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Under the Microscope – Analysing how the EU’s Energy Policies have been Impacted by the EU Green Deal Initiative

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Abstract

A game changer for the European Union in terms of energy policies, this is how the European Green Deal was presented in 2020, when the initiative was launched. But game changers are more of an expectation than a rule, from a Union that has historically been sluggish in reaching internal consensus and progressing its policies. In this paper, I will research the magnitude with which change has resulted in the formulation of policies, due to the EU’s Green Deal, whilst also analysing the impact of the Renewable Energy Directive and its iterations, over the years.

Keywords: European Union, energy, policy, development.

JEL Classification: D78, J18, N14, P18.

1. Introduction

On December 11, 2019, European Commission President Ursula Von der Leyen unveiled the European Green Deal, an ambitious plan designed to transform Europe's economy and EU policymaking. This article aims to closely examine the Green Deal and its impact on EU policies, particularly in the energy sector, which is expected to undergo significant changes. Energy is a major contributor to carbon emissions, with electricity and heat production alone accounting for 31.20 % of the EU's CO₂ emissions in 2019 (EEA). Additionally, this article explores a key proposal from 2021: the revision of the Renewable Energy Directive, which sets one of the Union's decarbonisation targets. By analysing the evolution of the Renewable Energy Directive and comparing it to the changes brought about by the Green Deal, we seek to determine the extent of the program's influence on decarbonisation policy.

Policy subsystems, composed of decision-makers within specific policy areas, strive to monopolise policymaking to advance their interests. However, this monopoly does not maintain a permanent equilibrium; instead, it leads to temporary stability. A shift in the intensity of interest, often triggered by changes in how actors

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and the public perceive a particular policy, can ignite a time of transformation through positive feedback. This feedback-driven change can cascade and eventually reach a tipping point, where negative feedback stops the process.

Previous studies have examined post-crisis financial reforms and long-term changes in energy policy (Burns, Clifton, Quaglia, 2018). Notably, an extensive analysis spanning 1968 to 2010 revealed that, while dynamics for change existed in the EU, the institutional structure consistently impeded the pace of change (Benson, Russel, 2010). These studies highlight the impact of the EU's institutional framework and the presence of veto-players on the extent and speed of public policy change. In this article, we aim to test these conclusions and evaluate their relevance in the context of EU energy policies.

The research methods employed in this study include process tracing analysis, which examines the 2009 Renewable Energy Directive and its subsequent revisions in 2018 and 2021. We will compare these documents to identify historical events and trends that influenced the directive and determine whether a punctuation occurred with the implementation of the European Green Deal. Qualitative sources will be utilised to study changes in the broader political context and the perception of policies. Through this analysis, we expect to gain insights into the transformative impact of the Green Deal on the EU's energy policy. The practical implications of this research lie in improving our understanding of the dynamics of policy change in the EU and informing future decision-making processes.

The structure of the paper is as follows: Section 2 provides a comprehensive overview of the European energy policies evolution, in time. Section 3 presents a short overview of the research questions that this article proposes, while Section 4 presents the research methodology utilised. In Section 5, we present our findings from our analysis, discussing the extent of change brought about by the Green Deal and its implications for decarbonisation policy. Finally, Section 6 concludes the article by summarising the key findings, discussing their practical implications, and suggesting avenues for further research.

This paper introduces novel insights into the European Green Deal's impact on EU energy policy. It offers a comprehensive analysis of the institutional framework, examines the momentum for climate action, explores the roles of different actors, and evaluates the proposed revisions in the Renewable Energy Directive III (REDIII). By addressing these elements, the paper provides a fresh understanding of the Green Deal's transformative potential for sustainable energy policies in the EU.

