



EIB policy entrepreneurship and the EU's regulation of Green Bonds

Lukas Spielberger

To cite this article: Lukas Spielberger (2025) EIB policy entrepreneurship and the EU's regulation of Green Bonds, Journal of Economic Policy Reform, 28:1, 37-54, DOI: [10.1080/17487870.2024.2356810](https://doi.org/10.1080/17487870.2024.2356810)

To link to this article: <https://doi.org/10.1080/17487870.2024.2356810>



© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 26 May 2024.



Submit your article to this journal [↗](#)



Article views: 1869



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 4 View citing articles [↗](#)



OPEN ACCESS



EIB policy entrepreneurship and the EU's regulation of Green Bonds

Lukas Spielberger

Institute of Political Science, University of Luxembourg, Esch-sur-Alzette, Luxembourg

ABSTRACT

This article investigates how the European Investment Bank (EIB) influenced EU policymaking by promoting Green Bonds as an asset class. The article argues that the EIB has been instrumental in formulating the EU's recently agreed Green Bond Standard. The EIB's expertise and successful coalition building later allowed it to put Green Bonds on the EU's policy agenda and develop a blueprint for the EU's rules. The article concludes by drawing implications about the conditions under which the EIB might be able to engage in policy entrepreneurship more generally.

ARTICLE HISTORY

Received 11 October 2023

Accepted 14 May 2024

KEYWORDS

European Investment Bank;
green bonds; policy
entrepreneurship;
sustainable finance

JEL CLASSIFICATION

G18

1. Introduction

In November 2023, the European Union (EU) announced the creation of a European Green Bond Standard (EUGB). The EUGB represents a significant development in the EU's sustainable finance agenda. It is supposed to establish strict criteria for Green Bonds to become a regulated class of financial assets and place the EU at the forefront of sustainable finance regulation (European Parliament 2023).

The EU's ambition to create a broadly applicable standard is a clear step towards resolving regulatory problems that had previously hampered the acceptance of Green Bonds (Bishop 2019; Deschryver and de Mariz 2020). Green Bonds have long been considered an important financial instrument to help channel capital towards climate-friendly investments and support the green transition (Maltais and Nykvist 2021; Mathews et al. 2010; Monk and Perkins 2020). However, the EUGB is the first attempt to establish an official regulatory standard for Green Bonds, which can be used internationally. The EUGB is therefore expected to serve as a “gold standard” for Green Bonds (Clifford 2023; Spinaci 2022).

This article aims to understand the EU's choice of the regulatory model of a “gold standard” for the budding Green Bond market. The EU's regulation is unconventional as it sets a rather strict standard, which can be used by issuers around the world, but is not mandatory for issuers inside the EU. To explain this choice, the article highlights the role of the European Investment Bank (EIB). As the remainder of this article will discuss, the EIB has played a crucial role in developing the EU's regulation of Green Bonds, and of the

CONTACT Lukas Spielberger ✉ Lukas.spielberger@uni.lu

© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

market segment more generally (Monk and Perkins 2020). The EIB issued the world's first Green Bond in 2007 – labelled the Climate Awareness Bond (CAB) – and it has long been the largest issuer of Green Bond, contributing largely to the deepening and broadening of the market. Moreover, the EIB has become a leading authority on Green Bond certification and has contributed to negotiations on voluntary Green Bond principles that predated the EU's sustainable finance agenda. Most recently the EIB has contributed to the EU's negotiations on sustainable finance regulation and has committed itself to promoting the EUGB.

The fact that the EIB was such an important factor in developing a key piece of EU financial legislation is intriguing given the Bank's position in the EU's institutional and political framework. Institutionally, the EIB is a public bank owned by the EU's 27 member states and it has formerly portrayed itself as a “policy-driven bank” that follows the political priorities of the EU (European Investment Bank 2001). It has neither the formal power nor the political mandate to formulate EU policies. However, recent academic work has argued that the Bank has acted as a policy entrepreneur and promoted new policies (Liebe and Howarth 2020). Building on this work, this article investigates how the Bank succeeded in influencing EU policies when it engaged in policy entrepreneurship in the context of the EU's regulation of Green Bonds.

This article conceives of the EIB's policy entrepreneurship as a set of actions aimed at policy innovation (Aviram, Neomi, and Beeri 2020; Capano and Galanti 2021). Drawing from the policy entrepreneurship analytical framework, it identifies three sets of activities, through which the Bank influenced the EU's Green Bond regulation. The EIB's pioneering involvement in sustainable finance regulation allowed the Bank to *develop policy solutions*; the EIB *built a coalition* in favour of a European standard; and lastly, the EIB *sought attention* for its preferred approach to regulating Green Bonds when it participated in EU expert groups. While the EIB had developed strong expertise for Green Bonds and a network of allies that shared its preference for a “gold standard” regulation, its success in shaping the EU's policy was enabled by the expert-led agenda-setting process in the field of sustainable finance.

The remainder of this article is structured as follows. Section two examines existing academic and grey literature on the development of the Green Bond market and regulatory issues. Section three proposes a way of studying the EIB's potential for policy entrepreneurship in the context of EU policymaking. Section four shows how the EIB has developed its expertise in regulating Green Bonds since it issued the first CAB in 2007. Section five details the EIB's efforts to build coalitions in favour of Green Bond regulation. Section six then reviews how the EIB succeeded in providing the blueprint for the EU's regulation of Green Bonds by acting through expert committees. The final section discusses the findings and offers conclusions for studying the EIB's potential for promoting policy innovations more generally.

2. The case of Green Bond regulation

The EU's new framework for Green Bonds represents an important milestone in the regulation of sustainable finance with potential effects beyond the EU. Green Bonds are commonly defined as “fixed-income securities which finance investments with environmental or climate-related benefits” (Ehlers and Packer 2017). Issuers of Green Bonds

commit to using the proceeds for sustainable projects and reporting about the allocations. But, just like normal bonds, Green Bonds are secured against the whole balance sheet of the issuer, rather than the individual projects that they fund. Research has found that investors have accepted slightly lower interest rates on Green Bonds (a green premium, or “greenium”) in return for the security in terms of how their funds are invested (Deschryver and de Mariz 2020; Ehlers and Packer 2017; Maltais and Nykvist 2021; Zerbib 2017).

As a financial asset class, Green Bonds have been a remarkable success story. Within 15 years, the Green Bond market has grown to about \$2.2trn, or about 3.5% of the volume of global capital markets – and it has doubled in size since 2020 (Michetti et al. 2023). Europe retains a leading role in the market for Green Bonds: About half the global volume of Green Bonds is issued by European entities and the euro is the most important denomination currency, accounting for 42% of issuance volumes (Michetti et al. 2023). As a result, regulatory developments in Europe affect large segments of the global market for Green Bonds.

Considering their success, Green Bonds have been hailed as an important financial technology to mobilise capital to reach global climate targets (UNEP 2015). Yet the critical question of how financial regulation can ensure that Green Bonds fund “green” projects has long been unanswered. Though the risk of “greenwashing” was recognized from the start, it took time to develop a binding set of rules for certifying Green Bonds. Two non-binding sets of Green Bond principles were proposed by the Climate Bonds Initiative (CBI), a non-governmental organization (NGO), in 2010 and the International Capital Markets Association (ICMA), a financial industry body, in 2014 (Bishop 2019; Ehlers and Packer 2017). The resulting absence of a single, official, and internationally open standard for Green Bonds has long been criticized as one of the regulatory obstacles that have held back the further development of the market (Bishop 2019; Deschryver and de Mariz 2020; Ehlers and Packer 2017).

