The European Union's Normative Power and Climate Leadership:

The case of the European Union Emissions Trading Scheme

Support or sabotage?

MA International Relations

Global Order in Historical Perspective

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Content

Abbreviations

CDM	Clean Development Mechanism
CFR	Charter of Fundamental Rights of the European Union
COP	Conference of the Parties
EC	European Commission
EGD	European Green Deal
ENVI	Environment
EP	European Parliament
EU	European Union
EUA	European Union allowances
ETS	Emissions Trading Scheme
GCF	Green Climate Fund
GHG	Greenhouse gases
JI	Joint Implementation
LDC	Least Developed Countries
MRV	Monitoring, reporting and verification
MS	Member States
NAP	National allocation plans
TEU	Treaty on European Union
TFEU	Treaty on the Functioning of the European Union
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
US	Unites States

Chapter 1 | Introduction

The threat of climate change is one of the most serious issues the world has ever faced. With previous temperature records being broken annually and instances of extreme weather conditions causing wildfires and cyclones around the world, global leaders seem to increasingly grasp the seriousness of the situation and the consequences that a failure to revert climate change will have.[1] Climate change repercussions are likely to impact almost all aspects of the future, causing economic, environmental, political and social issues on a scope that ranges from the local to the international level.[2] Although it is impossible to predict with certainty the effects climate change will have on international relations, it is evident that its impact will be unevenly distributed, both within and between countries and generations.[3] This could exacerbate instability of the international order, for example by causing global tensions through migratory pressure. Hence, climate change is likely to have ramifications of a truly global nature, making it a compelling issue to study within the discipline of international relations.

One of the actors that has contributed significant efforts to climate change abatement is the European Union (EU), which has developed an expansive and complex framework to combat climate change. Its most recent goals have been outlined in the European Green Deal (EGD), presented in December 2019.[4] Furthermore, the EU has outlined a long-term pathway for reaching carbon neutrality by 2050 and committed to clear energy and climate targets for 2020 and 2030.[5] In September 2020, the European Commission (EC) pledged to significantly increase its abatement efforts and reduce its emissions by at least 55% of 1990 levels by 2030. Additionally, over 20% of the EU's budget for 2014-2020 was earmarked for climate-related actions.[6] Alongside being the frontrunner for setting ambitious climate goals, the EU has designated "accomplishing a clean and just energy transition" as one of "the biggest challenges of the 21st century".[7] The institution acknowledges the disparate effects climate change can have on different communities and regions and has vowed to combat inequality resulting from climate change. Accordingly, the EU and its Member States (MS) are the largest contributors to international climate finance to the Global South. Over the period of 2014-2020, the EC alone has pledged to provide at least 14 billion EUR annually.[8] The EU has, on multiple occasions,

[1] National Centers for Environmental Information (NCEI). (2018). Global Climate Report - Annual 2018. *United States Department of Commerce*. [online]
[2] European Commission (EC). (no date). Climate Change Consequences. [online]
[3] Islam, N. and Winkel, J. (2017). Climate change and social inequality. United Nations, Department of Economic and Social Affairs, *DESA Working Paper 152,* 1-30, p. 4
[4] European Commission (EC). (no date). A European Green Deal. [online]
[5] European Commission (EC). (no date). Climate Strategies and Targets. [online]
[6] Tagliapietra, S. (2020). Unpacking President von der Leyen's new climate plan. *Bruegel*, September 16. [online]
[7] European Commission (EC). (2020). In focus: Towards a just and clean energy transition, Introduction. *European Commission, News,* 1 October. [online]
[8] European Commission (EC). (no date). International climate finance. International Action on Climate Change. [online]

referred to itself as a leader in the fight against climate change, in line with its provision of international climate finance and its elaborate advocacy for ambitious international climate agreements.[9]

The EU aims to reduce its 'domestic' greenhouse gas (GHG) emissions through the European Union's Emissions Trading Scheme (EU ETS). Implemented in 2005, the EU ETS is the world's biggest and first transnational carbon trading system. The European Commission has declared the system to be 'the cornerstone of the EU's climate policy'.[10] The EC sets an annual cap for total emissions that are authorized. For these emissions, allowances are created and distributed or auctioned, and can then be traded privately, through brokerage or on the EU carbon spot market. The ETS regulates that no emissions above the threshold are emitted and gradually decreases EU emissions by an annual lowering of this threshold. In total, the EU ETS covers around 45% of the EU's total GHG emissions, including energy intensive power plants and emissions caused by aviation.[11] As allowances are traded freely on the market, the system is meant to ensure an economically efficient allocation of emissions, while simultaneously stimulating energy efficiency and the use of cleaner energy sources.

This thesis will examine the EU ETS and research its ability to support the EU's climate leadership, which is founded on the principle of 'leading by example'. As this is the most prominent formulation of EU climate leadership, a normative lens will be used to analyze the nature and implications of the EU ETS. This will be done using Ian Manner's conception of normative power, which argues that the EU's international power stems from its ability to shape international ideas by adhering to domestic norms. I argue that the set-up of the ETS does not sufficiently incorporate fundamental EU values. Due to the policy's significance in wider EU climate efforts, its lack of value incorporation results in a diminishing of the credibility of the EU's climate leadership on an international level, and thus leads to a decrease in the region's possibility to exert normative power.

[9] Parker, C. F., C. Karlsson, M. Hjerpe, and B. O. Linnér. (2012). Fragmented Climate Change Leadership: Making Sense of the Ambiguous Outcome of COP-15. *Environmental Politics, 21 (2),* 268–286. p. 274
[10] European Commission (EC). (no date). EU Emissions Trading Scheme. [online]
[11] European Commission (EC). (no date). EU Emissions Trading Scheme. [online]

Chapter 2 | Literature Review

The European Union's Normative Power

Extensive literature has been written on the evolution from the 1952 European Coal and Steel Community into the official establishment as the European Union via the Maastricht Treaty in 1993.[12] Along with the EU's developments, scholars have questioned the organization's possibility to effectively exert power outside its borders, in order to influence international order. Gerrits (2009) has rightfully pointed out that those scholars that believe that the EU wields significant power to shape the international agenda, are mainly European and subject to Eurocentrism.[13] Among such scholars, there are different schools of thought on how the expression of power is portrayed. Aggestam (2009) points out that whereas a country like the United States (US) is commonly characterized by its military or economic power, the EU is primarily portrayed as a soft power. Although this does not mean that other countries do not exert soft power, Aggestam argues that for the EU specifically, this soft power is influential in and of itself, and does not obtain its legitimacy from other forms of power.[14] Literature on the EU's soft power can be dated back to 1973, when Duchene wrote about the European Community's civilian action. Since then, scholars such as Bull (1982), Hill (1990), Gourlay and Remacle (1998) and Smith (2005) have analyzed and outlined different dimensions of EU soft power, each defining it differently as, for example, civilian, ideational or ideological power.[15][16][17] One of the most influential descriptions of EU soft power was published by Manners (2001), who developed the concept of the EU's normative power. [18] Manners' idea of normative power originates in 1990s social constructivist theory and goes beyond traditional forms of power like military and civilian power.[19] According to Manners, normative power is the cause of the EU's ability to shape international ideas and norms, based on an adherence to universal values and principles, that have been institutionalized into policy and legislation within the EU. [20][21][22] These universal values and principles are often propagated by international bodies like the United Nations (UN). Devotion to these universal norms

[12] Treaty establishing the European Coal and Steel Community, ECSC Treaty. [online]
[13] Gerrits, A. (2009). Normative Power Europe: Introductory Observations on a Controversial Notion. In *Normative Power Europe in a Changing World: A Discussion*, ed. André Gerrits, 1-9, p. 2
[14] Aggestam, L. (2009). The World in Our Mind: Normative Power in a Multi-Polar World. *Normative Power Europe in a Changing World: A Discussion,* ed. André Gerrits, 23-36, p.31
[15] Duchêne F. (1973). The European Community and the Uncertainties of Interdependence. In *A Nation Writ Large? Foreign-Policy Problems before the European Community*, eds. Max Kohnstamm and Wolfgang Hager, London, Macmillan.
[16] Hill, C. (1990). European Foreign Policy: Power Bloc, Civilian Model – or Flop? In *The Evolution of an International Actor*, ed. Reinhardt Rummel, Boulder, Westview Press.
[17] Smith, K. E. (2005). Beyond The Civilian Power EU Debate. *Politique Européenne, 3(17),* 63-82
[18] Manners, I. (2001). Normative Power Europe: The International Role of the EU. Paper presented at Biennial Conference of the European Community Studies Association in Madison, Wisconsin, USA, 31 May, 1-30, p. 6,7
[19] Manners, I. (2006). The European Union as a Normative Power: A Response to Thomas Diez. *Millenium: Journal of International Studies, 35(1),* 167-180, p. 169
[20] Manners, I. (2002). Normative Power Europe: A Contradiction in Terms? *JCMS, 40(2),* 235–58, p. 238
[21] Pace, M. (2007). The Construction of EU Normative Power. *JCMS, 45(5),* 1041-1064, p. 1045
[22] Gerrits, A. (2009). Normative Power Europe, p. 12

determine the EU's effectiveness and legitimacy as an international actor, and thus lie at the heart of its identity.[2324] Manners argues that the EU's normative power is made up of five core norms: peace, liberty or freedom, democracy, rule of law and human rights.[2526] Moreover, he claims that four additional norms have not yet been cemented in EU identity, but are omnipresent in EU practice and law and thus constitute part of the EU's normative power as well. These norms are anti-discrimination or equality, social solidarity, sustainable development and good governance.[27] EU commitment to these norms is exemplified through its inclusion in the region's most significant legislation, such as the Charter of Fundamental Rights of the European Union (CFR, 2000) and the Treaty on European Union (TEU, 2007).[2829] Besides the obvious importance these universal norms have for informing EU legislation and policy they can be instrumentalized to exert international power and achieve foreign policy goals, through the dissemination of these norms. Pace (2007) stresses how dissemination is often attained through dialogue, ratification of international treaties and other contractual relations and policy initiatives, but can also be achieved through rewards and punishments such as international recognition, technical assistance or EU membership. [3031] In this norm propagation, important roles are played by EU institutions, such as the European Council.[32]

Manners' idea of how the EU actively uses norms to exert its power has received widespread criticism. An important critical contribution was produced by Thomas Diez (2005), who argues that Manners' normative power should not be seen as a distinct power, but as part of the EU's civilian power .[3334] In another example, Bicchi (2006) stresses the imperative for reflexivity, first brought to the attention by Diez, and inclusiveness in order to ensure evading Eurocentric tendencies, before assuming that the EU is a moral power in its foreign policy.[35] Pace (2007), on the other hand, argues that a lack of focus on the actual construction of the EU's normative power leads to a failure of acknowledgement of its limits. This, in turn, can lead to power asymmetries, gaps between rhetoric and reality and tensions between EU institutions, thus actually impairing rather than furthering the

[23] Pace, M. (2007). EU Normative Power., p. 1050
[24] Manners, I. (2006). The European Union as a Normative Power, p. 169
[25] Manners, I. (2002). Normative Power Europe, p. 242
[26] Manners, I. (2006). The European Union as a Normative Power, p. 171
[27] Manners, I. (2002). Normative Power Europe, p. 243
[28] Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community, signed at Lisbon, 13 December 2007. (2007). *Official Journal,* C 306/1.
[29] Charter of Fundamental Rights of the European Union. (200). Official Journal of the European Communities, /C 364/01.
[30] Manners, I. (2006). The European Union as a Normative Power, p. 173
[31] Pace, M. (2007). EU Normative Power, p. 1053
[32] Pace, M. (2007). EU Normative Power, p. 1048, 1049
[33] Diez, T. (2005). Constructing the Self and Changing Others: Reconsidering 'Normative Power Europe'. *Millennium: Journal of International Studies, 33(3)*, 613-636, p. 616
[34] Manners later rebutted Diez' criticism in: Manners, I. (2006). The European Union as a Normative Power, p. 176
[35] Bicchi, F. (2006). Our Size Fits All: Normative Power Europe and the Mediterranean. *Journal of European Public Policy, 13(2),* 286-303, p. 289

global power of the EU.[36] Clearly, there is no unanimous consent on how the EU uses normative power to assert its global influence.

