NOVA SCHOOL OF LAW

ANDRÉ FRANCISCO SOARES CARVALHO ALVES TEIXEIRA

AUTONOMY STRATEGY AND THE FUTURE OF THE GREEN INDUSTRIAL TRANSITION: A TRANSATLANTIC COMPARATIVE

Dissertation to obtain a Master's Degree in Law,
with specialization in International and European Law

Supervisor:

Prof. Dr. Lucila de Almeida
Professor of NOVA School of Law, Coordinator of NOVA Green Lab and Coordinator of the Master's in International and European Law

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On my honour, I declare this to be true.

André Teixeira
12/12/24

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DECLARATION

I hereby declare that the body of the thesis or dissertation, including spaces and notes, occupies a total of 199.959 characters (including spaces), in accordance with article n.º 21 of the 2nd Cycle Regulations of NOVA School of Law. The language of this dissertation is English (UK) and it uses as its citation and bibliography style the Oxford Standard for Citation of Legal Authorities (OSCOLA).

LIST OF ABBREVIATIONS

- AB - Appellate Body
- ACA - Affordable Care Act
- CBO - Congressional Budget Office
- CCS - Carbon Capture and Storage
- CVC - Clean Vehicle Credit
- DSU - Dispute Settlement Understanding
- ECB - European Central Bank
- EV - Electric Vehicle
- GATT - General Agreement on Tariffs and Trade
- GHG - Greenhouse Gas
- IRA - Inflation Reduction Act
- IRS - Internal Revenue Service
- ITC - Investment Tax Credit
- JCT - Joint Committee on Taxation
- LCR - Local Content Requirements
- MPIA - Multi-Party Interim Appeal Arbitration Arrangement
- NATO - North-Atlantic Treaty Organization
- NDC - Nationally Determined Contribution
- NZIA - Net-Zero Industry Act
- NZSP - Net-Zero Strategic Projects
- PTC - Production Tax Credit
- RE - Renewable Energy
- RRF - Recovery and Resilience Facility
- TCTF - Temporary Crisis and Transition Framework
- WTO - World Trade Organization

Abstract: In the last few years there has been a growing concern about the decreasing industrial independence of the European Union (EU) and United States of America (US) when it comes to the green industrial transition. Since then, the European Commission has proposed a series of legislative changes to strengthen the industrial capacity of the EU, with similar examples being introduced by the Biden administration in the US. However, there is little debate about the borderline between autonomy strategy and protectionism, especially in the context of the new industrial shift into a greener economy. This dissertation aims to analyse the two case studies of the US and the EU, focusing on the search for effective public policies for the development of strategic autonomy through investment in the green industry and seeking to detect protectionist impulses in the context of a case study between two major pieces of legislation. The cases analysed were the “Inflation Reduction Act” when it comes to the US, and the “Net-Zero Industry Act” when it comes to the EU. The final purpose is to produce conclusions on the compatibility of current geopolitical tensions and the state of the two study cases in question, deriving a view of what the plan forward should be to ensure efficacy of public policy in both cases.

Keywords: Dissertation – United States – European Union – Inflation Reduction Act – Net-Zero Industry Act – Draghi Report – Market Economy – Protectionism – Strategic Autonomy – Green Transition – Industrial Strategy – Case Study – China – Geopolitics

Resumo: Nos últimos anos tem-se verificado uma preocupação crescente com a diminuição da independência industrial da União Europeia (UE) e dos Estados Unidos da América (EUA) no que toca à transição industrial ecológica. Desde então, a Comissão Europeia propôs uma série de alterações legislativas para reforçar a capacidade industrial da UE, tendo sido introduzidos exemplos semelhantes pela administração Biden nos EUA. No entanto, existe ainda pouco debate sobre a fronteira entre a estratégia de autonomia e o protecionismo, especialmente no contexto da nova transição industrial para uma economia mais verde. Esta dissertação pretende analisar os dois casos de estudo dos EUA e da UE, centrando-se na procura de políticas públicas eficazes para o desenvolvimento de autonomia estratégica através da indústria verde e procurando detetar impulsos protecionistas no contexto de um estudo de caso entre dois grandes diplomas legislativos. Os casos analisados foram o *Inflation Reduction Act*, no caso dos EUA, e o *Net-Zero Industry Act*, no caso da UE. O objetivo final é produzir conclusões sobre a compatibilidade entre as tensões geopolíticas atuais e o estado dos dois casos de estudo em questão, derivando uma visão sobre o plano a seguir para garantir a eficácia das políticas públicas em ambos os casos.

Palavras-chave: Dissertação – Estados Unidos – União Europeia – Inflation Reduction Act – Net-Zero Industry Act – Relatório Draghi – Economia de Mercado – Protecionismo – Autonomia Estratégica – Transição Verde – Estratégia Industrial – Estudo de Caso – China – Geopolítica

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A good government implies two things: first, fidelity to the object of government, which is the happiness of the people; secondly, a knowledge of the means by which that object can be best attained. Some governments are deficient in both these qualities; most governments are deficient in the first.

James Madison, The Federalist Papers No. 62, 1778

1. INTRODUCTION AND RESEARCH PROPOSAL

1.1. PROBLEM AND MOTIVATION

Many regions throughout the world are experiencing extreme weather events, including heatwaves, wildfires, hurricanes, and flooding, which seem to be linked to climate change. The concentration of greenhouse gases in the atmosphere, primarily carbon dioxide, continues to rise, resulting in a steady increase in global temperatures. Nations are taking steps to reduce emissions and transition to renewable energy sources, but the overall pace of action is considered insufficient to limit global warming to the targets set out in the Paris Agreement, which seems difficult to do without structural changes to the economies of the main polluters. This is an issue since energy and industry have long been the domains of competition between nations, and such is especially true when it comes to today's challenges.

The broader context of geopolitical competition between China and the United States of America (US), which prompted the European Union (EU) to position itself as a strategically independent third player, becomes even more complex when the rivalry extends to the realm of industries, not only essential to tackle the climate crisis, but also to ensure autonomy in the face of the disruption of international relations. In the aftermath of the COVID-19 pandemic, the Russian invasion of Ukraine, and the conflicts in the Middle East, the two main Western economic powers seem to have decided that the interconnected world they depended on was too unsafe and unbalanced to keep. Liberal economic values, a priority in place since the twentieth century's turn into a globalized economy, are apparently put in second after a succession of situations reminded us that the dependence on unsafe sources of critical materials and energy might not endure the fallout of regional or global conflicts. Many of the US's and EU's policies concerning technology and security are undergoing a process of evolution in search for geopolitical influence[1]. For instance, in 2019, President von der Leyen boldly characterized her Commission as "the geopolitical Commission that Europe urgently requires". While presenting the team for her new mandate in 2024, she reinforced this aspect saying that she would strive "to ensure we stay a Geopolitical Commission"[2]. While we have witnessed the politicization of policies in various areas, industrial policies focused on the transition into cleaner and more environmentally friendly production and consumption of energy, in the

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[1] Dennis Broeders, Fabio Cristiano and Monica Kaminska, "In Search of Digital Sovereignty and Strategic Autonomy: Normative Power Europe to the Test of Its Geopolitical Ambitions" (2023) JCMS: Journal of Common Market Studies nº61, 261–1280.

[2] Ursula von der Leyen, "Press statement by President von der Leyen on the next College of Commissioners" (*European Commission*, 2024)

context of strategic competition, is unmistakably steering pertinent policies towards a geopolitical orientation, while the climate crisis represents a growing concern worldwide.

While sometimes approached with caution, and after an initial period of established isolationism, the US government has historically embraced the globalization phenomenon instead of attempting to oppose it. However, recent events put into question the sustainability is this stance[3]. Concerns related to economic security and national defence seem to be influencing a bulwark of US political orthodoxy, and questions arise about the possibility of commercial wars with traditional allies, not only China. The history, values, and institutions of the US discourage a significant shift towards interventionism, regardless of its underlying motivation, but such a change might not be avoidable considering the current political climate. In response to these challenges, the EU is working to strike a delicate balance, ensuring the protection of its internal market while avoiding a shift towards protectionist measures. Concurrently, the EU is actively considering investments in emerging technologies and markets, promoting and coordinating cooperation with its members, and constructing supportive legal frameworks for its intentions, all focused on achieving a degree of independence and autonomy[4]. The necessity of such a status was laid bare when the threat of a natural gas drought caused by the economic sanctions imposed on Russia created the danger of a long and cold winter in Europe. In summary, the EU faces the complex task of positioning itself as a significant geostrategic player while also preserving its contentious identity as a regulatory and norm-setting authority. A daunting task, when faced with the simultaneous need to ensure the block cannot be blackmailed through the commerce of energy again.

As such, this study, while based on a legal and even economic point of view, also deals directly with the foreign policies of the nations involved, as their industrial options when it comes to legislation are a product and a consequence of these policies.

1.2. RESEARCH OBJECTIVE AND QUESTION

While it's apparent that various socio-economic systems have a legitimate prerogative to protect themselves through strict and adaptable trade control measures, as proposed, this inherently creates challenges when delineating the boundary that distinguishes similar from

[3] Aaron L. Friedberg, “The End of Autonomy: The United States after Five Decades” (1991) Daedalus Vol.120 nº4, 69–90.
[4] Dennis Broeders, Fabio Cristiano and Monica Kaminska, “In Search of Digital Sovereignty and Strategic Autonomy: Normative Power Europe to the Test of Its Geopolitical Ambitions” (2023) JCMS: Journal of Common Market Studies nº61, 261–1280.

dissimilar[5]. Different individuals might hold varying perspectives on where this demarcation should be situated, which are in a logical sense equally significant. But is it even possible to maintain the liberal international order of free commerce with the current geopolitical tensions? Is it possible to ensure economic independence while facilitating a transition into a green economy? Is the fight against climate change destined to become a casualty of autonomy strategy, or is it instrumental for the development of said strategy? And can the legal tools that served us in the past maintain relevance in a world that seems to actively disregard them? These are important questions that must be answered in a focused manner, to ensure that polices being implemented right now do not fall into the trap of looking into the urgent but to into the important. Looking at the issues present in the literature[6], the current international context, and considering the different angles that can be worked, the main question at hand is:

I. Which of the legal instruments used to promote the industrial transition in modern autonomy strategies is better when it comes to the efficacy of its public policy?

Considering these worries, the main objective of this dissertation is to answer this question, compare the legal instruments in both jurisdictions, understanding if the legal tools being used and currently in development are derivative of protectionist purposes, and characterizing the policies being implemented in the process. The recent European and American Elections represent a definite critical point for the future of green industrial policy on both sides of the Atlantic. The conclusion is never a foregone expectation, especially regarding the policies' efficacy. I must also add that this question, however academic, will be approached from an unapologetic European point of view, not only in the sense that the writer is a citizen of the EU, but that the goal of the work is to aid in the discussion of how the Union can improve its policies in the interests of a more just, fair, green and efficient transition.

1.3. METHODOLOGY OF CASE STUDIES

As for the methodology used, it begins with a comprehensive literature review, focused on legal documents, doctrinal materials, and scholarly publications. There was an attempt to cross-reference information from multiple sources, ensuring accuracy. Qualitative study designs are generally less specific and precise compared to those in quantitative research, and

[5] Brian Hindley, "Protectionism and Autonomy: A Comment on Hager" (1982) International Affairs Vol.59 nº1 Winter, 77–86.
[6] Jens Hillebrand Pohl, "Strategic autonomy as a means to counter protectionism" (2021) ERA Forum Vol.22, 183–191.

there can be overlap between study designs and data collection methods. Common qualitative research designs include case studies, oral history, focus groups, participant observation, community discussion forums, and reflective journal logs. In our case, the focus of the work will be a binomen of case studies, that encompass within themselves a myriad of challenges.

A case study is expected to capture the intricacies of a single case, which should function as a cohesive unit and be investigated within its natural context using a variety of methods[7]. Case study methodology plays a bridging role between the quantitative and qualitative methods in the field of social sciences. A case may be examined with intrinsic interest in the case itself or with the aim of making broader generalizations. When generalization is deductive in nature, the process typically involves testing hypotheses, or analysing the comparisons between two different situations, as will be the case. Since the potential for further development in case studies lies in mastering the combination of various techniques and merging different modes of research, this methodology[8] offers potential for expanding the utility of any conclusion to the problem at hand. The use of comparative law, understood as the study of different legal systems, with the aim of identifying similarities and differences between these legal systems, will benefit the choice of methodology and the usage of two main case studies, that of the United States of America and that of the European Union. This will involve the systematic comparison and analysis of the reactions of these two regions to gain a deeper understanding of how they answered the challenges put in place by the pushback on globalization, the climate crises and the need for strategic autonomy, in order to both reindustrialize and to allow a green transition.

A case study, typically a qualitative research design, can also be used in quantitative research[9]. A "case" can be an individual, group, community, event or any defined unit, and is treated as a whole entity for an in-depth exploration of specific aspects. This design aims to examine the case's unique complexity rather than the entire population of similar cases, taking away focus from the creation of a relevant quantity in the development of a study process, from which it is possible to derivate a hypothesis, and putting it into the context of the two cases that were selected[10]. Case selection is usually purposive, focusing on providing comprehensive insights into the topic. A case study is ideal for exploring areas with limited prior knowledge or for gaining a holistic understanding of a situation, group, or phenomenon. It aims to

[7] Rolf Johansson, "On Case Study Methodology" (2007) Open House International Vol.32 nº 3, 48–54.
[8] Ranjit Kumar, *Research methodology: A step-by-step guide for beginners* (SAGE Publications 5th edition, 2018)
[9] Ibid.
[10] Ibid.

extensively explore rather than confirm or generalize findings beyond similar cases. Building rapport with participants and using multiple data collection methods is crucial for thorough analysis, while considering the case as a single entity throughout.

1.4. THE PRINCIPLES OF COMPARATIVE LAW

Regarding the need for comparisons between two very different legal, political and social systems, it stands as inevitable that one finds refugee in the practices of comparative law. However, like in many areas of legal scholarship, there is no official canon of great works to emulate in comparative law. One might even question whether a distinct "comparative law method" truly exists. While I was never formally trained in how to conduct comparative law research, I do agree with the existence of a "comparative method" capable of being used in cases such as this. While there isn't much consensus on the essentials of this method[11], I found that the principles formulated by Professor John Reitz present the best formulation to date of how to operationalize the practical usage of comparative law in research pieces[12] such as this. Following these principles, it is clear to see that the value of the comparative law method goes beyond the mere jurisprudential study of legal characteristics but is in itself wide enough to encompass a series of different areas and sciences within itself[13]. I dare to suggest that the diversity of legal systems worldwide should be seen as a source of richness rather than an obstacle when it comes to case study analysis. However, for general principles to be a viable source of law in a diverse society, they need to be reimagined, or at least adapted to each specific situation.

Legal traditions across the world could serve as resources for jurists to address issues but claims of commonality or representativeness of legal rules should be abandoned. Instead, the validity of a general principle would rely on the strength and persuasiveness of legal reasoning[14], when applied to the practical consequences of its political application, rather than assertions about the objective nature of law or implicit state consent. This approach is more honest, allowing legal professionals, internationalists and even politicians, to present the actual reasoning behind identifying a particular principle as relevant or useful. This can and should be translated into academia, when it comes to the study of different use cases, due to the real applications of inter-systemic learning.

[11] John C. Reitz, "How to do comparative law." (1998) Am. j. Comp. L.46, 617.
[12] Ibid.
[13] Ibid.
[14] Jaye Ellis, "General principles and comparative law." (2011) European Journal of International Law 22 nº4, 949-971.

1.5. FRAMEWORK AND HYPOTHESIS

In order to explore the research question in the context of the case studies at hand, there is a need to establish a theoretical and conceptual framework around the ideas being studied. The main two concepts being explored are “autonomy strategy” and “protectionism”, encompassing different approaches to a similar problem[15]. When discussing the theoretical and conceptual framework of autonomy strategy versus protectionism, it's important to consider the underlying principles and ideologies that guide these two approaches in international law, politics, international relations, economics, and trade. This framework, initially designed to focus the research question on more palpable legal concepts, evolved during the process of writing this dissertation, ensuring a more diverse research standpoint that was also based on the experiences of the author during the period. A prevalent critique of the political aspiration of achieving strategic autonomy is that it often appears to serve as a mere façade for traditional protectionist policies. In this context, “protection” often signifies safeguarding the interests of declining industries from foreign competition and potential takeovers. While the term may have negative connotations, it's important to acknowledge that “protection” itself is a neutral activity, neither inherently good nor bad. Its value and implications depend on what is being safeguarded, from what it is being safeguarded, who is involved, and its underlying purpose[16]. In the context of a theoretical framework, there are several aspects that must be considered, like the rise and function of economic liberalism, the free trade effects on both and the comparative advantages they present. As for a more conceptual framework, there are several aspects that must be analysed, like national interests, political and ideological factors, legal instruments, international relations, trade partnerships and expected economic outcomes.

Another important factor that must be taken in account is the significant differences that exist between the two political systems. The legislative and regulatory systems of the EU and the US differ significantly in many ways, yet they share some common features. In the phases of rulemaking and implementation, the US holds a slight process advantage. Both regions have robust regulatory frameworks, but they approach this inclusion in distinctly different ways[17]. This has mainly to do with institutional design. Federal institutions in the US

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[15] Scott Lavery, Sean Mcdaniel and Davide Schmid, “European Strategic Autonomy: New Agenda, Old Constraints” in Babić, M., Dixon, A.D., Liu, I.T. (eds) *The Political Economy of Geoeconomics: Europe in a Changing World. International Political Economy Series.* (Palgrave Macmillan Cham, 2022)

[16] Jens Hillebrand Pohl, “Strategic autonomy as a means to counter protectionism” (2021) ERA Forum Vol.22, 183-191.

[17] Richard W. Parker and Alberto Alemmano, "A comparative overview of EU and US legislative and regulatory systems: implications for domestic governance & the transatlantic trade and investment partnership." (2015) Colum. J. Eur. L. 22, 61.

are more developed, powerful, and confident than those in the EU, across all branches of central government[18]. Additionally, Congress has far greater legislative authority over environmental and industrial matters than the EU. Another key difference lies in the balance of power between central and regional authorities[19]. EU Member States must generally agree to the adoption of policies, while in the US, States have no direct say beyond their representation in Congress. In the EU, reaching consensus with Member States whose priorities may diverge poses a significant challenge. Therefore, the instruments are key. There are several instruments that are apt to be examined as hypothetical examples of either protectionist or strategic autonomy response, but their sheer complexity is an obstacle to a general review. However, there are several legal instruments and strategies that represent clear priorities for both sides of the Atlantic and can be analysed to understand both the motivation behind them, the place they occupy in the major national and international legal order, and the political and economic impacts they may encompass. As such, on the US side the focus will be set on the Inflation Reduction Act[20], which is a transformative law that is helping the United States meet its climate goals and strengthen energy security. As for the EU, we will be focusing on the Net-Zero Industry Act[21], a part of the EU's 2023 efforts for an Autonomy Strategy pack of legislation.

2. THE GLOBAL LIBERAL MARKET ECONOMY

2.1. GLOBALIZATION AND DEPENDANCE

Globalization has become a central theme in discussions about the challenges and opportunities humanity faces in the 21st century, as well as both the major cause and effect of the policies taken by Western political leaders since the end of the Cold War[22]. It is commonly understood as the economic, political, and social integration of states and societies, both horizontally and vertically, creating tighter networks of interdependence. National integration into the global economy unfolds through two major observable trends: the rapid expansion of foreign capital and trade, and the unprecedented spread of political democracy and market economy ideas. The debate over globalization's desirability is polarized[23], with some viewing

[18] Cliona JM Kimber, "A comparison of environmental federalism in the United States and the European Union."(1995) Md. L. Rev. 54, 1658.
[19] Ibid.
[20] House Resolution 5376 - Inflation Reduction Act of 2022, 117th Congress
[21] Regulation (EU) 2024/1735 of the European Parliament and of the Council of 13 June 2024 on establishing a framework of measures for strengthening Europe's net-zero technology manufacturing ecosystem and amending Regulation (EU) 2018/1724
[22] Alfred E. Eckes Jr and Thomas W. Zeiler, *Globalization and the American century*. (Cambridge University Press, 2003)
[23] Ibid.

it as mutually beneficial, while others see it as exacerbating exploitation, particularly by international capitalist forces. Critics of globalization, drawing on structural theories of imperialism and unequal exchange, argue that international interactions between strong and weak states result in negative socio-economic outcomes for the poor. They contend that foreign direct investment and trade represent forms of capitalist exploitation in developing societies, perpetuating poverty and leading to societal instability and conflict. In contrast, neoliberal models attribute underdevelopment to internal factors, such as poor governance and interventionist policies, rather than international processes. Neoliberals argue that it is the distortion of domestic and global markets, not their proper functioning, that causes underdevelopment. They believe globalization can prevent narrow interests from controlling markets, while the spread of democracy and reduction of ideological divides will lead to improved social welfare through more accountable redistribution of wealth. While the pros and cons of globalization can and should be debated, its influence in the evolution of political tendencies may not be denied, especially when it comes to geopolitical alignments.