Against this backdrop, the EU’s Green Bond regulation represents an important development in the field of sustainable finance. It consists of two central pieces of legislation that were part of the EU’s sustainable finance agenda. In the EU Taxonomy Regulation (Regulation (EU) 2020/852), the EU set out a framework for which activities it would consider sustainable. The EUGB (Regulation (EU) 2023/2631) requires issuers of Green Bonds to allocate funds in line with the taxonomy and outlines the processes by which they have to solicit external reviews and report on their use of funds (Spinaci 2022). Though the EU’s standards are modelled on the ICMA’s rules, they are stricter in several matters, notably by requiring legal documentation and giving the European Securities and Markets Authority (ESMA) a supervisory role (Spinaci 2022). In combination, the Taxonomy and the EUGB thus aim to fill the existing regulatory gap for Green Bonds and set an official standard.

It is important to note that the EUGB will be a voluntary standard, open to issuers inside and outside the EU (European Commission 2023). Some observers expect that the EUGB will serve as a “gold standard” for its potential impact on international rules for Green Bonds (Clifford 2023). The relatively strict criteria and the EU’s important role in the Green Bond market are expected to produce a “Brussels effect” whereby regulators in other countries follow the EU standard (Bishop 2019; Bradford 2012). However, the EUGB’s voluntary character implies that it will still be possible to

issue Green Bonds in the EU that do not meet these exacting requirements, which prioritises market growth over tight regulatory standards (Perkins 2021). The choice for a voluntary “gold standard” model is especially interesting as the European Commission, the European Central Bank (2021) and various civil society organisations were in favour of a mandatory standard (Seabrooke and Stenström 2022). As this article argues, the EIB’s role as a policy entrepreneur helps understand this surprising choice.

3. The EIB’s potential for policy entrepreneurship

Various approaches from the field of policy studies could be considered to highlight processes and factors that contributed to the EU’s regulation of Green Bonds. To investigate the EIB’s involvement, the Bank’s institutional position within EU policy-making needs to be accounted for. Rational choice institutionalist approaches – arguably one of the baseline approaches to EU policymaking (Kassim and Menon 2003; Pollack 1997) – struggle to explain why the EIB should play a central role in devising a new piece of financial regulation. The Bank plays, after all, no formal role in the EU’s legislative procedure: the European Commission initiates legislation and the European Parliament and Council of Ministers amend and adopt it. The EIB does not stand to benefit directly from the Taxonomy and EUGB Regulations, as they only delegate new competences to the Commission and ESMA. The Bank has at times played up its role as a policy-taker. According to former EIB President Maystadt:

[T]he EIB [...] does not have as part of its remit the power to define policies [...]. The bank’s task is to support the implementation of European Union policies via the financial instruments at its disposal. (Maystadt, in Bussière, Dumoulin, and Willaert 2008, 6)

An alternative view of the EIB has, by contrast, argued that the Bank is a “potentially powerful and autonomous actor” (Robinson 2009, 652). Several studies have attributed to the EIB a proactive role in the EU’s policy processes and characterised the Bank as a policy entrepreneur (Kavvadia 2021, 2022; Liebe and Howarth 2020; Mertens and Thiemann 2023). For instance, Liebe and Howarth (2020) argue that the Bank acted as a policy entrepreneur in promoting Public-Private Partnerships (PPP), and Kavvadia (2021) contends that the EIB’s announcement that it was to become the EU’s “climate bank” was a case of policy entrepreneurship. The policy entrepreneurship approach offers a promising avenue for studying the influence of EU institutions on policy-making and has also been applied to the European Commission (Ackrill, Kay, and Zahariadis 2013; Schön-Quinlivan and Scipioni 2017) and the European Central Bank (De Rynck 2016).

Nonetheless, it is not straightforward to apply the concept of policy entrepreneurship to a public institution like the EIB. The original concept of a policy entrepreneur was introduced by Kingdon (2003) who referred to “political actors who seek policy changes that shift the status quo in given areas of public policy” (Mintrom 2016, 103). This framework has often been applied to “heroic, lonely” individuals (Petridou 2014, p. S22) and only rarely to organisational actors (Capano and Galanti 2018; Mintrom 2019). Liebe and Howarth (2020), in their study of EIB policy entrepreneurship, for instance, identify individual norm-entrepreneurs inside the Bank to explain the EIB’s promotion of PPPs.

While focusing on individuals is informative in some ways, it yields few more general insights about the conditions under which the EIB, as an institution, is capable of promoting new policies. To accomplish that, this study follows recent work in public policy that has conceptualised policy entrepreneurship as a set of distinct activities aimed at policy innovation, rather than as traits of an individual (Capano and Galanti 2018, 2021; McCaffrey and Salerno 2011; Mintrom 2019). This approach distinguishes explicitly “between the individuals who are policy entrepreneurs and the process of policy entrepreneurship” (Ackrill and Kay 2011, 74; McCaffrey and Salerno 2011). Policy entrepreneurship, thus understood, is a function within the policymaking process which can be performed by both individual and collective actors.

Policy entrepreneurship comprises a potentially large range of different activities and strategies (Aviram, Neomi, and Beeri 2020). Following the parsimonious approach outlined by Capano and Galanti (2021), this article conceptualises a process involving three distinct entrepreneurial activities through which the Bank promoted its preferred model of Green Bond Regulation. First, the EIB would need to *develop policy solutions* (Mintrom and Norman 2009). To do so, the Bank would require recognised technical expertise which it draws on to formulate innovative proposals. Second, one would expect the Bank to *build a coalition* in favour of its preferred policy, drawing on its network and credibility (Mintrom 2019). Third, the Bank would need to *seek attention* for its preferred policy, by exploiting “windows of opportunity” during which decision-makers are receptive to new ideas (Ackrill and Kay 2011; Ackrill, Kay, and Zahariadis 2013; Kingdon 2003; Mintrom and Norman 2009).

The following sections employ theory-testing process tracing (Derek and Pedersen 2018) to examine each step in this theorised process. Whereas the first two steps of the process work as expected, the analysis finds little evidence for a window of opportunity. As elaborated in the conclusion, the EIB was influential thanks to the important role of expert groups in setting the EU’s sustainable finance policy agenda (Princen 2011; Princen and Rhinard 2006). The empirical analysis is based on publicly available documents, such as official reports and newspaper articles. Though the author was unable to conduct interviews himself, several publicly available interviews have been used to reconstruct the history of the first CAB and the EIB’s subsequent objectives in regulating Green Bonds.

