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**Too green to be true?**  
**Forging a climate consensus at the European Central Bank**

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**Abstract.** In its 2021 strategy review, the European Central Bank's Governing Council unanimously decided to make climate change one of its priorities for the coming years. In this article, we try to understand how this change was achieved. To do so, we rely on mixed methods, studying ECB policies, speeches, exchanges with the European Parliament, and conducting semi-structured interviews. We present a detailed account of the rapid - and still ongoing - changes within the ECB regarding the climate challenge, and attempt to unpack its conditions of possibility. We show that climate integration results from the combination and hybridization of internal dynamics and external pressures. On the one hand, the renewal of the Executive Board and modifications in organizational dynamics secured a growing coalition for a change. On the other, pressures from politicians, NGOs, academics and citizens pushed the institution to develop its expertise and provided willing insiders with further argumentative resources to push their green agenda. While these two intertwined dynamics have allowed 'green doves' to forge a consensus around the climate action plan, disagreements remain within the Governing Council on the scope and shape of future greening efforts.

**Keywords:** European Central Bank, climate change, low-carbon transition, monetary policy, financial stability, green central banking

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## 1. Introduction

In July 2021, the Governing Council of the European Central Bank (ECB) voted unanimously for a four-year action plan to integrate climate change into its action (ECB, 2021). A year later, the ECB announced that its corporate sector purchase program (CSPP) and its collateral framework would now feature climate-related criteria. Moreover, the CSPP would progressively be tilted not only based on financial risk, but also be aligned with the Paris Agreement (ECB, 2022). This represents a clear break with the stances taken by European central bankers just a few years before, who saw climate change as a challenge to be tackled by political authorities alone (e.g. Mersch, 2018; Weidmann, 2020). More generally, this integration of climate concerns is puzzling, as it takes central bankers away from their usual focus and exposes them to reputational risks or attacks on their legitimacy (Dietsch et al., 2022; Van Doorslaer et al., 2022). How can this change be accounted for? Why has climate change become such an important part of the ECB's agenda? How was a consensus reached within the Governing Council on this previously divisive issue?

In this article, we attempt to answer these questions using a mixed methodology. First, we study the speeches of ECB Executive members using textual analysis techniques to trace back the evolution of climate-related stances among the board. Second, we examine ECB responses to its political accountability counterpart (the European Parliament) regarding climate change. Third, we compare these words with ECB's deeds through a close reading of its official strategy, instrument implementation and policy development. Last, we rely on 21 semi-structured interviews with senior European central bankers, MEPs involved in ECB accountability and advocacy group representatives to obtain insider views on the evolution of the Governing Council's balance of power and ideas regarding climate change. The triangulation from the various empirical materials allows us to do three main contributions to the literature. First, this article aims to provide a detailed account of the rapid changes underway within the ECB regarding the climate challenge. Through our interviews and the study of ECB speeches and accountability exchanges, we are able to trace the evolution of views on the topic inside the Executive Board. We show that prior to 2018, and despite some repeated parliamentary accountability requests, the issue of climate change was hardly discussed, only as a distant challenge unrelated to central banking issues. It was not until 2018 that climate change began to be framed in the central bank's coordinates. However, disagreements remained up to 2020 within the board about climate change's relevance and the extent to which it fell within the ECB's mandate. These tensions were gradually resolved, eventually resulting in a consensus within the Board of Governors on the mid-2021 climate action plan.

Second, we try to trace how this ideational change was made possible. Drawing from Schulz (2017) study of ideational changes within the ECB, we explore three explanatory avenues. First, the *persuasion* – or conversion – of some of the reluctant central bankers was possible due to the conjunction of external pressures from climate activists, parliamentarians, and other central bankers who pushed the issue onto the ECB’s agenda. Second, the *appointment* of new central bankers, especially inside the Executive Board, was decisive in swinging the balance of power inside the Governing Council. Last, the evolution in *leadership* - the modification of routines and informal policymaking procedures – under Lagarde’s Presidency helped structure a coalition of the willing inside the Eurosystem. The conjunction of external pressures and internal dynamics therefore helped anchoring climate change considerations more firmly within the institution, moving from a marginal non-issue to one of the most visible new areas of central bank expertise.

Our final objective is to understand the extent to which this ideational change might reflect a broader paradigmatic shift regarding the way central banks view their role in the economy, from their ideal of depoliticised neutrality to more distributive interventions. We stress that behind the surface consensus reached with the climate action plan, heated disagreements remain inside the Board of Governors regarding to what extent the ECB should go beyond a risk-based *prudential* approach (i.e. a defensive reaction to climate-related risks) and embrace a more *promotional* greening of its action (i.e. pro-active policies aimed at facilitating the low-carbon transition) (Baer et al., 2021). While the ECB has overcome its internal gridlock as regards to climate change integration, it still faces disagreements regarding the extent to which it should proactively steer financial flows to facilitate the transition to a low-carbon economy.

The remainder of this article is organised as follows. Section 2 provides a literature review and introduces our methodology and materials. In the third section, we trace how climate change has gradually emerged as a relevant issue at the ECB. Section 4 presents three channels through which this ideational change was facilitated, with *persuasion*, *appointment*, and *leadership* interacting and reinforcing each other. We conclude in section 5.

## **2. Literature review, methodology and materials**

### **2.1. Literature review**

Unlike what ‘institutional amnesia’ might suggest, European central banks were not so long ago active far beyond their price stability mission (Braun and Downey, 2020).

For example, Banque de France used during the post-war era its credit policy instruments to fulfil a wide range of objectives such as industrial policy, trade policy or financial policy (Monnet, 2018). More generally, credit-guidance policies were more prevalent and contributed to steering credit towards non-financial firms and accelerating industrialization (Bezemer et al., 2021; Mikheeva and Ryan-Collins, 2021). These policies were then abandoned in most high-income countries, and central banks, endowed with institutional independence from their political counterparts, scaled back the scope of their actions to focus solely on inflation control, during a period known as the ‘Great Moderation’.

After thirty years of central bank independence and ‘neutralization’ of credit policies, we may be entering a new era in which central banks regain some of their lost powers, re-entering more coordinative efforts with governments (Deyris et al., 2022; Scialom, 2022). The global financial crisis has indeed triggered important changes in central banks’ actions, paradigms and ideas, reflected, for example, in the emergence of countercyclical macroprudential policies (Baker, 2018, 2013), the normalization of quantitative easing practices (Ronkainen and Sorsa, 2018), and the increasing purchase of sovereign debt on secondary markets (Gabor, 2021). The global financial crisis – and the following sovereign debt crisis – have both provided the European Central Bank an opportunity to reinterpret ‘by stealth’ the rules of the game and to extend its sphere of influence (Schmidt, 2016). This move may have been in large measure forced, due to political authorities’ inaction, translating into ‘institutional loneliness’ (Mabbett and Schelkle, 2019). In short, the ECB and other high-income country central banks have engaged in (or have returned to) broader and more far-reaching interventions since the global financial crisis, sometimes despite the lack of new formal powers.

In recent years, climate change has emerged as one of these new fields of action for central bankers, and the number of climate-related financial policies have soared globally (D’Orazio, 2022). The sizes and shapes of these policies vary as central banks vary in ‘green policy space’. On the one hand, low- and middle-income countries often still benefit from wider mandates allowing for more far-reaching policies (Dikau and Volz, 2021a, 2021b). On the other hand, the central banks of high-income countries, still bound by narrow mandates and political independence, engage in more timid greening. They generally refuse to intervene as directly in the allocation of capital and settle for more passive roles by implementing informational policies to foster climate-related risks disclosure. However, as with the management of the global financial crisis, the ‘institutional loneliness’ triggered by political authorities’ inaction in the fiscal or regulatory sphere could push central banks to green their actions even without formal changes to their mandates (Baer et al., 2021).

