

EU industrial policy – the solution to various dilemmas?



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*If you want a
green EU (...)
you also need an
industrial policy.*



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By Professor Simone Tagliapietra, Bruegel and the Johns Hopkins University - School of Advanced International Studies (SAIS) Europe, and Cecilia Trasi, Bruegel



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EDITORIAL

By Gaston Moonen

Giving 'Made in the EU' a new meaning

When was the last time you read the words 'Made in the EU' on a product? Or read that it was made in one of its member states? When I checked a few products for anything relating to the EU or its member states, the main thing I found was the CE certification mark, beside an indication that it was made in China or elsewhere, invariably outside the EU. The COVID 19 pandemic and the war in Ukraine have made us realise that the EU has become more dependent on others for all sorts of products – from paracetamol to masks and from critical raw materials to energy – than various policy makers would like. Driven by the ambition that the EU should play a bigger role globally and the need to be less dependent on others – whether militarily or economically – the idea of somehow providing assistance to industries in the EU has gained support. Such assistance could take the form of regulation or outright subsidies, either at EU or member state level.

Considering how China and the US support their industries and the fear that achieving decarbonisation as envisaged in Fit for 55 will require hundreds of billions of euros of support, the EU's willingness to be the champion of free trade at any cost has waned. The idea has taken root that the EU should be more independent and less naïve about other regions coming to its aid in times of crisis. Among other things, this means making its industries more resilient. The EU playing a role in boosting various industries in its member states is nothing new. As Professor Simone Tagliapietra and Cecilia Trasi point out (page 5), even the very origins of the EU, with the European Coal and Steel Community, can be seen as a proactive interventionist policy, nurturing industries crucial for future growth. More recently, the 2000 Lisbon Strategy or the 2014 European Industrial Renaissance initiative, in which the European Commission set out priorities for industrial policy, are examples of EU action in this respect.

The Von der Leyen Commission has also launched various proposals. These include a New Industrial Strategy for Europe in 2020, whose aims include decreasing the EU's dependency on external critical raw materials, and its 2023 proposals to stimulate the development of clean technologies, for example through the Net Zero Industry Act. However, the EU's goals for a green transition by 2050 should not lead to deindustrialisation in the EU itself – on the contrary, according to Belgium, which currently holds the Presidency of the Council of the EU. Belgium has made 'strengthening our competitiveness' one of its key priorities, highlighting that the EU should prioritise its long term competitiveness and industrial policies. As Belgium Prime Minister Alexander de Croo said in our interview: 'None of us have ever solved our biggest challenges by shifting into reverse gear'. He is a staunch believer that solutions, including for the green transition, are going to come from innovation combined with the capacity to scale up such innovations competitively into tangible products (page 10).

To do this, the single market needs to be further developed. This is a view expressed not only by Mr De Croo but also prominently in the report by Enrico Letta, former Prime Minister of Italy and current President of the Jacques Delors Institute, published in April. He pleads for a swift development of the capital markets union, which in his view is crucial to attract the funds necessary to finance the green and digital transitions (page 16). However, Mr Letta goes further, highlighting the need for EU rather than national industrial funds, since the latter risk leading to competition between member states, the likely winners being those with the biggest public purses.

In the past, too, member states' industrial policies, be it through outright subsidies or fiscal measures, have collided with the idea of EU's single market. Yet creating European champions through an EU industrial policy may likewise be irreconcilable with the principles of the single market. And providing EU funds does not necessarily create such champions, as pointed out in the articles by Matteo Tartaglia on the EU's efforts in aquaculture to enhance food security (page 47) or by Afonso de Castro Malheiro regarding the EU's efforts to stimulate the production of EU made batteries (page 42). The ECA's special report on the latter topic was one of the reasons behind our decision to choose industrial policy as the theme for this edition of



the ECA Journal, and to make it a special edition. Another reason was the timing: both the current Belgium presidency and the recently published Letta report have highlighted EU industrial policy as a priority, linking it to strategic autonomy. Moreover, the upcoming report by Mario Draghi (former ECB President) on EU competitiveness, due in June 2024, is expected to call for swift action at EU level. This echoes European Commission President von der Leyen, who in her 2023 State of the Union Address spoke about a European industrial policy requiring common European funding and ‘...an economic and national security imperative to preserve a European edge...’.

As the article by Juan Antonio Vazquez Rivera and Martin Weber (page 34) points out, the ECA has published various reports related to EU industrial policy actions, with several others planned on topics such as hydrogen, microchips and state aid rules. What struck Annemie Turtelboom, the ECA Member responsible for several of these reports, was that many of them explicitly highlighted the challenge EU policymakers face to reconcile the EU’s different goals. Or, as she calls it, ‘the trilemma of EU industrial policies’: not only producing competitively on a global scale, thereby also ensuring affordability for EU citizens, but also contributing substantially to the EU’s goals of decarbonising while remaining self sufficient in areas critical for a society’s functioning (page 22). What characterises an external auditor such as the ECA is being able to see the big picture, presenting a comprehensive overview of the different factors affecting the attainment of various policy goals. This includes connecting the dots between actions in what appear to be rather different policy areas.

Industrial capacities, with European champions such as those that already exist in the chip-making equipment or offshore wind industries, may translate into bargaining power on a global scale. This could help to avoid trade wars such as the one seemingly emerging in relation to the ‘flooding’ of EU ports with inexpensive, allegedly subsidised Chinese electric vehicles. Independence and interdependence are key words when looking at foreign direct investment in the EU, as ECA Member Mihails Kozlovs does in his contribution, among other things identifying where the ECA sees its audit findings bearing fruit in new proposals the Commission has made in this area (page 28). While the risks and possible drawbacks of such investment in the EU are clear – hence the EU measures taken – this is less the case for public or private investment outside the EU, for example through the US Inflation Reduction Act. What are the potential consequences of this act for the EU, and should the EU embark on something similar? Or is it perhaps a blessing in disguise, since the US is finally assuming its responsibility for decarbonising its industry? Four experts in economic analysis explain the act’s implications and the responses the EU may consider (page 53).

Policymaking is all about choices, not only in relation to where we want to go – your objectives – but also in terms of how to get there. How can the EU nurture the capacities available and stimulate those needed, and by which policy means? Which policy means are available, and which need to be made available? And do these actually address the multiple, sometimes conflicting objectives? Trying to address them all entails the risk of actually achieving none of them, or only a few. Industrial policymaking at EU level seems to be at a crossroads if it is going to have the impact needed to ensure that products and services used by EU citizens go from ‘made in China’ (at best perhaps ‘designed in the EU’ or an EU member state) to ‘made in the EU’. Such a label – a CE label 2.0, perhaps? – would indicate not only where the product is made but also according to which criteria and would contribute to EU’s overall objectives. An interesting challenge, even more so as we head towards the European Parliament elections, will be how to convey this meaning to EU citizens. ‘Europe First’ would not be the most original choice...





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EVOLUTION, CHALLENGES AND STRATEGIES FOR EU'S GREEN INDUSTRIAL POLICY

By Professor Simone Tagliapietra, Bruegel and the Johns Hopkins University - School of Advanced International Studies (SAIS) Europe, and Cecilia Trasi, Bruegel

EU's road into industrial policymaking is not a new one. As Professor Simone Tagliapietra - Senior Fellow at Bruegel and Professor of EU climate and energy policy at the Johns Hopkins University and author of many publications on EU energy and climate policy, and Cecilia Trasi, Research Analyst at Bruegel - point out, even the roots of the EU, with the establishment of the European Coal and Steel Community, can be considered an industrial policy initiative. But unlike in the past, when the main policy driver was economic growth, the EU's new industrial policy ambitions seem to require a multilane highway where the various objectives – greening EU's industry, safeguarding economic security, enhancing EU's competitiveness while respecting EU's social and governance values - need to be addressed at the same time. And fast too because the clock is ticking. The authors argue that this requires a more collaborative process at EU level than ever before offering a good mix between regulation and targeted financial support.

EU's ability to maintain its competitive edge

The transition from brown to green economies stands as a critical socio economic shift, akin to an industrial revolution under a pressing deadline¹. The European Green Deal spearheads this transformation, committing the European Union to achieve climate neutrality by 2050. A cornerstone of this commitment is the 'Fit for 55' legislative package, targeting a 55 % reduction in greenhouse gas emissions by 2030. However, the effectiveness of climate targets hinges on seamless adaptation by businesses and citizens alike. Balancing environmental objectives with economic and social sustainability is paramount, exemplified by the indispensable role of green industrial policy. This framework not only advances the European Green Deal's objectives but also addresses social challenges posed by the transition away from carbon intensive industries, such as automotive manufacturing.

¹ Tagliapietra, S., and Veugelers, R, Sparking Europe's New Industrial Revolution: A Policy for Net Zero, Growth and Resilience, Brussels 2023, available at <https://www.bruegel.org/book/sparking-europes-new-industrial-revolution-policy-net-zero-growth-and-resilience> [accessed 27 July 2023].

As we embark on the path towards a greener and more sustainable future, the European Green Deal introduces unprecedented goals for renewable energy deployment, energy efficiency, and sustainable transportation. Nonetheless, it also presents fresh challenges to economic security, necessitating a robust and nuanced response. As Europe positions itself as a leader in the global race for clean technologies, adherence to the Green Deal becomes more than a mere policy; it becomes a litmus test of the EU's ability to maintain its competitive edge on the global stage. The importance accorded to green industrial policy further underscores the urgency, providing industries with the requisite stability for long term planning while reducing dependencies on external actors. Energy transition and climate protection have evolved beyond environmental concerns; they are now integral components of our security policies, safeguarding against supply chain vulnerabilities and ensuring strategic sovereignty in critical sectors.

However, navigating the multi dimensional objectives of green industrial policy presents a formidable challenge, especially in reconciling these imperatives with the pursuit of strategic autonomy. While competitiveness and economic security are rightfully prioritized, it is crucial that these priorities complement rather than detract from the energy transition. In an era marked by escalating conflicts and unforeseen shocks, the EU must pursue strategies that not only mitigate risks but also enhance economic resilience and technological leadership, with decarbonization at the forefront of priorities.

Innovation and collaboration emerge as paramount, transcending fragmented approaches and fostering collective action, particularly in addressing the existential threat of climate change. Recognizing the imperative for a more cohesive European industrial policy, as underscored in [Enrico Letta's report](#), emphasizes the pivotal role of public funding in steering Europe through the green and digital transitions. It underscores the need for innovation driven development, highlighting that the EU's future productivity growth hinges on its ability to foster technological advancements and innovation adoption across the Union.

The past of European industrial policy

European industrial policy's evolution mirrors the continent's journey through various economic and political eras. Post World War II, amidst reconstruction, European industrial policy prioritized strategic sectors like coal, steel, electricity, and railways. Notable initiatives included France's 'Plan Calcul' and the establishment of the European Coal and Steel Community (ECSC) in 1952, which modernized coal production and fostered inter state coordination. This period saw proactive interventionist policies nurturing industries crucial for future growth. The Davignon Plan of 1977 sought European wide solutions for 'sunset' industries while retaining national control over 'sunrise' industries, such as computers. The Airbus consortium exemplified European industrial cooperation in this era.

The 1980s heralded market oriented industrial policies, emphasizing liberalization and horizontal frameworks. Initiatives like the Single European Act (1986) fostered collaborative research and innovation projects such as ESPRIT. Despite fostering cooperation, these initiatives faced challenges in bridging Europe's technological gap. At European level, the inefficiencies of uncoordinated national industrial policies became clear, leading to the development of two important instruments at EU level: the internal market and competition policy, including state aid.

The 1990s and early 2000s saw further liberalization, epitomized by the Lisbon Strategy of 2000 striving to transform the EU into a competitive, knowledge based economy. However, the 2008 Great Recession marked a shift towards interventionist policies, emphasizing reindustrialization and competitiveness enhancement, as with like the European Commission's 2012 communication, 'A Stronger European Industry for Growth and Economic Recovery'. This evolutionary journey culminates in renewed focus on green industrialization, as with national initiatives like the German Energiewende, reflecting Europe's commitment to tackling climate change and economic security.

Economic security and green industrial policy

The COVID 19 pandemic and subsequent crises have propelled economic security to the forefront of Europe's policy agenda, prompting a strategic reevaluation. In response, the EU championed 'open strategic autonomy,' aimed at mitigating risks of supply disruptions and reducing dependence on external actors, particularly in critical sectors like health, green technologies, and digital infrastructure. Efforts to navigate these challenges are evident in initiatives such as the [European Economic Security Strategy](#) and the [Net Zero Industry Act \(NZIA\)](#). However, while the NZIA's emphasis on domestic manufacturing of clean technologies is commendable, it also raises concerns about potential over reliance on import substitution, potentially signaling protectionist tendencies. A nuanced approach is imperative; isolationist tendencies risk undermining Europe's resilience against diverse threats. Collaborative actions, exemplified by past responses to oil shocks, yield greater benefits through international cooperation in enhancing economic security².

Furthermore, the transition to green industrialization presents both unique opportunities and challenges for economic security. Europe must adopt a forward thinking approach that aligns economic security with climate objectives, recognizing the dual challenge of transitioning to a green economy while safeguarding economic resilience and security³. Blindly supporting declining industries or attempting to win a race that has already been lost in specific technologies may ultimately undermine efforts to strengthen economic resilience. The EU's dilemma regarding solar photovoltaic (PV) manufacturing epitomizes this challenge, requiring careful consideration of import substitution strategies while avoiding potential pitfalls such as increased costs and over reliance on subsidies.

To illustrate, consider that the European Green Deal underscores the EU's commitment to decarbonization and accelerating solar deployment is crucial for meeting renewable energy targets. However, the reliance on concentrated supply chains, such as the case for solar panels, particularly from China, poses significant economic security risks. Strategic measures, such as diversifying import sources and promoting sustainable industrial development, are the right steps to take. However, policy recommendations must prioritize innovation. Subsidies for solar manufacturing should be justified not solely based on European production criteria but on innovation grounds, fostering the development of sustainable industries that contribute to climate objectives⁴.

Ultimately, achieving both climate objectives and economic security necessitates a comprehensive policy framework that embraces transformation and fosters adaptable economic systems. By prioritizing global engagement, innovation, and resilience building measures, the EU can navigate the complexities of the modern geopolitical landscape while advancing towards a green and secure future.

Principles for the future of EU industrial policy

Europe's green industrial policy represents more than just a policy shift; it symbolizes a profound paradigmatic transformation, intertwining environmental sustainability with imperatives of economic growth. Rooted in the principles of sustainability, equity, and resilience, it signifies a departure from conventional industrial strategies, embracing a holistic vision that seamlessly integrates ecological considerations into the fabric of industrial planning.

² Tagliapietra, S., and Trasi, C, How Should Europe Think About Economic Security?, in: [Intereconomics](#), 2024:2, 88–91.

³ Tagliapietra, S., Veugelers, R, and Zettelmeyer, J (2023) [Rebooting the European Union's Net Zero Industry Act](#), Bruegel, June 2023, available at https://econpapers.repec.org/paper/brepolbrf/node_5f9177.htm [accessed 29 November 2023].

⁴ Tagliapietra, S., McWilliams, B, and Trasi, C, [Smarter European Union Industrial Policy for Solar Panels](#), 19 April 2024, available at <https://www.bruegel.org/policy-brief/smarter-european-union-industrial-policy-solar-panels> [accessed 7 May 2024].

While akin to standard industrial policy in its selection of tools and projects based on diverging private and public returns, green industrial policy extends beyond mere industry competitiveness to encompass broader societal objectives. However, despite strides in this direction, Europe finds itself still distant from achieving a fully integrated EU green industrial policy. Instead, it grapples with a patchwork of initiatives at both the EU and member state levels, often lacking coordination and sometimes even conflicting. This fragmentation poses a significant challenge, as divergent policies across member states risk fracturing the EU single market, thereby squandering opportunities for economies of scale and synergies at the EU level.

Recent developments such as the NZIA have done little to alleviate the fragmented state of clean energy industrial policy making in the EU, and in some instances, may have exacerbated it. Beyond the realm of member state coordination, there exists a notable absence of an overarching systemic strategy for clean tech manufacturing at the EU level. This oversight neglects to leverage some of the EU's most potent policy instruments, including its Single Market, green regulation, and the EU ETS scheme.

As we navigate the complexities of EU industrial policy, it becomes imperative to uphold key principles moving forward. Central to the success of green industrial policy is its alignment with climate policy, employing a diverse array of instruments to address the multifaceted challenges posed by climate change. Carbon pricing emerges as a critical tool, synergizing with other measures to facilitate the transition to a low carbon economy.

Acknowledging the inherent uncertainties and risks associated with green technologies, a proactive approach to experimentation and innovation becomes paramount. Drawing inspiration from successful models such as the [US Defense Advanced Research Project Agency \(DARPA\)](#), coupled with strategic venture capital funding, Europe can cultivate an environment conducive to fostering technological breakthroughs and maintaining global competitiveness.

Despite uncertainties, green technologies have advanced significantly, with investments flowing into the sector. Renewable energy technologies, notably solar, have become cost effective and competitive, challenging traditional energy sources. However, transitioning to green technologies necessitates efforts to overcome market distortions and path dependencies associated with fossil fuel based technologies. Directing investments towards green technologies is crucial to counter hidden support mechanisms favoring fossil fuels.

Furthermore, involving diverse stakeholders, including the private sector and civil society, is indispensable in shaping and implementing green industrial policy. Collaborative efforts through public private partnerships and civil society engagement will not only drive innovation but also address societal concerns associated with climate change. Effective governance mechanisms, characterized by transparency, accountability, and stakeholder coordination, are paramount for the successful implementation of green industrial policy.

Innovation guided by policy to realise a green transition...in a competitive way

In conclusion, the significance of green industrial policy in achieving climate goals while safeguarding economic security cannot be overstated. By fostering innovation, promoting sustainable industrial development, and embracing strategic measures, policymakers can effectively navigate the dual imperatives of decarbonization and resilience building.

As we strive for simultaneous decarbonization, economic growth, job creation, and resilience, it becomes imperative to identify and support strategic technologies and projects capable of delivering on these objectives. At the same time, minimizing trade offs necessitates the promotion

of technological innovation to substitute critical inputs. An innovation driven approach can mitigate the need for costly import substitutions and enhance domestic capacity for sustainable production, serving as a stronghold for global competitiveness. Targeted policymaking should be a collaborative process among the public sector, the private sector, and society, eschewing the conventional top down fund allocation approach that favours only a select few beneficiaries. This calls for a good mix between vertical and horizontal instruments, with a carbon price and environmental regulations as strong horizontal instruments complementing targeted financial support.

Ultimately, innovations can serve as the cornerstone of a successful transition that reconciles decarbonization, competitive value creation, job preservation, and strategic autonomy on a global scale, provided that the innovation machine is effectively guided by policy. Thus, as we move forward, there is a pressing need for a holistic approach that considers both environmental and economic factors. Policymakers must prioritize global engagement, innovation, and collaboration to ensure a sustainable and secure future for all.





