STUDY

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Towards a Decarbonised and Competitive Europe

Implications for EU member states

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A European decarbonisation and competitiveness plan

Implications for EU member states

Content

Foreword

Europe's industry is at a crossroads. In order to limit the consequences of climate change and fulfil the European climate targets on time, it must switch its development and production methods to low-emission processes at full speed and move into new cleantech areas. At the same time, Europe is facing tough global competition on the world market, both in traditional sectors and in clean technologies and decarbonisation. This has intensified dramatically in light of the recent geo-political and geo-economic upheavals. The dependence on competitors for raw materials and primary products makes the situation even more complex.

This means that the European economy is facing short-term challenges in order to react to global changes in demand. At the same time it has to deal with the medium to long-term challenges of a profound reorganisation of the industry in order to reduce dependencies and remain in the race for future technologies. More than ever, current developments are deciding the future of Europe as a global industrial centre. This requires a long-term strategic European industrial policy in order to preserve jobs and prosperity. In the global competitive situation outlined above, the market alone will not be able to deliver this without major losses.

The way out of this dilemma cannot be by weakening or reversing European climate and transformation targets. This would possibly give European industries some breathing space in the short term. However, it would be a fatal delay while competitors, especially China, continue to extend their lead in cleantech. What is needed instead are focused strategies and forward-looking investments to reduce one-sided dependencies and increase industrial autonomy.

Therefore, a purposeful path for Europe is to combine the competition agenda with the decarbonisation agenda – and not to conceptualise them as opposites. This is also the conclusion of the report prepared by Mario Draghi to advise the European Commission. The findings have been incorporated into concrete industrial policy initiatives by the EU Commission since the beginning of 2025. Even if they are still not very concrete in many respects, they outline two clear perspectives – a continued ambition to decarbonise the European economy and a significant strengthening of European cleantech potential compared to global competitors.

These dynamics are met with very different starting conditions in the member states; from countries with very energy-intensive and high-emission industrial structures that have a high level of transformation ahead of them, to member states with existing industries that can benefit more than others from an ambitious cleantech policy push. These disparities must be kept in mind when developing and building a strategic European decarbonisation and competitiveness agenda. The plan must succeed in both supporting existing industrial centres and exploiting and developing their potential, as well as continuing to provide structurally weak areas with opportunities for upward convergence. This study is meant to contribute to a better understanding of the different starting conditions that a European decarbonisation and competitiveness agenda will encounter in the member states and how this will affect them.

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1
Introduction

Competitiveness has emerged as a focal point of debate in the EU. The centrality of this debate is evidenced by the task that the president of the European Commission assigned to Mario Draghi: to produce a report on the future of European competitiveness.[1] Published in 2024, the Draghi Report – or, in its full name, 'The Future of European Competitiveness' – is a compelling two-volume report outlining the challenges involved in securing EU competitiveness in the present international context. In addition to discussing the status quo, the report calls for a coherent EU industrial strategy to reconcile the bloc's decarbonisation targets with the imperatives of competitiveness in a way that goes beyond the climate-economy dichotomy. The key messages and some of the ideas of the Draghi Report are reflected in the EU's recent Competitiveness Compass[2] and its Clean Industrial Deal.[3] The latter documents have already announced a plethora of (horizontal and sectoral) policy initiatives in 2025. This fervent activity seems to suggest that something is moving in the EU.

The EU's competitiveness problem is a long-standing one with multiple root causes. Over the past two decades, Europe has failed to keep up with other global players due to a persistent gap in productivity growth. Today, it is at risk of losing technological sovereignty in advanced technologies. While the EU has never caught up with the US in digital technologies, China could overcome the EU in green technologies. This is a rather regrettable development, given that Europe pioneered clean tech innovation. From a trade perspective, Europe has also become excessively reliant on China, and the green transition is only expected to reinforce these dependencies.[4] Reducing these strategic dependencies will require two things: first, adopting new industrial policies to de-risk and identify alternative trade partners; and, second, strengthening manufacturing capacity, as the EU will need more green products and technologies to meet its ambitious climate targets.

Beyond its environmental merits, the business case for the green transition is relatively solid. Green technologies offer substantial opportunities for job creation, business profitability, innovation and investment. Countries worldwide are striving to either enter or expand their focus on these industries to capitalise on the growing demand and the various benefits that come along with it. China is a leading example of such a strategy. Until Donald Trump started his second term as its president, the US had also been showing an appetite for green technologies. While the US now seems to have lost some interest in boosting investments in them, the urgency to implement Draghi's grand plan has remained. In addition, it is genuinely unclear whether Trump's intentions to eliminate clean tech subsidies will alter the green business case in the EU.[5] In any case, China does not intend to leave the industrial and technological race for clean technologies, and its related products will also likely be redirected more towards the EU market as the trade war with the US goes into full steam. Given these circumstances, failing to capitalise on the green transition is among the mistakes that Europe cannot afford.

Aligning the EU's economic agenda with its ambitious green agenda is a natural solution for revitalising competitiveness. In a nutshell, this strategy is what Draghi calls the 'joint decarbonisation and competitiveness plan'.[6] Europe is at a historic crossroads at which it needs to reinvent its competitiveness. It is among the largest markets for green technologies, and given its climate ambitions, its demand for these technologies is projected to grow exponentially in the near future. However, at present, Europe is largely dependent on Chinese products and technologies to realise its green agenda. To fully capitalise on the green transition, the joint decarbonisation and competitiveness plan calls for prioritising clean technologies and bolstering EU manufacturing capacities and technological capabilities in clean industries, with the simultaneous goals of achieving decarbonisation and promoting competitiveness. The Draghi Report, the EU's Competitiveness Compass and its Clean Industrial Deal identify a set of challenges and risks associated with the plan and propose some of the measures needed to implement this industrial strategy. In addition, the Commission aims to tackle some

1 Draghi (2024)
2 European Commission (2025a)
3 European Commission (2025b)
4 See, e. g., Guadagno and Stehrer (2024 and 2025a).
5 Zettelmeyer (2025)
6 Draghi (2024)

structural issues. For example, EU business representatives often cite EU regulatory standards and the fragmentation of policies and standards as obstacles to competitiveness. In response, the Competitiveness Compass and the Clean Industrial Deal strongly emphasise reducing red tape, especially for targeted technologies (including green ones), and additional initiatives are expected in this area.

Still, while the merits of a coherent EU-level industrial policy are evident, it is essential to consider how this plan will affect the various EU member states individually. Given the heterogeneities in production structures, investment and innovation capacities (to list just a few), the benefits and challenges of this plan will be unevenly distributed across the EU member states. Moreover, from an implementation perspective, key decisions will need to be made regarding the design of incentives to boost manufacturing capacities and the criteria that will guide investment prioritisation across industries and member states. The European Commission has recently started to formulate more concrete related policy measures. Both the EU's Competitiveness Compass and its Clean Industrial Deal, along with strategic plans for the automotive and steel industries, show a willingness to move forward along the lines of Draghi's ideas. However, to date, there has not been a strict prioritisation of very specific sectors or supply-chains segments, and a lot is being left to the individual member states regardless of their varying capacities to provide government assistance.

Building on these considerations, this policy note reflects on the proposal of a joint decarbonisation and competitiveness plan. It discusses what this plan could mean for different EU member states and how different countries could benefit from (or encounter challenges while) implementing it. In doing so, we aim to move the discussion forward to a place that is more focused on practical issues, where we can start thinking about how it can be feasibly realised and which strategy should be adopted to do so while also taking into consideration the zero-sum games that the plan entails as well as the opportunities and critical issues for all EU member states.

2
A joint decarbonisation and competitiveness plan for different EU member states

2.1 What brought competitiveness to centre stage in the EU policy debate?

The EU is losing competitiveness due to four main factors: low productivity growth, trade (particularly weaker foreign demand and fiercer competition), high energy prices, and external threats to its security and defence.[7] First and foremost, sluggish growth and low competitiveness are linked to weak productivity growth, which in turn results from low investments in knowledge, skills and innovation. The other three factors are all external. With trade protectionism on the rise, it is unclear whether Europe can continue growing through trade openness. Moreover, foreign demand, particularly from China, has weakened significantly. China has transformed itself from a mere 'factory of the world' into an innovator and competitor of the EU in several technological fields, including green ones. Beyond its R&D- and innovation-related efforts, China's higher competitiveness is often linked to its generous state subsidies, which are aimed at creating overcapacities. Energy prices are another factor that impacts the EU's competitiveness, and Russia's war of aggression on Ukraine has resulted in the disappearance of Europe's former source of relatively cheap energy. Energy-intensive industries were hit particularly hard and, even after the 'energy crisis' precipitated by Russia's full-scale invasion of Ukraine in 2022, electricity prices in the EU have remained higher than in other global competitors. In this regard, decarbonisation could be an opportunity to lower dependencies on foreign energy while also reducing energy costs. The final factor is related to the current geopolitical context, which calls for a greater emphasis on security and 'open strategic autonomy', higher defence spending (e.g. via the ReArm Europe Plan), and reinvigorated efforts to build new or strengthen existing industrial partnerships (e.g. to ensure access to critical raw materials).

Beyond these structural factors, it is often claimed that the EU's new climate legislation impinges on the competitiveness of EU firms, particularly those in energy-intensive industries. The EU Emission Trading System (EU ETS), the Carbon Border Adjustment Mechanism (CBAM) and the Corporate Sustainability Due Diligence Directive (CSDDD), as well as a variety of targets related to adopting clean tech, are just a few examples of legislation that have a clear environmental justification but have nevertheless been considered a cause of concern by EU firms. In their eyes, this is the problem: By having more ambitious decarbonisation targets than other global players, the EU is forcing EU firms to deal with additional – and sometimes massive – short-term costs, with those firms in energy-intensive industries paying the highest price. In addition, many believe that even if these targets are entirely motivated by environmental considerations, their negative impacts on the EU's industrial competitiveness cannot be neglected, especially when one considers that competitors in the US and China do not face similar requirements.