2. Problem Statement

In 2009, the Renewable Energy Directive (REDI) was finally adopted after lengthy negotiations (EP & COEU, 2009). This directive was the first of its kind, setting a binding framework to encourage the development of renewable energy. The European Union has been concerned with sustainability in energy policymaking since the 1990s (Knodt, Ringel, 2020), due to a growing environmentalist movement in the 1970s, 1980s, and 1990s, as well as international climate diplomacy throughout the 1990s. This led to environmental protection being mentioned in the

Maastricht Treaty and later on, white papers declaring it as one of the EU's main objectives alongside the security of supply and market competitiveness. In 2001, the RES-E directive was adopted, which had only non-binding objectives for Member States. However, this was not enough to explain the adoption of a much more stringent and binding legislative proposal like the first Renewable Energy Directive. Positive feedback supporting a refocusing of energy policies on sustainability started to become strong at that time, as renewable energy sources became popular and well-perceived in the media. Empirical evidence shows that a majority of the Financial Times' articles published around the time of RED I's negotiations were positive on the topic of renewables, praising their potential and publishing articles with titles such as "Renewables to emerge leaner, fitter, stronger" (Scott, 2022).

The first significant aspect of the new directive is the targets it sets. It aims to achieve a 20 % share of renewables in the Union's energy mix (EC, 2009), and initially, the Commission proposed increasing this target to 30 % depending on further international commitments (Solorio, Jorgens, 2020). However, this never happened in the end. These targets are not uniform across Member States but rather vary depending on their situation and renewable energy potential.

The second important feature of the directive is its innovative governance system. It requires Member States to create national renewable energy action plans (NREAPs) from a template designed by the Commission, detailing how they will work towards their respective targets (EC, 2009). The Commission then reviews these plans and makes recommendations. The plans also include declarations by Member States on their expectations regarding renewable electricity production and whether they will need to buy or sell renewable electricity production surplus (EP & COE, 2001).

The third important feature is the lack of a specific support scheme for renewables (Solorio, Jorgens, 2020). The Commission has tried to promote a market-based "tradeable guarantees of origin" system, where consumers buy a certain amount of renewable electricity each year defined by the Member State, and its purchase is guaranteed by a certificate whose sale generates revenue for the electricity producer (Held, 2014). However, because Member States have been reluctant to drop their respective national systems, REDI remained neutral in terms of support schemes, acknowledging both systems as relevant.

Finally, biofuels and biomass are recognised by REDI as renewable energies (EC, 2009), but they are also subject to sustainability criteria, as their production can have negative effects on the environment. Sustainability criteria are quite loose, and the Commission will further investigate the issue in the following years, leading to more stringency in those criteria.

These four features of the directive are novel and major because they will remain sticking issues in the coming revisions of the directive and had important implications for Member States' energy policy. The EU did not fully have an energy competence, but policy entrepreneurs and ensuing positive feedback accelerated the venue change regarding energy policy from Member States to the

Union. All this hints at REDI being the result of a “Downsian mobilisation.” (Baumgartner, Jones, 2009).

Despite the adoption of the Renewable Energy Directive, interest in renewable energies and sustainability did not decrease. In fact, the number of articles published on the subject increased from 29 to 51 between 2011 and 2014, compared to the previous period (Knodt, Ringel, 2020). However, the tone of the coverage shifted from being mostly positive to being critical of renewable energy sources. In 2011, only about 25 % of the analysed articles had a positive tone on renewables. This improved in 2012, but the negative coverage remained strong, and in 2013 and 2014 it became majoritarian once again. This change in tone can be explained by two factors: the ongoing economic crisis and the overall failure of climate diplomacy during COP15 in Copenhagen (Burgin, 2020).

Concerns over energy prices and competitiveness of the EU’s industry started to be increasingly present in renewable energy-related media coverage, and EU energy companies expressed concerns over the Union’s decarbonisation plans. Furthermore, the European Union decreased its ambition in terms of climate diplomacy, as some EU leaders felt that the Union had failed to play its leadership role during COP15 (Burgin, 2020). The increasing importance of energy security as a political priority for the EU also reinforced this trend.

