renewable energy backsliding, negating gains toward 21% renewable electricity by 2023 (BRIEFING Energy cooperation with non-EU countries, n.d.)(Elder, Zusman and Hengesbaugh, 2025). Conservative rhetoric mocks the EGD vision of net-zero and Fit for 55's €1 trillion price tag as chimeric, with a fossil fuel rebound the top priority (Moore and Hedberg, 2024). Consequently, social media platforms show evidence of this split, with greens backing EGDled policy and conservatives lampooning its cost (Elder, Zusman and Hengesbaugh, 2025).

Joint Initiatives and Cooperation

The EU–US Trade and Technology Council (TTC), inaugurated in 2021, has come to serve as the focal platform to align transatlantic trade and technology policy with sustainability goals. Standard harmonization across areas like artificial intelligence (AI), 6G networks, and green regulation, precisely on the Carbon Border Adjustment Mechanism (CBAM) and the Inflation Reduction Act (IRA), is a focus of the TTC (Aveni, 2024). By 2024, the TTC had secured agreements on key critical minerals employed in electric vehicle (EV) batteries and clean technology, reducing both regions' reliance on Chinese supply chains (Tausendfreund, Moraal and Campbell, 2024). Collective action on sustainable steel has also relieved CBAM-induced trade tensions, as the U.S. initiated low-carbon export exemptions (Buzogány, Parks and Torney, 2025). The TTC's technical working groups have led green tech interoperability forward, staying in sync with the European Green Deal's €50 billion low-carbon marketplace and the IRA's \$300 billion in clean tech subsidies (Aveni, 2024).

Trump's re-election in 2025 has already unsettled transatlantic market peace. His presidency's increasingly protectionist tone, including threats of tariffs on EU imports of up to 50%, and outright hostility towards multilateral institutions now threaten the

Trade and Technology Council (TTC) with collapse, undercutting consensus on such key issues as the Carbon Border Adjustment Mechanism (CBAM) and strategic mineral supply chains (Tausendfreund, Moraal and Campbell, 2024). Additionally, the TTC initiative on AI and cybersecurity standards, which are crucial to smart grids under the EU's Fit for 55 initiative, risks to be derailed under Trump's focus on reshoring U.S. manufacturing over regulatory harmonization (Aveni and Universidade de Brasília, UnB, DF, Brasil, 2024). Nonetheless, however, the TTC remains a vital diplomatic platform, with the EU endorsing a "climate club" agreement to harmonize carbon pricing mechanisms across both economies, linking the Emissions Trading System (ETS) with IRA-style incentives (Buzogány, Parks and Torney, 2025).

Climate finance is the second pillar of EU–US cooperation, underpinned by the principle of Common but Differentiated Responsibilities (CBDR-RC) of the Paris Agreement. By 2024, the EU had committed €30 billion annually in climate finance, complementing that with a 15% increase in grants for loss and damage, moves that were meant to complement U.S. support (Tausendfreund, Moraal and Campbell, 2024). Under President Biden's administration, the U.S. had committed \$12 billion in climate finance, largely through mobilizing private capital via green bank grants. These actions complemented the EU's €300 billion Global Gateway, which aimed to finance sustainable infrastructure in the Global South (Buzogány, Parks and Torney, 2025). Joint initiatives, such as the Just Energy Transition Partnerships in Brazil, solidified the EU–US climate group in the international arena, e.g., at COP (Tausendfreund, Moraal and Campbell, 2024).

All of these gains have been demolished by the second Trump Administration, specifically the withdrawal from the Paris Agreement and the following reduction in foreign assistance, including climate finance plans (Tausendfreund, Moraal and Campbell, 2024). His "America First" agenda, based on Project 2025, benefits fossil fuel exports – 48% of which America supplied to the EU's LNG in 2023– over multilateral climate commitments (BRIEFING Energy cooperation with non-EU countries, n.d.). Although the EU remains at the forefront with it maintaining its €30 billion climate finance commitment and taking the reins of COP30 negotiations, its effort is nullified by the lack of unqualified U.S. commitment (Tausendfreund, Moraal

and Campbell, 2024). Moreover, the attention of the two regions to domestic industrial subsidies—through the IRA and the Green Deal Industrial Plan—has singled out a number of Global South countries that continue to insist on the long-promised \$100 billion annually in climate finance under CBDR-RC (Buzogány, Parks and Torney, 2025)