In comparative political economy the United States is denominated a “liberal market economy” characterized by market-based labour policy and an economy relatively free from governmental interference[24]. Government served mostly as arbitrator of disputes and assurance against unfair competition, not a driver of the economy itself. As such, the US used to stand as the example and protector of the global liberal market economy. The advent of the EU as an economic bloc and the rise of China and the Global South created a more intricate network of dependencies that make it more difficult to affirm who is leading the global market economy and who is being led by it, and the political consequences of the dependencies between countries that are many times not politically have come to bear their burden on internal dynamics. In essence, globalization has had its golden years as a political and economic doctrine and may now be experiencing its twilight. It is however essential to help contextualize the rest of this study through an understanding of the underlying historic forces and power dynamics, as well as through the major themes and concepts that guide the case studies.

2.2. THE AMERICAN HEGEMONY

No other country in modern history has amassed as much military and economic preparedness as the United States. Some analysts refer to this as American "hegemony," drawing parallels with British hegemony during the 19th century. Americans, sheltered by the

[24] Robert Lizak and Sebastian Skuza, "The Inflation Reduction Act as an Element of Shaping the US Grand Strategy and the UN Strategy of Global Goals" (2024) Białostockie Studia Prawnicze Vol.29 nº1, 11–26.

vastness and isolation of their country, along with their idealism and distrust of the Old World, have pursued a foreign policy shaped more by their vision of how they wanted the world to be rather than by its actual realities[25], even if their starting point was an isolationism point of view that would sound terribly outdated if not for its current resurgence. The isolationist tradition in America, as seen from 1939 to 1941, was rooted in two key principles: avoiding involvement in European wars and maintaining complete freedom of action[26]. Isolationism differs from pacifism, which rejects any form of war, as isolationists could still advocate for strong national defence, pursue overseas territories, and seek economic spheres of influence. Although isolationists and pacifists often aligned, especially with the outbreak of war in Europe, their partnership was always one of convenience rather than shared ideology. It must be said that the expansion of the United States' territory was viewed as a domestic more than an international matter[27], and that following the Monroe Doctrine any wars for territory in northern, central and southern America were seen as an imperative of the maintenance of the new Republic[28]. The construction of the American empire was never a matter of foreign policy, but of domestic affirmation[29]. Europe and Asia were far, but their backyard was theirs to manage. The break with centuries-long American isolationism first began with President Theodore Roosevelt, with his theory of intervention on account of national interest, and continued with President Woodrow Wilson, with his theory of a transversal American mission of propagation of democracy as the only way to achieve piece[30]. While the first thesis was mostly unpopular and forgotten and the second was applauded, neither was built into US foreign policy until the events in European soil forced the American population to react, not rationally, but emotionally, to the consequences of the conflicts. It was the seeds built by Wilson's vision of American exceptionalism that allowed for the quick mobilization of a people that was by definition and tradition against intervention in the affairs of others, not once but twice.

It was the efforts of President Franklin Roosevelt in "educating" the US public while managing their isolationist purview of the world that ensured that the US was ready to take up arms and join the Allies in 1941[31]. Roosevelt navigated through four different neutrality bills

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[25] National Museum of American Diplomacy, "USA History in Brief Booklet" (*National Museum of American Diplomacy*, 2007)
[26] Justus D. Doenecke, "American Isolationism, 1939-1941." (1982) Journal of Libertarian Studies 6 nº3-4, 201-216.
[27] Ibid.
[28] Ronald Seavoy, *An economic history of the United States: From 1607 to the present*. (Routledge, 2013)
[29] Henry Kissinger, *Diplomacy* (Simon & Schuster, New York, 1994)
[30] Charles A. Kupchan, *Isolationism: A History of America's Efforts to Shield Itself from the World* (Oxford University Press, USA, 2020
[31] Henry Kissinger, *Diplomacy* (Simon & Schuster, New York, 1994)

in Congress in order to fuel the British war effort, eventually shaping the Monroe Doctrine to a state that would be unrecognizable by its creator. The American hegemony caused though wars in Europe and its necessary reconstruction was effectively determined by the US's defence of an international free market centred around the strength of its currency, the dollar, and its quasi-moral belief that the expansion of their ideal of "freedom" with a worldwide transition to democratic institutions would lead to a more peaceful and rational world[32]. In fact, from the United Nations to the International Monetary Fund, it was Roosevelt's view that any violent conflicts between nations should be avoided by a system of collective security, policed by the major victors of the War, that created both the current international system of rules and its institutions[33], opening the way for a new orthodoxy in US foreign policy. This was the major factor in breaking the isolationist consensus the US maintained for most of its history.

During the 1920s, manufacturing corporations created the first consumer culture in the world through their extensive production capabilities. US political leaders viewed the policies that enabled rapid industrialization and the wide range of consumer products as exemplary models for other nations to emulate. While they were partially correct, the model proved insufficient for sustaining the consumer culture over the long term[34]. The Great Depression, which began in 1930 and lasted until 1941, served as a stark wake-up call. This period was marked by a profound national crisis as the creation of new wealth came to a halt and reversed[35]. The economic policies that had initially fostered the consumer culture were no longer effective. To sustain a consumer culture, different policies were needed. Two crucial policies emerged as essential for maintaining a consumer culture: free trade in manufactured goods among industrialized nations and substantial government spending during economic downturns. Free trade leads to affordable consumer products, while massive government spending supports employment and prevents excessive savings by providing assurance of job opportunities. The Great Depression ended as the US geared up for World War II, requiring a rapid expansion of military and naval production funded by a significant increase in government spending that played a pivotal role in overcoming the economic downturn.

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[32] Ibid.

[33] Alfred E. Eckes Jr and Thomas W. Zeiler, *Globalization and the American century.* (Cambridge University Press, 2003)

[34] Indra De Soysa and Nils Petter Gleditsch, "The liberal globalist case." (2002) Alternative Perspectives on World Order EGDI Study 2, 26-73.

[35] Stanley L. Engerman and Robert E. Gallman (eds), *The Cambridge economic history of the United States Vol. 3* (Cambridge University Press, 1996)

The economic model of the West was then defined through the Marshal Plan[36], which proved to be instrumental to the development of the globalized market we have today. Western Europe experienced a swift dismantling of controls over product and factor markets, as well as a restoration of price and exchange rate stability. This occurred partly because the political-economic conditions were favourable, but also because governments in power had a strong pro-market orientation. American administrators pressured European governments to deregulate and liberalize even when they were hesitant to do so, meaning that the formal and informal conditions for receiving US aid promoted growth by shaping the environment in which economic policies were made, or in other words, after the American image of what a market should be. After 1945, the United States held a dominant position in economic resources and power, but in the political and military spheres, the world was characterized by a bipolar balance rather than a single hegemonic power, with the Soviet Union countering American influence until its collapse in 1991. Although the American-led world order did offer benefits like security and prosperity to certain regions, these were considered club goods, rather than universal public goods. However, since the mid-1960s, the United States has become increasingly integrated into the modern global market, which emerged under the protective framework of the North-Atlantic Treaty Organization[37] (NATO), the first ever peacetime alliance that the US joined, mostly to counter Soviet influence. The changes in foreign policy experiences by the US leadership were stark during the start of the Cold War; the US government initially believed there could be a dynamic of collective security with the Soviet regime, but Soviet policy forced the US to accept a philosophy of distinct areas of influence[38].

The exhaustion of the traditional European powers demanded that he US deepened its interventionism and enshrined it as a mainstream foreign policy objective, something unthinkable before World War I. This vision demanded from the US a change in doctrine that could only be accompanied by a “global mission of the protection of democracy”, wherever it stood. While NATO was its military arm, capable of ensuring collective security of Western allies, the expansion of the US economic model was in parallel the most efficient way to counter the Soviet’s own expansionistic ideals. The establishment of this global market was a shared achievement of political leaders from Western Europe and the United States, with a particularly significant contribution from European leaders. They envisioned a world of

[36] J. Bradford DeLong and Barry Eichengreen, "The Marshall Plan: History's most successful structural adjustment program." (1991) Working Paper No.3899, National Bureau of Economic Research.
[37] North Atlantic Treaty. *North Atlantic Treaty Organization NATO*. International Organizations, 2001
[38] Henry Kissinger, *Diplomacy* (Simon & Schuster, New York, 1994)

consumer cultures for all industrialized nations, with global trade serving as the driving force for rapid economic growth. This success was made possible through unprecedented cooperation among advanced industrial nations, which entrusted the management of the global market to international organizations created out of crisis and necessity. The regulation of trade was crucial to resolving disputes before they could escalate into conflicts. However, recent developments have made definitive and grievous blows to the global liberal order that so many believe as essential and inevitable. General discontent due to the far-reaching effects of globalization have begun to truly influence politics, mostly due to the ascension of populist political movements. The 2022 invasion of Ukraine by Russia also demonstrated the real limitations of a global order that is based solely upon free trade markets. As such, it is still an open question if this order is wounded beyond repair.

As we transition into a "post-American world" where globalization is redistributing power towards the Global South and East[39], the United States is working to replace its brief period of global dominance with a network of partnerships to maintain its role as the "indispensable nation". This shift raises important questions about the future of the transatlantic relationship. During the Cold War, European governments aligned with their superpower patron, offering solidarity in exchange for security and a subordinate role in global leadership. This arrangement allowed Europe to feel a sense of power without bearing the full burden of responsibility and shift their bulk investment from defence to the social support networks they are so famous for[40]. However, over 20 years since the fall of the Berlin Wall, the Cold War-era assumptions that once shaped this partnership persist, distorting and complicating Europe's approach to its relationship with the US. As global power dynamics shift, the significance of the transatlantic relationship is bound to change as well, as the US's relative power differential to the rest of the world diminishes[41]. This does not mean that the central spot the US has taken as the "indispensable nation" is going to disappear in the coming years, but that the period of American hegemony where the US was the sole superpower might be coming to an end.

2.3. WHY AN AUTONOMY STRATEGY

Strategic autonomy refers to a country's ability to operate independently in key policy areas without relying on other countries, encompassing fields such as defence, the economy[42],

[39] Joseph S. Nye Jr, "Is the American century over?" (2015) Political Science Quarterly 130 nº3, 393-400.
[40] Jeremy Shapiro and Nick Witney, *Towards a Post-American Europe: a power audit of EU-US Relations* (Brussels: European Council on Foreign Relations, 2009)
[41] Ibid.
[42] Vitor Bento, *Strategic autonomy and economic power: the economy as a strategic theatre* (Routledge, 2022)

and, in the case of the EU and US, the preservation of democratic values. The debate around strategic autonomy in the EU has evolved through several phases. From 2013 to 2016, it was primarily focused on security and defence. Between 2017 and 2019, it became a way to protect European interests amid Brexit, the Trump presidency, and China's growing influence. In 2020, the COVID-19 pandemic highlighted the need to reduce economic dependence on foreign supply chains. The concept has since expanded to cover nearly all EU policy areas. Following Russia's invasion of Ukraine in 2022, efforts to achieve strategic autonomy have intensified, especially when it comes to energy dependency, although the concept remains vague due to varying terminology. This situation has also started to sound the alarm about dependencies on nations with varying degrees of alignment with EU interests, chief among them China, due to the West's dependence on it for masses of capital, cheap labour and raw materials.

It is important to note that strategic autonomy is not explicitly mentioned in the European Treaties, since only Europe's identity and independence in security and defence policy are emphasized. The concept of strategic autonomy is tied to the EU's common defence policy and defining NATO's European pillar. The term first appeared in 1994, resurfaced in 1998, and re-emerged in 2003, just before the Iraq war, to assert Europe's independence amid weakening ties with the United States and increased international tensions with neighbouring states[43]. It wasn't until March 10, 2020, with its Communication on the industrial strategy for Europe, that the Commission finally acknowledged the Union's overall dependence and recognized the concept of strategic autonomy in a broader sense. This marked a significant step in addressing the EU's vulnerabilities and the need for greater self-reliance across various sectors, reflecting a growing awareness of the importance of strategic autonomy in achieving long-term resilience and competitiveness, including in industrial terms.

Strategic autonomy is essential for a nation to maintain strategic options in its interactions with other states. Achieving it requires a shared vision, political will, and the necessary capabilities. Key sources of economic power, such as the size of the economy, trade and technology networks, savings, wealth, and finance, all influence a country's capacity for strategic autonomy. Strategic governance of the national economy ensures that this economic power can be harnessed as strategic power, granting a nation greater autonomy[44]. The paths taken by China, transforming from an underdeveloped nation to a major global challenger in

[43] Scott Lavery, Sean Mcdaniel and Davide Schmid, "European Strategic Autonomy: New Agenda, Old Constraints" in Babić, M., Dixon, A.D., Liu, I.T. (eds) *The Political Economy of Geoeconomics: Europe in a Changing World. International Political Economy Series*. (Palgrave Macmillan Cham, 2022)
[44] Peter A. Hall, "The changing role of the state in liberal market economies." (2015) The Oxford Handbook of Transformations of the State, 426-444.

less than four decades, and Germany, emerging as Europe's dominant power despite its post-World War II defeat and its civilian power stance, serve as two prime examples of this theory in action[45]. Legality, while in question, is never completely out ruled due to the transversal concept of strategic autonomy. Article 20 of the General Agreement on Tariffs and Trade (GATT)[46] permits governments to restrict trade to protect human, animal, or plant life or health, as long as such actions are not discriminatory or disguised protectionism. Additionally, two WTO agreements address food safety, animal and plant health, and product standards, aiming to balance the application of these standards while avoiding hidden protectionism.

In the case of the US, it is a much more direct policy, since there was never a moment since the creation of the young republic that the US ever renounced to the idea of a central sovereignty that determined the characteristic of its autonomy strategy. As previously stated, much of the autonomy strategy of the US was seen much more as a basis for domestic policy than with the creation of options over which to develop relations with foreign powers. The success of this strategy enshrined in the US the idea that its autonomy was a given fact as long as its economic and military power were above any of its neighbours, due both to its geographical position and its neutrality, and this notion was never challenged until the need for intervention in European soil. Only since the start of the millennium has the US had to envision a strategy to develop autonomy in the traditional sense of the word, mostly due to the war on terror, and more recently to shortages in raw materials and issues with labour displacement,

Relations between the US and the EU hold significant strategic importance, particularly in military and economic terms. Despite challenges posed by the Trump administration, the US and the EU remain each other's largest trading partners and primary markets. In 2020, trade in goods and services between the EU27 and the US totalled approximately €950 billion, which is 40% higher than EU trade with China[47]. However, in defence and security, the EU remains heavily reliant on the US, which contributes with 75% of NATO's funding. The EU lacks the short-term resources to ensure its own strategic autonomy, especially as US military spending continues to rise. In 2023 there was a real increase of 11% in defence spending across European Allies and Canada, which the Secretary-General of NATO at the time called an "unprecedented rise"[48]. There are expectations that 18 Allies will be spending 2% of GDP on defence in 2024, a six-fold increase since 2014, when only three Allies met the target. If this was caused by the

[45] Henry Kissinger, *Diplomacy* (Simon & Schuster, New York, 1994)
[46] General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194 (GATT)
[47] Stanley Hoffmann, "US-European Relations: Past and Future." (2003) International Affairs 79 nº5, 1029-1036.
[48] NATO, "Secretary General welcomes unprecedented rise in NATO defence spending" (*NATO*, 2024)

"bullying" policy of the Trump administration, seen as an untrustworthy partner that could not be counted on for mutual defence, or by the bellicose actions of the Russian Federation, is still to be seen, but the most logical conclusion is a combination of the two.

Even with a sympathetic and engaged partner in President Biden, EU leaders started to realize that the need of autonomy in external affairs demands that their NATO obligations are not only met, but that their capacity to defend their own borders is not completely dependent on the US umbrella, as it has been ever since the Cold War. Calls for a European army, independent from NATO allies, are not new, with the first effort for its creation having been made, and failed, as early as 1951[49]. The major positive point of the Alliance has always been its Article 5, that states that if one party of the treaty is attacked, then all are. The purpose of this article is to maintain US engagement in a possible European theatre that might not be as relevant to the US as to its European allies. However, the recent return of isolationist tendencies of the US brings into question the real value of the Alliance as a deterrent against aggression and as a mechanism of foreign policy. While it's uncertain whether the EU will move decisively towards a European army[50], several factors suggest Member States may gradually increase defence cooperation. The EU faces a "capability-expectations gap" in foreign policy and defence, and current economic pressures make it harder for States to justify maintaining unused military assets, even if geopolitical concerns seem to encourage it. Member States are still hesitant to delegate sovereignty, and despite public backing for coordinated defence there is limited support for increasing defence budgets. Only time will reveal whether the US pivot to Asia and ongoing crises will create the conditions needed for the EU to implement significant defence cooperation, even if the founding treaties of the EU make it harder to design. In the energy sector, the EU has increasingly turned to the US to diversify its supply, in order to counter the time where Russia was its primary supplier. It is likely the incoming Trump administration will be receding into its isolationist tendencies, and as such significant autonomy must be developed, be it economic or military[51]. The fact that Biden did not eliminate the Trump era tariffs on strategic goods, and that there seems to be a growing desire for more in-house supply chains in the US, demonstrate that even the Democrats might not be able to go back to a full-on global supply chain scenario, implying a focus on autonomy in the long run.

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[49] Snezhana Stadnik, "A Comparative Historical Study of the Development of a European Army" (*E-International Relations*, 2016)
[50] Ibid,
[51] Veronika Grimm, Ulrike Malmendier, Monika Schnitzer, Achim Truger, and Martin Werding. "The Inflation Reduction Act: Is the new US industrial policy a threat to europe." (2023) Conselho Alemão de Especialistas Econômicos Policy Brief 1.

When it comes to the major external influence to promote an autonomy strategy, the affirmation of the Asian giant is inevitable. In just 15 years, China has become a significant financial, economic, industrial, and military power. By 2030, it is expected to surpass the US, the EU, and Japan as the leading economic power. China is the EU's second-largest trading partner overall and the largest for goods, with trade between the EU and China reaching €657 billion in 2020. There are two main strategies launched in order to achieve and maintain Chinese dominion[52]. First, a “Made in China 2025” strategy that aims to develop national champions that can lead in high-tech strategic sectors globally, in efforts to compete with the US superpower in technological advancements. China keeps its internal market largely reserved for domestic enterprises, protecting them from competition through selective market openings, large subsidies for state-owned and private companies, restricted procurement, and preferential treatment of local operators. EU companies face strict requirements for market access, like creating joint ventures with Chinese firms or transferring key technologies. The EU is heavily dependent on China in three areas: strategic raw materials, such as heavy rare earth elements essential for many industries; intermediate goods, which are vital for global value chains; and medical supplies. All of these are difficult to replace and require efficient long-term vision that might not be simple to achieve with the current political conditions.

Second, the famous “Belt and Road Initiative”[53], known in China as the “One Belt One Road” and sometimes referred to as the “New Silk Road”, started by President Xi to enhance China’s presence in the developing world and ensure a more amicable response to his foreign policies. The has allowed China to export goods to less affluent countries and extract natural resources from developing nations, aiming to address the surplus production of basic materials like steel and cement while effectively using its foreign exchange reserves through lending, facilitating the export of more products to Europe and beyond. Although the initial goals have only been partially met, like building freight railroads from China to Europe, China has shown impressive coordination in implementing projects. The Global South, rich in natural resources, often lacks capital and technology, so China's involvement presents development opportunities. China continues to fund modernization initiatives using its resources in areas like telecommunications, renewable energy, and artificial intelligence. While its successes are questionable when it comes to economics, its geopolitical position has substantially improved.