TO COMPETE WITH THE REST OF THE WORLD, WE NEED AN INDUSTRIAL POLICY

Interview with Alexander de Croo, Prime Minister of Belgium

By Gaston Moonen

Of the various initiatives launched by the Von der Leyen Commission, one of the best known is the European Green Deal, guiding the EU to the overarching aim of being climate neutral by 2050. How can this Green Deal be reconciled with the multiple industrial policy proposals and legislation the EU has launched, ranging from batteries to microchips? How do these initiatives contribute to the EU's autonomy and security, while at the same time ensuring an affordable society for EU citizens? Belgium currently holds the EU Presidency, and has made the EU's long term competitiveness and industrial policy the second priority of its six point programme. We interviewed Alexander de Croo, Prime Minister of Belgium since October 2020, on what this means in practice, and where the EU needs to progress further.

Creating a truly single market... through market innovation

Strategic autonomy, greening and industrial policy are well known terms in EU political circles. When asked why Belgium's Presidency has EU competitiveness and industrial policy as the second priority in its [beEU programme](#), Prime Minister de Croo refers to the first priority: the rule of law. 'Because our Union is not only a union of markets, but also a union of values. And if you also want the economic side to work well, the rule of law is essential. The rule of law unites us and makes our Union function'.

According to Mr De Croo, industrial policy is high on the agenda because the world has changed geopolitically in a fundamental way. 'We Europeans believe in democracy, free trade, and rights. The rest of the world has not evolved in the way we Europeans would like to see. More conflict in the world and climate change are forcing us to behave differently and to integrate different parts of European policy better'.

'Up to now, you could say that our trade, industrial, and climate policies were quite detached from one another. The Green Deal is a good piece of legislation, a good example of how we work. But the flip side of the Green Deal – how we achieve it, and how we support our industry in a world where

competition is geopolitically oriented – is the side we miss'. For Mr De Croo, one of the goals of the Belgian Presidency is to see what is needed to make the Green Deal possible from an economic perspective. 'If you want a green EU able to compete with the rest of the world, you also need an industrial policy. We need to integrate all these pieces that are not well synchronised'.



If you want a green EU able to compete with the rest of the world, you also need an industrial policy.

But how do we stay competitive with the various objectives and circumstances we are facing, ranging from the EU's zero emission goals to its high energy prices compared with other regions of the world, from regulation and fragmentation to dependency on imports of critical raw materials? Mr De Croo identifies one of the EU's major assets: 'The European continent remains the continent of innovation. In many areas, we are real leaders in terms of innovation. But a few links are missing. If you look at the capital that is needed to scale up these innovations, then you see we are falling behind. One of the reasons for this is that we don't have a capital markets union. It's something that has been on the table since 2008, but we haven't been able to achieve it'.



If you look at the capital that is needed to scale up these innovations, then you see we are falling behind.

He explains that the capital needed to scale up innovation often comes from US private equity funds, and that a large part of the money that these funds raise comes from Europe: European pension funds that invest in US funds which subsequently finance innovation in the EU. 'Which means that part of the value added – or part of the value increase – is taken by these US funds. The EU's answer is often to fund capital with public money, which I don't think is very efficient, especially because there's capital here in Europe. Also, innovation – e.g. in pharmaceuticals – arrives first on the US market, and then in Japan and China, before coming to Europe. So even in terms of access to innovation, we fall behind'. In Mr De Croo's view, this can be avoided by creating a capital markets union. 'We haven't been able to do it so far, but in times of crisis we Europeans are able to move forward'.

'Energy costs are a challenge, but we have solutions. In renewables – e.g. offshore wind – we are still the leading continent from a technology point of view'. Mr De Croo notes that the EU created a European energy policy in the space of two years. 'Who would have thought that we would be able to disconnect from Russian gas in the space of just two years. It turned out that there were alternatives. Yes, there are cost disadvantages; but there are also solutions, and our resilience in times of crisis is enormous. The COVID 19 pandemic and the energy crisis have shown what we can do. Let's build on that and use the momentum to move forward'.

Using the US Inflation Reduction Act as an opportunity

To serve as a springboard out of a crisis, the US launched its Inflation Reduction Act (IRA) in 2022. For Mr De Croo, the IRA contained several elements which were not fair from a free trade perspective, but which have been addressed to a certain extent. However, he also sees several positive aspects of the IRA. 'For 20 years, we have been complaining that the US should move to our side of the table by supporting green technologies in the fight against climate change. Now they've moved in that direction, we should stop complaining and be happy'. As for the EU's response to the crisis – the Recovery and Resilience Facility (RRF) – he views it as a short term answer. 'The RRF is good, but limited in time'.



If we use them against competitors outside the EU, I can understand it and feel comfortable with it; but if we use subsidies to compete with one another inside the EU, then we are not on the right track.

Mr De Croo sees the most problematic aspect of the EU's reaction to the crisis in exemptions from state aid rules. 'Because we are competing against each other with subsidies. And instead of strengthening the single market, we are dismantling it. I am not always against subsidies if we use them to defend ourselves against state led economies such as China, or against incentives in the US. If we use them against competitors outside the EU, I can understand it and feel comfortable with it; but if we use subsidies to compete with one another inside the EU, then we are not on the right track'.

He refers to the study on the single market which the Council and the European Commission asked Enrico Letta to produce. 'I understood that some interesting analysis came out of that, particularly the finding that the capital markets union needs to be achieved. Another important point is how we implement our common regulations.' As an example, he refers to the EU's general data protection regulation (GDPR). 'On a global scale, the GDPR is quite well regarded. But implementation is different in every EU member state. For a European start up, the GDRP did not solve very much because it is still different everywhere. Another example he cites concerns regulators. 'They are actually very different from market to market, and I think there is a need for better integration'.

Prime Minister De Croo explains that although common regulation may be adopted at EU level, important differences occur in terms of implementation. 'This is really the next dimension. Letta's report wants us to work on capital markets, the implementation and enforcement of rules, and the behaviour of regulators. The single market dates from the era of Jacques Delors, and is now 39 years old. It is a miracle, and it shows what a visionary he was. The world has changed quite a lot since then, and we have not adapted enough. We need a single market 2.0!'. He notes that this is not an easy subject, but it is important for businesses. 'And ultimately also for people'.



...we have not adapted enough. We need a single market 2.0!'



As Europeans, we are quite good at regulation, but we sometimes do a bit too much of what we are good at...(..) 'I would like to see a perspective which is built more on trust than on mistrust.'

Comparing EU initiatives with US actions, he observes that the EU tends to regulate. 'To use sticks, while the American approach is about carrots, i.e. incentives. As Europeans, we are quite good at regulation, but we sometimes do a bit too much of what we are good at by overregulating compared with the rest of the world!'. This is the feedback he has received in particular from medium sized companies. 'I would like to see a perspective which is built more on trust than on mistrust'.

Returning to EU initiatives, Mr De Croo considers the EU initiatives taken in the chip sector, with the European Chips Act in 2023, as a good example of how the EU can respond to the IRA. 'The IRA is built around fiscal incentives – an instrument we don't have at EU level since things are arranged nationally. Politically speaking, it is interesting that the ones who often oppose any fiscal powers at Union level are those who complain the most'. For Mr De Croo, the European Chips Act was implemented faster than its US equivalent, and was therefore the right approach. 'We looked to see where our expertise is in Europe, e.g. Fraunhofer in Germany, CEA Leti in France and IMEC in Belgium. EU funds should be allocated on the basis of expertise, not on the grounds that there are 27 of us and everyone needs to have a piece of the cake'.

He views this approach as the way forward: first identify expertise and then allocate funds on that basis. 'Take IMEC, for example: how do we draw other industries into the expertise that IMEC has? First, you create expertise, but then you open it up to the rest of industry. That is the right answer!'. He is not in favour of giving outright subsidies. 'For example, I met the CEO of Intel who was going through Europe with a shopping cart to see where he could get the most subsidies – we're talking about billions – for his new plant. I said: "You know, I can give you access to 2 000 PhD students in electronics: that we can offer, that we do have at IMEC. Subsidies we don't do, because we think you're better off with the knowledge infrastructure provided by 2 000 PhDs. It's your choice".'.

One of his concerns is how to coordinate knowledge better in order to be a stronger player outside the single market. 'Twenty years ago, Europe was the leader in the photovoltaics industry. Today, everything has moved to China. There is a risk that the same will happen with the offshore wind

industry. Internal competition is good, but we need to coordinate more. We have a tendency not to act towards the outside as a single market. I am not advocating protectionism, but better use of our knowledge so we can stay ahead on the innovation side.'

He concludes that the European Chips Act was a good response. 'If we want to stay ahead in the field of innovation, that's the way forward: we need to assess how good different players are, with the attitude of "if some of us get better, then we all get better"'. In his view, this is different from the RRF approach, where everyone wants their own piece of the cake.

EU stepping up to its global role

Mr De Croo thinks that for EU citizens and voters, the world has changed, as has the EU's position in it. 'We used to be the centre of the world, but we are less so today. There are different models, and you might not agree with them, but they are there. The idea that we are leading and setting the direction: that has changed.' Nevertheless, he believes Europe still has many assets to play a global role. 'We remain a major player in the world: a major trading partner and investor. In this geopolitical environment, you need to act with words, but sometimes you also need to show some muscle, the leverage you can have'. He adds that everything the EU has done over the past few years shows that it has the capability to act. 'As the EU, we are a geopolitical force, which has been the ambition of the Von der Leyen Commission from the beginning. We are not where we should be, but we are on our way. The transformation we have undergone in a short period of time is quite remarkable'.



...sometimes you also need to show some muscle, the leverage you can have.

Another ambition with which the current Commission can be credited is the European Green Deal. In his contact with industry, farmers and entrepreneurs, it struck Mr De Croo that nobody was saying that we should scale back on the Green Deal. 'I was at an industry summit in Antwerp, where every part of the energy sector was represented. The reaction I heard was: "The Green Deal is there, we want to do this, and we want to be part of it". We need to create the right environment to do it. What everyone wants is a lighter administrative burden. Costs will nevertheless continue to be an important factor, whether in farming or elsewhere'.

Mr De Croo believes that the way the EU trades with the rest of the world will be essential. There is a risk that production will go somewhere else, where norms are less strict. 'We need to address this; we need more reciprocity in the way we deal with the rest of the world. Keeping industry here is good for jobs and prosperity. But even if you don't believe in that, industry moving away from Europe is a bad thing from a planetary perspective because you will have more emissions and pollution elsewhere. Yet another reason why it is important to keep industry here, including food production'.



...industry moving away from Europe is a bad thing from a planetary perspective because you will have more emissions and pollution elsewhere.

He refers to the EU Common Agricultural Policy, which accounts for around 35 % of the EU budget. 'In the past, the question was whether such a large amount was necessary. Today, it is quite clear why it is necessary. The EU budget is about 1.3 % of the EU's GNI, so less than 0.5 % of our GNI is for the EU Common Agricultural Policy, i.e. something which affects us at least twice a day. We need to allow farmers to develop and innovate'.

Forcing others to adapt to us

The risk of importing resources or products that do not meet EU conditions, e.g. environmental ones, is an issue that Mr De Croo feels both the member states and the EU need to address. 'In terms of inputs, access to energy is crucial, particularly for Belgium as an energy hub, with natural gas and soon hydrogen coming in. We also need to stimulate investments that drastically reduce CO₂, by helping on the fiscal side, providing a stable business environment with certain incentives. This is all national policy.'

At EU level, he sees the [Carbon Border Adjustment Mechanism \(CBAM\)](#) as an important tool. 'You can be the greenest producer in the world, but if somebody on the other side of the planet is not and then dumps their product on your market, you have a problem. The CBAM forces the rest of the world to adjust to us'. He stresses his belief in trade, and the need for the EU to remain open to the rest of the world. 'I just want reciprocity. What the Chinese are allowed to do here, I would love to



The CBAM forces the rest of the world to adjust to us.

be able to do in their market, which is certainly not the case today. The huge trade imbalances we see today between China and Europe are a matter not only of price, but also of access'. He recalls an experience he had in China at the end of 2023. 'When they said they were protecting their share of our market, I replied that they should know because they've been doing it for decades. Now the Commission is carrying out an investigation into electrical vehicles, which is fine under WTO rules. If it's fair, then that's OK; if it's not, then we should act'.

On all these issues, Mr De Croo believes it is important for the EU's members to stick together. 'Others try to divide the EU: the Chinese, the Russians and even our British friends during the Brexit talks. As long as we stick together, particularly where trade and the single market are concerned, then everyone understands their value'. Mr De Croo believes that politicians should also realise their limitations as market regulators. 'As regulators, we need to set objectives and say we have certain incentives to reach them. The technology they use is up to them. As Europeans, we have a tendency to define not only the objectives, but also the way to get there.

This is not a good thing, because as policymakers we are not good at innovation. We need to be good at governance and let industry do the innovating, and be less definitive when deciding what type of technology we need'. He gives hydrogen as an example, and has doubts about whether it is efficient enough as an energy carrier. 'The way things look now, electrification comes first, then blue hydrogen, and then the transition to green hydrogen'.



We need to be good at governance and let industry do the innovating...

Although he is less concerned about innovation in Europe, he is concerned about labour. 'You know, Belgium is a country with rather high labour costs. We have automatic inflation indexing here, and recently the rate was +14 %. But when I talk to businesses, this is not their immediate priority. Their priority is the availability of people: "Even if they're expensive, at least give us the people". Labour shortages are not only killing specific jobs, but often some related jobs as well'. Sometimes we need organised migration. We should do this together in the EU and reach comprehensive agreements in other parts of the world'. He stresses that Europe is still an attractive place to live for many people. 'I mean, is there a better place to live in the world than Europe? That's why so many people want to come here!' He adds that there should nevertheless be clear conditions from the outset about length of stay and returns. 'We somehow need to create a circular migration model, with people taking knowledge back to their home country or region'.

Mr De Croo is a staunch believer in innovation as a means of achieving the EU's various goals, and thinks that the solution of 'degrowth' that some people are suggesting is not the way forward. 'None of us have ever solved our biggest challenges by shifting into reverse gear. We need innovation and investment, and that is not going to happen with negative economic scenarios. Solutions are going to come from innovation. Our way of life will only really change if we have the technology to support it.'



Solutions are going to come from innovation. Our way of life will only really change if we have the technology to support it.

He believes that the ECA can provide important insights into the nature and impact of policymaking. 'First of all, one thing the ECA does as a public auditor is to provide transparency. And transparency is the best disinfectant for anything that goes wrong. We are human, and humans make mistakes, so bring those mistakes into the open and see what we can learn'. He highlights a second need: 'Make us more efficient. What the ECA does in its reports is to identify what works well and what doesn't'.

When it comes to the effectiveness of industrial policies, Mr De Croo notes that some may obviously work better than others. 'It's also interesting to know how well everything fits together. Its almost makes sense that there are silos, but if we can integrate them, then so much the better'. By way of conclusion, he observes that 'We are constantly being challenged by our voters, and that is how democracy works. But we should also be challenged by experts who say, "We've looked at this, and this is how it can be improved". So, keep challenging us!'





Enrico Letta presenting his report on 18 April 2024. Source: European Commission.

THE LETTA REPORT – A STRATEGIC CROSSROADS FOR THE EU SINGLE MARKET

By Gaston Moonen, ECA.

When it comes to actions related to specific industries, the current European Commission can easily reference new acts ranging from the European Chips Act to the Battery Act, and from the Critical Raw Materials Act to the Digital Market Act. As an enabler for realising tangible scale projects, people often refer to the EU single market, a market which is considered to be the largest global trading bloc and among the most open worldwide. In practice, however, does this market also enable the scaling up of those industries crucial for the EU's transition to a decarbonised economy, while still remaining competitive globally? Enrico Letta, former Prime Minister of Italy and currently President of the Jacques Delors Institute, was tasked both with analysing the operation of the single market, and with the improvements that are needed to tackle the challenges currently facing the EU when it comes to transition, enlargement and economic security. Gaston Moonen took a closer look at the Letta report and the reactions it triggered. Together with specific proposals, the report highlights that transforming the single market into a real European market calls for action on many different fronts.

A thorough and detailed analysis... urging wide-ranging action

On 18 April 2024, Enrico Letta, President of the Jacques Delors Institute and former Prime Minister of Italy, presented his report *Much more than a market*. It focuses particularly on what is needed to make full use of the EU's single market potential. While it does not explicitly follow the 'America First' idea, in practice the aim is to create the conditions necessary to promote the EU's industry as the primary supplier for the European market and beyond.

In the 147-page report, the author advocates for a truly working operational market. The EU must either integrate its financial, energy and telecommunications markets, or face losing its 'economic security' and falling still further behind the US and China. As Letta puts it, 'Europe cannot, and should not, cede its role as a manufacturing leader to others.' When Letta presented his report on 18 April



2024, he was well aware that his report addresses politically sensitive issues. 'My biggest enemy is the drawer,' he said .

What is Letta's analysis of the single market? What problems did he identify, which solutions did he propose, and how do they dovetail with the EU's industrial policy and strategic autonomy? And what of the initial reactions to his solutions? Is there any chance – or even risk – that his report will actually remain on the desk instead of ending up in the drawer?

Source: Council of the EU.

A single market needs teeth to unlock its potential

In June 2023, the European Commission and the European Council called for an independent high-level report on the future of the single market. Following this call, Letta travelled far and wide across the EU, taking part in over 400 meetings with European heads of state and government, business leaders, civil society representatives and academics. Dedicating his report to former Commission President Jacques Delors, Letta highlighted that when Delors launched the single market – in 1993, well before the euro was introduced – both the EU and the world were 'smaller', simpler and less integrated. Not anymore. 'Europe is bigger, and the world is very complex.' He pointed to the single market as a success, with its focus on the four fundamental freedoms (the free movement of people, goods, services and capital). That integration has reached high levels, with 80 % of national legislation stemming from decisions adopted in Brussels. Yet, as he describes it, the process of merely making national legislation converge and recognise EU legislation has become slow, cumbersome and complex in a European Union with 27 member states. On the other hand, the flip side of this larger EU is the enhanced potential for economies of scale. Hence Letta's call for an overhaul of the single market, driven by factors such as our demography, a resurgence of power politics which challenges the rules-based international order, and the economy. For example, the US GDP per capita increased by almost 60 % between 2003 and 2022 – while in Europe the increase lagged at below 30 %.

For Europe to survive globally, while also addressing the challenge of decarbonisation, its ambitions to pursue enlargement and enhance the EU's security, Letta argues that '...we need to create a single market with teeth.' He finds that national borders are still very much relevant, creating differences in the interpretation and implementation of EU regulations. This negatively affects scaling up production within the EU, something which he argues the EU should not, in key sectors, cede to other global players. He therefore proposes a profound modernisation of the single market to secure its own production, ranging from sectors such as communications to defence. Three areas excluded from the single market in Delors' time were finance, electronic communications and energy. The report makes the case for rethinking the barriers to be able to unlock the full potential of the single market. As Letta puts it: 'If you're not able to integrate the single market for energy, finance, telecom you don't have any economic security.'

For example, the report identifies the communications sector as one with significant disparities, where the residual fragmentation of rules and industries at national level stands in the way of the

¹ [Politico, 16 April 2024.](#)

² [Volkskrant, 19 April 2024.](#)

³ [Financial Times, 15 April 2024.](#)

⁴ [Politico, 16 April 2024.](#)

⁵ [Financial Times, 15 April 2024.](#)

crucial final step towards a single market. The scale of the disparity is considerable: the EU has over 100 operators, with the average European operator serving only 5 million subscribers, compared to 107 million in the US and 467 million in China. As Letta observes: ‘Today, we are missing the boat in these areas because of market fragmentation.’