Decarbonization of industry is now a site of EU–US convergence, powered by the Green Deal Industrial Plan and the IRA. The EU has pledged €100 billion under the Recovery and Resilience Fund and the Multiannual Financial Framework (2021–2027) to invest in clean tech such as EVs, solar, and hydrogen, comparable to the IRA's \$500 billion in subsidies. Bilateral partnership on critical raw material has increased supply chain resilience and reduced dependence on China. The EU's Critical Raw Materials Act (CRMA) also closely aligns with U.S. efforts to diversify supply and increase strategic resilience (Aveni, 2024).

However, there are still major challenges. Trump's plan to double LNG exports to 150 billion cubic meters by 2030 clashes with EU methane standards under CBAM, and may have the result of imposing \$1–\$2 billion in yearly compliance expenses on U.S. exporters (Giulia Signorelli and Leonardi, 2025). American commentators increasingly frame the EU's Fit for 55 package—budgeted at €1 trillion by 2030, as overly bureaucratic and expensive compared to the IRA's market-based approach (Chair, 2025). While EU leaders like Mario Draghi have called for an integrated European energy market to improve competitiveness, Trump's deregulatory agenda and preference for fossil fuels further complicate a unified path toward transatlantic decarbonization (Aveni, 2024).

The EU countermove to the second Trump administration, through levers like InvestEU, integration of capital markets, and plastic treaty leadership, is designed to uphold global climate credibility. However, internal disputes over Chinese EV tariffs and German resistance to co-borrowing reveal fractures in the EU's own coalition of sustainability. Growing populist resistance in member states like Italy, Denmark, and the Netherlands only adds to European Green Deal implementation (Tausendfreund, Moraal and Campbell, 2024).

Nevertheless, strategic prospects are available. Both the EU's CRMA and US critical mineral deals are in a shared battleground of resistance versus China's market share in EV battery supply chains (Aveni, 2024). If maintained, the TTC would be a site to bargain CBAM exclusions and harmonize closer the EU's ETS with US climate incentives (Buzogány, Parks and Torney, 2025). Moreover, the EU's leadership role in COP30 could pressure a reluctant U.S. administration to re-engage, especially if Brazil and India elevate Global South demands (Tausendfreund, Moraal and Campbell, 2024). Finally, proposals like Draghi's call for a Research and Innovation Union align well with U.S. priorities in AI and clean tech, creating a potential foundation for transatlantic R&D collaboration (Aveni, 2024).

Conclusion

The US perspective has been fundamentally changed. Initial interests were overshadowed by rivalry with the IRA 2022 launch, hardening into Trump 2.0 isolationism (Chair, 2025). CBAM stokes trade tensions, the Taxonomy widens regulatory loopholes, and LNG interests compound geopolitical tensions, at the expense of energy security for climate (Giulia Signorelli and Leonardi, 2025). Progressive demands for ETS linkage and clean tech interlinkages, fueled by the IRA momentum of the EGD, are swamped by a market-driven, polarizing rhetoric (Buzogány, Parks and Torney, 2025). Moreover, Trump 2.0 protectionism, withdrawal from the Paris Agreement, and fossil fuel focus strain these initiatives with energy price imbalances and EU internal divisions making them harder. EU leadership of the EGD's €1 trillion investment and Global Gateway remains necessary but requires US re-engagement to meet Paris goals. In platforms such as the TTC and collaboration on innovation and supply chains, both parties can catch 2025 waves, providing transatlantic sustainability leadership.

Conclusion

This thesis has explored the external dimensions of the European Green Deal, demonstrating that it is not only a decarbonization plan for the EU economy but also a tool of normative power and strategic action on the global arena. The EGD integrates green ends with geopolitical intent, combining climate leadership and trade leverage, regulatory leadership and green diplomacy. Through the United States and China case studies, the thesis provided a comparative analysis of how the EGD is reshaping global governance and redefining the EU's international role.