[52] Xinxuan Cheng and Manjiang Fan, “The impact of the US Inflation reduction act on the restructuring of the Asia-Pacific energy industry Chain and China’s response strategies” (2024) China Economic Journal, 1–23.
[53] Yiping Huang, "Understanding China's Belt & Road initiative: motivation, framework and assessment." (2016) China economic review 40, 314-321.

The relations with China affect the US as much as they do the EU. According to the US Bureau of Economic Analysis, daily trade in goods and services between the US and China reached approximately $1.26 billion in 2023[54], encompassing both imports and exports. A sudden halt in such commerce would disrupt trade at all levels, derail investment, increase financial market volatility, and cripple supply chains for spare parts, assembly components, materials, chemicals, and numerous other goods. Given the US-China geopolitical rivalry, global supply chains have effectively divided into three layers. The first layer consists of strategic goods, making up about 20% of trade between the two countries, which includes not only semiconductors but also critical technologies like supercomputers, software, algorithms, and quantum computing, collectively known as artificial intelligence. The second layer poses a dilemma for multinationals dealing with thousands of dual-use technologies that have both commercial and potential military applications. In today's hyperconnected world, almost anything from an electric toothbrush to an electric vehicle might require an export license. The third layer includes all other trade not categorized as strategic, covering items like apparel, consumer goods, and most agricultural products, which are expected to continue unless a major confrontation or complete breakdown in US-China relations occurs.

Two critical concepts for the analysis of autonomy strategy are decoupling and derisking. Derisking, like decoupling, aims to reduce dependence on a single supplier or safeguard against economic or geopolitical risks[55]. However, unlike decoupling, derisking seeks to maintain essential trade and investment activities once those risks are mitigated. The distinction between the two approaches, though, can often become unclear. As a contemporary example we can consider the EU's effort to de-risk from Russian natural gas in 2022. Before Russia's invasion of Ukraine, the EU imported approximately 40% of its natural gas from Russia, leaving Europe vulnerable to Russian geopolitical influence and the potential weaponization of energy. In response to the invasion, the EU reduced its dependence on Russian energy by diversifying gas sources, cutting wasteful energy use, and investing in renewable resources. Consequently, by the end of 2023, Russia supplied only 12% of the EU's natural gas imports, down from 40% before the invasion. The EU aims to end all Russian gas imports by 2030, with its initial de-risking efforts evolving into a longer-term decoupling strategy, which demonstrates the volatility and interconnection of both concepts. The EU's heavy reliance on imports of vegetable proteins, tied to the broader debate on food sovereignty

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[54] Dong Jung Kim, "US Protectionism and Competition with China" (2024) The Washington Quarterly 47(2), 71–86.

[55] Alex Capri, "China decoupling versus de-risking: What's the difference?" (*The Heinrich Foundation*, 2023)

as a geostrategic objective, is also worth noting. Since reversing this trend requires time, significant investment, and political consensus among Member States, the pace of transition towards achieving strategic autonomy for the EU has become a key geopolitical concern, especially in the end of the first von der Leyen mandate. Processes like decoupling and derisking are likely to remain complex and unpredictable. Geopolitical events, both anticipated and unforeseen, could abruptly shift the focus from strategic derisking to inevitable decoupling. After all, when asked about the greatest challenge for a statesman, UK Prime Minister Harold Macmillan famously responded: "*Events, my dear boy, events*"[56].

2.4. THE CASE FOR PROTECTIONISM

It's in this context of accelerated search for more strategic autonomy that we will explore the concept of "protectionism". Key questions about trade theories, which are among the oldest areas of economic thought, have included what drives trade between nations, its effects on the parties involved, and which trade policies are most effective[57]. Researchers have taken differing positions on these issues, influenced by the gains from trade or the adverse effects of imports on domestic industries. These views can be broadly divided into two opposing camps: one emphasizing the benefits of free international trade, such as economic growth and technological progress, and the other highlighting the harm foreign competition may cause to domestic industries, workers, and cultures[58]. Thus, there is no consensus that free trade is the ideal policy. In many countries, inward-looking protectionist economic policies have gained increasing preference**.** As a result, the global implications of protectionist trade policies are being actively debated, weighing the pros and cons for trade partners. All findings suggest that both protectionism and free trade create winners and losers, challenging the idea that either approach is entirely beneficial or harmful. Protectionism is the policy of shielding domestic industries from foreign competition through tariffs, subsidies, import quotas, and other restrictions on foreign goods[59]. Tariffs are the most common, raising the cost of imports to make domestic products more attractive. Protectionism can support developing industries or

[56] Rudyard Griffiths, "The curse of events and what a second Trump presidency means for Canada" (*The Hub Canada*, 2024)
[57] Birgül Cambazoğlu, "Trade Protectionism: Pros and Cons" in *International Trade Policies in the Era of Globalization,* 94-115 (IGI Global, 2020)
[58] lan O. Sykes, "Regulatory protectionism and the law of international trade." The University of Chicago Law Review(1999): 1-46.
[59] Tyler Coleman, "Antidumping Protectionism and Globalized Economies." (2024) Business and Politics 26 nº1, 142–69.

promote self-sufficiency in defence[60]. Import quotas, which limit the quantity of certain imports, are often more effective than tariffs, as they directly cap import levels of specific origins, for any and all reasons. Protectionism differs from strategic autonomy in the sense that the first is a specific kind of policy banned by the WTO, while the second is a general strategy that can encompass several kinds of measures[61]. Governments have numerous tools to protect domestic industries from foreign competition, such as import taxes, or tariffs, import restrictions, or quotas, subsidies to domestic producers and other regulations.

However, not all protection instruments are equivalent. While tariffs, quotas, and subsidies can have somewhat similar effects on economic welfare and are somewhat supported under World Trade Organization (WTO) rules, regulatory protectionism tends to be far more damaging, often by a significant margin[62]. Unlike direct financial measures, regulatory protectionism indirectly distorts market access, potentially leading to greater inefficiencies and adverse impacts on international trade relations. Additionally, it often escapes the scrutiny applied to more traditional protective measures, making it harder to address and rectify through trade negotiations or agreements. The orthodoxy stands united in its distaste for protectionist measures, especially after the establishment of a globalized chain of labour and supply that came to be the norm in modern times[63]. However, the rising complexity and far-reach of supply chains, especially in the manufacturing of consumer goods, have made it more complicated to justify the use of cheap labour abroad in order to ensure smaller prices domestically.

While it was perfectly fine to maintain the manufacture of products and the maintenance of far-reaching digital and support services in outsourced formats when the economy was booming, the growing number of people that felt abandoned by the relocation of traditional jobs in services and manufacturing turned the issue from sectorial to national. One must always consider the political and electoral roots and implications of protectionism. Industries with lower wages, high numbers of unskilled workers, and older employees might see higher tariffs if voters sympathize with low-income workers facing income losses[64]. Factors such as "fairness," import penetration levels, and reasons for sudden import increases, like dumping, also impact voter support, which in the end is the major, if not single, factor in any political

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[60] Brian Duignan, “Protectionism” (*Britannica*, 2024)
[61] Robert E. Baldwin "The political economy of protectionism" in *Import competition and response,* 263-292 (University of Chicago Press, 1982)
[62] Helen V. Milner*, Resisting protectionism: Global industries and the politics of international trade* (Princeton University Press, 2021)
[63] Wilfred J. Ethier, and Ronald D. Fischer, "The new protectionism." (1987) Journal of International Economic Integration, 1-11.
[64] Zornitsa Kutlina-Dimitrova and Csilla Lakatos, "The global costs of protectionism." (2017) World Bank Policy Research Working Paper 8277.

programme. Voter views on whether an industry's decline threatens a national interest, such as defence or foreign relations, can also shape voter support for active policy. Additionally, voters may oppose tariffs due to fears of foreign retaliation that could negatively affect their own industries. Protectionism tends to be easier to achieve if only a few industries seek import relief or if other governments are also cutting tariffs simultaneously[65]. Voters who support protectionism for self-interested, long-term insurance purposes are more likely to favour it in industries with wages similar to their own. Various factors related to the ability of elected officials to deviate from voter preferences, while still securing re-election, can further influence the support curve for tariff increases. Elected officials might support protectionist measures for strategic reasons or based on lobbying efforts from industries, even when voter preferences differ and are more focused on immediate and typically more local concerns. These dynamics add complexity to how officials balance voter interests with other factors, which makes the application of protectionist measures not only an economic but also a political affair.

3. CASE STUDY I: UNITED STATES OF AMERICA

3.1. BACKGROUND ON THE UNITED STATES

For over 200 years, the history of the United States of America has been an ongoing experiment in liberal democracy[66]. Many issues tackled in the early years remain relevant today, such as the debate over big government versus small government, individual rights versus group rights, unfettered capitalism versus regulated markets, and global engagement versus isolationism. The flavour of these discussions might have changed, but the essential questions that surround them have in essence been maintained by the American political subconscious[67]. Expectations for American democracy have always been lofty, though the reality has sometimes fallen short. Nonetheless, the nation has grown and thrived through a continuous process of adaptation and compromise[68]. Although the economy was strong in the mid-1990s, even those who were materially comfortable were concerned about a perceived decline in quality of life, the weakening of family bonds, and a loss of neighbourliness and civility. These concerns have increased in recent years and found representation in an

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[65] lan O. Sykes, "Regulatory protectionism and the law of international trade." The University of Chicago Law Review(1999): 1-46.
[66] Michael R. Haines and Inter-university Consortium for Political and Social Research, *Historical, Demographic, Economic, and Social Data: The United States, 1790-2002*. (Inter-university Consortium for Political and Social Research 2010)
[67] Paul Studenski and Krooss Herman Edward, *Financial history of the United States* (Beard Books, 2003)
[68] Henry R. Luce, "The American century." (1999) Diplomatic History 23, nº2, 159-171.

increasingly more polarized bipartisan system, where the Democratic Party incorporates the more progressive of American views and the Republican Party integrates its most conservative ones. However, this formal ideological division between the two parties has been complicated by the advent of digital and social media, since it has had a transformative effect on how political parties and candidates can rally their base.

Despite losing the 2012 presidential election to Barack Obama, Mitt Romney was regarded as a relatively moderate conservative, incorporating some traditionally progressive ideas into his policies and advocating for bipartisan cooperation. John McCain's 2008 campaign followed a similar approach, with comparable results. These moderate strategies and electoral defeats may have prompted the Republican Party to adopt a more radical stance[69]. The rise of the Tea Party faction around the 2008 financial crisis, along with more extreme candidates defeating established figures in Republican primaries, indicated a shift toward appealing to voters disillusioned with "establishment" figures and career politicians. The success of Tea Party candidates likely influenced the Republican Party's decision to back Donald Trump when his results in electoral primaries were surprisingly significant, moving away from the moderate platforms of Romney and McCain[70]. While both major parties have long featured politicians aligned with their core policies, Trump's influence introduced a new and more rigid party line, born out of the radicalization of the voter base and the creation of information “bubbles” derived from dependence on social networks and cable television.

The Democratic Party itself was also affected by its growing dependency on urban voters, focusing on its most progressive policies and becoming highly dependent on less moderate identity politics that highly contrast with the traditionalist cultural blowback that propels the Republican public. This was a departure from its traditional public of labour and workers, that it stopped trying to appease through narrative, even if not through policy. While the election of Barack Obama was fruit of a grand collation, it also seemed to create a violent response from the most conservative voters, that saw the “change” candidate continue an economic policy that did not favour their way of life and did not improve the lives of those left behind by globalization. Hillary Clinton’s classification of the rural and downtrodden inner country voter base as “undesirables” further reinforced the notion of a great rift between those that thrived in the cosmopolitan international setting of the new century, and those that did not.

[69] Christian Frederik Bjørnsson Lande, *The Elephant in the Room: A study of how the Republican Party in the United States of America has changed since 2010, and how these changes have affected the party, its politicians, and its politics* (University of Agder, 2024)
[70] Ibid.

The greatest divide in party coalitions increasingly became the level of education, rather than the ethnical, cultural or economic standing of the voters. Ever since, the college educated demonstrate an overwhelming tendency to vote for Democratic candidates, while the non-college educated show a similar tendency to vote for Republicans. While this tendency has always existed, it has never been to stark and intensive as in the last decade[71]. These divisions, both cause and consequence of the voter base changes, have made it increasingly more difficult to create bipartisan support in both Houses of Congress for transformative pieces of legislation. As such, with changes in constitution of both public and party, came significant changes in the policy that the sides of the US binomial political system maintained.

As it stands, US foreign policy is undergoing a significant transformation. In the post-Cold War era, Washington championed economic openness, minimal government intervention and privatization, fuelling the rapid expansion of global trade, often referred to as hyper-globalization. However, the current policy direction has shifted, with both the White House and Congress now emphasizing "fair trade" over "free trade." This shift towards an "America First" economic strategy, first championed by Trump, has been reflected in several concrete actions. Not only did the first Trump administration revive the Buy American Act, but the Biden administration has also pursued inward-focused investment policies, such as the American Rescue Plan Act[72], the Infrastructure Investment and Jobs Act[73], the CHIPS and Science Act[74], and the Inflation Reduction Act. Additionally, the US has imposed tariffs on a wide range of Chinese imports, including electric vehicles, batteries, solar cells, and medical products. The change in administration observed in 2020 had no effect in these tariffs, implying support across the aisles that is unlikely to change in 2025. If protectionism is broadly defined as the implementation of policies designed to shield domestic industries from foreign competition, then it seems clear that the US has embraced a more protectionist stance.

Two main rationales drive these protectionist measures. First, there is a widespread belief that many American workers and companies have been disadvantaged by the unfair economic practices of other nations. From this perspective, it is necessary to compensate Americans who have lost jobs, wealth, or competitiveness due to the forces of economic globalization over the past few decades. Protectionist policies are seen as essential for levelling the playing field and addressing the unfair practices of other countries. Second, the rise of

[71] Stephen Amberg, "Liberal market economy or composite regime? Institutional legacies and labor market policy in the United States." (2008) Polity 40 nº2, 164-196.
[72] House Resolution 1319 - American Rescue Plan Act of 2021, 117th Congress
[73] House Resolution 3684 - Infrastructure Investment and Jobs Act, 117th Congress
[74] House Resolution 4346 - CHIPS and Science Act, 117th Congress

China as a peer and competitor has prompted calls for a more active government role in safeguarding the US's economic leadership and technological superiority. Proponents of this view argue that China's rapid economic and technological advancement has been driven by strong government intervention[75]. Therefore, it would be naive for Washington to remain passive and risk losing its competitive edge in the global power struggle with China. This reaction is appetizing to both those that believe that the US should become more isolationist, focusing on its own domestic interests and public, and those that believe that American exceptionalism and leadership demand a more muscled response to Chinese economic aggression. These two arguments, one focused on domestic economic concerns and the other on strategic geopolitical considerations, are frequently invoked by advocates of protectionist measures. Together, and despite resistance, they are helping to push these policies forward.

3.2. GREEN INDUSTRIAL LEGISLATION IN THE US

For decades, deep-seated partisanship in Washington, D.C. had hindered Congress from enacting significant climate change legislation. The ongoing political divide, particularly with Republicans frequently opposing measures aimed at addressing the climate crisis, had stalled efforts to implement comprehensive policies to combat environmental challenges. The Republican Party had grown increasingly hostile to the science of global warming and to cap-and-trade, associating the latter with a tax on energy and more government regulation (while the nature of the GOP is changing, this area remains a notably contentious point of hatred for its supporters, even if derived more on conspiracy theories centred around climate change than small government ideology). This persistent gridlock has left the United States lagging in its response to one of the most pressing global issues of our time, as legislative attempts to mitigate the impacts of climate change have often been stymied by partisan opposition and been stopped in their tracks due to mostly regional issues[76]. The worsening of the political climate in the US, coupled together with the increasingly worrying levels of disinformation, made a climate-based package almost impossible to push through Congress, especially with bipartisan support.

At the end of the COVID-19 pandemic, the US economy faced the looming threat of long-term weakening, raising concerns about its ability to maintain the privilege of being the world's economic authority, a position shaped by the global balance of power in both economics and international politics. In response, the US administration enacted several

[75] Xinxuan Cheng and Manjiang Fan, "The impact of the US Inflation reduction act on the restructuring of the Asia-Pacific energy industry Chain and China's response strategies" (2024) China Economic Journal, 1–23.
[76] Daniel Weiss, "Anatomy of a Senate Climate Bill Death" (*American Progress*, 2010)

legislative measures to mitigate these risks and challenges in both the short and long term, trying to produce impacts that would be forward looking and capable to survive future incoming Republican administrations that might be intent on going back on the established priorities. Due to the brief window allowed by slight majorities held by Democrats, there was a possibility of advancing with long-term legislation, but the complexity of voting mechanisms demanded that the only matters that could be advanced without bipartisan support would be mostly focused on subsidies and budgetary matters. The brunt of the efforts of new bills were so focused, in order to achieve the most impact, as quickly as possible.

On his first day in office, President Joe Biden re-committed the United States to Agenda 2030, reaffirming the nation's obligation to meet the 17 Sustainable Development Goals by 2030, despite a delay of nearly two and a half years in progressing toward these goals. This recommitment may have influenced the development of the Inflation Reduction Act**,** which also seems to have seek the compliance with the Paris Agreement’s established Nationally Determined Contribution (NDC). Since the US adopted Agenda 2030, there had been no significant legislative initiatives aimed at fulfilling the SDGs at a national level, and the Trump administration’s retreat from the Paris Agreement meant that there was no intention of ensuring a commitment towards its measures. However, in 2020 the political base of then-presidential candidate Joe Biden launched the Build Back Better Plan, a comprehensive proposal representing the most ambitious public investment in social, infrastructure, and environmental programs since the Great Depression[77].

This Plan was divided into three components: the American Rescue Plan, aimed at addressing the COVID-19 crisis; the American Jobs Plan, focused on infrastructure investments and reducing US contributions to climate change; and the American Families Plan, which funded various social policy initiatives. The first part was enacted through the American Rescue Plan Act of 2021, while the second and third components were later regulated through the Infrastructure Investment and Jobs Act of 2021 and the Inflation Reduction Act, signed by President Biden on August 16, 2022. On August 9, 2022, President Biden also signed the CHIPS and Science Act[78] into law. This act aims to incentivize the construction, upgrading, or expansion of semiconductor manufacturing facilities and equipment, establish a high-tech semiconductor research and development program, and promote semiconductor-related workforce development in the US It also includes several measures to strengthen US supply

[77] Molly Hanson, “Two Years Ago, We Passed the Biggest Climate Spending Bill Ever. Here’s What It Has Achieved.” (*Earthjustice*, 2024)
[78] House Resolution 4346 - CHIPS and Science Act, 117th Congress

chains, safeguard national security, and enhance international cooperation. Taken together, these documents represent the most drastic change in US industrial and climate policy in a generation, even if the highly polarized context of the American political landscape may consider this as mere partisan rhetoric. While their effects will continue to be uncertain for quite a while, there can be no doubt about their revolutionary nature, since they were the first to signal a change in strategy, if not rhetoric.

3.3. THE INFLATION REDUCTION ACT

Through reconciliation, which deals with budget, spending, and the federal debt limit, Democrats passed the Inflation Reduction Act (IRA) on August 16, 2022, without any Republican support in the House or Senate. The IRA has as most relevant quirk is the fact that almost none of its significant number of measures has as its direct consequence the reduction of inflation. The stated goal of the law, addressing inflation, appeared more urgent in the months leading up to the bill's debate than in January 2023, when most of its provisions came into effect. While the name may be misleading, the IRA is clearly designed to change production from foreign nations to the US[79], tackling the trend of local companies offshoring labour and supply chains to other markets.