Focusing on how to deepen the single market

The report includes several proposals to overhaul and extend the single market, and is organised around six separate chapters. Each chapter has different sections, which are accompanied by a roadmap proposing specific actions and timings. The six chapters relate to:

1. extending the original four freedoms from 1993 to include a fifth – to stimulate research, innovation and education in the single market;
2. mobilising the single market to finance the EU’s strategic goals;
3. enhancing the single market’s potential to better support the scaling up and growth of European companies;
4. using the single market to better distribute the benefits of economic integration and address economic convergence issues, thereby improving the situation for all citizens, SMEs and regions;
5. speeding up the impact of the single market by improving its regulatory framework and strengthening enforcement tools to limit differences in implementation; and
6. using the single market as leverage beyond its physical borders in the EU’s relationship with its strategic partners on the global stage.

Some of the core proposals are presented in **Table 1**.

Table 1 – Some key proposals from the Letta report *Much more than a Market*

1	<p><i>Adding a fifth freedom to enhance research, innovation and education in the single market</i></p> <p>With its proposal for a fifth freedom of movement – relating to research, data, knowledge, etc. – the report emphasises the importance of innovation for the EU. Again, this relates to addressing the EU’s transition objectives, with the EU firmly in the driving seat and using innovation as a springboard for productivity and economic security.</p> <p>To accelerate innovation, another proposal is to encourage public-private partnerships in strategic areas to boost cooperation and integration between EU companies. The report encourages the EU to prioritise impactful, large-scale, cross-border projects.</p>
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⁶ [Le Monde, 19 April 2024](#).

2 | *A single market to finance strategic goals*

For Enrico Letta, one of the most urgent elements relates to the capital markets union which he considers to be crucial in order to realise the EU's ambitions for a fair, green and digital transition, EU enlargement and enhancing the EU's defence capabilities. The report identifies the EU as home to a staggering €33 trillion in private savings, which Letta sees as wealth that has not been fully leveraged to meet the EU's strategic needs. 'If we don't find a way to use private money, these needs won't be covered. It would be very complicated to find a solution based on public money only.'⁷ He has branded his proposal the 'Savings and Investments Union', and it is aimed at keeping European private savings in Europe, making it more attractive and appealing for both EU residents and foreign investors to invest in the EU. This is all the more important since he estimates that over €300 billion of these savings are primarily transferred to the US economy for investment. Other suggestions relate to upgrading a pan-European personal pension product and creating a digital euro.

The report proposes the reform of state aid to prevent the fragmentation of the single market and to ensure that national state aid – which is possible within the framework of a national industrial policy – does not disturb the level playing field for the European economy. A state aid contribution mechanism is envisaged, requiring member states to allocate a portion of their national funding for financing pan-European initiatives and investments. In the report, Letta points out that the important projects of common European interest (IPCEIs) approach could be further developed and generalised to form an EU industrial policy.

Identifying public procurement as a fundamental component of the single market, Enrico Letta recommends making further concerted efforts with regard to public procurement, and refers to the ECA's special report 28/2023 on this topic.

To achieve greater harmonisation on the regulatory front, the report calls for a more comprehensive and integrated supervision of financial markets, including by strengthening the European Securities and Markets Authority (ESMA).

3 | *A single market to play big: scale matters*

The report also recommends consolidation in the telecommunication industry, for example. 'We can modify one of the most important parts of the competition rule, which is relevant market', Enrico Letta stated regarding industrial policy. 'I think the most important part is to move from 27 markets to one... to then apply the competition rules to a much bigger relevant market (...). Then markets will create champions.'⁸ He also called for concentration in the energy sector, otherwise a transition to locally produced green energy would be impossible⁹. Promoting interconnectivity is a top priority.

The report also urges the EU to ensure that the rules on the control of foreign direct investment in strategic sectors are implemented effectively, to avoid any risk to public security (see also page 28).

Identifying the fact that it is impossible to travel between European capitals by high-speed train, Enrico Letta proposes a proper, pan-European high-speed rail network to act as a catalyst for EU integration.

4 | *A sustainable single market for all*

The report calls for greater SME participation in the single market because many SMEs currently face barriers, ranging from complex bureaucratic procedures to 'gold plating' by member states, with additional requirements to those already included in EU directives. SMEs also have to contend with a lack of information and a number of hurdles due to tax fragmentation. Letta argues for simplified procedures, more guidance and a harmonised EU tax framework.

⁷ [Financial Times, 15 April 2024.](#)

⁸ [Politico, 19 April 2024.](#)

⁹ [Volkskrant, 19 April 2024.](#)

5 | *A single market to go fast and go far*

Instead of using directives, the report urges EU institutions to prioritise the use of regulations to create binding single market rules.

Letta expresses concern about the use of infringement procedures, an issue which is currently under audit by the ECA with a report scheduled for publication in 2024. He makes the case for launching an infringement procedure for all major cases where there is a breach of the EU single market rules.

6 | *The single market beyond its borders*

Arguing that the internal and external dimensions of the single market need to be addressed together, the report underlines the importance of the EU's ability to shape these standards, something that is essential for its competitiveness on the global market.

Deepening the single market where enforcement will be crucial

In his report, but also in his comments during and after the presentation, Enrico Letta indicated that he is well aware that what he proposes is rather ambitious, that it '...aims to inspire a genuine call for action...' and that there is a 'need for broad engagement and concrete actions'.¹⁰ He observes that 'the window of opportunity to intervene and relaunch the European economy risks closing in the near future'¹¹. He sees the European Council's first responsibility as playing 'a decisive role in advancing necessary reforms' for the completion of the single market. 'The Council is urged to delegate to the European Commission the task of drafting a comprehensive Single Market Strategy'.¹² His overall aim is to engage EU leaders and the future European Commission on where to focus their energy and resources for the next 5 years.

Enrico Letta is well aware that the European Parliament elections in June 2024 will be pivotal: 'The electoral outcome will not only guide the strategic direction but also shape the recommendations detailed in this report'¹³. Letta acknowledged that it would be an uphill battle to mobilise action on the report's proposals, given that financial issues are 'not very sexy' for voters¹⁴. Still, he believes that financial integration within the single market will remain elusive unless it is clear that such integration would serve not merely the finance sector itself, but be crucial for financing common objectives¹⁵. Furthermore he identified working on enforcement as a crucial point. 'That is, in my view, one of the main issues of the single market.'¹⁶

Initial reactions to the Letta report have been positive but tempered with some constraint. During its discussions on the Letta report on 18 April 2024, the European Council gave a positive reaction to the conclusions. The Von der Leyen Commission has also expressed support for the report, particularly regarding the point on access to finance¹⁷, as has the Belgian Presidency (see also page 10). Nevertheless, the specific timeframe as laid out on the roadmap pages of the Letta report may be somewhat optimistic. Various actions proposed by the Juncker Commission in 2014 have been discussed for several years now, but have yet to lead to specific changes on the ground. And the reasons for this have not disappeared either – namely conflicting interests between member states¹⁸. In their first discussions of the Letta report several member states voiced their concerns, expressing a fear of being left at a disadvantage by greater harmonisation, in particular those countries with a

¹⁰ Enrico Letta, *Much more than a market*, Brussels, April 2024, page 144.

¹¹ Ibid.

¹² Ibid.

¹³ Ibid, page 145.

¹⁴ [Politico, 19 April 2024](#).

¹⁵ Enrico Letta, *Much more than a market*, Brussels, April 2024, page 144.

¹⁶ [Financial Times, 8 February 2024](#).

¹⁷ See for example the [statement](#) by President von der Leyen at the joint press conference with Belgium Prime Minister De Croo and Enrico Letta, Brussels, 18 April 2024.

¹⁸ Berg, A, and Meyers, Z, *Enrico Letta's Report: more than a market, but less than an agenda*, Centre for European Reform, 23 April 2024.

relatively strong capital market for their size. Letta, however, remained optimistic, because at least the European Council discussed his proposals which, as he put it, 'perhaps has prevented' the shelving of his report¹⁹.

Looking ahead, Letta hopes that his report will also be an important tool for former ECB President Mario Draghi, who is currently drafting a report on EU competitiveness, which is due to be published in June 2024. Draghi has already promised to demand 'radical change'.²⁰ 'He indicated that his report will '...focus on ten macro areas of the European economy'; specifying 'three common threads': scalability, public goods and the supply of essential resources. Both Draghi and Letta indicated that they worked in synergy when preparing their respective reports²¹. 'There is a clear link,' according to Letta: 'integrating the single market is fundamental to competitiveness.'²² As Letta said at the European Commission's [Annual Budget Conference](#), he believes politicians have to act. 'We need to increase our budget because the economy cannot save us, and we also need politics.' The Draghi report will be another opportunity for further decision-making based on proposals made in the Letta report, which should at least postpone the risk that the Letta report will end up in policy makers' drawers. As with the Letta report, the Draghi report will also undoubtedly touch on the EU's industrial policy and ambitions for strategic autonomy as key pillars for the EU's future.

¹⁹ Volkskrant, 19 April 2024.

²⁰ Mario Draghi in his speech at the High-level Conference on the European Pillar of Social Rights, Brussels, 16 April 2024.

²¹ EU news, 18 April 2024.

²² Politico, 19 April 2024.



ADDRESSING THE TRILEMMA OF THE EU'S INDUSTRIAL POLICIES

Interview with Annemie Turtelboom, ECA Member and Dean of the Investment for cohesion, growth and inclusion Audit Chamber

By Gaston Moonen

For several long term EU goals - ranging from the Fit for 55 package for decarbonisation, to a stronger Europe in the world - realisation relies on the EU's industrial capacity. Additionally, with the background of the rapidly changing geopolitical situation of the last years, the EU has launched several initiatives to support EU industry. These have resulted in multiple ECA audits assessing these policies. Annemie Turtelboom, ECA Member and Dean of the audit chamber that conducts many of these assessments, has identified several commonalities in ECA findings, often relating to the dilemmas European and national decision makers face when addressing the goals set. In this interview, she reveals the conundrums the EU must solve regarding its industrial policy actions, and highlights some key findings from the ECA's work in this area. These issues may come across as inconvenient truths, but are things that need to be said if the EU is to meet its goals.

Cars production reveals potholes on the road of the EU's industrial policy

When I speak with Ms Turtelboom, it is a few days after she held a press briefing to present the ECA's work from several reports related to EU transportation initiatives, focussing on cars, together with fellow ECA Member, Mr Nikolaos Milionis. 'Cars touch on several aspects related to industrial policy. In our audit work, due to the fact that we have limited time and resources, we work on specific and focused topics, with well scoped questions we want to address in a timely manner. What you see, however, is that several different audit topics are actually interlinked'.

She explains that the ECA also wants to communicate more through key cross cutting messages, as stated in its [2021-2025 strategy](#). 'For example, I see that we have more and more special reports touching upon industrial policy issues. Take [real world emissions](#), on which my colleague Petro Russo reported [[special report 01/2024](#)], where it was very clear that in all sectors of the economy emissions were down – in industry, in agriculture, the energy sector, waste processing. Apart from one sector, where emissions were going up. And that was transport'.

The ECA has published a [report on biofuels](#). 'During that audit, we saw that biofuels cannot provide a credible and reliable alternative to combustible engines on a large scale, because of issues with the availability and sustainability of biomass. Then we had our [special report 15/2023](#) on batteries, which drew a lot of attention. With the de facto ban on petrol and diesel cars in 2035, it means that many more electric cars will have to be sold in the EU in the next decade. As for the alternative of hydrogen cars, the fuelling stations infrastructure is not yet there, and there are very few models available – it is a chicken and egg issue. So as of now, this means in practise only electric cars from 2035 onwards'.

She explains that the most important element in these cars is the battery. 'Which can make up to 40 % of the price of the car. This is one of the reasons why we decided to audit the battery value chain since you need them for the green transition'. She compares batteries to microchips in terms of strategic importance. 'You also need microchips for everything. In every electronic device, microphones, medical equipment, for the Internet of Things. Without microchips there won't be a green transition'.

Ms Turtelboom explains that substantial amounts of public funds are involved in this transition to battery powered transport. 'The Commission has invested €1,7 billion in funds. On top of that there is also state aid for battery production. Furthermore, in its 2018 communication on Sustainability for Europe¹, the Commission said that it wants Europe to be a world leader in the production of batteries'. But the current reality paints a different picture. 'At the time of our report, 7 % of world battery production was in Europe. Of that 7 %, the vast majority was in the hands of South Korean companies. Which means you are in a position of great dependency, and that brings challenges in terms of economic sovereignty'.



[regarding battery production the EU is] in a position of great dependency, and that brings challenges in terms of economic sovereignty.

A multi faceted dilemma

For Ms Turtelboom, the challenges of the EU's stance on batteries exemplify various dilemmas that the EU needs to resolve. 'In our battery report, we saw that meeting the 2035 target of phasing out combustion cars may be difficult. As external auditors, it is not our job to make policy, or to question policy objectives. However, it is our job to look at policy implementation. And from our battery report, it's clear that as things stand, that target will likely not be met, or it may only be feasible through the import of Chinese cars. The latter can be an option, but we need to be clear about its consequences. Because on the one hand we have the Green Deal – with the Fit for 55 package, hence zero emissions. And the import of EVs from outside the EU can therefore assist in this area. On the other, there's a conflict with plans to support European industry. You have to remember that more than 3 million people in Europe work in the automotive industry. If you meet the 2035 target by relying on cars coming from third countries, are you willing to risk their jobs? And if you do, can you transfer them to other jobs?'



...it is not our job to make policy, or to question policy objectives. However, it is our job to look at policy implementation.

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She brings up another aspect - affordability. 'Every transition costs money. And if you have a problem with cost competitiveness, it maybe means that this transition is only affordable for citizens through getting cheaper cars from China'. She refers to an example from the past, the production of photovoltaic material. 'These panels were more cheaply produced in China, and now by far the largest part of the world production of solar panels comes from China. Where would we stand with our transition to solar energy production without cheap solar panels from China?'

Part of that picture is the EU's cost competitiveness. 'The target was for the battery price in Europe to be €90 per kWh by 2022. As of 2020, it was still double that price. So on cost competitiveness, we have a disadvantage. One of the reasons for this is that the Commission takes a different approach to other state actors, by focussing investment efforts mainly into research and development, or by working indirectly, such as by allowing state aid'. She compares this to the US Inflation Reduction Act. 'Through this Act the US invests in direct subsidies for American made cars, which mostly end up on American roads. Direct subsidies lower the price immediately, on the spot, in your bill'.

¹ [Annex 2 to COM \(2018\) 293](#).

From an economic sovereignty point of view, Europe still struggles to secure reliable supplies of the materials necessary to produce batteries. 'Europe is very reliant on raw materials coming from third countries, and in many cases countries with which we do not have trade agreements, such as Australia. We depend on the Democratic Republic of Congo for 68 % of our cobalt. And 87 % of our lithium comes from outside of the EU'. Many of the source countries also score low on good governance indicators. 'Hence we are dependent on regimes with a lot of instability, and a lack of rule of law. Regimes you don't want to be dependent on. Do we want to repeat our experience with Russian gas, with a dependency on raw materials from regimes with low governance indicators?'



Do we want to repeat our experience with Russian gas, with a dependency on raw materials from regimes with low governance indicators?

For Ms Turtelboom it is this trilemma of goals – the green transition, affordability for EU citizens, and economic sovereignty – ideas drawn from the ECA's report on batteries. 'We presented this trilemma, bringing together different angles in our transportation press event. Of course, we do not provide a solution to it. Because, as I said, that is not our task. But we can highlight the choices the EU has to make, and how one goal can perhaps come to detriment of another, whether that be increasing costs for your own industries, or increasing your dependency on third countries. Take for example microchips, see how dependent we are from Taiwan, not only in Europe, but also in the US'.



...we can highlight the choices the EU has to make, and how one goal can perhaps come to detriment of another...

Ms Turtelboom acknowledges that the task is a difficult one. 'To be fair, the Commission takes many initiatives, for batteries, for electric charging stations, for microchips, for raw materials. If you are dependent on various external factors, it is not easy to make your policy and regulations work directly, as they are only one part of the whole. In our reports, different policy questions come together, and it is not always clear, based on the findings we have, whether all these policy ambitions speak to each other'. For her, assessing whether one policy can cause potential collateral damage in another area is an issue that needs to be considered. 'We can applaud that the Commission, the EU in fact, has this ambition on greening the economy. But you also need to be aware of the potential downsides, and how you can deal with those'.

The year 2026 is written into the CO2 regulation as the point for the Commission to make a reassessment. 'That is a pivotal moment, to ask whether to "stick to the targets set", or whether there is a need to adjust. This can affect many issues, ranging from the internal combustion engine ban to the



...it is not only about the bigger goals but also whether you in fact can meet them.

3 billion trees to be planted, or the availability of charging points for cars'. For her, this is a window for policymakers to consider again what type of Europe they want, and how different aspects can be weighted and targeted through policy initiatives. 'Which different aspects can be combined.

What needs to be given up? Because it is not only about the bigger goals but also whether you in fact *can* meet them'.

Assessing the how, not the why

Ms Turtelboom points to the many variables that come into play when trying to reach these policy objectives, one of them being human behaviour. 'For example, there were plans to build battery production in Hungary, but it led to many protests because of the high impact on the biodiversity. The same regarding the mining of critical raw materials in Portugal'. One therefore needs to assess the whole value chain. She thinks such assessment is necessary also to avoid, as she puts it, 'ending up with an electric car with a dirty battery'.

Overall, the road to realising a certain policy, the how, is what the ECA's work touches upon. 'Because we look at implementation. We only look at policy goals by assessing whether the goal is achievable, by reviewing how the implementation is organised. Or whether the correct information is used. For example, for batteries, in 2023 they were still working with data from 2016. Or take the mining of lithium and other critical raw materials in Europe. Getting this out of the ground, from discovery, takes between 12 to 16 years. So if you find lithium now, you are looking at 2040 before it actually available . What do you do until then? Consequently, as auditor you end up at looking at the how '.



...as auditor you end up at looking at the how.

She explains that scaling up innovation in Europe, carrying it all the way to marketed products, is another example. 'If there is funding available, it can sometimes take up to three or four years before you obtain it. That may be too late for the objectives you have set. As our President Tony Murphy said, we are at a crossroad for the future of the finances of the EU, after the 2027 period. And this is one of the many aspects on the table'. She points out that her audit chamber has identified a number of audits clustered around industrial policy, ranging from circular economies to batteries, and the currently ongoing audits on microchips, hydrogen, and state aid. The ECA has also recently published a [special report 08/2024](#) on artificial intelligence. She also refers to ECA's [special report 03/2022](#), regarding the rollout of 5G in the EU, where there were very different approaches in the EU, or the ECA [review 03/2020](#) on the EU's response to China's investment strategy. 'These reports bring together a number of points critical to addressing a world in transition, from competitiveness to greening, and strategic autonomy'.

While EU industrial policy initiatives are funded from various EU budget headings, including the Recovery and Resilience Facility (RRF), Ms Turtelboom notes that cohesion is a key one. 'It is one of the biggest EU policy instruments, making up over 40 % of the EU budget'. In this sense cohesion policy addresses its role as a transition enabler. 'There is a big correlation between EU initiatives regarding circular economies, batteries, hydrogen and so on, and cohesion related financial sources '. She explains that this is why the ECA is preparing a report on smart specialisation strategies. 'With this a region can choose what will be its strategic option to uplift the region, making it a trailblazer in a certain domain'.