In other countries (China, most notably, but also the US and Japan), climate targets are not as ambitious as they are in the EU. At the same time, some of these other countries have extensive programmes aimed at strengthening local clean-tech manufacturing capacities that are much more proactive than those found in the EU. In addition to creating an uneven playing field for European companies competing with foreign ones, this discrepancy has allowed firms in other countries to establish themselves as global market leaders in various clean technologies.

2.2 Decarbonisation as an opportunity to regain competitiveness

Draghi's proposals are essentially a sketch of an industrial policy strategy to increase the EU's manufacturing capacities and technological capabilities in clean industries, which is aimed at simultaneously achieving decarbonisation and promoting competitiveness. Its premise is that the EU's decarbonisation targets create an extraordinary opportunity to regain competitiveness despite creating additional costs. By pushing the green agenda and tying it to reindustrialisation and innovation, the EU could not only lower energy prices and increase energy security but also de-risk (from China) and (re)gain the industrial and technological leadership in the clean technologies that would be needed for the decarbonisation of EU industries. Moreover, establishing itself as the world leader in green products would also help the EU reposition itself within global markets, thus leveraging a new competitive advantage. Hence, the magnitude of this opportunity becomes

7 This section builds on Draghi's analysis, which is also shared by many observers (e.g. Heussaff 2024; Kleimann et al. 2023; Lindner et al. 2023; McKinsey Global Institute 2022, 2024).

even more tangible when one considers that the same environmental targets that create additional costs will also stimulate higher demand for green products and potentially give the EU a competitive edge in foreign markets for green technologies.

Europe is a top innovator in several clean technologies, but it cannot satisfy its increasing domestic demand solely through domestic production. In recent decades, EU pioneers of green technologies were either pushed out of the market by intense competition from China (e.g. in the photovoltaics industry) or proved to be incapable of transforming their innovations into commercial products or of producing them at the required scale (e.g. for next-generation batteries).[8] The loss of comparative advantage in some clean tech fields and the inability to become key players in others affected the EU's industrial performance, leading to job losses, the destruction of entire value chains, and trade imbalances. In addition, the current geoeconomic and geopolitical situations are increasing the likelihood of a deterioration of the EU's economic strength. The recent policy documents by the Commission recognise the 'existential challenges' to overall and green competitiveness, emphasising the need to shift gears.[9] It has never been stated more explicitly that the objective of expanding manufacturing capacities in the EU will remain elusive without a coherent and adequately financed industrial policy.

The idea of a decarbonisation and competitiveness plan recognises that without a strategy in support of clean tech manufacturing, the EU's increased demand for clean tech is likely to be satisfied by Chinese products. The EU's decarbonisation targets push for increased installed capacities (e.g. in solar photovoltaics) as well as bans on internal combustion engines. However, the EU's support for manufacturing activities of clean tech and for the conversion of energy-intensive industries does not match these ambitions with sufficiently funded and properly structured industrial policies.[10] Hence, Chinese products are the lowest-cost route to achieve some of these targets, and overcapacities would ensure that the EU's demand can actually be met. Furthermore, without an industrial policy strategy, a significant part of the additional demand in the EU will be satisfied by imports from China. For example, according to simulations by the European Central Bank,[11] if the Chinese electric vehicle (EV) industry benefits from subsidies similar to those that support solar photovoltaics, EU-based production of EVs will decline by 70%. As a consequence, the EU's global market share would decline by 30 percentage points.

To avoid this scenario, the plan reconciles the decarbonisation challenge with the reindustrialisation and competitiveness challenges, thus aiming to develop and produce – within the EU – the technologies and products needed for decarbonisation. In doing so, the EU should move beyond the dichotomy between sustainability and competitiveness by coupling green ambitions and targets with policies aimed at supporting affected and promising industries. As the Draghi Report[12] puts it: 'If Europe's ambitious climate targets are matched by a coherent plan to achieve them, decarbonisation will be an opportunity for Europe. But if we fail to coordinate our policies, there is a risk that decarbonisation could run contrary to competitiveness and growth.' To achieve this, the plan will need to involve the industries that produce energy, those most in need of decarbonisation (i.e. those that use energy most intensively and are 'hard to abate'), and those that enable decarbonisation (e.g. clean tech, batteries and EVs).

Given that the EU has started to implement measures for more strategic industrial decarbonisation policies, it is worth looking at how Draghi's plan prioritises clean tech manufacturing while focusing on technologies in which the EU is a leader or for which there is a strategic case for developing domestic capacities. More specifically, Draghi proposes a mixed strategy that combines different policy tools and approaches for different typologies of industries, as follows:

1. In the industries where the EU cost disadvantage is too high, the EU cannot be a credible contender in the global market. For this reason, the proposed strategy is to continue importing but diversify suppliers in order to limit dependencies (particularly on China).

2. For some other industries, the EU is interested in maintaining a production role and safeguarding jobs from (unfair) foreign competition. In these cases, Draghi's strategy would be to attract foreign direct investment (FDI) while imposing trade measures to offset the cost advantages of competitors.

3. A third case encompasses industries in which the EU has a strategic interest in retaining relevant know-how, manufacturing capacities and technological sovereignty in order to be able to ramp up production in the event of heightened geopolitical tensions. For these industries, the proposed optimal strategy is to deploy a full range of industrial policies, including local content requirements and joint ventures with foreign companies. This category of industry would need to be reassessed periodically due to evolving security considerations.

8 European Commission, Joint Research Centre and Vilkman (2024). See also European Investment Bank and European Patent Office (2024).

9 European Commission (2025b)

10 Draghi (2024)

11 European Central Bank (2024)

12 Draghi (2024: 6)

4. The last group of industries are 'infant industries', which are defined as those in which the EU has an innovation edge and which could foreseeably have future growth potential. The proposed strategy for these highly strategic industries involves using a broad range of industrial policies aimed at nurturing these industries to help them reach sufficient scale and international competitiveness.

The report also details a variety of measures to implement the decarbonisation and competitiveness plan. Focusing support for the most strategic industries requires streamlining funds devoted to manufacturing clean tech and prioritising those industrial fields in which the EU has an advantage and/or future potential. Beyond simplification and redirection of existing funding schemes, the report also calls for dedicated funding schemes and growth equity instruments, minimum quotas for local production in public procurement, preferences for locally produced technologies (including in EU and European Investment Bank financing schemes), and a more assertive use of public procurement that allows governments to act as customers for new technologies.[13] Draghi reiterates the importance of diversifying supply sources and establishing new industrial partnerships with third countries to reduce vulnerabilities in green value chains. While the list of policy instruments is long and detailed in addition to varying by industry,[14] it is important to note that it is never a subsidy or a financial scheme alone that will solve such a complex issue.

Importantly, the Draghi Plan aims to be implemented at the EU level to avoid fragmented actions that undermine the single market by allowing differences in fiscal spaces to determine the magnitudes of the interventions. Despite this proposal, the Competitiveness Compass and the Clean Industrial Deal hint at a significant role for state aid. This preference for member-state funding endangers not only the single market but also the speed at which the plan will unfold (if at all) in different member states. It also puts a natural limit on the amount of financing available for the plan, as member states have little room for manoeuvre to raise spending.[15]

What is even more concerning is that, owing to the different production structures and innovative capacities of the EU member states, such a plan will inevitably have different implications for different member states. Recognising that the challenges and opportunities are asymmetric across industries and member states is essential to bring this plan to the next level, on which concrete policy choices are to be made.

13 It is worth noting that the Competitiveness Compass does not mention trade measures that are not in line with WTO agreements, such as local requirements.

14 See Part B of the Draghi Report (Draghi 2024).

15 Zettelmeyer (2025)

3
Why are EU countries differently positioned to benefit from the decarbonisation and competitiveness plan?

EU member states are differently positioned in terms of the extent to which they can take advantage of and be impacted by the decarbonisation and competitiveness plan. Unarguably, certain member states are less green than others, and these member states will be at a disadvantage when it comes to benefiting from the opportunities of the green transition. The European Commission's Eco-Innovation Index (EII) offers a comparative assessment of the related performance of EU member states based on a large number of indicators.[16] It shows that while the performance of virtually all member states improved between 2014 and 2024, there is a persistent gap between more advanced (old) member states and less advanced (new) member states. Indeed, among the eco-leaders (i.e. the countries with the best performances in eco-innovation) are Finland, Denmark and Austria. The economies still lagging behind are predominantly in Central and Eastern Europe (CEE), with Romania, Poland, Hungary and Bulgaria taking the last positions (see Figure 1, p. 10).

The green performance of EU member states could be unsatisfactory for a variety of reasons, for example, because their ecosystems are not investing and adopting green technologies or because they are less abundant in renewable energy sources. In turn, greener countries will likely find the right environment and framework to advance the green transition. These countries already have the human capital, skills, technologies and firms capable of implementing the plan and increasing the overall manufacturing capacity of the EU. Similarly, member states with a much higher (natural) potential for adopting clean technology (most notably, solar and wind energy) will enjoy some 'location advantages'.