4. Developing policy solutions

4.1. The first Green Bonds

The EIB’s decision to launch the first Green Bond in history showcases the Bank’s ability to rely on its internal expertise to develop new financial instruments. In June 2007 the EIB listed the first so-called Climate Awareness Bond (CAB) on the Luxembourg Stock Exchange (LuxSE). Concerns about the environment played a role in that decision, as the European Commission (2006) had previously called upon the EIB to “facilitate leveraging of financing for energy efficiency projects.” However, the main objective at the time was to support EU capital markets integration. The EIB wanted to test the passporting mechanism from the EU’s Prospectus Directive (Directive 2003/71/EC) and issue the

first bond ever to be listed at once in all EU Member States (EIB 2021b, p. 47; Florence School of Banking and Finance 2022).

In this context, a team in the EIB's Capital Markets Department proposed a new financial product to attract retail investors for its EU-wide issue (Romani and Murphy 2008). The proceeds of the CAB were to be ringfenced in a separate account which could only be used for “new energy efficiency and renewable energy loans” (European Investment Bank 2007). The initial CAB issue was a great success: the EIB raised €600 m and attracted immense media interest (Jacob 2007; Wilson 2007).

Over the following years, the EIB, together with other Multilateral Development Banks (MDB), nurtured and developed the embryonic market for Green Bonds. In 2013 the Bank issued a “Statement on Climate Action” in which it promised to “help develop the green bond market” (European Investment Bank 2013, 2). In 2015, the EIB adopted a Climate Strategy in which it planned to “support the green bond market in quantity and quality” (European Investment Bank 2015). Between 2014 and 2019, the EIB each year issued about €4bn in CABs and Sustainability Awareness Bonds (SABs; a second category of Green Bonds it developed in 2018) (European Investment Bank 2023b), making the Bank the largest issuer of Green Bonds (European Investment Bank 2022a).

The EIB thus invented the Green Bond and developed the market before any EU-wide approach to sustainable finance was in place (Monk and Perkins 2020). As a result, the Bank was widely acknowledged for its leadership and expertise in this market segment. Sean Kidney, a leading proponent of Green Bonds, for instance, stated that “the EIB started this market. It continues to push and grow it, and ensures that the market maintains a critical focus on climate change” (Climate Bonds Initiative 2017).

4.2. The Green Bond Principles

The EIB was central to international discussions about the regulation of Green Bonds and built up its technical capacity for developing sustainable finance standards. When in early 2014, the ICMA proposed its first set of Green Bond Principles (GBP), a set of “voluntary process guidelines for issuing Green Bonds” (ICMA 2014), the banks that drafted the principles invited the EIB to participate (European Investment Bank 2021b, 52; Toth 2023).¹ From 2015 to 2018 the EIB even chaired the GBP Executive Committee's steering body (Kreivi 2016). Though the ICMA principles were set by an industry body, the EIB was thus central to their development.

In parallel, the EIB cooperated with other Multilateral Development Banks (MDB) to formulate an international regulatory agenda. In 2014 the EIB and five other MDBs issued a joint statement in which they promised to maintain their “developmental role, to spur sustainable growth of the green bond market” (AfDB, ADB, EBRD, EIB, IADB, and World Bank Group 2014). One of the issues on which the MDBs contributed to international best practice was the proposal that issuers of Green Bonds should not just report on how they allocated their funds, but also the environmental impact of the projects they funded. Their proposal for the “Harmonisation of Impact Reporting” was included in the GBP in 2016 (ICMA 2015, 2016).

At times, the EIB's influence on international Green Bond Standards can be discerned directly. The EIB has pursued an idiosyncratic approach to issuing CABs and has secured

carve-outs when new rules were developed. For instance, most issuers have relied on an expert “second opinion” to attest to the sustainability of the projects that their Green Bonds funded (Ehlers and Packer 2017). By contrast, the EIB’s approach to evaluating the impact of projects funded through CABs has been to rely on its in-house expertise and appoint an external private auditor who validates with “reasonable assurance” that the Bank’s internal procedures conform to the GBP (European Investment Bank 2021b, 56). Though a recent evaluation found that the EIB is the only issuer in its peer group that uses an external auditor (European Investment Bank 2021b, 74), “verification” of the kind is allowed as a substitute for a second opinion on both the ICMA principles and the EUGB.

4.3. A common language in green finance

The EIB developed its technical capacities across different domains of sustainable finance regulation. While the ICMA GBP spelt out the procedure for issuing Green Bonds, they did not include any substantive standard for what investments should be counted as green (Bishop 2019). The EIB’s approach in its CAB framework was, for instance, to invest CAB proceeds only in renewable energy and energy efficiency-related projects,² but other issuers invested Green Bond proceeds in other kinds of projects, including transportation infrastructure (European Investment Bank 2017a, 2023a). To make Green Bonds more comparable, the EIB and other MDBs established several expert groups that sought to align their approaches to project classification (AfDB, ADB, EBRD, EIB, IADB, and World Bank Group, 2015) and greenhouse gas accounting for individual projects (World Bank 2015).³

The issue of developing a common understanding of which activities would count as sustainable rose on the international political agenda in 2015 for another reason. That year the People’s Bank of China’s Green Finance Committee (GFC), passed the first official substantive standard in its “Green Bond Endorsed Project Catalogue” (Green Finance Committee of China Society for Finance and Banking 2015). In response, the EIB agreed with the People’s Bank of China to compare their different classification schemes for sustainable activities (European Investment Bank 2017b) and the two institutions co-authored a joint report entitled “The Need for a Common Language in Green Finance” (European Investment Bank and Green Finance Committee of China Society for Finance and Banking 2017). In that report, they agreed to align the different lists of sustainable activities and feed them into the work on GBP.

The EIB’s work at the forefront of international efforts to regulate Green Bonds indicates that the Bank had far stronger technical expertise than the European Commission, which usually conducts such external cooperation on the EU’s behalf and has since taken over. Yet the expertise the EIB developed would later allow the Bank to formulate blueprints for the EU’s regulation of Green Bonds.

5. Coalition building

In parallel with its efforts to work towards the international harmonisation of technical aspects of Green Bond regulation, the EIB also engaged a broad set of stakeholders. Its credibility as the largest issuer of Green Bonds, and its embeddedness in various

international and local networks allowed it to enrol many different actors that would later participate in the technical discussions that would shape the EU's sustainable finance agenda. Arguably, Green Bond regulation has long been a niche field, at the intersection of financial market expertise and climate science, and only a few actors were involved in regulatory discussions (Monk and Perkins 2020). Yet, as Seabrooke and Stenström (2022, 1282) show, EIB officials were centrally embedded in the professional networks that would formulate the EU's sustainable finance agenda after 2016.

Through the EIB's role as chair of the ICMA GBP Executive Committee, the Bank worked closely together with several financial industry actors. Indeed, the GBP Executive Committee, which brought together Green Bond investors, issuers, and underwriters quickly turned into a "vital formal network" (Monk and Perkins 2020, 7) for promoting Green Bonds after 2014.

The EIB similarly cooperated with NGOs that advocated the promotion of Green Bonds. One such NGO was the CBI, which is widely seen as a critical factor in promoting Green Bonds and has formulated another set of informal Climate Bond Standards (Monk and Perkins 2020). In 2013, an EIB official joined the CBI's Climate Bonds Advisory Panel, noting a "natural alignment of interests with the aims of The Climate Bonds Initiative" (Climate Bonds Initiative 2013). In 2018, both the EIB and the CBI participated in the launch of the Global Green Bond Partnership, a platform for providing technical support to prospective Green Bond issuers (European Investment Bank 2018).

