


## Article

# Advocacy Coalitions and Paths to Policy Change for Promoting Energy Efficiency in European Industry

Fredrik von Malmborg <sup>1,\*</sup> and Peter A. Strachan <sup>2</sup> 

<sup>1</sup> Division of Political Science, Department of Management & Engineering, Linköping University, SE-581 83 Linköping, Sweden

<sup>2</sup> Aberdeen Business School, Robert Gordon University, Garthdee Road, Aberdeen AB10 7QE, UK

\* Correspondence: fredrik.von.malmborg@liu.se; Tel.: +46-13-770-22-42

**Abstract:** This paper applied the advocacy coalition framework to explore and explain the political processes creating policies to enhance energy efficiency of European Union (EU) industry. The paper used legislation on energy audits and energy management systems as a proxy for EU policy on energy efficiency in industry. Based on qualitative text analysis of EU policy documents, including a proposal to recast the energy efficiency directive, amendments to the proposal suggested by Member States, the Council and the European Parliament, and reports from negotiations, the paper identified four advocacy coalitions with different core beliefs, spanning from those that want few companies to implement energy audits or energy management systems, and that recommendations from audits should not be mandatory to implement, to those that advocate that many companies implement energy audits and management systems and that it should be mandatory to implement measures recommended in audits. It was further found that policy change followed an external shock, deliberative negotiations, and policy-oriented learning. The identification of core beliefs and advocacy coalitions will help policymakers and other stakeholders become more aware of their own and others' values on energy efficiency and how these could be changed. As important was the differentiation of deep core beliefs, policy core beliefs and secondary beliefs. Which beliefs can be easily changed, which cannot?

**Keywords:** advocacy coalition framework; energy audits; energy efficiency; energy management systems; industry; process tracing; policy change; policy process



**Citation:** Malmborg, F.v.; Strachan, P.A. Advocacy Coalitions and Paths to Policy Change for Promoting Energy Efficiency in European Industry. *Energies* **2023**, *16*, 3785. <https://doi.org/10.3390/en16093785>

Academic Editors:  
Matheus Koengkan and  
Fernanda Oliveira

Received: 16 March 2023  
Revised: 24 April 2023  
Accepted: 26 April 2023  
Published: 28 April 2023



**Copyright:** © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

The Paris Agreement and, most recently, the Russian invasion of Ukraine put the spotlight of European Union (EU) energy and climate policy on energy efficiency measures to save energy, reduce greenhouse gas emissions, reduce import dependency from outside the Union, lower energy bills for households and companies, and alleviate energy poverty. Energy efficiency is seen as the 'first fuel' in the clean energy transition leading to multiple benefits [1,2]. Industry accounts for 26 per cent of the EU's final energy consumption [3], which makes it an important sector to develop policies for promoting energy efficiency.

In this study, the policy problem relates to the question of how to promote energy efficiency in industry. There is no single EU legislation for this, why EU legislation for promoting the use of energy audits and energy management systems in enterprises in EU member states (MSs) is used as a proxy for promoting energy efficiency in industry. The EU emissions trading scheme may also stimulate measures to improve energy efficiency as means to reduce greenhouse gas (GHG) emissions in companies covered by the ETS. Energy audits and energy management systems are seen as key instruments to improve energy efficiency in industry, both in large companies and in small and medium-sized enterprises (SMEs), e.g., [4–6]. Energy audits were regulated in the EU since the entry into force of the EU Energy Services Directive (ESD, 2006/32/EC) in 2006, requiring MSs to

ensure the availability of efficient, high-quality energy audit schemes which are designed to identify potential energy efficiency improvement measures and which are carried out in an independent manner, to all final consumers, including smaller domestic, commercial, and small and medium-sized industrial customers. Article 3.1 of the ESD defines energy audits as ‘a systematic procedure to obtain adequate knowledge of the existing energy consumption profile of a building or group of buildings, an industrial or commercial operation or installation or a private or public service, identify and quantify cost-effective energy savings opportunities, and report the findings’. With the adoption of the EU Energy Efficiency Directive (EED, 2012/27/EU) in 2012, which repealed the ESD, provisions on energy audits were made mandatory for large companies. In its 2021 proposal for a recast of the EED, the European Commission (EC) [7] suggested that the provisions on mandatory energy auditing are changed. In addition, provisions on mandatory energy management systems were added. An energy management system is defined in the EED (Article 2.11) as ‘a set of interrelated or interacting elements of a plan which sets an energy efficiency objective and a strategy to achieve that objective, including monitoring of actual energy consumption, actions taken to increase energy efficiency and measurement of progress’. In March 2023, after 21 months of negotiations and deliberations, the co-legislators of the EU, the Council of Ministers (Council) and the European Parliament (EP) reached an agreement that changed the provisions on energy audits from focusing on large companies to focusing on companies with high energy use. All enterprises, including SMEs that exceed 85 TJ of annual energy consumption, will have to implement an energy management system. Otherwise, companies will be subject to an energy audit if their annual consumption exceeds 10 TJ. This introduction of a new requirement for companies with highest energy use can be seen as a major policy change. In all, changing focus from large companies to companies with high energy use may pave the way for more cost-effective energy efficiency improvements [8]. The new provisions are deemed one of the three most important policies and measures of the EED in terms of contributions to energy savings and increased energy efficiency in the EU [9]. However, what made these policy changes happen?

Research on policy process on energy efficiency policy is scarce [10–13]. The aim of this paper is to analyze the political processes leading to the recent change of the EU legislation on energy efficiency in industry. What were the political conflicts and how were they resolved by policymakers? To answer this, the paper applied process-tracing [14] and the advocacy coalition framework (ACF) [15,16] in a qualitative case study, using empirical data from negotiations in the Council, the EP and trilogue negotiations between the Council, the EP, and the EC. The policy subsystem, the advocacy coalitions, and their core beliefs and coordinated behavior were analyzed, as were paths to a policy change. Based on the ACF and previous research on policy change regarding energy efficiency policy in the EU, three propositions are made:

1. There exist at least three advocacy coalitions, around the EP, the EC, and the Council, respectively;
2. The EP advocates stricter and more far-reaching core beliefs in favor of energy efficiency in industry than do the EC and the Council, while the Council advocates a weaker role of the public policy than the EC;
3. Policy change followed an external shock and a negotiated agreement.

Improved scientific knowledge of the policymaking processes and policy change and the role of different advocacy coalitions and their efforts to influence of EU policy can inform political science theory on the workings of the EU, including the workings of the Council and its relation to the EP and the EC, cf. [17]. It can also inform stakeholders to better shape their advocacy in EU policy-making. The paper gives scientists and stakeholders a glimpse into the private and somewhat ‘confidential’ means of communication with the other side, which usually characterize negotiations in the Council [18,19] and between the Council and the EP.

The remainder of the paper is outlined as follows. The next section summarizes the scientific and technical literature on energy efficiency in industry. Section 3 presents the

theoretical framework, the research questions, the method used, and the demarcations made in the study. Section 4 presents and discusses the views of different actors and institutions on the Commission's proposal for a recast EED. Section 5 analyses the political creation of EU policy on energy efficiency in industry with the ACF as a theoretical lens. Conclusions and policy implications are presented in Section 6.

## 2. Previous Research

Numerous research has been undertaken on the role and effect of energy audits in industry, e.g., [4,20–27]. A general conclusion is that energy audits are necessary but not sufficient for improving energy efficiency in industry. Some research has also been undertaken on the role and effects of (certified) energy management systems in industry [6,28–32]. Implementation of energy management systems can contribute to energy savings, increase the adoption of low carbon practices, and improvements of carbon and economic performance of companies [33–35]. Lee and Cheng [29], on the other hand, found, in their literature review of effects of energy management systems on energy savings, that energy savings in industry decreased after implementation of energy management systems. Jovanović and Filipović [36] claimed that certified (ISO 50001) energy management standards represent a good practice of energy management in industry, but they are not the best models to improve energy efficiency. A study by Schulze et al. [37] provided evidence that the degree of energy management system implementation relates positively to companies' energy performance, but that energy efficiency could be improved by other factors not included in an energy management system, e.g., that an energy coordinator is employed. Fuchs et al. [32] found that obtaining and sustaining top management support is critical towards the success of implementing an energy management system, and that the primary barrier for success is lacking a culture of energy management. Experience from Sweden, where requirements for energy management systems were part of a voluntary agreement program for energy-intensive industries, tells that it was primarily the fact that participating companies received a tax reduction on electricity that made companies invest in energy efficiency measures, not the energy management system as such [38].

Of interest for this paper, Nabitz and Hirzel [26] found that the transposition of the original EED provisions on mandatory energy audits in large companies was delayed in more than half of the EU-28 MSs and that transposition by the MSs' results in different national implementations. One important difference was the scoping to identify which companies that should undertake energy audits. In the EED, a 'large company' is defined as the opposite to an SME, the latter which according to the EED (Article 2.26) should be defined in accordance with the EC [39] recommendation concerning the definition of micro, small and medium-sized enterprises. Some MSs focused on companies or parts of companies located in the national territory only, while others took account of parts of companies in other countries too.

In addition to scientific papers, there is some grey literature comparing the implementation of EED provisions on mandatory energy audits in different MSs of the EU. Serrenho et al. [40], Eichhammer and Rohde [41] (this study was made for the European Council for an Energy Efficient Economy (ECEEE) and paid for by Rockwool) and De Groen et al. [8] (this study was commissioned by the EC in collaboration with the Concerted Action Energy Efficiency Directive (CA EED)) analyzed MS implementation of the EED provisions, and provided some proposals for revision of the provisions, e.g., that energy use should be the criterion for mandatory energy audits. The EC [42] itself also published a report on how MSs deal with energy auditing in large companies. They found that MSs generally deal differently with multi-national and multi-site companies. Some MSs take all company parts located inside and outside their national territory into consideration for determining the status as an SME. Others rely on the company parts inside the national territory only.