For the United States, the evidence is one of two-dimensional tension and coordination. The Biden administration welcomed more transatlantic cooperation through mechanisms like the US-EU Trade and Technology Council and the Transatlantic Green Agenda. Common interest in green finance, clean tech, and decarbonization fostered convergence during global climate talks. However, the Inflation Reduction Act (IRA) with its robust subsidy structure and local content emphasis raised concerns in Brussels about competitive distortions and market manipulation. Such tensions have not thwarted cooperation but uncovered structural asymmetries between the climate-industrial strategies of the two partners.

Moreover, the specter of the current second Trump presidency is highly perilous. Trump's retreat from the Paris Agreement and pro-fossil fuel policies also signal a probable climate disengagement, trade unilateralism, and transatlantic rifts. In this case, the EU calls for a two-track strategy: internal resilience strengthening through energy autonomy and industry innovation, and external partner diversification to bet against US unpredictability. The EU may have to take more leadership at COP summits, expand alliances with other big emitters, and establish institutional buffers (e.g. climate clubs, carbon alliances) to shield itself from geopolitical shocks.

Between China and the EU, the relationship is defined by mutual dependence and rising rivalry. China lies at the center of the global green transition, both as the world's biggest polluter and a leading manufacturer of solar panels, batteries, and major raw materials. The EU and China have collaborated in platforms such as the High-Level Environment and Climate Dialogue, and joint statements have reaffirmed the priority of climate

cooperation. Still, the CBAM is viewed by Beijing as a protectionist measure aimed at replacing China's industrial competitiveness. Even if some Chinese firms have already begun to adapt to EU carbon pricing, more profound political resistance to harmonizing regulation remains firm.

The confrontation between industrial policy and CBAM in China raises the spectre of a "green trade war." The reaction would be to exercise China's strategic management of supply chains, such as restricting the export of key inputs or establishing substitutable markets through the Belt and Road. When the EU imposes environmental conditionality on agreements and filters investments, the spectre of decoupling of regulatory regimes at the systemic level grows. Yet, despite all these complexities, China engagement is essential to world-wide emissions targets.

The thesis thus concludes that the EGD is a powerful yet controversial tool of external action. It allows the EU to project global leadership functions by exporting standards, investing in transitions, and setting trade relations. Yet it is dependent upon nuanced diplomatic fine-tunings, particularly in not being accused of "green colonialism" or "regulatory overreach.". The EU should continue to be responsive to the concerns of the emerging economies, particularly the Global South, whose decarbonisation external costs threaten to exacerbate structural imbalances. Against this background, the effectiveness of the EGD in inducing global governance is patchy. It can induce norms and create policy emulation, but it evokes backlash when perceived as punitive or unilaterally imposed. Externalisation needs multilateral action, capacity-building collaborations, and open green finance instruments to legitimise it.

In the future, a number of the main geopolitical trends will affect the worldwide impact of the EGD:

- US Political Volatility: The future EU climate diplomacy must be prepared for US leadership volatility, balancing involvement versus risk aversion.
- China's Global Strategy: China's strategic development in reaction to CBAM, its investment in green infrastructure, and its power in the Global South will be determinative.

- **Green Geopolitics in Conflict Zones:** The Russia-Ukraine war and rising Middle Eastern tensions can accelerate fossil fuel realignments and make EU efforts at maintaining climate priorities amidst security challenges more difficult.
- **Global South Partnerships:** The EU must move beyond conditionality and invest in equitable cooperation to avoid further entrenching global inequalities.
- **Climate-Security Linkage:** The future relevance of the EGD will rest in whether climate goals are integrated into security, migration, and resilience agendas or not.

Finally, the European Green Deal represents an ambitious and dynamic process that returns the EU to center stage in an increasingly fragmented world. External success will depend on the EU's ability to bridge the gap between its normative ambitions and hard realpolitik facts. Future research must examine the institutionalization of green diplomacy in the longer term, the emerging climate coalitions, and the socio-political consequences of a decarbonized world economy.

In a polycrisis-grown world of climate change, international conflict, technology upheaval, and financial instability, the European Green Deal is not a policy but a vision. It is the EU's attempt to set an example of green leadership that is ethical, effective, and inclusive. Whether this vision can be realized in cooperation with powers like the US and China is still an open and urgent question.

