The Eye of Every Storm: Policy Entrepreneurs to Strengthen the Role of Energy Efficiency in EU Climate Policy

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Article

The Eye of Every Storm: Policy Entrepreneurs to Strengthen the Role of Energy Efficiency in EU Climate Policy

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Abstract: Contextualising the narrative on energy efficiency as the *first fuel* in the clean energy transition, the *energy efficiency first principle* (EE1) was introduced in EU energy and climate policy with Energy Union communication in 2015 and made nonbinding with the EU Governance Regulation in 2018. In 2023, the EU legislators made EE1 legally binding to apply in policy, planning and investment decisions exceeding 100 million euros each and 175 million euros in the transport sector across all sectors that affect the energy system. By applying the multiple streams framework, this article analyses the role of policy entrepreneurs in the policy process and politics of making EE1 binding through qualitative text analysis of policy documents, position papers and reports from EU negotiations. The analysis shows how nonprofit and nongovernmental organisations such as the Regulatory Assistance Project, the European Climate Foundation and the Energy Efficiency Financial Institutions Group, as well as the European Commission and the rotating Council Presidency, were critical policy entrepreneurs for coupling the problem, policy and politics streams. The coupling was performed once a policy window was opened by the Paris Agreement on climate change, the entering office of the Ursula von der Leyen European Commission in late 2019, immediately presenting the *European Grean Deal* as the EU's climate action plan and green growth strategy, and the energy crisis in Europe following Russia's second war on Ukraine, leading the Commission to present the REPowerEU Plan and the EU Save Energy Strategy. This paper provides better knowledge of the policy processes and politics related to EE1, contextualising and concretising the concept of energy efficiency as the *first fuel* into binding law.

Keywords: demand-side flexibility; energy efficiency; European Union; multiple streams framework; policy entrepreneurs; policy process

1. Introduction

The clean energy transition needed to limit global warming to 1.5–2 °C above preindustrial levels and meet UN Sustainable Development Goal (SDG) 7 on affordable and clean energy requires massive deployment of energy efficiency and renewable energy sources (Sugiyama et al, 2013; Jayachandran et al., 2022; Olabi & Abdelkareem, 2022; Zakari et al., 2022; IPCC, 2023). According to the IEA (2021), energy efficiency can contribute more than 40 % of the greenhouse gas (GHG) emission reductions needed to meet the Paris Agreement targets. The IEA (2019) refers to energy efficiency as the *first fuel* in the clean energy transition. However, demand for the first fuel needs to increase, and that is where policy action matters the most.

Energy efficiency policy was introduced in the EU with the 1970s oil crisis (Dunlop, 2022; von Malmborg et al., 2023a). Since then, several policies on the energy efficiency of different sectors and products have been adopted and implemented. The overarching legislation, setting overall targets

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and including binding provisions on energy efficiency in different sectors, is the Energy Efficiency Directive (EED), first adopted in 2012 (EU, 2012a), amended in 2018 (EU, 2018a), and recast in 2023 (EU, 2023). With reference to the 'first fuel' narrative, the European Commission (EC) under President Jean-Claude Juncker introduced the *energy efficiency first principle* (EE1) in the EU energy and climate policy narrative with 'Energy Union' communication (EC, 2015) and the 2016 'Clean Energy for All Europeans' legislative package (EC, 2016), presenting it as the overarching theme of EU energy and climate policy. EE1 was introduced as a nonbinding principle in EU legislation with the regulation of the governance of the Energy Union and climate action (Governance Regulation), defined as follows:

"taking utmost account in energy planning, and in policy and investment decisions, of alternative cost-efficient energy efficiency measures to make energy demand and energy supply more efficient, in particular by means of cost-effective end-use energy savings, demand response initiatives and more efficient conversion, transmission and distribution of energy, whilst still achieving the objectives of those decisions" (EU, 2018b, p. 15).

In mid-July 2021, the EC presented a proposal to recast the EED (EC, 2021a, 2021b). The proposal was part of the so-called 'Fit for 55' package (EC, 2021c) and included, i.e., stronger provisions on EE1. The European Parliament (EP) and the Council of the EU (Council) reached a political agreement on the recast EED in March 2023, which was formally adopted by the EP and the Council in July 2023 (EU, 2023). This made EE1 a legally binding principle for EU member states (MSs) to apply in policy, planning and decision-making on investments regarding the energy system and in sectors that affect energy supply and energy demand, exceeding 100 million euros each and 175 million euros for transport infrastructure projects. MSs will transpose EE1 into national legislation by 11 October 2025.

EE1, as an overarching, binding principle, complements two other guiding principles of EU energy and climate policy, i.e., cost-effectiveness and consumer protection. This case is highly interesting because EE1 binding indicates a paradigm shift that contrasts with the earlier path-dependent agenda for EU energy and climate policy (Lafferty & Ruud, 2009; Kettner & Kletzan-Slamanig, 2020; Herranz-Surralés & Solorio, 2022), disconnecting the energy supply side from the energy demand side. According to Recital 18 of the Recast EED, EE1 implies the following:

"adopting a holistic approach, which takes into account the overall efficiency of the integrated energy system, security of supply and cost effectiveness and promotes the most efficient solutions for climate neutrality across the whole value chain, from energy production, network transport to final energy consumption, so that efficiencies are achieved in both primary energy consumption and final energy consumption. That approach should look at the system performance and dynamic use of energy, where demand-side resources and system flexibility are considered to be energy efficiency solutions" (EU, 2023, p. 4).

However, how did this transformative policy change happen? How was the binding EE1 framed, formulated and agreed upon under political ambiguity and influence by MSs and different interest groups (IGs)? Analysing policies includes not only their effects and effectiveness but also the values and beliefs attached to problem framing, different policy options and the ambiguities of decision-making on policies (Cairney, 2023). To understand EE1 as a policy instrument, one must understand the policy processes and the politics of policy design. This article aims to analyse the policy processes and politics that make EE1 a legally binding principle in EU energy and climate policy. Policymaking in the EU is a complex process of agenda-setting, advocacy and decision-making on policy design involving several EU institutions, MSs and IGs in a multilevel governance setting (Cini & Borragán, 2022).

Political science offers a variety of theories, frameworks and concepts to explain policy processes and the roles of stakeholders influencing agenda-setting and decision-making on public policy. One such framework is the *multiple streams framework* (MSF) (Kingdon, 1984; Herweg & Zohlnhöfer, 2022; Herweg et al., 2023), which focuses on three structural factors (problems, policy options and politics) and the role of *policy entrepreneurs* framing problems and policy solutions and coupling the factors to change policy. Compared to other analytical frameworks, such as *the advocacy coalition framework (ACF) and discourse analysis* (DA), MSF focuses more on the agency of central actors in policy processes. ACF and DA have been applied by von Malmborg (2023a, 2023b) to analyse the politics of

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EE1 in the EU, providing knowledge about beliefs, storylines, discourses and conflicts between coalitions and the role of negotiations, policy learning and discursive agency to overcome conflicts. However, there is still a gap in knowledge about the agency of central actors—policy entrepreneurs—in the policy process. The following research questions are analysed based on qualitative text analysis of partly unique data from EU negotiations:

- Which problems and policy options were presented, by who and why? How were these problems and policy options framed??
- How did the policy window open?
- Which strategies were used by the policy entrepreneurs, and why were they successful?

The paper provides knowledge on how the concept of energy efficiency as the 'first fuel' was turned into a binding principle to be applied by different actors in the public and private sectors in the EU. The article can inform energy researchers and political scientists as well as policymakers and stakeholders on the agency of policy entrepreneurs in the policy process related to policymaking on the clean energy transition. This study complements the work of von Malmborg (2023a, 2023b), who used other theoretical frameworks on the policy process to analyse the politics of EE1. Different frameworks and theories provide complementary ways of analysing a policy process, which together provide us with better knowledge (Cairney, 2013; Heikkila & Cairney; 2018). The article also improves theory on the agency of policy entrepreneurs in EU policymaking. This study will add to the growing literature on the processes and politics of energy efficiency policy in the clean energy transition (Kerr et al., 2017; Fawcett & Killip, 2019; Dupont, 2020; von Malmborg, 2021, 2022, 2023a, 2023b; von Malmborg & Strachan, 2023; Dunlop & Völker, 2023).

2. Theory and Previous Research

2.1. Multiple Streams Framework

MSF was developed for the analysis of agenda setting in American politics (Kingdon, 1984) and has been used extensively to analyse policy processes. It contextualises policy process research into unique arrangements of rules and relationships between values and narratives that cause policy change to occur (Herweg et al., 2023). According to the MSF, policymaking is not about rational problem solving but rather about viable solutions seeking adequate solutions (Herweg et al., 2023). MSF also assumes that policymaking is undertaken under issue ambiguity, "a state of having many ways of thinking about the same circumstances or phenomena" (Feldman, 1989, p. 5); institutional ambiguity, "a policy-making environment of overlapping institutions lacking a clear hierarchy" (Ackrill & Kay, 2011, p. 75); time constraints; and organised anarchy, i.e., problematic policy preferences, unclear technology and fluid participation (Choen et al., 1972).

The MSF is increasingly popular as a model for understanding the EU policy process (e.g., Zahariadis, 2008; Ackrill et al., 2013; Herweg, 2016; Herweg, 2017; Becker, 2019; Herweg & Zohlnhöfer, 2022), including analyses of EU energy and climate policy (Maltby, 2013; Bocquillon, 2018; Kreienkamp et al., 2022). However, this poses methodological challenges since it is different from the one for which the MSF was originally developed. A comprehensive contribution aiming to exploit the explanatory potential of MSF must address two issues: (i) define functional equivalents of the MSF elements in the EU and (ii) be explicit about how the causal mechanisms relate to these equivalents. There are two causal mechanisms: events that open a policy window and policy entrepreneurs' coupling activities (Kingdon, 1984).