The European Union's Climate Leadership

The EU started to exert itself as a global pioneer of international climate and environmental policy in the 1990s, pushing for biodiversity and ozone layer protection, and while shaping UN reform and international agreements on climate change mitigation.[37] Scholars concur that this period marks the inception of EU climate leadership. Skjaerseth (2017) argues that this pioneering role was solidified when the EU accepted the highest targets for emission reductions of Global North actors, standing as the only non-state Party to the 1997 Kyoto Protocol.[3839] Consequently, Convery (2009) outlines how the EU would play a leading role in sustaining the agreement, as the US rejected the Protocol in 2001 due to lacking popular support for any form of binding emission reductions. Ratification by 55 Parties making up at least 55% of Parties' emissions in 1990 was necessary for the Protocol to go into effect. As the US constituted 34% of these emissions, their rejection meant that all other large-scale emitters would have to be persuaded to ratify the Protocol. The EU took it upon itself to extensively lobby for Parties' ratification at the following Conference of the Parties (COP) meetings, and finally succeeded in persuading big emitters such as Russia, China and Japan to ratify the agreement in 2004, thus realizing the Treaty's implementation. This marked EU leadership in terms of climate change, and ever since, the EU has continued to be an advocate for ambitious international climate change policies.[4041]

The existing literature provides various justifications to motivate the EU's choice to support ambitious climate change policies and position itself as an international climate leader. One of the most commonly posed arguments, supported by Oberthür (2008) and Parker (2012), is that the EU uses its position of 'climate leader' to legitimize its credibility as an international actor, thus simultaneously employing climate leadership as an exertion of and a justification for its normative power.[4243] Convery (2009) adds that the EU developed itself as leader of international climate change as it recognized that climate change would be an important political issue of the future, and it wanted to obtain a

[36] Pace, M. (2007). EU Normative Power, p. 1055, 1056
[37] Oberthür, S. and Roche Kelly, C. (2008). EU Leadership in International Climate Policy: Achievements and Challenges. *The International Spectator, 43(3),* 35-50, p. 36
[38] Skjaerseth, J. B. (2017). The European Commission's Shifting Climate Leadership. *Global Environmental Politics, 17(2)*, 84-104, p. 90
[39] The United Nations (UN). (1997). Kyoto Protocol to the United Nations Framework Convention on Climate Change, 10 December 1997, Annex B.
[40] Convery, F. J. (2009). Origins and Development of the EU ETS. *Environmental & Resource Economics, 43*, 391-412, p. 392
[41] Falkner, R. (2019). The unavoidability of justice – and order – in international climate politics: From Kyoto to Paris and beyond. *The British Journal of Politics and International Relations, 21(2),* 270-278, 272
[42] Oberthür, S. and Roche Kelly, C. (2008). EU Leadership, p. 44
[43] Parker, C. F., C. Karlsson, M. Hjerpe, and B. O. Linnér. (2012). Fragmented Climate Change Leadership: Making Sense of the Ambiguous Outcome of COP-15. *Environmental Politics, 21 (2),* 268–286. p. 277

competitive edge over other international actors.[44] Additionally, the issue of climate change is said to be particularly well-suited for the EU because of the issue's inherent necessity for improving multilateral cooperation, an essential objective of the EU's position within global order.[45] Moreover, international cooperation in the field of climate change is likely to be particularly interesting to the EU, as the EU is one of the least self-sufficient energy consumers. The region has long been concerned with ensuring energy security – a concern that has been exacerbated by the 2006 and 2009 gas crisis with Ukraine and Russia - and improving international cooperation on the issue is thus in the EU's interest.[46] Lastly, taking up the role of global climate leader forces the EU to increase coordination within its borders, which in turn leads to a deepening of EU integration.[47]

Although the EU continues to position itself as a climate leader, the effectiveness of this rhetoric has been questioned by various authors. Whereas the EU was a pivotal actor to ensure success at Kyoto in the 1990s, Oberthür stresses how internal EU climate policies lagged behind: various efforts to reduce domestic GHG emissions failed to gain support, and, if they did happen to be implemented, interests other than climate change mitigation prevailed. This created a 'credibility gap' between substantive EU attempts to provide international climate leadership, and its inability to achieve domestic climate change mitigation.[48] Efforts to close this gap occurred in the early 2000s, when the EU brought about various programs on climate change abatement such as the ETS (2003) and the Renewable Energy Directive (2009).[49] However, Oberthür and Groen (2018) stress how the EU continued to lack credibility, as a result of failing to reduce its own domestic emissions, and thus was unable to effectively influence the decision-making process at the 2009 Copenhagen COP.[50] Empirical research conducted by Parker, Karlsson and Hjerpe (2017) over the course of seven COPs, from COP 14 (2008) to COP 21 (2015), found that the share of those surveyed who saw the EU as a leader in climate change has decreased rapidly; from 62% at COP 14 to 41% at COP 21. Over time, both the US and China have taken over the EU as widely recognized climate leaders. However, even their leadership remains debated, suggesting that global climate leadership remains largely fragmented.[51][52] This fragmentation of global climate change leadership is especially worrisome as Rogelj et al. (2013) have found that political, rather than technological, social or geopolitical, uncertainties constitute the

[44] Convery, F. J. (2009). Origins and Development, p. 396
[45] Oberthür, S. and Roche Kelly, C. (2008). EU Leadership, p. 43
[46] Bartuska, V., Lang, P. and Nosko, A. (2019). The Geopolitics of Energy Security in Europe. In *New Perspectives on Shared Security: NATO's Next 70 Years* ed. Valásek, T. [online]
[47] Oberthür, S. and Roche Kelly, C. (2008). EU Leadership p. 43
[48] Oberthür, S. and Roche Kelly, C. (2008). EU Leadership, p. 40
[49] European Commission (EC). (no date). Renewable energy directive. Renewable energy. [online]
[50] Oberthür, S. and Groen, L. (2018). Explaining goal achievement in international negotiations: the EU and the Paris Agreement on climate change. *Journal of European Public Policy, 25(5)*, 708-727, p. 711
[51] Parker, C. F., Karlsson, C. and Hjerpe, M. (2017). Assessing the European Union's global climate change leadership: from Copenhagen to the Paris Agreement. *Journal of European Integration, 39(2),* 239-252, p. 244
[52] Parker, C. F., C. Karlsson, M. Hjerpe, and B. O. Linnér. (2012). Fragmented Climate Change Leadership, p. 276

biggest risk of missing climate targets.[53] Despite public opinion, Oberthür and Groen (2017) claim that the EU has succeeded in asserting some climate leadership during the Paris COP 21, where it was able to secure some of its goals due to active diplomatic activity and effective coalition building.[54] Thus, although it remains debated to what extent the EU's portrayal as a climate leader is effective, the EU at least attempts to influence international climate policy and, in doing so, has succeeded in achieving some of its goals.

Climate Leadership as Part of Normative Power

As was outlined in the previous section, scholars often attribute the EU's legitimacy to take up a role of climate leader to its ability to provide ideational leadership, thus 'leading by example'.[555657] This notion presupposes that the EU is able to shape the international climate agenda, by both taking part in international climate agreements and conforming to its climate principles domestically. The narrative of the EU's climate leadership is built on the assumption of domestic adherence to certain values and can thus be seen as an example of normative power. This is represented in Manners' inclusion of the value of 'sustainable development' as one of the integral norms on which EU normative power is founded.[58] As Manners argues, the legislative basis for the EU's sustainable development is anchored in both domestic and international treaties, such as the 1992 Rio Declaration and the 1997 Amsterdam Treaty.[59] Article 3 of the TEU states the EU's commitment to 'contribute to the sustainable development of the Earth' and stresses that it will work for 'a high level of protection and improvement of the quality of the environment'.[60] The preamble of the Charter of Fundamental Rights of the European Union, which came into force in 2009, also states that the EU "seeks to promote balanced and sustainable development".[61] Furthermore, Article 37 of that same Charter specifically addresses environmental protection and sustainable development, stating that "a high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable

[53] Rogelj, J., McCollum, D., Reisinger, A. et al. (2013) Probabilistic cost estimates for climate change mitigation. *Nature, 493*, 79–83, p. 80
[54] Oberthür, S. and Groen, L. (2017). The European Union and the Paris Agreement: leader, mediator, or bystander? *WIREs Climate Change, 8(445),* 1-8, p. 5
[55] Skjaerseth, J. B. (2017). Shifting Climate Leadership, p. 84
[56] Oberthür, S. and Roche Kelly, C. (2008). EU Leadership, p. 47
[57] Dirix, J., Peeters, W., Sterck, S. (2015). Is the EU ETS a Just Climate Policy? *New Political Economy*, 20(5), 702–724, p. 703
[58] European Council and Council of the European Union. (2020). Climate change: What the EU is doing. Policies. [online]
[59] Manners, I. (2006). The European Union as a Normative Power, p. 172
[60] EUR-LEX. (2008). Consolidated version of the Treaty on European Union – Title I: Common Provision. *Official EU Journal, 115*, 9 May, Article 3. [online]
[61] Charter of Fundamental Rights of the European Union. (2016). Official Journal of the European Union, C 202/02, 389-405, p. 393

development." [62] Further, a similar commitment to sustainable development has been incorporated in EU policy making. The EC has outlined six political priorities for the period 2019-2024, the first one of which is the European Green Deal (EGD), published in December 2019.[63]

The EGD is defined as 'the plan to make the European economy sustainable, by turning climate and environmental challenges into opportunities, and making the transition just and inclusive for all'.[64] Hence, in addition to incorporating sustainable development, the EGD also commits itself to the values of 'equality' and 'social solidarity', as it vows to ensure justness for all in the green transition. This commitment has been executed in climate policies such as the Just Transition Fund, which compensates fossil fuel-reliant regions and sectors within the EU as they are phasing-out their carbon intensive activities. [65] Similar commitments to these two values included in the EU's normative power can be discerned internationally, with the EU as one of the strongest advocates for the Kyoto Protocol. As the Protocol outlines differentiated responsibilities for developed and developing (sic.) countries based on their historic contributions to the issue of climate change, the EU can thus be seen as committed to the value of social solidarity as a key part of the international climate regime.[66] Similarly, the EU tried to position itself as a leader advocating for climate justice during the Paris COP 21, but EU critics continue to stress the EU needs to do more. [6768]