The EIB's contribution to Green Bond industry standards was also recognised by the World Wide Fund for Nature (WWF), another NGO. In line with its advocacy for strict Green Bond standards (WWF 2016), the WWF in 2015 urged the EIB to "support the development of a robust, credible and fully developed and generally-accepted industry standard for green bonds" (WWF 2015, 4). When the EIB analysed the Chinese taxonomy, the Bank, in turn, did so in "close cooperation" with the WWF, which helped the Bank arrange stakeholder consultations (European Investment Bank 2021b, 53).

Lastly, the EIB intensified its cooperation with the Luxembourg Stock Exchange. Since the EIB issues most of its bonds, including 95% of all CABs, on LuxSE, Luxembourg's capital markets have played an important role in Green Bonds since 2007 (Halder 2023). The Bank has maintained a well-established "strategic partnership" with the Luxembourgish government and financial stakeholders, which helped turn Luxembourg into one of the leading locations for sustainable finance (Dörry and Schulz 2018, 722). In 2015, the EIB contacted LuxSE about the growth potential of the Green Bond market (European Investment Bank 2021b, 81). In 2016 the stock exchange announced the creation of the Luxembourg Green Exchange (LGX), the first platform entirely dedicated to sustainable securities and a leading venue for sustainable finance, with about 50% of all green, sustainable, and social bonds worldwide listed (LEO 2020). In cooperation with the EIB, the ICMA, and the WWF, LGX has instituted stringent requirements for external review and post-issuance reporting on Green Bonds (Caprioli 2017; Medland 2016). Julie Becker, the CEO of LuxSE highlighted that "the EIB [...] leads the way towards common standards and more harmonised frameworks for sustainability funding and lending" (European Investment Bank 2021a).

Yet, LuxSE has openly opposed the introduction of a mandatory EUGB, as that might jeopardise its leading market position (Murdoch 2022). Indeed, none of the EIB's partners supported a binding standard. The ICMA (2021) and the CBI, which

both had their own Green Bond standards, feared competition from an official regulatory standard (Seabrooke and Stenström 2022). The WWF (2016) was one of the few environmental NGOs that supported voluntary standards. By 2016, the EIB therefore had a set of allies that were part of the “growth machine” coalition (Perkins 2021) which wanted to set standards that would above all facilitate market growth. Both the EIB’s expertise and its allies helped the Bank put the vision of the EUGB as a “gold standard” – voluntary and open, but with strict criteria – on the EU’s political agenda. However, this success did not require the exploitation of a sudden window of opportunity, but the gradual formulation of an expert consensus.

6. Seeking attention

6.1. Bottom-up agenda-setting

In 2016 the European Commission chose to begin working on the topic of sustainable finance by convening a High-Level Expert Group (HLEG) (European Commission 2016). The Commission’s decision to keep the discussion on sustainable finance at the level of an expert group allowed the EIB to put its proposals on the policy agenda. The EIB was invited as an observer and technical adviser to the HLEG and several of the Bank’s longstanding partners, including the CBI, the ICMA, LuxSE, and the WWF sent full members.

The EIB provided decisive input for the HLEG’s recommendations. In its interim report in 2017, the HLEG recommended that the Commission “invites the European Investment Bank to coordinate the development of an EU classification for climate change finance” (EU High-Level Expert Group on Sustainable Finance 2017, 56). In response, the EIB submitted a taxonomy proposal, based on the White Paper that it had written with the Chinese authorities, which served as a discussion base and was ultimately adopted by the HLEG and annexed to the final report.⁴ The HLEG also raised the possibility of setting a European Green Bond Standard, which had not yet been mentioned in its mandate from the Commission. The HLEG’s proposed outline for an EUGB was largely based on the ICMA’s standard (EU HLEG 2018). Its main innovation was to link the issuance procedure to the proposed taxonomy, thereby aligning itself largely with the EIB’s CAB framework at the time.

The EIB was proactively committed to promoting the EU’s new sustainable finance rules and the future EUGB. Just half a year after the HLEG concluded that sustainable financing did not just include climate change mitigation, but also other environmental and social objectives, the EIB created a new type of Green Bond to fund such projects, called the Sustainability Awareness Bond (Sustainabonds 2021). The EIB’s Climate Strategy reiterated its promise to support the Green Bond Market (European Investment Bank 2020b) and extend the eligibility of CABs and SABs in line with the EU’s standards even though these were still being negotiated. Between 2020 and 2022 the EIB increased its reliance on Green Bonds from 15% to 45% of its funding, the equivalent of €40bn. According to an EIB internal evaluation, the major benefits of issuing CABs consisted in improving the Bank’s strategic position in sustainable finance forums and allowing it to further cement its position as a market leader (European Investment Bank 2021b, 113–114).

6.2. Success in depoliticized venues

After the Commission published its Sustainable Finance Action Plan in the spring of 2018, it decided to keep working through an expert group to depoliticise the policy formulation stage (Seabrooke and Stenström 2022, 1284). It was thanks to the EIB's inclusion in this Technical Expert Group (TEG), rather than any “window of opportunity” that the Bank could promote its vision for the EUGB.

The composition of the TEG reveals a strong role for the EIB, especially on the topic of Green Bonds. The TEG comprised 35 members from industry and NGOs, as well as “directly invited members” from several EU bodies, including seven EIB staff. The TEG set up a separate EUGB Working Group, which drafted a potential EUGB and a reporting template (EU Technical Expert Group on Sustainable Finance 2019). In this technical setting, the EIB and its allies were strongly represented as Table 1 illustrates: the Working Group consisted of only seven ordinary TEG members (including the ICMA, LuxSE, and the WWF), one representative of the European Banking Authority (EBA) and no less than four EIB officials. In the discussion on whether the EUGB should be mandatory, the EIB and its coalition in favour of an open standard prevailed. Though the Commission had advocated a binding standard, the expert group recommended the EUGB become voluntary. The Commission's proposal for an EUGB (European Commission 2021) differs from the TEG's proposal only in a few respects (Spinaci 2022).

Subsequent developments of the EU's Taxonomy – which would be the backbone of the EUGB – would, however, illustrate how little leverage the EIB had outside expert settings. When the Taxonomy Regulation was adopted in 2020, the Bank quickly promised to align its CAB framework gradually with the EU's classification (European Investment Bank 2020a). The Bank saw “a reputational benefit associated with Taxonomy alignment” (European Commission 2021, 113–114) as that would mean adhering to the highest standards. However, the substance of the taxonomy – which activities were to be designated as “green” – would not be published before 2022. In a highly controversial decision, the European Commission gave in to German and French political pressure and included natural gas and nuclear energy in its list of sustainable activities (Khan 2022). Far from exploiting a window of opportunity, the EIB saw its proposals jeopardized once they moved to the level of political decision-making.

Table 1. Members of the TEG EUGB working group (Source: EU TEG 2019).