The analytical approach is to explore three types of structural factors, a problem stream, a policy stream and a politics stream, which, when connected, have the power to change policy (Figure 1). The three streams are assumed to be independent. The assumption of stream independence holds if the stream dynamics differ and if the streams do not affect each other (Herweg, 2017).

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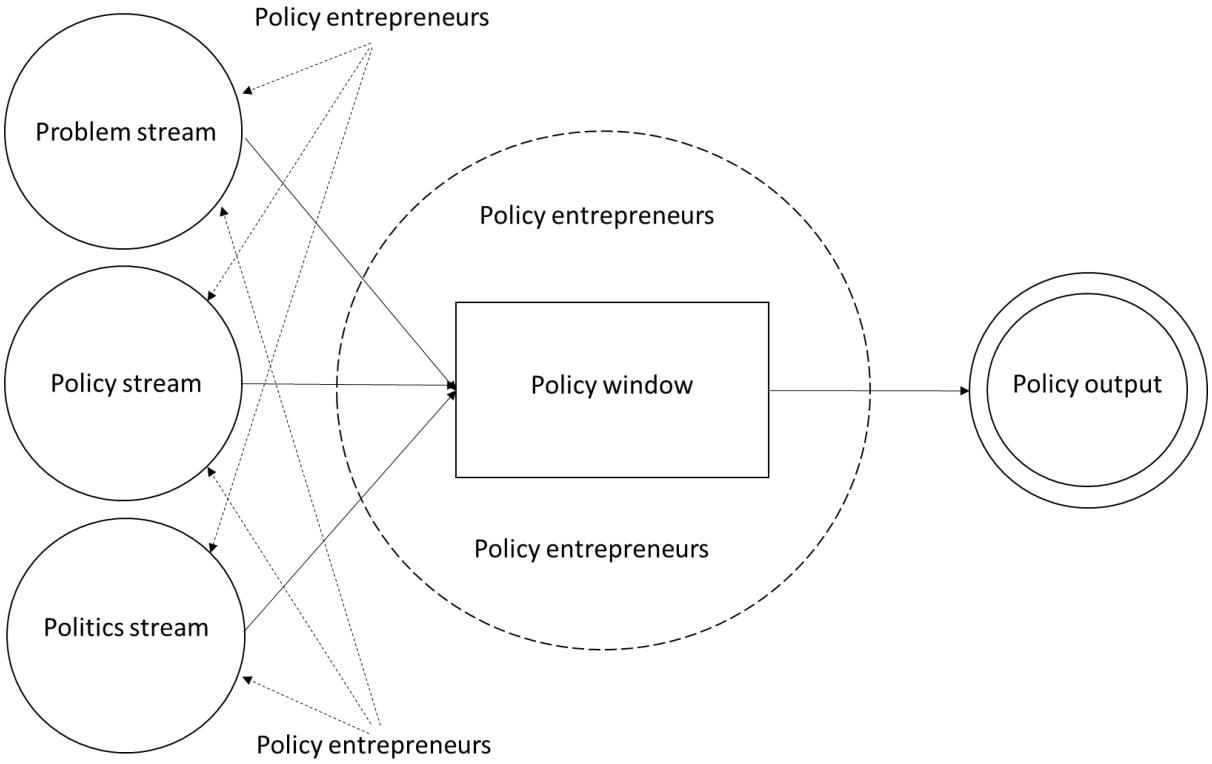

Figure 1. The policymaking process according to the MSF based on Kingdon (1984) and Herweg et al. (2023).

The *problem stream* highlights the need for a new policy on the agenda. It is something seen as a public matter requiring attention (e.g., climate change). The problem stream includes mechanisms of problem recognition (indicators showing a problem, e.g., high GHG emissions, high energy use, and energy efficiency potential that remains untapped), focusing events (e.g., gas supply disruptions and energy price spikes), and feedback concerning previous policy programmes (e.g., EC review reports, often inscribed in legislative acts). In MSF, problems are seen as socially constructed, not as evident facts (Kingdon, 1984; Herweg et al., 2023). The problem stream is ripe for coupling if a policy entrepreneur is successful in framing it as problematic, and the issue is seen as problematic in the policy community. The *policy stream* brings potential policy options to the agenda and formulates suitable proposals to address the problem. These policy options are formed by the values of acceptability in the formulation, the technical feasibility of the proposed solution, resources such as competences, the existence of technical capacities and structures to manage the policy and a network supporting it (Herweg et al., 2023). The policy stream is ripe for coupling if at least one technically feasible policy idea is available, which is discussed by the policy community.

How a condition is framed as a problem influences how we think about the problem (Knaggård, 2015). This enables coupling to certain policies but not to others (Herweg, 2016). A policy option must be promoted by policy entrepreneurs with resources, strategies, and access to the policy window where the streams can meet and form the policy community in the policy stream (Gunn, 2017). Research on the policy process in the EU has shown that there is greater heterogeneity in EU policy communities than in national ones (Bache, 2013; Herweg, 2016). Differences in culture, economy, and politics between MSs make it unlikely that their governments agree on value acceptability, tolerable costs, normative acceptance, and receptivity.

The *politics stream* is defined by the framing of decision-making, including political party ideology, interests, the national/EU mood and the institutional arrangements of decision-making. In EU policymaking, this stream is ripe if the EC supports an issue through a political entrepreneur, e.g., the commissioner of the relevant directorate-general who actively supports the idea in question

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(Herweg & Zohlnhöfer, 2022). The focus on the EC results from its formal monopoly on initialising legislation. The politics stream is more complex and scattered in the EU policymaking process than in national policymaking processes. In the EU, executive power is shared between MS governments in the Council, the European Council and the EC (Herweg & Zohlnhöfer, 2022). The EP is the European counterpart of a national parliament.

Policy change occurs when the three streams converge. Coupling is the central mechanism in MSF, connecting the three streams to achieve policy change, stasis or reversal. The coupling of streams occurs when stakeholders act as *policy entrepreneurs* (Mintrom, 2019a; Petridou & Mintrom, 2021; Herweg et al., 2023). Policy entrepreneurs exploit opportunities to influence policy outcomes to promote their own goals without having the resources necessary to achieve this alone. Policy entrepreneurs, as individuals or collectives, attempt "to transform policy ideas into policy innovations and, hence, disrupt status quo policy arrangements" (Petridou & Mintrom, 2021, p. 945). They are central actors in political agenda setting and for policy change, as they 'soften' the political system for certain ideas and ensure that there are packages of problems and policies that are ready when there is a policy window of opportunity to put the problem on the agenda (Mintrom, 2019a). Section 2.2 provides a more in-depth description of policy entrepreneurs.

Coupling of streams is more likely when so-called *policy windows* are open, defined as "a fleeting opportunity for advocates of proposals to push their pet solutions, or to push attention to their special problems" (Herweg et al., 2023, p. 37). At that time, policy entrepreneurs can successfully push forward their respective ideas, "coupling solutions to problems" and "both problems and solutions to politics" (Kingdon, 1984, p. 21). Policy windows can open by a push from the problem stream or the politics stream but not the policy stream (Herweg & Zohlnhöfer, 2022; Herweg et al., 2023). The problem stream pushes the policy window when indicators change significantly. The politics stream pushes the window with changes in partisan composition in parliaments and governments. In the multilevel governance setting of EU policy, a policy window can also be opened from above (international) to below (national) (Kreienkamp et al., 2022).

2.2. Policy Entrepreneurs

The concept of *policy entrepreneurs* was introduced by Dahl (1961) and popularised by Kingdon (1984), who defines them as "advocates who are willing to invest their resources – time, energy, reputation, money – to promote a [policy] position in return for anticipated future gain in the form of material, purposive, or solitary benefits" (Kingdon, 1984, p. 179). Drawing on Kingdon's definition, most scholars have assumed that they are instrumentally rational (Bakir & Jarvis, 2017), motivated by a "desire for power, prestige and popularity, the desire to influence policy, and other factors in addition to any money income derived from their political activities" (Schneider et al., 1995, p. 11) or "satisfaction from participation, or even personal aggrandisement" (Kingdon, 2002, p. 123). However, policy actors are rather boundedly rational and motivated by cognitive rationality, i.e., their beliefs and ideas (Zahariadis, 2007; Bakir, 2009). Thus, policy entrepreneurs may engage in policy advocacy to prevent opponents with conflicting beliefs from securing 'evil' policies, triggering a 'devil's shift' (Sabatier & Jenkins-Smith, 1999). Arnold (2022, p. 26) argues that "[o]ppositional factors, by triggering a value-laden, devil shift-influenced fear of a threat to a desired policy goal, can catalyse policy entrepreneurship".

Initially, only individuals, such as elected politicians, public officials, academics and experts, were considered policy entrepreneurs, but research on policy processes in the EU has included organisations as policy entrepreneurs. Thus, policy entrepreneurs also include companies, business associations, NGOs, think tanks, other IGs, political parties and public institutions, e.g., the EC, the Council, the European Central Bank, or national, regional or local governments and authorities (Herweg, 2016; Petridou, 2017; Mintrom, 2019a; Pircher, 2020; Heldt & Müller, 2022; Herweg & Zohlnhöfer, 2022; Bürgin, 2023; von Malmborg et al., 2023b). Zito (2000, 2017) even refers to "collective entrepreneurship", in which advocacy coalitions act as policy entrepreneurs to formulate individual policies in a certain policy area. Overall, policy entrepreneurs can come from the public and private sectors as well as civil society.