Annex

Emissions Trading Systems (ETS 1 & ETS 2)

According to estimates, ETS 2 will cover an extra 25% of emissions, creating a new, independent carbon market for the newly covered industries.

ETS 2 attempts to further close the gap by encompassing medium-small polluters including home heating sources, vehicles and trucks, and small industries, whereas the previous edition only included significant polluters like power plants, cement and steel manufacturers, and airline firms. Furthermore, ETS 2 allows fuel providers to pay rather than households for logistical reasons and to prevent monitoring millions of homes and vehicles, which reflects the costs indirectly to consumers. Meanwhile, ETS 1 allows enterprises and power plants to directly purchase permits for CO₂ emissions.

Furthermore, prices may vary significantly under the current legislation (between €30 and €100/tCO₂), whereas ETS 2 ranges from €71 to €261/tCO₂ by 2030, depending on complementary policies. If the policies are strong (energy efficiency measures that reduce demand for allowances), the lowest price (71€/tCO₂) is applied; if the policies are weak (emission cuts are strictly linked to carbon pricing to reduce demand for allowances), the highest fare (€261/tCO₂). To protect industries and consumers, ETS 2 also imposes stricter price caps (max €45/tCO₂ to 2030), with the possibility of releasing additional permits if the price spikes. However, fundamental demand can still push prices higher than €200 because safeguards can only bump them up by 18%. ETS 1, nevertheless, permits price volatility while adjusting supply via the Market Stability Reserve (MSR1).

Public opinion is a major issue with ETS 2. Although the price of ETS 1 was kept somewhat invisible as it was being capitalized into power pricing, ETS 2 has tangible impacts on domestic energy and transport prices, which can elicit reactions from the general public.

Lastly, ETS 1 reduces emissions at a pace of 4.3% per year, whereas ETS2 will need to reduce emissions at a rate of 5.1% per year starting in 2027 in order to fulfill objectives more quickly because of delayed action (Günther et al., 2024).

Carbon Border Adjustment Mechanism (CBAM)

One of the EGD's most disputed provisions is the Carbon Border Adjustment Mechanism (CBAM).

Proposed on July 14, 2021, and approved in 2023, it aims to stop carbon leakage originating from

EU businesses move their carbon-intensive manufacturing to nations with laxer climate regulations but also from carbon-intensive imports. CBAM sets a carbon price on imports of carbon-intensive products such as hydrogen, fertilizers, iron and steel, cement, and aluminum, in order to bring their carbon costs into line with the EU's Emissions Trading System (ETS). CBAM ensures that EU companies decarbonize while retaining their competitiveness by aligning with the phase-out of free ETS permits (2026–2034). It is made to abide by World Trade Organization (WTO) regulations, demonstrating the EU's adherence to international trade standards.

Its operationalisation has been divided into two main phases, a first transitional phase and a second definitive phase.

1. From 1st October 2023 to December 31st the first transitional period calls for importers to report embedded GHG emissions without making any financial adjustments, allowing stakeholders time to get used to
2. As of January 1, 2026, the EU ETS weekly average carbon price (€/tonne CO₂) on embedded emissions, offsetting carbon prices paid elsewhere, serves as the reference point against which importers must buy CBAM certificates. On or after March 31, 2025, authorized CBAM declarant status is needed and handled via the CBAM Registry.

CBAM is composed by several objectives and mechanisms such as:

- balancing the carbon costs of imports and EU-produced commodities;
- replaces the ETS's free emission allowances for specific industries;
- intends to encourage third-world nations to implement comparable carbon pricing;

- equalizes carbon costs to mitigate the danger of EU companies moving to nations with less stringent emission regulations;
- applies EU norms to international trade participants through market access criteria, functioning as a transnational measure with extraterritorial influence.

A downward trend has been witnessed in 2023 specifically in trade statistics regarding six high carbon emission sectors, such as:

1. Aluminium
2. Cement
3. Electricity
4. Fertilisers
5. Hydrogen
6. Iron and Steel

These sectors were selected due to their significant carbon emissions and susceptibility to carbon leakage, which might cause manufacturing to move to nations with laxer climate regulations.