For van 't Klooster (2021), such a shift may be underway within the ECB. Without any new democratic input, ECB officials have abandoned the 'market liberal' ideas hard-wired in their mandate to embrace 'technocratic Keynesianism', relying on 'strategic ambiguity' to bridge the inconsistencies between the two. If the rebirth of macroprudential policy and the reintroduction of public bond purchases at a massive scale represent important changes in central banking operations, there is still debate to what extent they truly entail an ideational shift (Gabor, 2021; Levingston, 2021). More importantly for the purpose of this paper, it is still quite unclear what position climate-action entails in all of this, as most of the debate has focused on post-crisis transformations such as macroprudential policy or fiscal-monetary coordination. This is precisely the gap that this article tries to bridge, focusing on the fast-paced integration of climate considerations at the European Central Bank.

## 2.2. Methodology and materials

For the purpose of this paper, we rely on a mixed-methodology in an attempt to circumvent the opacity of the ECB. Indeed, if general accounts of the monetary policy committee sessions are available since January 2015, precise minutes and votes within the Governing Council remain confidential, and archives will only be shared with a delay of 30 years.

First, we rely on public speeches and official communications to try to approach ECB officials' positions. This has been done multiple times by the political economy literature (see e.g. Braun, 2021; Diessner and Lisi, 2020; Dietsch et al., 2022). While still a second-best material, public discourses are valuable resources for scholars. Indeed, communication is seen as increasingly important by central bankers themselves for so-called 'forward guidance' purposes, leading to regular and polished communications that have the explicit goal of shaping agents' perceptions and anticipations. The performativity of their discourses is therefore not only recognised, but also actively pursued by central bankers. To track climate-related stances by ECB Executive Board members, we relied on textual analysis methods, using a dictionary-based approach to spot climate-related speeches. We then carefully read the speeches and hand-coded qualitative variables to depict the evolution of stances over time (for more details, see Appendix).

Second, we also investigated ECB's (climate-related) interactions with the Members of the European Parliament (MEPs), either through letter to the ECB President, or through questions at trimestral Monetary Hearings sessions. Using the same dictionary-based methodology, we were able to gather year by year and party by party the accountability demands of parliamentarians to the ECB regarding the climate

challenge, as well as ECB's answers. This gave us a more complete picture of the evolution of the ECB's official positions on the issue.

Third, we complemented the study of spoken words with a systematic review of regulations and policy documents concerning ECB's climate efforts. This includes monetary policy accounts, monetary policy decisions, as well as dedicated climate-related announcements, reports and in-house research.

Finally, we conducted 21 semi-structured interviews with European central bankers, members of the European Parliament (MEPs) and pressure group representatives (see Table 1). This allowed us to obtain insider views on the current and past balance of power at the European Central Bank about climate-related issues. Central bankers interviewed are mainly senior executives, coming from the ECB and from national central banks to capture the diversity of opinions in the Council of Governors<sup>1</sup>. MEPs interviewed are members of the ECON commission that engaged with the ECB on climate-related issues. NGO advocacy officers were selected due to their role within advocacy campaigns with the ECB and/or national central banks on climate change issues, giving them a strong sense of the different positions at stake. The interviewees were selected based on a snow-balling method: initial contacts were made on the basis of current or past positions of potential interviewees, who themselves recommended competent colleagues in their institution or in other European central banks.

**Table 1. List of semi-structured interviews**

	<b>Interviewee</b>	<b>Date</b>	<b>Type</b>
<b>R1</b>	Senior official from a national CB	12/2021	Video call
<b>R2</b>	Senior official from a national CB	12/2021	Video call
<b>R3</b>	Senior official from the ECB	12/2021	Video call
<b>R4</b>	Senior official from the ECB	02/2022	Video call
<b>R5</b>	Senior official from a national CB	03/2022	Video call
<b>R6</b>	MEP (Socio-Democrats)	04/2022	Video call
<b>R7</b>	Former MEP (Greens)	04/2022	Video call
<b>R8</b>	MEP (Greens)	05/2022	Video call
<b>R9</b>	MEP (Left)	06/2022	Written Q&A
<b>R10</b>	MEP (ECR)	06/2022	Video call
<b>R11</b>	MEP (Renew)	06/2022	Written Q&A
<b>R12</b>	Senior official from the ECB	06/2022	Video call
<b>R13</b>	Senior official from a national CB	09/2022	Video call
<b>R14</b>	Junior official from a national CB	09/2022	Video call
<b>R15</b>	NGO Advocacy Officer	09/2022	Video call
<b>R16</b>	Former senior official from a national CB	09/2022	Video call
<b>R17</b>	Former ECB accountability adviser	09/2022	Video call
<b>R18</b>	Board member of a national CB	09/2022	Video call
<b>R19</b>	Board member of a national CB	10/2022	Video call
<b>R20</b>	Think tank expert	10/2022	Video call
<b>R21</b>	Former member of the ECB Executive Board	10/2022	Video call

### **3. Climate change mainstreaming**

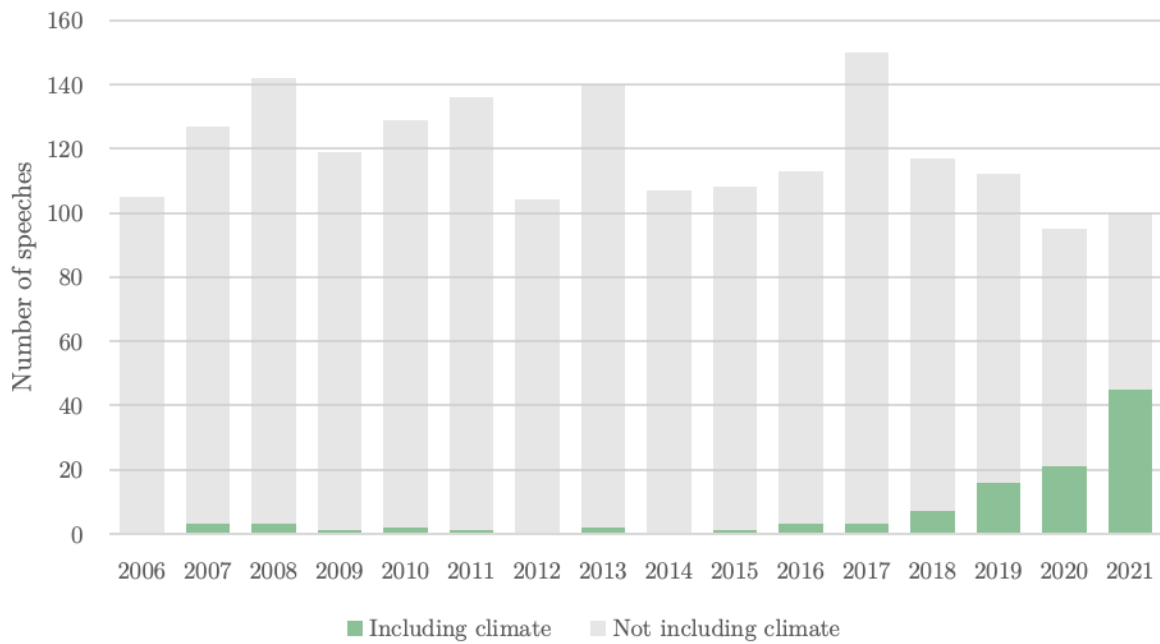
In this section, we highlight how climate change has come to the fore within the ECB, taking an increasing share of its agenda. To do so, we provide a detailed account of how its public positions evolved through speeches of its Executive Board members and compare those words with the deeds of the ECB.