As a result, between 2011 and 2014, the Union’s sustainability momentum died down, and the adoption of policies in support of renewable energies slowed down at the European level. Therefore, the support for renewables within the subsystem decreased, and because of the lack of intervention at the macropolitical level, the support policies for renewables remained largely unchanged.

After 2015, momentum starts to build up again for renewables. This can be seen as the Financial Times’ coverage of renewables becoming positive again (Ward, 2017). The FT’s focus moves increasingly toward subjects such as EU energy companies calling for more ambition on renewables, though criticisms are still present (for instance, regarding the rise in energy prices caused by renewable energy development) (Pooler, 2015). The presence of this type of narrative clearly shows that this new positive feedback is not fully dominant yet. Regarding EU policies, The Financial Times also publishes more articles stressing the climate urgency and the need for EU action, in particular in the context of COP21 (Weinger, 2015). Criticisms about the Union not doing enough for renewables also started to appear. For instance, some articles point out to the increasing administrative burden for companies involved in renewables (Clark, 2015). Furthermore, coverage started to increasingly cover utility companies’ decisions or positions regarding renewables: this is a sign that, after initial resistance, many of them are now focusing on renewables. In a sense, these energy sources have entered the realm of normality within the EU’s energy mix. This comeback of positive feedback for renewable energy support can be explained by several factors. First is the creation of the energy union in 2015. If the debates around this program were mainly about security of supply at first, Western and Nordic Member-States successfully managed to add references to sustainability within its policy goals, giving new assurance

to businesses that the EU is still committed to supporting renewables (Knodt, Ringel, 2020). Another factor is the success of COP21 in Paris, which gave new impetus to the fight against climate change, and new, higher targets for the EU and its Member-States to reach (EC, 2020). This would directly lead the Juncker Commission to propose the 2016 “Clean Energy for all Europeans” communication, aiming at a roadmap for new policies to be presented to reach the objectives set during the COP21.⁹⁸ This renewed presence of positive feedback supporting further action to promote renewable energy sources gives the EU a new window of opportunity to act, and propose a recast of the Renewable Energy Directive.

In the past, there was some positive feedback supporting more use of renewable energy sources, but there was also negative feedback from the Commission. In 2014, the Commission was split between those who supported renewable energy targets and those who preferred a market-based approach. President Barroso ultimately decided to keep a 27 % renewable energy target at the EU level (Burgin, 2022), but this decision was not challenged by stakeholders since the renewable energy federation EREC had collapsed. NGOs were more focused on revising the ETS, so support for high-binding renewable energy targets was weaker. Negotiations on REDII started with a proposal for a less stringent framework and a moderate increase of the target, but a strong coalition of Member States opposed going beyond what was proposed by the Commission (Bocquillon, Maltby, 2020). This led to a stalemate. In 2017, there was a new attempt to review the RED, and this time, Germany was less supportive of binding targets while Italy and Spain became strong advocates of them. France and Luxembourg also started to play a leading role in pushing for the 27 % target. Central and Eastern European countries were still opposed to high targets and nationally binding ones, but the European Parliament led by Claude Turmès and his team promoted a 35 % target. Although the Parliament failed to obtain nationally binding targets, it was successful in raising the level of the target to 32 % (Bocquillon, Maltby, 2020).

During the period between the first and second Renewable Energy Directives, there was alternating positive and negative feedback toward renewable energy. There were doubts about the sustainability of biomass and bioenergy, which led to the conclusion that stronger sustainability criteria were needed. The legal basis for national plans switched to the Governance Regulation, giving the Commission more power to scrutinise their content and implementation (Solorio, Jorgens, 2020). The Commission failed to establish a European support scheme, but did impose constraints on state aid rules, which eventually led to the banning of Feed-in Tariffs. REDII also facilitated renewable energy permitting processes, which had been a bottleneck for deployment.