Asian developing countries make up a large portion of the exporters to the EU in these industries. Increased export spending and possible short-term financial losses for these nations might result from the adoption of CBAM, which may lead to stronger reluctances and potential deterioration of bilateral relations with these nations.

Moreover, the access to raw materials for EU importers may become more costly, presenting difficulties for sectors that depend on foreign inputs. This change in trade dynamics and new regulations could represent an opportunity for gaining competitive advantage for certain industries and companies that are able to transition swiftly to greener practices, both within and outside the EU.

By 2026, the mechanism, which is now in a transitional phase, should be fully functioning, with emission certificates decided by routine assessments (Agayev, 2024).

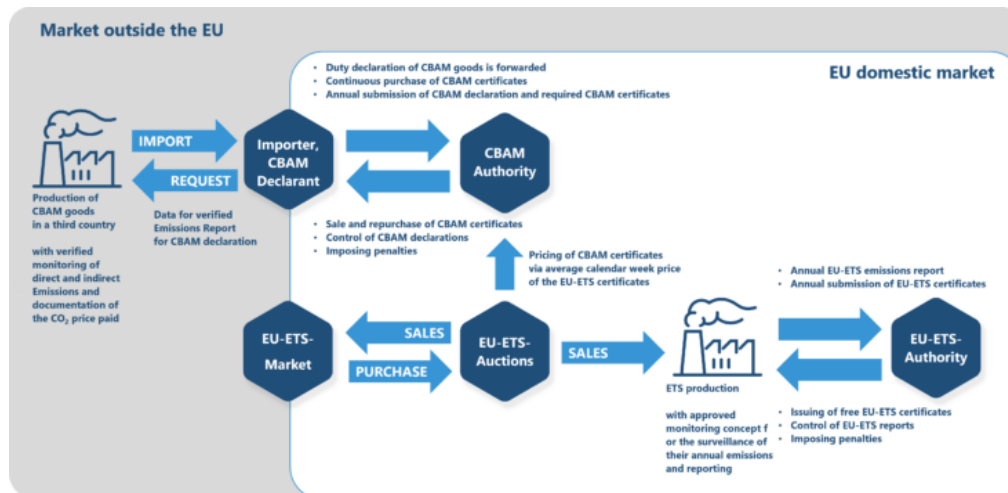


Figure 1: Overview of the interrelationships between CBAM and EU-ETS. Source: FfE München (2024) *Carbon Border Adjustment Mechanism (CBAM) is in force. What needs to be considered?* - FfE. <https://www.ffe.de/en/publications/carbon-border-adjustmentmechanism-cbam-is-in-force-what-needs-to-be-considered/>.

Renewable Energy Directive (RED III)

The acceleration towards renewable energy as outlined in the RED III Directive (2023/2413) proceeds through these key features:

- Renewables Acceleration Areas in which fast-track zones are free from Environmental Impact Assessments (EIAs), if mitigating measures are in place;
- Decreased Permitted Timelines that permit processes received substantial shortening to one year (or even 6 months in case of smaller projects) potentially at the expense of public participation and detailed environmental scrutiny;
- Overriding Public Interest Clause to projects using renewable energy as main source, placing them legally superior to other environmental interests, raising questions regarding ecological balance and democratic legitimacy (Montini, 2024);

Within this policy, the introduction of battery energy storage systems (BESS) with photovoltaics (PV) improves energy independence and lessen the erratic nature of renewable energy sources, resulting in a roughly 47.8% decrease in energy imports. On the other hand, while RED III aims to boost the EU's clean energy usage, its credibility in climate diplomacy might be threatened by the weakening of environmental

regulations. This process is critical when analysing the bilateral relations with China and the US, which scrutinise the EU regulatory standards during trade and bilateral discussions. The “green normative power” should not be hindered by an energy policy that compromises biodiversity or ecosystem protection, potentially creating counternarratives especially for the case of China and the US.

Hence, the alignment between internal policies in regard of the speed of renewable deployment and biodiversity protection is fundamental to present the European Green Deal as a just sustainable global strategy (Montini, 2024).