The different studies on the transposition of EED provisions on mandatory energy audits in EU MSs revealed that the different approaches in different MSs led to challenges for companies. Eichhammer and Rohde [41] and de Groen et al. [8] stressed that some

large companies covered have low energy use and that the costs of energy audits will not be offset by the potential savings that may arise from implementing energy efficiency measures. They proposed that obligations on energy audits should be made based on energy use, not the size of a company. Nabitz & Hirzel [26] and the EC [42] found that multi-national companies were treated differently in different MSs, with negative impacts for the level playing field on the EU internal market.

As presented, there is plenty of research on the benefits and costs of introducing energy audits and energy management systems in enterprises. The same holds true for outcomes of policy programs to stimulate their uptake. However, research on the processes and politics of policy programs for stimulating energy efficiency in industry is underrepresented in the scientific literature, cf. [10,11].

There are only a few studies focusing on the entire policy process related to energy efficiency in the EU. Both von Malmberg [12] and Dunlop and Völker [43] analyzed policy change related to the amendment of the EED in 2016–2018. Von Malmberg analyzed the advocacy coalitions, their core beliefs and paths to policy change in the EU related to individual metering and billing (IMB). IMB is a policy instrument provided by the EED to improve energy efficiency of buildings. He found that the minor coalition, opposing IMB, gathered enough support to outweigh the dominant coalition, in favor of IMB. An internal shock and policy-oriented learning led to changed provisions on IMB. Dunlop and Völker [43] analyzed an event in which the rapporteur in charge of the energy efficiency file in the EP proposed to alter the way energy efficiency is defined and measured. The meaning of energy efficiency was negotiated through the way it is technically measured. Dunlop and Völker found that processes of politicization and de-politicization in the definition of energy efficiency indicators brought about a rethinking of energy efficiency governance. In addition, von Malmberg [13] analyzed the politics of the 2021–2023 recast of the EED, with particular focus on making the ‘energy efficiency first’ (EE1) principle binding for MSs to apply in policy, planning, and decision-making on major investments, including in industry. There was a dispute among legislators and other stakeholders whether energy efficiency policy and the EE1 principle aimed at exploiting multiple benefits or climate change mitigation only. The multiple benefits discourse was associated with strong provisions on the EE1 principle, covering all projects in all sectors, whereas the climate change discourse was associated with weak provisions of the EE1 principle, covering very large projects only in the public sector. Deliberative negotiations enabled interdiscursive communication and policy-oriented learning across belief systems, leading to policy change in line with the multiple benefits of discourse.

### 3. Theory, Method, and Materials

#### 3.1. The Advocacy Coalition Framework—A Brief Overview

This study uses the advocacy coalition framework (ACF) as a theoretical framework for analyzing the political creation of energy efficiency in EU industry. ACF is a network theory of the policy process developed by Sabatier [44–46] and Jenkins-Smith [47] in the late 1980s. It is considered one of the most influential theories for analyzing and explaining the policy process and policy change, having been applied in several hundred studies all over the world [15,48,49].

The ACF asserts that policy actors must specialize to exert any influence. This specialization takes place in policy subsystems which are defined by a policy topic (e.g., energy efficiency), territorial scope (e.g., the EU), and the actors influencing policy subsystem affairs [44]. Policy subsystems are overlapping with other subsystems and being nested within yet other subsystems [16].

Drawing on Lasswell and Kaplan [50], who describe policy as ‘a projected program of goals, values and practices’, the ACF argues that public policy is ‘not just the actions or inactions of government, but also the translations of belief systems as manifested by goals, rules, incentives, sanctions, subsidies, taxes, and other instruments regulating any given issue’ [51]. Thus, policies can be analyzed in terms of belief systems and policy change

corresponds to changes in belief systems [52]. Jenkins-Smith et al. [16] argue that policy actors have a belief system structure on three levels: (i) deep core beliefs, (ii) policy core beliefs, and (iii) secondary beliefs. Deep core beliefs are normative values and ontological axioms. They can be attributed to several policy subsystems. In contrast, policy core beliefs have topical and theoretical components bound by scope and topic of the political subsystem. They can be normative and empirical, and include assessments of the severity of the problem, its basic causes, and preferred solutions. Policy core beliefs are fairly stable over time and more resistant to change than the secondary beliefs. These deal with the specific policy instruments for achieving the desired outcomes outlined in the policy core beliefs. They can be described as the actors' policy preferences, e.g., specific policy design, policy instruments, budgetary allocations, and others. These preferences are more prone to change based on new knowledge and experience [46].

According to the ACF, beliefs and behaviors of policy actors are embedded in informal networks of policy actors. Policy decisions are partly structured through these networks [53,54]. Policymakers seek to translate their beliefs into action and policies. To be successful, policy actors have to find allies for sharing resources and developing strategies. The ACF assumes that policymakers are looking for allies among people and organizations who share policy core beliefs among, e.g., parliamentarians, government officials, interest groups (IGs), researchers, and think-tanks from various levels within the jurisdiction of policy, e.g., the EU. Actors that have a significant degree of coordination form an advocacy coalition [53,54]. An advocacy coalition consists of actors in a network that share core beliefs and resources and collaborates to translate core beliefs into policy [44,45].

As for policy change, ACF aligns changes in policy core beliefs, i.e., significant shifts in the direction or goals of a subsystem, with major policy changes. Changes in secondary beliefs, i.e., changes in means for achieving the goal, e.g., policy instruments, are seen as minor policy changes [46,49]. Advocacy coalitions often disagree on proposals related to policy core and secondary beliefs, and debates on policy, therefore, focus on differing positions regarding initiatives of either change or preserve policy programs [16,54]. To understand and interpret the actions of different actors and, thus, policy change over time, one must analyze the primary and secondary beliefs of different coalitions hold [46]. ACF proposes four paths to policy change: (i) external shocks, (ii) internal shocks, (iii) policy-oriented learning, and (iv) negotiated agreements [15,16].

### 3.2. Notes on Method and Materials

Process-tracing is an important method in qualitative social science research, most notably in case study research designs [14,55,56]. It can be used to describe and explain policy events, and to elaborate on the paths by which they come about [55]. Process tracing can provide a rich account of 'how' a complex political phenomenon such as public policy on energy efficiency emerges. Process tracing can provide a 'how-we-come-to-know nuts and bolts for mechanism-based accounts of social change [and directs] one to trace the process in a very specific, theoretically informed way' [57,58].

There are three types of process tracing [14]: (i) case-centric, (ii) theory testing, and (iii) theory building. This study uses a combination of case-centric and theory testing process tracing. It aims at explaining outcomes in a particular case, i.e., policy to enhance energy efficiency in industry, in combination with testing a theory (propositions) derived from existing literature on ACF, energy efficiency in industry and studies of policy change on energy efficiency in the EU. Case-centric process tracing is used by researchers who assume a case to be context-specific and includes a detailed narrative explaining how a particular outcome came about [56].

Kay and Baker [14] suggested a step-by-step best practice of how to undertake process tracing as a method in policy analysis: (i) theorizing variables and empirical proxies, (ii) collecting evidence, and (iii) testing propositions (hypotheses) or presenting a detailed narrative. Based on ACF and previous research on policy change regarding energy efficiency policy in the EU, three propositions are made:

1. There exist at least three advocacy coalitions, around the EP, the EC, and the Council, respectively;
2. The EP advocates stricter and more far-reaching core beliefs in favor of energy efficiency in industry than the EC and the Council, while the Council advocates a weaker role of the public policy than do the EC;
3. Policy change followed an external shock and a negotiated agreement.

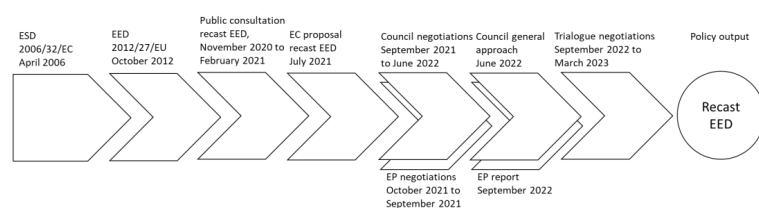
Empirical data to answer the research questions were collected by qualitative text analyses of official and confidential documents such as the (i) EC proposals for EU legislation, (ii) amendments proposed by MSs and the Council as well as the EP, (iii) non-papers and written statements of MSs, and (iv) Sweden's records and notes from negotiation meetings in the Council (particularly meetings at the level of officials (Working Party of Energy with energy attachés)) and trilogue meeting. Data were also collected from the (v) results of the EC's [59] public consultation prior to the recast of the EED, which is available with open access [60].

Sweden's reports from negotiations are confidential, explaining why positions of individual MSs and individuals cannot be revealed. They provide a unique account of the negotiations of the Council, as well as the negotiations between the Council, the EP and the EC. The authors judge the likelihood that the findings would be systematically biased is limited. Swedish officials' reporting from the negotiations should have no incentives to falsely convey the positions of other EU MSs, the EP and the EC to the Government Offices of Sweden, since this information is used to formulate Swedish negotiation strategies.

In the manual text analysis of these documents, we identified the narratives and views of various actors on energy efficiency in general and policy on energy efficiency in industry and the reasons for this. Qualitative text analysis is a suitable method in this study. It enables a thorough analysis of the material. Through text analysis, it is possible to collect material on policy making without conducting interviews or participatory observations [19].

#### 4. Results: Advocacy on the Recast EED

Energy audits were regulated in the EU since the entry into force of the Energy Services Directive (ESD, 2006/32/EC) in 2006 (Figure 1). According to Article 6.2(a)ii of the ESD, MSs should 'ensure the availability of efficient, high-quality energy audit schemes which are designed to identify potential energy efficiency improvement measures, and which are carried out in an independent manner, to all final consumers, including smaller domestic, commercial, and small and medium-sized industrial customers'. Provisions on energy audits were made mandatory for large companies and provisions on energy management systems were added with the adoption in 2012 of the EU Energy Efficiency Directive (EED, 2012/27/EU), which also repealed the ESD. Article 8.4 of the original EED provides that MSs 'shall ensure that enterprises that are not SMEs are subject to an energy audit carried out in an independent and cost-effective manner by qualified and/or accredited experts or implemented and supervised by independent authorities under national legislation by 5 December 2015 and at least every four years from the date of the previous energy audit'. Article 8.2 of the original EED stipulated that MSs 'shall bring to the attention of SMEs, including through their respective representative intermediary organizations, concrete examples of how energy management systems could help their businesses'. In addition, Article 5.7(b) of EED requires that public bodies 'put in place an energy management system, including energy audits'.