Among other factors, differences in production structures will unevenly impact each country's ability to benefit from the decarbonisation and competitiveness plan.[17] EU industrial and economic structures vary considerably across member states, with some countries relying heavily on high-emission and energy-intensive industries (e.g. coal and steel), while others have already developed clean tech manufacturing and related innovation capabilities. Countries with more polluting and energy-intensive industries will face greater challenges and higher costs to transition to low-carbon technologies, to adapt their production methods, or to discover new engines of competitiveness and economic growth. By contrast, economies with a more developed clean tech industry and innovation system will be better positioned to leverage the plan's opportunities. In what follows, we analyse these factors in more detail.

3.1 The challenges of mining and processing coal and fossil fuels

Certain EU member states are still mining and processing coal and other fossil fuels. In these countries, decarbonisation will have a profound impact on the economy and society, as structural transformation away from mining will destroy jobs, depress incomes, and have social impacts that could undermine acceptance of the green transition and potentially lead to social unrest.[18] As these activities naturally cluster in particular (resource-rich) areas, the question is how to transition industries, firms and workers in these territories into new industries, business models and jobs. Beyond the social impact and the political acceptance problem (which, of course, are matters of considerable concern), these regions will need to reinvent themselves and find new industries that can ensure their competitiveness and long-term prosperity. These challenges need to be made part of the competitiveness debate and the decarbonisation and competitiveness plan. For these territories to find new engines of competitiveness in a decarbonised world, EU industrial policies should include instruments tailored to redirect structural change in a way that builds on the current strengths and potentials of these areas. Although exploring the regional dimension of the decarbonisation and competitiveness plan is beyond the scope of this study, these considerations are of key relevance today.

16 These include indicators such as the number of ISO 14001 certificates, eco-innovation patents, energy productivity, and exports of environmental goods and services. For details, see Cambridge Econometrics and EFIS (2024).

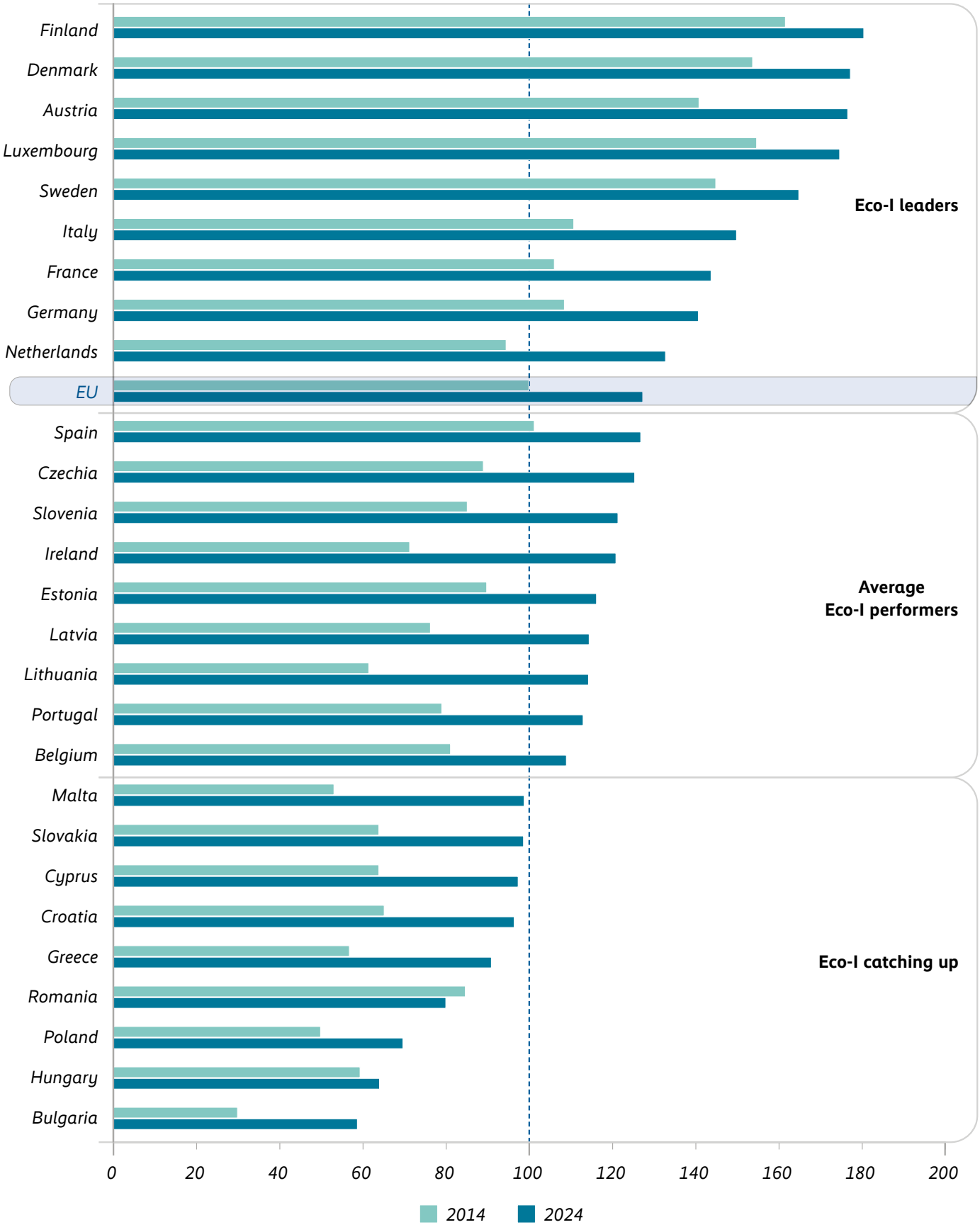
17 Quite naturally, the availability of infrastructures and skills, access to renewable energy, and the government's capacity to design and implement national policies (from the perspective of both administrative and fiscal capacities) will also play a critical role in determining how much each country can benefit from the plan.

18 Hassel et al. (2024)

Figure 1

The performance in the Eco-Innovation Index (EII) across EU member states

2014 vs 2024

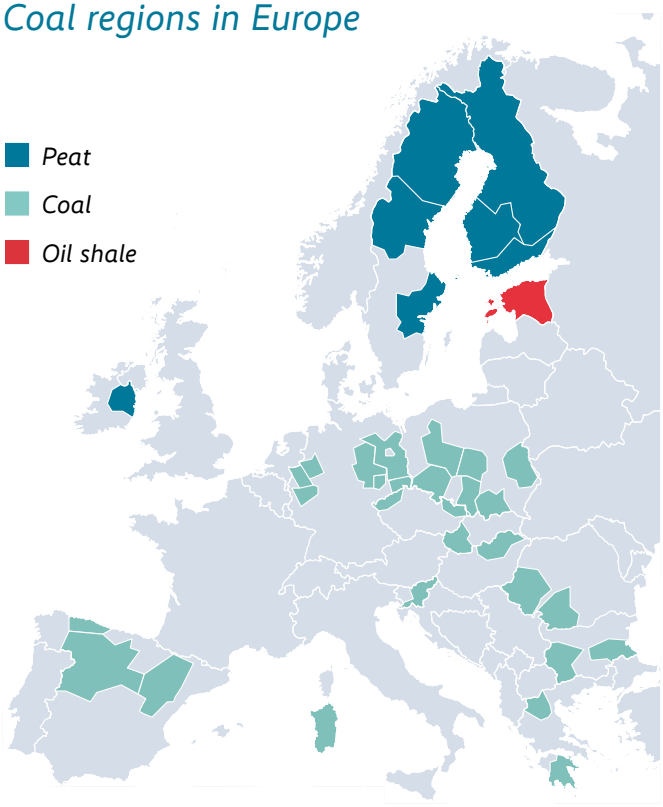


Source: Cambridge Econometrics and EFIS (2024: 8)

Fossil-fuel combustion is the most significant source of greenhouse gases (GHGs), accounting for 80% of emissions.[19] Once considered the bedrock of economic growth, member states and regions with strong coal industries are facing the urgency of transition. There are deposits of coal (including lignite, fuel peat and oil shale) in 19 EU countries and 94 NUTS 2 regions.[20] Coal-related activities directly account for roughly 208,000 jobs, with 76% of them being in the mining sector.[21] The countries with the highest number of jobs in the coal sector (i.e. mines and power plants) are Poland, Germany, Czechia, Romania and Bulgaria.[22] Peat is used in six countries – namely, Estonia, Finland, Ireland, Latvia, Lithuania and Sweden – with Finland and Ireland being the most prominent users of this type of energy source. At present, shale oil is only used in Estonia. Using Joint Research Centre (JRC) data sources, the European Commission's Coal Regions in Transition Initiative (CRiT) has identified NUTS 2 regions in which operations to extract coal, lignite, peat and oil shale employed over 100 people in 2018. As the map of these regions in Figure 2 shows, Poland and Germany are the member states with the highest coal production, respectively accounting for 29.8% and 20.8% of EU production.[23]

Figure 2

Coal regions in Europe



Source: European Commission (n.d.a)

The green transition in these countries and regions would entail abandoning fossil fuels and finding new sources of competitive advantage. In the meantime, countries and regions with abundant renewable energy and the capacity to generate electricity from it could be very well positioned to benefit from this switch. Recent research has explored the socioeconomic impacts of the coal phase-out in Europe, and some studies have found that the substitution of coal and lignite will have both negative and positive effects in terms of EU value added and employment.[24] While the largest negative impacts are concentrated in the eastern regions, which specialise in coal and lignite, the positive effects appear in a larger number of regions, particularly those with developed alternative-energy sectors.