Effort Sharing Regulation

The main features of the ESR are:

- Establishing enforceable national emission reduction goals based on GDP per capita for every Member State, upholding the values of fairness and solidarity;
- Covering most emitting sectors such as road transportation, building heating, agriculture, and small businesses;
- Creating a climate governance framework able to monitor targets through National Energy and Climate Plans (NECPs), introduced in the Governance Regulation and consolidated by the European Climate Law;
- Introduction of a second Emission Trading System (ETS 2), comprising heating fuels and road transport, accounting for circa 50% of the necessary reduction in ESR sectors;
- Establishment of flexibility mechanisms that enable member states to accomplish the objectives through banking or borrowing emission allowances, trading, and use of LULUCF (land-use) credits. According to this framework the wealthier member states encounter more stringent reductions and possess restricted ETS1 allowance conversions for compliance

Energy Efficiency Directive (EED)

The EED binds Member States, from 2024 to 2030, to annually save an average rate of energy equivalent to 1.49%, which is higher than the prior requirement of 0.8%.

Additionally, in order to achieve almost zero-energy requirements, the public sector is expected to renovate at least 3% of the total floor area of public buildings annually and lower consumption by 1.9% annually.

Finally, the directive aims at alleviating consumers affected by energy poverty through implementing measures of energy efficiency (European Commission, 2023b).




KEY PRIORITIES	RED 	ReFuel EU 	Fuel EU Maritime 
Overall target	14.5% GHG reduction by 2030 or 29% energy share	6% energy share of SAF by 2030	6% GHG reduction target as of 2030
RFNBO target	1% with double counting by 2030	1.2% by 2030, 2% in 2032	2% from 2034
Crop-based biofuels	Limited to 2020 Member State volumes, max 7%, with 1% flexibility	Non-eligible	Non-eligible
Annex IX biofuels - Part A (advanced biofuels)	Mandate of 4.5% with double counting by 2030	No mandate	No mandate
Annex IX biofuels- Part B	1.7% cap	Not capped	Not capped
Non-Annex IX biofuels	Eligible	Excluded: PFAD, palm and soy derived materials, soap stocks & derivatives, intermediate crops; rest is limited to 3%	Eligible
Multipliers	1.2 for advanced biofuels and 1.5 for RFNBOs in the A&S sectors, 4 for renewable electricity	No multipliers	2 for RFNBOs by 2034
Electricity	Support via the credit mechanism	No direct supporting mechanism	Electricity counted as having zero-emissions

Figure 2: Comparison between targets in RED, ReFuelEU, Fuel EU Maritime.

Source: T&E (2024) *RED III implementation, BRIEFING - September 2024*.

https://www.transportenvironment.org/uploads/files/REDIII_implementation_briefing.pdf.

Land Use, Land-Use Change and Forestry (LULUCF)

An actual policy harmonisation can be obstructed by limited integration and openness of LULUCF policy in LTSs context, reflecting a disconnection between national aspirations and EU benchmarks. Indeed, 15 Member States' 2030 projections are lower than the LULUCF Regulation targets, requiring new or revised policies. Therefore, internal inconsistencies remain despite the EU's aspiration to lead. To introduce landbased mitigation measures, the majority of Member States (MSs) need well-established, quantifiable, and coordinated national programs. Long-term strategy (LTS)

imperfections, i.e., lack of integration of cropland and peatland policies, may undermine the EU climate credibility.

This, therefore, erodes the EU's influence over green diplomacy. US land-based mitigation under the Inflation Reduction Act incorporates activities like forestry and carbon farming. China's long-term carbon neutrality and national afforestation strategies are tied to the LULUCF sector. By improving its use, therefore, the EU's LULUCF policy can be promoted to enable international collaboration (Lallo et al., 2023).

Circular Economy Action Plan (CEAP)

The main targets of the CEAP are:

- Implementation of a framework for sustainable product policies to guarantee that goods are made to be long-lasting, repairable, and recyclable;
- Providing customers with trustworthy information about the sustainability of products and supporting public procurement procedures that give the circular economy top priority;
- Targeting the most resource consuming industries which already possess a high potential for circularity;
- Reducing waste production while enhancing reutilisation, reparation, and recirculation of resources to keep them in the EU economy for as long as feasible;
- Promoting innovation and job creation at the local and regional levels while aiding in the growth of regional circular economies;
- Positioning the EU as champion of the circular economy worldwide while encouraging collaboration on sustainable resource management at multilateral, regional and bilateral levels (European Commission, 2020a);