It is a fact that poorer countries will be disproportionally impacted by climate change, partly because of unfavorable geographic conditions. Additionally, poorer countries often do not have the economic resources to conduct proper climate change mitigation.[69] The problematic nature of this trend is exacerbated by the fact that the countries likely to suffer most, are those that have historically contributed the least to climate change.[7071] Thus, if efforts to mitigate climate change are not enacted or climate change burden sharing is not enforced, poor countries will suffer more than rich countries, causing global inequality to increase even further.[72] This threat has fueled members of the European Economic and Social Committee (EESC) to argue for incorporation of Climate Justice in the EU's

[62] Charter of Fundamental Rights of the European Union. (2016). p. 401
[63] European Commission (EC). (2019). Priorities. 6 Commission Priorities for 2019-2024. [online]
[64] European Commission (EC). (no date). A European Green Deal. [online]
[65] European Commission (EC). (no date). The Just Transition Fund. [online]
[66] The United Nations (UN). (1997). Kyoto Protocol, 10 December 1997. Preamble.
[67] Okereke, C. and Coventry, P. (2016). Climate justice and the international regime: before, during, and after Paris. *WIREs Climate Change 7*, 834–851, p. 839
[68] Creutzig, F. et al. Challenging the European Climate Debate: Can Universal Climate Justice and Economics be Reconciled with Particularistic Politics? *Global Policy, 2(1)*, 6-14, p. 11
[69] Bretschger, L. and Valente, S. (2011). Climate Change and Uneven Development. *Scandinavian Journal of Economics, 113(4)*, 825-845 p. 826
[70] Tol, R. S. J. (2009). The Economic Effects of Climate Change. *The Journal of Economic Perspectives*, 23(2), 29-51, p. 29
[71] Newell, P. (2020). Global Green Politics, Cambridge: Cambridge University Press, ch. 1, p. 10
[72] Islam, N. and Winkel, J. (2017). Climate change and social inequality, p. 13

climate regime. In Logan (2017) the EESC proposes that an EU Bill of Climate Rights should be developed, anchored in the Universal Declaration of Human Rights (UDHR).[73]

Thus, incorporating all three values - sustainable development, social solidarity and equality- in climate change policies is essential, as they are inextricably linked and climate change is inherently ethical. Sustainable development is the way to solve climate change, while social solidarity and equality are at stake if the issue is not resolved quickly.

Lastly, scholars have analyzed the EU's normative power in light of other EU environmental policies, albeit rarely. Afionis and Stringer (2012) examined the EU's part in international biofuels regulation and ultimately questioned the effectiveness of the role that the EU's normative power played. The study finds that trade competitiveness, rather than environmental protection, was the primary factor determining EU action in the area of biofuels.[74] Thus, scholars have previously acknowledged the relevancy of researching specific EU environmental policies and their support for normative power EU, as part of the EU's climate leadership.

As this literature review has shown, the effectiveness of both the EU's normative power and the EU's climate leadership is questionable, but it is clear that the EU's climate leadership relies on the region's normative power for its legitimacy. As such, the EU's domestic climate policies and the inclusion of the values the EU aims to export in these policies, are key in maintaining the credibility of its climate leadership as part of its normative power.

[73] Lohan, C. (2017). Climate justice, EESC opinion. European Economic and Social Committee, 19 October. [online]
[74] Afionis, S. and Stringer, L.C. (2012). European Union Leadership in Biofuels Regulation: Europe As a Normative Power? *Journal of Cleaner Production*, 32, 114-123, p. 120, 121

Chapter 3 | Research Design

The leading question this thesis aims to tackle is ***to what extent the European Union's Emission Trading Scheme, a cornerstone of the European Union's climate policy, supports the credibility of the European Union's climate leadership, as part of its normative power.***

Methods

As previously discussed, the definition of normative power employed in this thesis will be that of Ian Manners. For this thesis, three of the values he outlines as part of the EU's normative power will be focused on. These three values are an essential components of the normative foundation of the EU's climate leadership, as has been shown throughout the literature review. The three values are:

- sustainable development;
- social solidarity;
- equality.

These three values will serve as independent variables throughout this thesis, and will be used as a normative lens to examine the dependent variable, the EU ETS. Although all three variables will be used identically, slightly more emphasis will naturally fall on the value of sustainable development, as this value is directly aligned with the EU ETS' purpose of reducing GHG emissions. In order to adequately determine whether the EU ETS incorporates these values, where possible, this thesis will use primary sources published by official EU institutions. These include publications from the EC website, content of the EC's Summer School on the ETS and the Directives that established the ETS. Chapter 5, in particular, will rely primarily on these types of sources. Where primary sources are insufficient, as a result of a necessity for more critical analysis, secondary literature will be consulted. This will mainly be the case for chapters 4 and 6.

Theoretical Framework

As the literature review has shown, the effectiveness of the EU's climate leadership is widely debated, and largely stooled on its ability to lead by example, thus part of its normative power. As leading by example is central to the legitimization of the EU's climate leadership, its ability to be a credible leader in terms of climate change is inextricably linked to the credibility of its domestic climate policies. Thus, it follows that its domestic policies should be in line with the values this normative power is built upon. Currently, no research has been performed linking the EU ETS to the EU's normative power as part of EU climate leadership. As such, there is a gap in the research on this highly relevant topic.

Despite the fact that a vast amount of literature is available on the EU ETS, its consequences for the EU's energy sector and its overall economic performance, much less is written on how the EU ETS

fits within the wider context of the EU's self-proclaimed role as a global climate leader. As the literature review has demonstrated, credibility for the EU's climate leadership is mainly achieved through its normative power, which is the main constituent of its international influence. As the EU's climate leadership is based on 'leading by example', its domestic policies should support these fundamental values in order not to undermine its credibility. Throughout this thesis, the cornerstone of the EU's domestic climate policy, the EU ETS, will be analyzed using a normative theoretical lens, focusing on the three values outlined in the Methods section - sustainable development, social solidarity and equality. In doing so, this thesis will contribute to the scarcity of literature covering the normative foundation of the EU's climate leadership and, more broadly, its normative power in international relations.

The thesis question can be divided into three smaller research questions, hinging on different levels of analysis of the EU ETS. These three research questions will be examined in separate chapters: chapters 4 through 6.

1. *To what extent does the process of the EU ETS' establishment support the credibility of the EU's climate leadership, as part of its normative power?*

In Chapter 4, the process of the EU ETS establishment will be analyzed, with a focus on the various actors, influences and incentives that played a decisive role in shaping the process. Four different levels of analysis are included in this chapter: the international, the EU-level, the national and the subnational. In doing so, this chapter will cover the entire scope of possible influences on the establishment of the EU ETS are covered. These influences are at the core of the initial set-up of the ETS system, discussed in the following chapter. The process of the ETS is chosen as unit of analysis, because both actors and influences present during this formation were pivotal in determining the final formulation of the ETS in 2003. As the process informed the intentions of the ETS system, the extent to which the three values were incorporated in its development will provide part of the answer to this thesis' principal research question. In analyzing the factors contributing to the establishment of the system, it will become clear to what extent the three values were at the basis of the formation of the EU ETS, and thus to what degree the process of the EU ETS' establishment supports the credibility of the EU's climate leadership, as part of its normative power.

2. *To what extent does the framework of the EU ETS support the credibility of the EU's climate leadership, as part of its normative power?*

In Chapter 5, the actual formulation of the EU ETS will be taken as unit of analysis, in order to determine the degree to which the framework of the EU ETS is in line with the EU's normative underpinnings of its climate leadership. As was mentioned in the Methods section, this chapter will

mainly use official EU documentation. In doing so, it will provide an important insight into the extent to which EU legislators incorporated the three independent values into the legislative process that resulted in the formulation of the EU ETS. As the issue of climate change is unprecedented, no roadmap exists to reach the solution. Thus, the success of climate policies is to a large degree determined by its political ambitiousness.[75] Therefore, the formulation of the EU ETS is essential to assess the credibility of the EU's climate leadership.

3. *To what extent do the outcomes of the EU ETS support the credibility of the EU's climate leadership, as part of its normative power?*

The outcomes of the EU ETs are the final unit of analysis that will need to be accounted for in order to answer the principal research question. By actually contributing to emission reductions and generating distributable revenues for nation states, effectuating market changes, contributing to operators' profits and providing the possibility to linkages with other ETSs, the outcomes of the EU ETS can have direct results for the EU's climate leadership, as part of its normative power. Thus, this unit of analysis is especially important, as the outcomes of the EU ETS have direct, tangible implications for the credibility of the EU's climate leadership. It is important to note that this section will not cover all outcomes of the EU ETS, but merely the ones that are essential to analyze using the three independent variables that were chosen for this thesis. Outcomes that will be covered will include both projected outcomes and unforeseen outcomes. Projected outcomes include those outcomes of the ETS that were anticipated and included in the ETS Directives. Unforeseen outcomes include more indirect consequences of the EU ETS, that were not formalized in the ETS Directives. This distinction is made in order to accurately determine whether there is a difference in alliance with EU norms between foreseen and unforeseen consequences of the EU ETS outcomes; the latter would suggest ineffective or imperfect design, while the former suggests a more general failure of the system.

[75] Dirix, J., Peeters, W., Sterck, S. (2015). Is the EU ETS a Just Climate Policy? *New Political Economy, 20*(5), 702–724, p. 715

Chapter 4 | Process

The first part of this thesis will examine to what extent the process of the EU ETS' establishment affects the credibility of the EU's normative power. In order to determine this, the most influential factors that shaped the decision-making process and the incentives and roles different actors played in achieving the formation of the EU ETS will be analyzed.