**Figure 1.** Development of EU legislation on energy audits and energy management systems.

#### 4.1. The Commissions Proposal for Revised Provisions on Energy Efficiency in Industry

On 14 July 2021, the EC [7] put forward, as part of the ‘European Green Deal’ [61] and the ‘Fit for 55’ climate policy package, a proposal for a recast of the EED, repealing the original EED. The proposal included, i.a., suggestions for changing the provisions on energy audits and energy management systems in large companies (previous Article 8, new Article 11):

1. Member States shall ensure that enterprises with an average annual consumption higher than 100 TJ of energy over the previous three years and taking all energy carriers together, implement an energy management system. The energy management system shall be certified by an independent body according to the relevant European or International Standards.

2. Member States shall ensure that enterprises with an average annual consumption higher than 10 TJ of energy over the previous three years and taking all energy carriers together that do not implement an energy management system are subject to an energy audit. / . . . / The results of the energy audits including the recommendations from these audits must be transmitted to the management of the enterprise. Member States shall ensure that the results and the implemented recommendations are published in the enterprise’s annual report, where applicable.’

Among the reasons for the proposal, the EC (p. 18, [7]) mentions that ‘ensuring that energy audit efforts are focused on larger energy users instead of the size of companies will lead to proportionately higher energy savings, which would result in a substantial reduction in burden for businesses with a lower energy use, as well as simplifying the burden on public administrations, since they would have a simpler criterion to assess the need for audits as well as a smaller number of businesses to verify’. This was underpinned by the findings of Serrenho et al. [40] and the EC [42] studies, but also studies by Nabitz and Hirzel [26] and Eichhammer and Rohde [41], as well as the critique raised by MSs. Advocacy by the Coalition for Energy Savings and European Union Alliance for Saving Energy (EU-ASE), researchers and think tanks (e.g., Centre for European Policy Studies (CEPS), the European Council for an Energy Efficient Economy (ECEEE), and ISI Fraunhofer Institute) was also important. The idea that energy use should be a criterion instead of company size was discussed in the Council during negotiations on the amending directive.

As for the proposal on energy management systems, the EC (p. 46, [7]) assumed that, ‘given the importance of energy use in their business, these very largest energy users should already have more sophisticated energy management systems in place.’ If not, the EC (p. 46, [7]) claims, ‘it makes sense to replace the audit obligation for these businesses with one to have such a system. It is likely that most of these enterprises will be covered by the requirements of the Industrial Emissions Directive (2010/75/EU) and the obligations through it to use Best Available Techniques.’ Using an environment management system is a key obligation for them, which means that implementing an energy management system would require little or no extra effort. As for resources underpinning the EC proposal, the head of unit for energy efficiency at the EC’s Directorate General for Energy (DG ENER) (Personal communication with Ms. Claudia Canevari, Head of Unit, DG ENER, 24 August 2021) pointed at three sources of information; a report by Waide Strategic Efficiency Ltd. [62] prepared for the European Cooper Institute, a paper by McKane et al. [34] on quantifiable impacts of ISO 50001 on climate change mitigation, and case studies from the Clean Energy Ministerial Energy Management working group. As for energy savings of the proposal, the responsible head of unit of the EC refers to the study by De Groen et al. [8], commissioned by the EC, which estimated that the energy savings potential for non-SMEs, within the scope of Article 8.4 amounts to seven per cent of total company final energy consumption as an EU average. This corresponds to a 27 per cent reduction in energy use in industry.

#### 4.2. Views of Interest Groups

Prior to presenting the proposal for the recast EED, the EC undertook a public consultation of issues related to the EED [60]. The objective of the consultation was to collect views and suggestions from stakeholders and citizens. The consultation did not contain any

draft proposals for the recast EED, only questions on potential developments. No questions were asked about implementation of energy management systems, which indicates that this idea came later.

In total, 344 organizations and citizens provided feedback in the consultation, 257 of which presented views on mandatory energy audits. Out of these, 143 were non-governmental organizations (NGOs), including business associations (109), consumer organizations (3), and environmental organizations (3). A total of 72 companies reported views on energy audits. Ministries or national agencies of seven MSs (Czech Republic, Cyprus, Estonia, Finland, Lithuania, the Netherlands, and Spain) did not respond to the questions on energy audits. As for the criteria on which companies should be subject to mandatory energy audits, 122 respondents (business associations and other NGOs, including all environmental organizations, and all MSs but one) agreed that the obligation should be based on average energy use. A total of 22 respondents, all of which were business associations or companies, disagreed. An issue discussed in the negotiations of the original EED was the frequency of energy audits. A total of 86 respondents to the public consultation disagreed that energy audits should be made more frequent than every four years, while 55 respondents thought that audits should be less frequent than every four years. A total of 70 respondents agreed or fully agreed, and 54 respondents disagreed, that energy audits should be accompanied by a requirement to disclose non-sensitive information from energy audits. Views of MSs were diverse. Finally, 118 respondents (business organizations and environmental organizations) agreed and 36 respondents (business organizations and companies) disagreed that energy audits should be accompanied by an obligation for enterprises to implement certain measures identified in energy audits. Views of MSs were diverse. This is an interesting result since the EC did not suggest such a provision, despite the prevailing view in favor of such measures. The issue was discussed in a workshop with MSs during autumn 2020, prior to the public consultation. It was stressed by many MSs that such a provision would be a violation of the freedom of companies to decide which investments should be made. However, the EC put forward such a proposal in its proposal for amending the directive on the EU Emissions Trading Scheme (ETS) Directive (2003/87/EC), stating that 25 per cent of the free allocation of emission allowances should be withheld until the most cost-effective measures identified in the energy audit were implemented.

#### *4.3. Views of Member States and the Council*

Once negotiations started, nine small and large MSs from Western, North, South, and Central EU were generally positive to the EC proposal that requirements according to paragraphs 1 and 2 are set on energy use instead of company size and ownership. Two MSs from North-Eastern Europe raised concerns about increased administration. One MS asked how MSs should identify companies, based on installations rather than companies. Along the same line, two MSs asked for a definition of enterprises since an enterprise could be made up of several entities. They also stressed that only entities within the jurisdiction of each MS should be included when identifying enterprises to be obliged by provisions in paragraphs 1 and 2. A large MS welcomed a lot of the provisions in Article 11 but asked what the 100 TJ threshold was based on, and why existing ISO standards (ISO 14001 and ISO 50001) are not mentioned. Another large MS welcomed the 100 TJ threshold in paragraph 1, whilst two small MSs considered the 100 TJ threshold too low, thus including too many companies, especially companies with low return in terms of increased energy efficiency. One MS from Northern EU suggested 300 TJ as a threshold, whilst a large MS from Central EU suggested a 1000 TJ threshold.

As for energy audits, six MSs, large and small, from across the EU claimed that the 10 TJ threshold in paragraph 2 was too low, while two MSs from Western EU claimed it was too high, since only 40 per cent of the companies would be included. An advocate of including many companies suggested a 7 TJ threshold, while of the group of MSs putting forward the non-paper during the amendment of the 2016–2018 EED advocated that less



companies to be included and suggested a 36 TJ threshold. The MS proposing a low threshold would also like to see stronger provisions on reporting, while the proponent of less companies to be included suggested that reporting is made to a competent authority in order to follow up effects. One MS asked if the EC had made any calculations on how many SMEs would be included within the thresholds in paragraphs one and two. One MS thought that it should be voluntary for companies to choose between an energy management system according to paragraph 1 and an energy audit according to paragraph 2. Three MSs from Western EU, one large, one medium and one small, proposed that a provision is added in paragraph two, mandating enterprises to implement energy efficiency measures identified in energy audits. This is like the proposal by the EC that 25 per cent of free allocation of emission allowances in the EU ETS are withheld until a company undertook energy efficiency measures identified in an energy audit according to EED Article 11.2. In June 2022, the Council adopted its general agreement as input to the trilogue negotiations with the EP and the EC. As for the thresholds, the levels proposed by the EC was confirmed. In addition, the Council rejected the idea that implementation of the recommendations of energy audits should be mandatory.

In the parallel negotiations on the revision of the EU ETS directive, a majority of MSs raised the issue of free allocation, cf. [63] conditional on energy audits under the EED. Eight MSs from Central and Eastern EU were to varying degrees critical of the proposal. Three Central European MSs argued that free allocation in the EU ETS aimed to counteract the risk of carbon dioxide leakage, not to promote energy efficiency measures. In addition, not all recommendations were necessarily cost-effective; on the contrary, sometimes, it could be more efficient to make a larger investment at a later stage (such as, e.g., carbon capture and storage (CCS)). Two MSs from Central EU, thus, wondered if full allocation could be given if an operator could justify why not all measures were implemented. Another Central European MS believed that withheld free allocation was a disproportionately powerful sanction. A large MS from southeast EU believed that the energy evaluations should only be discussed within the framework of the EED. Another MS from South-Eastern EU emphasized that the recommendations should continue to be fully voluntary and questioned that they were given a more binding nature through the introduction of indirect sanctions through the EU ETS. In addition, that MS considered that the free allocation should not be changed in the current period. The EC suggestion on mandatory energy efficiency measures did not make it to the Council general approach on the amended EU ETS.

As for the Council's general approach on the recast EED, a middle ground was found among the four different coalitions, implying that medium thresholds should be applied for energy audits and energy management systems, and that recommendations from these instruments need not be implemented. No MS opposed the Council's general approach on these points. As argued by Heisenberg [19], the Council prefers to negotiate agreements rather than to proceed to voting, and that the negotiations frequently are successful in the sense that agreements are concluded.