There is a big correlation between EU initiatives regarding circular economies, batteries, hydrogen and so on, and cohesion-related financial sources.

Mapping vulnerabilities and... addressing them

For Ms Turtelboom, it is clear that since the pandemic, but also with the war in Ukraine, strategic autonomy has become a very serious policy consideration. 'You need to map your vulnerabilities. With the war in Ukraine we have seen that prices went up, ranging from energy to food. With the pandemic we saw that all our protective masks came from China. So you need to think about stocks. And you need to think about the ingredients to make products, ranging from batteries to pharmaceuticals'. She refers to audits her colleagues in other audit chambers are currently working on, for example relating to the supply of pharmaceutical products in the EU. 'Also, an issue such as access to critical raw materials is essential for many areas, not only batteries, but also to produce military equipment'.

To the EU's advantage, it has a market of 450 million inhabitants. 'The EU knows this but has not always used its leverage in the past. In our review regarding EU's policy towards China we said that we don't really have 27 players on one team, but we have 27 teams. For example, we found that the Commission had no access to the bilateral agreements member states had made with China, because they were confidential. This limits the EU's ability to utilise its full size for leverage'. This review

came out four years ago, and 'Things have improved. But to rectify your dependencies takes time, also because the environmental and social standards we use in Europe are higher than in most other regions. On top of that, we are not a large state subsidised economy but mainly market driven'.

In this context she refers to the EU's Carbon Border Adjustment Mechanism (CBAM). 'I understood this will require EU importers, as of 2026, to purchase certificates equivalent to the weekly EU carbon price, thereby preventing "carbon leakage" to production outside the EU'. CBAM serves to create a level playing field, including with non EU producers, but Ms Turtelboom also has concerns about level playing field within Europe. 'I found it remarkable that one of the findings in our report on

batteries was that 83 % of state aid for batteries comes from three member states – Germany, France and Italy. And that has effects on the wider European scale. You need to be careful that it does not come to the detriment of a similar industry in smaller member states, which may be less able to support the industry'. She explains that more and more big companies go shopping for supports in order to determine locations, including in the EU: 'Leading to a subsidy competition, which is not always in the taxpayers' interests'.



...83 % of state aid for batteries comes from three member states...

In this respect she mentions the [recent report of Enrico Letta](#) on the single market. 'While it is clear that the issues he raises cannot be addressed by quick fixes and easy solutions, it is important to highlight them and spell out where single market is not yet fully operational, or not even at all operational. Because if properly worked on, frameworks and blueprints have their effects, as the banking union and energy union show'. However, in her view there are still enough issues to tackle. 'You cannot say there is a single digital market in 2024. There is always room for improvement. For example, the ECA recently published [special report 03/2023](#) on the internal electricity market integration. It highlighted progress, but noted a lack of it in certain market segments and regions. And also our [special report 28/2023](#) on public procurement in the EU, which Letta refers to in his report, shows there are significant differences between the member states'.



...if properly worked on, frameworks and blueprints have their effects, as the banking union and energy union show.

Crisis creates an opening for solutions...which require coordination

The Letta report pushes for a single market for financial services, which has been on the table for some time. As to why now is the right time for progress in this area, Ms Turtelboom smiles. 'Never waste a good crisis! You can say that Europe often grows through crises. The world of five years ago is no longer comparable with the world of today. This will trigger reforms because if you want to be a geopolitical player collectively, you will have to work together. In certain policy areas you might have to come closer to each other to make full use of your potential'.



...to be a geopolitical player collectively, you will have to work together.

Making use of this potential does not necessarily mean throwing EU money at a problem. The ECA Member is not convinced that subsidies will always help to bring EU industries further. 'In our batteries report, we have seen that €1,7 billion of subsidies did not make the European battery industry competitive. It is not a magical solution'. For her a big take away from several ECA reports touching upon industrial policy issues is that coordination between the EU and member states, in terms of regulation, infrastructure, and finance,



...€1,7 billion of subsidies did not make the European battery industry competitive. It is not a magical solution.

is crucial. 'And solutions may need to be tailor made.' Industrial policy often starts at the member state level because they know their specific circumstances. Each will have different industrial specialisations, and the contacts and knowledge of that industry. For example, the largest port of Europe is in Rotterdam, the second largest petro chemical cluster in the world is based in Antwerp, the car industry in Germany, and so on.'

Ms Turtelboom is looking forward to the findings of the ECA's upcoming audit on state aid, to be published later this year, with the cross cutting approach set to continue in the ECA's future work. 'This one will most likely help us join the dots between various ECA audit findings, and underline some of the cross cutting messages, as we did in our cars press event'. And no doubt more ECA work will follow, highlighting the different policy dilemmas EU policymakers have to address, and how far the EU has gotten in reaching its multi faceted policy goals. 'Balancing and advancing these goals is, I can say from experience, no easy task'.





SCREENING FOREIGN INVESTMENT TO REINFORCE THE EU'S ECONOMIC SECURITY

By Mihails Kozlovs, ECA member and dean of the Regulation of Markets and Competitive Economy Audit Chamber

Strategic autonomy actions do not just involve EU initiatives to enhance development, resilience and innovation in critical sectors of the EU economy; they also entail coordination at EU level to prevent foreign states – particularly those that may pose a threat to security or public order in the EU – from obtaining a decisive say over technologies and operations which are essential to EU member states. For this 'other' side of the coin, the EU developed a framework for screening foreign direct investment (FDI). Below, Mihails Kozlovs, ECA Member and Dean of the Regulation of Markets and Competitive Economy Audit Chamber, provides insights not only into the ECA's recent audit work on this topic, but also into the Commission's proposals to develop this framework for FDI further.

Strategic autonomy and economic security: identical twins?

In general, cross-border economic activities, including investment flows, are certainly beneficial for the parties involved. However, as we are now learning, such activities may also present a risk to our security.

Until recently, the EU economy thrived (and indeed still does) on open and rules-based trade and investment, but it has now awoken from a dream of truly benign free trade and globalisation, having realised that it can actually make you very vulnerable. A hostile geopolitical environment, profound technology shifts, the COVID-19 pandemic with the major disruptions it caused to supply chains and, lastly, Russia's war in Ukraine have led to a debate in the EU about its ability to be ready – if needed and when the time comes – to act autonomously in strategically important policy areas, such as security and defence, information and technology, and the economy.

Various concepts, such as strategic autonomy, open strategic autonomy, and strategic sovereignty, are used in the public domain to headline the debate. But whatever it is called, whatever it encompasses and however broad it is, it is clear that one cannot have strategic autonomy without economic security playing a considerable part.

The EU has strong legislative and financial capacity in areas related to its economy, more so for example than in relation to defence. Although each EU member state is responsible for its own economic policy, there is considerable coordination of economic policies between member states, particularly those that use the euro. The EU budget has also contributed considerably over the years to areas that are essential for economic, social and territorial cohesion, economic development, and improved competition. In practice, the EU's budget efforts have increased substantially since the NGEU instrument was introduced in 2021. As we all know, investment – whether domestic or foreign – is an engine of economic growth.

Here, the EU's trade/common commercial policy comes into play. This policy is an exclusive responsibility of the EU, one of its core objectives being to support and defend EU industry and business. Even bearing that in mind, enhancing the EU's economic security will be challenging, as one must manage the risks to economic security while at the same time trying to preserve dynamic economic development and competitiveness. This is a balancing act: opening the EU market to new players, technologies and practices, while making sure that external financing is in line with our values and policy goals. Doing this together at EU level is a mammoth task, since economic risks are increasingly merging with security risks, which have traditionally been a solely national competence.

The principles of free movement are enshrined in the EU Treaty; on capital, for example, they also cover third countries (see Article 63 TFEU). Thus, any protective tools designed in good faith should not lead to unjustified/arbitrary discrimination and affect free and economically driven cross-border capital flows.

Regulation establishing the EU framework for screening Foreign Direct Investment



Container terminal in Antwerp. Source: Depositphotos.

Openness to FDI has always been one of the key principles of the EU's internal market. However, perceptions have started to change as a result of concerns about a new geopolitical environment, vulnerabilities stemming from the EU's dependencies, and foreign investors – notably state owned enterprises (often guided by very clearly defined political/strategical reasons) – taking over European companies with key technologies. EU investors often did not and do not enjoy the same rights to invest in the country from which an investment originates.

The risks associated with FDI have become more serious, especially in cases concerning strategic autonomy and assets like nuclear plants or ports, sensitive sectors (e.g. those involving critical defence inputs such as semi conductors or microchips of a dual use nature), or the transfer of sensitive technology to a third country whose strategic intents are not aligned with EU interests. **Box 1** provides an example of a potentially harmful FDI.



Box 1 – Example of a potentially harmful FDI

The acquisition of a research-driven industrial engineering EU company and design house specialising in radio technologies and microelectronics by a state-owned defence company from a third country.

For this reason, on 13 September 2017 the European Commission used the EU's exclusive competence for common commercial policy to publish a proposal for a regulation establishing a legal framework for screening FDI inflows into the EU. The aim was to help to identify and address security or public-order risks related to FDI affecting at least two member states or the EU as a whole, because the high degree of integration of the internal market meant that an FDI in an EU company may create a risk beyond the borders of the member state hosting that FDI.

In 2019, the European Parliament adopted the proposal, the Council formally endorsed it in March 2019, and Regulation (EU) 2019/4526 ('the Regulation') became applicable on 11 October 2020. The Regulation created a cooperation mechanism between the Commission and member state screening authorities for individual FDIs. This mechanism has made it possible to exchange information on a voluntary basis, enabling both the Commission and other member states to highlight possible security or public-order risks to other member states or critical EU-level programmes arising from an FDI.

As member states have sole responsibility for national security and public order, they were/are free to introduce and define the scope of screening mechanisms as long as they comply with EU law (including free movement for capital), meaning that member state authorities are the only ones that can take decisions on individual cases of FDI. The EU is not alone in taking action in order better to scrutinise inward investment flows. Other jurisdictions, notably the US, had already established FDI screening mechanisms, with sweeping powers for the respective implementing agencies.

Framework in place, but with significant limitations

In 2023, the ECA carried out an audit of this framework to assess whether it has been efficient and effective at addressing security and public order risks, and published its findings in December 2023 as [special report 27/2023](#). Establishing the framework at EU level under Commission management creates a legitimate expectation of providing a shield against investment driven by non economic considerations. We examined both its design and its implementation by the Commission, reviewing a representative sample of cases reported by member states and assessed by the Commission, and all FDI opinions which the Commission issued between 2020 and 2022.

We found that, overall, the Commission had taken appropriate steps to establish and implement a framework for screening FDI in the EU. However, significant limitations persisted across the EU, reducing the effectiveness and efficiency of the framework at identifying, assessing and mitigating security and public-order risks. Although the cooperation mechanism facilitated the sharing of screening information and risk assessments on FDI, some features in the design of the Regulation mean that the cooperation mechanism is less effective at protecting the EU's public order and security:

- as the Regulation does not require member states to set up an FDI screening mechanism, there were still six member states¹ that did not have such a mechanism in place as of September 2023 (when we carried out the audit);
- as the Regulation is silent on the scope of national screening mechanisms when they exist, there were significant differences in scope and approach between the screening systems, resulting in a large share of FDI that was not subject to screening, and a substantial number of low-risk or ineligible cases which overburdened the system;
- member states are under no obligation to inform the Commission or other member states of their final decisions in cases where the Commission or other member states issue opinions or send comments identifying likely risks to security or public order;
- the Commission's recommendations are not binding, even when overall EU interests are at stake;

¹ Bulgaria, Croatia, Cyprus, Greece, Ireland and Sweden.

- the Regulation leaves room for interpretation with regard to the notion of the 'likely impact' on security or public order;
- comparable rules were not consistently applied to comparable situations (particularly in the treatment of intra-EU trade from entities that are foreign-owned and controlled, or of portfolio investments); and
- member states can determine the scope of security and public order for themselves.

All these elements made it very challenging for the Commission not only to monitor the implementation of the framework and demonstrate its EU added value, but also to ensure that investors are not discriminated against, or that the free movement of capital is not unduly restricted. In addition, Europol and Eurojust databases may also shed light on certain risks relating to past engagement in illegal or criminal activity by individual investors. However, the current Regulation does not contain any provisions enabling such cooperation and information sharing.

We also assessed the quality of the recommendations made by the Commission in its opinions. The key factors which led the Commission to issue an opinion included risks and measures relating to sensitive EU targets (such as security of supply of critical goods and technology, or dual use products), and risks related to investors (such as foreign state influence or control). In terms of the quality and relevance of the mitigating measures proposed, we found that in some cases the Commission:

- proposed mitigating measures without explaining the extent to which they would address the risks identified;
- recommended various safeguards which did not sufficiently distinguish between the roles and responsibilities of shareholders and management, or which could have raised issues of enforceability, and thus could not have effectively mitigated the risks identified. The commitments they imposed were binding on the investor, but not necessarily on the target company and its management; and
- recommended restrictions on or conditions for investors or target companies which were not consistent with a market economy environment, for example by placing a financial and legal obligation on a private party to resolve a systemic market situation for which the investor is not directly responsible.

In addition, our audit showed that where certain transactions involved individuals on a sanctions list, the member states concerned did not block the investment. Our view was that no further assessment by the Commission was necessary to issue an opinion, because any such investment would be illegal if the member state permitted it. In view of the above, we recommended that the Commission should:

- seek the necessary amendments in the Regulation to strengthen the EU FDI screening framework by clarifying the key concepts of the framework and avoiding the current blind spots and inefficiencies;
- assess national screening mechanisms for compliance with regulatory standards, streamline some practices like pre-screening, and align criteria, timeframes and processes across member state screening mechanisms; and
- improve the cooperation mechanism and the Commission's assessments to provide better justification of mitigating actions related to high-risk cases, and the reporting process.

Recent developments have necessitated new initiatives for European economic security

Whether we like it or not, the world has changed even more since the inception of the FDI screening framework. The issue of security and public order has grown in importance. Russia has attacked Ukraine, fighting continues in Gaza, the US is gradually reassessing its foreign policy, and competition is intensifying in both natural resources and advanced artificial intelligence – a key driver of future economic and strategic power. Non military hybrid actions have become relevant for geopolitical purposes, i.e. 'geo economics', where economic tools are used to advance geopolitical objectives. Typically, these include trade control, investment policy, economic and financial sanctions, and controls on energy and commodity flows².

Against this backdrop, and as part of the rollout of the European Economic Security Strategy, on 24 January 2024 the Commission presented five initiatives to enhance the EU's economic security. Unsurprisingly, one of these – the most mature one – was a proposal to revise the Regulation on FDI screening ('the Proposal').

As the Commission accepted the vast majority of the recommendations we made as a result of our 2023 audit, I am not at all surprised that many of the inefficiencies to which we drew attention and many of the recommendations we made have been addressed by the Proposal. Most notably, the Proposal:

- clarifies that 'foreign investment' also means an investment within the Union by a company with foreign control, which enables effective participation in management;
- requires all member states to set up and maintain a screening mechanism that complies with the minimum set of requirements of the proposed Regulation and to notify the Commission of this mechanism;
- requires member states, after they have received an opinion, to notify other member states and the Commission of their screening decisions;
- obliges member states to notify the Commission and other member states of any foreign investment in their territory made by investors that are subject to any type of EU restrictive measures, as well as any other party owned or controlled by – or acting on behalf or at the direction of – such a person or entity;
- clarifies pre-screening practices;
- requires member states, where the EU target is part of or participates in a project or programme of Union interest, to screen and notify the foreign investment concerned to the Commission and other member states (**Annex I**);
- requires member states to screen the foreign investment where the EU target is economically active in an area listed in **Annex II** (which lists the technologies, assets, facilities, equipment, networks, systems, services and economic activities of particular importance for the security or public order interests of the Union);

² https://knowledge4policy.ec.europa.eu/foresight/shift-geopolitical-landscape_en.

- introduces a risk-based filter to ensure that the EU cooperation mechanism focuses only on foreign investments that are of potential interest from a security perspective, and so does not impose an unnecessary burden on national administrations and companies; and
- expands the requirements for determining an investment's likely negative impact on security and public order, especially concerning the investor.

Overall, it is safe to say that the Proposal certainly has potential to address key shortcomings in the FDI screening framework and to make it more effective and efficient, thus contributing to the EU's strategic autonomy. Obviously, the ultimate design of the new framework will depend upon deliberations by the co-legislators.





INDUSTRIAL POLICY: AN EU POLICY IN THE MAKING

By Juan Antonio Vazquez Rivera and Martin Weber, 'Investment for cohesion, growth and inclusion' Directorate.

Against the backdrop of recent crisis, globalisation and changing patterns in trade and economic relations, industrial policy has seen a renaissance in many countries. Responsibilities and focus have shifted, and the EU is playing an increasing role in terms of both financial support and regulation. This is also reflected in the work of the EU's external auditors. Martin Weber, ECA Director, and Juan Antonio Vazquez Rivera, Senior Auditor and coordinator of the ECA's internal 'knowledge node' on industrial policy developments, provide insights into some key aspects of industrial policy, recent EU action in this field, and what the ECA has been doing to assess the effectiveness of industrial policy design and implementation.

What is industrial policy?

The term 'industrial policy' encompasses any form of public intervention to develop all or part of the economy in pursuit of some public goal. In practice, it means governments taking action to improve the competitiveness and capabilities of domestic firms and promote structural transformation. Historically, it has often focused on the manufacturing sector and the potential of new technologies.

For many years, industrial policy was not much in vogue in most western industrialised countries. In fact, it was often associated with harmful government intervention to protect declining industries. Instead, deregulation, the opening of markets and globalisation were seen as the key drivers for increasing economic competitiveness. This all changed with the 2008 economic and financial crisis and the rise of China, which has become a technological leader in many sectors. In response, nearly all major economies, including the USA, Japan and many European countries, have started developing an industrial policy.

Contemporary industrial policy focuses less on the decline of older industries than on the growth of emerging ones. It often involves governments working collaboratively with industry to respond to challenges and opportunities.