International Influence

International factors played an important role in shaping the EU ETS. Notably, the establishment of the international climate regime, outlined in the 1997 Kyoto Protocol, was instrumental to the development of the ETS. The EU played a decisive role in the Kyoto negotiations, as its main advocate and the only international organization that was Party to the Kyoto Protocol.[76] The EU's objective was to establish an absolute limit on emissions for Global North countries, equal to a 15% emission reduction when compared to the base-year 1990.[77] As such, the EU pushed for ambitious emission reductions. As part of the final Kyoto Agreement, the EU agreed to a reduction commitment of its anthropogenic GHG emissions by 8% compared to 1990 levels.[78] This reduction needed to be realized during the Kyoto Protocol's first commitment period, from 2008 to 2012. As a result of the EU's leadership role in the ratification of the Kyoto Protocol, the European Commission (EC) was devoted to adhering to its stated climate commitment. This was strengthened by international opposition to commit to binding emission reductions by countries not included in the Kyoto Protocol, such as Japan.[79] Although the EU was initially averse to including market-based mechanisms in the Protocol, Article 17 of the Kyoto Protocol outlined the possibility of introducing domestic carbon trading in order to reach country-specific commitments. Additionally, the Protocol established flexible mechanisms to reach emission reductions, which were also market-based. As a result of this development, the EU began examining the possibilities of a centralized carbon trading market in 1998.[80] The eventual development of the ETS fell directly in line with the timeframe of the events laid forth in Kyoto; phase II of the EU ETS lines up with Kyoto's first implementation period, and ETS' pilot phase was set to start in 2005, when the Kyoto Protocol required its signatories to have made considerable progress in terms of reaching its commitments.[81] Additionally, a carbon market could also be relatively easily integrated with Kyoto's flexible mechanisms and was therefore institutionally desirable. Thus, adhering to the Kyoto Protocol formed a justification for the establishment of the EU ETS, and its flexibility mechanisms and timeframe are at the core of the EU ETS framework. On the

[76] See literature review for overview of EU's role in the ratification of Kyoto
[77] Convery, F. J. (2009). Origins and Development of the EU ETS. *Environmental Resource Economics, 43*, 391-412, p. 393
[78] The United Nations (UN). (1997). Kyoto Protocol, Annex B.
[79] Convery, F. J. (2009). Origins and Development, p. 393
[80] Convery, F. J. (2009). Origins and Development, p. 399
[81] Skjærseth, J. B. and Wettestad, J. (2009). The Origin, Evolution and Consequences of the EU Emissions Trading System. *Global Environmental Politics, 9(2),* 101-122, p. 107

flip side, the EU, in its role as a climate leader, also played a pivotal role in achieving the Protocol's ratification. As such, the EU and the Kyoto Protocol bilaterally strengthened one another.

At the same time as the initial development of the EU ETS, it became clear that the US was likely to introduce carbon trading to reach emission reductions. The EC saw the development of a compatible system as an opportunity to enhance transcontinental trade, and thus strengthen its political and economic position.[82] Other international influences that played a significant role in the development of the EU ETS include the American Acid Rain Program, a policy established in 1990, aimed at reducing air pollution.[83] The Program has a market-based underpinning, similar to the EU ETS, with allocation of allowances, that diminishes over time in order to ensure pollution reduction. One of its key characteristics is the flexibility in the policy's approach, including the concept of 'learning by doing', which was adopted as the main objective of the EU ETS' pilot phase. This flexibility was meant to lead to acceptance of the model, which can lead to more stringent reductions in the long-term.[84] Throughout the early 2000s, the EU ETS was finally developed with the help of extensive US consultation, again signifying the role transatlantic cooperation had in its development.[85] This suggests that international influences, like the Kyoto Protocol and developments in the US, significantly influenced the development of the EU ETS.

Economic Coupling

From the beginning, part of the discussion on how to tackle the EU's Kyoto commitments included directly linking emission reductions to the economy. According to basic economic theory, emissions are negative externalities, as they are not automatically incorporated in pricing but do result in negative consequences for the public. Thus, failure to account for the price of emissions in the pricing of goods is a form of market failure that can be resolved by pricing emissions.[86] Even in 1990, years before the Kyoto Protocol, the Commission Task Force advised that economic and environmental objectives should be linked, in order to create the most cost-effective outcome. After the 1997 Kyoto Protocol, both academics and the EC's climate leadership continuously campaigned for the inclusion of economic incentives as a way to achieve emission reduction - —this was in part due to the fact that current EU leadership was made up of career economists.[87] For example, in the 2000 Green Paper that provided a first proposal of the EU ETS, one of three supporting documents that were added was an

[82] Convery, F. J. (2009). Origins and Development, p. 399
[83] Rutherford, A. P. (2014). Linking Emissions Trading Schemes: Lessons from the EU-Swiss ETSs. Carbon & Climate Law Review (CLLR), 4, 282-290, p. 291
[84] Tietenberg, T. (2002). The Tradable Permits Approach to Protecting the Commons: What Have We Learned? Fondazione Eni Enrico Mattei (FEEM), Milano, *Nota di Lavoro, 36.2002*, 1-32, p. 22
[85] Watanabe, R. and Robinson, G. (2005). The European Union Emissions Trading Scheme (EU ETS). *Climate Policy, 5(1),* 10–14, p. 12
[86] European Commission (EC). (2015). EC Summer University, *ETS Online Course*, Unit 1: Climate Policy Instrument Choice. [online]
[87] Skjærseth, J. B. and Wettestad, J. (2009). The Origin, Evolution and Consequences of the EU Emissions Trading System. *Global Environmental Politics, 9(2),* 101-122, p. 108

economic analysis that argued how significant economic gains could be achieved when tackling the agreed reductions centrally, instead of nationally, through a carbon trading mechanism.[88] Economic incentives were expected to increase the likelihood of reaching the EU's emission reductions commitments, and would ensure that in doing so, those who contributed would also pay carry the burden, in line with the polluter pays principle.[89] Thus, the EU's goal to reduce emissions has been linked to the objective of achieving this in the most cost-effective way from the start.

Stakeholder Interests

Stakeholders of the affected industries also played a crucial role in the establishment of the EU ETS, as they vocally opposed the proposal for a carbon taxation in the 1990s. Although they favored regulatory policy instruments, stakeholders preferred a carbon trading scheme over carbon taxation.[90] Thus, this policy instrument was seen as a more politically acceptable option for industries, making it more favorable for the EC. Although industry groups preferred an ETS over a carbon tax, they actively countered parts of the ETS proposal, like its mandatory participation.[91] Playing the role of the most influential non-governmental actor and the most affected stakeholders in the energy-intensive industry, the industry lobby was constantly consulted during the formation of the EU ETS. As a result, the industry lobby was able to influence the decision-making process to a large degree.

Institutional Reform

As one of the pioneers of combating climate change, the EU initially aimed to reduce emissions by relying on regulatory instruments, such as the implementation of performance standards. When this proved insufficient, the EC tried to install an EU-wide carbon taxation mechanism by as early as 1992. Due to concerns over giving up fiscal autonomy at the Member State level and extensive industry lobbying, attempts to realize this mechanism were discontinued in 1997.[92] However, these EC efforts did foreshadow the extensive push for a macroregional approach towards tackling climate change. This was reinforced institutional deepening that occurred in the 1990s, which expanded the EU's potential for central policymaking and thus enhanced its power and increased its authority. The formal establishment of an EU-wide single market with the 1986 Single European Act and the decision-making power granted to the European Parliament as part of the 1993 Maastricht Treaty and 1997 Amsterdam Treaty were both important factors to ensure that the EU would later have the institutional capacity to effectively enforce the EU ETS. For example, in 2001, the European Parliament's newly established Environment Committee (ENVI), passed the final proposal after first reading.[93]

[88] Convery, F. J. (2009). Origins and Development, p. 399
[89] European Commission (EC). (2015). *ETS Online Course*, Unit 2. [online]
[90] Convery, F. J. (2009). Origins and Development, p. 399
[91] Watanabe, R. and Robinson, G. (2005). EU ETS, p. 12
[92] Convery, F. J. (2009). Origins and Development, p. 393
[93] Watanabe, R. and Robinson, G. (2005). EU ETS, p. 12

Moreover, in 1998, the EU Burden Sharing Agreement was signed, which legally bound all 15 EU Member States to the EU's target of reaching an 8% emissions reduction. As a result, it became increasingly clearer that an EU-wide solution in meeting Kyoto commitments was necessary.[94] Additionally, EU leadership desired to act quickly in order to ensure that no decentralized ETSs would spring up over Europe, as the UK and Denmark had started coupling environmental objectives to economic ones.[95] During the development of the ETS, tensions arose between Member States (MS) and the EC on which actors should get authority over which aspect of the EU ETS.

Furthermore, MS were skeptical of the EC's capacity to reject national allocation plans (NAPs) for the maximum of allowed emissions and feared that this would give the EC too much influence over national matters. MS claimed that the EC demanding more ambitious emission reductions would lead to discrepancies between efforts on the national and EU-level. Particularly industry-heavy Germany was strictly opposed to the EC's authority; the country already had in place voluntary agreements with industry operators and did not wish to replace these with mandatory agreements.[96] As the carbon tax proposed by the EC had received extensive criticism by both the industry lobby and Member States, a carbon market seemed to be the lone economic possibility remaining. Moreover, as a carbon tax constitutes a fiscal duty, it would require MS unanimity, whereas a carbon trading system could be approved by quantified majority voting, which encouraged the EC to favor a carbon trading system. The formation of the EU ETS would thus, to some extent, constitute a power struggle between the national and EU-level, a struggle that is still very present in EU politics.[97]

Throughout this analysis of the constitutive elements of the development of the EU ETS, it has become clear that the EU's primary concern in the development of the system seems to have been its political feasibility, not the development of a policy instrument that would result in the most ambitious climate change abatement. A carbon trading scheme was chosen as the most suitable policy instrument, as this was the instrument most likely to serve EU interests and be tolerated by all influential stakeholders. A desire to maintain international legitimacy by adhering to Kyoto commitments, hopes of improvement of transatlantic relations, the possibility for approvement without unanimity due to institutional reform, and Member State and industry lobby opposition to taxation were at the core of the decision to implement a carbon trading scheme. Moreover, the pace of the formation was principally dictated by the need to align with the Kyoto Protocol. First, the timeframe of the Kyoto Protocol obliged the EU to develop and implement the EU ETS quickly. Second, the initiation of the development of national carbon trading schemes, which would create decentral efforts for climate abatement, and undermine the EU's ability to reach its Kyoto commitments, played a big

[94] Watanabe, R. and Robinson, G. (2005). EU ETS, p. 13
[95] Watanabe, R. and Robinson, G. (2005). EU ETS, p. 12
[96] *Ibidem*
[97] Skjærseth, J. B. and Wettestad, J. (2009). The Origin, Evolution and Consequences of the EU Emissions Trading System. *Global Environmental Politics, 9(2),* 101-122, p. 107

role in speeding up the process of the policy's establishment. Thus, although the EU ETS was the first in developing a large-scale carbon trading mechanism and thus incorporated sustainable development, it did not do so purely out of inherent commitment to wanting to reduce emissions, but also because it was the most politically feasible way to ensure that it would maintain its international climate credibility. Although it could be argued that the EU incorporated some degree of social solidarity by extensively taking into account stakeholders' interests, other population groups were not consulted, and this thus does not constitute true social solidarity. A lack of focus on sustainable development, social solidarity and equality in the process of the EU ETS, would later lead to a lack of incorporation of these values in the formulation of the EU ETS, as the next chapter will show.

Chapter 5 | Framework

This chapter analyzes to what extent the formulation of the EU ETS is in line with the EU's normative power. Hence, this chapter will focus on how sustainable development, social solidarity and equality, underpinning the EU's normative power, were actually incorporated in the formulation of the EU ETS. An outline of the actual structure of the EU ETS will be given, including an analysis of the incorporation of values associated with the EU's normative power in the policy's texts. This chapter will show that these values have not been sufficiently included in the ETS' formulation.