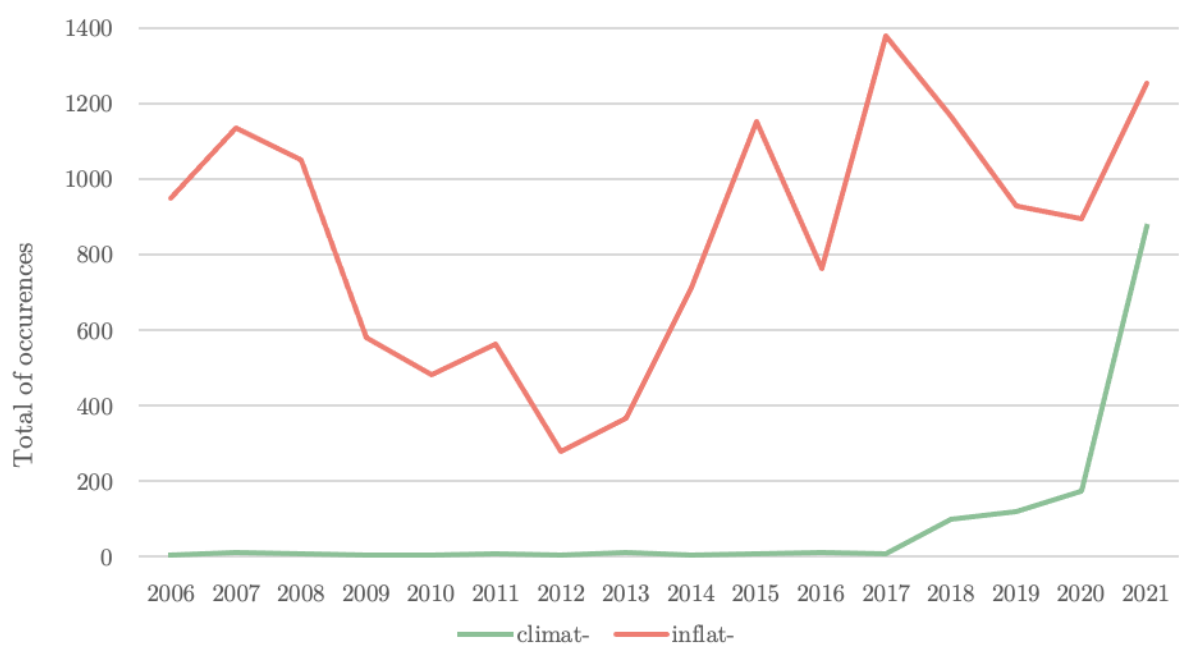
### 3.1. Warning words in a warming world

The first salient fact about climate change in ECB public stances is the quantitative increase in official speeches addressing this topic. Barely present before 2018, climate change was mentioned at least once in 45% of speeches in 2021 (Figure 1). In the same period, occurrences of the word "climate" (and its derivatives) have steadily increased to reach about 900 occurrences in 2021. This places climate change at a level comparable to inflation in ECB public speeches (Figure 2).

**Figure 1. Climate change in ECB speeches**



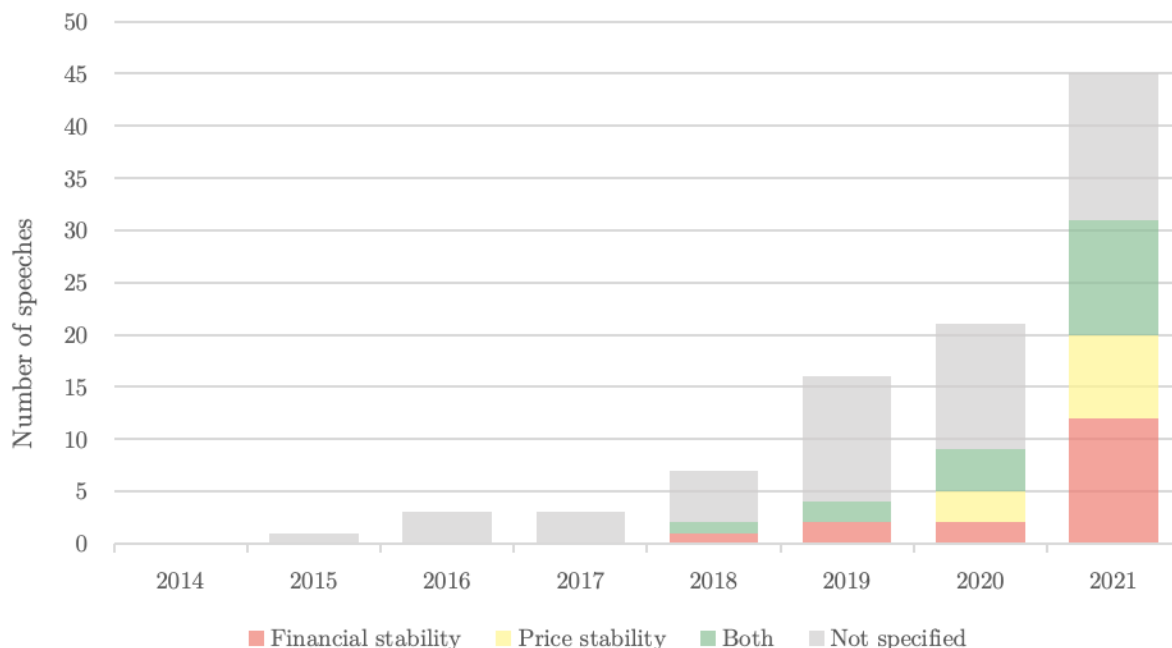
**Figure 2. Climate change and inflation occurrences in ECB speeches**



Besides this quantitative shift, climate change has been increasingly addressed as a central banker's problem, linking it to the ECB's missions, mandate and instruments. The European Central Bank's has two main missions. First, it has to ensure price stability, keeping inflation 'around 2 percent in the medium term' (ECB, 2021). Second, it must ensure financial stability through the supervision of systemic banks. At first glance, climate change may seem remote from these concerns. But since Carney (2015), central bankers began to link climate change to their remit, first through financial stability and then through its impact on monetary policy.

Yet, before 2018, ECB speeches touching upon climate change were usually mentioning it just once, and always referred to it as a 'great challenge' facing humanity, like digitalisation or demographic ageing. It is only with Lautenschläger (2018) and Benoît Cœuré (2018) that climate change began to be framed as a central banker's problem. In the following years, the number of speeches making this link soared, and climate change even became the main focus of some speeches, whether to develop the links between climate and price stability (Schnabel, 2021) or between climate-related risks and financial stability (Elderson, 2021a). In 2021, more than two thirds of the speeches mentioning climate change explicitly characterised it as a threat to all or part of the ECB's missions, as shown by Figure 3. Initially addressed almost exclusively from a financial stability perspective, climate change became increasingly pictured as a challenge for all relevant ECB operations, impacting its macroeconomic forecasts, the inflation dynamics or threatening the transmission mechanisms of monetary policy.