#### *4.4. Views of the European Parliament*

Responsibility for the EED dossier in the EP lay with the Committee on Industry, Research and Energy (ITRE), who appointed Danish Member of the European Parliament (MEP) Niels Fuglsang, Group of the Progressive Alliance of Socialists and Democrats (S&D), as rapporteur. He presented his draft report ([https://www.europarl.europa.eu/doceo/document/ITRE-PR-703281\\_EN.pdf](https://www.europarl.europa.eu/doceo/document/ITRE-PR-703281_EN.pdf) (accessed on 8 March 2023)) in late February 2022, for voting in the ITRE. He suggested a considerably lower threshold for when energy management systems (18 TJ/year) and energy audits (3.6 TJ/year) should be implemented by companies. In addition, he suggested that MSs shall ensure that the implementation of the recommendations of energy audits is mandatory, except for those where the payback period is longer than four years.

In June 2022, the ITRE committee voted on the rapporteur's proposal for a negotiation mandate. After negotiations in ITRE, a compromise text supported by the European

People's Party (EPP), S&D, Renew Europe, and the Greens/EFA was adopted. As for thresholds, the compromise of the ITRE committee raised the levels considerably compared to the rapporteur's proposal: 100 TJ for energy management systems from 2024, 70 TJ for energy management systems from 2027, 10 TJ for energy audits from 2024, and 6 TJ for energy audits from 2027. These thresholds are higher than the rapporteur suggested but lower than the EC proposed, and the Council adopted. As for energy efficiency measures to be implemented on a mandatory basis, it is suggested that those measures with a payback period up to three years should be mandatory. The negotiation mandate of the EP was adopted when the EP voted in plenary in mid-September 2022.

#### 4.5. *Trilogue Negotiations*

Informal trilogues became a standard procedure in the European Union's ordinary legislative procedure [64,65]. They provide an alternative to the formal readings back and forth between EP and Council. In trilogue meetings, the Council, the EP, and the EC are represented by negotiating delegations tasked with finding a legislative compromise between institutions. For the EP, this delegation includes the rapporteur, the shadow rapporteurs, the committee chair, and an EP vice president, whereas the Council is usually represented by the rotating presidency at the Committee of Permanent Representatives or working party level together with policy experts from the capital. The EC is represented by a director and the head of unit and policy experts from the Directorate General in charge of the dossier.

Both the Council and the EP supported the EC proposal for making energy audits and energy management systems mandatory in industry, and that requirements should be linked to firms' energy use instead of company size. However, they had different views on the thresholds for when the instruments should be implemented. The Council and the EP had different views also on implementation of energy efficiency measures identified in energy audits. The Council wanted no requirements, while the EP argued that MSs shall ensure that the implementation of the recommendations of energy audits is mandatory, except for those where the payback period is longer than three years.

Trilogue negotiations between the Council, the EP, and the EC were initiated in September 2022. Negotiations were initially going slowly as a result of deadlocked positions from both sides. Five MSs from Northern, Central, and Southern EU, both small and large, wanted to maintain the Council's general approach, but two small MSs could accept lower thresholds for the requirements. One large and one medium-sized MS from Western EU was able to support the EP proposal. After several political trilogue meetings, taking place weekly in March, the co-legislators agreed on thresholds for when energy management systems and energy audits should be implemented by companies. In the Council negotiations, MSs advocating higher or lower thresholds than the EC proposed learned and adjusted their secondary beliefs. The Council general approach proposed the same thresholds as did the EC. In trilogue negotiations, the EP adopted the secondary belief of the Council and the EC with regard to thresholds for energy audits. All institutions adjusted their views on thresholds for energy management systems, with the EP having to move the most.

## 5. Discussion: The Political Creation of EU Policy on Energy Efficiency in Industry

### 5.1. *The Policy Subsystem*

The ACF assumes that policy actors must specialize to be able to exert any influence, an operation taking place in policy subsystems [53]. A policy subsystem is defined by a policy topic (e.g., energy efficiency policy), territorial scope (e.g., the EU [66]), and the actors directly or indirectly influencing policy affairs [49]. Policy subsystems are semi-independent and overlap with other subsystems and are nested within yet other subsystems [16].

In this study, the policy problem relates to the question of how to promote energy efficiency in industry. There is no single EU legislation for this, why EU legislation for promoting the use of energy audits and energy management systems in enterprises in

EU MSs is used as a proxy for legislation to enable energy efficiency in industry. The EU ETS may also stimulate measures to improve energy efficiency as means to reduce greenhouse gas (GHG) emissions in companies covered by the ETS [67]. In its 2021 proposal for amending the EU ETS, the EC [68] proposed that companies covered by the ETS should undertake measures to improve energy efficiency identified in energy audits and energy management systems, in order to obtain their full allocation of emission allowances. An energy audit or an energy management system could help companies participating in the EU ETS to gain better knowledge of measures to save energy and reduce emissions. The policy subsystem of energy efficiency is, thus, linked to the policy subsystem of the EU ETS, and it is a subsystem of the larger subsystem of EU energy policy. These are linked to the even larger subsystem of EU climate policy. The proposal for a recast of the EED was a means to make the EED fit for meeting the ambitions of the new European climate law [69].

At the end of 2016, there were an estimated 0.75 million active large companies (i.e., non-SMEs), corresponding to about two per cent of all approximately 42 million companies in the EU-28 [8]. How many companies meet the energy use thresholds of the recast EED is not known, but the analysis of different options by de Groen et al. [8], which corresponds to the EC's proposal, indicates that the number of companies that will be covered by requirements for energy audits or energy management system will be drastically lower, approximately 0.15 million companies, than the number of companies covered by the original provisions.

As well as potentially 0.15 million companies with high energy use, the policy subsystem consists of energy service companies that help industry companies to undertake energy audits and implement energy management systems, the EC, the EP, MSs, the Council Presidency, national governments and parliaments, national authorities responsible for law enforcement, interest groups (business associations, environmental NGOs etcetera) on EU level and in MSs, e.g., the Coalition for Energy Savings (CfES), researchers and think tanks (e.g., Centre for European Policy Studies (CEPS), the European Council for an Energy Efficient Economy (ECEEE), Fraunhofer Institute and the Commission's Joint Research Centre (JRC) that analyzed EU legislation on energy audits and energy management systems and put forward proposals as for how to overcome the problems identified with the provisions of the original EED, are all part of the policy subsystem.

Depicting the policy subsystem as consisting of any actor attempting to influence a subsystem's affairs presents dilemma for the analyst: as mentioned, there are hundreds of thousands of actors somehow involved in the policy subsystem. A more effective approach is to organize actors into advocacy coalitions based on shared beliefs.

### *5.2. Advocacy Coalitions and Their Core Beliefs*

An advocacy coalition consists of actors in a network that share core beliefs and resources and collaborates to translate core beliefs into public policy [43,44].

Based on text analysis of MS non-papers, amendments suggested and notes from negotiation meetings, ten core beliefs were identified (Table 1), many of which are negations of each other.

As argued by Byskov-Lindberg and Markard [70], the identification of core beliefs is a challenging task in studies of EU policy. This is particularly true for core beliefs of EU MSs, since countries do not hold core beliefs that hardly change over time. The positions of an MS are often the result of negotiations within the country, and it can change with the next election. In addition, MS positions within negotiations might not be clear until the end of the negotiations when decisions are voted on in the Council. In all, Byskov-Lindberg and Markard [70] argue that the 'treatment of MSs in the ACF and the operationalization of their policy core beliefs represents a conceptual challenge of the ACF on international/supranational levels, which has not yet been adequately addressed in the literature'. The core beliefs presented in Table 1 represent core beliefs presented in the period from 2021 to 2022. No changes in beliefs of MSs over time were accounted for.

**Table 1.** Core beliefs identified among actors in the policy subsystem (policy beliefs are grouped in relation to views on the strength of EU policy on energy efficiency in general (policy core beliefs) and related to energy efficiency in industry (secondary beliefs)).

Strong EU Policy	Weak EU Policy
Deep core beliefs	
EU policies should mandate companies to make certain investments.	Companies should have the freedom to decide themselves which investments to make.
Policy core beliefs	
Increased energy efficiency is the first fuel and vital for reaping multiple benefits.	Increased energy efficiency is vital for mitigating climate change and enhancing energy security of supply.
EU policy should have binding policy measures for energy efficiency.	There should be flexibilities for MS to decide how targets are met.
Companies should be obliged to undertake energy efficiency measures identified in their energy audits.	Companies should not be obliged to undertake energy efficiency measures identified in energy audits.
Secondary beliefs	
The thresholds for when companies should implement energy audits or energy management systems should be low. Many companies should be obliged.	The thresholds for when companies should implement energy audits or energy management systems should be high. Few companies should be obliged.

Actors' policy beliefs and behaviors are embedded in informal networks and policy decisions in the policy process are structured by policy actors through these networks [53]. Policymakers seek to translate their beliefs into action and real policy. To be successful, policy actors must find allies and form advocacy coalitions.

Table 2 presents networks of actors, i.e., advocacy coalitions, identified based on core beliefs of actors held in relation to energy efficiency in industry. Four coalitions were identified, with beliefs of MSs being divergent. One small and one medium MS from Western EU shared core beliefs with the EP, wanting strong EU policy. On the other hand, a group of six small, medium, and large MSs from Central, Southern, and Northern EU argued for weaker EU policy. The Council's general approach was in line with the EC proposal regarding thresholds for when companies should implement energy management systems and energy audits. The EC did not suggest provisions on implementation of measures identified in energy audits in the recast EED, but in the amended EU ETS, why it shared beliefs with a large MS from Western Europe. As for the criteria on which companies should be subject to mandatory energy audits, 122 respondents to the EC public consultation (business associations and other NGOs, including all environmental organizations, and all MSs but one) agreed that the obligation should be based on average energy use. An amount of 22 respondents, all of which were business associations or companies, disagreed. In addition, 118 respondents agreed, and 36 respondents disagreed, that energy audits should be accompanied by an obligation for enterprises to implement certain measures identified in energy audits.