Phase I-II

The EU ETS was officially established in 2003, with the publication of Directive 2003/87/EC on 25 October. Beginning with the Scheme's implementation in January 2005, installations included in the EU ETS are required to have permits, in the form of allowances, for all GHG emissions governed by the ETS. These EU allowances (EUAs) were initially created and distributed by Member States, with their amount derived from a nationally determined cap of annual emissions outlined in national allocation plans (NAPs). Distribution of EUAs occurs either through free allocation or auctioning of allowances by Member States, with the bulk of allowances being allocated freely in phase I and II.[98] As all cumulative allowances equal the cap, emissions covered by EUAs theoretically cannot exceed the cap, thus ensuring a fixed maximum of emissions per year. Cap-setting was meant to take into account both national and Kyoto commitments, be as ambitious as possible and was forbidden to be adjusted after allowances were distributed. NAPs that failed to meet these preconditions, were required to be adapted by the EC.[99] In the first two phases of the ETS, governments thus retained significant control over the effective reductions realized by the European initiative.

The EU ETS was implemented in different phases. The scheme's pilot phase, phase I, started in January 2005 and ran until the end of 2007. The goal for this phase was to 'learn by doing' and establish a functioning market. The only GHG that was covered by the scheme was CO2, as this was most easily measured through the Emissions Monitoring set up in 1993.[100][101] The second trading period, phase II, ran from the beginning of 2008 until the end of 2012. Goals for this phase included applying lessons learned from the pilot phase and furthering the operationalization of the ETS. Phase II occurred alongside the first commitment period of the Kyoto Protocol, and NAPs were thus meant to be in line with Kyoto commitments. The operators covered in phase I and II were power and heat installations with generation capacity of over 20 MW, and energy-intensive industries, such as metal

[98] European Commission (EC). (no date). Phases 1 and 2 (2005-2012). EU Emissions Trading Scheme. [online]
[99] European Commission (EC). (no date). National Allocation Plans. EU Emissions Trading Scheme. [online]
[100] Council of the European Council. (1993). 93/389/EEC: Council Decision of 24 June 1993 for a monitoring mechanism of Community CO2 and other greenhouse gas emissions. Official Journal of the European Communities, L 167/31
[101] Skjærseth, J. B. and Wettestad, J. (2009). EU Emissions Trading System, p. 107

and mineral production.[102] Although in phase II slightly less EUAs were allocated freely and the cap on allowances was decreased by over 6% compared to the start of the EU ETS, both phase I and II remain limited in terms of scope.

Article 1 of the 2003 Directive, which consists of just one sentence, underlines the centrality of economic incentives in the EU ETS:

> "The Directive establishes a scheme for greenhouse gas emission allowance trading within the Community (hereinafter referred to as the 'Community scheme') in order to promote reductions of greenhouse gas emissions in a cost-effective and economically efficient manner."[103]

Cost-effectiveness in the EU ETS is ensured by the ability for operators to trade permits for GHG emissions on a carbon spot market. As a result, operators with the lowest emission abatement costs are expected to effectuate emission reductions, as the operators with higher emission abatement costs would buy excess allowances off of them. Subsequently, emission reductions would occur there where it is most economically efficient, thus making carbon trading the most cost-effective way to realize emission reductions.

The 2003 Directive acknowledges the importance of the Kyoto Protocol, and unilaterally links the EU ETS to two flexibility mechanisms established in the Protocol in order to provide a way to offset domestic emissions. Global North countries that committed to emission reductions in Kyoto have two flexible mechanisms at their disposal to compensate domestic emissions through investment in foreign emission abatement: the Joint Implementation (JI) and the Clean Development Mechanism (CDM). The JI allows for emission-reducing investment in other Global North countries to offset emissions, while the CDM allows for emission-reducing investment in Global South countries to counterbalance emissions.[104] In linking these mechanisms to the EU ETS, the scope of EU ETS emission abatement is expanded significantly, which increases the cost-effectiveness of the system. Additionally, the opportunity of investment in the Global South to realize ETS obligations opens up the way to reach global climate justice and achieve equitable climate abatement.

The 2003 Directive establishing the ETS and its first two phases outlines the institutional framework of the new policy instrument, and repeatedly stresses the focus on cost-efficiency and economic benefits accruing from the system's implementation. Although it mentions the fundamental rights and principles outlined in the Charter of Fundamental Rights of the European Union and provides MS with the possibility to offset emissions by investing in Global South countries through the CDM, it contains

[102] Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a system for greenhouse gas emission allowance trading within the Union and amending Council Directive 96/61/EC. (2003). *Official Journal*, L 275, 32-46, Annex I.
[103] Directive 2003/87/EC (2003), Article 1
[104] The United Nations (UN). (1997). Kyoto Protocol, Article 12.

no direct mention of any of the values that EU climate leadership claims to be based on.[105] This is especially salient, because of the system's strong reliance on the Kyoto Protocol, which is centered on contributing to climate justice. The Kyoto Protocol repeatedly stresses the common but differentiated responsibilities different countries have based on disparate historic responsibilities.[106][107] Although the EU ETS derives its goals and timeframe from the Kyoto Protocol, no mention of achieving climate justice has been adopted in the formulation of the first two phases of the EU ETS.

Phase III

In April 2009, Directive 2009/29/EC was published, which amends the previous Directive and provides an outline for the EU ETS' third phase, which included some significant changes. Phase III of the EU ETS started at the beginning of 2013 and lasted until the end of 2020. Key goals for phase III included further consolidation and harmonization of the Scheme, as well as the establishment of linkages with other ETSs.[108][109] Starting from phase III, authority over setting the emissions cap shifted: an absolute emissions cap is set at the EU-level. This cap is reduced with a factor of 1.74% each year. [110] With the move from multiple national to one EU-cap, the EU has significantly expanded its authority over the EU ETS. Moreover, the ETS' effective contribution to combating climate change has increased over time, with faster emissions reduction through more ambitious caps.

With the initiation of phase III, the EU ETS expanded to include emissions from aviation and other sectors, while covering additional GHGs, such as nitrous oxide and perfluorocarbons. Moreover, the EU committed to auctioning the majority of EUAs, rather than allocating them freely, thus generating more auctioning revenues. However, for certain sectors believed to be at risk for carbon leakage, the totality of allowances is still allocated without charge. The Directive defines carbon leakage as "an increase in greenhouse gas emissions in third countries where industry would not be subject to comparable carbon constraints, and at the same time could put certain energy-intensive sectors and subsectors in the Community which are subject to international competition at an economic disadvantage."[111] Clearly, the EU acknowledges the need to protect its industries from external competition caused by the economic burden of emission reductions.

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[105] Directive 2003/87/EC (2003), Preamble
[106] The United Nations (UN). (1997). Kyoto Protocol, Article 10.
[107] Bushey, D. and Jinnah, S. (2010). Evolving Responsibility? The Principle of Common but Differentiated Responsibility in the UNFCCC. *Publicist, 6(1),* 1-10, p. 5
[108] European Commission (EC). (2015). *ETS Online Course*, Unit 5 [online]
[109] European Commission (EC). (no date). Revision for phase 4 (2021-2030). EU Emissions Trading Scheme. [online]
[110] European Commission (EC). (no date). Emissions cap and allowances. EU Emissions Trading Scheme. [online]
[111] Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community. *Official Journal, L 140*, Article 24.

Furthermore, 300 million allowances were sold to an innovative EU-wide program that supports development of innovative tools for climate abatement, such as renewable energy development.[112] The 2009 Directive outlining phase III of the ETS goes further in committing itself to its climate values; it explicitly underscores the importance of sustainable development and stresses the need to ensure that the ETS does not result in negative social effects.[113] Moreover, the Directive mentions the need for equity and transparency in the further realization of new climate objectives. The Directive commits to devoting at least 50% of the revenues generated from allowance auctioning to furthering climate change abatement. In doing so, revenues from climate abatement are effectively recycled to ensure more climate abatement. In terms of reaching climate justice, the Directive proposes providing financial aid to Global South countries as one of the ways in which to spend revenues from auctioning.[114] It also calls for the establishment of an international system to reduce deforestation and support afforestation, in line with United Nations Framework Convention on Climate Change (UNFCCC) agreements.[115] Attention is given to the pressing need of investment in Least Developed Countries' (LDC) climate abatement, which are more susceptible to climate change repercussions and bear little responsibility for its causes.[116] In summation, Directive 2009/29/EC shows a shift in the incorporation of normative values; in this Directive, the ETS more clearly commits to considering sustainable development, social solidarity and equality in its third implementation phase.

Phase IV

The EU ETS entered its fourth implementation phase as of January 2021, which was outlined in Directive 2018/410. This Directive reiterates the centrality of the EU ETS in reaching the EU's climate goals for 2030 in a sustainable manner, and increases the ETS' emission reduction factor to 2.2% from the start of phase IV.[117] In order to counter over-allocation of the allowances on the market, the EU has established a Market Stability Reserve (MSR) which improves flexibility and can take excess EUAs off the market to safeguard competitiveness. No expansion of the share of EUAs to be auctioned is included in this Directive; hence, like in phase III, around 57% of total allowances will be auctioned.[118] Some subsectors will be required to phase out free EUAs allocation starting from 2026, while others will continue to receive free allocation of EUAs, with ample attention for the validity of the threat of carbon leakage throughout the Directive.[119]

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[112] European Commission (EC). (no date). NER 300 programme. Innovation Fund. [online]
[113] [113] Directive 2009/29/EC, 29
[114] Directive 2009/29/EC, 18
[115] Directive 2009/29/EC, 36
[116] Directive 2009/29/EC, 31
[117] European Commission (EC). (no date). Emissions cap and allowances. EU Emissions Trading Scheme. [online]
[118] Directive 2018/410 of the European Parliament and of the Council of 14 March 2018 amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments, and Decision (EU) 2015/1814. (2018). *Official Journal, L 76*, Article 8.
[119] Directive 2018/410, Amendment to Article 10b

Notably, the Directive mentions the EU's commitment to the polluter pays principle, thus holding actors accountable for their emissions. By doing so, the Directive indirectly states its support for the notion that operators should carry the burden of climate change. Article 7 concludes that, following the polluter pays principle, the EU ETS should transition to full auctioning "over time".[120] Although this in itself is promising, no temporary outlook is included in this description. At the same time, the credibility of this commitment is also weakened by the EU, which stated in the very same Directive that the total share of auctioned allowances will not increase in the period 2020-2030.

A maximum of 25% of the revenues accruing from auctioning may be redistributed to compensate for cost increases as a result of the ETS. The Directive states the need for MS to spend these revenues on international climate finance and on ensuring a 'just transition' on a subnational level. [121] However, the Directive does not specify how much should be allocated to these goals and does not set any binding rules. Further, this Directive does not contain a similar notion of the need to aid Global South countries in climate abatement, as did the previous Directive.

The formulation of the EU ETS through Directive 2003 emphasizes economic efficiency. Moreover, throughout the constituting text, no commitment is made to the values that the EU advocates its climate leadership to be based on. Directive 2009, on the other hand, marks a significant improvement in the formulation of norm-based goals for the EU ETS, with sustainable development and foreign aid to climate abatement included in the Directive. However, this formulation often lacks clear commitments. For example, the Directive states the need to aid LDCs, but no quantitative goals for aid provision are set. Additionally, economic objectives are still principal aspects of the formulation of phase III of the system. With the recent initiation of phase IV, the system's operationalization and harmonization has been improved further. Nevertheless, this Directive still lacks quantified commitment to fundamental values, aside from its commitment to support a just transition and invest in international climate finance.