Membership	Affiliation	Name	Sector
TEG	EACB	Tanguy Claquin	Financial industry
TEG	Eurelectric	Jesús Martínez Pérez	Electricity industry
TEG	ICMA	Nicolas Pfaff	Financial industry
TEG	LuxSE	Flavia Micilotta	Stock exchange
TEG	Nordea	Aila Aho	Financial industry
TEG	Unilever	Michel Pinto	Consumer goods
TEG	WWF	Jochen Krimphoff	NGO
Directly invited	EBA	Slavka Eley	
Directly invited	EIB	Eila Kreivi, Aldo Romani, Dominika Rosolowska, Jean-Luc Filippini	

Demonstrating its preference for a stricter taxonomy, the EIB reacted defiantly and publicly lobbied the European Parliament and the Council of the EU to block the delegated act. EIB President Hoyer openly contested deviations from the Bank's preferred policy and declared that the Bank had never invested in nuclear projects and had "no intention to change that" (Pop 2022).⁵ Contrary to its earlier pledge, the EIB has – to the time of writing – yet to update its eligibility list for climate lending to include nuclear energy (European Investment Bank 2022b).

Overall, the Bank's policy entrepreneurship was instrumental in developing the EUGB along the lines of a "gold standard." The EIB provided important input on the EU's sustainable finance strategy, where it was among the actors that put an EUGB on the EU's political agenda and proposed templates for future Commission proposals. However, as the setback regarding the Taxonomy Delegated Act indicates, the EIB's influence hinged on the choice of expert groups for policy formulation; once the issue made it to the political agenda, the Bank had little leverage.

7. Conclusion

This article has studied the Bank's policy entrepreneurship in the EU's regulation of Green Bonds as a set of distinct activities that the Bank performed within the policymaking process. Of the three hypothesised activities, two took place as expected: the EIB drew on its expertise to *develop policy solutions* and it *built a coalition* in favour of an EU "gold standard" for Green Bonds. As the largest issuer of Green Bonds until 2020, the Bank has gathered widely acknowledged expertise and has been at the forefront of the development of informal standards for Green Bonds. In parallel, the EIB had developed networks in the sustainable finance community and formed a coalition that advocated the introduction of a voluntary European Green Bond standard.

However, contrary to most work on policy entrepreneurship, the EIB's success in *seeking attention* for its preferred policy was not the result of a window of opportunity opening up; rather, it gradually built an expert consensus around the "gold standard" model for the EUGB.

The EIB's success in influencing the character of the EUGB thus owed to the important role the Bank could play in the EU's expert groups. An expert-led policy formulation process allowed the Bank to influence considerably the proposals for a sustainable taxonomy and an EUGB that the Commission would subsequently put forward (Table 2).

Table 2. The process of EIB policy entrepreneurship for the EUGB.

	Part 1	Part 2	Part 3	Outcome
Theorisation	Formulating policy proposals	Building a coalition	Seeking attention	Policy change
Manifestation	EIB develops first international principles for Green Bonds (Section 4)	EIB cooperates with allies (Section 5)	EIB develops draft Taxonomy and EU GB in TEG (Section 6)	Introduction of EU GB close to EIB preferences
Enabling factor	Expertise	Network position	Expert-led policy process	

This finding suggests a procedural condition, the importance of expert venues, that enabled the EIB to upload its preferred policies to the EU level and speaks to the distinction in the literature on EU agenda-setting between issues appearing on the agenda from “above” (at the initiative of political leaders) or from “below” (through expert groups) (Princen and Rhinard 2006). The development of the EU’s sustainable finance legislation was long kept at the level of expert groups, which minimised open political conflict and built stakeholder consensus (cf. Howarth and James 2022). Under these circumstances the EIB could bring its organisational resources, above all its expertise and network, to bear and formulate the blueprints for the subsequent Commission proposals. Conversely, once the proposals were discussed at more political levels, the conflict was expanded (Princen 2011) and the EIB proved unable to prevent the issue from being “hijacked” (Princen and Rhinard 2006, 1122) when the Commission included gas and nuclear energy in the Taxonomy in 2022.

The analysis, moreover, suggests that the EIB’s promotion of the “gold standard” model followed reputational considerations rather than ideological conviction. By establishing and adhering to strict EU standards the Bank can claim a leadership position in the field of sustainable finance; by keeping the standard voluntary, it can support the growth of the market (Perkins 2021). The Bank’s continued efforts to shape the EUGB, in short, responded to organisational interests that could be served by being a prime issuer in an expanding Green Bond market.

The upshot of this analysis is that one might expect the EIB more generally to be able to promote new policies in the EU under the conditions that it can develop autonomous staff expertise, is well-connected in a policy subsystem, and can contribute to agenda setting through expert groups. These findings align with some of the claims made by Liebe and Howarth (2020) about the Bank’s promotion of PPPs. However, the functional analysis of the EIB’s policy entrepreneurship developed here adds to previous efforts to identify individuals who have promoted new policies by looking at the Bank’s organisational interests and the peculiarities of a policy setting that allowed the Bank to promote new policies.

While this article has proposed a novel approach to studying the EIB’s policy entrepreneurship, its findings about the Bank’s impact on a significant piece of financial regulation open two further avenues for future research. One is the Bank’s documented capacity to shape sustainable finance standards at the international level – including in its cooperation with the ICMA, MDBs, and Chinese authorities – which highlights its potential for policy entrepreneurship beyond the EU. Future work could, moreover, explore further the conditions under which the Bank is successful in promoting new policies within the EU.

Notes

1. The Banks were: Bank of America Merrill Lynch, Citi, Crédit Agricole Corporate and Investment Bank, and JPMorgan Chase.
2. Nuclear energy was counted as low-carbon activity, but was not eligible for funding through CAB.

3. An overview of subsequent reports on these topics can be found here: <https://unfccc.int/climate-action/sectoral-engagement/ifis-harmonization-of-standards-for-ghg-accounting/ifi-twg-list-of-methodologies>
4. https://finance.ec.europa.eu/system/files/2018-02/180131-sustainable-finance-final-report-annex-3_en.pdf
5. In fact, the Bank has financed several nuclear power plants, including Flamanville, France, and Mühleim-Kärlich, West Germany (see <https://www.eib.org/de/projects/>)

Acknowledgments

The author would like to thank the participants at the Political Science PhD colloquium at the University of Luxembourg, especially Susana Teixeira de Matos Rosa and Helen Kavvadia, as well as the editors of the special issue and the anonymous reviewers for their comments and suggestions.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

The work was supported by the Fonds National de la Recherche Luxembourg [INTER/UKRI/21/15560511/BanKEU].