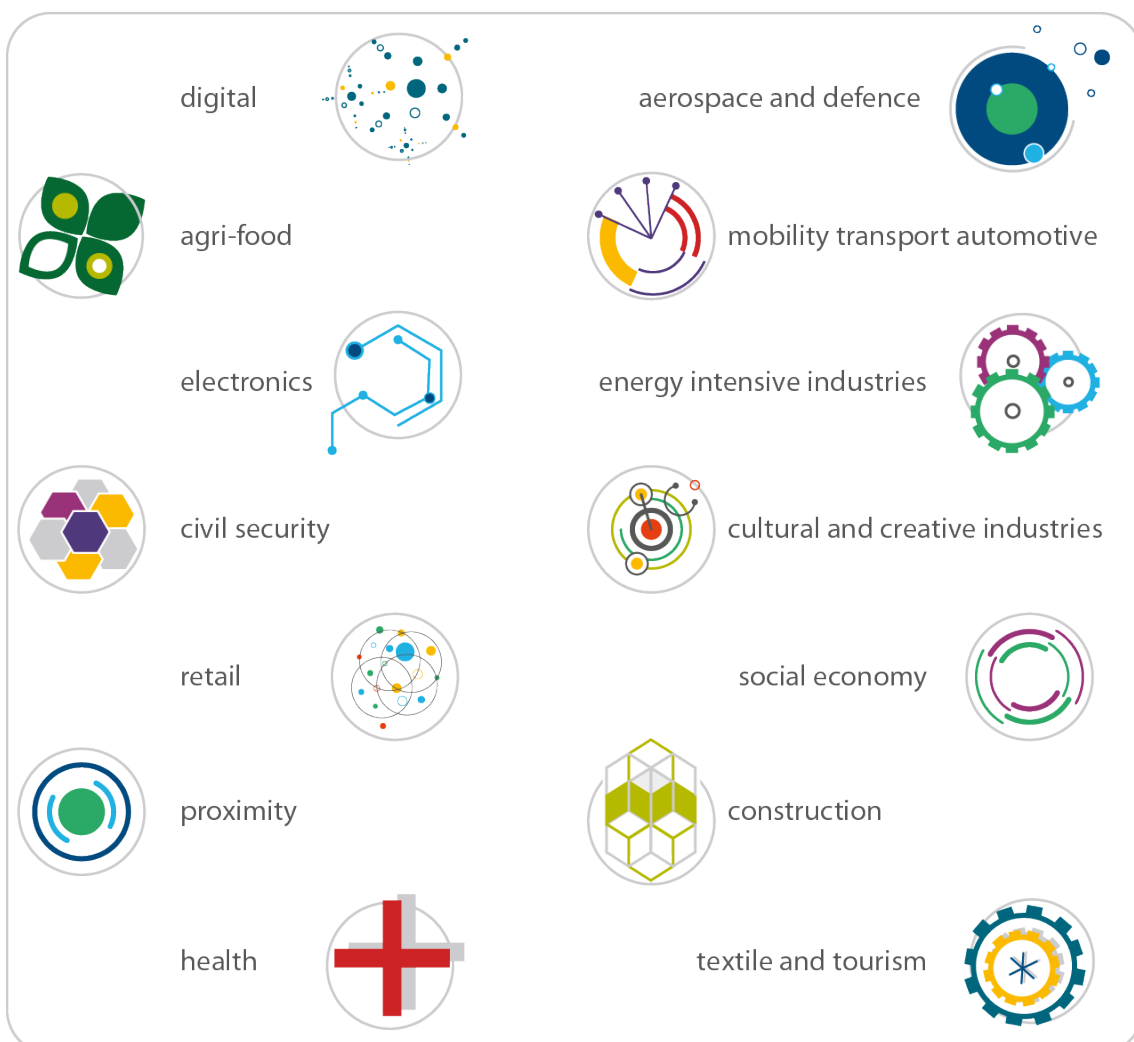
Industrial policy – an EU responsibility?

Under Article 173 of the Treaty, the EU and the member states must ensure that the necessary conditions are in place for the competitiveness of EU industry. Member states have primary responsibility for domestic industrial policy, but the EU plays an important supportive, coordinating and supplementary role. In particular, the Commission may:

- propose regulatory measures;
- provide financial support for investments;
- ensure policy is coordinated between different member states; and
- promote innovation.

In recent years, industrial policy has become an increasingly important topic in the EU. In 2012, the Commission published the EU's industrial strategy ([Strategy for the Re-industrialisation of Europe](#)). Five years later, in 2017, it issued a second strategy, the [renewed EU Industrial Policy Strategy](#). In 2019, the European Council, in its [Strategic Agenda 2019-2024](#), emphasised the need for 'a new, more assertive, comprehensive and coordinated industrial policy'. In response, in March 2020, the Commission launched the [New Industrial Strategy for Europe](#). The aim of this latest strategy was to modernise EU industry by steering it towards climate neutrality and digital leadership, driving competitiveness and ensuring strategic autonomy along entire value chains. In the [2021 update](#) of the strategy, the Commission also defined 14 specific 'industrial ecosystems' (see **Figure 1**).

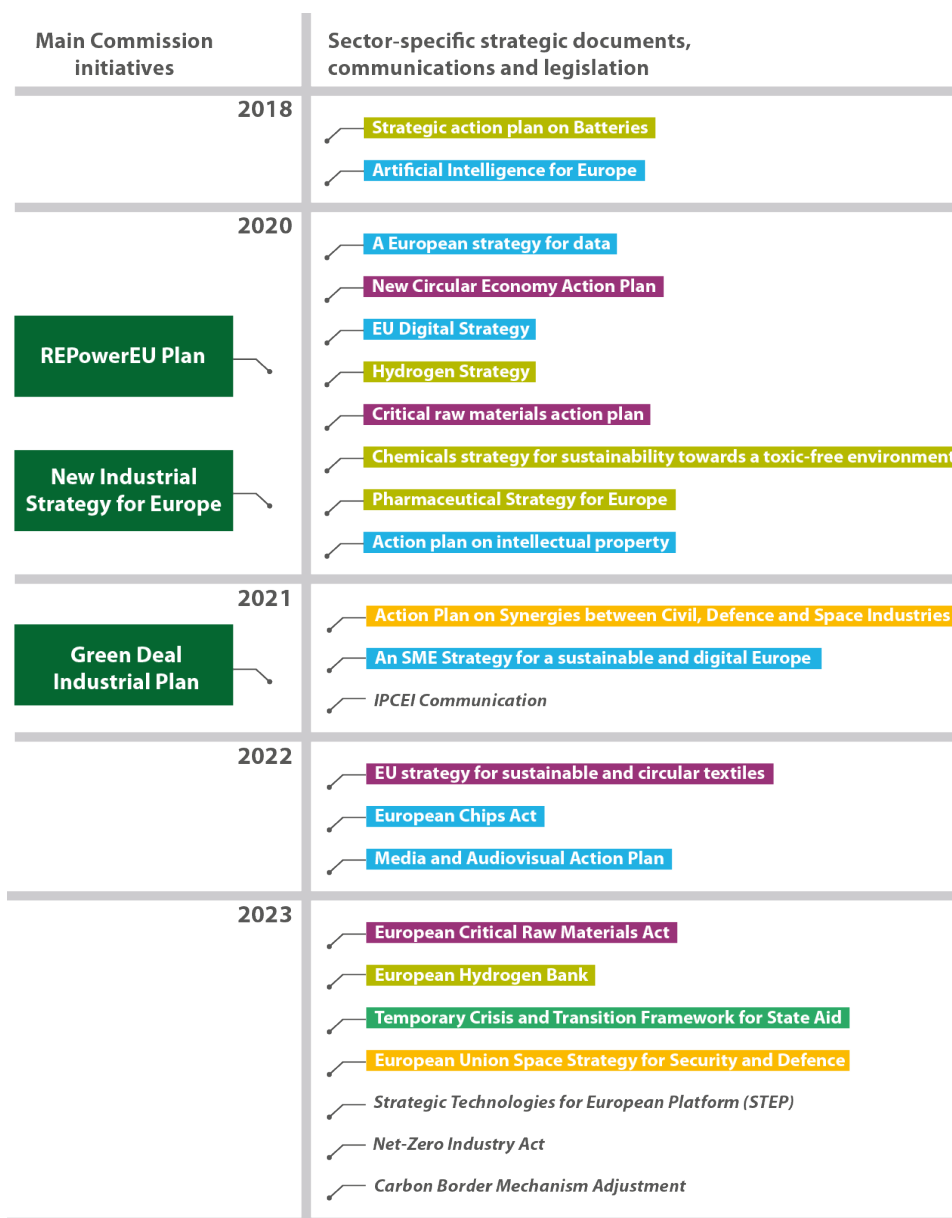
Figure 1 – Industrial ecosystems in the EU (2020)



In February 2023, the Commission published its [Green Deal Industrial Plan for the Net-Zero Age](#). The aim is to create an environment that encourages the expansion of the EU's manufacturing capacity for the net zero technologies it needs to meet its ambitious climate goals.

In addition, the Commission has issued separate strategies focusing on key sectors that are relevant to scaling up European industry, securing technological sovereignty, and achieving the twin (green and digital) transitions. The strategies seek to identify the need for legislative proposals, coordinate dispersed and fragmented policies and funding, and raise additional public and private finance (see **Figure 2**).

Figure 2 – Overview of key sector specific strategies (2024)



Source: ECA, based on European Commission information.

This has led to a proliferation of strategies. For example, in the first quarter of 2024 alone, the Commission issued new specific strategies for three industrial sectors.

- First, the [Industrial Carbon Management Strategy](#): a set of actions to be taken, at EU and national level, to establish a single market for CO₂ in Europe and create a more attractive environment for investments in industrial carbon management technologies.
- Second, the [European strategy to ensure industrial leadership in advanced materials](#), thus boosting the EU's long term competitiveness and continuing its prominence in emerging materials with innovative properties and functionalities.
- Third, the new [European Defence Industrial Strategy](#): achieve defence industry readiness in the EU. The Commission has tabled a legislative proposal for a [European Defence Industry Programme](#) and a framework of measures to ensure the timely availability and supply of defence products.

EU industrial policy, the green transition, strategic autonomy and the attractiveness of Europe as an industrial base – how are they connected?

There are three main factors that put additional pressure on the competitiveness of significant parts of industry in the EU.

- First, the considerable compliance costs associated with the [European Green Deal](#), a key project of the Von der Leyen Commission. The Green Deal aims to decarbonise the EU economy by reducing net greenhouse gas emissions by at least 55 % by 2030, compared to 1990. To meet this challenge the Commission issued a series of legislative proposals, known as [Fit for 55](#). These translate into legally binding targets for EU industries in terms of [CO₂ emissions reductions and] the use of renewable energy sources or renewable fuels in their processes (see for example the [Renewable Energy Directive – RED III](#)). Achieving these targets is likely to pose considerable challenges to the competitiveness of some EU industries, as significant investment will be needed.
- Second, the supply chain disruption, particularly in the wake of the COVID-19 crisis, has revealed the extent of EU industries' external dependence – for example in the case of the pharmaceutical and microchips industries. Russia's invasion of Ukraine in February 2022, and the embargo on fossil fuels from Russia, led to a drastic rise in energy prices. This has had a significant impact on European businesses, since higher energy prices influence production costs, productivity and consumer demand.
- Third, in recent years, other industrialised countries have put in place new subsidy mechanisms which may conceivably put at risk the attractiveness of Europe as a home for certain industrial processes. The US Inflation Reduction Act (IRA) provides tax credits to companies investing in the US in technologies that accelerate the transition to a clean energy economy, thereby creating a competitive environment for clean tech and infrastructure investments (see also page 53).

All of these factors have increased the need for an EU industrial policy that promotes the twin transitions while maintaining competitiveness. This means significant public and private investment in EU industries.

What regulatory initiatives has the Von der Leyen Commission launched to support the EU's industrial policy? In March 2023, as part of the [Green Deal Industrial Plan](#), the Commission issued three regulatory proposals:

- the [European Critical Raw Materials Act](#), a set of actions whose purpose is to guarantee EU access to a secure, diversified, affordable and sustainable supply of critical raw materials which are indispensable for a broad set of strategic sectors;

- [electricity market reforms](#) to accelerate the use of renewables and the phasing out of gas, reduce the link between consumer bills and volatile fossil fuel prices, and make EU industry cleaner and more competitive;
- the [Net-Zero Industry Act](#) to scale up manufacturing of clean technologies in the EU and ensure that the EU is well equipped for the clean energy transition, building on:
 - i. setting enabling conditions (including prioritising 'net zero strategic projects');
 - ii. accelerating CO₂ capture;
 - iii. facilitating access to markets;
 - iv. enhancing skills; and (v) fostering innovation.

The following two legal acts which are relevant to the twin transitions and the EU's strategic autonomy also went into effect in 2023:

- the [Carbon Border Mechanisms Adjustment \(CBAM\)](#): to prevent so called 'carbon leakage' CBAM aims to ensure that the carbon price of imports is equivalent to the carbon price of domestic production, and that the EU's climate objectives are not undermined;
- the [European Chips Act](#), designed to address semiconductor shortages, strengthen Europe's technological leadership and ensure a swift response to future supply chain disruptions.

How is the EU investing in industrial policy?

According to Thierry Bretton, [Commissioner for the Internal Market](#), the EU's Green Deal 2030 objectives in clean tech deployment will require private and public investment of some €700 billion annually until 2030. This figure includes more than €100 billion for net zero manufacturing capacity alone, and it makes no allowance for the massive investments required in digital infrastructure. Currently, very little of the estimated industrial policy investment need has been met by EU financial support.

So far, the [Recovery and Resilience Facility \(RRF\)](#), set up for the period 2020 to 2026, has been the main funding instrument for EU industrial policy, through grants and loans to member states. In 2022, following the Russian invasion of Ukraine, the RRF was amended through the [REPowerEU plan](#). The RRF provides for significant investment in several areas of EU industrial strategy (e.g. €13.6 billion for hydrogen, €3 billion for microchips, €5 billion for decarbonisation). Funding is made available through a range of dispersed. Similarly, significant funding for projects under the EU's industrial priorities available under the Cohesion policy funds. Other funds providing support for EU industries are [Horizon Europe](#), the [Innovation Fund](#), the [Modernisation Fund](#) and [InvestEU](#). Finally, the European Investment Bank provides industry loans, guarantees and equity.

Plans have been laid to create a dedicated EU funding instrument for industrial policy. In February 2024, the European Parliament and the Council adopted the Commission's proposal for a [Strategic Technologies for Europe Platform \(STEP\)](#), which has a budget of €1.5 billion to reinforce, leverage and steer EU funding in critical and emerging strategic technologies (deep, digital, clean and biotech) in the EU. STEP has also introduced the 'STEP Seal', an EU quality label that should facilitate access to EU or national funding for STEP projects.

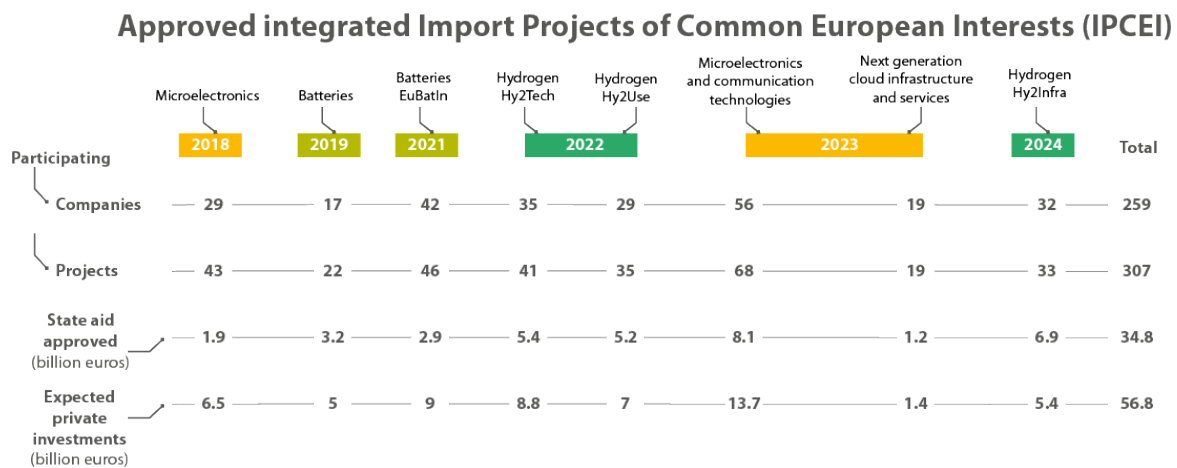
How the EU's industrial policy should be financed in future will become clearer in mid 2025, when the Commission is due to present its proposal for the next multiannual financial framework (2028-2034).

Greater flexibility in the provision of member state support for industry?

In principle, the Treaty prohibits any government support for industry. However, the EU's State aid rules allow exemptions from this general rule. Since the COVID-19 crisis, the Commission has been modifying existing state aid schemes, or creating new ones, to allow greater flexibility.

- In March 2022, the Commission recognised that the EU economy was experiencing serious disturbance as a result of Russia's invasion of Ukraine. It therefore adopted a [Temporary Crisis Framework \(TCF\)](#) permitting the use of state aid to support member state economies. In March 2023, the Commission replaced the TCF with the [Temporary Crisis and Transition Framework \(TCTF\)](#). The TCTF facilitates state aid to speed up the rollout of renewable energy and energy storage, and schemes to decarbonise industrial production processes and accelerate investment in key sectors such as batteries, solar panels, wind turbines, heat pumps, electrolysers, carbon capture usage and the recycling of critical raw materials.
- In early 2022, the Commission updated the Climate, Energy and Environmental Aid Guidelines, which exempt certain types of government support from the state aid rules so that member states can achieve the Green Deal objectives. The Guidelines now include renewable hydrogen and the decarbonising of production processes in the list of exempted investments.
- Important projects of common European interest (IPCEIs) are large cross border projects, involving multiple member states, that address significant market or systemic failures. IPCEIs too are exempt from the state aid rules, which means that member states can provide financial support to participating companies. The first IPCEIs were set up in 2018; by March 2024 the Commission had approved eight IPCEIs in four strategic sectors: microelectronics, batteries, hydrogen and cloud computing. Other IPCEIs are currently being set up in other sectors (see **Figure 3**).

Figure 3 – Overview of IPCEIs set up/planned by the Commission (2024)



Note: 22 member states, Norway and the UK participated in at least one IPCEI.

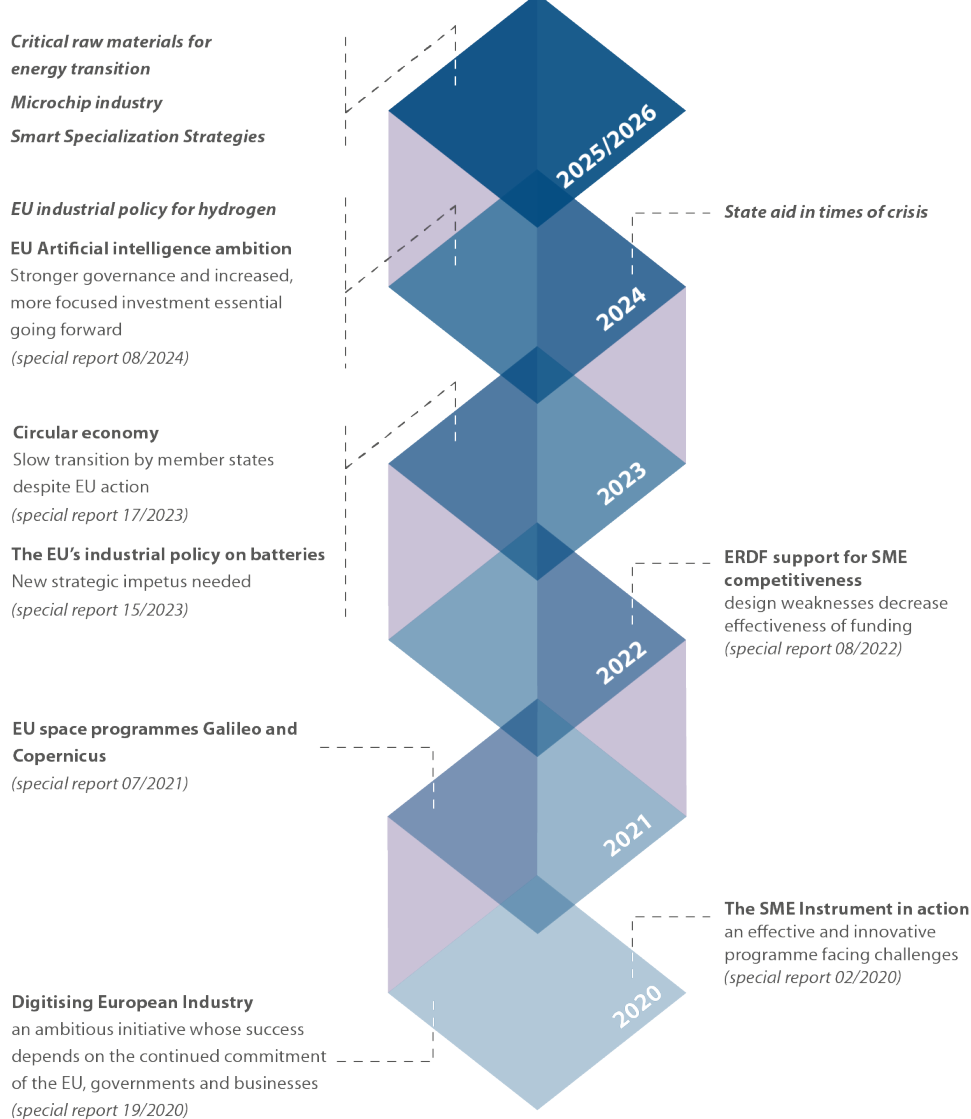
Source: ECA, based on European Commission data.