**Figure 3. Climate change and ECB missions**



### 3.2. Climate change and ECB mandate(s)

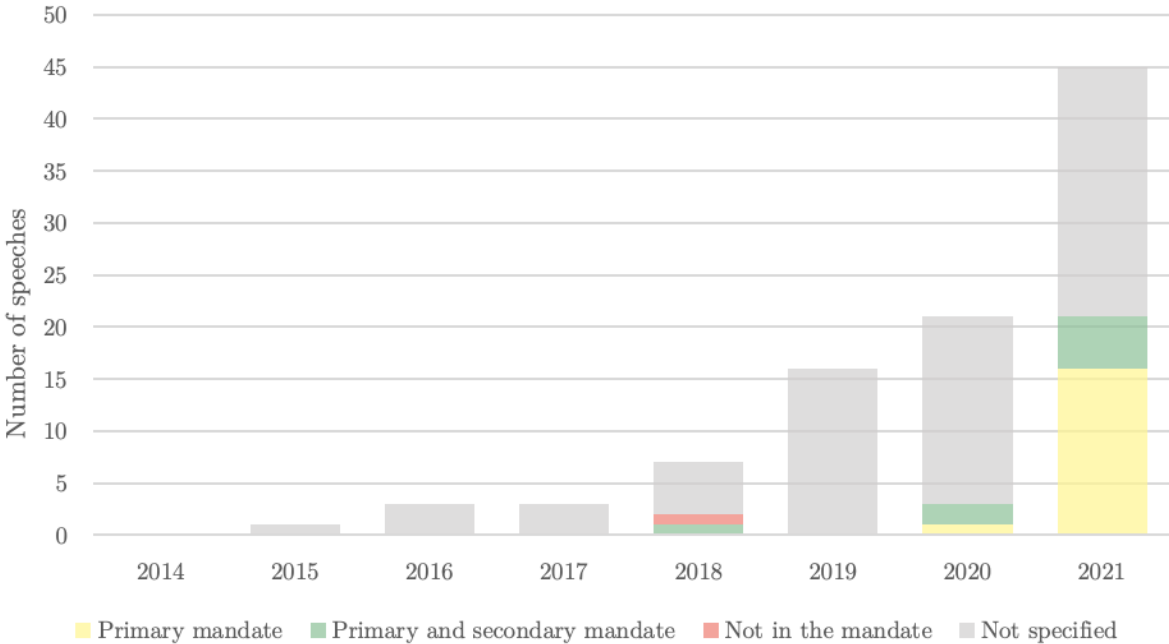
If climate change is a threat to the ECB's missions, its mandate lacks precise guidelines on how to respond to it (de Boer and van 't Klooster, 2021), leading to controversies among Board members. On the one hand, the 1992 mandate states that 'the primary objective of the European System of Central Banks (ESCB), shall be to maintain price stability', and that 'the ESCB shall act in accordance with the principle of an open market economy with free competition'. This led Yves Mersch to argue that the ECB should focus on inflation and not 'venture into a political agenda with distributional consequences', warning against undermined legitimacy and possible litigation if the ECB was to take any green action (Mersch, 2018).

On the other hand, the mandate also states that 'without prejudice to the objective of price stability, the ESCB shall support the general economic policies in the Union with a view to contributing to the achievement of the objectives of the Union', including 'working for the sustainable development of Europe [...] and a high level of protection and improvement of the quality of the environment'. This led Benoît Cœuré to advocate for a much more ambitious role for the ECB, even discussing the opportunity of 'actively support the transition to a low carbon economy', referring to this 'secondary mandate' (Cœuré, 2018).

After this 2018 public clash between Mersch and Cœuré, no explicit positions were taken regarding how climate change should be interpreted within ECB's mandate for

almost two years (Figure 4). Lagarde (2020) and Schnabel (2020a, 2020b) were the first ones reassessing that climate was fully within the primary mandate, Schnabel even adding references to the secondary mandate. However, it was not until 2021 that the issue really appeared clear-cut in the speeches, featuring in nearly half of the interventions, often with additional references to the secondary mandate. Far from the fears of mission creep evoked by Mersch (2018), climate inaction is now seen as the biggest risk to the ECB's legitimacy (Elderson, 2021b).

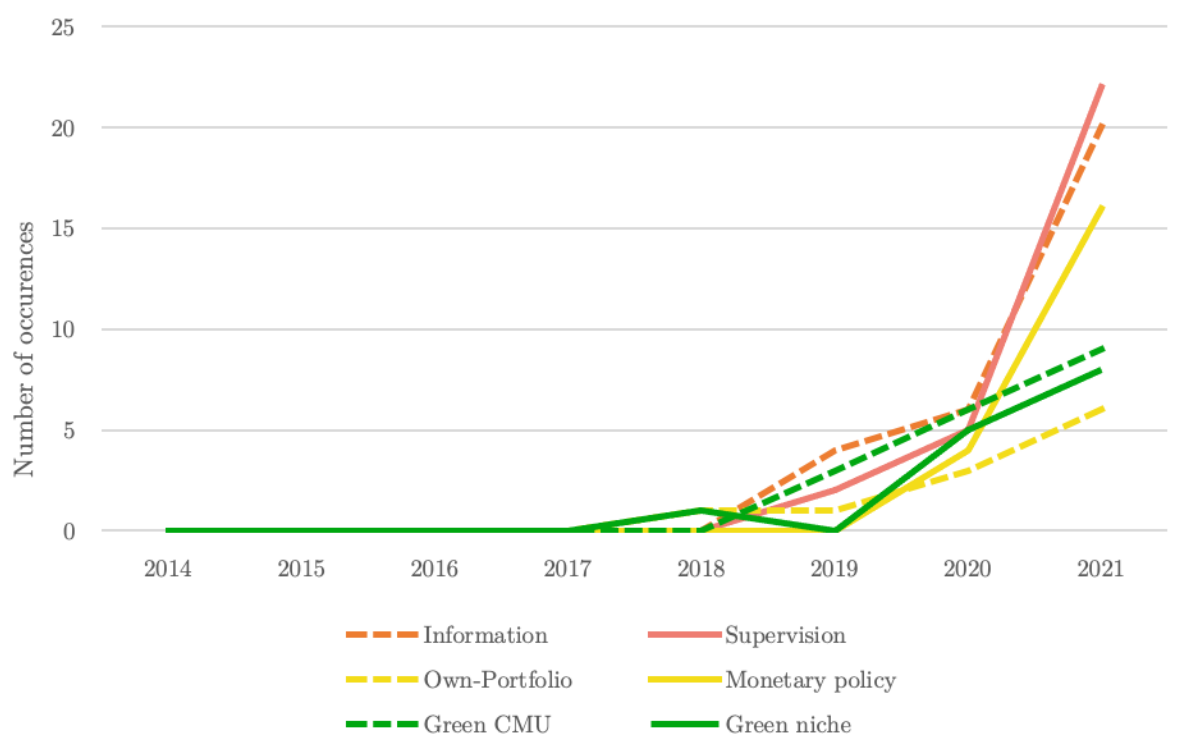
**Figure 4. Climate change and ECB mandate**



3.3. From words to deeds

As climate change began to be considered relevant for ECB’s missions and mandate, European central bankers started to discuss ideas on how to integrate climate change in their policymaking. The first mention of greening ECB’s instruments appeared in Coeuré’s speech (2018). He recalled that (i) the ECB managed its own portfolio with ESG criteria and (ii) that its quantitative easing program led to significant green bond purchases – although these purchases simply follow market neutrality, i.e. they are not favoured over other bonds. In 2019, three other instruments were mentioned in speeches (see Figure 5). European central bankers started to discuss the need to improve information disclosure, to conduct climate stress tests, and called for an accelerated green capital market union to foster the development of sustainable finance. It was only in 2020 that the possibility of tilting the monetary policy portfolio was first evoked, gaining momentum in 2021.