**Table 2.** Advocacy coalitions (actor networks) of different actors in the subsystem.

Mandatory implementation of recommendations	Threshold for Implementation of Energy Audit and/or Energy Management System		
	High	Medium	Low
Yes	n/a	European Commission, one large MS, 118 interest groups	European Parliament, two small and medium-sized MSs
No	Six MSs	Council, other MSs *, 36 interest groups	n/a

\* Note that views of MSs in the Council are divided, but the Council's general approach focuses on a medium threshold and no mandatory requirements to implement recommendations from energy audits and/or energy management systems.

As König and Junge [71] suggested, we need to examine more closely the relationship between EC proposals and agenda-setting, on the one hand, and how the EC exploits potentially favorable coalitions in the Council, on the other [17]. The ACF research program hypothesizes that unofficial policy actors, i.e., actors within purposive groups, are more constrained in their expression of beliefs and policy positions than actors from material groups such as MSs, the EC, and the EP [16]. This hypothesis is rarely tested. This study found no support for this hypothesis, as unofficial policy actors such as think tanks (e.g., CEPS, ECEEE, JRC) had the ear of the EC and provided data for the Commission to underpin its proposals. They were explicit in their recommendations for policy. The coalition formed during negotiations on the amended EED, calling for energy use to be defining which companies should undertake energy audits largely remained intact, was now also calling for a higher threshold than what the EC suggested. As for the coalition including the EC, only one large Western MS shared the same beliefs, but also a majority of interest groups. The majority of MSs shared the EC view on a medium threshold but did not share the belief that recommendations from energy audits and energy management systems must be implemented (to get a higher share of free allowances in the EU ETS). Two MSs shared the view of the EP on strong policy in both regards. The main reason the coalition formed around a medium-sized MS from Northern EU did not get more support was that MSs did mainly focus on other parts of the EED in the Council negotiations, i.e., provisions on the EU headline target and national contributions in Article 4, and the national energy savings obligations in Articles 8–10. Energy efficiency in industry was not the main issue at stake, and most MSs took the fight on other, to them, more important issues of the recast EED related to their policy core beliefs rather than their secondary beliefs.

### 5.3. Paths to Policy Change

The ACF model proposes four paths to policy change: (i) external shocks, (ii) internal shocks and other internal events in the political subsystem, (iii) policy-oriented learning, and (iv) negotiated agreements [15,16]. ACF provides the hypothesis that at least one of these, or any combination thereof, is a necessary but not sufficient source of change in the core beliefs and attributes of a policy program. Another hypothesis of ACF is that the policy core attributes of a policy program will not be significantly revised if the advocacy coalition that instated the program remains in power—unless a change is imposed by a hierarchically superior jurisdiction.

Policy changes in the subsystem related to energy audits, energy management systems, and energy efficiency in industry followed several paths which are discussed below. The policy change related to the new definition of which companies should undertake an energy audit could be seen as a minor change, although with high impact for companies, national authorities and the level playing field on the EU market, whilst the new requirement for companies with higher energy use should implement certified energy management systems is a major policy change. The latter provision puts new requirements on industry.

#### 5.3.1. An External Shock

External shocks include events outside the control of subsystem actors, in terms of their ability to influence underlying causes and triggers [16]. They are changes in the socio-economic conditions, changes in the governing coalition or policy decisions from other political subsystems. They increase the likelihood of major policy change. However, they require enabling factors, e.g., raised public and political attention, agenda change, and a redistribution of coalition resources and opening and closing of political venues, for policy change to happen [16].

The current EC, led by President Ursula von der Leyen, entered office on 1 December 2019. Soon thereafter, on 11 December 2019, the EC put forward a proposal for a ‘European Green Deal’ [61], aiming to promote a fair and prosperous society with a modern, resource-efficient, and competitive economy with net zero emissions of GHG by 2050. As part of the Green Deal, the EU adopted a new climate law in March 2021. The European climate

law established the EU climate targets for reducing GHG emissions to 55 per cent to 2030 compared to 1990 levels and climate neutrality, i.e., net zero emissions, in 2050. To meet the new 2030 GHG target, and as part of the ‘European Green Deal’, the EC put forward, on 14 July 2021, a package of proposals to make the EU’s climate, energy, land use, transport, and taxation policies ‘Fit for 55’ ([https://ec.europa.eu/commission/presscorner/detail/en/IP\\_21\\_3541](https://ec.europa.eu/commission/presscorner/detail/en/IP_21_3541) (accessed on 7 December 2022)). Achieving these emission reductions in the next decade is crucial to Europe becoming the world’s first climate-neutral continent by 2050 and making the European Green Deal a reality. With the package, the EC presented ‘the legislative tools to deliver on the targets agreed in the European climate law and fundamentally transform our economy and society for a fair, green and prosperous future’.

The EC’s proposal on mandatory energy audits and energy management systems, which is part of the proposal of a recast EED, can, thus, be seen as a consequence of the ‘European Green Deal’ and the new climate law, decided on in another policy subsystem. The decision on changes to the EED are dependent on decisions in the policy subsystem for climate policy. In all, the policy change related to the EED, including energy audits and energy management systems, could be seen as a consequence of an external shock. However, it is mainly that there is a change made to the policy that follows the climate law, not which policy changes were made. In comparison, the new, more ambitious EU target on energy efficiency to 2030—raised from at least 32.5 per cent to 36 per cent regarding final energy use and 39 per cent regarding primary energy use—set by the recast EED—is a more direct consequence of the ‘European Green Deal’ and the climate law and, thus, a result of an external shock, as is the decision on more ambitious national energy savings obligations—with an increase from 0.8 per cent new annual energy savings to 1.5 per cent new annual energy savings. That EU provisions on energy audits (and energy management systems) should be amended was decided already in the amendment of the EED in 2018.

### 5.3.2. A Negotiated Agreement

The new legislation is a negotiated agreement—a result of deliberative negotiations in the Council and the EP, and trilogue negotiations between the EP, the Council, and the EC. Negotiated agreements mean that the policy change does not correspond to the policy goals of the dominant or minority coalition, but a negotiated middle ground. Negotiated agreements may emerge in a variety of ways but are facilitated by collaborative institutions conducive to negotiation. This is the case of EU decision making, with co-decision of the Council and the EP on new, amended, or recast directives and regulations [17].

As for the Council general approach on the recast EED (see Section 4.3), a middle ground was found among the four different coalitions, implying that medium thresholds should be applied for energy audits and energy management systems, and that recommendations from these instruments need not be implemented. No MS opposed the Council’s general approach on these points. As argued by Heisenberg [19], the Council prefers to negotiate agreements rather than to proceed to voting, and that the negotiations frequently are successful in the sense that agreements are concluded. The Council’s general approach in this case was met in the Permanent Representatives Council some days ahead of the Council of energy ministers’ meeting on 27 June 2022. The Council’s general approach was met through deliberation, convincing others of the right thing to do through the force of the better argument. However, it is hard to generalize on the status of the Council as a deliberative body. Deliberation sometimes happens, under specific circumstances. In particular, the level of politicization is important [17]. The issues at stake regarding energy efficiency in industry were not the main issues at stake in negotiations on the recast EED, rather the EU energy efficiency target and national contributions and national energy savings obligations. As for negotiations in the EP, a compromise text was agreed upon by S&D, EPP, Renew Europe, and the Greens/EFA before voting in the ITRE committee and then in the EP plenary.

Both the Council and the EP supported the EC proposal for making energy audits and energy management systems mandatory in industry, and that requirements should

be linked to firms' energy use instead of company size. However, they had different views on the thresholds for when the instruments should be implemented, thus explaining why trilogue negotiations were slow at the start. The Council and the EP had different views also on implementation of energy efficiency measures identified in energy audits. The Council wanted no requirements, while the EP argued that MSs shall ensure that the implementation of the recommendations of energy audits is mandatory, except for those where the payback period is longer than three years. After deliberative trilogue negotiations, the EP adopted the secondary belief of the Council and the EC with regard to thresholds for energy audits (10 TJ annual energy use). All institutions adjusted their views on thresholds for energy management systems (85 TJ annual energy use), with the EP having to move the most. In addition, they agreed that companies should not be mandated to undertake energy efficiency measures identified in energy audits, which was the Council position. The EP gave up its policy core belief that companies should invest in energy efficiency measures with a pay-back time up to three years after the Council Presidency explained the deep core belief of the Council that companies are free to decide on what investments to make.

Contrary to the findings of Brandsma [64] and Reh et al. [72], that an increasing number of co-decisions by the EP and the Council are met informally and secluded by fast-track agreements before the EP and the Council adopted their negotiation mandates, so-called first reading agreements, the agreement on the recast EED was met as a second reading agreement. Both the EP and the Council adopted their negotiating mandates before trilogues commenced. Nevertheless, it was an early agreement, following an informal and secluded process. Under co-decision, informal decision making is in line with the Lisbon Treaty. Informal decision making plays along within the EU's formal legislative process, from which it differs along three dimensions: (i) a restricted, noncodified set of decision makers operates in a secluded setting, (ii) social interaction is structured by informal rather than codified and enforceable rules, and (iii) informal compromise must be legitimized through the formal process of rubber stamping [64,72]. In the case of energy efficiency in industry, part of the recast EED, there were high expectations for early agreements on all legislative acts in the 'Fit for 55' package, with the 'European Green Deal' being one of six priorities of the von der Leyen Commission.

The mode of negotiation to be found in decision-making processes of the EU is determined by context [73]. It is demonstrated empirically that most negotiations in the EU are to a large extent problem-solving exercises, as was the case on energy efficiency in industry. Under certain circumstances, however, conflictual bargaining occurs. The pattern varies with level of politicization and type of policy, and according to the stage in the decision-making process [73].