During this time, the policy image and the EU renewable energy subsystem evolved due to continued support from Western and Northern Member States, resulting in a small increase in the renewable energy target proposed by the Commission in 2014. However, there was still resistance within the Council and the Commission's preference for non-nationally binding targets, leading to a more incremental change rather than a clear punctuation. After COP21, there was a new

burst of enthusiasm for renewable energies due to climate diplomacy, a resurgent environmental movement, and increased competitiveness. This led to positive feedback and an evolution of the subsystem, with many Member States becoming more supportive of renewables. The second Renewable Energy Directive caused a much more incremental change, but change, nonetheless.

3. Research Questions / Aims of the Research

This research paper aims to investigate the hypothesis that the European Green Deal caused a significant change in EU energy policymaking. Using a comparative case study, the study will examine the extent of its impact on the Union's energy policy.

4. Research Methods

The case study will be based on three types of qualitative sources, enabling us to study changes in the broader political context and the way policies are perceived. This article employs a process tracing analysis to examine the evolution of EU renewable energy policies, with a specific focus on the 2009 Renewable Energy Directive and its subsequent revisions in 2018 and 2021. The purpose is to examine the evolution of EU renewable energy policies over the last decade. By comparing the different versions of the Directive, we aim to identify historical events and trends that have influenced it and determine if a punctuation really occurred with the implementation of the European Green Deal.

The study relies on three types of qualitative sources to provide a comprehensive understanding of the changes in the broader political context and the perception of policies. These sources will be used to compare the different versions of the Renewable Energy Directive and to investigate the impact of the European Green Deal.

The specific documents used in this article for analysis are: The 2009 Renewable Energy Directive; The revisions of the directive in 2018; The July 2021 Commission proposal for the Renewable Energy Directive; several articles, studies, and institutional reports.

By examining these documents and conducting a comparative analysis, the study aims to shed light on the evolution of EU energy policies, the influence of historical events and trends, and the potential punctuations in policy brought about by the European Green Deal.

5. Findings

In this section we will present key findings on the impact of the European Green Deal's impact on EU energy policy. We will also discuss the institutional framework and the roles of different entities in the legislative process, while clarifying legal terms within the EU context. The section will explore the momentum for climate action and changes in the renewable energy policy subsystem, examining the roles of various actors, including the European Commission, Parliament, Council, energy

utilities, and NGOs. The proposed Renewable Energy Directive III (REDIII) will also be presented, highlighting target increases and incremental changes.

The European Green Deal is a comprehensive policy framework introduced by the European Commission in December 2019. It aims to make the European Union the world's first climate-neutral continent by 2050 and sets out a roadmap for transitioning to a sustainable and low-carbon economy. The Green Deal covers various policy areas, including energy, transportation, agriculture, the circular economy, biodiversity, and more.

Within the institutional framework of the EU, the European Commission plays a central role in proposing legislation and driving the implementation of the Green Deal. The European Parliament and the Council of the European Union are also involved in the legislative process, providing scrutiny and approval of proposed measures. Member States of the EU are responsible for implementing and enforcing the policies and directives at the national level.

To better understand how the EU legal system functions, we must clarify the differences between its legal terms:

- Directives are like guidelines that set goals for EU member states to achieve within a certain timeframe. Member states have flexibility in how they turn these goals into their own national laws. Directives aim to align laws and regulations across member states while allowing for some adaptation to national circumstances.
- Policies are broad strategies adopted by governments or organisations to address specific issues or achieve certain goals. They outline the principles, objectives, and approaches to follow in a particular area. Policies can include various instruments such as laws, regulations, directives, guidelines, and action plans.
- Regulations are binding legal acts that apply directly to all EU member states. Unlike directives, they do not need to be translated into national laws since they are automatically enforceable and have a direct legal effect.
- Frameworks provide a general structure or outline for approaching a specific issue or policy area. They establish the context and principles within which further policies and measures will be developed.
- Strategies are long-term plans that outline a vision and a set of goals to be achieved in a specific area. They often provide a framework for policy development and guide decision-making processes.
- Action plans are detailed documents that lay out specific actions, measures, and timelines for implementing policies or achieving specific goals. They provide a roadmap for translating policy objectives into concrete steps and monitoring progress.