3.2 Energy-intensive industries in transition

Second, certain EU member states specialise in energy-intensive industries and, hence, face high investment costs to meet decarbonisation targets and considerable challenges to remain competitive amid increased competition. While there is no commonly agreed definition of 'energy-intensive industries', the four most energy-intensive industries in the EU in terms of gas and electricity demand are: basic metals; non-metallic minerals; paper, pulp and printing; and chemicals.[25] Data also show that chemicals, basic metals and non-metallic minerals (which are often referred to as 'heavy industries') – together with heavy-duty transport (i.e. trucking, shipping and aviation) – are 'hard-to-abate' sectors, meaning that it is particularly difficult for them to reduce their emissions. Energy-intensive industries should also be part of the plan, as they will need to be reshaped and converted to be competitive in the future while aligning with the EU's decarbonisation agenda.

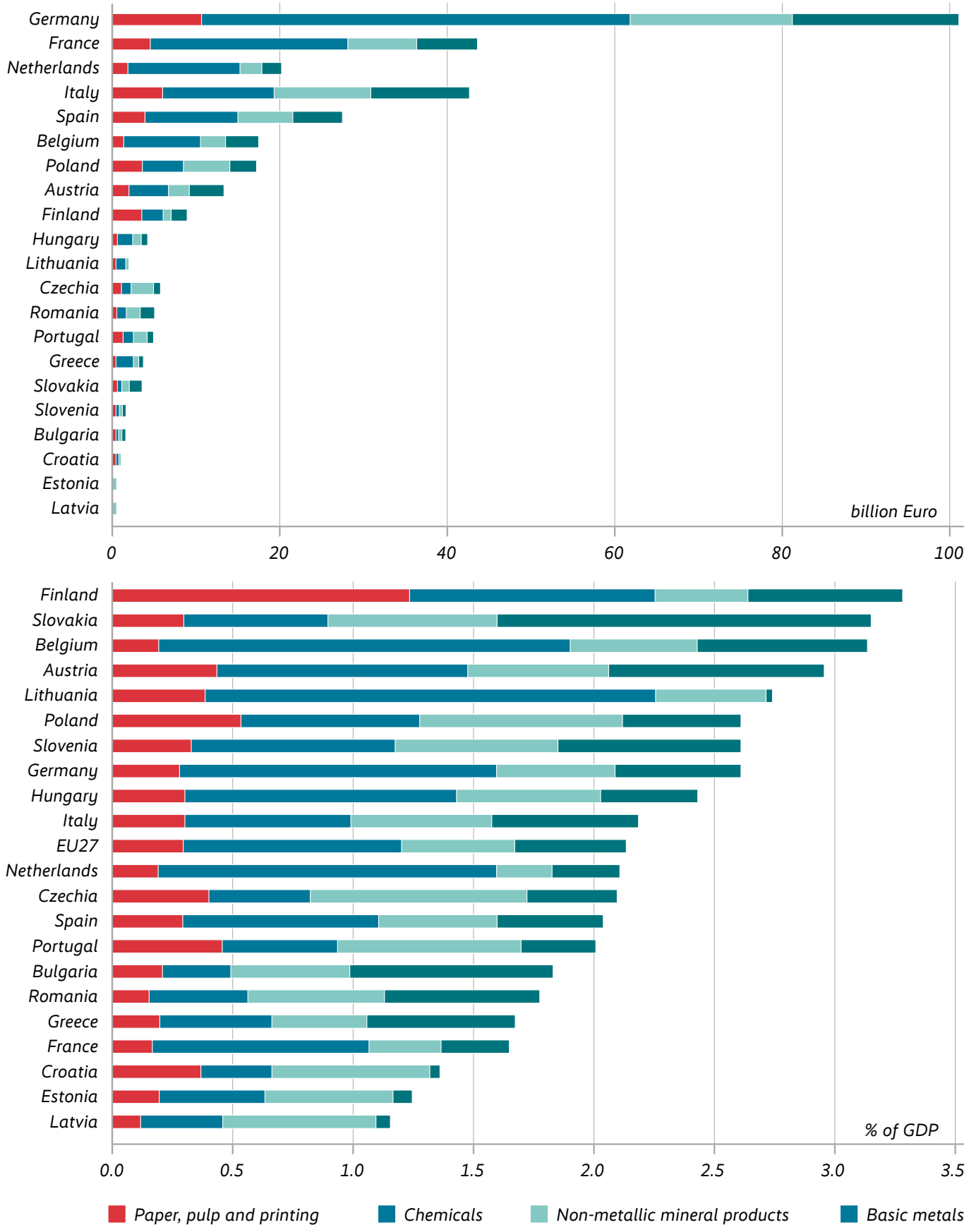
Germany is the most affected country in this respect owing to the size of these industries in terms of value added (see Figure 3, p. 12) and energy demands (see Figure 4, p. 13). Indeed, German energy-intensive industries are the largest in Europe, as measured by gross value added (Figure 3), and account for 64% of industrial gas demand and 57% of industrial electricity demand (see Figure 4, p. 13). At a significant distance, France is the second-largest EU economy with large energy-intensive industries and the correlated high consumptions of industrial natural gas and electricity. Other EU member states with these traits

19 McKinsey Sustainability (2020)
20 Kapetaki et al. (2021)
21 Ibid.
22 Ibid.
23 IEA estimates available at: https://www.iea.org/regions/europe/coal (accessed 13 December 2024).
24 Almazán-Gómez et al. (2024)
25 See, e.g., Sgaravatti et al. (2023) and Jäger (2023)

Figure 3

The size of energy-intensive industries in terms of value added

in EUR bn and % of GDP, 2021

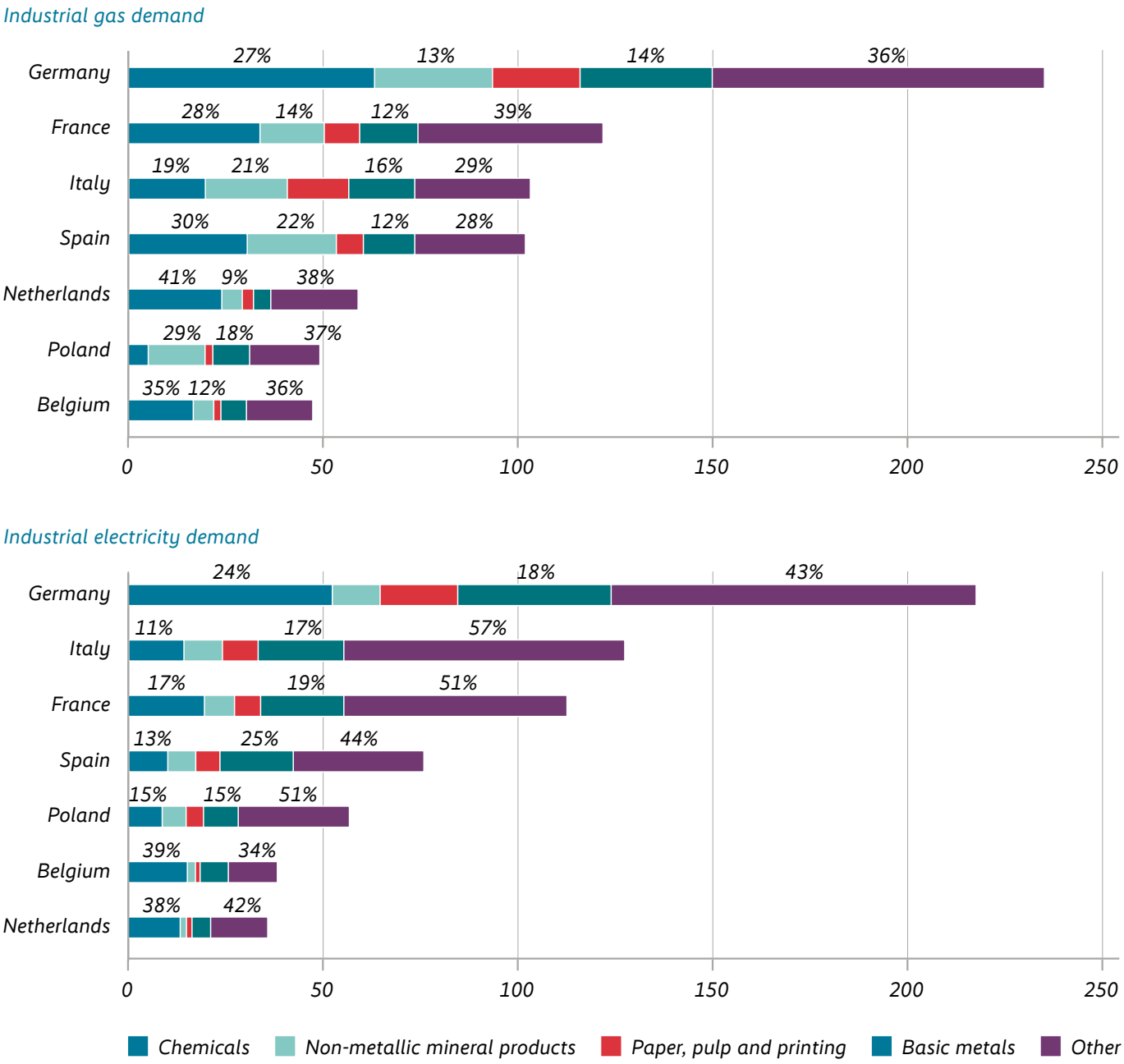


Source: Jäger (2023: 8)

Figure 4

Gas and electricity consumption by country and industry

in TWh and %, 2021



Source: Sgaravatti et al. (2023: 3)

include Italy and Spain, followed at some distance by the Netherlands, Poland and Belgium. In Germany, France, Spain, the Netherlands and Belgium, the chemical industry has the highest demand for industrial gases. The same industry is also the largest consumer of industrial electricity in Germany.[26] Countries such as Austria, Finland, Hungary, Lithuania, Slovakia and Slovenia also seem to be affected. While their production levels are lower than those in Germany and France, for example, energy-intensive industries make up for a relatively larger share of GDP (right-hand panel of Figure 3). This implies that these economies are specialised and depend upon these industries and, hence, that they would face greater challenges in decarbonising their economies.