Although the Directives underpinning the EU ETS have improved in their incorporation of values over time, there is still ample room for progress. Hence, , the credibility of the EU's climate leadership as part of its normative power is not strengthened by the formulation of the EU ETS.

[120] Directive 2018/410, Article 7
[121] Directive 2018/410, Article 16.

Chapter 6 | Outcomes

In the last section of this thesis, the outcomes of the EU ETS through 2020 will be analyzed and the implications of these outcomes will be discussed, for the purpose of determining to what extent they support the EU's climate leadership, as part of its normative leadership. This chapter will discuss both planned and unforeseen outcomes of the EU ETS, as they both will be shown to play a pivotal role in the system's normative credibility.

Abatement Incentives and Emission Reductions

As the EU ETS is primarily a climate policy instrument, examining whether the policy tool has been able to cause sufficient emission reductions is essential for determining the success of its sustainable development goals.

Part of the justification used by the EU for the choice of this policy design is to try and achieve the inherent goal that goes along with using an ETS; as the annual emissions cap cannot not be exceeded without leading to penalties and a forced emission reduction for the following year, the policy instrument is meant to guarantee sustainable development by design.[122] During the pilot phase of the EU ETS, no convincing emission reductions were measured. Although significant reductions were reported in 2007 and 2008, these are commonly attributed to the economic crisis rather than to success of the EU ETS. Additionally, emission reductions mainly occurred in gas-fired power plants, rather than in the more carbon-intensive, and thus more emission-heavy, coal-fired power plants. Although carbon intensity in the electricity sector declined from 2005-2011, this decline stabilized by 2011.[123] These outcomes suggest that the ETS has failed to motivate sufficient incentives for emission abatement and energy efficiency investments in its first two implementation phases.[124] As such, the EU ETS failed to deliver on its primary goal of reducing emissions in a way that would support sustainable development.

These unsatisfiable outcomes of the EU ETS can be explained by extremely low EUA prices in the EU carbon market throughout the 2010s.[125] During the first two phases of the ETS, a surplus of allowances was allocated, due to insufficiently ambitious NAPs. As a result, the carbon price collapsed at the end of phase II, falling from approximately 30 EUR per EUA in 2005, to below 3 EUR per EUA in

[122] European Commission (EC). (2015). *ETS Online Course*. Unit 2 [online]
[123] Berghmans, N. and Alberola, E. (2013). The Power Sector in Phase II of the EU ETS: Fewer CO2 emissions, but Just as Much Coal. Climate Report 13, 1-32, p. 25
[124] Zhang, Y. and Wei, Y. (2009). An overview of current research on EU ETS: evidence from its operating mechanism and economic effect restrictions of energy-intensive imports into the European Union through border cost adjustments. Working Paper 3, Center for Energy and Environmental Policy Research, 1-31, p. 29
[125] Lundgren, T., Marklund, P. and Zhang, S. (2016). Industrial energy demand and energy efficiency – Evidence from Sweden. *Resource and Energy Economics 43*, 130-152, p. 148

2013.[126][127][128] This surplus is believed to have been exacerbated by the economic crisis in the late 2000s and early 2010s; as a result of reduced economic activity, emissions decreased, causing demand for EUAs to diminish, which put further negative pressure on the price of EUAs.[129] Additionally, the capacity of renewable energy development that was achieved has likely had a negative impact on EUA pricing, as increased access to renewables reduces the demand for EUAs. This constitutes an intrinsic controversy in the ETS; improving sustainable development by growth of renewable energy use, results in weakening of ETS.[130] This undermines the possibility of the ETS to effectively achieve sustainable development. A similar tendency can be seen in the use of international credits generated through carbon offsetting, which formed another reason for ineffectively low EUA prices. The flexibility mechanisms were used to offset domestic emissions on such a large scale that incentives for local emission reductions were insufficient.[131] In 2012 alone, industry operators were able to save over 1.2 billion EUR by using offsetting mechanisms established at Kyoto, and from 2008-2012 60% of the total amount of offsetting until 2020 had already been used.[132] Thus, international offsetting, resulting in support for international climate justice, also led to the weakening of the EU ETS, thus undermining the system's overall effectiveness in terms of achieving normative goals.

The EC has implemented several measures in order to resolve overallocation of allowances and the consequential pricing failure on the EU ETS carbon market. Cap-setting has been switched to the EU-level in order to ensure that the desired amount of emission reductions is achieved and the limits for the amount of offsetting allowed have been lowered. Furthermore, the EU decided to postpone the sale of 900 million EUAs because of allowance overallocation, transferred over from phase II into phase III.[133] By postponing the sale of these EUA's, also known as backloading, the ETS aims to drive up carbon pricing. In adopting these measures, the EU has made an attempt to solve some of the issues associated with the EU ETS. However, early research on energy efficiency improvements in phase II show a continued lack of energy efficiency improvements.[134] In 2019, the EC established the Market Stability Reserve (MSR) in order to improve the flexibility of allocation on the carbon market throughout phase IV.[135] However, projections of phase IV show the MSR will likely only yield significant consequences in the long-term, with EUAs price increases to be expected only after 2030.

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[126] European Parliament (EP). (2014) Reform of the EU carbon market, October, 1-10, p. 4
[127] Rutherford, A. P. (2014). Linking Emissions Trading Schemes: Lessons from the EU-Swiss ETSs. *Carbon & Climate Law Review (CLLR), 4*, 282-290, p. 284
[128] Climate Policy Info Hub. (no date). The EU Emissions Trading System: an Introduction. [online]
[129] *Ibidem*
[130] Koch, N. et al. (2014). Causes of the EU ETS price drop: recession, CDM, renewable policies or a bit of everything? – New evidence. Energy Policy, 1-18, p. 12
[131] Climate Policy Info Hub. (no date). An Introduction. [online]
[132] Berghmans, N. and Alberola, E. (2013). The Power Sector, p. 2
[133] Keating, D. (2013) NGOs call for ETS to be scrapped. POLITICO, 15 April. [online]
[134] Cui, Q. et al. (2016). Measuring the energy efficiency for airlines under the pressure of being included into the EU ETS. *Journal of Advanced Transportation 50,* 1630–1649, p. 1646, 1647
[135] Climate Policy Info Hub. (no date). an Introduction. [online]

Moreover, this price increase will be largely driven by the decrease in the supply of allowances that will occur in phase IV, rather than by the intake of allowances by the MSR.[136]
All in all, scholars argue that the EU has granted industries with too much flexibility, including comprehensive options for offsetting and allocation saving that will undermine the effectiveness of the system.[137][138] Moreover, they have done so from very early on in the development process of the EU ETS. [139] As the EU has continuously reevaluated the EU ETS and its outcomes without making significant changes, it seems like the EU ETS prioritizes economic sustainability over environmental sustainability, as it has not strived to achieve the most ambitious emission reductions possible through the EU ETS. This conclusion is supported by the rhetoric used in more recent climate policies; the EGD is continuously portrayed as a new "growth strategy", rather than a means to achieve climate change abatement.[140] On multiple occasions, critics have expressed their concern with the EU's seeming favoring of industry interests above climate objectives, leading to the opposite achieving sustainable development. [141]

Distributional Inequalities

The EU's focus on economic incentives has also resulted in unplanned, yet significant, distributional inequalities. Throughout phase I and II, the EU allowed countries to allocate most EUAs freely.[142] The EC claims that free allocation was necessary in order to smooth the transition of emissions from a free commodity to a paid good.[143] The majority of free distribution of EUAs was executed through the process of grandfathering, where EUAs are allocated to operators based on historical emission data.[144] The distributional effects of this mode of allocation have been severely criticized from the start; as operators that have to pay for EUAs through auctioning raise their prices to cover these additional costs, operators enjoying free allocation gain a competitive edge in the market. Thus, the latter will benefit from windfall profits.[145][146] While pollutors are supposed to be charged for their emissions in the ETS, the allocation through grandfathering had the opposite effect, giving polluters a competitive edge. This exacerbates relative inequality in society, as energy costs comprise a larger burden for

[136] Perino, G. and Wilner, M. (2017). EU-ETS Phase IV: allowance prices, design choices and the market stability reserve. *Climate Policy, 17(7)*, 936-946, p. 944
[137] European Commission (EC). (2015). *ETS Online Course*. Unit 3 [online]
[138] Skjærseth, J. B. and Wettestad, J. (2009). the EU Emissions Trading System, p. 117
[139] Hepburn, C. et al. (2006). Auctioning of EU ETS Phase II allowances: how and why? *Climate Policy, 6(1),* 137-160, p. 140
[140] Tagliapietra, S. (2020). New climate plan. [online]
[141] Keating, D. (2013) NGOs call for ETS to be scrapped. POLITICO, 15 April. [online]
[142] Directive 2003/87/EC (2003), Art. 11.1, 11.2
[143] European Commission (EC). (2015). *ETS Online Course*. Unit 3 [online]
[144] Knight, C. (2013). What is grandfathering? *Environmental Politics, 22(3),* 410-427, p. 418
[145] Rutherford, A. P. (2014). Lessons from the EU-Swiss ETSs., p. 288
[146] Hepburn, C. et al. (2006). Auctioning of EU ETS Phase II allowances: how and why? *Climate Policy, 6(1),* 137-160, p. 139

poorer households than for richer ones.[147] Thus, the inequality that stems from favoring certain industries in the EU ETS set-up is at the disproportionate expense of consumers and future generations.

The EC has justified grandfathering by claiming that if allowances were not allocated freely, this would likely result in carbon leakage. Companies would move their industrial processes to extra-EU territories where their emissions would not be covered by EU jurisdiction. As a result, emissions would shift in physical location, but no actual decrease in emissions would be achieved.[148] Thus, the EU has essentially used the objective of emission reductions as a rhetoric to justify their choice for free allocation. As outlined in the previous chapter, this justification has been included in two of the three Directives guiding the EU ETS. However, the extent to which the risk of carbon leakage actually exists is questionable. Economic analyses, carried out in various sectors covered by the ETS, have found no indication of carbon leakage as a result of the implementation of the EU ETS during phase I and II of the system.[149][150] Rather, it seems that over phase I-II of the EU ETS, energy-intensive industries have increased their competitiveness and raised their profits.[151] This lack of expected carbon leakage may be the result of the significant geographical size that the ETS covers, making it unprofitable for companies to move outside of the area, as a result of import tariffs and transportation costs. The lack of carbon leakage could also be a result of the relatively low prices of EUAs over the first phases. Although in theory, carbon leakage could occur, there is no empirical proof to assume that it is occurring now, hence there is no empirical proof supporting the justification of the EC's decision on free allocation. Furthermore, scholars have long argued that freely allocating allowances in trading schemes is mainly included to satisfy industry lobbies and is thus often employed as a tactic to enhance political feasibility of a system.[152] More specifically, analysis of the tools the EU uses to determine the risk of carbon leakage do not seem to present accurate risk calculus and are expected to be politically driven.[153] Notably, differences exist between sectors; while the power sector is obliged to acquire all its allowances through auctioning since phase III, the aviation sector obtains 85% of its allowances at no cost.[154] As the assessment of which sectors are and which are not at risk for carbon leakage is not done properly, this could also contribute to unequal distributional effects between

[147] European Commission (EC). (2015). *ETS Online Course*. Unit 2 [online]
[148] European Commission (EC). (no date). Free Allocation. EU Emissions Trading Scheme. [online]
[149] Naegele, H. and Zaklan, A. (2017). Does the EU ETS Cause Carbon Leakage in European Manufacturing? *Deutsches Institut für Wirtschaftsforschung,* 1-33, p. 24
[150] Branger, F., Quirion, P. and Chevallier, J. (2016). Carbon Leakage and Competitiveness of Cement and Steel Industries Under the EU ETS: Much Ado About Nothing. *The Energy Journal, 37(3),* 109-135, p.130
[151] Berghmans, N. and Alberola, E. (2013). The Power Sector, p. 24
[152] Tietenberg, T. (2006). Tradable permits in principle and practice. *Penn State Environmental Law Review, 14(2)*, 251-282, p. 270
[153] Clò, S. (2010). Grandfathering, auctioning and Carbon Leakage: Assessing the inconsistencies of the new ETS Directive. Energy Policy 38, 2420–2430, p. 2428
[154] European Commission (EC). (no date). Reducing emissions from aviation. [online]

sectors covered by the EU ETS.[155] Moreover, possible profits disproportionately benefit companies' shareholders and not their workers, hence also increasing inequality within companies. [156]

Although support for the industry lobby can theoretically be seen as a form of social solidarity, the constant assistance provided by the EU to carbon-intensive industries has resulted in extra profits for the industry, while in tandem creating negative implications for future generations. As free allocation of EUAs results in inequal distributive effects, the ETS clearly does not support the ETS value of social solidarity.