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For theoretical reasons, policy entrepreneurship must be distinguished from other political advocacy actions. Boasson and Huitema (2017, p. 1351) argue that "privileged actors in powerful positions deploy[ing] the regular tools at their disposal and merely do their job, they are not demonstrating entrepreneurship". Policy entrepreneurship can be deployed by actors in and out of government – elected officials, lobbyists or civil servants – at different levels and in different domains if they are "persistent and skilled actors who launch original ideas, create new alliances, work efficiently or otherwise seek to 'punch above their weight'" (Boasson & Huitema, 2017, p. 1344; Green, 2017). For instance, the current EC president Ursula von der Leyen and former EC commissioner Frans Timmermans were described as policy entrepreneurs for launching the *European Green Deal* in 2019 (Kreienkamp et al., 2022; Becker, 2024).

The strategies used by policy entrepreneurs are the lines of action taken to reach their aims, the latter of which fall into two categories (Boasson & Huitema, 2017):

- *Structural entrepreneurship*: acts aimed at overcoming structural barriers to enhancing governance influence by altering the distribution of formal authority and factual and scientific information; and
- *Cultural-institutional entrepreneurship*: acts aimed at altering or diffusing people's perceptions, beliefs, norms and cognitive frameworks, worldviews, or institutional logics.

Analysing the scholarly literature, Aviram et al. (2020) identified 20 strategies and three traits of policy entrepreneurs: trust building, persuasion, and social acuity. Theses may vary with respect to the target audience, level of government at which the policy entrepreneurs operate, sector, and policy entrepreneurs' professional roles, timing, number and types of actors involved, relationship to development of international politics, etc. Brouwer (2015) and Brouwer and Huitema (2018) proposed four categories of strategies (Table 1), which I will apply in my analysis:

Table 1. Strategies of policy entrepreneurs (based on Roberts & King, 1991; Mintrom & Norman, 2009; Brouwer, 2015; Brouwer & Huitema, 2018).

Approach to policy change	Strategies used by policy entrepreneurs
Attention- and support seeking strategies	Problem framing; Idea generation
	Strategic dissemination of information
	Lead by example; Use demonstration projects.
	Rhetorical persuasion; Media attention
	Exploitation of focusing event(s)
Linking strategies	Coalition and team building with bureaucratic insiders and policy influencers outside of government
	Issue linking
	Game linking
Relational management strategies	Networking by using social acuity
	Trust building
Arena strategies	Venue shopping

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Timing

For structural entrepreneurship, three strategies are particularly important: (i) creating and working in networks and advocacy coalitions, (ii) strategic use of decision-making processes, and (iii) strategic use of information (Boasson & Huitema, 2017). Through networking, a policy entrepreneur learns the worldviews "of various members of the policymaking community" (Mintrom, 1997, p. 739), which enables policy entrepreneurs to persuade policy actors with high levels of legitimacy or authority to join (Wihlborg, 2018). The strategic and smart use of decision-making procedures and venues relates to timing and thus launching the policy idea when there is an open policy window (Kingdon, 1984). Finally, policy entrepreneurs can reach their aims by assembling new evidence and making novel arguments (Dewulf & Bouwen, 2012), carrying ideas (Swinkels, 2020) that serve as 'coalition magnets' (Béland & Cox, 2016) to convince an appropriately powerful coalition of supporters to back the proposed changes (Boasson & Huitema, 2017; Mintrom & Luetjens, 2017), either by manipulating who obtains what information, if information is distributed asymmetrically and information is scarce (Moravcsik, 1999; Zahariadis, 2003), or by strategic manoeuvring, such as providing as little information as possible to one's likely opponents (Mackenzie, 2010).

For cultural-institutional entrepreneurship, framing problems and policy options is the most important strategy for making people positive about the ideas coming from the entrepreneur and negative about existing and competing policy or governance arrangements (Boasson & Huitema, 2017). As Copeland and James (2014, p. 3) put it, framing is about "strategic construction of narratives that mobilise political action around a perceived policy problem in order to legitimise a particular solution". How a condition is framed as a problem influences how we think about the problem (Knaggård, 2015), which enables coupling to certain policies but not to others (Weiss, 1989). To persuade others, a policy entrepreneur must consider the perspectives of various actors and create meanings and frames that appeal to them (Fligstein, 2001). Policy entrepreneurs deploy 'outsider tactics' by shaping public discourse on problems and policy solutions or 'insider tactics' by working with policymakers to design regulations (Gabehart et al., 2022; Tosun et al., 2023).

Not all policy entrepreneurs are successful (Boasson & Huitema, 2017; Arnold, 2021). Success is defined in different ways. For some, a policy entrepreneur is successful if the advocacy leads to changes in other policy actors' policy preferences (Teske & Schneider, 1994). This can be compared to policy-oriented learning (Sabatier, 1988). For others, a policy entrepreneur is successful if it influences agenda setting in such a way that the policy entrepreneur's pet issue is considered by policymakers (Mintrom, 1997; Mintrom & Vergari, 1998). However, another view is that a policy entrepreneur is successful if she has an actual influence on policy and governance (Boasson & Huitema, 2017), e.g., adoption of specific policy measures the policy entrepreneur sought (Arnold et al, 2017; Crow, 2010; Mintrom, 1997, 2000). What is deemed success depends on the aim of the policy entrepreneur agency.

Mintrom and Norman (2009) assume that success is more likely for a policy entrepreneur who has more characteristics that define her as such or who deploys entrepreneurial strategies with greater frequency or intensity (cf, Binderkrantz & Krøjer, 2012). Most policy entrepreneurs strive for policy innovation, which consists of initiation, diffusion, and the evaluation of effects that such innovations create, the latter requiring analytical capacities (Jordan & Huitema, 2014). These challenges are central to the work of policy entrepreneurs. It is their willingness to use their positions for leverage and for aligning problems and solutions that increase the likelihood of policy change (Mintrom & Norman, 2009). The ability of policy entrepreneurs to successfully promote policy innovation also depends on their ability to identify relevant competencies and develop and effectively deploy them (Considine et al., 2009; Meijerink & Huitema, 2010). In addition, a successful policy entrepreneur must understand the concerns of the actors they seek to persuade, use social acuity to build teams, networks, and coalitions, be knowledgeable to strategically disseminate information, and be organising, corresponding to political activation and involving civic engagement (Mintrom & Norman, 2009; Aviram et al., 2020; Arnold, 2021). Anderson et al. (2020) added that the influence of policy entrepreneurs lies not only in their ability to define problems and build coalitions but also in their ability to provide new and reliable information to elected officials.

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2.3. Previous Research on EE1 and Policy Entrepreneurs in EU Climate and Energy Policy

Analysing the 'Clean Energy for All Europeans' package, which introduced EE1, Rosenow et al. (2017) found that it falls short of comprehensively reflecting EE1. It was part only of the proposal for the Governance Regulation. Yu et al. (2022) and Mandel et al. (2022) outlined the potential role of EE1 as a decision-making tool for prioritising demand-side actions over supply-side actions when these actions provide greater value to society. Pató and Mandel (2022, p. 11) show that an "'EE1-compliant' regulation guarantees that consumers can offer their flexibility and get compensated at market value and requires that distribution systems operators use them whenever they provide more net benefit that network investment". Von Malmborg (2023a, 2023b) analysed the policy process and the political meaning of EE1 using discourse analysis and the ACF. He revealed a conflict among EU legislators and other stakeholders regarding whether EE1 should aim at reaping multiple benefits of energy efficiency or climate change mitigation only. Interdiscursive communication and policy-oriented learning in deliberative negotiations across belief systems settled the dispute, and actors agreed in line with the multiple benefits discourse. For policy learning, von Malmborg (2024a) found that the level of politicisation and polarisation as well as the mandates of the lead negotiators of the Council and the EP in EU trilogue negotiations on energy efficiency policy are important factors enhancing or inhibiting policy learning.

Regarding policy windows in EU policy, Herweg (2016) argued that the start of an EC term of office opens a window. This is because the EC has formal privileges for initiating EU legislation. For the same reason, the EC is considered a natural policy entrepreneur (Maltby, 2013; Edler & James, 2015; Herweg, 2016; Bocquillon, 2018; Herweg & Zohlnhöfer, 2022; Bürgin, 2023). Kreienkamp et al. (2022, p. 735) analysed transformative change in EU climate policy, emphasising "the importance of creating windows of opportunity but also seizing synchronistic moments when such windows open from political situations 'above' or 'below'". Maltby (2013), Palmer (2015) and Bocquillon (2018) analysed the work of policy entrepreneurs in framing climate and energy policies in the EU. Since approximately 2005, the EC has acted to shift political norms, successfully framing import dependency as a problem requiring an EU-level solution (Maltby, 2013). Palmer (2015) found that persuasive framing enabled the policy entrepreneur to impinge on agenda-setting processes, while boundary work enabled the policy entrepreneur to forfeit an existing policy considering widespread criticism. The 2009 EU energy and climate policy package gathered support among stakeholders from framing it as a way for the EU to gain leadership in the green energy transition (Bocquillon, 2018). Von Malmborg (2024b) analysed the role of policy entrepreneurs in the policy process leading to the adoption of the world's first legislation to curb GHG emissions from maritime shipping in 2023. Activistic advocacy by an environmental NGO, framing decarbonisation as an opportunity to gain competitiveness and building a broad coalition with NGOs, business associations and progressive companies in the shipping value chain, gathered enough support in the Council and the EP to stand the ground against heavy lobbying from the fossil fuel industry that opposed decarbonisation to maintain competitiveness. This confirms the importance of persuasive framing and coalition building as key strategies for policy entrepreneurs.