26 More disaggregated data could help to shed light on which specific sub-industries are responsible for this high demand.

These industries and countries would need to switch to greener business models, including more extended use of renewable energy sources and alternative (greener) raw materials, more heat recycling, the re-use of scrap and waste, and the optimisation of existing processes.[27] In these industries, getting rid of natural gas (or oil and coal) is very difficult, as major industrial processes require high temperatures, hydrocarbons for processing (e.g. for plastics and fertilisers), or both (e.g. in primary steel and most chemicals). Some of these technologies are still under development and face fierce competition from their Chinese counterparts, who are making significant leaps into clean technologies.[28] Hence, it would be paramount for the EU to maintain or reinvigorate its innovation efforts to develop technologies and solutions to decarbonise energy-intensive and hard-to-abate industries.

Finally, social effects are to be expected as a consequence of the profound changes in energy-intensive industries. As mentioned above, these changes arise not only from the environmental targets imposed by the EU but also from the increased competition from third countries, most notably China. Due to these forces, the energy-intensive industries in the EU practically find themselves in a state of siege. In recent years, production has decreased in various segments and countries.[29] Given these circumstances, EU-based workers in emission-intensive industries may face significant difficulties in reskilling and transitioning to new jobs, which may not necessarily emerge in the same regions or at the same wage levels as their previous jobs.[30]

3.3 The member states with strong clean tech industries

Finally, certain member states that already specialise in the production of green products would be the best positioned to expand manufacturing capacity for the green transition in Europe. Obviously, the extent of these advantages would depend on the industries or products prioritised by the new EU industrial policy. Indeed, while the Commission is implementing new policy measures (that are both horizontal and sector-specific) and has already announced several others, it is not yet clear what the priorities will be in terms of the specific products, technologies or value-chain segments that could be manufactured and scaled up in the EU. To date, the few EU countries that have successfully specialised in green production include Austria, Denmark, Germany and Sweden.[31] This suggests that these countries could be in a good position to host green manufacturing activities.

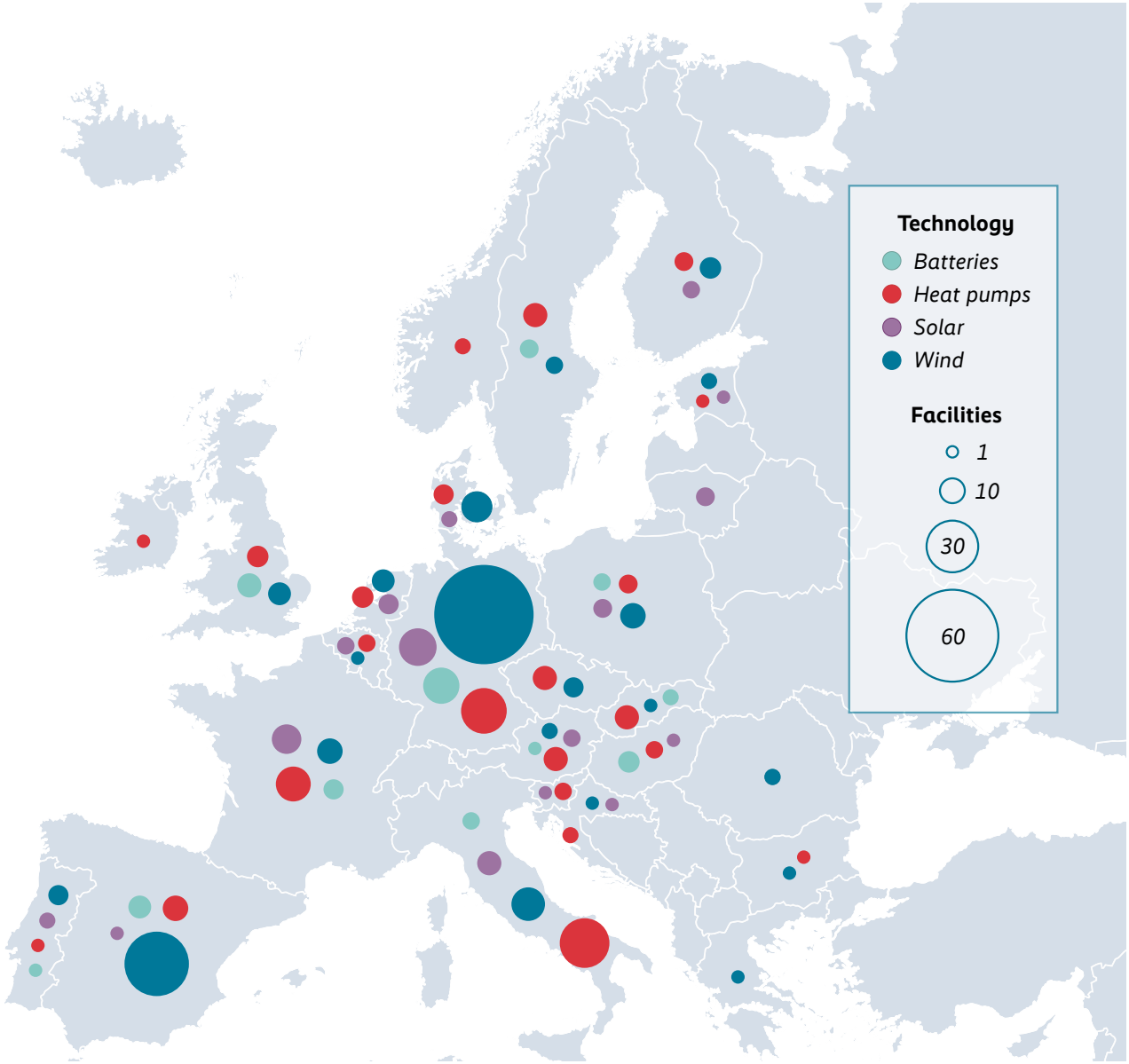
Germany is a central hub for clean tech, hosting the highest number of clean tech manufacturing facilities overall and in almost all technologies (Figure 5).[32] As is well known, the EU has lost its manufacturing advantage and capacity in solar technologies amid intense competition from China. While most of the limited remaining production is in Germany, France has a small presence (Figure 5). Although recently challenged, Europe has a more solid position in wind power generation. Spain and Denmark boast several manufacturing facilities in wind technology.

According to Bruegel's Clean Tech Tracker, the global wind turbine market is dominated by 10 manufacturing companies, which collectively account for 88% of global demand. Five of those companies – namely, Vestas (DK), Siemens Energy (DE), Enercon (DE), Nordex SE (DE) and GE Renewable Energy (FR) – are headquartered in the EU. Batteries are a strategic technology for the decarbonisation and competitiveness plan of the EU. Interestingly, this is also a technology in a state of rapid transformation, as next-generation batteries are to be developed and mass-produced, opening a window of opportunity for the EU to become a global leader.[33] Thanks to the recent commitments for production projects in the EU (although most of them are from non-EU companies) and the potential to increase the utilisation of already installed capacity, some observers estimate that the EU could meet its (rapidly growing) demand for batteries by 2030[34] and, in fact, battery production rose sharply in 2021 (see Figure 6, 16). Beyond Germany, Hungary is an important player. Poland has manufacturing plants, too, and a growing positive trade balance, but it did not publicly release its data for 2021 (hence the gap in Figure 6, p. 16). Finally, Italy has 27 facilities for producing heat pumps (see Figure 5, p. 15). Production data also show that Germany and Sweden (mainly since 2019) are key players at the EU level (see Figure 6, 16). More countries produced and have increased their production, and there was particularly significant growth in 2018, 2019 and 2020, including in France, Spain, Italy and Finland.[35] These figures suggest that the EU can count on a strong clean tech manufacturing base. While it is unclear whether this base can be scaled up fast enough to meet the growing demand, several companies have been expanding production lines, such as ones in Poland, Slovakia, Czechia and Sweden.[36]

27 See, e.g., European Patent Office (n.d.).
28 Draghi (2024)
29 See, e.g., Mittal (2024) on the steel industry and Nilsson (2024).
30 Hassel et al. (2024)
31 Bontadini and Vona (2022) and Ecorys, Ramboll and WIP Renewable Energies (2025)
32 https://www.bruegel.org/dataset/european-clean-tech-tracker
33 Draghi (2024)
34 Ibid.
35 Kuokkanen et al. (2022)
36 Ibid.