References

- Ackrill, R., and A. Kay. 2011. "Multiple Streams in EU Policy-Making: The Case of the 2005 Sugar Reform." *Journal of European Public Policy* 18 (1): 72–89. <https://doi.org/10.1080/13501763.2011.520879>.
- Ackrill, R., A. Kay, and N. Zahariadis. 2013. "Ambiguity, Multiple Streams, and EU Policy." *Journal of European Public Policy* 20 (6): 871–887. <https://doi.org/10.1080/13501763.2013.781824>.
- AfDB, ADB, EBRD, EIB, IADB, and World Bank Group. 2014. "Joint Statement by Multilateral Development Banks (MDB) on Climate Finance." <http://www.eib.org/infocentre/press/releases/all/2014/2014-189-multilateral-development-banks-agree-to-reinforce-climate-financing-in-advance-of-un-summit.htm>.
- AfDB, ADB, EBRD, EIB, IADB, and World Bank Group. 2015. "Common Principles for Climate Change Adaptation Finance Tracking Version 2 - 15th June 2015." http://www.eib.org/attachments/documents/mdb_idfc_adaptation_common_principles_en.pdf.
- Aviram, F., N. C. Neomi, and I. Beerli. 2020. "Wind(ow) of Change: A Systematic Review of Policy Entrepreneurship Characteristics and Strategies." *Policy Studies Journal* 48 (3): 612–644. <https://doi.org/10.1111/psj.12339>.
- Bishop, N. 2019. "Green Bond Governance and the Paris Agreement." *New York University Environmental Law Journal* 27:377–411. https://www.nyuelj.org/wp-content/uploads/2019/10/Bishop_Green-Bond-Governance-and-the-Paris-Agreement.pdf.
- Bradford, A. 2012. "The Brussels Effect." *Northwestern University Law Review* 107 (1): 1–67.
- Bussière, É., M. Dumoulin, and É. Willaert. 2008. *The Bank of the European Union; the EIB 1958-2008*. Luxembourg: European Investment Bank.
- Capano, G., and M. T. Galanti. 2018. "Policy Dynamics and Types of Agency: From Individual to Collective Patterns of Action." *European Policy Analysis* 4 (1): 23–47. <https://doi.org/10.1002/epa2.1031>.

- Capano, G., and M. T. Galanti. 2021. "From Policy Entrepreneurs to Policy Entrepreneurship: Actors and Actions in Public Policy Innovation." *Policy and Politics* 49 (3): 321–342. <https://doi.org/10.1332/030557320X15906842137162>.
- Caprioli, C. 2017. "Luxembourg Green Exchange: The Meeting Place for ESG-Conscious Issuers and Investors." *Annales Des Mines-- Responsabilité et Environnement* 88 (4): 37–39. <https://doi.org/10.3917/re1.088.0037>.
- Clifford, C. 2023. *The EU's Gold Standard-- the Final EU Green Bond Standard Has Landed but What Does it Mean for the Green Bond Market*. London. <https://www.cliffordchance.com/content/dam/cliffordchance/briefings/2023/05/the-eus-gold-standard-the-final-eu-green-bond-standard-has-landed-but-what-does-it-mean-for-the-green-bond-market.pdf>.
- Climate Bonds Initiative. 2013. "European Investment Bank's Climate Financier Chris Knowles Joins Climate Bonds Advisory Panel." <https://www.climatebonds.net/node/1319>.
- Climate Bonds Initiative. 2017. "Market Blog: EIB GB Anniversary. Norway, Italy, Sweden Again, News Bites, Gossip. Let's Think Big for 2020!": New York State Housing. <https://www.climatebonds.net/2017/07/market-blog-eib-gb-anniversary-new-york-state-housing-norway-italy-sweden-again-news-bites>.
- Derek, B., and R. B. Pedersen. 2018. *Process Tracing Methods - Foundation and Guidelines*. Ann Arbor: The University of Michigan Press.
- De Rynck, S. 2016. "Banking on a Union: The Politics of Changing Eurozone Banking Supervision." *Journal of European Public Policy* 23 (1): 119–135. <https://doi.org/10.1080/13501763.2015.1019551>.
- Deschryver, P., and F. de Mariz. 2020. "What Future for the Green Bond Market? How Can Policymakers, Companies, and Investors Unlock the Potential of the Green Bond Market?" *Journal of Risk and Financial Management* 13 (3): 61. <https://doi.org/10.3390/jrfm13030061>.
- Directive 2003/71/EC. *On the Prospectus to Be Published When Securities Are Offered to the Public or Admitted to Trading and Amending Directive 2001/34/EC*. European Parliament and the Council. <http://data.europa.eu/eli/dir/2003/71/oj>.
- Dörry, S., and C. Schulz. 2018. "Green Financing, Interrupted. Potential Directions for Sustainable Finance in Luxembourg." *Local Environment* 23 (7): 717–733. <https://doi.org/10.1080/13549839.2018.1428792>.
- Ehlers, T., and F. Packer. 2017. "Green Bond Finance and Certification." *BIS Quarterly Review* (September): 89–104. https://www.bis.org/publ/qtrpdf/r_qt1709h.htm.
- EU High-Level Expert Group on Sustainable Finance. 2017. *Financing a Sustainable European Economy Interim Report*, July 2017. https://finance.ec.europa.eu/system/files/2017-07/170713-sustainable-finance-report_en.pdf.
- EU High-Level Expert Group on Sustainable Finance. 2018. *Financing a Sustainable European Economy Final Report* 2018. https://ec.europa.eu/info/sites/info/files/180131-sustainable-finance-final-report_en.pdf.
- European Central Bank. 2021. *Opinion of the European Central Bank of 5 November 2021 on a Proposal for a Regulation on European Green Bonds (CON/2021/30) 2022/C 27/04*. <https://eur-lex.europa.eu/legal-content/EN/TXT/?home=ecb&uri=CELEX%3A52021AB0030>.
- European Commission. 2006. *Communication from the Commission Action Plan for Energy Efficiency: Realising the Potential*. <https://op.europa.eu/en/publication-detail/-/publication/65f8e050-52d1-4706-80ad-5a18f7eb085b>.
- European Commission. 2016. "High-Level Expert Group on Sustainable Finance (HLEG)." https://finance.ec.europa.eu/publications/high-level-expert-group-sustainable-finance-hleg_en.
- European Commission. 2021. *Proposal for a REGULATION of the EUROPEAN PARLIAMENT and of the COUNCIL on European Green Bonds*. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021PC0391>.
- European Commission. 2023. "European Green Bond Standard." https://finance.ec.europa.eu/sustainable-finance/tools-and-standards/european-green-bond-standard_en.
- European Investment Bank. 2001. *The EIB Group: Activity Report 2001*. Luxembourg: European Investment Bank. <https://www.eib.org/attachments/general/reports/ar2001en.pdf>.