Subsidies were the primary tool available, leading to a $369 billion investment in energy security and climate change[80]. Prior to the IRA, the US was projected to reduce greenhouse gas (GHG) emissions by 30% of 2005 levels by 2030[81]. The clean energy investments in the IRA are now expected to increase this reduction to 40% by 2030. This anticipated reduction is achieved through a variety of tax credits, including an expanded Investment Tax Credit for renewable energy investments, an expanded Production Tax Credit for renewable energy generation, an Advanced Energy Project Credit for renewable energy manufacturing, and several credits for energy-efficient homes, buildings, and certain electric vehicles (EVs). While the IRA alone will not meet the full target of a 50-52% reduction by 2030, it is the most aggressive action Congress has taken to date to address the climate crisis, and has been compared in scale to President Obama's "Obamacare" bill, or the Affordable Care Act (ACA)[82], since it is in essence an "omnibus" piece of legislation that seeks to achieve and

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[79] Justin Badlam, Jared Cox, Adi Kumar, Nehal Mehta, Sara O'Rourke, and Julia Silvis, "The Inflation Reduction Act: Here's what's in it" (*McKinsey & Company*, 2022)
[80] The White House, "Inflation Reduction Act Guidebook" (*The White House*, 2023)
[81] Ping Xu, Tomiwa Sunday Adebayo, Khatib Ahmad Khan, Oktay Özkan and Nizomjon Khajimuratov Shukurullaevich, "United States' 2050 carbon neutrality: Myth or reality? Evaluating the impact of high-tech industries and green electricity" (2024) Journal of Cleaner Production Vol.440 140855.
[82] House Resolution 3590 - Patient Protection and Affordable Care Act, 111th Congress

incredibly vast number of objectives at the same time. As such, the name of the Act is mostly focused at achieving public recognition and acceptance, not reflecting its nature.

The provisions of the IRA were projected to significantly reduce emissions. Without the IRA, under a business-as-usual scenario, US greenhouse gas emissions were expected to drop by 24% to 35% by 2030, compared to 2005 levels[83]. This is a substantial shortfall from the 50-52% reduction target outlined in the country's earlier NDC. However, with the passage of the IRA, emissions reductions were expected to reach between 31% and 44% by 2030[84]. When coupled with increased efforts from federal agencies like the Environmental Protection Agency and the Department of Agriculture, as well as initiatives by states and cities, modelling from the Rhodium Group[85] indicates that the US could still meet its NDC target and therefore achieve compliance with the Paris Agreement. Here stands a brief breakdown[86] of the IRA's major components[87], objectives and details:

1. **Funding for Climate Initiatives:** The IRA provides nearly $400 billion in federal funding to support climate action, with a goal to significantly cut national carbon emissions by the end of the decade. This funding is distributed via tax incentives, grants, and loan guarantees, with the largest allocation focused on clean electricity and transmission. Clean transportation, including electric vehicles, receives the next biggest share, as do efforts for the requalification of what already exists in the network.
2. **Energy Infrastructure Modernization:** The Department of Energy's Loan Program Office received approximately $12 billion, expanding its loan authority tenfold. In addition, a new $250 billion loan program was established to modernize, repurpose, or replace outdated energy infrastructure, focusing on the development of energy networks that are capable of giving responses to both national and international needs, outside of the usual recourse to fracking or import of external petroleum.
3. **Incentives for Private Investment:** Most of the $394 billion allocated for energy and climate efforts takes the form of tax credits, primarily benefiting corporations and private enterprises, intending to stimulate private investment in clean tech. Many of the tax credits allow entities to claim the full amount, even if their tax liability is lower,

83 Ravi Agrawal and Katherine Tai, "The White House's Case for Industrial Policy" (*Foreign Policy,* 2023)
84 John W. Diamond "Macroeconomic Effects of the Inflation Reduction Act" (2022) Rice University's Baker Institute for Public Policy Working Paper.
85 Ben King, John Larsen and Hannah Kolus, "A Congressional Climate Breakthrough" (*Rhodium Group*, 2022)
86 Justin Badlam, Jared Cox, Adi Kumar, Nehal Mehta, Sara O'Rourke, and Julia Silvis, "The Inflation Reduction Act: Here's what's in it" (*McKinsey & Company*, 2022)
87 John D. Podesta, "Building a Clean Energy Economy: A Guidebook to the Inflation Reduction Act's Investments in Clean Energy and Climate Action " (*The White House*, 2023)

using direct tax methods. While undervalued by principle in some circles, this is a major incentive to the requalification of the whole energy industry, since private investment continues to be the main motor of US research and development.

4. **Incentives for Consumers:** Around $43 billion in IRA tax credits are aimed at reducing emissions by making EVs, energy-efficient appliances, rooftop solar panels, geothermal systems, and home batteries more affordable. Starting in 2023, eligible new EVs can receive a tax credit of up to $7,500, while used EVs can get up to $4,000. Qualified home improvements may also earn a credit of up to 30% of their cost, which would allow for both support in the creation of indirect housing programmes, and in the requalification of homes to be more efficient and achieve savings in consumption.
5. **Conditional Requirements:** To qualify for full IRA tax credits, manufacturing facilities must adhere to prevailing wage and apprenticeship requirements. Additionally, many of the tax credits require increased domestic production or procurement. To qualify for the full EV consumer credit, an increasing percentage of critical battery minerals must be recycled in the US or sourced from countries with US free trade agreements, and the battery must be manufactured or assembled in the US. This is not only a main tool of the effort to reindustrialize parts of the US economy, but also an essential vector of the autonomy strategy that motivated it in the first place.
6. **Legislative Synergy:** Clean-energy tax credits and incentives in the IRA are expected to complement and amplify the $70 billion allocated for clean-energy technology and demonstration projects under the Bipartisan Infrastructure Law. Together, these two pieces of legislation are anticipated to provide roughly $370 billion in federal funding over the next five to ten years, accelerating the clean-energy transition. This horizon is also targeted at ensuring that backtracking by future administrations would be difficult, since the legislative synergies and obligations would be settled in the long-term only.
7. **Lower Healthcare Costs:** The IRA reduced prescription drug costs by allowing Medicare to negotiate prices with pharmaceutical companies, introducing an inflation cap on drug prices, and lowering out-of-pocket costs for Medicare beneficiaries. It also extended subsidies under the ACA for an additional three years. The Congressional Budget Office (CBO) projected that these measures would save the federal government $173 billion by 2031, while also supporting the medical support efforts required by the population without making the mistake of calling attention to rising healthcare costs.
8. **Multi-Agency Involvement:** Funding from the IRA would be distributed across more than a dozen federal agencies. The Treasury Department manages most of the funds

due to the extensive use of tax credits, while the Department of Health and Human Services oversees more than $100 billion to extend ACA subsidies. Additionally, the Departments of Agriculture and Energy, along with the Environmental Protection Agency, will receive $120 billion for initiatives related to environmental justice, conservation, and resilience. The diversity in federal commitment allowed for several escape points in case of the failure of relative inefficiency of particular programs.

9. **Revenue Generation:** A significant portion of the new spending under the IRA was balanced by revenue-generating measures. These included raising the minimum tax rate for large corporations to 15%, implementing a 1% excise tax on stock buybacks, and increasing IRS enforcement funding. Combined with healthcare-related savings, the CBO estimated that the IRA would reduce federal deficits by $237 billion over the next decade. While inflation reduction was not the true aim of the project, excessive spending without revenue would be almost universally objected to.

It must be noted that the IRA has vast implications for several fields not directly related to climate or industrialization. For instance, the IRA implements Medicare price negotiation and reform, impacting how US pharmaceutical companies present evidence for their products. The use of real-world evidence and health technology assessments had played a crucial role in assessing drug value and effectiveness, but there had also been a significant lack of customized methodologies that fit the specific healthcare environment and regulatory standards of the US[88]. The impacts of IRA drug price negotiations cannot be understated for the well-being of the American public, even if implying a direct intervention in market practices (something that the US has avoided doing for decades), demonstrating its far-reaching implications. It also bears notice that a key geopolitical goal of the US through the IRA is to reduce dependence on China and Russia, particularly for critical raw materials[89], by building resilient value chains. In this context, a significant tool for achieving this goal is the "Buy American" or local content requirement instrument, that we will explore in more detail below. In this respect, the efficacy of the program can only be evaluated in the long term, even if the direct influences in the economy can and are being judged in the present tense, in very different contexts.

[88] Paul Arora, Alind Gupta, Emma Mackay, Bart Heeg and Kristian Thorlund, “The Inflation Reduction Act: An Opportunity to Accelerate Confidence in Real-World Evidence in the United States” (2024) Value in Health Vol.27 Issue 8, 999–1002.

[89] Regulation (EU) 2024/1252 of the European Parliament and of the Council of 11 April 2024 establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1724 and (EU) 2019/1020

3.4. INSTRUMENTS AND CHARACTERISTICS OF THE IRA

We can consider that the IR has five broader objectives: Purchasing Power, Fair Trade Balance, Growth, Employment and Energy Insecurity. These objectives are sought after using several legal and financial tools[90]. While there is a multiplicity of legal instruments included in the IRA, we will focus on the ones that are more prevalent in the design of its policies.

1. AGENCIES AND SCOPE

The CBO and Joint Committee on Taxation (JCT) estimate that the IRA **g**enerated $738 billion through tax reform and prescription drug reforms aimed at reducing costs, while authorizing $891 billion in total spending, including $783 billion for energy and climate initiatives, along with three years of ACA subsidies[91]. While these numbers are still under evaluation and constant revision[92], this marks the largest investment in addressing climate change in the history of the US, and the greatest investment in industrial policy made since the New Deal. The IRA created 119 new programs with funding available to 11 different governmental Agencies and Departments[93]. The breadth and wide range of impacts crated by the IRA demonstrates the expectations deposited in the law by the Biden administration, that clearly wished to involve the highest possible number of government operations in a transversal exercise that would be capable of long-term changes to the economy[94]. The extreme variety of Agencies and Departments involved is striking, even if all of them can be said to be naturally interconnected. The programs themselves have the following as sources of funding or financial mechanisms[95], including Direct Federal Spending (with acquisition, procurement and transaction agreements), Loans (including modifications), Loan Guarantees and Forgiveness, federally funded third party contract support, among many others. When it comes to the main political scope of the IRA, the Biden administration chose to define it through four essential vectors[96]:

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[90] Douglas W. O'Donnell, "Election to Exclude Certain Unincorporated Organizations Owned by Applicable Entities from Application of the Rules on Partners and Partnerships" (*Department of the Treasury,* 2024)
[91] The White House, "Inflation Reduction Act Guidebook" (*The White House*, 2023)
[92] Joint Committee on Taxation, "Estimated Budget Effects Of The Revenue Provisions Of Title I Committee On Finance, Of An Amendment In The Nature Of A Substitute To H.R. 5376" (*Joint Committee on Taxation*, 2022)
[93] Ibid.
[94] Ibid.
[95] Department of the Interior, "Public Law 93-638 Indian Self-Determination and Education Assistance Act, as Amended" (*Department of the Interior Bureau of Indian Affairs*, 1996)
[96] Department of Treasury, "How the Inflation Reduction Act's Tax Incentives Are Ensuring All Americans Benefit from the Growth of the Clean Energy Economy" (*Department of Treasury*, 2023)

(1) The Inflation Reduction Act offers targeted incentives to spur investment and create opportunities in communities nationwide.

(2) It encourages clean energy project developers to meet strong labour standards, ensuring that workers benefit from the clean energy economy they help build.

(3) The Act will lower the cost of energy-efficient property improvements and rooftop solar installations, saving working families and small businesses money on their utility bills and helping them protect against fluctuating fossil fuel prices.

(4) The Act enables state, local, and tribal governments, as well as non-profits and tax-exempt entities like cooperatives, to receive tax credits as payments, expanding the number of actors with a direct incentive to invest in their communities.

2. TAX CREDITS AND LOANS

Due to the type of document the IRA is, namely a tax and subsidy-based piece of legislation that was built throughout substantial negotiations, the size and complexity of the IRA's credit and loan arrangements are considerate and difficult to schematize. The instruments present in the IRA affect areas like electricity, transportation, buildings, manufacturing, environmental justice, community resilience, lands and agriculture[97] through a wide variety of tax credits, grants, investments and loans available to both businesses and individuals. When it comes to businesses, the main instruments available are base around Commercial Energy Manufacturing, Clean Vehicles, Energy Generation, Carbon Capture and Fuels[98]. When it comes to individuals, the main instruments available are based around Home Energy, Vehicles and Other Energy Efficiency Upgrades[99]. It must be noted that since the IRA is a 10-year plan the changes will not be completely visible for a while, even if the Internal Revenue Service (IRS) and other agencies are united in the production of materials[100] that can help both individuals and companies make use of the opportunities afforded by the IRA.

3. DIRECT PAY AND TRANSFERABILITY

A critical innovation of the IRA is Direct Pay and Transferability, which allows businesses to transfer all or part of the clean energy credits to third parties for immediate, tax-

[97] Ben Beachy, "Inflation Reduction Act: Climate / Energy / Environmental Justice Provisions" (*BlueGreen Alliance*, 2022)
[98] Internal Revenue Service, "Clean Energy Tax Incentives for Businesses" (IRS, 2023)
[99] Ibid.
[100] Internal Revenue Service, "Inflation Reduction Act of 2022" (*IRS*, 2023)

free funds, enabling those without sufficient tax liability to benefit from tax incentives. In essence, the direct pay allows eligible taxpayers to claim credits that offset their tax liability and receive the excess as a cash refund[101]. Previously, only large corporations could fully utilize these credits, raising costs and limiting the financing of clean energy projects. In addition, the transferability allows eligible taxpayers to transfer any eligible tax credit to a third-party for cash. Final rules on transferability are forthcoming and have been slowly implemented by the US Treasury. The new regulations also permit renewable energy investments through noncorporate entities and adjust joint marketing restrictions for multi-year power purchase agreements. In 2023 the IRS and the Treasury released proposed regulations under the IRA[102] to clarify how certain tax-exempt, taxable, and government entities can receive cash from the federal government instead of tax credits ("direct pay"), and the guidelines for transferring energy tax credits to unrelated parties in exchange for cash ("transferability"). These regulations provide essential guidance for financing parties aiming to monetize tax credits under the new systems[103], provided all provisions are applied consistently, and essentially allows for a major conversion of the tax cuts provided into actual capital, be it credit or cash, that can be directly injected in the economy. For taxpayers above the credit limit, this mechanism essentially becomes an indirect subsidy in all but name.

4. LOCAL CONTENT REQUIREMENTS

One of the major components of the IRA is the introduction of Local Content Requirements (LCR) in several tax credits. A LCR is a policy that requires businesses to source products or materials from a specified geographic area to receive certain benefits. One primary goal of LCRs is to encourage innovation. Many potential investors in the renewable energy (RE) sector are hesitant due to the difficulty of competing with well-established, non-RE companies on the global stage. By implementing LCRs, governments can provide protection to domestic manufacturers and RE generators, giving them a shield against more advanced international competitors while they expand their operations. This protection helps new industry players survive their early stages and gradually integrate into the global market. As domestic industries grow and become more competitive, it is expected that international competition will intensify, which will drive innovation. Over time, this innovation is likely to

[101] Michael Masri, Sam Kamyans, Stephen Butler, Adam Nguyen and Sophia Han, “Treasury and IRS Issue Guidance on Direct Pay and Transferability for Energy Tax Credits“ (*Kirkland & Ellis*, 2023)
[102] Ibid.
[103] Bipartisan Policy Center, “3 Reasons Why “Direct Pay” is Crucial for Clean Energy Tax Policy “ (*Bipartisan Policy Center*, 2022)

reduce the global cost of renewable energy technology. Enhancements to the Production Tax Credit (PTC) and Investment Tax Credit (ITC) are available if a certain percentage of raw materials are sourced from the US. Additionally, the Clean Vehicle Credit (CVC) offers up to $7,500 in rebates for EVs that meet specific domestic assembly and battery sourcing criteria[104]. The CVC requires that EVs be assembled in North America, with battery components produced or assembled there and critical minerals used in the vehicle sourced, processed, or recycled in North America, or a country with which the United States has a free trade agreement. The lack of countries that both comply with this requirement and are adequate providers of raw materials demands that this capacity is encouraged on the supply side, representing a clear encouragement of the development of in-house supply chains[105].

4. CASE STUDY II: EUROPEAN UNION

4.1. BACKGROUND ON THE EUROPEAN UNION

The European Union is the major political miracle of the 20th century. Since the rise of the modern state in the mid-17th century, philosophers and political thinkers have envisioned a united Europe rising above narrow national interests. From Napoleon to Hitler, there have been many statesmen that tried to create a European continent united through either force or diplomacy, capable of then projecting the entirety of its significant capabilities to the exterior. Until World War II, the major strategic imprint of British diplomacy was, in fact, avoiding the creation of a united continent that could then turn its head against its insular empire[106]. Even so, the difficulties of uniting an entire continent, full of different people’s, languages, customs and cultures, were and still are significant. Centuries of mistrust and war between nations with ever-changing borders have always been a burden on Europe. Visions of European integration are therefore common, and many empires have tried to achieve this goal with more or less success[107]. Among these competing visions, today's Union stands out.

The countries that formed the European Communities, the first institutional foundation of the EU, opted to limit, though not eliminate, their sovereignty, shifting from a purely nationalist focus to a collective pursuit of peace, economic integration, and supranational

[104] Heram Zahra Amiri, "Green Growth and Employment: Unveiling the Macro, Micro, and Global Implications of the Electric Vehicle Evolution" (2024) Senior Projects Spring 2024.
[105] Ibid.
[106] Henry Kissinger, *Diplomacy* (Simon & Schuster, New York, 1994)
[107] Ibid.

governance[108]. In 1948, France had to come to terms with the reality of a newly established West German state and its growing economic strength. The need for access to German markets and coal resources prompted a major shift in French policy, resulting in a Franco-German alliance that became the cornerstone of European economic integration. The fact that a war-ravaged nation like France accepted co-dependency with its invader and greatest rival was a fantastic piece of foresight from all the leaders involved. For France, admission into this new institution meant security against its belligerent neighbour, preparing for its inevitable recuperation; for Germany, accession was the only conceivable wat to regain the trust of its occupiers and ensure them of tis goodwill[109]. This partnership thrived from the Adenauer and de Gaulle era in 1950s, all through the Kohl-Mitterrand era in the 1980s. The goal of safely integrating a revived German economy into the West was achieved[110], and as a result Germany's economic recovery never again posed a political or military threat to Europe following World War II[111]. Considering that the main purpose of what was to become the EU was to avoid yet another war between the central powers of the continent, then this objective was achieved with such stupendous success that is now taken for granted.

The motivations of the forefathers of the EU stemmed from the catastrophic experiences of the early 20th century. The devastating legacy of extreme nationalists, which caused two world wars, millions of lives lost, and economic devastation, resonated deeply with the people of Europe, who were open to treaty-based, institutionalized economic and political integration. European leaders prioritized ending international conflicts, fostering social harmony, and promoting economic prosperity over the old policies of balance of power, since that balance had already been permanently destroyed by the defeat of the European Great Powers and the affirmation of the Allies as the decision makers of the future. To avoid being run over by their ambitions, unity was not only necessary but mandatory. For the post-war generation, European integration symbolized peace and progress. However, the path to European integration as we know it was far from inevitable. European leaders have often been reluctant to share national sovereignty, despite their public statements. Unlike French Foreign Minister Robert Schuman, who included federalist impulses into the project from the start, European political leaders chose to share sovereignty through supranational institutions

[108] Desmond Dinan, "Europe recast: a history of European Union" (2004) Vol. 373 Basingstoke: Palgrave Macmillan.
[109] Wolfram Kaiser, Brigitte Leucht, and Morten Rasmussen. "The history of the European Union." (2009) Origins of a Trans and Supranational Polity 1950, 72.
[110] Ibid.
[111] Martin Dedman, The origins and development of the European Union 1945-1995: a history of European integration. (Routledge, 2006)

primarily because it served their countries' interests, not because they wished to create a continent-wide superstate. Despite growing public concerns about the process of integration, Europeans generally accept it because the benefits outweighed the alternatives, even if public opinion has become much more diverse in its evaluation of the EU. However, this Union of Europeans was built up despite the public opinion of its citizens, not because of it, making it the first political body to be created before formally acquiring citizenry.