Green Deal Industrial Plan (GDIP)

The Green Deal Industrial Plan (GDIP) is built around 4 main pillars:

1. Predictable and Simplified regulatory environment under the Net-Zero Industry Act (2023), setting a target to domestically produce 40% of its net-zero technology by 2030 enhancing the geopolitical independence from actors like China. The Net-Zero Industry Act has the general scop of simplifying clean-tech project permitting procedures, prioritizing strategic projects through financing schemes and simplified regulatory requirements, leading to a general less red tape. However, concerns have been raised about environmental safeguards, as accelerated permitting could weaken biodiversity and water protections.
2. The second pillars focuses on accelerated access to fundings, increasing both private and public funds towards net-zero industries while also redirecting funds from the EU Recovery and Resilience Facility (RRF) and creating a European Sovereignty Fund (ESF), trying to counterbalance the foreign subsidy. Although this could boost the European industry, it could also create market distortions which could favour disproportionally the wealthier MSs.
3. Skill development is another main feature of the GDIP. With plans for Net-Zero Industry Academies to teach workers in technologies like hydrogen and batteries, the GDIP places a strong emphasis on reskilling and upskilling the workforce for green sectors. The risk here is to face an underfunding in this sector vis-à-vis US and China workforce.
4. The final pillar is concerned with an open trade and resilient supply chains. Initiatives like the Critical Raw Material Act (CRMA) set targets for 10% domestic extraction 40% processing, and 15% recycling of CRMs by 2030. This pillar aims at tackling the strong dependency that the EU faces with China, especially in the field of rare-earths (Im et al., 2024).

EU Batteries Regulation (2023/1542)

The key features and objectives are the following:

- Batteries must be designed in a way to minimise their environmental impact, promoting practices of recycling and repairing;
- From 2025 batteries will be subject to carbon footprint calculation, particularly the ones dedicated to electric vehicles;

- Setting ambitious targets to boost gathering and recycling in order to recover materials and reduce dependency;
- Restricts the use of dangerous elements in batteries and mandates frequent inspections to make sure that only essential hazardous materials are utilized;
- Battery-related garbage will be considered as "black mass", designating them as hazardous to guarantee correct management and avoid contaminating the environment (European Commission, 2023a);

EU Biodiversity Strategy 2030 (EU BDS)

Overall, this strategy accounts for more than 100 actions and 17 targets which have been operationalised through 22 main tools: the Dashboard and Actions Tracker, created by the Commission's Knowledge Centre for Biodiversity (KCBD). While the Action Tracker provide tracking of individual actions such as: Protected area designations, restoration initiatives, legislative proposals (e.g. Nature Restoration Law) and biodiversity financing, enabling policy makers and experts to address the eventual gaps; the Dashboard offers both aggregated and disaggregated data by MS or EU-wide regarding: Percentage of protected land and marine areas, restoration progress, status of pollinator populations and nature financing flow providing also real time visuals for easier policy understanding (Viti et al., 2024).

Just Transition Mechanism (JTM)

The JTM is structured around three main pillars:

1. Firstly, this mechanism is a financial instrument, granting funds to assist impacted areas' environmental restoration, reskilling, and economic diversification. Its €17.5 billion (2021–2027) budget includes €10 billion from the NextGenerationEU recovery tool and €7.5 billion from the EU's Multiannual Financial Framework (MFF). Investments in SMEs, start-ups, energy efficiency, renewable energy, worker reskilling, and land restoration (such as replanting of old mining sites) are among the eligible activities.

2. Through the InvestEU programme, the JTM provides financial solutions and assurances to assist initiatives that are in line with just transition objectives. It emphasizes social investments, like education and inclusiveness and infrastructure, like sustainable energy and transportation).
3. Through the Public Sector Loan Facility (PSLF) managed by the EU Investment Bank, public sector initiatives, including energy-efficient infrastructure and environmental restoration, get financed by combining EU funds with EIB loans (Europa.eu, 2025).

However, compared to the US's Inflation Reduction Act which ensures access to €369 billion, the JTM is not only limited in terms of funding amount, but also slow in being implemented, with just 3% of the total fund being spent by 2025.