- European Investment Bank. 2007. *EPOS II - The "Climate Awareness Bond" EIB Promotes Climate Protection via Pan-EU Public Offering*. http://www.eib.org/eib.org/investor_relations/press/2007/2007-042-epos-ii-obligation-sensible-au-climat-la-bei-oeuvre-a-la-protection-du-climat-par-le-biais-de-son-emission-a-l-echelle-de-l-ue.htm?lang=en.
- European Investment Bank. 2013. *Statement on Climate Action*. https://www.eib.org/attachments/strategies/statement_climate_action_en.pdf.
- European Investment Bank. 2015. *EIB Climate Strategy*. <https://data.europa.eu/doi/10.2867/55282>.
- European Investment Bank. 2017a. *Climate Awareness Bonds Statement for the Year That Ended 31. December 2016*. <https://www.eib.org/attachments/fi/cab-statement-2016.pdf>.
- European Investment Bank. 2017b. "New People's Bank of China and EIB Initiative to Strengthen Green Finance." <https://www.eib.org/en/press/all/2017-073-new-peoples-bank-of-china-and-eib-initiative-to-strengthen-green-finance>.
- European Investment Bank. 2018. "Launch of the Global Green Bond Partnership." <https://www.eib.org/en/press/all/2018-229-launch-of-the-global-green-bond-partnership>.
- European Investment Bank. 2020a. *Climate Awareness Bonds Framework 2020*. <https://www.eib.org/attachments/fi/eib-cab-framework-2020.pdf>.
- European Investment Bank. 2020b. *EIB Climate Strategy*. https://www.eib.org/attachments/strategies/eib_climate_strategy_en.pdf.
- European Investment Bank. 2021a. "LGX Hits 1,000 Sustainable Bonds Mark with EIB's Latest Global Climate Awareness Bond." <https://www.eib.org/en/press/all/2021-164-lgx-hits-1000-sustainable-bonds-mark-with-eib-s-latest-global-climate-awareness-bond>.
- European Investment Bank. 2021b. *Operations Evaluation - Evaluation of the EIB's Climate Awareness Bonds*. Luxembourg: European Investment Bank. <https://www.eib.org/en/publications/evaluation-of-the-eibs-climate-awareness-bonds>.
- European Investment Bank. 2022a. "15 Years of EIB Green Bonds: Leading Sustainable Investment from Niche to Mainstream." <https://www.eib.org/en/press/all/2022-308-15-years-of-eib-green-bonds-leading-sustainable-investment-from-niche-to-mainstream>.
- European Investment Bank. 2022b. *European Investment Bank Climate Action and Environmental Sustainability List of Eligible Sectors and Eligibility Criteria*. https://www.eib.org/attachments/publications/climate_action_lending_eligibility_list_en.pdf.
- European Investment Bank. 2023a. "Climate Awareness Bonds [Old Website]." https://www.eib.org/en/OLD-investor_relations/cab/index.htm.
- European Investment Bank. 2023b. "Climate Awareness Bonds the First Green Bond." <https://www.eib.org/en/investor-relations/cab/index.htm>.
- European Investment Bank, and Green Finance Committee of China Society for Finance and Banking. 2017. *The Need for a Common Language in Green Finance: Towards a Standard-Neutral Taxonomy for the Environmental Use of Proceeds*. <http://www.eib.org/attachments/press/white-paper-green-finance-common-language-eib-and-green-finance-committee.pdf>.
- European Parliament. 2023. "Greening the Bond Markets: MEPs Approve New Standard to Fight Greenwashing." <https://www.europarl.europa.eu/news/en/press-room/20230929IPR06139/greening-the-bond-markets-meps-approve-new-standard-to-fight-greenwashing>.
- EU Technical Expert Group on Sustainable Finance. 2019. *Report on EU Green Bond Standard*. https://finance.ec.europa.eu/document/download/bca86ee3-0534-49fe-a7c4-c6ba3a73b63b_en?filename=190618-sustainable-finance-teg-report-green-bond-standard_en.pdf.
- Florence School of Banking and Finance. 2022. "15 Years After the First Green Bond by the European Investment Bank: What Next? - Aldo Romani (EIB)." <https://www.youtube.com/watch?v=4100APKzCtc>.
- Green Finance Committee of China Society for Finance and Banking. 2015. "China Green Bond Endorsed Project Catalogue." <http://www.greenfinance.org.cn/displaynews.php?cid=79&id=468>.
- Halder, K. 2023. "Climate and Sustainability Awareness Bonds: Driving True Sustainable Finance." *Delano.Lu*. <https://delano.lu/article/climate-and-sustainability-awa>.

- Howarth, D., and S. James. 2022. *Bank Politics: Structural Reform in Comparative Perspective*. Oxford: Oxford University Press.
- ICMA. 2014. *Green Bond Principles, 2014 Voluntary Process Guidelines for Issuing Green Bonds*. <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Green-Bonds-Principles-2014.pdf>.
- ICMA. 2015. *Green Bonds: Working Towards a Harmonized Framework for Impact Reporting*. <https://documents1.worldbank.org/curated/en/678851573042154496/pdf/Green-Bonds-Working-Towards-a-Harmonized-Framework-for-Impact-Reporting.pdf>.
- ICMA. 2016. *Green Bond Principles, 2016 Voluntary Process Guidelines for Issuing Green Bonds*. <https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/GBP-2016-Final-16-June-2016.pdf>.
- ICMA. 2021. *Analysis of the Draft EUGB Regulation*. <https://www.icmagroup.org/assets/documents/Sustainable-finance/Responses/ICMA-analysis-of-the-EuGB-Regulation-080721v2.pdf>.
- Jacob, N. 2007. "EIB Launches 'Climate-Aware' Structured Note." *Euroweek*. May 25 2007.
- Kassim, H., and A. Menon. 2003. "The Principal-Agent Approach and the Study of the European Union: Promise Unfulfilled?" *Journal of European Public Policy* 10 (1): 121–139. <https://doi.org/10.1080/1350176032000046976>.
- Kavvadia, H. 2021. "The European Investment Bank's 'Quantum Leap' to Become the World's First International Climate Bank." *Politics & Governance* 9 (2): 185–195. <https://doi.org/10.17645/pag.v9i2.3921>.
- Kavvadia, H. 2022. "Small Words, Big Changes: Understanding the European Investment Bank Through Its Business Model." In *Deciphering the European Investment Bank*, edited by L. Coppolaro and H. Kavvadia, 116–139. London and New York: Routledge. <https://doi.org/10.4324/9781003231592-7>.
- Khan, M. 2022. "Brussels Proposes Green Label for Nuclear and Natural Gas." *Financial Times*. January 1, 2022. <https://www.ft.com/content/7872a05f-9e38-4740-9b1b-4efc69ca316c>.
- Kingdon, J. W. 2003. *Agendas, Alternatives, and Public Policies*. 2nd ed. New York: Longman.
- Kreivi, E. 2016. *European Investment Bank Green Bond Market Development and EIB*. European Investment Bank. <https://www.eib.org/attachments/green-bond-market-development-and-eib.pdf>.
- LEO. 2020. "Trailblazer in International Capital Markets." *Luxembourg for Finance*. https://www.luxembourgforfinance.com/wp-content/uploads/2020/12/LEO-INFOGRAPHICS_DEC2020.pdf.
- Liebe, M., and D. Howarth. 2020. "The European Investment Bank as Policy Entrepreneur and the Promotion of Public-Private Partnerships." *New Political Economy* 25 (2): 195–212. <https://doi.org/10.1080/13563467.2019.1586862>.
- Maltais, A., and B. Nykvist. 2021. "Understanding the Role of Green Bonds in Advancing Sustainability." *Journal of Sustainable Finance & Investment* 11 (3): 233–252. <https://doi.org/10.1080/20430795.2020.1724864>.
- Mathews, J. A., S. Kidney, K. Mallon, and M. Hughes. 2010. "Mobilizing Private Finance to Drive an Energy Industrial Revolution." *Energy Policy* 38 (7): 3263–3265. <https://doi.org/10.1016/j.enpol.2010.02.030>.
- McCaffrey, M., and J. T. Salerno. 2011. "A Theory of Political Entrepreneurship." *Modern Economy* 2 (4): 552–560. <https://doi.org/10.4236/me.2011.24061>.
- Medland, D. 2016. "Luxembourg Launches World's First Green Stock Exchange: LGX, 'The Full Green Monty'." *Forbes*. <https://www.forbes.com/sites/dinamedland/2016/09/27/luxembourg-launches-worlds-first-green-stock-exchange-lgx-the-full-green-monty/>.
- Mertens, D., and M. Thiemann. 2023. "The European Investment Bank: The EU's Climate Bank?" In *Handbook on European Union Climate Change Policy and Politics*, edited by T. Rayner, K. Szulecki, A. J. Jordan, and S. Oberthür, 68–82. Cheltenham, UK: Edward Elgar Publishing.
- Michetti, C., N. Chouhan, C. Harrison, and M. MacGeoch. 2023. *Sustainable Debt Global State of the Market 2022*. Climate Bonds. https://www.climatebonds.net/files/reports/cbi_sd_sotm_2020_04d.pdf.
- Mintrom, M. 2016. "Policy Entrepreneurs and Morality Politics: Learning from Failure and Success." In *Entrepreneurship in the Polis*, edited by I. N. Aflaki and E. Petridou, 103–118. London: Routledge. <https://doi.org/10.4324/9781315579931>.