### 5.3.3. Policy-Oriented Learning

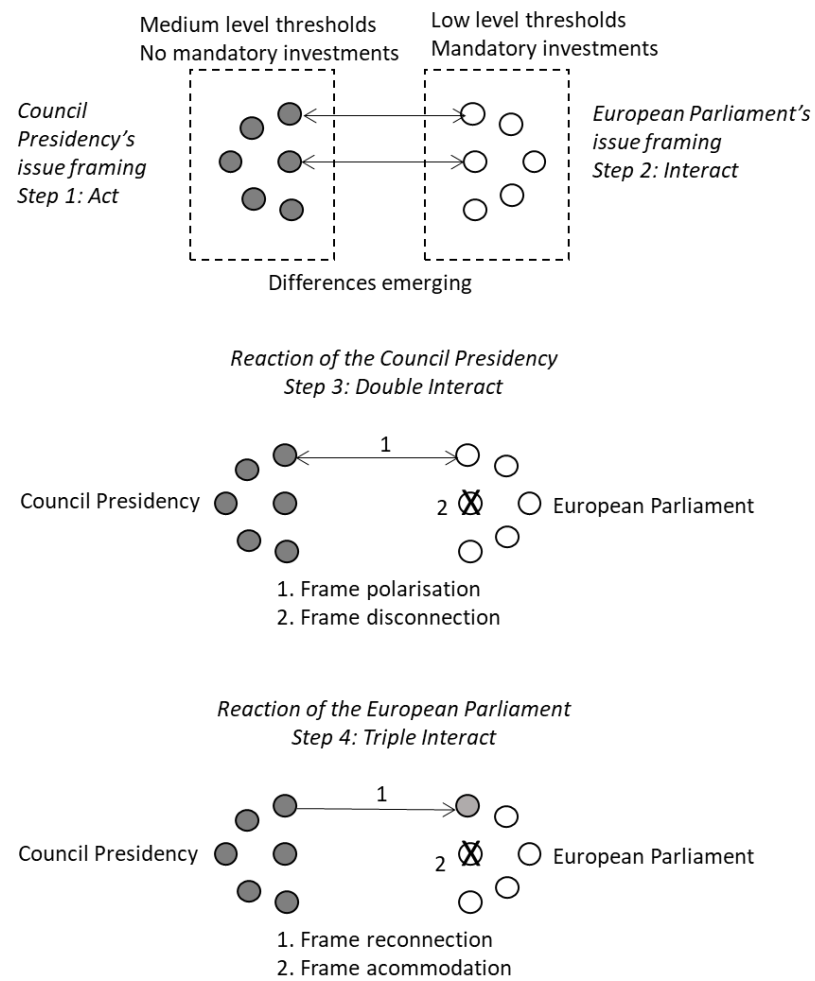
The deliberative nature of the negotiations opened for policy-oriented learning in the political subsystem for energy efficiency. Policy-oriented learning is defined as 'enduring alternations of thought of behavioral intentions that result from experience and concerned with the attainment or revision of the precepts of the belief system of individuals or of collectives' [74]. Learning implies changes in belief systems of advocacy coalition members that include the understanding of a problem and associated solutions, as well as use of political strategies for achieving objectives [16]. Through learning, policy actors can maintain, reinforce, or revise their beliefs about the patterns and outcomes of policies. First, there was 'epistemic learning' from experiences, cf. [75], driven by documented experiences from MSs, scientific research, and science-based experts, that a focus on large enterprises was hard to deal with administratively, which resulted in a change of the provisions on energy audits. In epistemic learning, knowledge is deployed by a limited set of expert actors to narrow discussion with the aim of reaching a technical policy solution [76]. Dissatisfaction with the performance of the original provisions on energy audits—in terms of either its policy outputs at the operational level or its resulting inability

to deal with the problem—led program proponents to reexamine their policy, cf. [45]. New knowledge, mainly from consultants but also from scientific research, also led to mandatory requirements for implementation of energy management systems in companies with highest energy use.

Second, there was ‘reflexive learning across belief systems’, cf. [45,74,75]. Reflexive learning appears when the degrees of problem tractability and certification of actors are low [75]. In reflexive learning, knowledge is employed with the aim of deepening discussion and facilitating argument. Reflexive learning is often regarded as ‘deep’ or ‘complex’ because it is the mechanism through which policy actors adjust their strategies and explore their fundamental preferences and identities [75]. Reflexive learning is the outcome of a social relation within a community of actors or a network, sometimes across advocacy coalitions with diverging belief systems. ‘Deliberative’ is arguably the most pure or ideal-typical form of reflexivity, where learning is not deduction, but the outcome of a process of communication, persuasion, and invention. According to ACF, policy-oriented learning can appear across belief systems and advocacy coalitions. When two cores conflict, the tendency is for ‘each coalition to talk past the other and, thus, for a “dialogue of the deaf” to persist until external conditions dramatically alter the power balance within the subsystem’ (p. 155, [45]). The task for policy analysts is to identify the conditions under which a productive debate between members of different advocacy coalitions is likely to occur. The indicator of such a debate is that one or both coalitions are led to alter policy core beliefs, or at least important secondary beliefs, as a result of an observed dialogue rather than a change in external conditions. MSs were part of four different advocacy coalitions, but they found a middle ground with the Council’s general approach that medium thresholds should be applied for energy audits and energy management systems, and that recommendations from these instruments need not be implemented. MSs in the Council learned from each other and accepted the core beliefs of the middle-ground positions. There was no voting in the Council and no MSs openly opposed the core beliefs expressed in the Council’s general agreement once it was decided. The situation was similar to the EP ITRE committee, where proposals of the supporting parties were taken onboard the compromise text without conflict. As for the trilogues, an agreement was reached on thresholds for energy audits (10 Tj annual energy use) and energy management systems (85 Tj annual energy use), and that companies should not be mandated to undertake energy efficiency measures identified in energy audits, which was the Council’s position. This policy-oriented learning across belief systems occurred since there was an intermediate level of informed conflict between the different coalitions. Everyone had the technical resources to engage in debate, and the conflict was between important policy core and secondary aspects of the different belief systems, cf. [50]. In addition, there existed a forum in the Council and the EP and the trilogues that was prestigious enough to force professionals from different coalitions to participate and dominated by professional norms.

The different policy options put forward by the EC and the EP created dualities between related but incompatible frames (beliefs), one supported by the EC and the Council and one supported by the EP. Acting as a policy broker [76] in Council negotiations and trilogue negotiations, the rotating Council Presidency utilized ‘frame polarization’ and ‘frame disconnection’ to find a compromise between the competing policy proposals, cf. [77] (Figure 2). The first strategy involves making the difference bigger by reaffirming a possibly upgraded version of your own policy as well as criticizing the opposite framing. The second strategy means disconnecting the challenging element from the ongoing conversation as irrelevant, unimportant or the like. The EP in turn reacted through ‘frame incorporation’, and ‘frame disconnection’. Frame incorporation implies incorporating a downgraded reformulation of a challenging element (no requirements for investments based on outcomes of energy audits).





**Figure 2.** Discursive interaction strategies to deal with dualities in reflexive learning across belief systems. Based on Dewulf & Bowen [77].

### 6. Conclusions and Policy Implications

This paper set out to analyze the political processes related to the change of EU legislation on energy efficiency in industry. Three propositions were made:

1. There exist at least three advocacy coalitions, around the EP, the EC, and the Council, respectively;
2. The EP advocates stricter and more far-reaching core beliefs in favor of energy efficiency in industry than the EC and the Council, while the Council advocates a weaker role of the public policy;
3. Policy change followed an external shock and a negotiated agreement.

It is concluded that four different advocacy coalitions were formed, not three as stipulated, each including one or more MSs. The Council, the EC, and the EP had different deep core beliefs, policy core beliefs, and secondary beliefs, and were part of different coalitions, the Council being part of the dominant coalition. The resulting policy change was due to an external shock to the policy subsystem of energy efficiency in industry, i.e., the adoption of a new climate law in the EU with new climate targets for 2030 and 2050 which required a recast of the EED, calling for change of the energy efficiency legislation to be ‘fit for 55’. It was also a result of negotiations in the Council, the EP and between the Council, the EP, and the EC. Negotiations in the Council, the EP and between the Council, the EP, and the EC were of a deliberative nature, meaning trying to reach agreement through the force of the better argument. The deliberative nature of negotiations opened for policy-oriented learning across belief systems. MSs in the Council learned from each

other and accepted the core beliefs of the middle-ground positions. There was no voting in the Council and no MS openly opposed the core beliefs expressed in the Council's general agreement once it was decided. Policy-oriented learning took place also in the trilogue negotiations between the Council, the EP, and the EC.

As for policy implications, it was found that the EC proposal on mandatory implementation of energy management systems in industry was poorly backed up with scientific research despite its existence. This calls for policymakers to become better in justifying their proposals for new or amended policy.

In addition, the thick description of the processes of policymaking provide knowledge for stakeholders of different kinds on how policymaking in the Council and the EU takes place. The paper gives scientists and stakeholders a glimpse into the private and somewhat 'confidential' means of communication with the other side, which usually characterize negotiations in the Council [18,19] and between the Council and the EP. This knowledge can help policymakers and stakeholders better shape their strategies in future advocacy and policymaking. The identification of core beliefs and advocacy coalitions will help policymakers and other stakeholders become more aware of their own and others' values on energy efficiency and how these could be changed. As important is the differentiation of deep core beliefs, policy core beliefs, and secondary beliefs. Which beliefs can be easily changed, which cannot?

As for future research in energy policy, it is important to study the implementation of the revised EU policy in different MSs. Are the new provisions easier to apply? How is the level playing field on the EU internal market affected? As for energy management research, also relevant for energy policy, it is important to analyze how the new EU provisions affect energy management in European enterprises. Do levels of energy use decrease?

**Author Contributions:** Conceptualization, F.v.M.; Formal analysis, F.v.M.; Writing—original draft, F.v.M. and P.A.S. Writing revised draft, F.v.M. and P.A.S. All authors have read and agreed to the published version of the manuscript.