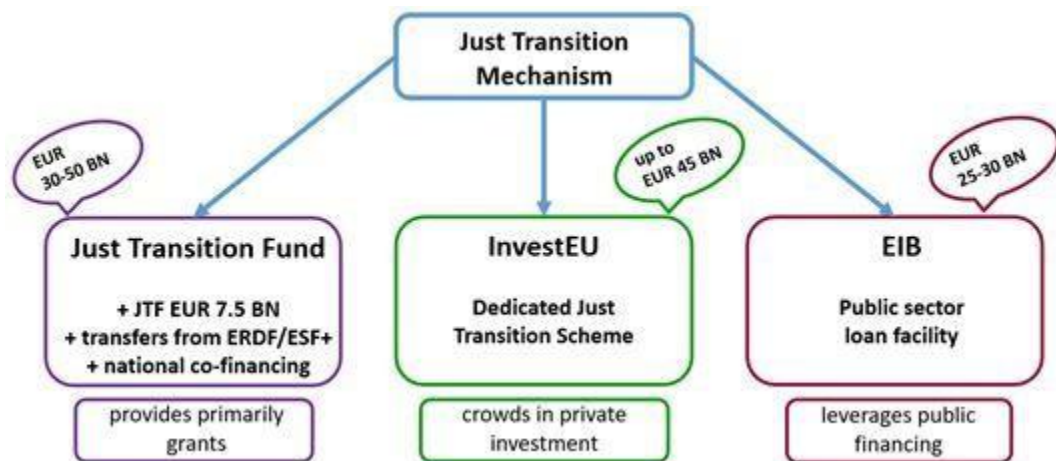


Figure 3: Composition of the Just Transition Mechanism

Source: CEPCONSULT (2020) *Prospects for the functioning of the Just Transition Mechanism - CEPCONSULT*. <https://cepconsult.com/publications/prospects-for-the-functioning-of-the-just-transitionmechanism/>.

EU Taxonomy Regulation

The EU Taxonomy Regulation aims to achieve its objectives through:

- Implementing an economic diversification of initiatives like energy efficiency, sustainable agriculture, and renewable energy (such as solar and wind) as sustainable, directing funds to areas moving away from fossil fuels;
- It actively follows with the EGD's dedication to social justice, basic social protections guarantee that Taxonomy-aligned operations uphold community welfare and labour rights;
- Supports regional transition plans by giving priority to investments in sustainable activities, guaranteeing that places that rely on fossil fuels receive financing for green infrastructure and reskilling initiatives;
- By specifying what is considered a “green” activity, the Taxonomy lowers the possibility of greenwashing and focuses funding on climate-friendly initiatives like low-carbon manufacturing or afforestation. This helps the EGD reach its 2030 investment target of €1 trillion;
- The CSRD's mandatory disclosures guarantee that businesses and financial institutions declare the percentage of operations that are aligned with the Taxonomy, promoting market trust and empowering investors to give sustainable portfolios first priority;
- Establishes a global benchmark for sustainable finance, impacting investment frameworks and green bond markets. It strengthens the EU's position as a leader in global financial regulation and is consistent with international frameworks such as the Paris Agreement (Europa.eu, 2020).

EU Global Gateway

By extending the EGD's sustainability and climate neutrality objectives worldwide, the Global Gateway establishes the EU as a green powerhouse through different initiative:

- With climate action, it supports the EGD's Fit for 55 and net-zero by 2050 by funding sustainable transportation, renewable energy, and climate-resilient infrastructure;

- Through sustainable development, it supports the EGD's human-centered approach, investments in digitisation and health, guaranteeing equitable growth;
- By shaping global standards the The Global Gateway strengthens the EU's position as a world leader in sustainable finance by promoting high environmental and social standards that are based on European values and the EIB Climate Bank Roadmap (European Investment Bank, n.d.).

The Global Gateway projects focus on strategic autonomy and sustainable supply chains can lead to trade disputes, especially between the US and China.



Figure 4: Global Gateway Investment priorities

Source: Help, I. and Help, I. (2022) 'THE GLOBAL GATEWAY - EU-ASEAN,' *EU-ASEAN - Strategic Partnership 2024*, 4 April.
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