**Figure 5. Climate change and ECB instruments**



Words were not always followed by action, but the number of climate initiatives within the ECB significantly increased in the last few years. First, the European Central Bank tried to build expertise. It joined the Network for Greening the Financial System<sup>2</sup> (NGFS) in May 2018 and its steering committee in July 2020. It then launched an in-house climate change research centre in January 2021 in order to better understand the macroeconomic consequences of climate change on ECB's missions and instruments. Second, it also engaged in climate-related policymaking. For example, the ECB drafted a methodological guide on climate-related risks (ECB, 2020a), and launched a climate stress test program for the main European banks (Elderson, 2021c). It also decided in September 2020 to accept sustainability-linked bonds as collateral, hence supporting the development of this niche asset class (ECB, 2020b). But the pinnacle of its climate commitment was decided during its strategy review of July 2021. It led to a four-year climate action plan that was accepted unanimously by the extended Council of Governors. First, the ECB announced that it would be pushing for more informational disclosure about climate-related risks. Second, it established climate stress-testing as a new routine, with possible future capital requirement consequences for banks that do not pass them. Third, it stated its intention to explore how to integrate climate criteria into its monetary policy instruments. A year later, the ECB confirmed that it would incorporate climate-related criteria both in its collateral framework and in its corporate

purchase sector program (CSPP). Besides, the ECB announced the greening of the CSPP would not only be based on risk-based metrics, but also actively tilted to be aligned with the Paris Agreement, a decision motivated by ECB's secondary mandate of supporting the European Union's objectives (ECB, 2022).

Three periods can therefore be isolated in the history of climate change at the ECB. Before 2018, climate change was not seen as a relevant topic, even though Carney (2015) had already launched the topic in the central banking sphere. Between 2018 and 2020, conflicting views were publicly expressed regarding its relevance, and most speeches did not problematise climate change in central banking coordinates. It was only from 2020 onwards that climate change gained traction and was put at the fore of its agenda. It was gradually incorporated in actual policy developments, and became a central part of ECB's 2021 strategy review. Although the guidance given to the ECB by its political counterpart - its mandate - did not change over the same period, it seems that European central bankers experienced an ideational shift. While they did not consider climate change a relevant issue a few years ago, European central bankers have now turned it into a policy priority. How can this change be accounted for?

#### **4. Forging a climate consensus: persuasion, appointment and leadership**

In this section, we try to explain why and how the ECB flip-flopped on climate change issues. Mobilizing the theoretical framework of Schulz (2017) on ideational shifts at the ECB, we highlight how the climate shift came about, through the *persuasion* of some of its members, the *appointment* of new executives and the changes in *leadership* they brought to the institution. While we focus mainly on changes at the ECB and within its Executive Board, we also account for significant changes in European national central banks that led to shifts in the balance of power within the Governing Council.

##### **4.1. External pressures and the *persuasion* of central bankers**

According to Schulz (2017), the first way in which an ideational change can occur within the ECB is through the *persuasion* of some of its Board members. Based on our interviews, we highlight three sources of external pressure: civil society, political actors and other central bankers.

The first type of external pressure came from civil society (climate activists, NGOs and academics). As Kupzoc (2022) points out, the external pressure from City financial activists in early 2010s who framed climate change as a systemic risk issue – and therefore a macroprudential problem - was key in catapulting the subject into central banking spheres (R20). Even before the seminal speech of Carney (2015), some central

bankers staff members had already been tasked to look at what was emerging as 'climate-related risks' due to the momentum of the 'carbon bubble' idea pushed forward by the NGO Carbon Tracker (R13). As this prudential understanding of climate change became mainstream, the pressure from NGOs shifted toward monetary policy. Other civil society movements such as Positive Money, Greenpeace or Reclaim Finance started to lobby the ECB into a more proactive greening. Together with academics, NGOs launched reports attacking the carbon footprint of the ECB's monetary policy, pointing out that it was tilted towards the most polluting sectors (Dafermos et al., 2021, see e.g. 2020). The policy reports were accompanied by a petition signed by 170,000 European citizen, a comprehensive poll, protests in front of the ECB headquarters and open letters in the press.

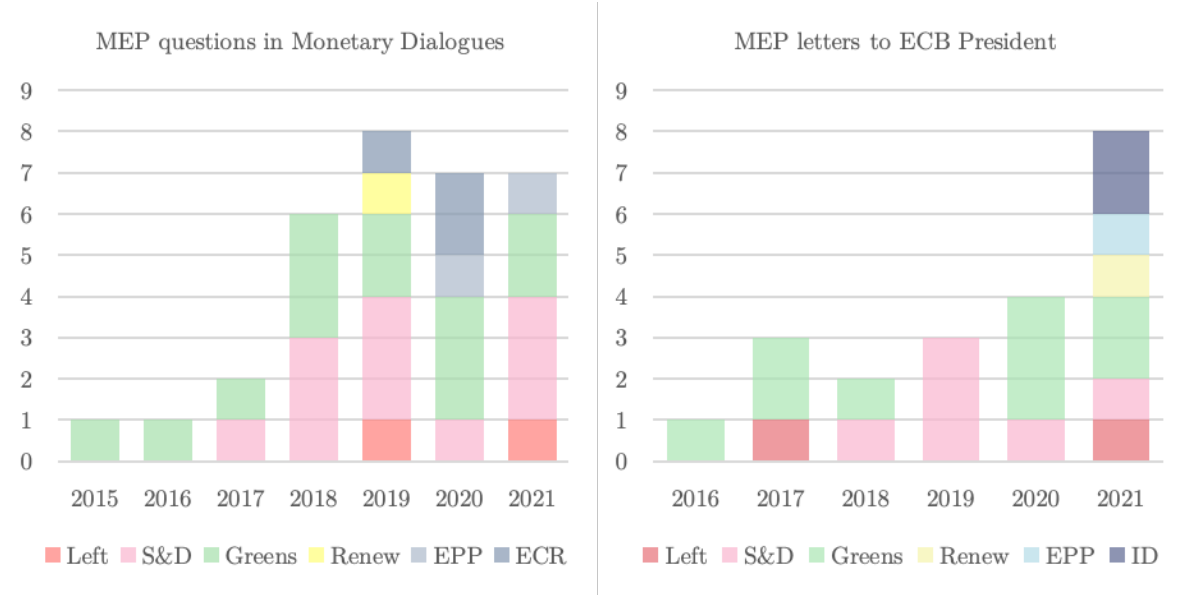
This pressure had a very significant impact pushing the climate agenda internally, as the ECB was constantly under the spotlight for their lack of climate action and their carbon bias (R12,15,20,21). In fact, this pressure may have been the main trigger for the tilting of the CSPP agreed in 2021 (R15). Indeed, one of the most vocal and influential opponents to this idea was Bundesbank Governor Jens Weidman. After responding to a letter that the ECB had to wait for all the relevant risk-based data before any action (Weidmann, 2021a), he opened the door a few weeks later to an alternative, 'limiting the maturities or the amount of corporate bonds of certain sectors' (Weidmann, 2021b) that was finally adopted after the 2021 strategic review (ECB, 2021).

However, activist pressure might not always be effective, as central bankers view themselves as independent, neutral technicians that should remain deaf to external pressures. If central bankers feel their independence under attack, such actions can even be counterproductive. According to R12, the legal action of the NGO ClientEarth (attacking the National Bank of Belgium for its involvement in ECB's carbon-intensive monetary policy) and the subsequent happenings in Brussels (dumping of a car wreck from the deadly Belgian 2021 floods) may have participated in entrenching Governor Pierre Wunsch's opposition. Governors receive pressure from think tanks and NGOs very differently, and NGOs benefit from varying levels of access to national central bank staff and management (R10,15,16,20).