**Funding:** This work was financially supported by the Swedish Energy Agency under Grant No. P2021-00238.

**Data Availability Statement:** Data on negotiations in the Council and the trilogues are confidential.

**Acknowledgments:** The authors are grateful to three anonymous reviewers for valuable comments on a draft version of this paper.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

1. IEA. *Multiple Benefits of Energy Efficiency: From "Hidden Fuel" to "First Fuel"*; International Energy Agency: Paris, France, 2019. Available online: <https://www.iea.org/reports/multiple-benefits-of-energy-efficiency> (accessed on 8 March 2023).
2. Fawcett, T.; Killip, G. Re-thinking energy efficiency in European policy: Practitioners' use of 'multiple benefits' arguments. *J. Clean. Prod.* **2019**, *210*, 1171–1179. [CrossRef]
3. Energy Statistics—An Overview. Available online: [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Energy\\_statistics\\_-\\_an\\_overview#Final\\_energy\\_consumption](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Energy_statistics_-_an_overview#Final_energy_consumption) (accessed on 27 October 2022).
4. Thollander, P.; Palm, J. *Improving Energy Efficiency in Industrial Energy Systems*; Springer: Heidelberg, Germany, 2012.
5. Javied, T.; Rackow, T.; Franke, J. Implementing energy management system to increase energy efficiency in manufacturing companies. *Procedia CIRP* **2015**, *26*, 156–161. [CrossRef]
6. Schulze, M.; Nehler, H.; Ottosson, M.; Thollander, P. Energy management in industry—A systematic review of previous findings and an integrative conceptual framework. *J. Clean. Prod.* **2016**, *112*, 3692–3708. [CrossRef]
7. European Commission. *Proposal for a Directive of the European Parliament and the Council on Energy Efficiency (Recast)*; COM(2021) 558 Final; European Commission: Brussels, Belgium, 2021. Available online: [https://ec.europa.eu/info/sites/default/files/proposal\\_for\\_a\\_directive\\_on\\_energy\\_efficiency\\_recast.pdf](https://ec.europa.eu/info/sites/default/files/proposal_for_a_directive_on_energy_efficiency_recast.pdf) (accessed on 8 March 2023).
8. De Groen, W.P.; Egenhofer, C.; Musmeci, R.; Kustova, I.; Jansen, J.; Boonekamp, P.; Pozo, B.; Oliinyk, I.; Gojsic, D. *Technical Assistance on Assessing the Effectiveness of the Implementation of the Definition of Small and Medium-Sized Enterprises for the Purposes of Article 8(4) of the Energy Efficiency Directive*; Centre for European Policy Studies, CEPS: Brussels, Belgium, 2021. Available online: [https://www.ceps.eu/download/publication/?id=32425&pdf=20200331\\_CEPS\\_SMEDefinition\\_FinalReport.pdf](https://www.ceps.eu/download/publication/?id=32425&pdf=20200331_CEPS_SMEDefinition_FinalReport.pdf) (accessed on 8 March 2023).

9. European Commission. *Commission Staff Working Document: Impact Assessment, Accompanying the Document Proposal for a Directive of the European Parliament and of the Council amending Directive 2012/27/EU on Energy Efficiency*; SWD/2016/0405 Final-2016/0376 (COD); European Commission: Brussels, Belgium, 2021. Available online: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52016SC0405> (accessed on 8 March 2023).
10. Lutzenhiser, L. Through the energy efficiency looking glass. *Energy Res. Soc. Sci.* **2014**, *1*, 141–151. [[CrossRef](#)]
11. Dunlop, T. Mind the gap: A social sciences review of energy efficiency. *Energy Res. Soc. Sci.* **2019**, *56*, 101216. [[CrossRef](#)]
12. von Malmborg, F. Exploring advocacy coalitions for energy efficiency: Policy change through internal shock and learning in the European Union. *Energy Res. Soc. Sci.* **2021**, *80*, 102248. [[CrossRef](#)]
13. von Malmborg, F. Combining the advocacy coalition framework and discourse analysis: The case of the ‘energy efficiency first’ principle in EU energy and climate policy. *Politics Policy* **2023**, *51*, 12525. [[CrossRef](#)]
14. Kay, A.; Baker, P. What can causal process tracing offer to policy studies? A review of the literature. *Policy Stud. J.* **2014**, *43*, 1–21. [[CrossRef](#)]
15. Pierce, J.J.; Peterson, H.L.; Jones, M.D.; Garrard, S.P.; Vu, T. There and back again: A tale of the Advocacy Coalition Framework. *Policy Stud. J.* **2017**, *45*, S13–S46. [[CrossRef](#)]
16. Jenkins-Smith, H.; Nohrstedt, D.; Weible, C.; Ingold, K. The Advocacy Coalition Framework: An Overview of the Research Programme. In *Theories of the Policy Process*, 4th ed.; Weible, C.M., Sabatier, P.A., Eds.; Routledge: New York, NY, USA, 2018; pp. 135–172.
17. Naurin, D.; Wallace, H. Introduction: From Rags to Riches. In *Unveiling the Council of the European Union: Games Governments Play in Brussels*; Naurin, D., Wallace, H., Eds.; Palgrave Macmillan: Basingstoke, UK, 2008; pp. 1–20.
18. Naurin, D. Backstage behavior? Lobbyists in public and private settings in Sweden and the European Union. *Comp. Politics* **2007**, *39*, 209–228. [[CrossRef](#)]
19. Heisenberg, D. How should we best study the Council of Ministers? In *Unveiling the Council of the European Union: Games Governments Play in Brussels*; Naurin, D., Wallace, H., Eds.; Palgrave Macmillan: Basingstoke, UK, 2008; pp. 261–276.
20. Rohdin, P.; Thollander, P. Barriers to and driving forces for energy efficiency in the non-energy intensive manufacturing industry in Sweden. *Energy* **2006**, *31*, 1836–1844. [[CrossRef](#)]
21. Backlund, S.; Thollander, P. Impact after three years of the Swedish energy audit program. *Energy* **2015**, *82*, 54–60. [[CrossRef](#)]
22. Kabule, A.; Ločmelis, K.; Blumberga, D. Analysis of the results of national energy audit program in Latvia. *Energy* **2020**, *202*, 117679. [[CrossRef](#)]
23. Kluczek, A.; Olzsewski, P. Energy audits in industrial processes. *J. Clean. Prod.* **2017**, *142*, 3437–3453. [[CrossRef](#)]
24. Andersson, E.; Arfwidsson, O.; Thollander, P. Benchmarking energy performance of industrial small and medium-sized enterprises using an energy efficiency index: Results based on an energy audit policy program. *J. Clean. Prod.* **2018**, *182*, 883–895. [[CrossRef](#)]
25. Johansson, I.; Mardan, N.; Cornelis, E.; Kimura, O.; Thollander, P. Designing policies and programmes for improved energy efficiency in industrial SMEs. *Energies* **2019**, *12*, 1338. [[CrossRef](#)]
26. Nabitz, L.; Hirzel, S. Transposing the requirements of the Energy Efficiency Directive on mandatory energy audits for large companies: A policy-cycle-based review of the national implementation in the EU-28 Member States. *Energy Policy* **2019**, *125*, 548–561. [[CrossRef](#)]
27. Ločmelis, K.; Blumberga, D.; Kabule, A. Benchmarking of industrial energy efficiency. Outcomes of an energy audit policy program. *Energies* **2020**, *13*, 2210. [[CrossRef](#)]
28. Rudberg, M.; Waldermarsson, M.; Lidestam, H. Strategic perspectives on energy management: A case study in the process industry. *Appl. Energy* **2013**, *104*, 487–496. [[CrossRef](#)]
29. Lee, D.; Cheng, C. Energy savings by energy management systems: A review. *Renew. Sustain. Energy Rev.* **2016**, *56*, 760–777. [[CrossRef](#)]
30. Maramon, F.; Casadesús, M. Reasons to adopt ISO 50001 energy management systems. *Sustainability* **2017**, *9*, 1740. [[CrossRef](#)]
31. Johansson, M.T.; Thollander, P. A review of barriers to and driving forces for improved energy efficiency in Swedish industry—Recommendations for successful in-house energy management. *Renew. Sustain. Energy Rev.* **2018**, *82*, 618–628. [[CrossRef](#)]
32. Fuchs, H.; Aghajanzadeh, A.; Therikelsen, P. Identification of drivers, benefits, and challenges of ISO 50001 through case study content analysis. *Energy Policy* **2020**, *142*, 111443. [[CrossRef](#)]
33. Böttcher, C.; Müller, M. Insights on the impact of energy management systems on carbon and corporate performance. An empirical analysis with data from German automotive suppliers. *J. Clean. Prod.* **2016**, *137*, 1449–1457. [[CrossRef](#)]
34. McKane, A.; Therikelsen, P.; Scodel, A.; Rao, P.; Aghajanzadeh, A.; Hirzel, S.; Zhang, R.; Prem, R.; Fossa, A.; Lazarevska, A.M.; et al. Predicting the quantifiable impacts of ISO 50001 on climate change mitigation. *Energy Policy* **2017**, *107*, 278–288. [[CrossRef](#)]
35. Jovanović, B.; Filipović, J. ISO 50001 standard-based energy management maturity model—proposal and validation in industry. *J. Clean. Prod.* **2016**, *112*, 2744–2755. [[CrossRef](#)]
36. Sola, A.V.H.; Mota, C.M.M. Influencing factors on energy management in industries. *J. Clean. Prod.* **2020**, *248*, 119263. [[CrossRef](#)]
37. Schulze, M.; Heidenreich, S.; Spieth, P. The impact of energy management control systems on energy efficiency in the German manufacturing industry. *J. Ind. Ecol.* **2018**, *22*, 813–826. [[CrossRef](#)]
38. Stenqvist, C.; Nilsson, L.J. Energy efficiency in energy-intensive industries—An evaluation of the Swedish voluntary agreement PFE. *Energy Effic.* **2012**, *5*, 225–241. [[CrossRef](#)]