- Mintrom, M. 2019. "So You Want to Be a Policy Entrepreneur?" *Policy Design and Practice* 2 (4): 307–323. <https://doi.org/10.1080/25741292.2019.1675989>.
- Mintrom, M., and P. Norman. 2009. "Policy Entrepreneurship and Policy Change." *Policy Studies Journal* 37 (4): 649–667. <https://doi.org/10.1111/j.1541-0072.2009.00329.x>.
- Monk, A., and R. Perkins. 2020. "What Explains the Emergence and Diffusion of Green Bonds?" *Energy Policy* 145 (April): 111641. <https://doi.org/10.1016/j.enpol.2020.111641>.
- Murdoch, A. 2022. "Luxembourg's Exchange Opposes Mandatory Green Bond Standard." *Capital Monitor*. Accessed June 23, 2022. <https://capitalmonitor.ai/asset-class/fixed-income/luxembourg-exchange-opposes-mandatory-green-bond-standard/>.
- Perkins, R. 2021. "Governing for Growth: Standards, Emergent Markets, and the Lenient Zone of Qualification for Green Bonds." *Annals of the American Association of Geographers* 111 (7): 2044–2061. <https://doi.org/10.1080/24694452.2021.1874866>.
- Petridou, E. 2014. "Theories of the Policy Process: Contemporary Scholarship and Future Directions." *Policy Studies Journal* 42 (S1): 12–32. <https://doi.org/10.1111/psj.12054>.
- Pollack, M. A. 1997. "Delegation, Agency, and Agenda Setting in the European Community." *International Organization* 51 (1): 99–134. <https://doi.org/10.1162/002081897550311>.
- Pop, V. 2022. "European Investment Bank Criticises Brussels' Sustainable Finance Rules." *Financial Times*. January 28, 2022. <https://www.ft.com/content/ab96e80c-483a-499e-9057-7af7a8668feb>.
- Princen, S. 2011. "Agenda-Setting Strategies in EU Policy Processes." *Journal of European Public Policy* 18 (7): 927–943. <https://doi.org/10.1080/13501763.2011.599960>.
- Princen, S., and M. Rhinard. 2006. "Crashing and Creeping: Agenda-Setting Dynamics in the European Union." *Journal of European Public Policy* 13 (7): 1119–1132. <https://doi.org/10.1080/13501760600924233>.
- Regulation (EU) 2020/852. *On the Establishment of a Framework to Facilitate Sustainable Investment, and Amending Regulation (EU) 2019/2088*. European Parliament and Council. <http://data.europa.eu/eli/reg/2020/852/oj>.
- Regulation (EU) 2023/2631. *On European Green Bonds and Optional Disclosures for Bonds Marketed As Environmentally Sustainable and for Sustainability-Linked Bonds*. European Parliament and Council. <http://data.europa.eu/eli/reg/2023/2631/oj>.
- Robinson, N. 2009. "The European Investment Bank: The EU's Neglected Institution." *Journal of Common Market Studies* 47 (3): 651–673. <https://doi.org/10.1111/j.1468-5965.2009.01818.x>.
- Romani, A. M., and J. Murphy. 2008. "An Unusual Opportunity." *International Financial Law Review* 27 (2): 26–30. <https://heinonline.org/HOL/LandingPage?handle=hein.journals/intfinr27anddiv=32andid=andpa>.
- Schön-Quinlivan, E., and M. Scipioni. 2017. "The Commission as Policy Entrepreneur in European Economic Governance: A Comparative Multiple Stream Analysis of the 2005 and 2011 Reform of the Stability and Growth Pact." *Journal of European Public Policy* 24 (8): 1172–1190. <https://doi.org/10.1080/13501763.2016.1206140>.
- Seabrooke, L., and A. Stenström. 2022. "Professional Ecologies in European Sustainable Finance." *Governance-An International Journal of Policy Administration and Institutions* 36 (4): 1271–1292. <https://doi.org/10.1111/gove.12739>.
- Spinaci, S. 2022. *European Green Bonds- a Standard for Europe, Open to the World*. European Parliamentary Research Service. [https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/698870/EPRS_BRI\(2022\)698870_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2022/698870/EPRS_BRI(2022)698870_EN.pdf).
- Sustainabonds. 2021. "Taxonomy Pre-Emption Gives EIB Competitive Green Edge." <https://sustainabonds.com/taxonomy-pre-emption-gives-eib-competitive-green-edge/>.
- Toth, J. 2023. "Sustainable Investments with Eila Kreivi." Produced by International Sustainable Finance Centre." In *Sustainability in Finance*, 38. Vol. 25. Podcast, Spotify. <https://open.spotify.com/episode/41YVMsDtkG9MUpuVbCVuZV>.
- UNEP. 2015. *The Financial System We Need Aligning the Financial System with Sustainable Development*. Geneva: United Nations Environment Programme. <https://www.unep.org/resources/report/financial-system-we-need-aligning-financial-system-sustainable-development>.

- Wilson, M. 2007. "FOCUS: EIB Launches Benchmark Climate Awareness Bond." *Dow Jones Newswires*.
- World Bank. 2015. *International Financial Institution Framework for a Harmonised Approach to Greenhouse Gas Accounting*. https://www.worldbank.org/content/dam/Worldbank/document/IFI_Framework_for_Harmonized_Approach%20to_Greenhouse_Gas_Accounting.pdf.
- WWF. 2015. *WWF Recommendations for the EIB Climate Policy Review*. WWF Briefing Paper. https://wwfeu.awsassets.panda.org/downloads/wwf_recommendations_eib_climate_policy_review_march15.pdf.
- WWF. 2016. *Green Bonds Must Keep the Green Promise! A Call for Collective Action Towards Effective and Credible Standards for the Green Bond Market*. http://d2ouvy59p0dg6k.cloudfront.net/downloads/20160609_green_bonds_hd_report.pdf.
- Zerbib, O. D. 2017. "The Green Bond Premium." *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.2890316>.