The second type of external pressure, which all central bankers must at least acknowledge, comes from their political counterparts. Although independent, the ECB must indeed respond to questions and letters from Members of the European Parliament by explaining its actions and accounting for its decisions. In the past years, MEPs have been increasingly vocal regarding ECB's climate (in)action (see Figure 6). While this might not have triggered shifts in Governors ideational framework, this mounting pressure had two positive consequences. First, it forced the ECB to work on those issues, because they did not have the answer to what was asked by MEPs.

According to R12 and R21, much of what was done at the ECB, especially at the beginning, was 'defensive', reacting to Parliament's pushes. Although MEPs often regret receiving preformatted answers (R6-8), climate-related letters actually forced the ECB to produce new studies and develop its expertise, bringing climate change even further into the realm of the central bank's ordinary and legitimate activities (R17,21). Indeed, letters pass through four different layers of approval, each time provoking interdepartmental discussions at all levels of the hierarchy, with internal impacts unsuspected by the MEPs (R17).

**Figure 6. Climate-related accountability requests**



Second, political pressure could be used as argumentative resources by green advocates within the Governing Council. This process became more and more efficient, because there was a process of discursive convergence as MEPs gradually adapted the way they framed their demands, leading to the formation of an effective - but precarious - coalition with 'green' central bankers (Massoc, 2022). For example, MEPs questioned ECB's monetary policy carbon footprint, using NGOs, think tank and academics work, increasing the pressure on the Governing Council (R6,15,17). Sometimes, 'green' central bankers even requested new argumentative resources to push their climate agenda. In an answer to MEP Chris MacManus (Left), Christine Lagarde hinted that ECB could do more regarding the climate challenge if the European Parliament clearly stated how important climate change should be in its secondary supporting objectives<sup>3</sup>. A few months later, the European Parliament incorporated in its annual resolution about ECB's action a full section devoted to



climate change, stressing that the ECB is bound by the Paris agreement, should act on its secondary mandate, and escape its risk-based-only approach (European Parliament, 2022). This resolution was important to secure the July 2022 announcements of the ECB confirming the green tilting of the CSPP and the return of secondary mandate considerations (R6,12,17). More generally, the European Union's environmental action has been an important precondition for the integration of climate change into the ECB, giving proponents of the 'secondary mandate' interpretation much more leeway than if the issue was neglected or politically contentious (R20,21). Besides accountability mechanisms, political influence also came from more informal or conjunctural channels. For example, the Banque de France had to expand its expertise on climate-related issues in 2013 after French Minister of the Economy sent a letter to the FSB asking to investigate on climate-related risk; and in 2015 after the Parliament passed a law about climate-related disclosure for financial actors that involved oversight by the Banque de France (R13). Requests for legal opinions by European institutions on climate-related risks and on sustainable finance policies was also an important factor of ECB's internal expertise development (R4,12,17). Last, but not least, the Network for Greening the Financial System (NGFS) was also launched after a political request. In October 2017, the Banque de France was approached by the French Treasury to intervene in the *One Planet Summit* organized by President Macron in late 2017. As the participation was conditioned to the launch of climate-related multilateral initiatives after the US dropped from the Paris Agreement, two senior executives proposed the idea of what would become the NGFS. Being a last-minute announcement, with only 8 institutions, this network quickly took on a very important role in integrating climate change into central bankers' spheres (R13,16,19,20).

This represents the third type of external pressure. In addition to external pressures from NGOs and political bodies, central bankers have also increasingly been influenced by their peers. Many interviewees stress the role of Carney (2015) speech in triggering the momentum, forcing other central bankers to take a stand and launching a series of speeches on the topic (e.g. Knot, 2015; Villeroy de Galhau, 2015). But this speech was mostly focused on introducing climate-related risks for private financial actors rather than on how central banks could green their policies. Peer pressure actually increased a few years later thanks to the creation of the NGFS. The Banque de France, hosting its secretariat, became a climate-related policy entrepreneur. Its (deputy) governor(s) began touring formal and informal venues such as G20 summits, Financial Stability Board meetings and thematic conferences to incentivize other central bankers to join (R20). Quickly, they were joined by dozens of other central banks, and it became increasingly costly to central bankers' reputations not to jump on the climate bandwagon (Van Doorslaer et al., 2022). The newly

converted central bankers in turn advocated for the topic, spreading the network and allowing the first movers to win reputational gains through their expertise. Central bankers began to see climate change issues as a new field in which they could pursue ‘comparative advantage’, either to reinforce the leadership of their institution in the Euro-system, or allowing them to find better career opportunities after the end of their mandate (R12,16).

After Banque de France, Bundesbank or the Netherlands central bank ‘unlikely activism’ (Siderius, 2022), the ECB also joined the NGFS mid-2018, and the remaining Euro-system central banks quickly followed. At first, joining the NGFS was an easy way of sending the signal that the ECB was ‘doing something’ without pre-committing too much, especially because the network focused in its early days on a more consensual risk-based approach (R12,21). Although ECB’s involvement was at first small (R16), it triggered the first climate-focused speech from a ECB member, at a NGFS event organized by the Bundesbank in Berlin (Cœuré, 2018). Then, as new central banks with broader mandates joined the network, the NGFS began to expand its analysis on the possibility of utilizing monetary policy as a greening technology. Having failed to take over the secretariat of the NGFS, the Bundesbank took over this workstream (R16). Despite its initial lack of interest, the chairmanship of this workstream gradually shifted the Bundesbank's position from an outright rejection of any proactive greening policy to a more measured position, and even leadership on the greening of non-monetary portfolios at the European level, which was achieved shortly before the strategic review (ECB, 2021). Since its inception, the NGFS acted as a catalyst for expertise, producing regular reports that helped climate change turn into a legitimate central banking issue, and providing ‘green’ central bankers with resources to tap into. By expanding the scope of their analysis, it also broadened the realm of acceptable green policies by showing that, besides its prudential implications on financial stability, climate change also impacted monetary policy portfolios and inflation dynamics (NGFS, 2020).

#### 4.2. Board renewal and the *appointment* of ‘green doves’

Another factor that can explain the change in central banking practices is the *appointment* of new board members with different ideas (Schulz, 2017). Indeed, many idiosyncratic features influence central bankers preferences (see e.g. Bennani and Neuenkirch, 2017; Mishra and Reshef, 2019). We argue that central bankers’ positions also vary significantly regarding climate issues, and that the appointment of new Board members was a key factor in climate mainstreaming at the ECB. Indeed, half of the Executive Board was renewed in the span of a year, from 2019 to 2020. This is an

important and infrequent event, as the terms of office are 8 years long. If one views climate mainstreaming as the result of a struggle between 'green doves' and 'green hawks', the latest appointments have tipped the balance of power in favour of the former.

First, Sabine Lautenschläger resigned in September 2019 for a disagreement over ECB's Quantitative Easing and was replaced by Isabel Schnabel. Sabine Lautenschläger was a German jurist, former Bundesbank vice-president. She had pretty conservative views regarding the greening of ECB's monetary policy, even presenting the development of green finance as a potential third climate-related risk to be monitored rather than encouraged (Lautenschläger, 2018). Her replacement, Isabel Schnabel, came from academia and had no prior experience as a central banker. At first, her views were pretty much aligned with the position of her Bundesbank compatriot Jens Weidman on climate issues. But she was 'converted on the way' and became 'a strong advocate in a 'quite unexpected' manner (R12). This shift happened during the lockdown, as covid crisis forced the ECB into more action (Kupzok, 2022), and she eventually became the leading advocate of challenging market neutrality because of its climate implications (see e.g. Schnabel, 2021). Not coming from a central banking background, her conversion was 'pragmatic', approaching the problem from all angles, without preconceptions, and taking care to weigh the pros and cons in each of her speeches. As a result, she quickly became one of the most prominent and respected voices on the Board of Governors (R20). According to R12, the Paris-compliant greening of the CSPP was only made possible through her decisive support during the 2021 strategy review. In a very tense drafting process, she managed to secure a broad wording of CSPP adjustments ('incorporating climate change criteria, in line with its mandate') against a coalition of climate reluctant governors determined to rule this out by entrenching a risk-based-only approach.