3. Method and Material

This article analyses the policy process, politics, and role of policy entrepreneurs in making EE1 a legally binding principle. We do this by exploring the problem, policy, and politics streams, explaining how the policy window was opened and how the streams were then merged. This paper analyses, in particular, how policy entrepreneurs framed the problem and policy solutions and their strategies for influencing decision-makers.

Arnold et al. (2023) recently criticised policy entrepreneurship scholars for paying too little attention to the methodological question of how to empirically identify policy entrepreneurs. Generally, scholars identify policy entrepreneurs by event-based or process-based approaches "asking elites and experts to point them out, querying secondary sources, surveying possible entrepreneurs, and focusing on high-profile advocates" or "using secondary sources" (p. 659), using

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a "I know it when I see it" standard to distinguish policy entrepreneurs from other policy actors (p. 660). Using elite or expert input to identify policy entrepreneurs may overrepresent the prevalence of policy entrepreneurs while overlooking less connected or less expert policy actors trying to influence policy.

I view policy entrepreneurs as individual or organisational change agents who are strategically and entrepreneurially involved in framing and developing innovative policies, presenting them well-packaged to policymakers or political executives. To avoid the pitfalls mentioned above, I applied a stepwise process suggested by Arnold et al. (2023) for identifying and distinguishing policy entrepreneurs once potential policy entrepreneurs were identified:

1. One marker of significant resource investment (time or money),
2. AND: at least one entrepreneurial goal,
3. AND: at least one entrepreneurial strategy or characteristics,
4. AND: at least one network partner.

To screen potential policy entrepreneurs in the case, I analysed the responses to the EC's public consultation, reports from negotiations in the Council, and reports in the pan-European online newspaper *Euractive*, writing about developments in EU policy. I also searched the internet for reports and policy papers/briefs from different policy actors. The screening was also facilitated by previous studies of advocacy and discourse coalitions (von Malmborg, 2023a, 2023b). The screening identified approximately 400 policy actors but identified 30 policy actors who were more active and vocal, provided more reports and policy briefs, and led the work in different policy networks and advocacy coalitions, which is why I did not survey all potential policy entrepreneurs with questions about resources, goals, strategies and network partners. After this analysis, four policy entrepreneurs from the public, private and civil society sectors who met the stepwise criteria were identified:

- The European Commission,
- Regulatory Assistance Project (RAP)[2],
- European Climate Foundation (ECF)[3], and
- Energy Efficiency Financial Institutions Group (EEFIG)[4]

In each organisation, key individuals with positions such as deputy directors, heads of units, policy officers or associates were particularly important for driving policy entrepreneurship, but they had supporting teams in their organisations without which they could not have acted as policy entrepreneurs.

For data collection, semistructured interviews were combined with qualitative text analysis of official and confidential documents related to agenda-setting, advocacy and formal negotiations on EE1 (Table 2). Three interviews were held with key individuals in the organisations acting as policy entrepreneurs. In addition, one interview was held with the Swedish energy attaché since he acted as chair of the Council energy working group during final trilogue negotiations between the Council, EC and EP in spring 2023, leading to political agreements and adoptions of the recast EED. The interviewees were asked about their motifs and entrepreneurial strategies. The participants were also asked about their views on their opponents' strategies in advocacy. The interviews were not

[2] RAP is a global private sector think tank based in Brussel, dedication to accelerate the clean energy transition through thought leadership. https://www.raponline.org

[3] ECF is an international environmental NGO, working to save the world from climate catastrophes. https://www.europeanclimate.org

[4] EEFIG is a hybrid sector expert group comprising over 200 organisations working with energy efficiency investments in EU. It was set up by the EC and the United Nations Environment Programme (UNEP) Finance Initiative in 2013. https://eefig.ec.europa.eu

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recorded, but notes were taken. For texts, I have analysed policy documents from the EC as policy entrepreneurs, policy papers from different MSs, and reports and policy papers from the policy entrepreneurs, looking for perceptions of problems and positions on policy proposals.

Table 2. Data sources.

Data sources	**EE1 principle**
Interviews	IP1. Head of Unit, Energy efficiency, European Commission, DG ENER (March 2023) IP2. Policy officer, Energy efficiency, European Commission, DG ENER (March 2023) IP3. Policy officer, Regulatory Assistance Project (August 2022) IP4. Energy attaché, Swedish Permanent Representation to the EU (March 2023)
Documents	- Energy Union Package: A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy (EC, 2015) - Clean energy for all Europeans package (EC, 2016) - Analysis to support the implementation of the energy efficiency first principle in decision-making (EC, 2020a) - Strategy for Energy System Integration (EC, 2020b) - Stepping up Europe's 2030 climate ambition (EC, 2020c) - EC proposal for recast EED (EC, 2021a) - EC Regulatory Impact Assessment (EC, 2021b) - Answers to the EC public consultation on the recast EED (EC, 2021d) - Commission recommendation of 28.9.2021 on Energy Efficiency First: from principles to practice. Guidelines and examples for its implementation in decision-making in the energy sector and beyond (EC, 2021f) - Annex to the Commission recommendation on Energy Efficiency First: from principles to practice. Guidelines and examples for its implementation in decision-making in the energy sector and beyond (EC, 2021g) - Regulatory scrutiny board: Proposal for a directive of the European Parliament and of the Council on energy efficiency (recast) (EC, 2021h) - Council general approach on the proposal for recast EED (Council, 2022) - Draft report on the proposal for recast EED (Fuglsang, 2022) - EP amendments to the proposal for recast EED (EP, 2022a) - Efficiency first: Key points for the energy union communication (Bayer, 2015) - Energy efficiency: The first fuel for the EU economy (EEFIG, 2015) - Efficiency First: A new paradigm for the European energy system (ECF, 2016) - Efficiency first: From principle to practice. Real world examples from across Europe (Rosenow et al., 2016)

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- Governance for Efficiency First (RAP, 2016)
- Energy Efficiency First: A key principle for Energy Union governance (Bayer, 2018)
- Applying the Energy Efficiency First principle in sustainable finance: Final report (EEFIG, 2023)
- Sweden's reports from 18 meetings in the Council working group for energy, from negotiations until the Council general agreement was adopted
- Sweden's reports from three interinstitutional technical meetings and two trilogue meetings between the Council, the EP and the EC
- Articles in newspapers and magazines

Decision-making in the Council and tripartite negotiations (i.e., trilogues) between the Council, the EC and the EP is secluded (Reh et al., 2013; Roederer-Rynning & Greenwood, 2021). It is difficult for scholars to obtain access to negotiations, which is why most research on EU policymaking draws on voting results. Through cooperation with the Swedish Ministry for Infrastructure, access was given to reports of Sweden's Permanent Representation to the EU to the Government Offices of Sweden from 18 meetings of the Council energy working party, three technical interinstitutional meetings and two political trilogue meetings. Getting of Sweden's reports is important since Sweden held the rotating Council Presidency during the final trilogue negotiations when the deal on EED was done by the Council and the EP. Such sharing of confidential information for research purposes is generally very rare (von Malmborg, 2023a, 2023b, 2024). These provided a unique opportunity to analyse the positions and changes in the positions of MSs, the Council and the EP. This is a methodological merit. Since the reports from the negotiations were used to formulate Sweden's negotiation strategies, they would not falsely convey the positions of others to the Government Offices of Sweden. Thus, the findings were not systematically affected by bias.

These documents include data on the perceptions of problems and policy options of the different actors involved in the policy process. They also include encounters of the policy process itself and the politics therein. Data coding and analysis were performed manually in relation to problem framing, policy proposal, beliefs and motifs for policy change, entrepreneurial approaches (structural or cultural-institutional (cf. Boasson & Huitema, 2017)), entrepreneurial strategies (see Table 1 for a categorisation of different strategies), and kinds of impacts/outputs.

4. Results

4.1. The Problem Stream

Energy efficiency is not considered a problem but rather a solution to different problems. The framing of EU energy efficiency policy has expanded over the years, from being a solution to the security of the energy supply to climate change and, most recently, energy poverty (Dunlop, 2022; von Malmborg et al., 2023a). The focus on climate change mitigation has been a goal of EU energy efficiency policy since the late 1990s (von Malmborg et al., 2023a), taking off with the adoption of the Kyoto Protocol in 1997 and increasingly important with the 2015 Paris Agreement. The need to alleviate energy poverty and enhance energy security became a key problem with Russia's second war on Ukraine and the energy crisis exacerbated by EU sanctions on Russia (Kuzemko et al., 2023).

Prior to the EC under President Jean-Claude Juncker in 2015 presenting an Energy Union strategy (EC, 2015), the Brussel-based think tank RAP and EEFIG, an EU-wide expert group on energy efficiency finance, stressed that energy efficiency is not only the most cost-effective way to reduce GHG emissions; it is also necessary for large-scale development and integration of renewable energy in the energy system to control costs and maximise consumer welfare (Bayer, 2015; EEFIG, 2015).

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In the EU, energy efficiency is increasingly framed as a solution to economic problems, security of supply problems, environmental problems and social problems (von Malmborg et al., 2023a), with the EC (2021a, p. 29) referring to the *multiple benefits* of energy efficiency, i.e.,

"Improving energy efficiency throughout the full energy chain, including energy generation, transmission, distribution and end-use, will benefit the environment, improve air quality and public health, reduce GHG emissions, improve energy security by reducing dependence on energy imports from outside the EU, cut energy costs for households and companies, help alleviate energy poverty, and lead to increased competitiveness, more jobs and increased economic activity throughout the economy, thus improving citizens' quality of life".