Figure 5

Map of EU manufacturing facilities of clean technologies



Source: Bruegel Clean Tech Tracker (accessed 15 April 2025)[37]

Recent evidence hints at the potential impacts on GDP and employment of an EU re-shoring strategy to fully bring back to the EU the production of five of the most critical and discussed green products (i.e. photovoltaics, wind turbines, batteries, electric motors and EVs).[38] Based on this hypothetical scenario, GDP and employment benefits would inevitably be created by allocating the volumes of products imported from third countries to EU member states proportionally to their current demands. In other words, the exercise tests the impacts of a hypothetical scenario in which EU countries that are currently importing certain green products stop importing them and start manufacturing the products themselves. The results show that several CEE countries (primarily Czechia, followed by Slovenia, Slovakia and Poland) as well as Germany would likely be the economies to benefit most owing to their existing specialisations in these technologies.[39] Although a full re-shoring of green production to the EU is obviously

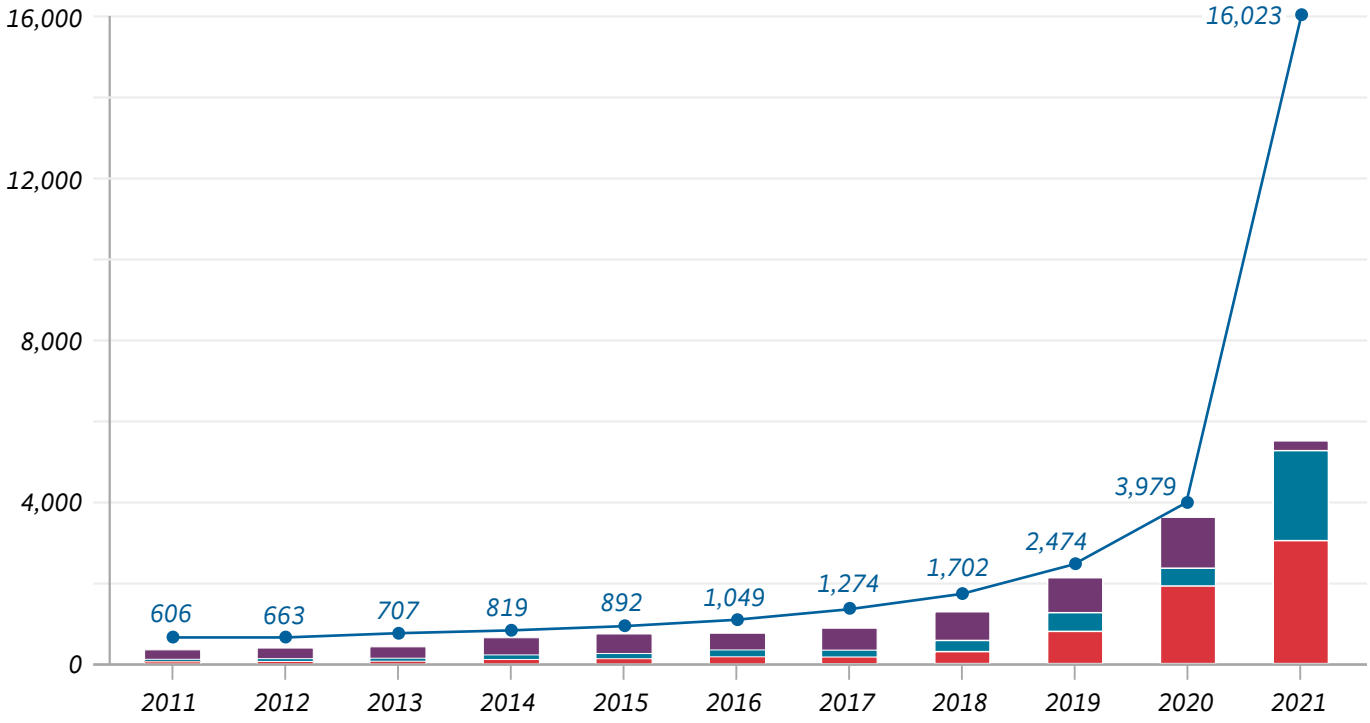
37 https://www.bruegel.org/dataset/european-clean-tech-tracker
38 Guadagno et al. (2024)
39 Ibid.

Figure 6

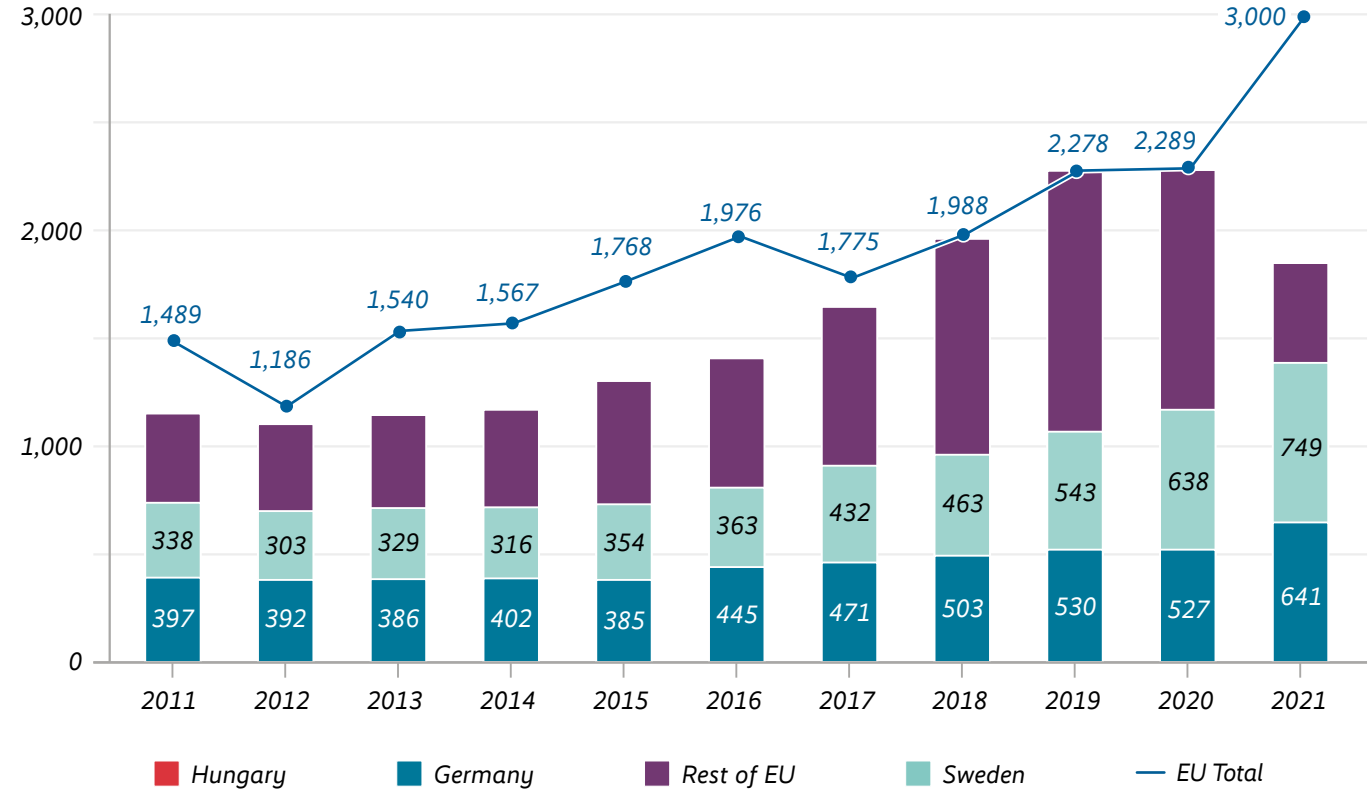
EU production value and top producers in the EU

in EUR m, 2011–2021

Batteries



Heat pumps



Note: The 'EU Total' is more than the sum of the 'Rest of EU' and the individual countries due to missing data (generally motivated by confidentiality).
Source: Kuokkanen et al. (2022)

Table 1

Summary: Some of the EU member states most affected by (and prepared for) the decarbonisation and competitiveness plan

	Negative	Positive
Member states with large coal deposits	Poland, Germany	
Member states with large energy-intensive industries	Germany, France, Italy, Finland	
Greener and less green member states (Eco-Innovation Index)	Bulgaria, Hungary, Poland, Romania	Finland, Denmark, Austria
Member states with large green industries		Denmark, Germany, Sweden, Austria

Source: authors' elaboration

an extreme and unrealistic scenario, these findings nevertheless confirm how uneven the impacts of a decarbonisation and competitiveness plan could be in the EU. Those EU member states with vibrant green industries will be better positioned to reap the benefits of an industrial policy to strengthen clean tech manufacturing capacities in the EU. These countries will already possess at least part of the value chains, firms and competencies to manufacture green technologies and products, which will enable them to offer themselves as feasible production locations for the joint plan.

3.4 Summary

Table 1 summarises the discussion so far and shows which EU countries might be positioned at a disadvantage or an advantage in terms of potentially benefiting from the decarbonisation and competitiveness plan under the different perspectives analysed here. As the table shows, some countries might be well positioned if we consider certain factors and ill positioned if we consider others. It is also important to stress that this is not a thorough assessment of the potential readiness of all EU member states to benefit from the Draghi Plan.

4
A focus on some prominent countries

In the following sections, we will zoom in on some of the member states that have emerged as among those that would be most affected by a decarbonisation and competitiveness plan. In doing so, we will focus on Germany and some of the Nordic countries as examples from the advanced part of the EU and certain CEE countries as examples of less advanced EU member states.

4.1 Germany

Germany is clearly among the member states that could be most affected by while simultaneously benefiting from a decarbonisation and competitiveness plan, and this does not solely result from the size of its economy, its weight in EU value chains, and its prominent role in the policy design process at the EU level. On the one hand, Germany is among the largest coal producers in the EU. Energy-intensive industries, and particularly the chemical industry, still play an important role. While proactive policies support structural transformation (including towards the adoption of renewable energies), there are still persistent challenges, particularly in the regions most focused on these activities. On the other hand, Germany is also the most prominent EU producer and innovator of several clean technologies. Hence, while some industries and regions will inevitably be negatively impacted in terms of additional costs and competitiveness threats, others could be in the position to reap some benefits. In both cases, additional support (e.g. through R&D and deployment grants, financial guarantees and earmarked revenues, such as from the EU ETS and the CBAM, as suggested by Draghi) will be needed to strengthen the business case for decarbonisation and counter the unprecedented level of competition, particularly from China.