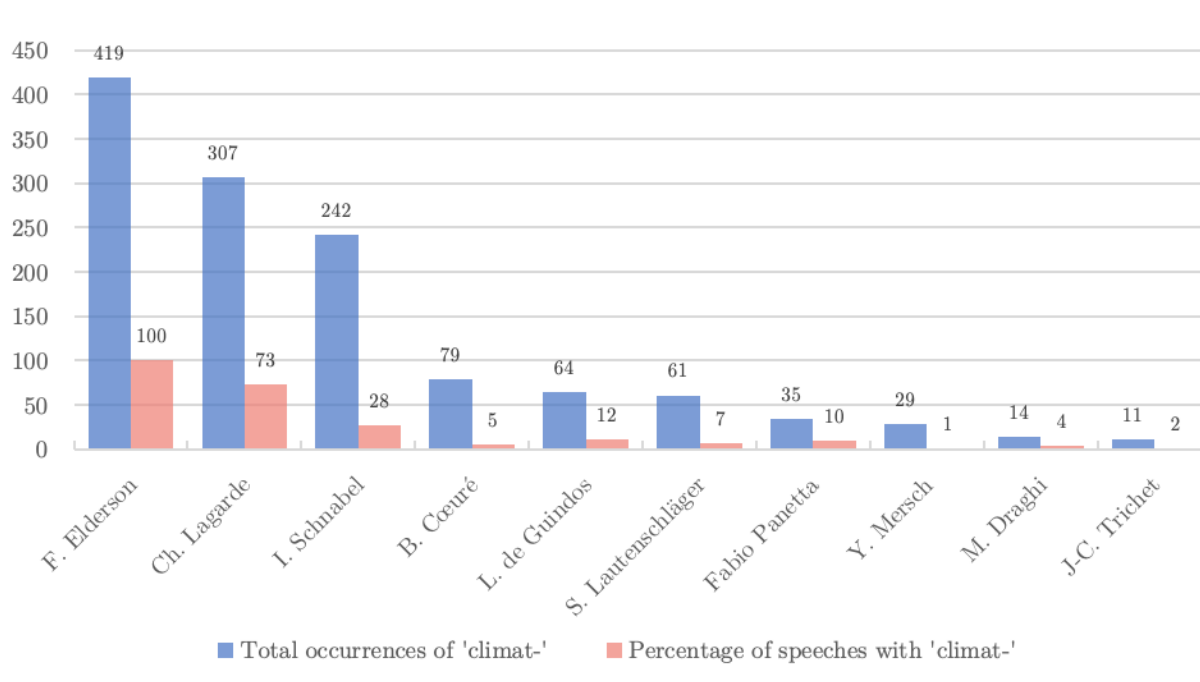
The second important change was the replacement of Mario Draghi by Christine Lagarde in November 2019. Draghi, whose presidency was marked by the 'whatever it takes' moment, was not especially keen on exploring climate change (R12,16,17,20). And indeed, not much was done by the ECB regarding climate change under his presidency. First, Draghi was mainly preoccupied with the main missions of ECB and did not pay too much attention to topics he saw as secondary (R12,16). Second, he saw the integration of climate criteria into monetary policy as an undesirable constraint that would limit the effectiveness of monetary policy by restricting its firepower (R21). On the other hand, Lagarde had a much more political profile. She was less constrained by the usual central banking routine ways of thinking (R6,12,20) and appeared since her first hearings as much more eager to push the climate topic (R6-11). She came from the IMF where she had already started to push climate change as

one of the main priorities, playing a significant role in this institutions turning into an 'unexpected environmentalist' (Skovgaard, 2021). Similarly, to how Draghi replacing Trichet brought a remarkable shift in ideas and policies (Schulz, 2017, p143), Lagarde replacing Draghi was an important step on the road to climate integration within ECB. She became a strong climate advocate, put the secondary mandate back on the agenda and even pushed for more ambitious green policies, as illustrated by her support for green TLTROs<sup>4</sup>.

Finally, Frank Elderson entered at the end of 2020 in the Executive Board of the ECB, replacing Yves Mersch. As chairman of the NGFS since its inception, his appointment was a clear signal and helped to establish the dominance of 'green doves' on the Board of Governors (R12,20,21). Besides chairing the NGFS, he was prior to his nomination a prominent figure of the Dutch central banks' shift on climate change (Siderius, 2022) and was generally very involved and appreciated among central bankers dealing with climate issues (R16). Moreover, he came as a replacement of Mersch, who's fierce opposition inside the Executive Board was the only dragging force remaining (see next section).

These three newcomers quickly formed an effective climatic coalition within the Executive Board, generally arriving with a common position at the Boards of Governors, having met the day prior (R19), and using the monopoly of initiative on the topics discussed to put climate change on the agenda (R21). Together with the Governor of Bank de France, the three newcomers are the most ambitious central bankers on climate integration, which also reflects in their public stances (see Figure 7). For example, Frank Elderson used the word 'climate' (and its derivatives) more than 400 times since taking office, while not having mentioned inflation (and its derivatives) once. Not only newcomers talk more about the climate, but they also embrace completely different views about ECB's role. As previously discussed, Lagarde, Schnabel and Elderson all acknowledge the relevance of the 'secondary mandate' for the climate challenge and were driving forces behind the incorporation of climate criteria in monetary policy instruments, by repeatedly stressing that climate change was not only a financial stability challenge, but also a monetary policy issue.

**Figure 7. Climate change and ECB's Executive Board**



#### 4.3. Changes in *leadership*, capacity building and internal dynamics

There is a last channel through which ideational shift can occur. Indeed, the decisions of the governing council are not only influenced by external factors (*persuasion*) or by the changing composition of its members (*appointment*), but also by changes in *leadership*. By this, Schulz (2017, p. 167) refers to the changes in internal organizational dynamics, when informal policymaking procedures get altered and ‘certain groups of agents find themselves sidelined by new rules and routines of decision-making, [reducing] the significance of the ideas they hold’. We argue this dynamic has also been an important factor of climate mainstreaming at the ECB.

The most prominent example of that dynamic occurred with the change in *leadership* from Yves Mersch to Frank Elderson. During his term, Yves Mersch was the Board member responsible for legal affairs. He had a very narrow vision of ECB's mandate, centered around the primary mandate. In his view, controlling inflation should remain the sole purpose of the ECB, and achieving this goal was the only way to contribute to European Union prosperity. This led him to reject any form of promotional climate action (Mersch, 2018). Despite the presence of alternative opinions among ECB staff and recurring internal discussions on the interpretation of the ECB's secondary mandate, these ideas were sidelined under Mersch's leadership (R21). When Elderson arrived at the Board, he made clear that his position was the exact opposite. In his first public stance, he explained in an ECB blog post entitled ‘Greening monetary policy’ that the ECB had (‘shall’) to take into account its secondary mandate, justifying a more

promotional approach to climate action (Elderson, 2021d). This allowed for opinions alike to emerge much more easily than before internally in the legal department, but also in the external communication, as mentions to the secondary mandate increased significantly in speeches (see Figure 4). A few months later, the legal department of the ECB released an Occasional Paper on the topic, concluding that the secondary mandate indeed provided a sound legal basis for ambitious climate action (Ioannidis et al., 2021). While it can be assumed that Elderson did not *persuade* legal scholars from his department, he did give prominence to those who thought like him and allowed the mainstreaming of this idea.