While young, the history of the Union is rich. Starting on the 9th of May of 1950, with Robert Schuman's famous Declaration[112], the European Coal and Steel Community was born, where founding members France, West Germany, Italy, the Netherlands, Belgium, and Luxembourg would pool their coal and steel production. This proposal aimed to lay the first concrete foundation for a system where it would physically and industrially impossible for the Member States to wage war on one another, having as its ultimate goal the creation of a European federation, essential for maintaining peace[113]. Building on their success, the six founders expanded their cooperation to other economic sectors by signing new treaties, establishing the European Economic Community and the European Atomic Energy Community. In 1993, the Single Market was launched, allowing the "four freedoms" of movement for people, goods, services, and capital, while in 1999 a common currency, the Euro, was introduced[114]. The 1990s also saw two key treaties: the Maastricht Treaty (1993), establishing the European Union, and the Treaty of Amsterdam (1999), which enhanced EU policies and governance, while the Schengen Agreement began allowing passport-free travel across large parts of the EU. The divide between Eastern and Western Europe was further healed in 2004 with the accession of eastern countries[115]. The global financial crisis of 2008 brought significant challenges due to the limited capacities of the Union in terms of economic and fiscal policy, but after a fraught moment where repressive economic measures were introduced, the Union survived through pure resilience. European integration continued, with Croatia becoming the 28th EU member in 2013, while in a 2016 referendum, the UK voted to leave the EU, marking a major turning point in the Union's history.

The signing of the Treaty of Lisbon in 2007, which came into effect in 2009, amended the Treaties that preceded it and streamlined the foundational legislation of the Union. While it is not unusual for the EU to proceed with revisions to its founding documents, this was a

112 Robert Schuman, "Schuman declaration May 1950" (*European Union*, 2002)
113 Luuk van Middelaar and Liz Waters, The Passage to Europe: How a Continent Became a Union. (Yale University Press, 2013)
114 European Union, "History of the European Union " (*European Union*, 2020)
115 Ibid.

special one in the sense that would give the Union capacities well beyond its initial economic scope, including in areas like foreign policy, and permanent institutional arrangements that would, for example, give more power to the elected representatives in the European Parliament at the expense of the European Council. Its approval marked the end of a political and institutional crisis within the EU that began in 2005 when the Treaty establishing a Constitution for Europe was rejected by voters in France and the Netherlands. The problem was, of course, the loss of sovereignty that was involved in giving more competencies to the Brussels institutions[116]. After all, if the power to impose taxes and the monopoly of violence are the two basic tools of a state, then this step into a more integrated Union, whose leaders could speak in the name of "European citizens", could spell the beginning of the end for the political independence of the old powers of Central Europe. The removal of a certain degree of independent agency from the European Powers of old was, in fact, one of the major objectives of the European project from the start, but this was always the domain of diplomats and statesmen rather than of the common citizenry. The main issue in convincing the population came from the success in eliminating war between Member States, for if this goal had already been achieved, over which urgency should more power be deposited into the Union's hands? The European public was too diverse in interests and context to be convinced without a seductive narrative that was missing[117], since most of the EU's most important evolutions had been caused by common diplomacy or judicial review, not electoral success or popular support.

It is unlikely that referring to the Treaty as a Constitution would have transformed the EU into a federation by itself, since the European Court of Justice had already established that point nearly twenty years earlier without any objections[118]. This is particularly important due to the role the Court assumed ever since the start of the integration process, singlehandedly establishing the primacy of EU law even before it was enshrined in the Treaties. The EU derives its authority from the sovereign states that are its founding and constituent members, and the Treaty clarified the relationship between the Union and its members more than ever before. Nevertheless, the significance of names cannot be underestimated, and the move toward informal federalism was too much for some Member States and citizens alike. As a result, with the Treaty of Lisbon, Member States returned to a traditional approach to treaty revision. While not perfect, the Treaty of Lisbon allowed for progress that soon proved to be crucial

[116] Luuk van Middelaar and Liz Waters, The Passage to Europe: How a Continent Became a Union. (Yale University Press, 2013)
[117] Ibid.
[118] Giorgio Maganza, "The lisbon treaty: A brief outline." (2007) Fordham Int'l LJ 31 1603.

The 2008 economic crisis and its response shaped the immediate future of the project. It was the largest crisis since the Great Depression, based mostly on overdependence on mortgage-based banking products, starting in the US and then spreading at an alarming rate to all markets aligned with its economic system[119]. While the structural causes of the crisis and the effectiveness of its responses are debate to this day, it represented a modern failure of unregulated markets, specifically an unregulated financial sector and risk management. The EU monetary union always was an ongoing and incomplete project, lacking sufficient safeguards and mechanisms for financial solidarity during emergencies. When the US sub-prime mortgage crisis hit, Europe's financial system was nearly pushed to collapse. The impact, however, was uneven, with Southern European eurozone members suffering far more than others due to their service-based economies and lower levels of industrial density. These countries experienced deep recessions and were forced to implement harsh austerity measures as conditions for bailout assistance imposed by Northern European members[120], leading to significant resentment among Southern European populations. Despite the uneven impact, all Member States faced the shared threat of a potential eurozone breakup, which would have had catastrophic effects for everyone and condemned the immediate future of European integration. This looming danger prompted Member States to overcome their divisions and agree on substantial reforms of the EU's financial system, including emergency funding programs, binding fiscal rules, and the establishment of a banking union[121], complemented by unprecedented financial actions by the European Central Bank (ECB).

During a conference in London in 2012, Mario Draghi, then President of the ECB, stated that "*Within our mandate, the ECB is ready to do whatever it takes to preserve the euro. And believe me, it will be enough*"[122]. With these words, followed with a sweeping program of bond purchases by the ECB, Draghi managed to hold the common currency together even after the tragic programmes of austerity ravaged social structures, caused public upheaval and threatened to destroy faith in the Union. While the monetary union remains incomplete and faith in the financial system remains brittle[123], the actions taken during the crisis have undoubtedly made the EU more stable, enabling it to withstand future economic disruptions. The terrible political and social response to the solutions imposed by the EU to this crisis, as

[119] Daron Acemoglu, "The Crisis of 2008: Lessons for and from Economics." (2009) Critical Review 21, nº2-3,185-194.
[120] Stefan Lehne, "The EU and the Creative and Destructive Impact of Crises" (Carnegie Europe, 2022)
[121] Ibid.
[122] Mario Draghi, "Verbatim of the remarks made by Mario Draghi" (European Central Bank, 2012)
[123] Daron Acemoglu, "The Crisis of 2008: Lessons for and from Economics." (2009) Critical Review 21, nº2-3,185-194.

well as the lack of instruments the Union had to deal with it, set the stage for the EU's reaction to future emergencies and established the need for more permanent cooperation that would not leave the weaker economies of the south in peril. The lessons learned were fortunately applied when the global pandemic hit, when the UK voted to leave the Union and when war returned to the continent, giving strength to Jean Monnet's words "*I have always believed that Europe would be built through crises, and that it would be the sum of their solutions*"[124].

Analyses of balance of power between the Union's major institutions have traditionally emphasized their ideological stance on further integration rather than focusing on power dynamics. The prevailing assumption in the literature[125] is that the Parliament and the Commission often align because both support deeper integration and share a supranational outlook, while the Council represents the Member State's interests and is generally more cautious about further integration. As a result, alliances tend to form based on the institutions' supranational or intergovernmental nature[126]. There have been several changes in the power dynamics between the EU's major institutions, product of both treaty alterations and of the nature of their own leaders. While the Parliament has been more successful in influencing policy outcomes since the introduction of the co-decision procedure, it still cannot consistently ensure outcomes closer to its preferences than those of the Council. It must be noted that in this architecture, the Parliament has actual incentive to represent its ideal of the "citizenry of Europe" even when negotiating between political groupings, while the Council, being constituted by members of national governments, has a much more traditionally diplomatic "power balance" internal system of negotiation. The evolving relationship between them resembles an informal bicameral system with asymmetry, although they share increasingly equal decision-making powers in formal legislative processes and Parliament remains the weaker partner in the legislative process[127]. From its side, the Commission, while losing power in theory, has been increasingly capable of setting the political agenda, mostly due to the assertive nature of its latest and ambitious leader.

The Commission's role depends on two key factors: the policy area affected by the crisis, due to the varying resources available, and the leadership of the President, who brings different backgrounds, experiences, and perspectives on how the institution should operate[128].

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[124] Jean Monnet, *Memoirs* (United Kingdom: Collins, 1978)
[125] Amie Kreppel, "Bicameralism and the balance of power in EU legislative politics." (2018) The Journal of Legislative Studies 24 nº1, 11-33.
[126] Ibid.
[127] Ibid.
[128] Elena Baracani, "Ideational agenda-setting leadership: President von der Leyen and the EU response to the invasion of Ukraine." (2023) West European Politics 46, nº7, 1451-1474.

In terms of resources, the Commission's traditional right to initiate legislation gives its President significant influence over problem recognition, issue selection, and agenda-setting. It has long been into question if the Commission’s President should assume the same kind of role that the head of an executive would assume, since the Treaties’ provisions do not explicitly state so. The “floodgates” were officially opened when during the mid-term of Juncker's tenure, he navigated the challenging institutional and situational constraints by adopting a mediating leadership approach, which ultimately enabled the European Commission President to assume a more prominent political role.[129] Ursula Von der Leyen’s style of leadership has been particularly effective in this new interpretation of the role. For better or for worse, it was Von der Leyen’s vision of a geopolitical Commission that reinforced the EU as a global player with capabilities far beyond what many hoped or even feared. The pandemic presented a new opportunity, and the Commission played a key role in negotiating with vaccine manufacturers on behalf of Member States, leveraging its competence over the market. Von der Leyen also advanced her own agenda by prioritizing the Green Deal and Digital Transition in the recovery spending. During the Russian crisis, she further shaped the EU’s response, setting priorities, declaring herself the voice of the EU’s public response and defining policy tools to support the Ukrainians. Through her leadership in agenda-setting, von der Leyen provided a clear and principled framework for interpreting the crisis and guiding the EU’s actions. This helped to bring new issues to the EU's political agenda and elevate the importance of existing ones. Ultimately, von der Leyen's leadership has contributed to furthering European integration by promoting a strong EU response to these crises[130], whatever one may think of her political views, party affiliation and background.

4.2. GREEN INDUSTRIAL LEGISLATION IN THE EU

While the history of European industrial legislation is relatively vast considering the brevity of the Union’s existence, the EU's formal climate and energy policies only began in the early 1990s. From 1997 to 2007, climate, energy, and innovation policies developed separately, each focusing on specific issues like climate change, energy security, and economic growth. Chief among these was the Emissions Trading System, introduced in 2003 and aimed to price carbon emissions, while energy policies mainly focused on energy security. Early renewable energy and efficiency directives were largely non-binding, and as such lacked significant

[129] Ana Luísa Prado da Silva, "Ursula von der Leyen: The study of her leadership from the media perspective." (2022) Master's thesis, ISCTE-Instituto Universitario de Lisboa.
[130]Hussein Kassim, “The von der Leyen Commission: An Early Assessment”, in Olivier Costa and Steven Van Hecke (eds.), *The EU Political System After the 2019 European Elections*, 169–93 (Cham: Palgrave, 2022).

ambition.[131] New policies were not directly linked to industry, but they aimed to foster "green" growth and jobs through renewables, energy efficiency, and technological innovation. Fairness among Member States, was addressed by setting national targets based on GDP and compensating lower-income states with revenues from the Trading System allowances[132].

In 2016, the European Commission proposed the "Clean Energy for all Europeans" package[133], which aimed to reform energy policies, setting more ambitious renewable energy and efficiency targets by 2030. Legislative proposals were adopted in sequence, with the European Parliament driving more ambitious targets, often citing the Paris Agreement as the motivator for faster and more urgent progress in the field. This moment in time was particularly impacted by global movements of young people awakening to the perils of climate change[134], opening up possibilities of a new electorate that cared more about the climate impacts of policy. Several European parties made stringent electoral gains, especially in Western Europe, where standards of living were significantly higher. As a response, in 2019 the European Green Deal was introduced[135] as a comprehensive green-growth strategy focusing on sustainability, innovation, and job creation, aiming to make Europe the first climate-neutral continent by 2050. The European Climate Law[136] makes the EU's commitment to climate neutrality, along with the goal of cutting net greenhouse gas emissions by at least 55% by 2030 legally binding. As such, the legislative package seeks to achieve these climate targets providing a roadmap to guide the European economy towards its environmental goals, with the “REPowerEU Plan” [137]speeding up the shift away from Russian fossil fuel imports. The Green Deal roadmap included various actions and high ambition but faced severe challenges, such as the high costs of a socially just transition and the need for political support from Member States, which among themselves had a very diverse set of reactions[138]. This was a flagship project for the new von der Leyen Commission, that started its mandate with the need to demonstrate action in order to recover from the handicap of the collapse of the *Spitzenkandidaten* project[139].

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[131] Jon Birger Skjærseth, “The climate policy of the EC: Too hot to handle?” (1994) Journal of Common Market Studies, 32(1), 25-45.
[132] Ibid.
[133] European Commission, “Clean Energy for all Europeans package” (*European Commission*, 2019)
[134] Nicole Nisbett, “The enduring impact of youth climate activism” (*Priestley Centre for Climate Futures*, 2023)
[135] European Commission, “European Green Deal Press Release” (*European Commission*, 2019)
[136] Regulation (EU) 2021/1119 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 (“European Climate Law”)
[137] Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions REPowerEU Plan
[138] J Jon Birger Skjærseth, P. O. Eikeland, L. H. Gulbrandsen and T. Jevnaker, *Linking EU climate and energy policies: Decision-making, implementation and reform.* (Cheltenham: Edward Elgar, 2016)
[139] Kenneth Armstrong “Has the Spitzenkandidaten System Failed and Should We Care?” (*VerfBlog, 2019*)

The COVID-19 pandemic was thought to cause and almost inevitable death of the project, considering the need to switch focus from, green to health issues, but ended up instead as one of the main engines of its massification. To aid with the recovery from the massive impacts of the pandemic, the "NextGenerationEU" program[140] was created, with the Recovery and Resilience Facility (RRF) at its core, an instrument that provides grants and loans to support reforms and investments in the Member States. Critically, the program aided the Green Deal goals by setting aside 30% of its €1.8 trillion budget for green investments. There were concerns that funds might be used for fossil fuel interests, especially in coal-reliant regions[141], but these were secondary considering the primary motivations for the package. As EU climate policies grow more ambitious, ensuring a fair transition has become a priority, addressing issues not just among states and industries but also among citizens and regions. The Green Deal also included plans for a carbon border tax on imports from countries with weaker climate policies, which may pressure nations like the US and China to increase their climate efforts[142]. The green revolution went from a political stance to an existential project for the von der Leyen Commission, and its effects started to be felt in every part of its action, especially in the context of its RRF project evaluations[143], even if sometimes only aesthetically. What started with a focus on climate ended up with a focus on competitiveness, the buzzword of the new mandate.

The EU derives most of its power for foreign policy from the capacity to influence external actors through its market, in the purest economic sense of the term “soft power”[144]. The size of the Single Market forces some of its standards and regulations on the foreign countries that have to deal with it, since they could not participate in its wealth generation otherwise. This is an issue that has proven to be particularly difficult to deal with by post-Brexit UK, especially when it comes to the difficulties small and medium sized companies have when complying with EU regulations. This influence proves effective when it comes to developing countries, that due to their material needs have little choice beyond depending on foreign markets. However, between 2008 and 2014, Europe’s exports to countries considered part of the Belt and Road Initiative decreased by $25 billion, while China's exports surged by $250 billion, in what can be defined as a strategically defined Chinese push for trade expansion[145].

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[140] European Union, “NextGenerationEU” (*European Union*, 2020)
[141] Jon Birger Skjærseth, "Towards a European Green Deal: The evolution of EU climate and energy policy mixes." (2021) International Environmental Agreements: Politics, Law and Economics 21, nº1, 25-41.
[142] Ibid.
[143] Ibid.
[144] Joseph S. Nye*, Soft power and great-power competition: shifting sands in the balance of power between the United States and China* (Springer Nature, 2023)
[145] Jonathan Holslag, “How China’s New Silk Road Threatens European Trade.” (2017) The International Spectator 52 (1), 46–60.

Chinese investments come without the conditionalities typically attached to European projects, and as such can be viewed as simpler to implement by countries with little interest in the development of Western-based political systems.

The overall shift highlights Europe's weakened competitive position, especially in sectors critical to its economic strength, like financial services, green industrial machinery and high-tech products, as China continues to capitalize on the opportunities created by its Belt and Road Initiative[146]. The recent US turn into support for its own manufacturers and supply chains also served as major motivation for a transversal effort in mixing the new reindustrialization drive and the already established green transition policy line. The need for a piece of legislation to counter the IRA was therefore not only economic but political. However, there was resistance to this idea from a group of Member States, cautioning the Commission that easing subsidy regulations could jeopardize the cohesion of the internal market[147]. Concerns that the Commission was doing too much or too little were sidetracked and the machine focused on delivering on the commitments given by the President. The Green Deal Industrial Plan was introduced by the European Commission in March 2023 to compete in the clean tech race sparked by the US, accelerate the net-zero industry and ensure the timely achievement of the European Green Deal's objectives. Other elements of this industrialized Green Deal include the Critical Raw Materials Act[148], released on 3 May 2024, and the Electricity Market design reform, published on 26 June 2024[149].

4.3. THE NET-ZERO INDUSTRY ACT

Although the EU lacked a single prominent green subsidy program like the IRA, it had numerous initiatives at both the EU and national levels that provide subsidies for similar goals. However, this fragmentation made (and continues to make) it challenging to determine the total amount of public support directed annually toward clean tech manufacturing and deployment. One of the major efforts to move in the direction of EU-wide programs was the Regulation (EU) 2024/1735 of the European Parliament and of the Council of 13 June 2024 on establishing a framework of measures for strengthening Europe's net-zero technology manufacturing

[146] Ibid.
[147] Barbara Moens, Joshua Posaner, Samuel Stolton and Karl Mathiesen , "The great EU subsidy shakedown" (*Politico*, 2023)
[148] Regulation (EU) 2024/1252 of the European Parliament and of the Council of 11 April 2024 establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1724 and (EU) 2019/1020
[149] Regulation (EU) 2024/1747 of the European Parliament and of the Council of 13 June 2024 amending Regulations (EU) 2019/942 and (EU) 2019/943 as regards improving the Union's electricity market design.

ecosystem, usually referred to as the Net-Zero Industry Act (NZIA)[150], which following an agreement reached between the European Parliament and the Council was published in the Official Journal of the EU on 28 June 2024. The NZIA entered into force on the next day, with most of its provisions applying from this date. This publication marked the completion of the legislative process for the key components of the Green Deal Industrial Plan. The NZIA[151] is therefore aimed at boosting the production of clean technologies within the EU. The goal was to expand the EU's capacity to manufacture technologies that are essential for the clean energy transition and produce very low, zero, or negative greenhouse gas emissions during operation.

This legislation seeks to attract investment and improve market conditions for clean tech in the EU, with the target of achieving at least 40% of the Union's annual deployment needs for net-zero technologies by 2030. This would accelerate the EU's progress toward its 2030 climate and energy goals and the transition to climate neutrality by 2050, while enhancing the competitiveness of EU industries, create high-quality jobs, and support the EU's move towards energy independence. The Act also streamlines the regulatory framework for manufacturing these technologies, which seeks to bolster the competitiveness of Europe's net-zero technology sector and increase the capacity to store CO2 emissions, while focusing on technologies that play a significant role in decarbonization, particularly those that are commercially available and can be rapidly scaled. The essential goal of the Net-Zero Industry Act[152] is to ensure that manufacturing capacity for the strategic technologies approaches or reaches a strategic benchmark of the Union's annual deployment needs, required to meet the Union's 2030 climate and energy targets. It was structured through four main steps[153]:

1. **Strategic Net-Zero Technologies:** It identifies technologies deemed essential, such as solar photovoltaic and thermal, onshore and offshore wind, batteries and storage, heat pumps, geothermal energy, electrolysers, fuel cells, sustainable biogas, biomethane, carbon capture and storage (CCS), and grid technologies. These technologies are determined as critical and therefore given high political and economic advantage over others, both through the regulation and its own secondary effects.