These various initiatives to make the state aid rules more flexible have allowed member states to support their industries more actively. However, they have also sparked debate about the possible hazards to the effective functioning of the internal market, because member states with greater fiscal capacity are in a better position to grant significant state aid.

How does EU industrial policy feature in the ECA’s audit work?

Given the economic stakes, the rapidly evolving regulatory framework and the significant volume of EU funded investment in this area, it is not surprising that EU industrial policy has recently emerged as a focus of our audit work. See **Figure 4**.

Figure 4 – Overview of ECA audits relevant to industrial policy (2020-2026)



For our [2021-2025 strategy](#), we decided to target our audits at the issues that matter most. One of the four strategic areas on which we wanted to focus was the Union’s economic competitiveness, and industrial policy is clearly a key factor in this.

The new priority is reflected in an increasing number of special reports in this field. In 2020, we issued [special report 19/2020](#) on Digitising European Industry. The following year saw [special report 07/2021](#) on the Galileo and Copernicus space programmes. In 2023, we issued two further reports: [special report 17/2023](#) on the circular economy and [special report 15/2023](#) on the EU’s industrial policy on batteries. Just recently we published [special report 08/2024](#) on artificial intelligence. Other ECA publications of relevance to EU industrial policy have included [special report 03/2022](#) on the rollout of 5G networks, [review 03/2020](#) on the EU’s response to China’s state driven investment strategy, [special report 04/2022](#) on investment funds, and [special report 27/2023](#) on screening foreign direct investments. Finally, we have published two other reports on issues of competitiveness and SMEs: [special report 08/2022](#) and [special report 02/2020](#).

In our reports on industrial policy, we identified the following as main findings:

- member states and industry stakeholders welcomed sector-specific EU-wide industrial strategies as a helpful coordination tool;
- the EU's industrial strategies have helped raise awareness of and increase activity in key industrial areas;
- industrial policy coordination at EU level and among the member states is still not entirely satisfactory;
- some strategies lacked information about intended outcomes, result indicators and targets, making it more difficult for the Commission and member states to reach informed decisions and steer their efforts;
- member states are responsible for how most EU funds are allocated and did not always use the available funding in line with the EU's industrial strategies;
- multiple public funding streams at EU and national level may support different industrial projects in the same sector, leading to poor coordination and focus;
- the Commission lacks a comprehensive overview of planned investments in key industrial sectors and their financing, including the EU and national public support provided for industrial policy activities.

More reports are currently in the pipeline: in 2024 there will be one on the EU's industrial policy for hydrogen and another on the EU's state aid rules in times of crisis. These will be followed in 2025 by reports on the EU's industrial policy for microchips and the use of smart specialisation strategies in cohesion policy and industrial policy. We also plan to issue a report on critical raw materials for energy transition in 2026.

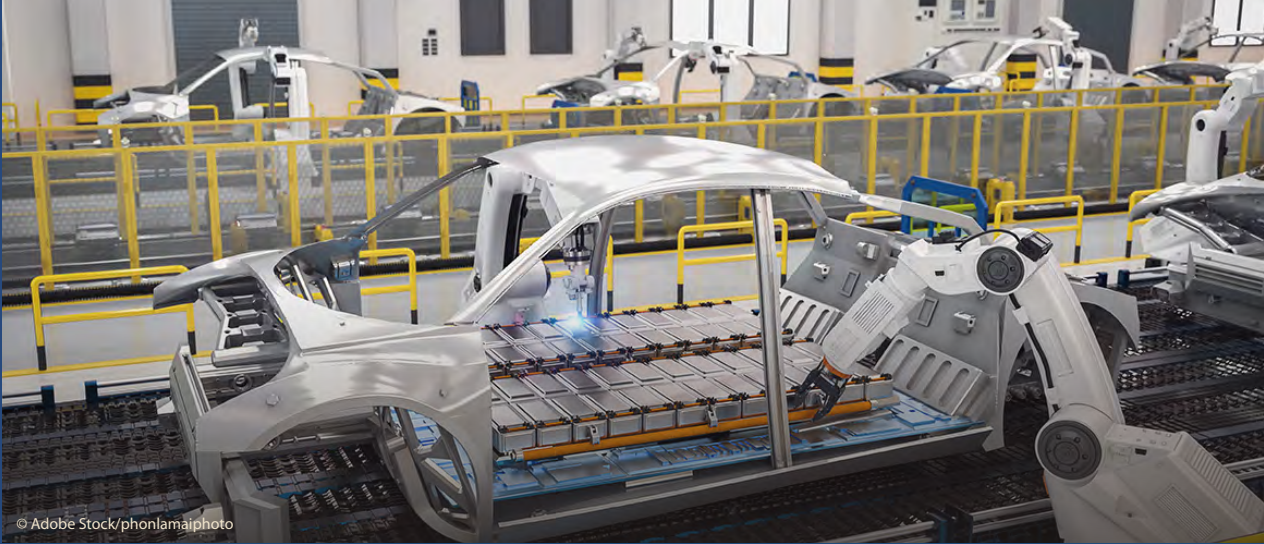
How did we build up our internal expertise to audit EU industrial policy?

Since 2016, single theme 'knowledge nodes' (KNs) have been the main forum for ECA auditors and other staff to create, reuse and share knowledge, as well as to discuss common professional topics of interest in a formal or informal setting. The KNs are coordinated by experienced auditors with specific expertise in a given policy area. They facilitate the exchange of knowledge and information among KN members using various tools (physical meetings, collaborative sites, newsletters, subject briefs, policy scans, etc.). The KNs also play a key role in the programming and planning of new audit tasks.

A new KN on 'Competitiveness, industrial policy and innovation', focusing specifically on EU industrial policy, went operational in 2022. Since then, members of the KN have actively shared their knowledge and organised several events, including seminars and webinars with high level industry representatives.

Although 2022 was only two years ago, the topics and potential audit subjects in this area are fast moving. The results obtained so far illustrate that we are on the right track, and that the significant effort and investment put into this KN are paying off.

In the years to come the success or failure of EU industrial policy will shape the economic future and welfare of the Union. And the financial stakes in terms of public money, both from the EU and from national budgets, are high. Our audits provide the European Parliament and the Council, but also all EU citizens, with reliable and evidence based information as to how effectively the policy is designed and implemented.



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THE EU'S BATTERY VALUE CHAIN - THE DELICATE BUT CRUCIAL LINK BETWEEN THE GREEN DEAL, INDUSTRIAL POLICY AND MOBILITY

By Afonso de Castro Malheiro, Directorate for external action, security and justice

If there is an industry where aspects such as global competition, action towards zero emissions, economic security and dependency on critical raw materials come together, it is the production and marketing of batteries, also ensuring mobility in the upcoming decades. The European Commission launched a strategic action plan on batteries in 2018 for the EU to become a global leader in this area. Afonso de Castro Malheiro, Head of Task of the audit the ECA conducted between 2022 and 2023 regarding this action plan, provides insights into the hurdles, implementation and impact of this EU industrial policy on batteries.

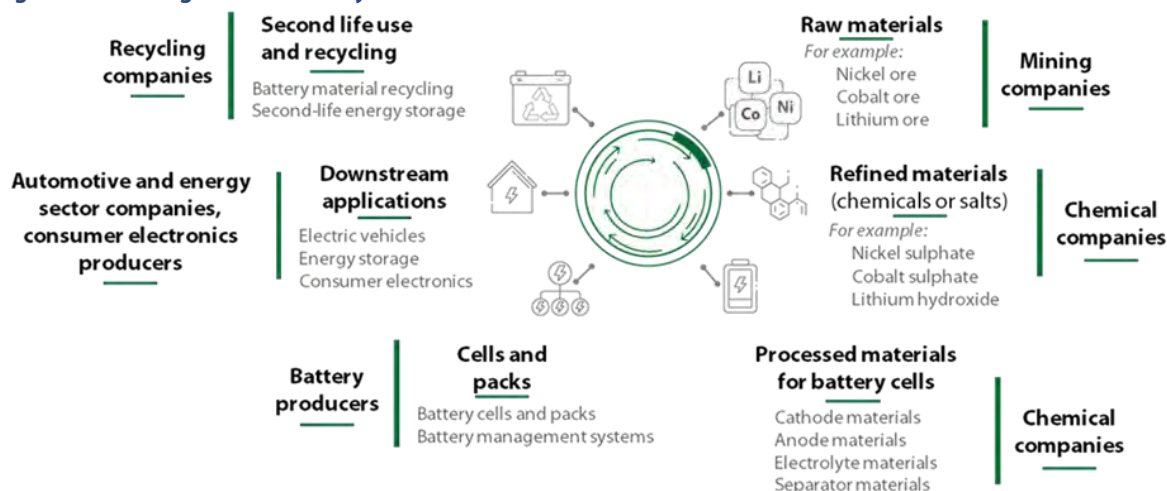
European Green Deal objectives imply a radical change

The 2019 European Green Deal is a flagship policy of the current European Commission. Its vision for 2050 is for the EU to have a competitive economy with net zero emissions of greenhouse gases. This not only shows great ambition, but also highlights that economic development and environmental protection will have to go hand in hand from the outset if that ambition is ever to materialise. Inevitably, the Green Deal hinges on the decarbonisation of transport – which is still responsible for around 25 % of the EU's emissions today – and the decarbonisation of road transport in particular, which is the largest CO₂ emitter among all transport modes. The Commission expects the EU wide fleet of zero and low emission vehicles to grow to around 13 million cars by 2025 and 30 million by 2030. The transition is already in motion, but the EU wants to accelerate it and ultimately enforce the uptake of these vehicles: sales of new passenger cars and light commercial vehicles using CO₂ emitting combustion engines should be all but banned by 2035, according to the most recent version of the regulation on the matter. In theory, the days of the tailpipe are numbered.

The interconnection between the economy and the environment then becomes painstakingly clear: the Green Deal implies a radical transformation of the EU's automotive industry, which over a whole

century built its reputation and global leadership on the production of combustion engines. The rise of the zero emission electric vehicle (EV) shifted the technological edge from pistons and fuel injectors to energy storage and management – the battery.

Figure 1 – The stages of the battery value chain

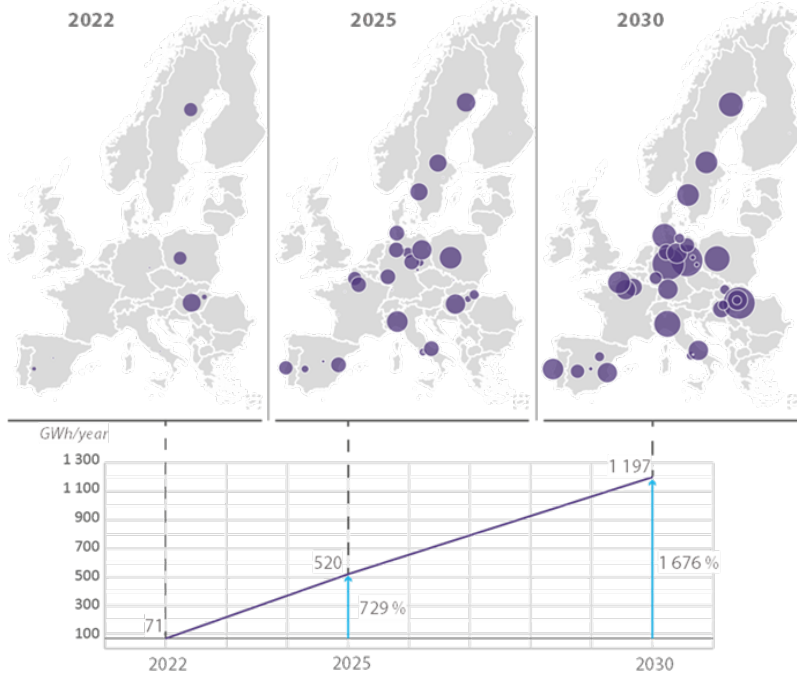


Conscious of the challenge, in 2018 the Commission published a strategic action plan on batteries, aimed at making Europe a global leader in sustainable battery production and use. It covered the different stages of the value chain (see **Figure 1**), identified strategic goals and proposed a range of tools to achieve them, including regulation and funding. Five years later, it was time for the ECA to assess the implementation of this plan and the results achieved

A successful industrial policy to become a global battery powerhouse?

We carried out our audit between 2022 and 2023, publishing our results [in special report 15/2023](#): 'The EU's industrial policy on batteries – New strategic impetus needed'. We found that the Commission was, for the most part, successful in implementing its action plan, in effect launching an EU industrial policy on batteries. It promoted the gathering of relevant EU industrial and research stakeholders and the collaboration between them. It proposed and eventually achieved the adoption of a new wide reaching EU regulation aimed at ensuring not only the sustainability of the production and recycling of batteries, but also a level playing field between producers inside and outside the EU. The Commission also provided important financial support for the development and production of batteries, by drawing directly from the EU budget or by facilitating financing from member states under specific state aid rules. As a consequence, the EU's battery production capacity has grown in recent years and is projected to continue expanding with new factories being announced and built in several locations (see **Figure 2**).

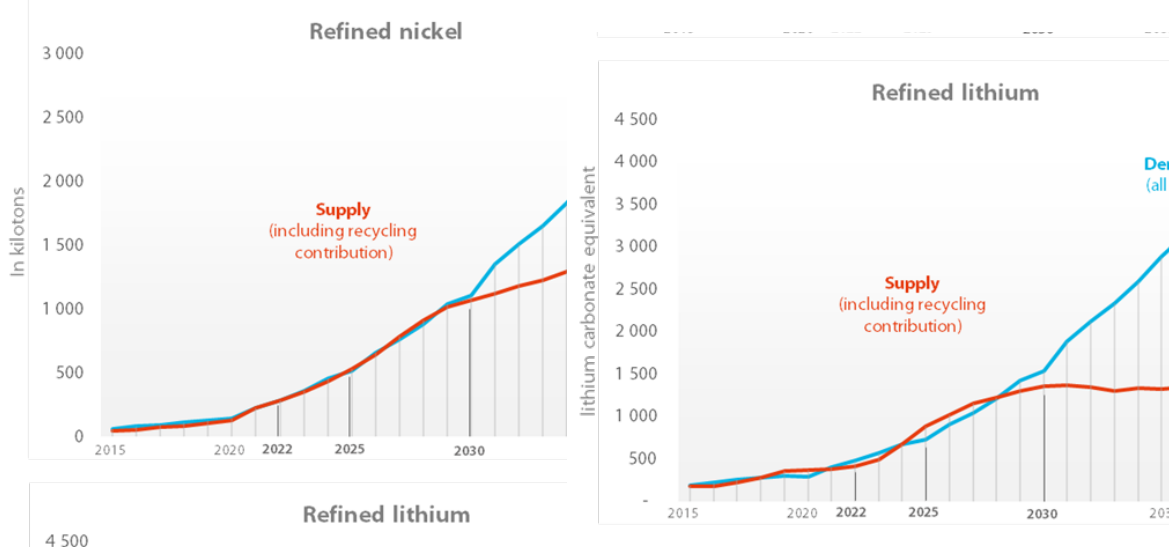
Figure 2 – EU battery production capacity – Current (2022) and planned (2025 and 2030)



Source: ECA, based on data compiled by Germany's Federal Ministry of Economic Affairs and Climate Action and company announcements. Circles are proportionally sized to reflect production capacity in individual locations. Design of the maps: Eurostat.

However, there were shortcomings in the monitoring of data, which was often lacking, and of funding, often uncoordinated. And, perhaps most crucially, access to raw materials – lithium, cobalt and graphite, just to name a few key ingredients of the modern battery – remains a major strategic challenge for the EU's battery value chain. The EU still strongly depends on foreign supplies and faces a looming shortage, especially from 2030 onwards, as electrification will eventually lead to a global imbalance in a market largely dominated by foreign players, particularly Chinese and Korean. Evidence of this are the multiple Asian owned battery factories in Europe, or the recent accumulation of Chinese EVs in European ports, waiting to reach the final customer. In contrast, EU reserves of raw materials are limited in quantity and take up to 16 years to be exploited – that is, if mining projects obtain the necessary approvals at all (see **Figure 3**).

Figure 3 - Global supply-demand balance for lithium and nickel



Source: Joint Research Centre, Analysis of supply chain challenges for batteries, medium demand scenario for lithium carbonate and refined nickel. In order to take into account the uncertainty inherent to long-term forecasts, the full analysis also includes high and low demand and supply scenarios.

Batteries increasingly permeate our lives...

Our special report received large media coverage at the time of its publication in June 2023. Remarkably, the topic remains high on the agenda today. This is a subject that enters people's kitchens (and garages) with ease. The relationship between humans and cars is often emotional. Many of us own and drive a car, and at some point may have considered or even switched to an EV. Many of us are determined to reduce our carbon footprint. Others are concerned about the affordability of EVs or where to charge them. Therefore, when we launched the audit back in 2022, motivation within the team was high: the topic was important and tangible, the timing was right. However, the audit work was not without its hurdles.

One was the all encompassing nature of the battery value chain: it ranges from the mining and refining of raw materials, to battery development and production, and eventually the recycling of those precious materials and their reintroduction into the production loop. The Commission's action plan was therefore broad in scope and involved around 10 different Commission services in its implementation. It involved member states, industrial stakeholders and research institutions as well. Our field work brought us to governmental departments, inspiring laboratory experiments and state-of-the-art assembly lines. Although cooperation was good with all entities, the need to bring together the many pieces of the puzzle meant that the level of complexity was high nonetheless.

A second challenge stems from the lack of details on what it means to be the 'global leader in sustainable battery production and use' – the policy's ultimate goal. Without quantified targets or proper data on actual battery production – another key finding of the report – assessing where we are, where we are headed and what progress we have made becomes particularly difficult (see **Box 1**).

Our report therefore called on the Commission to strengthen its monitoring with regular, up to date and comprehensive data, covering actual battery production in Europe and also the domestic production of raw and advanced materials needed to deliver the current and future generations of batteries. On the basis of good data, the Commission should renew its strategy for batteries so that it reflects the global evolution of the battery sector since 2018 and its current strategic challenges, especially the access to raw materials. EU funding should be better monitored and better targeted in the future.