Lagarde change in *leadership* also changed how climate policy entrepreneurs inside the ECB could defend their ideas and transform them into actual policies. When the application to join the NGFS was sent during Draghi's term of office, it was not a thoughtful policy decision of the Board, but in fact an unprompted application sent by a member of staff (R12). At that time, the Executive Board was not eager to investigate the topic, and accepted to join the NGFS as a convenient way of showing they did something in the face of accountability requests and NGO pressures regarding climate action (R16). But the ECB did not really engage in discussions and did not recruit anyone to work on those topics. At the beginning of 2019, there was still only one identified 'climate expert' in the entire ECB institution who kept abreast of the central bank's research and conferences on the matter (R21). It was only when Lagarde arrived at power and announced that climate change would be on top of her agenda that things started to move. From bottom-up climate initiatives, much of what happened next came top-down, as she requested more work on the topic to assess policy options and develop expertise (R12,21). She later established a Climate Change Center early in 2021 to strengthen and bring together ECB work on climate. This fast-paced structuration, together with her clear climate leadership led to increase the weight of climate advocate ideas' internally.

A similar dynamic happened at the Banque de France, although the change in *leadership* did not come from a new *appointment*, but from the ideational shift of his Governor François Villeroy de Galhau. After setting up the NGFS secretariat, the Governor of the Banque de France basically left this issue aside and neglected the three staff involved. But as the network developed, and the first comprehensive NGFS report came out in early 2019, he changed his view on the subject (R16). Indeed, the event rallied two to three thousand people at Bank de France, proving the momentum the topic had acquired in the past few months. It was only from that moment that internal climate expertise was pushed forward, being now understood as a competitive advantage to be conserved to assert the position of France within the Governing Council (R12,16,21). This led to a series of organizational changes

culminating in March 2021 as the Banque de France mimicked the ECB by creating its own climate change center. This new dedicated department, built around the NGFS secretariat, became responsible for coordinating all climate-related actions at the Banque de France (R13). It is organized around a strategic committee led by a deputy governor, and more specialized working groups at the staff-level in which technical work is carried out in a transversal fashion, in relation with other departments (Monetary Policy, Market Operations, Risk Management). The establishment of this department allowed climate advocates to gain agency within the Bank and gave their stances prominence with direct access (and requests) from the executive management.

## 5. Conclusion: A climate consensus, but an unresolved dispute

In this article, we have shown the different phases through which climate change entered the ECB. After a delayed start compared to other central bankers before 2018, and two years of dithering, the ECB accelerated since 2020, pushing the issue to the top of its agenda. We also tried to explain this ideational shift, from climate neglect to climate enthusiasm. We showed how the combination of internal dynamics and external pressure allowed the issue to gradually gain prominence within the Governing Council, through the *persuasion* of some of its members, new *appointments* shifting the balance of power, and changes in *leadership* that allowed ideational turnarounds.

This case study enabled us to emphasize two elements. First, the European Central Bank is independent *de jure*, but not autonomous *de facto*. It does not float outside society, and is subject to external pressures to which it often reacts more than it is willing to publicly admit. Second, the decisions that are made there are not simply the rational consequence of neutral and rational choices based on economic science for the greater good. Decisions are also the subject of struggles between different visions of what a central bank can and should do, navigating a broadly defined mandate that allows for very different positions to emerge regarding the climate change challenge. While a consensus seems to have emerged on the relevance of climate change to the ECB's missions and on its legitimacy to respond to it, disagreements remain on the magnitude of the changes to be made. On the one hand, several Governing Council members – from the Banque de France, the DNB and the Executive Board - push for an ambitious agenda, stressing ECB's secondary mandate and the need for proactive policies steering financial flows to facilitate the transition. This call for *promotional* policies meets opposition from other members of the Governing Council – from the Bundesbank, the Oesterreichische Nationalbank and the National Bank of Belgium –

that claim that ECB should stick to *prudential* policies that only react defensively to climate-related risks (Baer et al., 2021). Behind this struggle hides deep ideational dissents on the interpretation of ECB's mandate and the role central banks should play in the economy.

Such disagreements have not been resolved by the new climate consensus. Indeed, the 2021 unanimity about the climate action plan comes less from a new harmony of positions inside the Governing Council than the patient building of a compromise between entrenched oppositions. The ECB opted for a strategy largely centered around a consensual risk-based approach, with a small ray of proactive greening on the CSPP. This concession, facilitated by the anecdotal importance of this program in the ECB monetary policy and its likely phase out due to soaring inflation, has mainly helped push back more ambitious and perennial proposals such as green TLTROs. Thus, the climate consensus forged at the ECB does not represent the end, but rather the beginning of new ideational struggles. While the strategy review has closed this battlefield for now by crystallizing the balance of power in the four-year action plan, future developments are likely to reopen the divide over what role the ECB should play in the low-carbon transition.

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## Appendix

For speeches, we rely on the speech database provided by the ECB (ECB, 2019), downloaded in early January 2022, that contains all speeches by members of the ECB's Executive Board from its inception until 31 December 2021, for a total of 2,633 speeches. For letters, we web-scraped the website of the European Parliament for questions, and the website of the European Central Bank for answers, for a total of 881 letters. For Monetary Hearings, we gathered the 111 transcripts from the European Central Bank website.

Then, we processed the different corpuses to remove punctuation, stop words, stemmatise (keeping only the root of the word) and lemmatise (putting words in their neutral form) the texts. This way, we avoid missing words derived from those we are interested in ('climatic', or 'inflationary' for example). Using a dictionary approach, we only kept in the corpus the speeches, letters and questions that mentioned the stem 'climat-', 'sustain-', 'carbon-', 'green-', or 'fossil-' at least once. We then manually removed false positives (e.g. 'economic climate', 'political climate', 'sustainable market conditions', etc.), leaving 108 speeches, 21 letters, and 32 Monetary Hearing questions that informed the analysis. A last step was undertaken to provide figures summarizing the evolution of stances in speeches. To do so, qualitative variables were coded manually for each speech by answering those questions:

1. Is climate change presented as a direct problem for central bank missions, or only in general terms? If so, does it mention financial stability, price stability or both?
2. Is the ECB's mandate explicitly mentioned? If so, is it only the primary mandate or also the secondary mandate?
3. What are the possible policy instruments mentioned by the ECB to meet this climate challenge?

Coding was done independently by two people, the author and a research assistant, and then compared to reduce the subjectivity of the exercise. The database of the 108 speeches enriched with these qualitative variables is available from the author upon request.

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<sup>1</sup> The Governing Council of the ECB is composed by 6 Executive Board members and the 19 Governors of the national central bank member of the Eurosystem.

<sup>2</sup> The NGFS is a network of central bankers and financial regulators across the globe that aims to mutualise expertise on climate-related topics to facilitate policy implementation and diffusion across its members.

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<sup>3</sup> Monetary Dialogue of November 2021: *'Clearly, those [secondary objectives] have to be taken into account, particularly if those secondary objectives are stated very clearly by the other institutions, and in particular by the European Parliament'*

<sup>4</sup> Green TLTROs (Targeted Longer Term Refinancing Operations) would be a way for the ECB to incentivize banks to lend more to green activities by providing them with preferential interest rates