In 2019, there was a renewed momentum for climate action, thanks to movements such as Friday for Future and Green-leaning political parties gaining ground in the European Parliament election (Financial Times, 2019). The positive feedback that started in 2015 gained momentum around 2019, generating even more political momentum for higher renewable energy targets. The 2020 targets set in the first renewable energy directive were met, with the Union achieving the 20 % renewable

energy uptake target (EEA, 2021). Renewables have become more affordable and profitable due to technological advancements, government subsidies, and high gas prices. This clear momentum for sustainability and renewables since 2015 could be the beginning of a new "S curve" of positive feedback.

The political momentum and the increased focus on sustainability led to changes in the EU renewable energy policy subsystem. Firstly, a group of Commissioners, led by Frans Timmermans, is responsible for the Green Deal, and the Commission's directorate generals are now more focused on sustainability issues. This has led to a more united and focused Commission, compared to the previous REDII policy. The European Parliament, elected in 2019, also shows greater awareness and support for higher renewable energy targets than proposed by the Commission, with some political groups even proposing targets as high as 45 % or 51 % (Simon, Tylor, 2022). However, there are still some divisions over the type of energy to be supported, with some political groups advocating for low-carbon gases. In the Council, REDII rapporteur Claude Turmès is a policy entrepreneur who enjoys support from Scandinavian and southern European countries, while central and eastern European countries show less ambition on renewable energy targets. Unlike REDII, there has been limited intervention from Heads of State and Government, with the debate focused within the subsystem. Energy utilities have shifted their support towards renewable energy sources and are now strong advocates for them. This is a noticeable change from their previous position of mainly promoting fossil fuels. Eurelectric, which previously represented fossil electricity, now prioritises renewables. NGOs have also become more active in promoting renewable energy and have even been successful in influencing the content of the REDIII proposal. In May 2021, when the Commission released an initial outline of the proposal, it included low-carbon energy sources in the RED certification scheme. However, a group consisting of NGOs, MEPs, and renewable energy stakeholders, including Climate Action Network (CAN), wrote a letter that persuaded the Commission to remove this solution. Thus, not only has the EU renewable energy policy image changed with the Green Deal, but also the actors within the renewable energy subsystem, particularly those involved with the REDIII proposal, are different from those who worked on earlier versions of the directive.

Looking at the Commission's July 2021 REDIII proposal, there is a significant difference in the conditions for a punctuation to occur. The Commission has proposed a 40 % target for 2030, which is an 8-point percentage increase from REDII. The Parliament supported a 45 % target, representing a 13-point percentage increase, which is greater than the increase between RED and REDII (EC, 2021). This increase in target means that REDIII would move EU energy policy into a new paradigm where renewables dominate the Union's energy mix. However, it should be noted that this ambition only came gradually, with REDII increasing the renewable energy uptake target from 20 % in 2020 to 32 % in 2030, and REDIII proposing to increase the target by 8 %. The proposal also introduces nationally binding sub-targets in economic sectors where decarbonisation has been deemed insufficient. On bioenergy and biomass, the changes are incremental, with biomass

support schemes set to be phased out starting in 2026, while criteria for recognition and counting in the renewable energy target become more stringent. The Commission is pushing for the implementation of the "cascading principle" for woody biomass (EC, 2021). In terms of support schemes, REDIII does not change anything, as they are still dealt with under state aid rules, and there is no radical change that could support the idea of a punctuation in the EU energy policy.

This article presents several novel elements in its examination of the European Green Deal and its impact on the EU energy policy. Firstly, it provides a comprehensive analysis of the institutional framework of the EU, shedding light on the roles of different entities in the legislative process and clarifying legal terms specific to the EU context.