The EC added more problems related to energy efficiency that needed to be addressed by EU policy with the recast EED. The first is the slow uptake of energy efficiency measures; the second is the unequal treatment of energy efficiency and demand-response measures on the one hand and supply-side measures on the other (EC, 2020a, 2020b, 2021a, 2021b).

There remains a large, untapped potential for cost-efficient energy efficiency in the EU (EC, 2021b), which calls for "further promotion of energy efficiency actions and the removal of barriers to energy efficient behaviour, including for investments" (EC, 2021a, p. 15). Knoop and Lechtenböhmer (2017) estimated the final energy savings potential in the EU up to 2030. Assuming low policy intensity, energy savings between 10–28 % could be realised compared to baseline development. With high policy intensity, the potential is 7–44 %. More recent estimates revealed that the 2030 technical potential for final energy savings across the residential, commercial, industrial and road transport sectors is 200 Mtoe, corresponding to 22.6 %, while the economic savings potential is 167 Mtoe or 18.9 % (EC, 2021e, 2022a). The economic potential is twice as large as the energy savings required to meet the 2030 target (Figure 2), but policies are needed to realise this potential (2021a, 2021b).

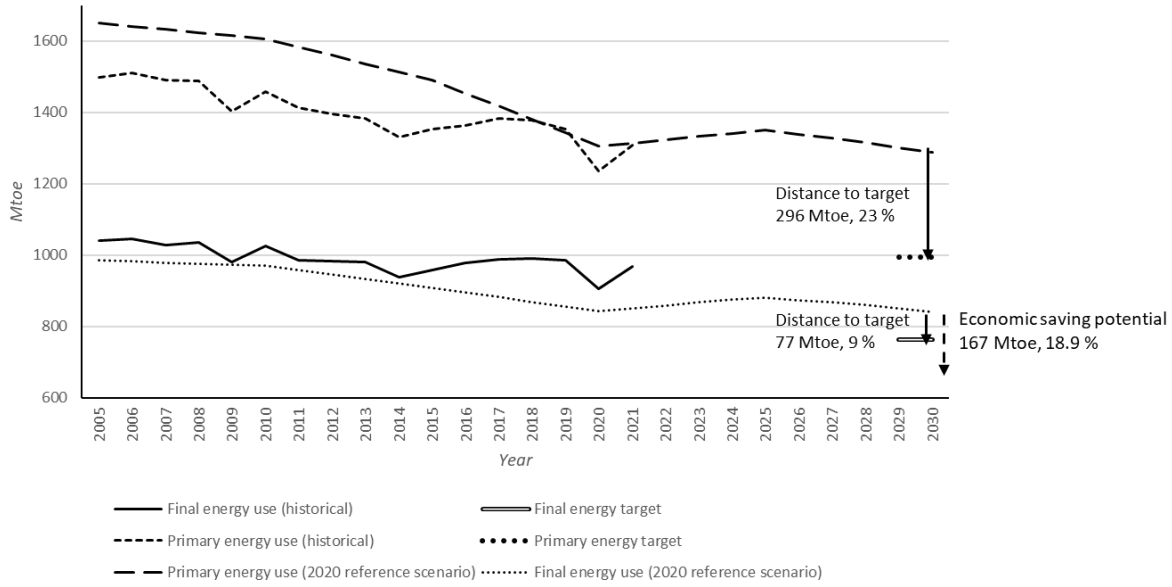

Figure 2. Trends and projections of energy use in the EU Based on data from EC (2020a), Eurostat (2023), European Environment Agency (2023).

The importance of demand-side measures, including user flexibility, is that the transition to a clean energy system is facing new challenges to ensure a secure and affordable energy supply. According to the RAP, ECF, EEFIG and EC, energy demand- and supply-side measures must compete on equal terms. Demand-side flexibility can provide "significant benefits to consumers and to society at large, and can increase the efficiency of the energy system and decrease the energy costs, for example by reducing system operation costs resulting in lower tariffs for all consumers" (EC, 2021a, p. 31).

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The problem stream began to ripen with communication on the 'Energy Union' (EC, 2015) and the 2016 'Clean Energy for All Europeans' package, which included the amended EED and the new Governance Regulation. The 'European Green Deal' (EGD) (EC, 2019), including the 'Energy Systems Integration Strategy' (EC, 2020b), the strategy for stepping up the EU's climate policy ambition (2020c), the 'European Climate Law' (ECL) (EU, 2021) and the 'Fit for 55' package (EC, 2021c) together with the EC's 'REPowerEU Plan' (EC, 2022b) and the associated 'EU Save Energy Strategy' (EC, 2022c), the latter two responses to the energy challenges raised by Russia's second war on Ukraine (Kuzemko et al., 2023), made it fully ripe to outline why an energy efficiency policy and a binding EE1 are needed.

4.2. The Policy Stream

4.2.1. The Commission Proposal

The introduction of the EE1 narrative to EU energy and climate policy was strongly influenced by the proactive policy entrepreneurship of the Brussels-based think tank RAP, environmental NGO ECF and EEFIG. They provided several reports to the EC in the preparation of the 'Energy Union' strategy and the 'Clean Energy for All Europeans' package (e.g., Bayer, 2015, 2018; EEFIG, 2015; Rosenow et al., 2016; ECF, 2016; RAP, 2016). EEFIG, working towards the financial sector to increase investments in energy efficiency, stressed that energy efficiency investments are strategically important for the EU and that a binding EE1 with 'multiple benefits' framing can help the sector. Regarding the role of EE1, Bayer (2018, p. 2) mentions the following:

"It is a necessary decision tool to ensure cost-effective decarbonisation of the economy, including facilitating the transition to a future powered by renewable energy, and to exploit the multiple benefits of energy efficiency. It asks the following question: Would it be better to help customers invest directly in energy-saving actions and demand-side response, rather than paying for supply-side actions, fuels, and infrastructure? The result is a more cost-effective allocation of resources across the energy system."

The EC proposed in July 2021 to strengthen the provisions on EE1 and regulate it for the first time in a separate article of the EED, with binding requirements for implementing measures in MSs. This made the policy stream ripe. MSs should ensure that actors take energy efficiency solutions into account in policy, planning and *major* investment decisions in energy systems and in sectors that affect energy supply and energy demand, including subsidised housing. The EC did not clarify what was meant by *major* investments.

According to the EC (2020a, 2021a), the proposal for a recast EED was an important step toward climate neutrality by 2050, where energy efficiency will be treated as an energy source in itself, corresponding to energy efficiency as the 'first fuel'. It is also important for reaping the 'multiple benefits' of energy efficiency. The central role of energy efficiency is supported by EE1. For the role of EE1 in EU energy and climate policy, the EC (2021a, p. 29-30) proposal states the following:

"The energy efficiency first principle is an overarching principle that should be taken into account across all sectors, going beyond the energy system, at all levels, including in the financial sector. Energy efficiency solutions should be considered the first option in policy, planning and investment decisions when setting new rules for the supply side and other policy areas. The Commission should ensure that energy efficiency and demand-side response can compete on equal terms with generation capacity. Energy efficiency improvements need to be made whenever they are more cost-effective than equivalent supply-side solutions. This should help the Union exploit the multiple benefits of energy efficiency, particularly for citizens and businesses. Implementing energy efficiency improvement measures should also be a priority in alleviating energy poverty."

To facilitate the implementation of EE1, the EC (2021f, 2021g) issued a recommendation and guidance to MSs on how the principle should be applied in different settings in September 2021. In 2023, EEFIG (2023) issued guidance on how EE1 could be implemented by banks and other finance institutions to strengthen energy efficiency.

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4.2.2. Views of Interest Groups

During the winter of 2020–2021, the EC organised a public consultation. A total of 344 answers were collected, most of which included a binding EE1 (EC, 2021d). More than 150 IGs requested that EE1 be applied to all relevant national energy policies related to the whole energy system. The views of RAP, ECF and EEFIG and the proposal of EC were supported by other IGs, particularly the Coalition for Energy Savings (CfES), an environmental NGO gathering more than 500 business and civil society associations, 200 companies, 1500 cooperatives and 2500 cities in favour of energy efficiency, and the European Alliance to Save Energy (EU-ASE). They all stressed that the "EE1 principle should be systematically and consistently applied in EU law" (CfES, 2021, p. 27). CfES also stressed that the reference to *major* investment decisions should be deleted (CfES, 2022).

Not all the IGs favoured EE1. Large state-owned energy utilities such as České Energetické Závody and Electricité de France, Eurelectric (the EU Association for Electricity Producers), the German Industry Association VIK Verband der Industriellen Energie- und Kraftwirtschaft, Swedish Forest Industries, Jernkontoret (the business association for Swedish iron and steel industries), and the Belgian Technology Industry Association Agoria were critical. The main critique was that energy efficiency should not be given priority over other measures to mitigate climate change.

4.3. The Politics Stream

Policy- and decision-making on EU legislation follow the Ordinary Legislative Procedure (Roederer-Rynning, 2019), in which the EC has a monopoly to propose legislative reforms. The council and the EP negotiate and decide on a negotiation mandate for the trilogue negotiations between the Council, the EP and the EC, in which the Council and the EP have to reach an agreement by consensus (Brandsma, 2015; Roederer-Rynning & Greenwood, 2021). In trilogue meetings, EU institutions are represented by negotiating delegations tasked with facilitating and finding a legislative compromise between institutions.