[150] Regulation (EU) 2024/1735 of the European Parliament and of the Council of 13 June 2024 on establishing a framework of measures for strengthening Europe's net-zero technology manufacturing ecosystem and amending Regulation (EU) 2018/1724
[151] Julia Voskoboinikova. "EU: the Green Deal Industrial Plan proposals unwrapped" (*Linklaters*, 2023)
[152] European Commission. "Net-Zero Industry Act" (*European Commission*, 2023)
[153] Simone Tagliapietra, Reinhilde Veugelers, and Jeromin Zettelmeyer, "Rebooting the European Union's Net-Zero Industry Act" (2023) Bruegel Policy Brief, No. 15/2023.

2. **Production Targets:** It sets a goal for the EU to domestically produce at least 40% of its annual deployment needs for these technologies by 2030, hoping to be able to satisfy the EU's international commitments. Additionally, it establishes a target for CO2 storage capacity, aiming for 50 megatons (Mt) of CO2 by 2030 to encourage CCS development, in accordance with the carbon markets already developed and the myriads of carbon-related measures currently in development.
3. **Governance and Strategic Projects:** Member States are tasked with identifying Net-Zero Strategic Projects (NZSPs), which will be reviewed by the European Commission. These projects should contribute to CO2 reduction, competitiveness, and supply security, focusing on technologies close to commercialization, a shift from previous support that targeted early-stage development, in the hopes to increase both economic impact and immediate contribution to climate goals.
4. **Support Measures:** The NZIA provides a set of policy tools to promote these projects, including streamlined permitting and administrative procedures; coordination of private funding, with €92 billion in investment needed by 2030, mainly from the private sector through a "Net-Zero Europe Platform"; limited public subsidies prioritized in national and EU budgets, though no new EU-level funding is allocated; and public procurement and auction processes that prioritize sustainability and resilience, while bids reliant on non-EU countries for more than 65% of supply would face significant disadvantages.

The Act focuses on improving conditions for investment in net-zero technologies by simplifying administrative procedures, speeding up permit approvals, and giving priority to essential NZSPs, such as CO2 storage sites[154]. The purpose is to streamline project development and enhance the resilience and competitiveness of the EU industry, while promoting market access by encouraging public authorities to consider sustainability and resilience in procurement decisions. When it comes to the increasingly mounting issue of skill development, and to ensure there is a skilled workforce to support production, the Act introduces measures such as creating Net-Zero Industry Academies[155]. The Net-Zero Europe Platform, a critical part of the whole endeavour, was designed as a tool to support coordination by monitoring progress, identifying financial needs, and fostering collaboration across sectors.

[154] Friedrich-Ebert-Stiftung, "The key provisions in the EU's Net-Zero Industry Act" (*Friedrich-Ebert-Stiftung*, 2023)
[155] Ibid.

4.4. INSTRUMENTS AND CHARACTERISTICS OF THE NZIA

Without direct subsidies, the NZIA uses several instruments to outline a series of changes to national and European planning and approval frameworks, including streamlining permit procedures, shortening approval timelines, enhancing transparency and reporting for carbon capture opportunities, improving market access, and facilitating state funding.

1. SCOPE AND COORDINATION

The NZIA seeks to align national policies across the currently fragmented internal market, aiming to make investment in manufacturing essential technologies for the EU's energy transition easier and more appealing. It sets the goal for the EU to establish a manufacturing capacity for net-zero technologies sufficient to meet at least 40% of annual deployment needs for its 2030 climate targets and 15% of global production of these technologies by 2040. Provisions in the NZIA support relevant projects in securing necessary financing, both through direct EU budget allocations and by providing guidance to promoters on private financing options. It highlights the critical role of private capital in scaling up net-zero manufacturing at the speed required for the energy transition[156]. While it does not specify the mechanics of private financing, it encourages Member States to facilitate financial solutions, including blended public-private funding where needed. Additionally, the NZIA mandates Member States to streamline regulatory processes, aiming to cut red tape and expedite permits for new net-zero technology manufacturing and assembly facilities[157]. Although the NZIA emphasizes the importance of increasing both state and private investments to meet its goals, it provides limited detail on the specific mechanisms for financing these initiatives, which will need to be "filled in" in the future for full effect.

2. SUPPORT OF NET-ZERO STRATEGIC PROJECTS

The main focus of the NZIA is the determination and support of the NZSPs that are identified as important to achieve the EU's climate and industrial goals. As such, the NZIA lays out various policy tools to support selected projects[158], primarily at the national level:

[156] Jessamy Gallagher, Ruth Knox, Candice Lambeth, Ally McKechnie, Stuart Rowson and Camille Jetzer, "The Net-Zero Industry Act "(*Paul Hastings LLP*, 2024)
[157] Ibid.
[158] David Kleimann, Niclas Poitiers, André Sapir, Simone Tagliapietra, Nicolas Véron, Reinhilde Veugelers, and Jeromin Zettelmeyer. "Green tech race? The US inflation reduction act and the EU Net-Zero industry act." (2023) The World Economy 46, nº12, 3420-3434.

1. **Streamlined Permitting and Administrative Processes:** The NZIA sets EU-defined time limits for permit acceleration and related administrative steps, including the establishment of a national one-stop-shop authority responsible for these projects.
2. **Coordination of Private Investment:** The Commission estimates that achieving the 40% target by 2030 will require €92 billion in investments, with around 80% expected to come from the private sector. This effort will be supported by the "Net-Zero Europe Platform" that facilitates connections and leverages existing industry alliances.
3. **Limited Public Subsidies:** Primarily allocated at the national level, funding support for NZSPs will be prioritized in national and EU budgets. However, the NZIA proposal does not introduce new EU-level funding, nor is such funding being planned in parallel.
4. **Public Procurement and Auctions with Sustainability Criteria:** Procurement procedures will incorporate "sustainability and resilience" criteria, weighted up to 15%-30%. Additionally, bids using over 65% of equipment sourced from a single non-EU country will face penalties.

The NZIA proposal also highlights other areas, such as regulatory sandboxes and a skills agenda, but lacks detailed implementation plans[159]. Although the Commission recognizes skills shortages as a significant barrier, the NZIA stops short of offering a concrete strategy to address this, instead focusing on coordinating initiatives through the new Platform.

3. PERMITS AND DEMAND

A central aspect of the NZIA is its streamlining of permitting processes. By 2025, each Member State must establish a single point of contact to manage the entire permitting procedure, aiming to reduce the timeline from years to months. The NZIA also introduces "Net-Zero Acceleration Valleys," specific regions designated by Member States to support net-zero industry clusters and expedite administrative steps. Public investments in these zones may qualify for maximum co-financing rates under several EU funding mechanisms, including the ERDF, Cohesion Funds, Just Transition Fund, and ESF+[160]. The NZIA also aims to stimulate demand for net-zero technologies through three key instruments. First, from April 2026, new

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[159] Ibid.
[160] Future Cleantech Architects, "Net-Zero Industry Act – What Is It?" (*Future Cleantech Architects*, 2024)

public procurement rules will require authorities to prioritize environmental sustainability and resilience when sourcing goods, services, or works related to net-zero technologies, particularly when over 50% of components are imported from a third country, though authorities can waive these criteria if cost disparities are significant. Second, beginning in January 2026, Member States must apply non-price criteria like environmental sustainability, innovation, energy integration, and resilience to at least 30% of annual auction volumes for renewable technologies, with some flexibility allowed if cost differences are substantial. Lastly, the NZIA encourages Member States to develop support schemes that incentivize households, companies, or consumers to choose high-sustainability, resilient net-zero products by providing financial benefits, promoting widespread adoption of these technologies[161].

4. TEMPORARY CRISIS AND TRANSITION FRAMEWORK

Since EU countries are the primary source of public funding for NZSPs, the NZIA should be considered alongside the Temporary Crisis and Transition Framework (TCTF)[162], which the European Commission updated in March 2023 in response to the IRA. The TCTF sets conditions under which the Commission will approve aid for accelerated investments in sectors critical to achieving a net-zero economy[163], such as batteries, solar panels, wind turbines, heat pumps, electrolysers, carbon capture, and the production or recycling of priority components and critical raw materials. Specifically, the TCTF allows Member States to provide more support to cleantech production in disadvantaged regions, with limits on the percentage of investment costs depending on the location and size of the beneficiary.

1. **Grant higher percentages of investment costs** when the aid is offered through tax incentives, loans, or guarantees. This means that support can cover not only capital expenditures but also operating expenditures, up to the funding gap. This is a relatively new approach for Europe, previously used mainly in cohesion policy.
2. **Offer matching aid**, which matches the level of support a company could receive if it invested in an alternative location, in a significant revision of the state-aid guidelines. Matching aid requires individual approval and must follow certain safeguards: investments must be in assisted areas or involve cross-border projects in at least three

[161] Ibid.
[162] European Commission, “Temporary Crisis and Transition Framework” (*European Commission*, 2024)
[163] David Kleimann, Niclas Poitiers, André Sapir, Simone Tagliapietra, Nicolas Véron, Reinhilde Veugelers, and Jeromin Zettelmeyer. "Green tech race? The US inflation reduction act and the EU Net-Zero industry act." (2023) The World Economy 46, nº12, 3420-3434.

countries, with substantial investment in at least two assisted areas. The aid must use low-emission production technology and cannot lead to the relocation of investments.

5. ANALYSIS AND EVALUATION

5.1. COMPARING THE INSTRUMENTS

While seemingly very similar in function and toolbox, the IRA and the NZIA are extremely different documents when it comes to strategy. While the first deals mostly in financial support to the development of a green industry and clean energy production through programs of federal spending, be it direct or indirect, the second consists mostly of a support scheme for the development of projects in specific areas of interest for the green transition, without centralizing efforts beyond controlling administrative requirements and redirecting existing funding programs[164]. While both seek to encourage the creation of an industrial base adapted to the fight against climate change, the US uses a direct and centralized approach, while the EU maintains its tendency to use an indirect and decentralized one. The debate in Europe over setting industry-specific controls and incentives versus general environmental quality standards resembles the US approach, but with lower stakes and the absence of an effective budget that can create enough financial incentives to make the technologic transition worth it for both existing and new players. Unlike the US, where the Environmental Protection Agency enforces nationwide technology-based pollution standards, Europe lacks a central regulatory agency with similar enforcement powers[165]. As a result, even with facility-specific standards, enforcement largely depends on domestic authorities within each country, even if heavily regulated Member States may push for such standards in anticipation of a future EU regulatory body with enforcement authority. Consequently, these countries are often the strongest advocates for strict enforcement of EU environmental laws. Due to lower capital mobility within the EU compared to the US., there is also less concern about a regulatory "race to the bottom" in Europe, which in turn reduces the need for centralized environmental regulation[166]. Together with institutional limitations, this explains the NZIA’s focus on support for local projects and procedures, rather than centralized rules and subsidies in the IRA.

Unlike the raw mobilization of financial resources encompassing the IRA, no new fund has been established to implement the NZIA. Instead, it will utilize a range of existing EU and

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[164] Ibid.
[165] Michael G. Faure, Jason Scott Johnston, and Robert G. Fuller Jr., "The law and economics of environmental federalism: Europe and the United States compared." (2009) Virginia Environmental Law Journal, 205-274.
[166] Ibid.

national funding mechanisms to achieve its goals, which marks a definitive difference between the direct investments under the IRA. The inclusion of 19 net-zero technologies, an expansion beyond the initially considered list, acknowledges the range of technological approaches necessary to meet the EU's climate targets, but may dilute focus and stretch limited resources[167]. Member States will need to quickly assess and prioritize strategic projects, potentially leading to regional disparities in implementation, meaning local and regional governments will also require robust support. Reaching the global production target will demand significant investments in technology and infrastructure, posing potential challenges in funding and coordination. Future alignment with critical raw material regulations is vital, as the availability and sustainability of raw materials are central to scaling[168]. The expected green subsidies under the IRA are comparable in size to those available in EU, with the exception of renewable energy production, where EU subsidies remain significantly larger. However, there are notable qualitative differences between the two. IRA subsidies tend to favour domestic producers, whereas EU subsidies do not impose such restrictions. Additionally, the IRA's clean-tech subsidies are simpler, less fragmented, and primarily geared towards the large-scale deployment of green technologies rather than fostering innovation. While these seem like reasonable directives for the scope of the act, its effect on labour is still very much dependent on community engagement and the belief of the business sector in a long-term sustainable model of industrial development centred on clean energy.

A study by the Roosevelt Institute on the impacts on jobs created by the IRA[169] concluded that the way communities collaborate with businesses to address their labour needs will determine how much they benefit from incoming clean energy investments. With the predominance of large and moderate-sized projects, most post-IRA clean energy investments will have significant impacts on local labour markets. Data also show that 83.3% of all projects and 88.3% of all jobs created by post-IRA clean energy investments are concentrated in the battery, electric vehicle, and solar panel manufacturing industries, representing 84% of all large and moderate-sized projects post-IRA[170]. The presence of LCR's gives the IRA a distinct protectionist feel, unlike the NZIA, which has as a significant advantage their role in safeguarding domestic employment. A major challenge of renewable energy policies is the

[167] Future Cleantech Architects, "Net-Zero Industry Act – What Is It?" (*Future Cleantech Architects*, 2024)
[168] Ibid.
[169] Alí R. Bustamante and Joe Peck. "Harnessing the Inflation Reduction Act: Case Studies in Maximizing Local Economic Benefits" The Roosevelt Institute (2024)
[170] Ibid.

potential job loss in areas that rely heavily on the fossil fuel industry[171]. LCRs address this issue by creating jobs in regions that might otherwise face substantial employment reductions due to decreased fossil fuel dependence. Without LCRs, countries with advanced electric vehicle manufacturing capabilities would have a competitive edge in EV production, while nations that have lagged in developing their EV sectors would struggle to recover lost jobs. Since the majority of Western companies are very much behind their Chinese counterparts when it comes to EV production and technology, effects on labour seem inevitable in both documents, which in their turn will have effects on voter's acceptance of the strategies adopted.

5.2. THE STATE OF TWO UNIONS

One of the major points of contention between the documents derive from the obvious differences between the two political systems, since a solution implemented in the US could not be done the same way in the EU, and vice versa. The differences between the two cases' institutions political, administrative and boreoarctic processes, as well as historical tendencies for how to deal with these kinds of challenges, would not allow for the same response to what is essential the same problem: the necessity to create policy goals as different as the fight against the adaptions needed to fight against climate change and the reindustrialization needed to develop and maintain autonomy in the geopolitical context[172]. The differences between systems are substantial and derive mostly from the institutional and political organization of the two polities, but surprisingly enough both the EU and the US have historically had issues with the typical definition of a "state". States, or nation-states in their political contextualization, have been key actors in the creation and development of legislation of any kind, even though international organizations[173]. The concept of nation is a distinctly modern construct, defined by several key features[174]. It is a territorial unit with clear borders, forming a translocal yet bounded community where the population moves freely and shares a deep bond with the homeland, shaping its identity and character. As a legal-political community, the nation operates under a unified legal system, granting common rights and responsibilities, and fostering a collective political culture and traditions, while maintaining its autonomy relative to other communities[175]. These characteristics underscore the novel and modern nature of the

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[171] Heram Zahra Amiri, "Green Growth and Employment: Unveiling the Macro, Micro, and Global Implications of the Electric Vehicle Evolution" (2024) Senior Projects Spring 2024.
[172] Cliona JM Kimber, "A comparison of environmental federalism in the United States and the European Union."(1995) Md. L. Rev. 54, 1658.
[173] Anthony D. Smith, "When is a nation." (2002) Geopolitics 7, nº2, 5-32
[174] Ibid.
[175] Ibid.

nation, and what we comprehend as a "nation-state", even defined as simply as a "*territorially bounded sovereign polity, that is ruled in the name of a community of citizens who identify themselves as a nation*"[176]. This idea, now abstractly accepted by populations all around the world, only fully emerged after the Enlightenment and the political and economic revolutions of the late eighteenth century and is as such historically very modernist[177].

It is challenging to apply this concept of "state" to American politics, simply due to the fact that the question of centralisation of power in the federal government has been the major motor of internal political discord, even since before its foundation [178]. If one were to use that term, most US citizens would likely associate it with the role of state governments, like those of California or Texas, rather than with the European notion of statehood. Curiously, this ambiguity around the American "state" persists despite the significant power held by the federal government and its unquestioned international recognition. The US Supreme Court can strike down any state law, and federal agencies wield substantial authority in matters of internal security. The federal budget is massive, its government controls approximately 20 percent of US land in the form of public lands, the US military is the most powerful in the world and business leaders frequently voice concerns about excessive regulation[179]. That it not the case with the European Union. While it holds considerable power in certain policy areas, the EU lacks the capacity to enforce its will as a typical state might, that only comes through political and legal ties that the Member States have until now been resistant to accept. Unlike the US, the EU lacks state apparatus and administrative capability, leading to a more pronounced dispersal of power. This decentralization of authority, both horizontally and vertically, further emphasizes the EU's fundamental absence of political legitimacy to do as much as the US[180]. EU political integration has been a slow and methodical process, moved along from crisis to crisis, resulting from negotiation between states that have long, historical roots and old grievances[181]. This is very much unlike the revolutionary explosion that birthed a federal system from the start in the US, allowing it to use a central "big bang" to kickstart its system.

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176 Yuval Feinstein, "Definition of a Nation-State" (*Encyclopaedia Britannica*, 2024)
177 Anthony D. Smith, "When is a nation." (2002) Geopolitics 7, nº2, 5-32
178 Alberta Sbragia, "The United States and the European Union: Comparing Two *Sui Generis* Systems", in Anand Menon, and Martin A. Schain (eds.), *Comparative federalism: the European Union and the United States in comparative perspective,* 15-35 (OUP Oxford, 2006)
179 Ibid.
180 Ibid.
181 Luuk van Middelaar and Liz Waters, *The Passage to Europe: How a Continent Became a Union*. (Yale University Press, 2013)

There are several conclusions that can be drawn from a comparison between the US and EU approaches[182]. First, the federal government in the US holds greater authority to create and enforce environmental legislation compared to the central institutions of the EU. This is evident in the more comprehensive and cohesive legal framework in the US, that directly tries to approach the problems with financial support and the action of central agencies like the EPA, which possess significant enforcement powers. Second, the supra-national structure in both systems has led to a division of responsibilities between central and regional authorities, but the less decentralized approaches seem to have less efficacy when it comes to the effect of the legislation. In the US, policies, goals, and standards are typically outlined and defined at the federal level, while implementation and enforcement are managed at the state level. In the EU, policies and objectives are defined centrally must coexist with each Member States's own policies and regulations, and this can be a problem. Third, in both systems, political and economic tensions between central and regional governments have hampered optimal environmental protection, and all indicates that they will continue to. Resistance to central regulation has made it challenging to enact effective or stringent enough measures to adequately protect the environment, and enforcement has been inconsistent[183].

All indicates that neither has fully resolved the challenges of protecting the environment within their systems[184], nor have they adequately addressed the underlying issues. The US has opted to face the challenge to its hegemony head-on after a long period of inner conflict about the path to take, unifying its response to climate change with its intention to re-establish its industrial dominance[185], even if this might not be a permanent choice due to the political choices of the incoming second Trump administration. The EU seems to be focused on competitiveness as its panacea for the tentative geopolitical decline Europe has suffered in modern times[186]. However, a minimum level of harmonization in standards is useful to avoid creating unnecessary trade barriers between close partners[187], especially when seen through an environmental lens, since issues with cross-border effects cannot be effectively managed on a region-by-region basis.

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182 Cliona JM Kimber, "A comparison of environmental federalism in the United States and the European Union."(1995) Md. L. Rev. 54, 1658.
183 Ibid.
184 Ibid.
185 Ravi Agrawal and Katherine Tai, “The White House’s Case for Industrial Policy” (*Foreign Policy,* 2023*)*
186 Ursula von der Leyen, “Press statement by President von der Leyen on the next College of Commissioners“ (*European Commission*, 2024)
187 Cliona JM Kimber, "A comparison of environmental federalism in the United States and the European Union."(1995) Md. L. Rev. 54, 1658.