Box 1 - Obtaining data is a challenge, but some figures are rather telling

- The EU accounts for less than 10 % of global battery production, while China's share is 76 % (2021).
- EU grants amounted to €1.7 billion between 2014 and 2020, and state aid up to €6 billion between 2019 and 2021. Decisions on financial support for 2021-2027 are ongoing.
- The EU's battery production capacity is projected to grow from 44 GWh (2020) to 1 200 GWh (2030).
- The EU depends heavily on imports of raw materials, with significant reliance (78 %) on five key ones.
- Imports come from a few countries with which the EU has no trade agreements and several of them have low governance indicators.
- In 2022, the EU's battery production capacity was mostly in the hands of non-European companies (Chinese and South Korean).
- Batteries cost more than planned: still €200 per kWh in 2020, instead of the €90 per kWh envisaged for 2022.

...and hence the stakes are high

Strategic autonomy is at stake, global competition is fierce, and the EU's nascent battery value chain needs new strategic impetus, if it is to survive and grow. The stakes are high. Failure means not reaching the zero emission targets for new vehicles in 2035 and continuing to pollute our atmosphere with an ever ageing fleet – EU cars are currently over 12 years old on average. If we do achieve those targets, but on the basis of imported batteries and EVs, it will be to the detriment of the EU's automotive industry and its 3.5 million direct manufacturing jobs. In other words, only a fully successful EU battery value chain will allow for the EU's simultaneous multipronged pursuit of climate action, industrial sovereignty, and affordable mobility solutions for its citizens.

Recent data gives cause for concern. At the end of 2023, the EU had a total fleet of 290 million cars and vans. Less than 2 % of them were fully battery powered. After growing to a market share of 14.6 % in 2023, sales of new battery electric vehicles appear to have stagnated. Market share in the first quarter of 2024 dropped to around 10 to 13 %, meaning that European drivers still largely prefer combustion engines. More charging stations and more affordable battery EVs in particular are key to changing this trend. Perhaps unsurprisingly, it is non EU brands that appear to have a competitive edge regarding price – to the point that the Commission has an ongoing investigation into possible illegal Chinese subsidies to the country's automotive industry. A flood of cheap non-EU electric vehicles could surely push the EU towards its green targets, but pull us away from industrial sovereignty. Potential tariffs could do the opposite.



EVs piling up at European ports. Source: Adobe Stock/ petert2

In any case, the EU is not shying away from the challenges and is pushing ahead. Since the publication of our report in June 2023, the EU's new regulation on batteries has entered into force and two other pieces of legislation are close to adoption - the Net Zero Industry Act and the Critical Raw Materials Act. EU funding for research and development continues. All these have the potential to add to the toolbox available to the Commission and other stakeholders. However, the question remains and will have to be revisited: will the EU battery value chain be in a position to support the Green Deal?



DEEP DIVE: NAVIGATING THE CHALLENGES OF EU AQUACULTURE TOWARDS STRATEGIC SUSTAINABILITY

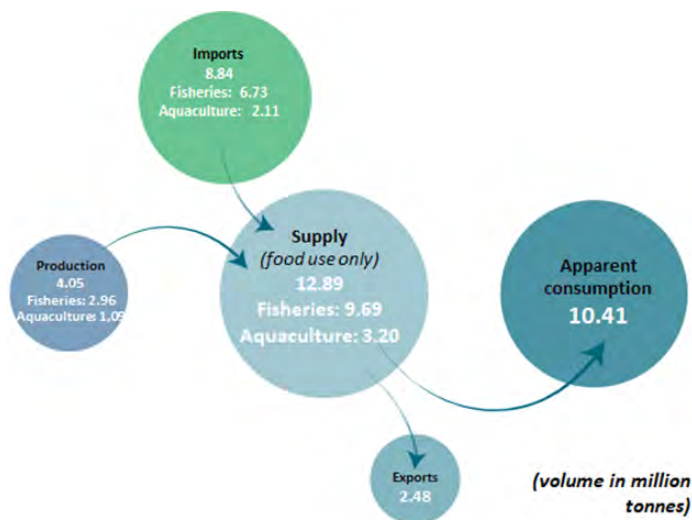
By Matteo Tartaglia, attaché in the private office of Nikolaos Milionis, ECA member

Recent crises, including the war in Ukraine, have shown many countries' dependency on global flows of food supplies. Long-term initiatives to stimulate the EU's autonomy in this area are also linked to the European Green Deal and its strategy for a sustainable Blue Economy, with aquaculture being promoted as a source of protein with a potentially lower carbon footprint, and as a way to take the pressure off wild fish stocks and agricultural land. To what extent have EU funding and action contributed to increasing production levels while ensuring the sustainability of the aquaculture sector? Matteo Tartaglia, an attaché in the private office of ECA member Nikolaos Milionis, was one of the heads of task for the ECA's recent audit on EU aquaculture policy. In this article, he explains how this policy ties in with many objectives and is not an easy 'shell' to crack when it comes to food security or sustainability aspects.

Aquaculture and strategic autonomy

Over the past 10 years, the European Union has increasingly emphasised the importance of strategic autonomy across various sectors, from defence to energy. Now, as geopolitical dynamics evolve, the reach of strategic autonomy is extending to virtually all EU policy areas, including aquaculture production. As a matter of fact, more than a quarter of seafood eaten in the EU is farmed, yet only around a third of it comes from the EU (see **Figure 1**).

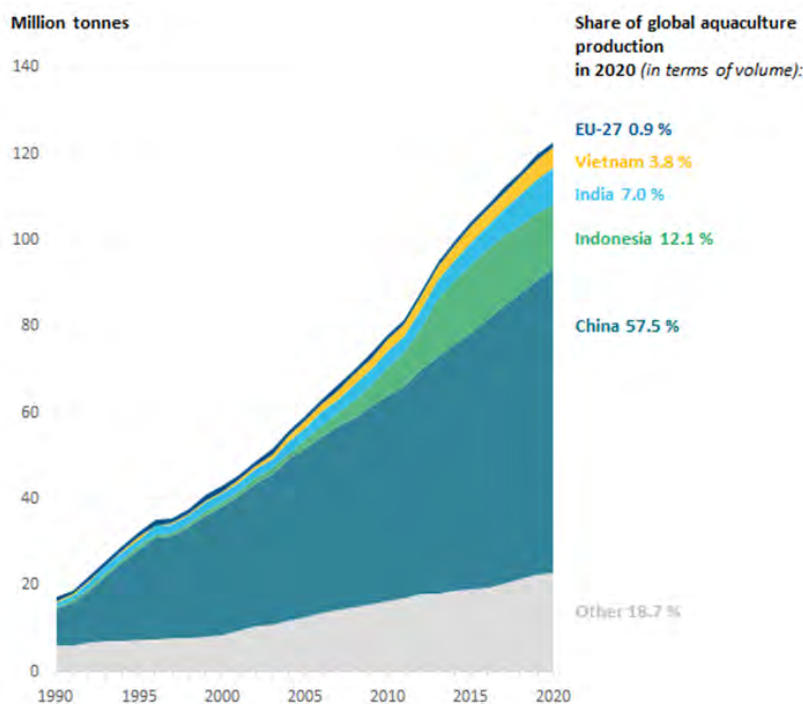
Figure 1 - Supply and consumption of EU fishery and aquaculture products, 2020



Source: ECA, based on EUMOFA – [The EU fish market – 2022 edition](#).

Aquaculture refers to the farming of aquatic organisms such as fish, shellfish and seaweed. It can take place in marine, brackish or inland waters, as well as in land-based facilities equipped with water recirculation systems. China is the biggest producer worldwide (58 % of production volumes in 2020), followed by Indonesia (12 %) and India (7 %). The EU occupies a much smaller position. In 2020, the EU’s total aquaculture production amounted to 1.1 million tonnes, accounting for less than 1 % of the global total (see **Figure 2**). Even more worryingly, while aquaculture is one of the world’s fastest growing food sectors, EU production volumes stagnated over the 2014-2020 period.

Figure 2 – Global aquaculture production, 1990-2020



Source: ECA, with [data from the World Bank](#).

Among the myriad of topics demanding scrutiny, EU aquaculture policy, as part of the [EU’s Blue Economy strategy](#), stood out for its significant implications on economic development, environmental sustainability, and food security. As auditors, we couldn’t overlook the fact that the funds allocated to aquaculture for the 2014-2020 period – more than €1 billion – exceeded three

times the amount spent in the previous period. This led us to look into why, despite the substantial increase in available funding, production levels had not been increasing. Moreover, our previous [special report 10/2014](#): 'The effectiveness of European Fisheries Fund support for aquaculture', had highlighted insufficient focus on environmental issues in the sector. Consequently, we sought to determine whether any improvements had been made in this regard.

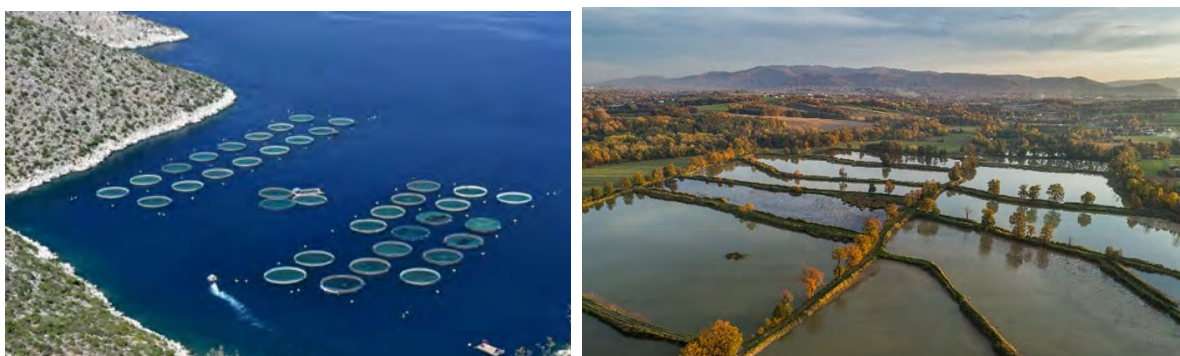
Ultimately, aquaculture promises to satisfy the demand for protein-rich food with a lower carbon footprint, while alleviating pressure on depleted wild fish stocks. Whether this promise can be met depends on several factors, that I will explore in this article.

A challenging audit: navigating a complex policy and a diverse sector

Auditing EU aquaculture policy was particularly challenging. First, the growth, competitiveness and sustainability of the sector is linked to a vast number of policy areas: environmental policies, permitting procedures, maritime spatial planning, food safety and food labelling, trade and research.

Covering all aspects in one report is impossible, so we had to exclude some areas, such as trade and research policies, from our audit scope. It was a necessary choice, yet a difficult one, as the lack of a level playing field between the EU and non-EU countries is often mentioned as a key obstacle to the development of the sector. Similarly, research is crucial to make sure that aquaculture can develop in a sustainable way, and we found that dozens of projects on aquaculture had been financed by the EU's research and innovation funding programme, Horizon 2020. But covering the effectiveness of this funding would require a separate audit.

Secondly, the EU aquaculture sector is very diverse, as member states specialise in different types and species of aquaculture production (see pictures below). We aimed to acquire a comprehensive understanding of the EU panorama, ideally auditing as many member states as possible. However, due to the extensive volume of documents to be reviewed for each member state, we had to limit our selection. Eventually, we decided to cover Greece, Spain, France, Italy, Poland and Romania. Together, these countries account for around 71 % of the EU's 2020 aquaculture production by volume, and represent a good balance of both marine and freshwater aquaculture, as well as finfish and shellfish farming.



© Didi Lavchieva and Chawran, stock.adobe.com Marine (left) and freshwater (right) aquaculture in Greece and Poland.

This selection was still quite extensive, and unfortunately we couldn't physically visit each of these countries. But talking to the people on the ground – or at sea, as we can see in the picture below – is essential to get a good understanding of a sectors' challenges. We travelled to Spain and Poland for discussions with the member state authorities, representatives of the aquaculture sector and environmental NGOs, and to visit six aquaculture projects. We carried out in-depth documentary reviews for all selected member states, analysed studies, reports and statistical data, and held extensive discussions with representatives of the Commission's Directorates-General for Maritime Affairs and Fisheries (DG MARE) and for the Environment (DG ENV). Our findings and conclusions are reflected in [special report 25/2023](#): 'EU aquaculture policy – Stagnating production and unclear results despite increased EU funding', which was published in November 2023.



Mussel rafts (bateas) off the coast of Galicia. We visited a mussel raft financed by the European Maritime and Fisheries Fund and interviewed the raft operator and the manufacturer. *Source: Matteo Tartaglia*

Bottlenecks to aquaculture growth in the EU

The audited member states made little progress towards their aquaculture production targets for 2020. In two member states (France and Italy), production in 2020 was even lower than in 2013. In parallel, the uptake of EU funds for aquaculture was weak. Member states therefore often reallocated financial resources to those measures attracting greater interest from the aquaculture sector. Projects aimed at renovating facilities or replacing assets, essentially to maintain existing production capacity, were far more prevalent than those focused on expanding production.

In a nutshell, the Commission and member states placed their bets on growth, persuaded by rising market demand for seafood products and the strain on wild fish stocks, and allocated a substantial amount of funds – more than €1 billion – to support this endeavour. However, growth failed to materialise. Consequently, they sought alternative avenues to allocate the available funds. But what factors contributed to this stagnation?

Access to water remained a significant challenge for aquaculture development in the European Union, with unresolved conflicts and environmental concerns complicating spatial planning and licensing procedures. Improving spatial planning was one of the needs recognised in our previous audit, and we certainly observed progress in member states, thanks in part to a 2014 EU directive which made spatial plans mandatory¹. However, several member states faced delays in approving their plans, and even when available, conflicts frequently resurfaced during the licensing phase. These conflicts often involved other productive sectors, such as the tourism industry, or local communities expressing concerns about the environmental impact of fish farms, as happened recently in [Greece](#) and [France](#).

Administrative processes and regulatory barriers further impeded the establishment and expansion of aquaculture operations. We asked the six selected member states to provide us with data on the duration of licensing procedures in the 2014-2020 period. The data we received was often patchy and difficult to compare over the period or among member states. While the average time taken to obtain licences had decreased in a few cases, in most it had remained stable, increased, or there was no clear trend. These challenges not only deter potential investors but also stifle innovation within the industry, hindering its overall growth and competitiveness.

¹ Article 4 of [Directive 2014/89/EU](#).

Sustainability: How green is aquaculture really?

Then, there's the elephant (or rather: the whale) in the room: reconciling growth and environmental protection. How green is aquaculture really? The short answer is: we don't know. Although the Commission is working to fill the gap, very little official data is currently available to assess the environmental performance of EU aquaculture.

Aquaculture's potential impacts on the environment include escapes of non native species, habitat degradation, contamination and nutrient enrichment. Standardised indicators for key metrics such as nutrient discharge, number of escapes, and feed demand – particularly the reliance on fishmeal and fish oil – would provide valuable insights into the immediate environmental impact of aquaculture. They would also shed light on the sector's overall sustainability as a source of protein.

In the absence of a single set of indicators which would allow us to assess the environmental credentials of EU aquaculture, we delved into thousands of pages of environmental strategies in each of the six member states we covered, which was possibly the most complex part of the audit. The documents we analysed depicted aquaculture as a potential negative pressure on the achievement of good environmental status, albeit one that does not pose a significant risk. For example, we observed and reported examples of local pressures caused by aquaculture activities, but these were considered reversible and confined to specific geographical areas.

These findings must be considered in the context of the relatively modest expansion of aquaculture in the EU. The more pressing question is how the extensive development outlined in member states' growth plans would impact the environment. Representatives from the aquaculture sector, with whom we engaged during and after the audit, consistently cited environmental regulations as the primary bottleneck to aquaculture growth. However, it's essential to acknowledge that these regulations serve a vital purpose. So, what's the way forward?

Hooked on the future: what lies ahead?

It goes without saying that it is not up to us auditors to decide where to strike the balance between growth and environmental protection. But we can share some insights based on our observations.

One situation we have come across is uncertainty about the application of environmental rules, sometimes coupled with insufficient knowledge of the carrying capacity of a specific environment. The rules need clarification, and in its reply to our report the Commission confirmed that it was working on a guidance document on the implementation of applicable EU environmental legislation, including the result of its efforts to map good practices at government and industry level on different aspects of the environmental performance of aquaculture.

At the same time, studies aimed at gaining a deeper understanding of the carrying capacity of areas designated for aquaculture development could streamline licensing procedures. By determining the optimal number and size of sites that can be sustained within these areas, authorities can expedite the licensing process and facilitate the growth of the aquaculture sector.

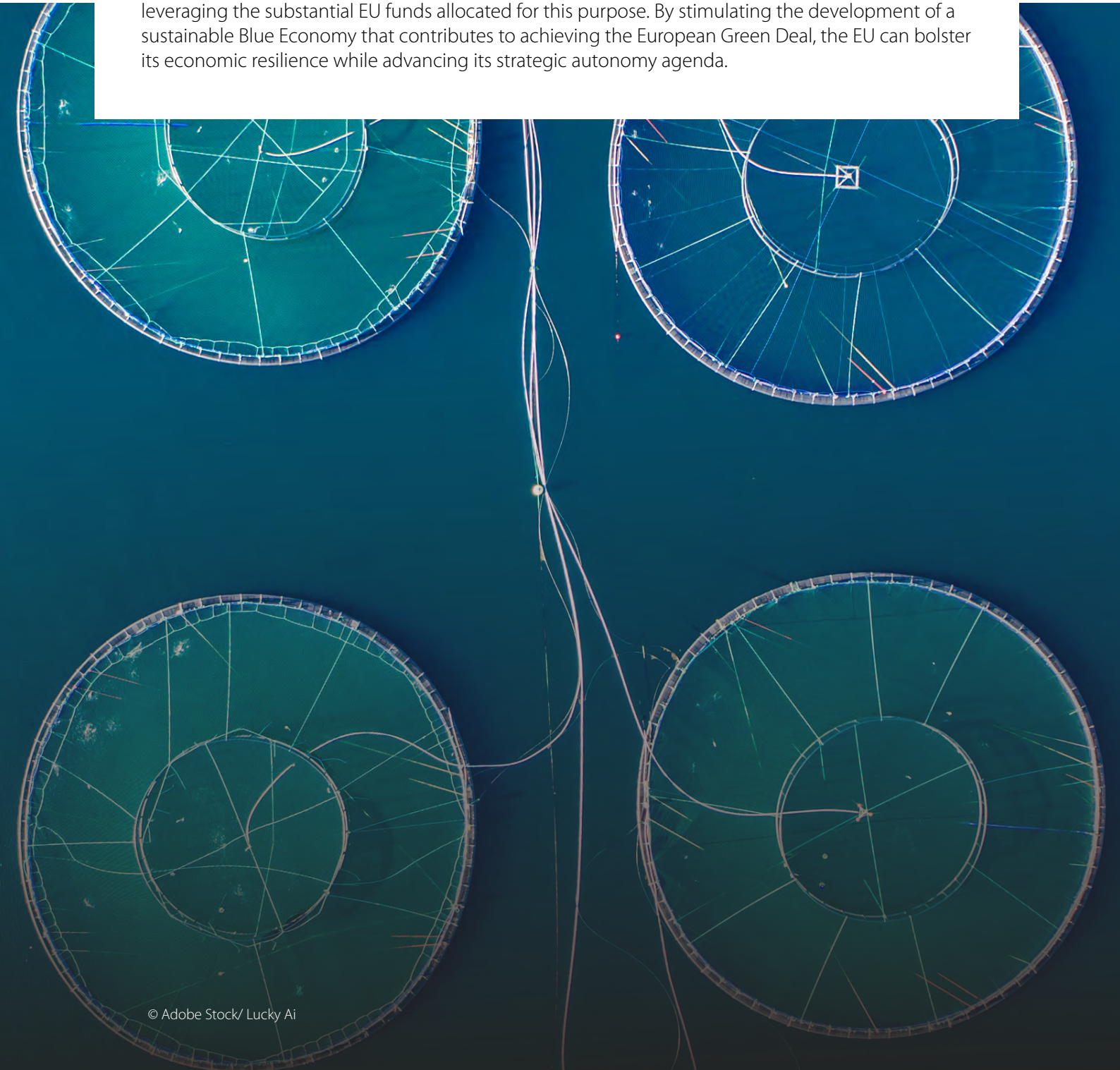
Applied research into farming practices and sustainable feeding methods is also crucial. For example, locating marine fish farms further from the coast, where there are sufficient water flows to disperse pollution and lower disease occurrence, could alleviate environmental pressures and reduce potential conflicts with other sectors. However, this approach entails higher production costs and necessitates the development of new farming technologies.