For the EU mood, there is a constant debate on subsidiarity and the need for collective action at the EU level. MSs often contest EU energy efficiency policy based on either sovereignty (subsidiarity claims) or substance (Wettestad et al., 2012; Herranz-Surralés, 2019; Dupont, 2020). MSs usually want flexibilities related to national circumstances. For energy efficiency policy, the EU does not hold exclusive competence. Although MSs maintain significant sovereignty over energy policy, the EC has achieved increasing competencies in the internal dimensions of EU energy policy (Maltby, 2013; Herranz-Surralés & Solorio, 2022), which since 2009 is based on Article 194 of the Treaty on the Functioning of the European Union (TFEU) (EU, 2012b). EU climate policy is based on Articles 191–193 of the TFEU. In response to the subsidiarity principle, the EC claimed in its proposal for the recast EED the need for action at the EU level but also that there is flexibility for MSs:

"Given the higher climate target, Union action will supplement and reinforce national and local action towards increasing efforts in energy efficiency. The Governance Regulation already foresees the obligation for the [EC] to act in case of a lack of ambition by the [MSs] to reach the Union targets, thus de facto formally recognising the essential role of Union action in this context, and EU action is thus justified on grounds of subsidiarity in line with Article 191 of [TFEU]" (EC, 2021a, p. 10).

"The Energy Efficiency Directive essentially sets the overall energy efficiency objective but leaves the majority of actions to be taken to achieve this objective to the Member States. The application of the [EE1] principle leaves flexibility to the Member States" (EC, 2021a, p. 12).

The politics stream materialised through negations in the Council and the EP, followed by the trilogue negotiations. Herweg (2016) suggested that the politics stream counts as ripe if the EC supports an issue. However, we argue that it is not enough for the EC to support an issue for the politics stream to be ripe. In addition, the Council and the EP need to have adopted their negotiation mandates for the trilogues for the politics stream to be ripe. The EC is an agenda-setter and policy-entrepreneur, but the Council and the EP are the colegislators in the EU and the ones that negotiated and decided on the recast EED and EE1.

4.3.1. Council negotiations

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The decision on the Council position on EE1 was made by the Council of Energy Ministers, but most negotiations took place at the attaché level in the Council Energy Working Party. Negotiations took place slowly in September 2021 under the Slovenian Council Presidency. In spring 2022, under the French Presidency, the Czech Republic, Hungary, Poland and Sweden asked for more MS flexibility. Estonia, Finland, Germany, Greece, Hungary, Ireland, Italy, Latvia and Malta, constituting a blocking minority[5], argued that EE1 should cover only the public sector. Six MSs claimed that *major* should be clarified. Austria and Latvia proposed that only projects exceeding 50 million euros each or 75 million euros for transport infrastructure projects should be included. Finland, Germany and Greece proposed that the economic thresholds for the size of investments to be covered should be tenfold to 500/750 million euros. Overall, MSs had quite different views on the scope of binding to EE1. In the negotiations, the rotating Council presidency acted as an 'honest broker' (Elgström, 2003), facilitating reflexive debates over coalition borders. The Slovenian and French Presidencies managed to get the Council adopt a general agreement in June 2022, in which the thresholds were set at 150 million euros each and 250 million euros for transport infrastructure projects (Council, 2022). The blocking minority did not use its veto, and the decision was made unanimously. When the EP had adopted its report and trilogues with the EP and the EC were initiated, the Czech and Swedish Presidencies managed to adapt the Council negotiation mandate.

4.3.2. European Parliament Negotiations

In the EP, the EED dossier was handled by the ITRE committee, which appointed Niels Fuglsang (Denmark, S&D) as rapporteur[6]. He presented his draft report (Fuglsang, 2022) in late February 2022. He proposed increasing the scope of EE1 from *major* to *all* relevant energy-related planning, policy and investment decisions in all sectors, including the public and private finance sectors. The need to strengthen the role of EE1 was also stressed by the rapporteur of the EP ENVI committee, Eleonora Evi (Italy, Greens/EFA). In mid-July, the ITRE voted for adoption of the proposals of the rapporteur, with minor amendments. The proposal was supported by the EPP (conservatives), S&D, Renew Europe (liberals) and the Greens/EFA. In mid-September 2022, the EP plenary adopted the final report (EP, 2022).

4.3.3. Trilogue Negotiations

Trilogue negotiations were initiated under the Czech Council Presidency in October 2022 and finalised during the Swedish Presidency in March 2023. In commenting on the EP position, a handful of MSs wanted to maintain the threshold of the Council's general approach. However, ten MSs indicated that they could be flexible to lower the threshold, including more projects, decisions, and investments. The EC argued that higher thresholds reduce the scope of the application and therefore the purpose of EE1 and were beneficial to MSs wanting to make compromises. After several political trilogue meetings, characterised as deliberative negotiations (von Malmborg, 2023b), an agreement was reached between the Council and the EP in March 2023, implying that EE1 is to be applied in the public and private sector on policy, planning and investment decisions exceeding 100 million euros each and 175 million euros in the transport sector. In the trilogue negotiations, the Swedish Council Presidency acted as an honest broker and chaired the meetings and drafted most compromise texts, forcing debates and facilitating reflexion on the meaning and scope of the EE1 principle. It managed to bridge political conflicts to get a deal with the EP, where the EP let go of its position that *all* projects and investment decisions should be covered by the EE1 principle and thresholds were included.

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[5] For the Council to take a decision on legislation, qualified majority (>65 % of the votes) is needed. A group of member states counting >35 % of the votes can block a decision, hence a 'blocking minority'.

[6] The responsible committee of the EP appoints a Member of the EP (MEP) as a so-called rapporteur, to draft a report with amendments to the EC proposal. The rapporteur is also acting as the EP's lead negotiator in trilogue negotiations between the EP, the Council and the EC.

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5. Analysis and Discussion

5.1. Opening the Policy Window

The policy discussion about EE1 was introduced in the EU in approximately 2015 through 'Energy Union' communication. In 2016, the EC proposed introducing EE1 as a guiding principle in EU legislation with the 'Clean Energy for All Europeans' package (EC, 2016). It could have been done in the EED, which was to be amended by then. However, there was a lack of politically understandable problem framing in 2015 and 2018, and no policy window opened for making EE1 binding. The politics stream was not receptive to the techno-economic needs for systems approach and merits of consumer flexibility proposed by RAP, ECF and EEFIG. It ended with EE1 being defined in the Governance Regulation, without requirements for application in practice. There was a lack of politically understandable problem framing in 2015, and no policy window opened for making EE1 binding. The timeline for introducing the EE1 narrative to EU energy and climate policy is presented in Figure 3.

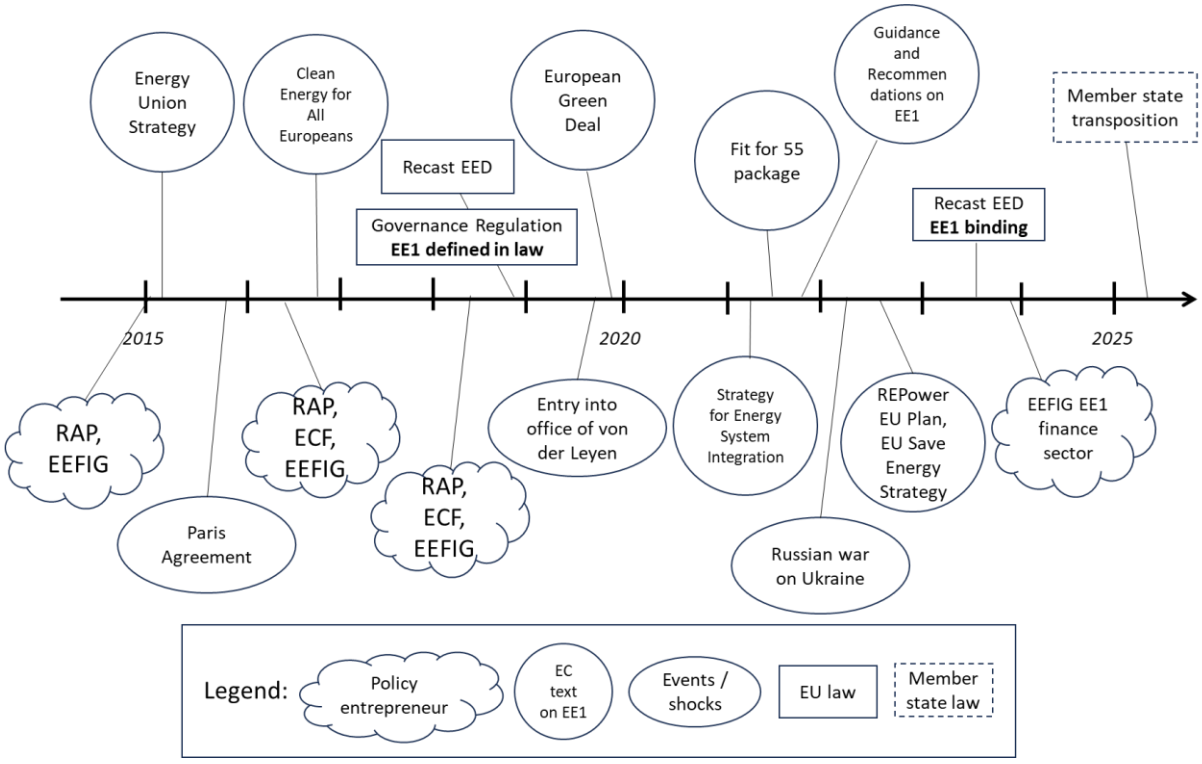

Figure 3. Timeline of making EE1 a binding principle in EU energy and climate policy.