Allocation of Revenues

From the perspective of maximizing climate change abatement, auctioning is the most effective form of allowance distribution, as it provides a solid financial incentive to promote emission reductions and increase energy efficiency.[157] Moreover, revenues acquired through auctioning can be 'recycled' and used for climate-related projects, providing additional contributions to emission abatement. One of the most significant changes with the initiation of phase III was that a majority of allowances were to be allocated through auctioning. As a result, in 2013 over 40% of allowances were auctioned.[158] EC estimates show that, on average 57% of allowances were auctioned during phase III.[159] As a result, significant revenues have accrued to EU Member States, with over 20 billion EUR worth of allowances being auctioned from 2013-2017.[160] As budgetary oversight remains a sole competency of EU Member States, the authority on how to spend these revenues lies with national parliaments. Nevertheless, the set-up of the EU ETS has provided several recommendations related to ETS revenue expenditure, albeit non-binding ones. For example, revenues from the ETS should be used to compensate poorer households that are disproportionally affected by the increasing carbon price associated with the ETS.[161] The 2003 Directive recommends that at least half of the revenues created from the auctioning of allowances under the EU ETS are spent on climate and energy related purposes.[162] In 2008 the European Parliament, led by the Parliament's ENVI Committee, supported an amendment that would earmark all EU MS to fully allocate revenues from allowance auctioning to climate mitigation and adaptation, with at least 50% of that money allocated to aiding Global South countries in the form of international climate finance.[163][164] However, this Amendment was not

[155] Dirix, J. et al. (2013) Strengthening bottom-up and top-down climate governance. *Climate Policy, 13(3)*, 363-383, p. 369
[156] Hepburn, C. et al. (2006). Auctioning of EU ETS Phase II allowances: how and why? *Climate Policy, 6(1),* 137-160, p.40
[157] European Commission (EC). (no date). Auctioning and its regulation. EU Emissions Trading Scheme. [online]
[158] Climate Policy Info Hub. (no date). The EU Emissions Trading System: an Introduction. [online]
[159] European Commission (EC). (no date). National Allocation Plans. EU Emissions Trading Scheme. [online]
[160] European Commission (EC). (no date). EU Emissions Trading Scheme. Auctioning of allowances [online]
[161] Dirix, J. et al. (2013) top-down climate governance., p. 371, 372
[162] Directive 2003/87/EC (2003), Amendment 17, Art. 10 (3)
[163] *Ibidem*
[164] Esch, A. (2013). Using EU ETS Auctioning Revenues for Climate Action. *German Watch*, 1-25, p. 6

approved and was never implemented. In addition to promoting energy efficiency and climate abatement, binding the EUAs auctioning revenues to climate goals was expected to strengthen the effectiveness of EU climate finance and its influence in UNFCCC negotiations as a result of increased credibility of the EU's climate leadership.[165]

Research conducted by the European Commission in 2017 shows that from 2013-2015, a total of 11.8 billion EUR in revenues was created via the auctioning of ETS allowances. Of those revenues, 82% was spent on energy and climate purposes, of which approximately 90% was spent within the EU, mainly to finance renewable energy (40.6%) and energy efficiency (27.4%). Although a significant amount, this is negligible relative to financing from the Cohesion Fund and European Regional Development Fund over that same period. However, EU ETS revenues were able to make up large shares of the financing for specific energy projects in EU Member States, thus contributing to sustainable development.[166]

The potential that fully committing revenues from EUA auctioning could have is exemplified in the Special Energy and Climate Fund (EKF) of Germany, the only EU MS to enforce full budgetary earmarking of ETS revenues for climate-related spending.[167] First, earmarking would mean that the polluter would fully pay the principle costs, conceiving the attempt to force those who harm the climate most to pay for the its reconstruction. Second, the EU ETS' transparency could be boosted using budgetary earmarking, as this would ensure tracking of the system's revenues. Lastly, international trust in the EU ETS would increase if revenues were clearly earmarked for financing climate goals and projects, especially if there was a clear commitment to allocate a fixed part of revenues to Global South countries. More generally, this could incentivize further international climate negotiations. [168]

Thus, spending auctioning revenues on climate goals is a promising feature of the EU ETS, and should be expanded further in order to support sustainable development, social solidarity and equality. In order to realize this, a binding agreement should be concluded between the MS, including also commitments to increasing transparency of national allocation of auctioning revenues, as some MS currently do not signify what they spend their allowances on.

International effects

The possible benefits of linkages between different ETSs were already outlined in the Kyoto Protocol and the establishment of the ETS, which included the possibility of multilateral and bilateral linkages

[165] Directive 2003/87/EC (2003), Amendment 17, Art. 10 (3)
[166] Le Den, X., Beavor, E., Porteron ,S. and Ilisescu, A. (2017). Analysis of the use of Auction Revenues by the Member States. Directorate-General for Climate Action, The European Commission, 1-66, p. 25
[167] Esch, A. (2013). Using EU ETS, p. 10
[168] Esch, A. (2013). Using EU ETS, p. 13

with other ETSs in order to optimize cost-effective emission reductions.[169][170] Since its establishment, the EU ETS has been unilaterally linked to the CDM and JI. Similarly, the EU ETS itself consists of bilateral links among EU Member States and the extra-EU countries that are part of the system. Moreover, as the first transnational and largest carbon trading scheme, the ETS claims to be a model for implementation of similar systems across the world.[171] In addition to strengthening the credibility of the EU's normative power, linking ETSs and shaping the design and implementation of foreign ETSs would constitute a direct dissemination of the EU's normative power.

Connecting different emission schemes has various potential benefits. For example, linkages can result in additional cost-effectiveness in reaching emission reductions, as they expand the possibility for emissions trading with the enlargement of the carbon market. Moreover, the lower cost associated with ETS linkages reduces incentives for industry relocation, and thus decreases the risk of carbon leakage.[172] Furthermore, bridging the EU ETS to similar national or macroregional ETSs would enhance multilateral cooperation on climate change abatement.[173] As such, it could strengthen both the EU ETS effectiveness and the EU's position as climate leader. However, there are also negative sides to creating linkages between the EU ETS and other ETSs; although the expansion of the ETS will reduce the overall cost of climate change abatement, its effects are likely to be unevenly distributed.[174] Moreover, bilateral linkages between two ETS systems provide an economic incentive to commit to more substantial emission reductions, in order to gain a competitive edge.[175]

As of 2020, the only other ETS the EU ETS has been linked to is the Swiss ETS. Negotiations to work out the details of this linkage started in 2014, with Switzerland revising its ETS to better fit the EU ETS in 2011.[176] This means that the EU ETS has been able to contribute to the development of the global carbon markets beyond its border, and can thus be said to constitute 'leading by example'. However, as Switzerland is part of the European continent, and thus, for the most part, shares its values and market characteristics, linkage with Switzerland does not mean that the EU will be able to effectuate the same change in other regions of the world. This assumption is supported by the expansive requirements in the ETS Directive, that suggest that the EU is not truly open to all linkages, but merely external ETSs that have adapted to fit the EU ETS.[177] For example, the EU has attempted to establish ETS cooperation with Australia, but these efforts stranded in 2014 as the Australian system

[169] The United Nations (UN). (1997). Kyoto Protocol, Article 17.
[170] Directive 2003/87/EC (2003), Article 25
[171] Dirix, J., Peeters, W., Sterck, S. (2015). Is the EU ETS a Just Climate Policy? *New Political Economy*, 20(5), 702–724, p. 703
[172] Haites, E. (2016). Experience with linking greenhouse gas emissions trading systems. *WIREs Energy and Environment, 5*, 246-260, p. 248
[173] Rutherford, A. P. (2014). Lessons from the EU-Swiss ETSs, p. 284, p. 290
[174] *Ibidem*
[175] Haites, E. (2016). Experience with linking greenhouse gas, p. 247
[176] Rutherford, A. P. (2014). Lessons from the EU-Swiss ETSs, p. 284, p. 285
[177] Rutherford, A. P. (2014). Lessons from the EU-Swiss ETSs, p. 284, p. 285

was repealed.[178] Moreover, it remains unclear how effective linkage would truly be. Modelling of a linkage between the EU ETS and an ETS in China, found that although emissions would be reduced in both countries, unlimited linkage would likely result in negative ramifications for the EU's renewable sector, thus also impeding climate progress.[179]

Furthermore, there are no clear signs that other ETSs are directly based on the EU ETS. It is true that from 2014-2017 and again from 2017-2020, the EU collaborated with China and provided guidance on the development and implementation of its ETS. However, it is unclear how effective this progress has actually been, as no national ETS has been implemented in China as of January 2021.[180] Therefore, though the EU had outlined its goal to cooperate with other ETSs by 2003, no sufficient progress has been made in achieving this objective.

There is no proof that the EU has exported its values through linking the EU ETS to other ETSs, nor has EU ETS linkage strengthened the EU's international credibility. Thus, the EU has not been able to effectively export the cornerstone of its climate policy as a form of its normative power, in the way it aimed to do.