5.3. TRACKING PROGRESS AND EFFECTS

Two years after the IRA was enacted on August 16, 2022, companies have announced at least 334 major clean energy and clean vehicle projects nationwide. Of these announcements, 278 included projected job creation and/or investment amounts. Based on these figures, the projects could generate 109 278 new jobs and attract $126 billion in private investments if completed[188]. In its second year alone, the IRA spurred 118 new project announcements, extending unprecedented job growth within the clean energy sector. While the number of major IRA-related projects announced this year declined from the 216 projects reported in the first year, this decrease aligns with the expected challenges surrounding the 2024 Elections and over 40 attempts by the US House of Representatives to scale back IRA provisions. Still, IRA-driven clean energy projects continue to bring economic benefits to communities nationwide, with announcements across 40 states and two-thirds of congressional districts and growth spanning the clean energy industry[189]. This represents significant progress in most areas. When it comes to the NZIA, it is much more difficult to measure progress, especially since the Act has only been in full effect for less than six months. However, initial predictions are not favourable, in the sense that much of the NZIA's impacts seem to be highly dependent on future development through specification and determination of its tools. As an example, the Commission must adopt a delegated act by March 2025 to define specific sub-categories within net-zero technologies and their key components that are primarily focused on net-zero purposes[190]. Additionally, the NZIA requires Member States to include pre-qualification criteria, including "responsible business conduct," in auctions for renewable energy sources. However, the Act does not clarify this term, leaving its interpretation to Member States in future auctions[191]. Until more legislation is issued, the precise scope of these provisions remains uncertain.

When it comes to effects, the energy industry plays a vital role in the industrial strategies of nations around the world. The IRA aims to exclude China from the clean energy supply chain, significantly impacting the energy industry layout in the Asia-Pacific region, while having an indirect effect on Europe. Additionally, Canada, Mexico, and other US allies are unlikely to benefit from the Act's subsidy provisions. In response, China is likely to focus on strengthening its domestic clean energy industry, enhancing its independent research and

[188] E2, "Clean Economy Works | IRA Two-Year Review" (*E2*, 2024)
[189] Ibid.
[190] Jessamy Gallagher, Ruth Knox, Candice Lambeth, Ally McKechnie, Stuart Rowson and Camille Jetzer, "The Net-Zero Industry Act "(*Paul Hastings LLP*, 2024)
[191] Ibid.

development capabilities, while promoting technological advancements within its industries to counteract the effects of the expected decoupling of the EU and US from Chinese supply chains. While the IRA is likely to negatively affect European industries, it could benefit Europe and much of the world by accelerating the global climate transition. The scale of these impacts, however, remains uncertain, partly due to the IRA's push to reduce reliance on Chinese inputs and reorganize supply chains[192]. This restructuring could ultimately improve the competitiveness of the EU and other economies relative to China, though it may initially slow down the green transition. In the long term, and if not repealed by future administrations, the IRA is expected to drive down the costs of clean technologies, offsetting any initial delays. In responding to the IRA, the EU should not only aim to pursue broader objectives[193], including decarbonization, competitiveness, and foreign development policy. Rather than increasing state aid at the national level, which risks fragmenting the single market and fuelling political tensions among EU countries, the EU should establish a well-targeted industrial policy at the EU level[194]. This policy could include a portfolio of funding instruments that combines top-down and bottom-up approaches.

6. FORWARD INTO THE FUTURE

6.1. ANSWERING THE QUESTION

Based on our analysis, the answer to which of the legal instruments used to promote the industrial transition in modern autonomy strategies is better when it comes to the efficacy of its public policy seems relatively self-evident. The IRA’s construction around subsidies brings significant changes to the US economy and promises long-term effects, while the NZIA seems to be an inadequate response to both the IRA and the EU’s attempts to develop strategic autonomy, especially before being complemented by future documents that might balance the current lack of detail around implementation and funding. There are several reasons why the IRA is more efficient, even if also imperfect and more divisive. First, the IRA aims to help the US, the world’s second-largest CO2 emitter after China, reach its 2030 climate target, which

[192] María Ángeles Orts Llopis, “Polite protectionism, or deglobalization? A study on persuasion and emotion in US and EU discourses around America’s Inflation Reduction Act 2022” (2024) MonTI. Monographs in Translation and Interpreting 16, 229–262.

[193] Kleimann, David, Niclas Poitiers, André Sapir, Simone Tagliapietra, Nicolas Véron, Reinhilde Veugelers, and Jeromin Zettelmeyer, “How Europe should answer the US inflation reduction act” (2023) Bruegel Policy Contribution Nº04/2023.

[194] David Kleimann, Niclas Poitiers, André Sapir, Simone Tagliapietra, Nicolas Véron, Reinhilde Veugelers, and Jeromin Zettelmeyer. "Green tech race? The US inflation reduction act and the EU Net-Zero industry act." (2023) The World Economy 46, nº12, 3420-3434.

would contribute meaningfully to global carbon reduction efforts. Second, the IRA raises concerns for global trade by introducing LCR's, an apparent WTO rule violation that might be vindicated by the international response. Third, the IRA could substantially impact the EU economy by affecting competitiveness and spurring innovation, although the full extent and balance of these effects remain uncertain[195]. The NZIA fails as both an attempt to develop autonomy and fight climate change, since its scope is very reduced, its instruments are too dependent of Member-State dedication, and it focuses all its energy on the manual determination of critical projects. On the other side, the IRA's issues are mostly derived from the circumstances of its design, that forced the strategy to depend almost exclusively on capital injections that might not be enough if the changes they case are not adopted by the targeted industries. In a world where the NZIA and its companion documents are not enough, the EU must develop a stronger green industrial policy. The EU should also counter distortionary subsidies that threaten to shift green-tech production out of Europe, while pursuing an agreement of fair standards for environmental subsidies with international partners[196].

When it comes to recommendations for sustained strategies that can be derived from the analysis of the documents, there are several steps that can be explored in order to create and reinforce such autonomy at EU level. Chief among these is the crafting of a cohesive EU industrial strategy that addresses national fragmentation, possibly under the incoming Clean Industrial Deal. This strategy must align with shared EU priorities, emphasizing the potential of all regions to reduce economic disparities and adapting the policy to regional needs[197], while avoiding the pitfalls of lack of coordination and complete delegation of implmentation to the Member States. The selection of strategic industries should follow an evidence-based approach guided by quantitative methods, following the example of both documents but also incorporating criteria that reflect the unique needs and objectives of each specific industry. A multi-level governance structure involving national, regional, and european administrations is crucial for a unified industrial strategy[198], without which any injection of money like in the IRA would simply fail. The Commission should centralize coordination through a dedicated body, while Member States and regions take an active role in policy design and implementation. Existing frameworks can support this approach, with the European Semester

[195] Ibid.
[196] Ibid.
[197] Lukas Bertram, Jakob Hafele, Sebastian Kiecker and Lydia Korinek, "A Unified Industrial Strategy for the EU: Industrial Policy Recommendations to Promote Decarbonisation, Competitiveness and Cohesion in Europe" (2024) Policy Study, Foundation for European Progressive Studies.
[198] Ibid.

and the next Multiannual Financial Framework guiding modernization and cross-border initiatives. While new funding is necessary, merely "throwing money" at the objective will not be enough to develop autonomy in a context as complex as this. This strategy should become a priority for the next institutional cycle, protecting the EU from an insistence in free trade in a world where its main proponents seem to have abandoned it.

Today, unilateral free trade means not only removing tariffs without reciprocity but also accepting unequal terms of trade[199], where trading partners gain an unfair advantage through practices like exploitative labour, environmental harm, unchecked epidemics, forced technology transfers, and subsidies, without active democratic control. It is this lack of control, felt and yet misunderstood by the majority of Western voters, that gives populist parties and far-right strongmen a chance at mainstream acceptance. A democracy sustains itself on the basis of an economy in the service of the people, not on a polity that adapts itself in the service of brutish economic growth. A multipolar and more stable world, where most nations are capable of a humane and efficient development and of the development of socially inclusive policies (that may or may not transition into democratic institutions) depends not on economic vassalage to one of the two giants of the century, be they Western or Eastern, but on a controlled and just energetic transition, a healthy relocation of industries into the nation state's area of influence, and a scale-back on excessive consumer culture. This can only be achieved with an assertive focus on some version of strategic autonomy, and the development of this autonomy might necessitate the revaluation of systems and strategies long considered immutable.

6.2. THE WORLD TRADE ORGANIZATION CONUNDRUM

The World Trade Organization (WTO) is an intergovernmental organization established to promote open trade globally. It originated from the 1947 General Agreement on Tariffs and Trade (GATT), which focused on reducing tariffs and trade discrimination[200]. It was created during the Uruguay Round (1986-1994) to address broader trade issues, including services and intellectual property, through the Marrakesh Agreement signed by 123 nations, and its core functions include negotiating trade rules, overseeing agreements, maintaining open trade, resolving disputes, and promoting sustainable development. When a member nation believes another is violating a WTO agreement, they must follow the Dispute Settlement Understanding, beginning with consultations. If unresolved after 60 days, a panel of experts is

[199] Birgül Cambazoğlu, "Trade Protectionism: Pros and Cons" in *International Trade Policies in the Era of Globalization,* 94-115 (IGI Global, 2020)
[200] World Trade Organization, "Understanding The WTO: The Agreements" (*WTO*, 2023)

convened to examine the case. WTO dispute resolution lacks a “stare decisis” rule, so panels and the Appellate Body (AB) aren't bound by previous decisions. The US has criticized the WTO's reliance on precedent, leading to a refusal to appoint new AB members. This crisis has paralyzed the appeals process, as the AB has dwindled to an insufficient number of judges, effectively blocking dispute resolution. In response, many WTO members formed the Multi-Party Interim Appeal Arbitration Arrangement (MPIA) to ensure that appeals can still be heard among participating nations, maintaining the effectiveness of WTO agreements.

A WTO panel would likely conclude that the IRA’s use of LCRs violates the General Agreement on Tariffs and Trade, the Trade-Related Investment Measures, and the Subsidies and Countervailing Measures agreements, based on previous Appellate Body interpretations. However, policies like the IRA are crucial for rapidly advancing renewable energy technology to address the climate crisis, and LCRs serve as an effective tool to achieve this. The CVC has garnered significant attention for potentially breaching WTO agreements. The EU, Japan, and South Korea have expressed concerns, with the EU enacting the Green Deal Industrial Plan in response to the IRA, and South Korea possibly considering a WTO complaint. The controversy is primarily due to the CVC’s considerable impact on EV prices and its rigorous LCRs, which require that the entire credit be tied to North American assembly lines and to essential critical material supply chains[201], since the LCRs for other IRA credits are less likely to disrupt trade.

There are similar cases relating to the EU’s actions, even if not directly related to the NZIA’s clauses. Several Members of the WTO raised concerns in recent statements regarding the EU's environmental and climate policies, as well as digital transformation, which impact multiple WTO disciplines. A particular case of interest arose when the WTO released a panel report on one of two cases brought by major palm oil producers against an EU directive excluding their oil from its future biofuels mix[202]. The report dismisses Malaysia's claim that the measure was designed with protectionist and discriminatory intent targeting Malaysian exports, instead supporting the EU’s argument that its primary aim is environmental. The panel concluded that regulating palm oil production in foreign countries is permissible under WTO and international law, given the global nature of the climate crisis[203]. Additionally, the panel determined that the measure is justifiable under the GATT’s "general exceptions" in Article XX, which allows countries to deviate from WTO norms to protect the environment. However,

[201] William K. Wilcox, "GATT-Based Protectionism and the Definition of a Subsidy." (1998) BU Int'l LJ 16, 129.
[202] Iana Dreyer, “Malaysia palm oil WTO panel divided over EU protectionist intent” (Bordelex, 2024)
[203] World Trade Organization, “WTO panel issues report regarding EU measures affecting palm oil, palm crop-based biofuels“ (WTO, 2024)

one panellist dissented from the report's main conclusions, arguing that "*Malaysia has provided sufficient evidence to meet its burden of demonstrating that the objective of the measure includes an element of protectionism"*[204] While this would be standing enough for Malaysia to appeal, the reality of the situation is that the EU might be inclined to appeal "into the void" due to the absence of a functioning appellate body at the WTO, an approach Brussels has already taken in at least one case. Malaysia is not a participant in the MPIA, which means it possesses no option to appeal in a manner that would have real juridical consequences.

Scholars such as Abigail Pelton advocate for a reinterpretation of GATT's General Exceptions to allow policies like the IRA or other pieces of climate-focused legislation to be considered lawful[205]. The adaptation of such rules could allow the elimination of the deadlocks created by nations that have no intention to back down on its agendas, while containing the surge of global protectionism. Pelton suggests three key reforms:

(1) simplifying the balancing test in the "necessary" and "essential" inquiries to better balance trade restrictiveness with non-trade policy goals.
(2) continuing to factor in policy objectives when assessing whether a measure complies with the General Exceptions' chapeau; and
(3) extending the scope of the General Exceptions to include the SCM and other agreements annexed to the Marrakesh Agreement.

This approach is grounded in the argument that, while renewable energy policies involving LCRs may create trade barriers**,** the climate crisis constitutes an emergency that justifies certain trade restrictions[206]. There seems to be a consensus in modern progressive scholars and political thinking in the US that the current moment presents an opportunity for the WTO to evolve its interpretation and accommodate such vital policies, but this might be more a product of current political necessity, in the view of the culture wars between the progressive and conservative caucuses of the US bipartisan system, than a legal and jurisprudential review of the current functioning of the WTO.

Historically, the EU has depended on multilateral institutions like the UN, NATO, the WTO and the OECD to extend its influence. As a grouping of states in constant evolution and flux, its power has always resided in the definition of trends, international treaties and the force

[204] Iana Dreyer, "Malaysia palm oil WTO panel divided over EU protectionist intent" (Bordelex, 2024)
[205] Abigail Pelton, "Protecting Protectionism in the WTO: A Reinterpretation of the General Exceptions to Protect the IRA's Local Content Requirements." (2024) Columbia Journal of Environmental Law Vol.49 nº1, 100–143.
[206] Ibid.

of its markets, too large to be ignored by foreign players. However, due to the inconsistent policies of the first Trump administration and the prospects of a second, the EU has realized that relying solely on multilateral negotiations cannot compensate for its internal divisions and lack of leadership. Nearly two decades after the WTO conference in Doha in 2001 aimed to kickstart global trade negotiations, those discussions remain stalled, particularly regarding the Dispute Settlement Body, which is currently at an impasse. The WTO is facing a serious crisis, struggling to enforce its rules against its larger members. Comprehensive reform of the WTO is necessary not just to address unfair practices from China and other emerging nations, but also to regulate state subsidies, protect intellectual property, combat counterfeiting, and manage data protection and environmental issues. As such, the WTO must change or be condemned to the fate of mere forum of discussion of financial matters, rather than an institution with the capability to dictate and enforce trade relations between its members. Sadly, considering the governance of the institution and the geopolitical context, a resolution to this situation seems far-fetched.

6.3. THE DRAGHI REPORT AND NEXT STEPS

In the introduction of his report "*The future of European competitiveness*", created under request of the European Commission and launched in September 2024[207], Mario Draghi, ex-President of the European Central Bank and ex-Prime-Minister of Italy, stated that "*Decarbonisation must happen for the sake of our planet. But for it also to become a source of growth for Europe, we will need a joint plan spanning industries that produce energy and those that enable decarbonisation such as clean tech and automotives*"[208]. The effective operation of an internal market free from border restrictions and unjustified barriers is essential for creating a Union that fosters an open market for innovative products and services. This setup can help address supply challenges and facilitate smart diversification in imports. Due to historical factors and the lack of institutional restructuring, the EU's ability to enhance its strategic autonomy relies on shared competencies that involve both the EU and its Member States.

Today's industrial strategies in countries like the US and China integrate a variety of policies, including fiscal measures to promote domestic production, trade policies to curb anti-competitive practices, and foreign economic policies aimed at securing supply chains. The report claims that in the EU, achieving this level of policy coordination requires significant

[207] Mario Draghi, "The Future of European Competitiveness" (*European Commission*, 2024)
[208] Ibid.

alignment between national and EU-wide initiatives. However, the EU's slow and fragmented policymaking process makes it less capable of delivering an effective response. As such, the fate of the EU green industry and of its Green Deal may hinge on putting the "right" issues and policies into sub-packages that reduce complexity and increase political feasibility, putting into focus the competitiveness part of the equation, not the environmental concerns. Despite the EU's expansion and the growing complexity of the global environment, its decision-making rules have not substantially adapted, and it decision-making processes hinder the capacity of the Union to develop cohesive strategies. The objective of the report is therefore to lay out a new industrial strategy for Europe to overcome these barriers[209], enhancing the value of the Single Market and promoting further evolution of the Union.

The former ECB president believes Europe must invest an additional €800 billion annually, or around 5% of the EU's current GDP, to restore investment levels akin to those of the 1960s and 1970s. This amount is roughly three times that of the Marshall Plan, which represented between 1% and 2% of GDP in annual post-war investments[210]. To achieve this, the report suggests that the EU should borrow funds, much like the €750 billion recovery plan implemented in 2020 for the COVID-19 crisis. However, this time the aim is to raise funds annually for long-term investments, particularly in research and new technologies, rather than as a one-off response to a pandemic or crisis. The report stands out by challenging the conventional emphasis on fiscal austerity, practised during the financial crisis, proposing instead that Europe must embrace substantial investment. While this principle is widely supported, differing views exist on the development model and welfare indicators to pursue. Draghi's approach, in particular, is technocratic, market-oriented, and consumer-driven, advocating for large public subsidies to boost private investment in new technologies[211].

Draghi identifies the mains blocks to his desired increase in competitiveness and the implementation of his plan[212]. In many areas, Member States are already acting individually, and industrial policies are on the rise. However, it is clear that Europe is not realizing its full potential by failing to act collectively. According to the report, there are three key barriers are holding the EU back. First, Europe lacks focus. While the EU articulates common objectives, it fails to prioritize them clearly or follow through with coordinated policy actions. Second, Europe is not making the most of its shared resources. Despite having significant collective

[209] Ibid.
[210] Thomas Piketty, "Europe must invest: Draghi is right" (*LeMonde*, 2024)
[211] Ibid.
[212] Mario Draghi, "The Future of European Competitiveness" (*European Commission*, 2024)

spending power, it is spread too thinly across various national and EU instruments. Third, Europe is not coordinating efforts where it counts. Today's industrial strategies, as demonstrated by the US and China, integrate multiple policies, ranging from fiscal measures to incentivize domestic production, to trade policies that penalize anti-competitive behaviour, to foreign economic policies aimed at securing supply chains. This analysis is sound and was reflected in the conception of the NZIA, as well as in its comparison with the IRA. As ighlited by the report, we identify three key areas for action to reignite sustainable growth[213].

First and foremost, Europe must refocus its collective efforts on closing the innovation gap with the US and China, particularly in advanced technologies. Europe's industrial structure remains static, with few new companies emerging to disrupt established industries or drive new growth. Notably, no EU company founded in the past fifty years has reached a market capitalization of over €100 billion, while all six US companies valued at over €1 trillion were created within this period. This lack of dynamism perpetuates itself and makes it more difficult to create "champions of industry" that could motivate more growth and counter external commercial pressures. The second area for action is a coordinated plan for decarbonization and competitiveness. If Europe aligns its ambitious climate targets with a clear strategy, decarbonization could present itself as an economic opportunity. However, without coordinated policies, there is a risk that decarbonization could undermine competitiveness and growth. This risk is compounded by the difficulty in maintaining the efforts of the European Green Deal with the new political composition of Parliament and the observed shift to the right in many Member State's national governments. The third area for action is enhancing security and reducing dependencies. Security is essential for sustainable growth, since increasing geopolitical risks can create uncertainty and discourage investment, while major geopolitical shocks or trade disruptions can have severe consequences. As geopolitical stability diminishes, the threat that insecurity poses to growth and freedom is becoming more pronounced[214]. The way the war in Ukraine is tied to the need to develop autonomy and self-sufficiency in energy production demonstrates the connections between industry and security.

Critics argue that Europe should explore alternative governance models to avoid empowering large private corporations to control essential sectors like data, energy, and transport. While I agree that corporate control is dystopic and institutional reform would be ideal, it seems more difficult to implement in time than some of the report's suggestions. For

[213] Ibid.
[214] Ibid.

such an ambitious investment plan to succeed, it is crucial that disadvantaged areas and regions across Europe receive significant and visible resources. If France, Germany, Italy, and Spain, which collectively represent three-quarters of the eurozone's population and GDP, can agree on a socially and territorially balanced compromise, the plan can move forward[215] with popular support. This could be achieved with a core group of countries, as envisioned in the Draghi report, even without full EU unanimity. This is the critical debate Europe must now engage in. Like many, I do believe that the Draghi Report represents a break with traditional European orthodoxy of reactive instead of proactive action, but it must be followed up with responses at national and European levels, or its warnings might as well be thrown in the wind.