Following a sequence of strategy documents part of the EGD, e.g., the Energy Systems Integration Strategy and the strategy for stepping up the EU's climate ambitions (EC, 2020b, 2020c), it took until 2021 before the EC presented a proposal to make EE1 binding. This time is a separate article in the recast EED with binding requirements for MSs. Now, the policy window started to open by a push from the problem stream, with clear problem narratives. First, the Paris Agreement targets limiting the temperature increase to 1.5–2 °C above preindustrial levels and consequential demands for extensive GHG emission reductions. This led the EC to present the EGD and the EU to adopt the ECL. Second, and more acutely, Russia's second war on Ukraine and the energy crisis that followed EU sanctions (Kuzemko et al., 2023) led the EC to present the 'REPowerEU Plan' and the associated 'EU Save Energy Strategy', which stressed the need for stronger energy efficiency policy. These two external 'events' or 'external shocks' from above are examples of the importance of "seizing synchronistic moments when such windows open from political situations 'above' or 'below'" (Kreienkamp et al., 2022, p. 735). Third, indicators showed a large untapped economic potential for further energy savings. Fourth, the increased integration of renewable energy sources in the power system requires a systems

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approach to the green energy transition, with consumer flexibility and demand-side measures (Pató & Mandel, 2022).

This can be added to the discourse about 'multiple benefits' of energy efficiency, where energy efficiency, like a Swiss army knife, helps solve all kinds of problems (von Malmborg et al., 2023a). This diffuse framing of energy efficiency policy could be a reason why the economically profitable potential for energy efficiency is still not being used, despite the reference to multiple benefits being made to help more politicians appreciate energy efficiency. Fawcett and Killip (2019) found that multiple benefits arguments are most persuasive when linked to the values and priorities of politicians, most of whom do not see an intrinsic value in energy efficiency. Kerr et al. (2017) found that the recognition of 'multiple benefits' may not equate with increased policy support. Instead, it is more likely that different rationales will have relevance at different times for different audiences. The focus on climate change and energy security is clearer as problem narratives, although both the EC and EP equally emphasised the possibility of reaping 'multiple benefits' in the negotiations on EED and EE1. The MS in the Council considered mitigating climate change to be the most important problem for addressing energy efficiency (von Malmborg, 2023a).

The policy window for EE1 also opened from an 'internal event' (von Malmborg, 2023b), i.e., the entry into office of the new EC President Ursula von der Leyen and the EU Energy Commissioner Kadri Simson of Directorate-General for Energy (DG ENER)) in November 2019. Given the formal monopoly position of the EC to initiate legislation, each beginning of its term of office can open a policy window (Herweg, 2016). It was particularly important for policy entrepreneurs who advocated strengthening EE1, such as RAP, ECF, and EEFIG but also for other advocates of strong energy efficiency policy, such as EU-ASE and CfES, that President von der Leyen and energy commissioner Kadri Simson of DG ENER were receptive. The EC's President gives political guidance to the EC, and DG ENER held the lead in formulating the proposal.

One month in office, von der Leyen presented, acting as a key authoritative policy entrepreneur in the politics stream capable of connecting agenda and decision-coupling (Kreienkamp et al., 2022), the EGD (EC, 2019) as the EU's response to the Paris Agreement. The EGD was also a response to bottom-up pressure from more ambitious climate policies, with unprecedented levels of public engagement in climate change, the success of the *Fridays for Future* strikes, and NGOs such as the ECF (Kreienkamp et al., 2022). Von der Leyen coined EGD as "Europe's man on the moon moment" (Hutchinson, 2019), and it is one of six priorities for the 2019–2024 period of the von der Leyen EC. It is the EU's climate action plan and strategy for the green transition. Part of the EGD was the ECL, adopted in July 2021 (EU, 2021), stating that EU GHG emissions will be reduced by 55 % by 2030 compared to 1990 levels and that the EU, by 2050, will be the world's first climate-neutral continent. The proposal on a recast EED was presented in July 2021 as part of a legislative policy package to make legislation on climate, energy, transport, land use and taxation 'Fit for 55' (EC, 2021c). Thus, the policy window was further opened by a push from the politics stream.

5.2. Strategies and Success of Policy Entrepreneurs

Policy change occurs when the three streams are ripe and connected by policy entrepreneurs. For stream independence, the problem and policy streams were characterised by arguing, while negotiations dominated the politics stream, despite the EC being present in all streams. Thus, stream independence is not violated. The different strategies used by RAP, ECF and EEFIG to persuade the EC, and then by EC (DG ENER), to persuade MSs, the Council and the EP, as policy entrepreneurs in the policy process on making EE1 a binding principle with the recast EED, are presented in Table 3.

Table 3. Strategies deployed by policy entrepreneurs to make EE1 a binding principle in EU climate policy.

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Policy entrepreneur	**Attention- and support seeking strategies**	**Linking strategies**	**Relational management strategies**	**Arena strategies**
RAP, ECF and EEFIG				
2015–2023 (change)	Problem framing, idea generation, strategic use of information, using demonstration projects, rhetorical persuasion	Coalition and team building with bureaucratic insiders and policy influencers outside of government, linking energy efficiency to issues such as energy systems perspectives, demand-response, climate change mitigation, multiple benefits	Networking by using social acuity	Timing, venue shopping, influencing EC as well as MEPs
EC (DG ENER)				
2021–2023 (change)	Problem framing, idea generation, strategic use of information, rhetorical persuasion	Linking energy efficiency to issues such as energy systems perspectives, demand-response, climate change mitigation, multiple benefits	n/a	Timing

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ECF, EEFIG and RAP, the latter two with strong analytical resources, used so-called 'salami tactics'[7] (Zahariadis, 2003) to inspire the EC to introduce the narrative of EE1 in EU policy, first in the Energy Union communication (EC, 2015), second in the 'Clean Energy for All Europeans' package (EC, 2016), manifested in the Governance Regulation (EU, 2018b), and finally as a self-standing, binding article in the Recast EED (EU, 2023).

RAP, leading the work in the consortium, was motivated by a dedication to accelerating the clean energy transition through thought leadership, taking a systems perspective on energy policies traditionally addressed as silos, while ECF was motivated by a will to save the world from climate catastrophes and provide funding. Since 2015, they have provided guidance in reports, policy papers and meetings on how EE1 has been and can be implemented as well as its benefits for more than five years. These organisations were also successful in linking the problem and policy solution to part of the politics stream, influencing the EP rapporteur, calling for a very strong application of EE1, and creating room for negotiation with the Council to end up with a compromise. Overall, this finding echoes the findings of Ringel et al. (2021, p. 9) that "especially hybrid stakeholders [such as EEFIG and CfES], combining industry, think tanks and NGO actors, can take a strong role for consensus building" on EU energy efficiency policy.

Given the formal monopoly of the EC to set the agenda and initiate EU legislation, it was a natural policy entrepreneur coupling the problem, policy and politics streams in the case of EE1. This confirms studies of EU energy policy integration (Maltby, 2013), the 2009 EU energy and climate package (Bocquillon, 2018), the relaunch of the EU economic reform agenda (Copeland & James, 2014), and the EU science and technology framework programme (Edler & James, 2015). In our case, the EC, through DG ENER, had a policy solution (binding EE1) and looked for a way to frame the problem(s) that fit their policy option, thus being a viable solution for identifying adequate problems (doctrinal/problem-focused advocacy). Then, the EC was present in the Council negotiations and took part in the trilogue negotiations.

The coupling of streams mainly followed the mechanisms of 'doctrinal advocacy' (Zahariadis, 2003) or 'problem-focused advocacy' (Boscarino, 2009), where the RAP, ECF, EEFIG and EC, as policy entrepreneurs, looked for a problem that suited a given solution. EE1 was established as a nonbinding principle with the Governance Regulation, but for EE1 binding, the policy entrepreneurs had to look for better problem narratives than in 2016–2018 when the EED was amended and the Governance Regulation was negotiated.

RAP, ECF and EEFIG, as 'advocate' policy entrepreneurs, used rather few strategies to reach a limited set of goals (cf. Arnold, 2021) and persuaded the EC to present transformative policy change. As highlighted by Kreienkamp et al. (2022), the 'hyperconsensual' environment of EU politics poses a great challenge to policy entrepreneurs seeking to advance transformative policy change. The central role of consensus-building in EU policy change is to maintain a path-dependent dynamic, where no single actor can prescribe policy and minority interests can be easily mobilised to block reform (Hix, 2007). The durable advocacy of RAP, ECF and EEFIG led the EC to propose gradually stronger provisions on EE1. The EC itself was receptive and acted strategically on 'external shocks' to reframe energy efficiency policy and the role of EE1 to make it appetizing for EU politicians; thus, it was successful in coupling all three streams according to its view. This was not only a "coincidence of propitious conditions" (Palmer, 2015, p. 281) in the EU politics stream but also a strategically outlined act of advocacy.

6. Conclusions and Policy Implications

The EU has recently adopted EE1 as an overarching binding principle in EU energy and climate policy. Energy efficiency should be considered the first option in policy planning, decision-making on investments regarding the energy system and in sectors that affect energy supply and energy

[7] So-called salami tactics means breaking favoured policies into modest segments and presenting them sequentially, steering policymakers toward the desired outcome without raising alarm at any one stage.