For decades, German prosperity relied on export-driven manufacturing-based growth – but Germany is now in the eye of the storm. Since 2019, its industrial production has been shrinking faster than in the rest of the EU and productivity growth has fallen below the EU average. No other European country is as exposed as Germany to China's aggressive entry into its key sectors.[40] A decade ago, the industries that suffered from Chinese competition were mainly construction, cement, steel, rail and solar panels. But, today, the pressure is also intense in other sectors, such as automotive, batteries and machinery.[41] The impacts of such competition are also becoming more visible as job cuts increase and more investments are shifted to China. Indeed, the automotive, chemical and energy-intensive industries face considerable challenges, including high energy costs, labour shortages, and under-investment in critical infrastructure (notably, transport and digital networks).[42]

Today, several political shifts within and outside the country make the prospects of German green industries particularly uncertain. We are living in interesting and rapidly changing times. In Germany, the new fiscal package will represent a clear break from the past. At the time of writing, its details were still unknown, but it is expected to create certain spill-over effects across German industries. Similar uncertainties relate to the EU's response to the recently imposed US tariffs, which, in turn, are expected to hit certain industries of strategic interest to Germany particularly hard (e.g. steel and automotive).[43] At the same time, China has been showing an interest in German green technologies, as exemplified by its recent investments in hydrogen electrolysers. This technology is part of the Net-Zero Industry Act and requires post-sale services that make production in Europe more effective (albeit less cost-efficient).[44] While direct investment in Europe is a strategic move for China (to prepare for possible policies favouring local production), it also testifies to the significant business opportunities that the green transition offers for countries like Germany.

To conclude, Germany's potential to drive green growth and reindustrialisation within the EU is clear, but it is nevertheless somewhat constrained by a variety of factors. In terms of its potential, Germany was the pioneer of several key green technologies and today remains the leading EU producer of many green products (as discussed in Section 3). At the same time, its dependence on traditional

40 Guttenberg et al. (2024)
41 Barkin and Sebastian (2024)
42 Barkin and Sebastian (2024) and Guttenberg et al. (2024)
43 See, e.g., Stehrer 2025 and Guadagno and Stehrer (2025b)
44 Wilson and Tani (2024)

and heavy industries makes it vulnerable and raises the costs of decarbonisation for it. Moreover, a bold push into new green technologies and their production poses challenges, even in areas in which Germany initially had an advantage (e. g. with EVs).[45] Insufficient reliance on renewable energy, high energy costs, excessive bureaucracy and other legal hurdles, and underinvestment in critical infrastructure (e. g. grids and connections) are often listed as factors hindering the competitiveness and green transition of German industries.[46] Still, owing to its industrial history and potential, Germany could greatly benefit from an EU industrial policy like the one advocated by Draghi, particularly if, at the EU level, production capacity is expanded in the countries and territories where it makes the most economic sense (i.e. where some competencies already exist or where there is a stronger potential for reconfiguring industries or promoting production).[47] Indeed, given its industrial tradition, which led it to accumulate significant production and technological capabilities, the business case for green manufacturing in Germany is relatively solid.

4.2 The Nordic countries

The Nordic countries are not just small open economies with a consolidated income level and living standards but also a group of countries at the forefront of the green transition. Finland and Denmark are the first- and second-best performers in the Eco-Innovation Index, while Sweden takes the fifth spot. All three economies have innovative firms operating in various clean technologies, even beyond the most critical industries and including waste recycling in textiles and batteries, bio-based products and durable consumer goods.

Nordic companies are well positioned to capitalise on the green transition, with 12 out of the 100 most sustainable companies worldwide and some start-ups having already secured their position as low-emission producers.[48] These countries have already fostered several green tech unicorns and promising start-ups in electricity, mobility, circular products, water and waste management, and carbon capture and storage (CCS).[49] Moreover, their energy-intensive industries are relatively small, creating less pressure in terms of decarbonisation costs and loss of competitiveness. Despite this focus, these economies do not lend themselves well to becoming EU manufacturing hubs for several reasons, including the skill compositions of their workforces (in which high-skilled workers outnumber low-skilled workers) and wage expectations. All these factors make the Nordic countries an interesting group of countries when assessing the potential implications of the Draghi Plan.

In particular, Finland is the leading eco-innovative economy in the EU owing to its top performances in green exports and high shares of employment and value added in green industries. To counteract the negative impacts of its comparatively large energy-intensive industry (mainly due to paper production), the government is investing in R&D to reduce the carbon footprint of hard-to-abate industries as well as making solid progress towards the switch to renewable energy sources. In terms of manufacturing capacities, Finland has targeted the battery value chain. Beyond mining and processing several raw materials that are key to this value chain, the country plans to increase its innovation efforts related to the next generation of batteries.[50] For example, a new cathode factory will be set up in Finland, which will also leverage a grant from the EU's Innovation Fund.[51]

Denmark is also a top performer in green innovation and among the earliest global leaders in decarbonisation. The country was a pioneer in wind-energy production and wind-equipment manufacturing. Ørsted, Denmark's largest energy company, was among the first national energy producers in the world to switch to renewables, setting up ambitious targets for the country's green transformation. Thanks to limited competition, state support (in the form of feed-in tariffs), high wind speeds in the North Sea, and the presence of turbine manufacturers nearby, Ørsted has succeeded in turning the wind energy sector in Denmark into a success story.[52] Vestas, the Danish market leader in wind-turbine production, has six production facilities in the country.[53] Beyond wind technologies, Denmark is active in a range of related fields, such as bioscience, electrolysers and CCS technologies.

Similarly to Finland and Denmark, Sweden is a green leader in the EU and globally. Beyond its early and speedy transition towards renewables (which was also made possible by exploiting natural energy sources, most notably hydro and wind power), the country hosts and nurtures green companies, unicorns and start-ups, which are partly attracted to Sweden by the availability of green electricity. Despite its high production costs (primarily due to high living standards and wages), the country has not given up on its production ambitions – at least not until recently. Recent production plans concerned strategic green

45 Schwarzer (2024)
46 World Economic Forum (2023)
47 Guttenberg et al. (2024)
48 Aagard et al. (2022)
49 Ibid.
50 See the IEA country profile available here: https://www.iea.org/reports/finland-2023
51 FREYR Battery (2024)
52 Millard (2024)
53 Vestas (n.d.)

products, including batteries, green steel and heat pumps. However, the recent experience of Northvolt may serve as a cautionary tale about the dangers of excessive green optimism in Sweden. Northvolt, a start-up launched in 2016 to fight Asian competition in battery production, recently filed for bankruptcy. It was the first homegrown European battery manufacturer to produce a cell from its gigafactory, but the factory never scaled up. Operating well below its capacity, it accumulated losses, leading to bankruptcy.[54] Several factors explain this outcome, which points to how accelerating manufacturing capacity requires entire industrial ecosystems and value chains to be built up.[55] Among them, a lack of an industrial policy of the type and size of other competitors (e. g. China and the US) contributes to explaining why the company could not achieve scale.[56] Arguably, the experience of Northvolt serves as a lesson not only to Nordic countries but also to Europe more broadly.[57]

To conclude, a decarbonisation and competitiveness plan holds great potential for a green region like the Nordic one. Innovation leadership and a society ready to embrace the green transition make the plan feasible. At the same time, the plan might not necessarily translate into the mass production of green technologies and products unless a carefully designed and adequately financed industrial policy contributes to strengthening industrial ecosystems, meaning systems in which infrastructures, skills, and investments are put in place and all necessary preconditions are met for manufacturing to thrive.

4.3 Central Eastern Europe

The proposal of a joint decarbonisation and competitiveness plan is particularly pertinent for Central Eastern Europe (CEE), considering its industrial orientation, costly and fossil fuel-reliant energy structure, and financing constraints.[58] As such, many of the issues highlighted by the Draghi Report are further magnified in the context of CEE.

The CEE countries rank among the most industrialised economies in the EU. With value added in manufacturing contributing around 20% to the economy in most of the region's countries, its industrial orientation compares, if not surpasses, that of Germany – a renowned manufacturing powerhouse. The automotive sector is an economic engine for CEE, making up around a fifth of the manufacturing value added in Czechia, Slovakia and Hungary. This export-oriented industrial structure has allowed CEE to experience strong growth over the past two decades and for its countries to rapidly approach the living standards of most developed EU countries. However, in recent years, several structural and energy-related challenges have emerged to put into question the sustainability of this growth model, echoing Draghi's assessment of Europe.[59],

Fossil fuels still serve as the overwhelmingly dominant energy source in CEE, with coal alone making up as much as 60% of the electricity-generation mix in Poland and 40% in Czechia.[60] This also underscores the role of coal mining as a significant employer, which makes decarbonisation a major socioeconomic challenge. Russia's full-scale invasion of Ukraine in 2022 further exacerbated the energy situation, as CEE has grappled with some of the highest energy prices in Europe. This, combined with relatively low energy productivity, has adversely impacted firms' profitability and employees' real wages in recent years. At the same time, the entry of new players into the automotive sector (particularly from China) and their introduction of innovative technologies has heightened the urgency to defend market shares and safeguard jobs in the industry of CEE. The impacts of slow adaptation are already being felt, as the past two years brought conditions of weak economic growth and struggling industrial production, mirroring the situation in Germany.