Climate Justice

As establishing linkages and providing a model for international ETSs forms part of the EU's normative power, it follows suit its international commitment to achieving climate justice would also be a test of the EU's normative power. As previously discussed, Global North countries, with the EU as a frontrunner, acknowledged their historical responsibility to supporting climate change mitigation and adaptation in Global South countries at Kyoto in 1997.[181] Since then, the EU has attempted to use its normative power to commit Global South countries to binding climate agreements, in exchange for climate funding.[182] Moreover, the EU reaffirmed its commitment to achieving international climate justice during UNFCCC negotiations in Copenhagen (2009) and Cancun (2010). In Cancun, the Global North committed to contributing Fast Start Finance for the period 2010-2012, to the amount of 30 billion USD. Additionally, Global North countries committed to proving 100 billion USD per year to realize international climate commitments by 2020. Lastly, the Green Climate Fund (GCF) was established, which is tasked to oversee and regulate climate projects in Global South countries.[183] Clearly, this EU's commitment to pay more attention to projects in the Global South is in line with all

[178] European Commission (EC). (no date). EU Emissions Trading Scheme. International Carbon Market [online]
[179] Li, M., Weng Y. And Duan, M. (2018). Emissions, energy and economic impacts of linking China's national ETS with the EU ETS. *Applied Energy 235,* 1235-1244, p. 1236
[180] *Ibidem*
[181] The United Nations (UN). (1992). United Nations Framework Convention on Climate Change, 9 May 1992, p. 1
[182] Parker, C. F., C. Karlsson, M. Hjerpe, and B. O. Linnér. (2012). Fragmented Climate Change Leadership: Making Sense of the Ambiguous Outcome of COP-15. *Environmental Politics, 21 (2),* 268–286, p. 274
[183] The World Bank Group. (2011). Mobilizing Climate Finance, A Paper prepared at the request of G20 Finance Ministers. The World Bank, 1-56, p. 10

three values of sustainable development, social solidarity and equality. However, critics argue that the EU is not doing enough.[184]

As the majority of future climate emissions are expected to take place in Global South countries, the World Bank estimates that if climate change is to be tackled in the most cost-efficient way, around 65% of climate change mitigation expenditure should be spent in the Global South. The World Bank also posits that by 2030 approximately 140-175 billion USD and 30-100 billion USD will be needed in the Global South for climate change mitigation and adaptation, respectively.[185]

In line with the EU ETS' commitment to supporting climate change mitigation and adaptation in Global South countries, part of the EU's auctioning revenues was invested in international climate finance. From 2014-2020, 8% of the EU's total revenues, equal to almost 900 million EUR, was spent internationally. The multitude of international climate expenditure was provided to multilateral financing institutions, with the biggest share for the UNFCCC Green Climate Fund, and bilateral funding. As the EU is the largest international climate finance donor, the auctioning of ETS allowances made up only around 5% of the EU's total annual expenditure on climate finance in all three years that were analyzed.[186] As EU ETS auctioning allowances are expected to grow as the EU ETS is expanded, estimates state that the EU ETS could deliver up to 20 billion EUR per year from 2020 onwards.[187] Thus, more clear commitments should be made to increase the EU ETS share of total climate financing and its absolute contribution to international climate financing. This would be a suitable way to increase the credibility of the EU's value-based climate leadership, as the EU carries the responsibility for a large share of historic emissions, and thus has an ecological debt to settle.[188][189] In supporting climate abatement in Global South countries, the EU currently does not work with a norm-based approach that takes into account equality and social solidarity. For example, a recent study has shown that although the EU has committed to include gender mainstreaming in all aspects of its policies, it does not do so for climate change. The absence of inclusion of gender equality in the EU ETS is particularly salient as the objective has been included in the Paris Climate Agreement.[190] As climate change is expected to have particularly severe repercussions for women in the Global South, as they are less likely to have sufficient financial means, ownership over land or access to education,

[184] Creutzig, F. et al. Challenging the European Climate Debate: Can Universal Climate Justice and Economics be Reconciled with Particularistic Politics? *Global Policy, 2(1),* 6-14, p. 7
[185] World Bank. (2010). World Development Report 2010 : Development and Climate Change. Washington, DC, 1-444, p.278
[186] Le Den, X., Beavor, E., Porteron ,S. and Ilisescu, A. (2017). Auction Revenues, p. 31
[187] Esch, A. (2013). Using EU ETS, 1-25.
[188] Zhang, Y. and Wei, Y. (2009). An overview of current research on EU ETS, p. 23
[189] Newell, P. (2020). Global Green Politics, Cambridge: Cambridge University Press, p.10
[190] Allwood, G. (2020). Gender Equality in European Union Development Policy in Times of Crisis. *Political Studies Review, 18(3),* 329-345, p.334

gender differences need to be included in climate policies in order to truly effectuate equal climate-related aid in the Global South.[191]

In conclusion, this chapter has shown how the EU ETS has not been able to achieve its planned outcomes, and as such does not provide support for the credibility of the EU's climate leadership. The desired emission reductions, cost-efficiency and improvements in energy efficiency have not been achieved, thus hindering sustainable development. Planned linkages with other ETSs and providing a model to be copied by international actors have as of yet not been remarkably successful. Moreover, the EU has justified freely allocating allowances to corporations for years, thereby causing unforeseen and unequal distributional effects and missing a significant amount of possible revenues that could have been spent on supporting a just redistribution domestically, realizing international climate justice or research and development into new technologies. In doing so, it has disproven its own normative values of supporting sustainable development, equality and social solidarity.[192] On a positive note, the EU has made elaborate efforts to commit to ensuring international climate justice, by spending a significant part of EU ETS revenues on international climate finance. Future revenues created by the auctioning of EUAs grant the opportunity to support this tendency and reestablish the system's credibility, as these financial resources can be spent to contribute to achieving some form of climate justice, both domestically and externally.

[191] Allwood, G. (2020). Gender Equality in European Union Development Policy, p. 341
[192] Dirix, J., Peeters, W., Sterck, S. (2015). A Just Climate Policy?, p. 369

Chapter 8 | Conclusion

The centrality of normative power in the credibility of the EU's climate leadership has been shown throughout this thesis, suggesting that domestic EU policies need to be more in line with fundamental values to ensure this international credibility. As part of this normative power, especially the values of sustainable development, social solidarity and equality are inextricably linked to the issue of climate change. As such, these values have been used throughout this thesis as a normative lens to analyze the cornerstone of the EU's climate policy: the EU ETS. The principal research question is to what extent the EU ETS, a cornerstone of the EU's climate policy, supports the credibility of the EU's climate leadership, as part of its normative power. This question has been answered in three subsections.

First, the process of the ETS' establishment was analyzed, with special attention paid to the factors and actors that were influential to the process of ETS establishment. This section showed the significant importance of international influences, the push for inclusion of economic incentives, the pressure of industry lobbies and the power struggle between the EU-level and the national level in the EU's decision-making. As a consequence, political feasibility was shown to be the main goal of the development of the ETS, with less attention paid to the inclusion of sustainable development, social solidarity and equality.

Second, the paper examined the formulation of the ETS, using first-hand official EU documentation. Throughout this assessment, it became clear that the main focus of the Directives founding the EU ETS is economic efficiency and cost-effectiveness. Although the Directives do include some mention of the need for sustainable development and incorporate social implications, albeit rarely, no quantified goals are set for strengthening these values as part of the EU ETS. Thus, the Directives do not establish a climate policy that is stooled on sustainable development, social solidarity and equality. This is likely to have repercussions for the EU ETS outcomes.

Third, the paper examined both planned and unforeseen outcomes of the ETS that are related to sustainable development, social solidarity and equality. Findings prove that the ETS does not seem to give sufficient incentives for emission reductions, cost-effectiveness and the development of energy efficiency. The system's institutional set-up is inadequate and has led to undermining of the EU's commitment to the polluter pays principle by creating a favorable market position for industry operators with negative repercussions for consumers. Moreover, international goals of influencing global ETS formulation have not been particularly fruitful. However, significant progress can be made by shifting to auctioning of EUAs, as profits can be spent on achieving both domestic and external climate justice, thus contributing to sustainable development, social solidarity and equality.

In summation, both the process, formulation and outcomes of the EU ETS do not seem to prioritize inclusion of sustainable development, social solidarity and equality. The system seems to represent the lowest common denominator that appeased all different stakeholders, and as such is primarily focused on economic and political goals, rather than normative and environmental, goals. Although the system seems to have improved over time, no sufficient commitment by the EC is made to turning the ETS into a just, equal and truly ambitious climate system. Thus, the ETS cannot be said to provide support for the EU's ability to 'lead by example', as part of its climate leadership.

Recommendations

The failure of the EU ETS to provide a normative basis for the EU's climate leadership is particularly concerning, as in recent years leadership of countries critical to the fight against climate change seems to have turned its back on the issue, thus endangering the whole project of climate mitigation. Recent leaders of the United States, with the highest per capita emissions and accounting for 15% of global CO2 emissions, and Brazil, home to the world's largest rainforest, have continuously denied the existence of climate change and actively discontinued climate mitigation policy measures.[193][194][195] These national, and possibly short-term, divergences from the path of climate mitigation, may have disastrous consequences on the long-term – thus stressing the need for effective global climate governance.

In order to ensure that the EU ETS, and thus the cornerstone of EU climate policy, will be able to espouse the values that EU climate leadership is built upon, the institutional set-up of the EU ETS needs to be altered. In terms of reaching sustainable development, the future of the EU ETS will be essential as the EU has increased its climate ambitions, which now include the commitment of a 5% decrease in emissions reduction by 2030. This means that the EU will have to significantly step up its reduction efforts, and more stringent EU ETS commitments will play a pivotal role in achieving these efforts. In terms of social solidarity and equality, the ETS' credibility could be improved significantly by officially acknowledging the need for climate justice and incorporating binding rules and quantified time-constrained goals aimed at improving social solidarity and equality in the green transition.

Future developments that will be of significance to the development of the EU ETS, include the possible establishment of a carbon border adjustment. The EC is currently working on a proposal to implement such a measure, which would take away the industries' perceived problem of carbon leakage. As a result, all EUAs could be auctioned, which would expect to significantly improve emission reductions and incentives for renewables investment and research into energy efficiency.

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[193] International Energy Agency (IEA). (2018). Atlas of Energy: CO2 Emissions from Fuel Combustion, 2018. [online]
[194] Carbon Brief. (2019). Amazon Fires and Climate Change. [online]
[195] Tharoor, I. (2019). Bolsonaro, Trump and the nationalists ignoring climate disaster. *The Washington Post*, August 23 [online]

EU countries within the EU ETS, as well as other developed countries that price carbon through ETS or are currently developing ETS systems, should involve binding commitments in order to ensure that revenues from allocation auctioning are spent on climate change abatement. Additionally, setting a fixed amount of revenues aside to redirect to international climate financing, particularly for the Global South, would further promote climate justice – by making up for the EU's historic responsibility of fixing carbon excess.

Moreover, the EC should consider the possibility for non-industry actors to be included in the carbon trading market. This would allow for actors, such as environmental groups, to buy and retire EUAs. As a result, the GHG accounted for in the bought EUAs would not be emitted, and as such further emission reductions could be activated by opening up the EU ETS to other actors. A similar strategy has successfully been applied in the Acid Rain Program, which the ETS itself is partially modelled on.[196]

Finally, the EC should commit to setting clear targets for cost reimbursement to vulnerable groups, both within the EU and in the Global South. Although the EU already is a significant contributor to international climate finance, the contribution of the EU ETS should be expanded, in order to ensure that the system's revenues are spent in a more socially just way. Moreover, funding should be allocated in a transparent way in order to support the EU's credibility and improve international climate cooperation.

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