39. European Commission. *Commission Recommendation of 6 May 2003 Concerning the Definition Of Micro, Small and Medium-Sized Enterprises*; (Notified under Document Number C(2003) 1422) (2003/361/EC); European Commission: Brussels, Belgium, 2003. Available online: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32003H0361&from=EN> (accessed on 8 March 2023).
40. Serrenho, T.R.; Bertoldi, P.; Cahill, C. *Survey of Energy Audits and Energy Management Systems in the Member States*; EUR 27481, JRC95432; Publications Office of the European Union: Luxembourg, 2015. Available online: <https://publications.jrc.ec.europa.eu/repository/handle/JRC95432> (accessed on 8 March 2023).
41. Eichhammer, W.; Rohde, C. *Enhancing the Impact of Energy Audits and Energy Management in the EU: A Review of Article 8 of the Energy Efficiency Directive*; European Council for an Energy Efficient Economy (ECEEE): Stockholm, Sweden, 2016. Available online: <https://tech-action.unepdtu.org/wp-content/uploads/sites/2/2016/04/eceereport-article8review-correctedformat.pdf> (accessed on 8 March 2023).
42. European Commission. *A Study on Energy Efficiency in Enterprises: Energy Audits and Energy Management Systems*; European Commission: Brussels, Belgium, 2016. Available online: [https://ec.europa.eu/energy/studies/study-implementation-energy-efficiency-directive-article-8-energy-audits-and-energy\\_en](https://ec.europa.eu/energy/studies/study-implementation-energy-efficiency-directive-article-8-energy-audits-and-energy_en) (accessed on 8 March 2023).
43. Dunlop, T.; Völker, T. The politics of measurement and the case of energy efficiency policy in the European Union. *Energy Res. Soc. Sci.* **2023**, *96*, 102918. [[CrossRef](#)]
44. Sabatier, P. Top-down and bottom-up models of policy implementation: A critical analysis and suggested synthesis. *J. Public Policy* **1986**, *6*, 21–48. [[CrossRef](#)]
45. Sabatier, P. An advocacy coalition framework of policy change and the role of policy-oriented learning therein. *Policy Sci.* **1988**, *21*, 129–168. [[CrossRef](#)]
46. Sabatier, P. The advocacy coalition framework: Revisions and relevance for Europe. *J. Eur. Public Policy* **1998**, *5*, 98–130. [[CrossRef](#)]
47. Jenkins-Smith, H. *Democratic Politics and Policy Analysis*; Brooks/Cole: Pacific Grove, CA, USA, 1990.
48. Heikkilä, T.; Cairney, P. Comparison of theories of the policy process. In *Theories of the Policy Process*, 4th ed.; Weible, C.M., Sabatier, P.A., Eds.; Routledge: New York, NY, USA, 2018; pp. 301–327.
49. Sabatier, P.; Jenkins-Smith, H. The advocacy coalition framework: An Assessment. In *Theories of the Policy Process*; Sabatier, P., Ed.; Westview Press: Boulder, CO, USA, 1999; pp. 117–166.
50. Lasswell, H.; Kaplan, A. *Power and Society*; Yale University Press: New Haven, CT, USA, 1959.
51. Jenkins-Smith, H.C.; Nohrstedt, D.; Weible, C.M.; Sabatier, P.A. The Advocacy Coalition Framework: Foundations, evolution, and ongoing research. In *Theories of the Policy Process*, 3rd ed.; Sabatier, P.A., Weible, C.M., Eds.; Westview Press: Boulder, CO, USA, 2014; pp. 183–223.
52. Pierce, J.J.; Weible, C.M. Advocacy Coalition Framework. In *American Governance*; Schechter, S., Ed.; Cengage Learning: Farmington Hills, MI, USA, 2016; pp. 22–23.
53. Sabatier, P.; Weible, C. The advocacy coalition framework: Innovations and clarifications. In *Theories of the Policy Process*, 2nd ed.; Sabatier, P., Ed.; Westview Press: Boulder, CO, USA, 2007; pp. 189–220.
54. Weible, C.M.; Sabatier, P.A.; Jenkins-Smith, H.C.; Nohrstedt, D.; Henry, A.D.; de Leon, P. A quarter century of the advocacy coalition framework: An introduction to the special issue. *Policy Stud. J.* **2011**, *39*, 349–360. [[CrossRef](#)]
55. Collier, D. Understanding process tracing. *PS Political Sci. Politics* **2011**, *44*, 823–830. [[CrossRef](#)]
56. Beach, D.; Pedersen, R. *Process-Tracing Methods: Foundations and Guidelines*; University of Michigan Press: Ann Arbor, MI, USA, 2013.
57. Checkel, J.T. Tracing causal mechanisms. *Int. Stud. Rev.* **2006**, *8*, 3623–3670. [[CrossRef](#)]
58. George, A.L.; Bennett, A. *Case Studies and Theory Development in the Social Sciences*; MIT Press: Cambridge, MA, USA, 2005.
59. European Commission. *Consultation on the Review and the Revision of Directive 2012/27/EU on Energy Efficiency*; European Commission: Brussels, Belgium, 2021; Available online: [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12552-Review-of-Directive-2012-27-EU-on-energy-efficiency/public-consultation\\_en](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12552-Review-of-Directive-2012-27-EU-on-energy-efficiency/public-consultation_en) (accessed on 8 March 2023).
60. EU Energy Efficiency Directive (EED)—Evaluation and Review. Available online: [https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12552-EU-energy-efficiency-directive-EED-evaluation-and-review/public-consultation\\_en](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12552-EU-energy-efficiency-directive-EED-evaluation-and-review/public-consultation_en) (accessed on 27 October 2022).
61. European Commission. *The European Green Deal*; COM(2019) 640 Final; European Commission: Brussels, Belgium, 2019. Available online: <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52019DC0640&from=EN> (accessed on 8 March 2023).
62. Waide Strategic Efficiency. *The scope for Energy Saving from Energy Management*; Report Prepared for the European Copper Institute; Waide Strategic Institute: Manchester, UK, 2016. Available online: <http://leonardo-energy.pl/wp-content/uploads/2017/07/The-scope-for-energy-savings-from-energy-management.pdf> (accessed on 8 March 2023).
63. Falbo, P.; Felletti, D.; Stefani, S. Free EUAs and fuel switching. *Energy Econ.* **2013**, *35*, 14–21. [[CrossRef](#)]
64. Brandsma, G.J. Co-decision after Lisbon: The politics of informal trilogues in European Union lawmaking. *Eur. Union Politics* **2015**, *16*, 300–319. [[CrossRef](#)]
65. Roederer-Rynning, C.; Greenwood, J. Black boxes and open secrets: Trilogues as ‘politicised diplomacy’. *West Eur. Politics* **2021**, *44*, 485–509. [[CrossRef](#)]
66. Rozbicka, P. Advocacy coalitions: Influencing the policy process in the EU. *J. Eur. Public Policy* **2013**, *20*, 838–853. [[CrossRef](#)]
67. EU Emissions Trading System (EU ETS). Available online: [https://ec.europa.eu/clima/policies/ets\\_en](https://ec.europa.eu/clima/policies/ets_en) (accessed on 26 October 2022).

68. European Commission. *Proposal for a Directive of the European Parliament and the Council Amending Directive 2003/87/EC Establishing a System for Greenhouse Gas Emission Allowance Trading within the Union*; Decision (EU) 2015/1814 Concerning the Establishment and Operation of a Market Stability Reserve for the Union Greenhouse Gas Emission Trading Scheme and Regulation (EU) 2015/757, COM(2021) 555 Final; European Commission: Brussels, Belgium, 2021. Available online: [https://ec.europa.eu/info/sites/default/files/revision-eu-ets\\_with-annex\\_en\\_0.pdf](https://ec.europa.eu/info/sites/default/files/revision-eu-ets_with-annex_en_0.pdf) (accessed on 8 March 2023).
69. European Commission. *Proposal for a directive of the European Parliament and the Council Establishing the Framework for Achieving Climate Neutrality and Amending Regulation (EU) 2018/1999 (European Climate Law)*; COM(2021) 80 Final; European Commission: Brussels, Belgium, 2021. Available online: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020PC0080&from=EN> (accessed on 8 March 2023).
70. Byskov-Lindberg, M.; Markard, J. Advocacy coalitions in EU energy policy: Indicators of an advancing transition? In Proceedings of the International Sustainability Transitions Conference, Manchester, UK, 11–14 June 2018. Available online: <https://documents.manchester.ac.uk/display.aspx?DocID=37386> (accessed on 8 March 2023).
71. König, T.; Junge, D. Veto player theory and consensus behaviour. In *Unveiling the Council of the European Union: Games Governments Play in Brussels*; Naurin, D., Wallace, H., Eds.; Palgrave Macmillan: Basingstoke, UK, 2008; pp. 81–98.
72. Reh, C.; Héritier, A.; Bressanelli, E.; Koop, C. The informal politics of legislation: Explaining secluded decision making in the European Union. *Comp. Political Stud.* **2013**, *46*, 1112–1142. [[CrossRef](#)]
73. Elgström, O.; Jönsson, C. Negotiation in the European Union: Bargaining or problem-solving? *J. Eur. Public Policy* **2011**, *7*, 684–704. [[CrossRef](#)]
74. Sabatier, P.; Jenkins-Smith, H. *Policy Change and Learning: An Advocacy Coalition Approach*; Westview Press: Boulder, CO, USA, 1993.
75. Dunlop, C.A.; Radaelli, C.M. Systematising policy learning: From monolith to dimensions. *Political Stud.* **2013**, *61*, 599–619. [[CrossRef](#)]
76. Petridou, E.; Mintrom, M. A research agenda for the study of policy entrepreneurs. *Policy Stud. J.* **2021**, *49*, 943–967. [[CrossRef](#)]
77. Dewulf, A.; Bouwen, R. Issue framing in conversations for change: Discursive interaction strategies for “doing differences”. *J. Appl. Behav. Sci.* **2012**, *48*, 168–193. [[CrossRef](#)]

**Disclaimer/Publisher’s Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.