Moreover, given the position of CEE countries as 'dependent market economies'[61] (as their economic structures are strongly shaped by FDI), tackling the region's competitiveness challenges fundamentally requires solutions that span the entire value chain. In this regard, Draghi's proposal to expand the scope of Important Projects of Common European Interest (IPCEIs), which are co-financed by common funding and focused on developing entire value chains in strategic industries, is highly relevant for CEE. It offers the region not only financial burden-sharing but also access to technological transfers enabled by cross-border mechanisms.[62] CEE could build on its relative success in IPCEI participation in recent years, as demonstrated by the inclusion of firms from Czechia, Estonia, Hungary, Poland, Romania, Slovakia and Slovenia in currently approved IPCEIs in batteries, hydrogen, microelectronics and health technologies.

As Europe's production hub, the CEE region may benefit from the EU's push to strengthen resilience in critical sectors. Specifically, as companies look to relocate closer to their end markets given greater uncertainty in the global

54 See Milne (2024a, 2024b, 2024c).
55 Tagliapietra and Trasi (2024)
56 See Milne (2024a, 2024b, 2024c).
57 Tagliapietra and Trasi (2024)
58 See, e. g., Ferrazzi et al. (2025).
59 Slacik (2024); Zavarská et al. (2024)
60 Based on IEA country profiles
61 Nölke and Vliegenthart (2009)
62 Zavarská et al. (2023, 2024)

economy, supply-chain restrictions could boost FDI activity in the region. Early signs of near-shoring are already emerging in some parts of Eastern Europe, with several countries reporting FDI inflows that surpass historical trends.[63] Indeed, the CEE countries have recently seen heightened investment activity in areas such as batteries and semiconductors, which positions them as important players in the EU's pursuit of strategic autonomy and in efforts to advance the decarbonisation and competitiveness plan.[64]

However, multiple challenges are associated with the operationalisation of a decarbonisation and competitiveness plan from the CEE perspective. First, it is a long-standing issue that common industrial policy instruments of the EU tend to be more closely aligned with the contexts of the technologically advanced member states, making CEE's participation in these initiatives a notable challenge.[65] Consequently, discontent has also been voiced regarding the focus of the Draghi Plan, which was perceived by many policy makers in CEE as being insensitive to the unique challenges and strengths of the 'new' EU member states.[66] This reflects the region's underlying fears of not being sufficiently represented in policy-making processes that shape the EU's future as well as of being left behind in the green and digital transitions as a result of different starting positions.

Finally, support at the level of the individual member state is expected to remain crucial over the medium term, bringing challenges for smaller and fiscally constrained countries like those in CEE. Germany's and France's stepped-up usage of state aid to support industry has already raised concerns regarding the distortive effects of potential subsidy races within the EU. However, limitations also partially stem from CEE policy makers' reluctance to support their domestic industries. With fiscal consolidation becoming a policy priority, countries like Czechia and Poland have recently scaled back on the support given to renewable-energy technologies.[67] In addition to upsetting investors, the abolishment of certain subsidies has highlighted the issue of how to bring national policies closer to the EU's ambitions, especially in times of austerity and low political will for decarbonisation, when state aid remains a major driver of financing.

Finally, the challenge of balancing a swift green transition with the pursuit of strategic autonomy looms large in the CEE region. In recent years, Chinese FDI in CEE has grown, significantly shaping the region's industrial landscape. Beyond Hungary, as an obvious example of increased Chinese FDI inflows in recent years,[68] countries such as Slovakia and Slovenia have also been stepping up their efforts to attract Chinese investors in the light of China's growing competitiveness in the global economy. While FDI can bring in much-needed capital and knowledge, these trends call for a thorough analysis of potential new critical dependencies.

63 Jovanovic et al. (2024)
64 See also Delanote et al. (2022).
65 Landesmann and Stöllinger (2019)
66 Minder (2024a)
67 Minder (2024b)
68 Éltető et al. (2024)

5
Conclusions

The loss of competitiveness has been a topic in the EU policy debate and strategic documents at least since the early 2000s – and rightly so. Competitiveness directly impacts the ability to sustain economic growth and global influence, issues that are becoming increasingly vital in this rapidly shifting international environment. The debate is also linked to other spheres of economic policy making, most notably trade, technology and innovation, manufacturing and, lately, climate protection.

Despite long-standing discussions, this might be the first in a long time that Europe is considering a targeted industrial policy to spur competitiveness. Such a policy goes well beyond the ambitions to revive competitiveness, as it aims to revitalise the manufacturing industry, reduce vulnerabilities within global value chains, ensure technological sovereignty and decarbonise.

The decarbonisation and competitiveness plan, advocated by Mario Draghi in his September 2024 report, proposes to focus the EU's industrial policy strategy on clean technologies. In doing so, it matches Europe's ambitious green agenda with an industrial, trade, innovation and competitiveness agenda that aims to spur innovation, help EU countries to become leaders in green technologies, increase security and reduce vulnerabilities. In very simple terms, the plan is an outline of an industrial policy strategy to increase the EU's manufacturing capacities and technological capabilities in clean industries to decarbonise and prosper.

The plan looks attractive from several perspectives, with the first (and perhaps most important) one being that it breaks the dichotomy between supporting the economy and supporting the planet. Many observers had been hoping for a reindustrialisation plan for the EU. The green transition offers a window of opportunity to develop new products and technologies as well as to capitalise on first-mover advantages. However, while clean tech opportunities are supported by an ambitious green agenda with clear climate targets, they are not matched by an equally ambitious industrial policy strategy sufficient to allow the EU to develop and produce clean tech domestically and to reconFigure its value chains. Indeed, in 2023, the EU committed to reducing net greenhouse gas emissions by at least 55% by 2030 compared to 1990 levels and to becoming climate-neutral by 2050.[69] To achieve this target, the European Commission has put in place several new green measures, such as the Emission Trading System, the targets in terms of renewable energy consumption, the Corporate Sustainability Due Diligence Directive, and the Critical Raw Materials Act. While the Net-Zero Industrial Act can be considered a similarly ambitious initiative regarding green industrial targets, the incentives and material support to strengthen EU value chains have not been on a par with the ambitious targets. This lack of industrial support, particularly compared to other global superpowers (most notably China), has contributed to deteriorating competitiveness in clean tech manufacturing and innovation in Europe as well as an over-reliance on Chinese imports.

While it is evident that the EU needs to step up its manufacturing and innovation efforts to sustain its green agenda, the decarbonisation and competitiveness plan will unevenly impact EU member states. As we argue in this paper, existing production structures will play a key role in determining the costs and benefits of the plan for different member states. Indeed, the plan would require huge investments and profound structural change for the countries (and territories) still dependent on fossil fuels as well as energy-intensive and polluting industries. For the countries that are already green and produce green technologies, it will enhance their ability to further expand innovation and production. This ultimately means that future industrial policies will need to include measures for green industries (to nurture them) *and* brown industries (to facilitate the transition).

However, a variety of factors makes our conclusions highly uncertain. Implementing a decarbonisation and competitiveness plan would be highly complex for the EU and its member states. Its impacts and outcomes will depend not only on the present positions of the member states regarding resources and hurdles for the green transition but also on how the EU's green industrial policy and the member states' individual policies will concretely unfold. This includes considerations of the specific industries, products and value-chain segments that will be targeted (an analysis that would require highly detailed data and an assessment of concrete options at the level of each step of the value chain and their associated technologies). Results will also depend on the type of support that private companies will receive and the criteria that will be used to promote the accumula-

69 See European Commission (n.d.b).

tion of production capacities in different territories. Regarding the latter, it is reasonable to imagine that the impacts of the plan will be very different if the investments to ramp up production were to prioritise the countries and regions that already have some installed capacities in the green industries (following what we could call a 'feasibility criterion') or if the investments were to benefit the countries and regions that are most affected by the negative impacts of the transition (following what we could label a 'cohesion-sensitive green criterion'). While it remains to be seen how the plan will be implemented (also in the light of the rapidly changing geopolitical context and shifting policy priorities), it is possible that both criteria will need to be taken into account. Without a strategy, the territories negatively impacted by the plan would probably resist it and thereby inject 'green discontent' into the situation.[70]

Whether EU countries will be ready and inclined to make the most of the benefits of the green transition will also strongly depend on their individual policies and interventions. As a matter of fact, despite EU-level policies, all member states are taking their own approaches to tackling the challenges of competitiveness and decarbonisation. The intensity and quality of their interventions depend on their scopes for fiscal action and their administrative capacities. While this cannot be avoided entirely, the implications of these individual actions on the EU's overall competitiveness (and cohesion) are not negligible. In the medium term, such fragmented interventions also have the potential to undermine the collective effectiveness of the EU's industrial strategy. This need for coordinating policy interventions along a clear joint strategy to achieve scale and maximise externalities is a clear conclusion of the Draghi Report.

70 Rodríguez-Pose and Bartalucci (2024)

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Towards a Decarbonised and Competitive Europe

With its Competitiveness Compass and the Clean Industrial Deal, the European Union (EU) has started catching up to some degree with Mario Draghi's proposal for a joint decarbonisation and competitiveness plan to capitalise on the decarbonisation push. Given the heterogeneous production structure and capabilities of EU member states, such a plan presents different challenges and opportunities for different countries. The plan would require huge investments and profound structural change for the countries still dependent on fossil fuels and energy-intensive and polluting industries. For the countries that produce green technologies, the plan will enhance their incentives and abilities to further expand innovation and production. Germany and the Nordic countries, for example, appear to be well positioned to capitalise on the green transition, particularly if industrial policies help them to overcome some of their recent competitiveness obstacles and create solid industrial ecosystems. The Draghi Report's proposal for a joint decarbonisation and competitiveness plan is also particularly pertinent for Central and Eastern Europe, considering the region's industrial orientation as well as its costly and fossil fuel-reliant energy structure.

Further information on the topic can be found here:
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