Furthermore, the paper offers fresh insights into the momentum for climate action and the increased focus on sustainability since 2015. It highlights the positive feedback loop and political momentum that emerged in 2019, leading to significant changes in the EU renewable energy policy subsystem. The roles of diverse actors, including the European Commission, Parliament, Council, energy utilities, and NGOs, are thoroughly examined, revealing their contributions to shaping the renewable energy policy landscape.

Moreover, the paper delves into the proposed Renewable Energy Directive III (REDIII) and unveils its notable differences compared to previous directives. It analyses target increases, nationally binding sub-targets, changes in bioenergy and biomass support, and the introduction of the cascading principle for woody biomass. By highlighting the incremental nature of these changes, the paper offers a nuanced understanding of the proposed revisions in EU energy policy.

To summarise, the article's hypotheses were confirmed. The Green Deal brought decarbonisation and climate neutrality to the forefront of EU policies, which changed the image of EU energy policy and led to the revision of the Renewable Energy Directive. The subsystem in charge of the Union's energy policy changed, with the Commission and Parliament promoting renewables and low-carbon energy sources, and energy companies and NGOs supporting ambitious targets. However, there has only been an incremental change, and a clear shift from REDII is unlikely. Member States' reluctance to commit to higher targets with binding characters has slowed down change, despite the efforts of policy entrepreneurs like Turmès and stakeholders. As a result, the EU's institutional framework and its veto players have once again slowed down the change, despite the positive feedback loop on renewable energy policy. The first renewable energy directive made a significant change to EU energy policy, but its recasting only brought about small changes. However, with the European Green Deal, which prioritises sustainability in climate policy, there may be an opportunity for a significant change with the proposed revision of the directive in 2021.

6. Conclusions

This article compares the three renewable energy directives from 2009, 2018, and the July 2021 Commission proposal. The review discusses the changes in policy image that occurred during this period, starting with a focus on sustainability and climate issues in 2007-2009. This was followed by a period of economic crisis and international tensions, leading to a greater emphasis on affordable energy and security of supply. However, sustainability came back into the spotlight after COP21 and led to the European Green Deal.

The article also notes the presence of policy entrepreneurs in each version of the directive, including heads of state, environmental NGOs, the European Parliament and its rapporteur, and stakeholders such as NGOs and renewable energy companies.

The article also discusses the progressive change in the EU renewable energy policy subsystem. Initially, this was dealt with at the national level, while the EU focused on topics such as competition in the energy sector. However, after REDI and the adoption of the Lisbon Treaty, the subsystem gained competence in the development of renewables. It became fully geared toward the green transition as part of the Green Deal after being divided for several years.

In this article, we examined the renewable energy directives from 2009, 2018 and the Commission's proposal from July 2021 to compare the different political situations and content of each. We found that several changes occurred over the period, with a strong focus on climate issues and sustainability in the field of energy in 2007-2009. This was followed by a period of economic crisis and international tensions, leading to other concerns such as affordable energy and security of supply. However, the COP21 in Paris brought sustainability back under the spotlight, creating a dynamic that resulted in the European Green Deal.

We also observed the presence of policy entrepreneurs appearing in the legislative process of each version of the directive. Heads of state, environmental NGOs, the European Parliament, and renewable energy companies were all pushing for the development of renewables. We also found a progressive change in the EU renewable energy policy subsystem, with the EU gradually becoming fully geared toward the green transition as part of the Green Deal.

However, despite the conditions for a punctuation to happen in the EU, it did not occur due to the presence of veto players, namely Member States. Some Member States were very ambitious about decarbonising their energy sector, while others were not, leading to opposition to high, binding targets in both REDII and III. This reluctance to change the directive's framework or the broader governance regulation led most institutional actors to drop support for nationally binding targets.

This study has some limitations, such as being based on only one directive and the third Renewable Energy Directive has not yet been adopted by the EU. Additionally, the final REDIII might be significantly different from the one currently being discussed, and the context of the Ukrainian War and the weaponisation of energy by Russia against the EU might lead to changes in the EU energy policymaking in the future.

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