This was not the first high-level document to recognize the need for evolution of the Single Market and European systems. The Letta Report on the future of the Single Market[216], commissioned by the European Council, was aptly named "*Much more than a Market*" and launched in April 2024. Letta states that it is vital for the European Council to take a leading role in driving the necessary reforms to complete the dream the Market represents. According to the report, this initiative should be a central priority for the next legislative agenda, reaffirming our shared commitment to revitalizing the European economy, and the Council should entrust the Commission with the task of developing a comprehensive Single Market Strategy. This plan should outline clear actions to remove existing barriers, promote market consolidation, and boost competitiveness, in line with the proposals presented in both reports[217]. This collective commitment would not only strengthen the Single Market but also ensure that it remains a cornerstone of Europe's economic resilience and global competitiveness. In its conclusions, Letta indicates that "*Given the ongoing crises and conflicts, action has become urgent, particularly as the window of opportunity to intervene and relaunch the European economy risks closing in the near future*"[218]. This call to action is more urgent than ever, considering the rightward shift we are experiencing throughout the continent.

The 2024 European Elections resulted in the stabilization of the traditional right and left parties, a decline for the liberals and Greens, and a surge in support for sovereigntist groups. Following these elections, key positions within the EU were reassigned to reflect both geographical and political balance based on the election results, even if pressure from now

[215] Thomas Piketty, "Europe must invest: Draghi is right" (*LeMonde*, 2024)
[216] Enrico Letta, "Much more than a Market" (*European Council*, 2024)
[217] Ibid.
[218] Ibid.

strengthened far-right groups was significant[219]. The number of groups in the Parliament increased, mostly due to infighting between the right-wing parties and contests of power between the conservative forces of the larger Member States, like Germany, France and Italy. During a summit on June 27, 2024, Ursula von der Leyen was reappointed as President of the European Commission, with Estonian Kaja Kallas taking over European diplomacy and Portuguese António Costa leading the European Council for the next 2.5 years (which could be doubled considering term limits and tradition). These appointments maintain the political equilibrium among the three main political groups at the centre of the European political spectrum, refusing (for now) to include the far right and the Eurosceptics on the driver's chair of European policymaking and allowing for a theoretical majority for progress.

As stated by many an analyst, "*the centre held*". However, the transfer of weight in the Parliament's composition is undeniable, and this may not be ignored. In the landscape created by very divisive elections in both the EU and the US, the EU stands at a crossroads, and the coming months will be pivotal for its internal dynamics and global role. With the Greens losing ground and liberals in decline, the progressive momentum that propelled initiatives like the Green Deal over the past five years may wane. Sovereigntist parties are expected to resist climate and green-transition policies, while moderate-right cooperation may persist on more restrictive migration policies. Meanwhile, calls for a Europe of sovereign nation-states will likely grow stronger, potentially hindering the EU's geopolitical ambitions[220]. The priorities of this new Parliament are set to diverge from those of the previous legislature, and yet, more action is needed from its members, not less. If both reports and their findings are consigned to only receive attention from within the Brussels bubble and be functionally ignored by a majority of Parliament, then I fear the opportunity for reform will be lost and there will not be enough time to catch up. If Europe fails to make these investments, the continent risks a "*slow agony*" in comparison to the US and China, according to both the reports and its analysts[221].

7. CONCLUSION

Over the past two decades, it has become increasingly clear that efforts to achieve environmental sustainability have come with significant costs, especially to the most vulnerable. These costs have particular significance in the quality and effectiveness of the

[219] Abdessalam Saad Jaldi, "Retrospective Analysis of the 2024 European Elections: The European Parliament Renews Itself in a Europe Facing Significant Transitions" (2024) Policy Paper, Policy Center for the New South.
[220] Ibid.
[221] Mario Draghi, "The Future of European Competitiveness" (*European Commission*, 2024)

western liberal democratic regimes, particularly as global and regional populations continue to grow. These costs are reflected in the harmful impacts of environmental degradation and instability, driven by rising human demands on natural resources, a trend visible across the globe. To achieve ecological protection and sustainable development goals, policy decisions must emphasize the promotion of green financing, clean energy generation, and innovative technologies to tackle the pressing issue of environmental degradation in the current century[222]. Governments must achieve these objectives while avoiding the loss of the popular support of their citizens, caused by worsening living conditions imposed on those that cannot match the transition, in what is probably one the most significant challenges of our time. A green industrial transition without the democratic legitimization that comes with popular support is destined to fail, whatever the quality of its policies.

Climate change has the potential to significantly impact political options, industrial development and government finances in multiple ways. It can reduce public revenues due to economic downturns triggered by more frequent adverse weather events, while increasing public spending as governments are forced to rebuild damaged infrastructure and assets. However, well-structured climate mitigation policies, focused on production of renewable energies and the requalification of workers, can help drive the green transition while also generating the necessary funds for this shift. Public support is essential to facilitate the economic transformation and ensure a fair transition, as no evidence suggests any economic transition of the kind can be achieved within a democratic system without public support that validates political decisions. Achieving net-zero emissions will require substantial investments over the coming decades, with the scale of investment varying across countries depending on the greenhouse gas intensity of their energy systems and industries[223]. Moving forward, it is essential for policymakers to ensure that the path toward climate neutrality is both environmentally and economically sustainable.

Free trade works only if all participants follow the same rules, sharing common understandings not only on tariffs but also on "non-tariff barriers", such as prohibitions on slave-produced goods, technical safety standards, state aid, and competition regulations[224]. The Brexit negotiations and the first Trump administration’s tariffs vividly illustrate that without a

[222] Theo Aphecetche, “Fiscal Challenges in the Green Transition: A Global Perspective” (2024) Economic Brief 081, Directorate-General for Economic and Financial Affairs.
[223] Commission Staff Working Document and Impact Assessment, accompanying the Communication (EU) From the Commission to The European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Stepping Up Europe’s 2030 Climate Ambition
[224] Birgül Cambazoğlu, "Trade Protectionism: Pros and Cons" in International Trade Policies in the Era of Globalization, 94-115 (IGI Global, 2020)

level playing field, unimpeded trade cannot occur, and therefore its inherent positive aspects cannot be ensured. This leads to two key realizations: economic interests are underpinned by certain societal values tied to well-being, and the benefits of economic openness depend on reciprocity. This distinction helps differentiate "good" protection from "bad" protection. Protection against unfair practices, which undermine the benefits of openness, is essentially the opposite of protectionism, being in essence counter-protectionism. As it stands, there is little reason to believe that every great power will behave with the same ruleset in mind, and the current status of the WTO does not bode well for a new era of economic openness. The more important the climate crisis becomes, the more critical it will be to mobilize resources that ensure strategic autonomy for every nation, and as such efforts of counter-protectionism should be encouraged, even if only within the frameworks of the nominal alliances that maintain a semblance of a global balance of power. While fighting fire with fire might seem counterproductive, it is an effective mechanism used by firemen to avoid the proliferation of actual forest fires. The past 70 years of experience with the GATT[225] show that free trade requires reciprocity and a structured process to reduce trade barriers effectively. In contrast, advocates of unilateral free trade find little historical support.

The increasing political polarization in the US and the EU has weakened their ability to effectively lead on the global stage. Domestic debates on issues such as immigration, voting rights, economic inequality, migration and racial tensions have often sidelined US foreign policy, and similar internal issues have consistently impacted the EU. This polarization threatens to worsen in both Washington and Brussels, making it difficult to develop a coherent foreign policy. In contrast, China's political system, despite being autocratic, enables a long-term strategic approach largely unaffected by domestic pressures. Under President Xi Jinping, China has steadily pursued its goal of becoming a global superpower by 2049. Unlike the West, where election cycles and changing administrations disrupt long-term plans, China's approach remains uninterrupted. The growing alignment of countries in Africa, Latin America, and Asia with China and BRICS poses a challenge to the US-led liberal international[226] order. Many of these countries, dissatisfied with Western dominance and the slow response to their developmental needs, are increasingly viewing China as a viable alternative for economic partnerships and influence. China's emphasis on infrastructure investment has resonated with nations in the Global South, further diminishing Western influence, and the duality of western

[225] Ibid.
[226] Dong Jung Kim, "US Protectionism and Competition with China" (2024) The Washington Quarterly 47(2), 71–86.

responses to the wars in Ukraine and the Middle East have eroded soft power and moral capital. While the US still sees China as a strategic rival, it risks falling behind, and the EU has already lagged in key areas compared to these competing blocs[227]. As China continues to rise, the US must reassess its strategies to maintain its position, and the EU needs a focused conversation, to awaken its potential as a geopolitical and industrial power. The next decade will be crucial in determining whether the West can adapt and thrive amid China's growing influence. As such, both sides of the Atlantic need to accelerate their plans if they are to stay relevant.

When it comes to the United States, the federal government should implement strategies and policy measures to balance the IRA's effective objectives[228]. Coordination between relevant policies is essential, since aligning fiscal policies, regulatory measures, and targeted incentives can help achieve the IRA's goals. Relying solely on fiscal or monetary measures in isolation may not effectively meet the objectives behind the document, even if it manages to survive the inevitable repeal attempts by the Republican Party. That said, the largest obstacle to the US's success in this matter might be the will of the majority of its citizens. The 2024 Elections marked a resounding victory for Donald Trump and the Republicans, that managed to gain control of government by a large margin. Trump's bold style and hardline policy proposals resonated with over 70 million voters nationwide, while Harris and the Democratic Party suffered a defeat that left them without clear direction[229]. The ex-President and convicted felon built a narrative over the working class's economic grievances to gain support among groups that have traditionally favoured Democrats, who in the end failed to sufficiently address concerns about the border and rising cost of living. Donald Trump's return to the White House could reverse most gains made by the US in fighting global warming, since he has vowed to unleash the production of fossil fuels, dismantle key environmental legislation, and significantly scale back support for the development of renewable energy and electric-powered vehicles[230]. Trump also plans to withdraw the US from the Paris climate accord, as he did in his first term, as well as end Biden's pause on new liquefied natural gas export projects[231]. In a worrying turn of events, Trump is expected to explicitly target the IRA, which he calls a

[227] Scott Lavery, Sean McDaniel and Davide Schmid, "European Strategic Autonomy: New Agenda, Old Constraints" in Babić, M., Dixon, A.D., Liu, I.T. (eds) *The Political Economy of Geoeconomics: Europe in a Changing World. International Political Economy Series*. (Palgrave Macmillan Cham, 2022)
[228] Jordan, Katherine, Peter Adams, Paulina Jaramillo, and Nicholas Muller, "Closing the gap: Achieving US climate goals beyond the inflation reduction act" (2023) Renewable and Sustainable Energy Transition Vol.4.
[229] Richard Luscombe, "Democrats suffer a drubbing: 10 key takeaways from Trump's election win" (*The Guardian*, 2024)
[230] Evan Halper, Maxine Joselow and Chico Harlan, "What Trump's victory could mean for oil companies and climate change policy " (*The Washington Post*, 2024)
[231] Daniel Payne, "The Trump agenda: Here's what to expect from his second term" (*Politico*, 2024)

"*green new scam*"[232]. While some of Trump's major objectives will require congressional approval, many will not, and the working majorities achieved in the election means his agenda is likely to face little congressional pushback. While rolling back and replacing Biden-era regulations could be a time-consuming process, the experience gained during his first term might allow his appointees to act more swiftly this time around[233]. The future of the IRA and climate policy in the US is shrouded in darkness, with nationalism and protectionism seemingly here to stay. Trump's second victory marks the end of a geopolitical era where the US sought to build prosperity by opening markets and encouraging the free movement of goods, capital, people and ideas, while upholding the defence of democracy and the rule of law. We know not what the future brings, but the time where the United States filled this singular global role seems to be over. Even if US democratic institutions survive the next 4 years, the "Pax Americana" of the past decades officially ends on Inauguration Day.

In this context, adopting a post-American approach to transatlantic relations seems essential for the EU, which requires both political will and decisive action. Europeans, accustomed to relying on institutions for momentum in the EU's development, often assume that institutional reform is the solution, and while they are not wrong, since this reform is critical to assure the EU has the tools and capabilities necessary to save its past successes (as well as its Single Market, the *raison d'être* of the Union), it cannot stand by its own and requires an active and assertive approach that can only come with actual and open debate of the issue[234]. Numerous ideas are emerging amid growing recognition that the transatlantic relationship is under strain. Serious internal discussion is needed, at both national and European levels, to identify the key issues that matter in transatlantic terms and where Europeans can present a united front to the Americans. Given the traditional European view of transatlantic relations, this level of self-assertion, along with the conflict it may bring, might seem uncomfortable, but it is truly essential. In the increasingly unstable global landscape, a robust transatlantic partnership, expressed not only through NATO and bilateral channels but also through a stronger and more effective US-EU relationship, will be more necessary than ever. To maintain such a partnership, Europeans must embrace discomfort and, paradoxically, accept a more contentious relationship with the United States that reduces dependency and creates autonomy.

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[232] Ibid.
[233] Ibid.
[234] Jeremy Shapiro and Nick Witney, *Towards a Post-American Europe: a power audit of EU-US Relations* (Brussels: European Council on Foreign Relations, 2009)

When it comes to the European Union, there is no indication that it will be possible to face the challenges of the future without severe and dedicated measures, targeted not only at protecting the current status quo, but above all else on advancing the ideals that led to the construction of the Union in the first place. The new Commission will have the difficult task of ensuring the necessary investment, while dealing with a Parliament that is recurrently chaotic and often hostile Member States. In his report, Draghi stated that "*We should abandon the illusion that only procrastination can preserve consensus"*[235]. In the next decade China is likely to position itself alongside the US as the one of only two superpowers. This raises questions about the EU's role as it faces three major challenges: transitioning to a green and digital economy, ensuring the resilience of its economic and social model, and securing its strategic value chains[236], all while aiming to defend and promote fundamental ethical values.

It is not easy to invest in long-term strategic autonomy while maintaining the approval of a population that can kick out their government every couple of years, but democracy cannot be an excuse for lack of vision and purpose. On the contrary, democratic validation of a government's vision must stand as its legitimizing principle, since convincing the public of the particular benefits of a policy is part of the job of any executive that wishes to see its vision through. The EU currently lacks a unified vision, with Member States taking varied positions that often bypass official channels, leading to confusion. Currently, the EU lacks the integrative power and budget necessary for a sustainable industrial policy that aligns with the green transition[237]. This situation stems from an ideological approach that has fostered dependency and weakened the EU, as reliance on globalization has overshadowed strategic industrial decisions, especially having in account the differences between political models with the US and China. Globalization of trade has created numerous advancements for humanity, but its costs can and should be mitigated now that we approach the end of the honeymoon period of a world connected by marvels that ensure that distance is a merely financial obstacle.

There is hope for success, and one that is not only motivated by an emotional response to a challenging situation but founded in fact and historic precedent. The financial crisis led to significant innovations in the Union's financial structure, including the banking union, while the refugee crisis prompted major upgrades to mechanisms for securing the EU's external borders and helped move new solidarity mechanisms. The decision by the UK to leave the EU

[235] Mario Draghi, "The Future of European Competitiveness" (*European Commission*, 2024)
[236] Regulation (EU) 2023/1781 of the European Parliament and of the Council of 13 September 2023 establishing a framework of measures for strengthening Europe's semiconductor ecosystem
[237] Bernoth Kerstin, and Josefin Meyer, "US Inflation Reduction Act demands quick strategic action from the EU." (2023) DIW Weekly Report 13 nº6, 54-60.

ultimately strengthened the cohesion of the remaining Member States by showing the price of an unruly exit and facilitated progress in defence policy negotiations and other difficult dossiers, typically blocked by the British. The early months of the COVID-19 pandemic led to the creation of the EU recovery fund and the emission of common debt, marking a breakthrough in financial solidarity among Member States, and saw the launch of the Union's first collective health program, opening up the potential of action in areas where it was restricted. More recently, Russia's invasion of Ukraine spurred a substantial mobilization of EU external policy to support Ukraine, including the unprecedented delivery of weapons and the imposition of a tough sanctions regime against Moscow, truly developing a sense that the Union possesses a set of coordinated, if fragile, foreign policy objectives[238]. Even Trump may force the EU to face its demons and make the ever-delayed next step in European integration. Every time there is a significant crisis, the European Union manages to achieve progress due to the strength of its social and political pillars. Seeking one's national interest is to be expected of a national leader, but greatness is found in responding to the current worries and expectations of one's population while driving its hopes towards a future that is yet to be. The Union has gone through impressive ups and downs throughout its existence, but its greatest quality remains the ability to rise to the occasion and thrive in situations of growing complexity.

Urgently establishing a robust industrial policy is therefore essential to enhance the EU's management and coordination capabilities and allow it to initiate actions with a clear mandate, facing whatever pressures will come from the other side of the Atlantic[239], as well from the waking giant that is China. The update of this industrial policy should aim to become a driving force for a fair green transition and bolster the Union's resilience, making it an actual and capable actor in the world stage[240]. In addition, there can be no retreat from the international order based on human rights and rule of law, since a return to simple *realpolitik* would empty the already scarce moral legitimacy of the EU and damage the handful of ideals it built itself on. As Steiner put it in his prophetic analysis, this need to advance beyond both our friends all-encompassing hug and our adversaries grasp is an economic, political and even philosophical imperative[241]. In the absence of the messianic approach to the expansion of democracy and

[238] Stefan Lehne, "The EU and the Creative and Destructive Impact the of Crises" (Carnegie Europe, 2022)
[239] Kleimann, David, Niclas Poitiers, André Sapir, Simone Tagliapietra, Nicolas Véron, Reinhilde Veugelers, and Jeromin Zettelmeyer, "How Europe should answer the US inflation reduction act" (2023) Bruegel Policy Contribution Nº04/2023.
[240] Dennis Broeders, Fabio Cristiano and Monica Kaminska, "In Search of Digital Sovereignty and Strategic Autonomy: Normative Power Europe to the Test of Its Geopolitical Ambitions" (2023) JCMS: Journal of Common Market Studies nº61, 261–1280.
[241] George Steiner and Rob Riemen, The Idea of Europe : An Essay. (New York: Overlook Duckworth, 2004)

brute military prowess of the US, the EU will not be able to face challenges of a multipolar world if it does not decide on the role it wants for itself. The fact that such a decision must be made through the highly complex system of national and European executives, and subject to the approval of both national and European parliaments, must not deter the EU from evolving to ensure its survival and do what it has always done ever since its political miracle came to be: struggle against the odds, and keep moving forward.

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IV. LEGISLATION AND OFFICIAL DOCUMENTS

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2. Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions 'REPowerEU' Plan
3. General Agreement on Tariffs and Trade, signed 30 October 1947, 61 Stat A-11, 55 UNTS 194
4. House Resolution 1319 – American Rescue Plan Act, 117th Congress
5. House Resolution 3590 – Patient Protection and Affordable Care Act, 111th Congress
6. House Resolution 3684 – Infrastructure Investment and Jobs Act, 117th Congress
7. House Resolution 4346 – CHIPS and Science Act, 117th Congress
8. House Resolution 5376 – Inflation Reduction Act, 117th Congress
9. Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation) [2016] OJ L119/1
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11. Regulation (EU) 2023/1781 of the European Parliament and of the Council of 13 September 2023 establishing a framework for strengthening Europe's semiconductor ecosystem and amending Regulation (EU) 2021/694
12. Regulation (EU) 2024/1252 of the European Parliament and of the Council of 11 April 2024 establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1724 and (EU) 2019/1020 (Critical Raw Materials Act)
13. Regulation (EU) 2024/1735 of the European Parliament and of the Council of 13 June 2024 on establishing a framework of measures for strengthening Europe's net-zero technology manufacturing ecosystem and amending Regulation (EU) 2018/1724 (Net-Zero Industry Act)

14. Regulation (EU) 2024/1747 of the European Parliament and of the Council of 13 June 2024 amending Regulations (EU) 2019/942 and (EU) 2019/943 as regards improving the Union's electricity market design
15. Treaty of the North Atlantic (North Atlantic Treaty Organization) (1949)