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demand, with a focus on projects and investments exceeding 100 million euros each and 175 million euros for transport infrastructure projects. EE1 aims to speed up investments in energy efficiency, energy savings and demand-side measures. It will help the EU reach its new climate targets and contribute to the UN SDGs on affordable and clean energy. This article aimed to analyse the policy processes and politics of the formulation of EE1 as a legally binding principle in the EU. This was done through the lens of the MSF and analysing the strategies of policy entrepreneurs as change agents.

This transformative policy change took place when politics could address problems in a new way with the help of a new set of policy entrepreneurs. For the *problem stream*, what frames the legislation on EE1 is the need to mitigate climate change, enhance the energy security of supply, improve the competitiveness of European companies and curb energy poverty among EU households and other 'multiple benefits'. Energy demand- and supply-side measures should also compete on equal terms. The *policy stream* built on the IEA (2019) narrative on energy efficiency as the 'first fuel', which paved the way for a more prominent role of energy efficiency in EU energy and climate policy, advocated by RAP, ECF and EEFIG as policy entrepreneurs and introduced with the Juncker Commission's Energy Union strategy (EC, 2015) and the Governance Regulation (EU, 2018b) with its nonbinding EE1. Most stakeholders agreed on making the principle binding but had different opinions on the specific policy design. The views of stakeholders were divided along two lines of political conflict: (i) which sectors to cover and (ii) the size of the projects covered. The *politics stream* includes negotiations within and between the Council and the EP. The negotiations on EE1 were of a deliberative nature, a problem-solving exercise with policy-oriented learning related to the sectors included and economic thresholds (von Malmborg, 2023b).

In conclusion, the policy window – the eye of every storm – was opened by a push from the problem stream 'above', notably the Paris Agreement and the energy crisis following Russia's second war on Ukraine, which made energy efficiency high on the EU agenda. The policy window was also opened by a push from the politics stream with the entering office of the new Commission in November 2019, which already presented the EGD in December 2019. This provided a window of opportunity for the EC to propose making EE1 legally binding with the recast of the EED (Figure 4).

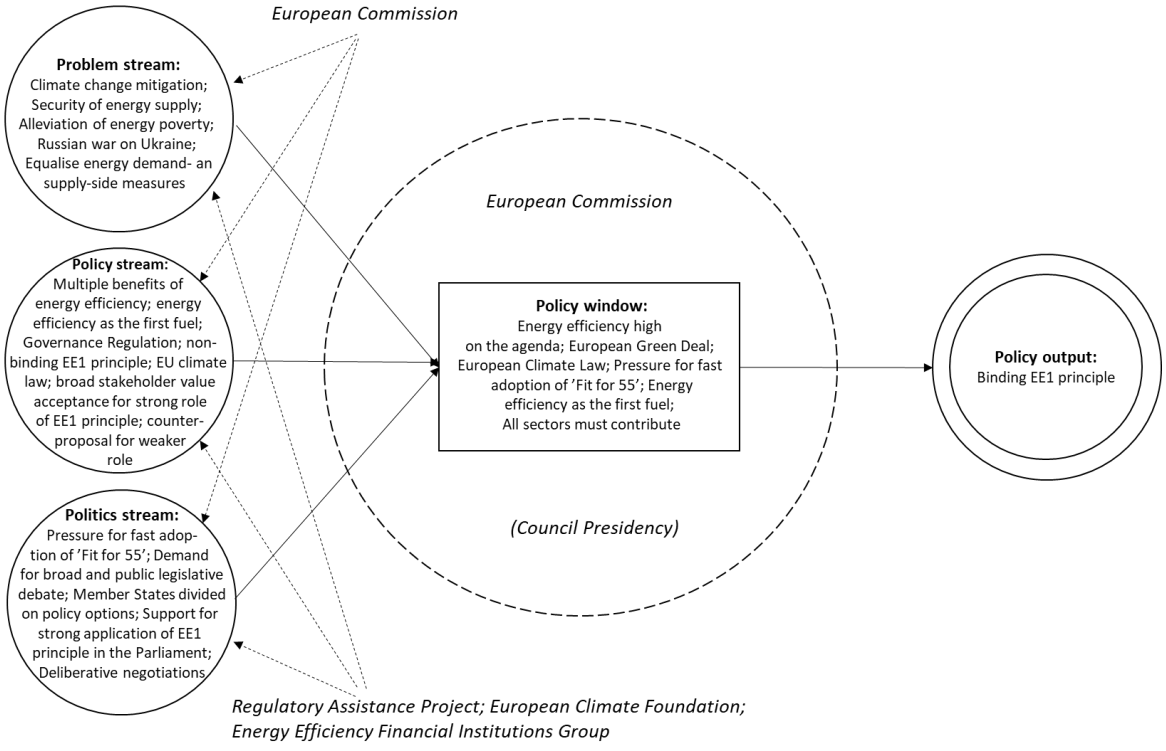

Figure 4. Multiple streams on EE1.

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The process that merged the streams and reframed the agenda was formed by the policy entrepreneurship of RAP, ECF and EEFIG supported by CfES and EU-ASE, who had long been advocating strong energy efficiency policy, approaching the EC since the mid-2010s on the importance of EE1. They coupled the problem and policy streams and made the EC and the colegislators apt to develop provisions on EE1. In addition, the institutional role of the EC as a policy entrepreneur, proposing revised legislation and coupling all streams should not be underestimated.

This paper provides better knowledge of the policy processes and politics related to EE1, contextualising and concretising the concept of energy efficiency as the 'first fuel' into binding law. In addition, it provides better knowledge of the workings of policy entrepreneurs in public policymaking in the EU, which are related to EE1 and the clean energy transition for the EU to become climate neutral by 2050. The finding that think tanks and particularly civil society organisations can take the role of policy entrepreneurs is important (cf. von Malmborg, 2024b). This study provides new insights into who can act as policy entrepreneurs and how in EU policymaking. Previous research on policy entrepreneurs in EU policymaking has focused on the EC, MSs and/or IGs from the private sector (e.g., Mazey & Richardson, 2006; Maltby, 2013; Herweg, 2016; Edler & James, 2015; Bocquillon, 2018; Herweg & Zohlnhöfer, 2022; von Malmborg, 2022; Bürgin, 2023), although Bocquillon (2018) found that the Council Presidency acted as an entrepreneur for the adoption of the EU energy and climate policy package in 2009. Kastner (2014) described the role of a polymorphous network of civil society organisations that was able to gain momentum after the financial crisis and to influence the financial reform process towards financial consumer protection. Kreienkamp et al. (2022) also identified targeted advocacy by environmental organisations towards the EC as a key ingredient in driving policy change related to EDG. Despite the fact that the policy window opened by pushes from both the problem and politics stream, policy entrepreneurs used 'doctrinal advocacy', a solution looking for its problem, to couple the streams. The solution was presented in 2015, but it was not until 2021 that problem framing was appetized to policymakers. They used different entrepreneurial strategies to reach their aims about policy change. Notably, policy entrepreneurs used 'salami tactics' to gradually introduce and strengthen the role of EE1 in EU energy and climate policy.

This paper contributes to the growing literature on the policy processes and politics of EU energy efficiency policymaking (Kerr et al., 2017; Fawcett & Killip, 2019; DuPont, 2020; von Malmborg, 2021, 2022, 2023a, 2023b, 2024a; von Malmborg & Strachan, 2023; Dunlop & Völker, 2023). Compared to previous analyses of the policy process and politics of EE1, using discourse analysis (von Malmborg, 2023a) and the ACF (von Malmborg, 2023b), applying the MSF for the analysis in this paper provides additional and invaluable knowledge on the strategies of policy entrepreneurs as agents for policy change, which was not revealed in those studies. Discourse analysis and the ACF could benefit from a combination with MSF to add to the analysis of policy entrepreneurs to better understand agency in policy change (cf. Mintrom & Vergari, 1996; Winkel & Leipold, 2016).

This paper provides valuable knowledge for policymakers and stakeholders outside the EU on how the concept of energy efficiency as the 'first fuel' can be turned into a binding principle to be applied by actors in different sectors. This paper can inform various policymakers and stakeholders on the policy processes, values, potential conflicts and agency related to policymaking on the clean energy transition. It can help them better shape their advocacy and policy-entrepreneurial strategies in future policymaking.

For further research on EE1, it is relevant to analyse how MSs implement EE1 in national legislation (cf. Chlechowitz et al., 2022), as well as how organisations use it as a tool for decision-making (cf. Mandel et al., 2022; Yu et al., 2022). From a broader perspective, there is a need to better understand the politics of the clean energy transition. Such knowledge, from the EU horizon, could be gained from comparative analyses of the 15+ legal acts of the 'Fit for 55' package, which aims at making EU legislation on climate, energy, transport, land use and taxation in line with the climate targets of the ECL.

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List of Abbreviations

ACF	Advocacy Coalition Framework
CfES	Coalition for Energy Savings
EC	European Commission
ECF	European Climate Foundation
ECL	European Climate Law
EE1	Energy Efficiency First Principle
EED	Energy Efficiency Directive
EEFIG	Energy Efficiency Financial Institutions Group
EGD	European Green Deal
ENVI	EP's Committee on the Environment, Public Health and Food Safety
EP	European Parliament
EPP	European Peoples Party
EU-ASE	European Alliance to Save Energy
Greens/EFA	Greens/European Free Alliance (green parties)
IEA	International Energy Agency
IG	Interest Group
IPCC	Intergovernmental Panel on Climate Change
ITRE	EP's Committee on Industry, Research and Energy
MS	Member State
MSF	Multiple Streams Framework
NGO	Nongovernmental Organisation
RAP	Regulatory Assistance Project
SDG	United Nations Sustainable Development Goal
S&D	Progressive Alliance of Socialists and Democrats (social democrats)

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