Improving the sustainability of feed systems, and in particular limiting reliance on fishmeal and fish oil, is equally essential to reduce the environmental footprint of aquaculture. This is before we even mention the ethical implications of feeding farmed fish with imported fishmeal and fish oil taken from wild stocks, thus diverting valuable resources from countries where these stocks could be used to alleviate hunger among human populations.

Serious efforts are needed to diversify aquaculture production methods, developing in particular multi trophic approaches, as well as diversifying the species farmed, expanding the production of non fed and low trophic species, such as shellfish, seaweed and small pelagic fish.

And finally, the availability of accurate and transparent data on the sustainability of EU aquaculture is paramount in order to address consumer concerns, ensure informed decision-making, and foster the adoption of sustainable practices across the industry.

In conclusion, the realisation of EU aquaculture's promise to deliver low-carbon proteins, conserve wild fish stocks, and enhance food security hinges on effectively addressing these challenges and leveraging the substantial EU funds allocated for this purpose. By stimulating the development of a sustainable Blue Economy that contributes to achieving the European Green Deal, the EU can bolster its economic resilience while advancing its strategic autonomy agenda.





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THE EU'S RESPONSE TO THE US IRA: INDUSTRIAL POLICY, GREEN ENERGY SUPPLY AND INTERNATIONAL COOPERATION

By Associate Professor Maxime Fajeau, University of Lille / French Council of Economic Analysis; Niklas Garnadt, German Council of Economic Experts; Professor Camille Landais, London School of Economics and Political Science/French Council of Economic Analysis; Professor Monika Schnitzer, Ludwig-Maximilians-Universität München/German Council of Economic Experts.

The US Inflation Reduction Act (IRA) entered into force at the start of 2023. Its combined objectives of easing domestic inflation and tackling climate change will take an estimated budget of anything up to \$900 billion over nine years, making it one of the largest areas of US government spending. Since the IRA surfaced, EU policymakers have expressed concerns about its impact on the EU and asked whether the EU should be taking similar measures or even seeking to mitigate its effects. The authors of this article, Maxime Fajeau, Associate Professor at the University of Lille and Scientific Advisor at the French Council of Economic Analysis, Niklas Garnadt, Secretary General at the German Council of Economic Experts, Camille Landais, Professor of Economics at London School of Economics and Political Science, Co-Chair of the Franco-German Council of Economic Experts, and Monika Schnitzer, Professor in the Department of Economics at Ludwigs-Maximilians Universität München and Co-Chair of the Franco-German Council of Economic Experts, discuss the macroeconomic implications of the IRA for the EU and recommend actions which the EU could consider in response.

Decarbonisation – to subsidise or to regulate?

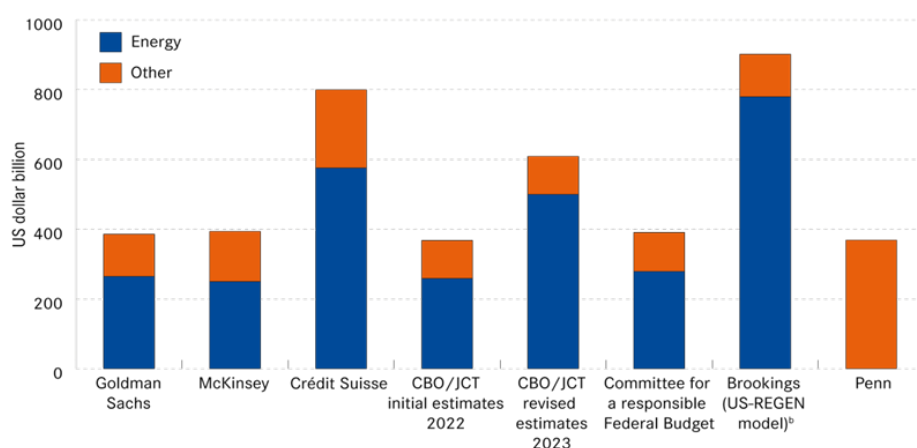
In August 2022, the US congress passed the Inflation Reduction Act (IRA), an ambitious subsidy programme aimed at promoting the production and adoption of clean energy. The goal of spurring the decarbonisation of the US economy was positively received in Europe. The local content requirements tied to many of the IRA's subsidies, however, have drawn substantial criticism. European policymakers worry that these requirements might trigger a reshuffling of investment and production of clean technologies towards the US to the detriment of the EU. As a consequence, the IRA has stirred a strong debate about the future of European industrial policy¹.

Does the IRA pose a risk to the EU's economies as a whole or are risks confined to specific sectors? Is Europe doing enough to support its industry to adapt to the Green Transition? Is the European strategy the right one, with its focus on carbon-pricing, or should the EU copy the IRA blueprint and focus more on large, blanket subsidies targeted at the take-up of market-ready technologies in specific sectors and strong local content requirements? In this article we discuss these questions based on our work at the Franco-German Council of Economic Experts².

The IRA's aggregate impact on the EU is likely to be very limited

Even though the IRA is an ambitious subsidy programme that is expected to substantially reduce US carbon emissions³, its financial volume needs to be put into perspective. Due to uncertain take-up, estimates of the fiscal costs of the IRA's climate-related provisions range from \$390 to \$900 billion over the period 2023-2031 (**Figure 1**). Even at the top end of these estimates, the total amount is comparable in size to various programmes already launched by the EU to achieve climate objectives and facilitate the green transition (**Figure 2**).

Figure 1 – Estimates of IRA's "Energy & Climate" section costs

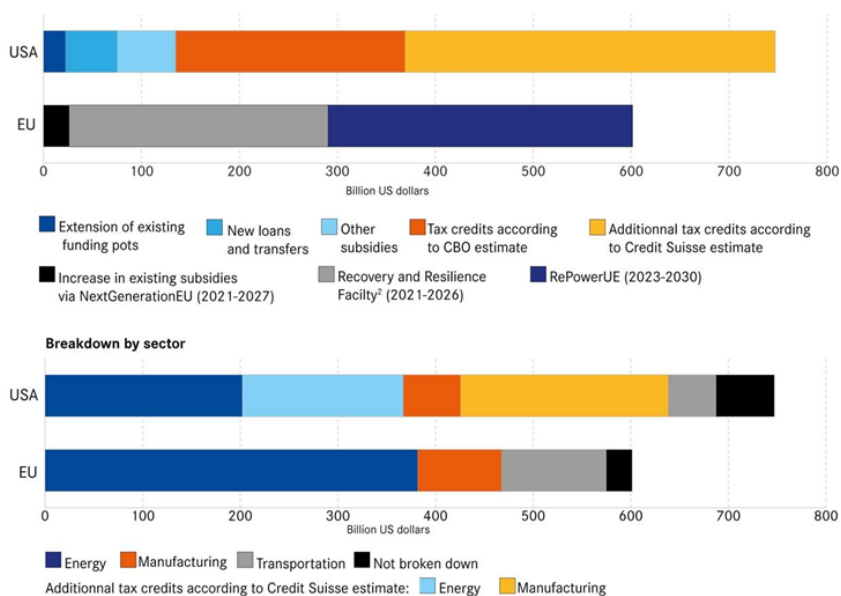


- a. These estimates relate to the provisions of the 'Energy and Climate' section of the IRA. There are some minor variations in the total duration covered by these estimates (till 2029 to 2031).
 b. This is the central scenario, calculated by Bistline et al. (2023)

Source: Brookings, Committee for a responsible Federal Budget, Congressional Budget Office (CBO), Crédit Suisse, Goldman Sachs, MacKinsey & Compagny, Tax Fondation (2023), University of Pennsylvania (Penn). Calculations by the Franco-German Council of Economic Experts.

¹ See among others: Eisl J., EU Industrial Policy in the Making. Notre Europe Jacques Delors Institute, in: Economy & Finance, Policy Paper, n°286, 2022; Jenkins J.D., Mayfield E.N., Farbes J., Jones R., Patankar N., Xu Q., Schivley G., Preliminary Report: The Climate and Energy Impacts of the Inflation Reduction Act of 2022, REPEAT Project, Princeton, 2022; Attinasi M.G., Boeckelmann L. and Meunier B., The Economic Costs of Supply Chain Decoupling, ECB Working Paper No. 2023/2839, August; Bistline J., Mehrotra N., Wolfram C., Economic Implications of the Climate Provisions of the Inflation Reduction Act, in: Brookings Papers on Economic Activity, 2023; Bouët A., Inflation Reduction Act - Comment l'Union européenne, in: CEPII Policy Brief, 2023. Bown C. P., Industrial policy for electric vehicle supply chains and the US EU fight over the Inflation Reduction Act, in: Peterson Institute for International Economics Working Paper, (23-1), 2023; Kleimann D., Poitiers N., Sapir A., Tagliapietra S., Véron N., Veugelers R., Zettelmeyer J., How Europe should answer the US Inflation Reduction Act, Bruegel, 2023; Jansen J., Jäger P., & Redeker N., For climate, profits, or resilience? Why, where and how the EU should respond to the Inflation Reduction Act, in: Hertie School, Jacques Delors Center, Policy Brief, 2023.
² Franco German Council of Economic Experts, The Inflation Reduction Act: How should the EU react?, Joint statement, September 2023; Fajeau et al., The US Inflation Reduction Act: How the EU is affected and how it should react, in: Vox EU Column, 17 October 2023.
³ Bistline J., Mehrotra N., Wolfram C., Economic Implications of the Climate Provisions of the Inflation Reduction Act, in: Brookings Papers on Economic Activity 2023. Projections from the US Energy Information Administration. Annual Energy Outlook 2023 get to very similar estimates of the reduction in emissions induced by the IRA.

Figure 2 - Comparison of production and environmental subsidies in the US and the EU



a These estimates relate to the provisions of the 'Energy and Climate' section of the IRA. The baseline amounts for the IRA subsidies are based on the CBO/JCT initial estimate which provide a breakdown by subsidy type and sector. As the total amount of tax credits is not ex-ante limited, we added the higher uptake estimates from Credit Suisse.

Source: German Council of Economic Experts, The Inflation Reduction Act: Is the new U.S. industrial policy a threat for Europe?, in: Policy Brief 1/2023.

Given that the subsidies provided by the IRA must be financed through current or future taxes, we anticipate a minimal impact of the IRA on both the US and the EU at the aggregate level. The US-REGEN model⁴, which contains a very detailed representation of US energy production - the main sector targeted by the IRA, indicates negligible effects on aggregate US output. Accordingly, the aggregate effect on European countries, which are only indirectly affected by the IRA, should also be extremely limited. To validate this prediction, we employ a multi-country, multi-sector model with detailed input-output linkages⁵. This model incorporates diverse substitution patterns across sectors, countries, and factors, enabling us to capture a wide range of reallocation effects along the supply chain in response to policy shocks such as tariffs or subsidies.

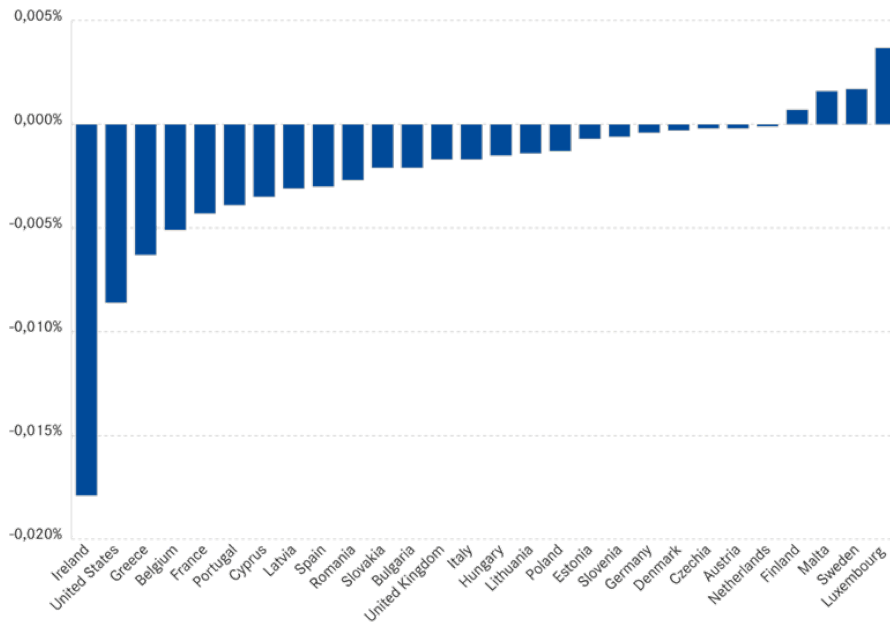
Results from calibrations of our model confirm that the anticipated macroeconomic effects of the IRA for European countries are extremely limited, at a five to ten years horizon: real national income would be unaffected in Germany, would decline by 0.004 % in France, and by 0.001 % for the European Union as a whole (**Figure 3**). The small aggregate effects stem from our choice to model the IRA as a set of sector specific subsidies that are financed by a lump sum tax on US tax payers⁶. A choice that in our view most closely resembles how the IRA works in reality.

Figure 3 - Estimated effect of the IRA on real national income in a multi-country multi-sector model

⁴ Bistline J., Mehrotra N., Wolfram C., (2023), p. 14.

⁵ Baqaee D.R. and Farhi E., The Macroeconomic Impact of Microeconomic Shocks: Beyond Hulten's Theorem, in: Econometrica, vol. 87 (4), 2019, pp. 1155–1203.

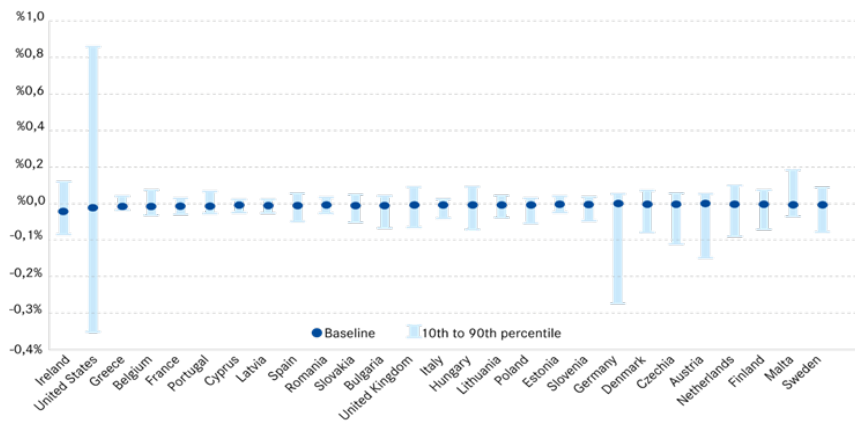
⁶ Using the same model as us, Attinasi et al. (2023) estimate aggregate effects of IRA that are significantly larger than ours. This result hinges on two differences to our assumptions, which result in more favorable effects of the IRA on the US economy to the detriment of non US economies. Firstly, they model the IRA as a pure reduction in trade costs akin to a net productivity gain to the US that is not financed by taxes. Secondly, they assume IRA credits to originate TFP improvements in some industries, an assumption we are reluctant to make due to the lack of a solid enough ground to do so. See Attinasi M.G., Boeckelmann L. and Meunier B., Unfriendly friends: Trade and relocation effects of the US Inflation Reduction Act, in: Vox EU column, 3 July 2023.



Source: Franco-German Council of Economic Experts.

While the IRA's macroeconomic effects are expected to be minimal for both the US and European countries, it is important to note that specific sub-sectors could still experience significant impacts. To delve deeper into this aspect, we have conducted a thorough analysis at the country-sector level (**Figure 4**). Sectoral effects are indeed substantially larger than aggregate effects. For example, in Germany, output of the transport equipment sector is expected to decline by 0.25 % due to the IRA.

Figure 4 -- Sectoral heterogeneity of the IRA's effect on real income^b



- a. 10th-90th percentile band of sectoral effects. Sector weighted by their share in total national income.
- b. Estimated effect of the IRA on real national income by country and multi-sector model (Baqae and Farhi, 2019).

Source: French and German Council of Economic Experts calculations.

The transport equipment sector is mainly affected through the IRA's subsidies for electric vehicles (EVs). This sector has garnered significant attention due to the substantial subsidies for EV purchases and EV production, as well as the local content requirement incorporated into those subsidies.

Firstly, Europe currently leads the US in the electric vehicle (EV) sector, with production in 2022 approximately three times higher than that of the US⁷. Secondly, we anticipate that the expansion of the US EV market will not significantly divert demand or production away from Europe. Projections for 2030 indicate a substantial increase in the share of EVs in new car sales in Europe, reaching nearly 60 %, with global EV sales also expected to rise to 40 million units⁸. Both numbers have been revised upward after the passing of the IRA by 20 percentage points and 10 million units respectively. Furthermore, Europe is still projected to maintain a larger sales market than the US in 2030, with estimates of 10.5 million EVs sold in Europe compared to 8.2 million in the US⁹. Thirdly, Europe imposes higher import tariffs on EVs compared to the US, with rates at 10 % versus 2.5 % respectively. This equates to a subsidy for European vehicles of approximately \$3,750, based on an average price of around \$50,000¹⁰. Finally, the high cost of transporting EVs serves to mitigate any competitive advantage provided by the IRA.

Another industry benefiting from substantial subsidies is the production of low carbon hydrogen. For instance, the IRA's production subsidies are expected to immediately decrease the cost of producing green hydrogen in the US from over \$4 to between \$0.9 and \$1.2 per kg, compared to roughly €4 in Europe¹¹. In the US, this subsidy brings the price of green hydrogen on par with that of conventional fossil hydrogen. Although the subsidy is slightly higher than the estimated transport cost of \$2.1 to \$2.7 per kg from the US to Europe¹², the current high transport costs and the demand for green hydrogen in the US make it unlikely that large quantities of subsidized green hydrogen from the US will be imported into Europe in the coming years.

In conclusion, this closer examination at the sectoral level also fails to yield evidence linking the IRA to significant risks for specific sectors in the EU.

Learn from the IRA's design, but avoid copying it one for one

The Green Transition will require significant and growing public financial support in specific industries in the next decade. But a sheeplike subsidy race with the US should be avoided as well as a subsidy race within the EU. We stress the importance of coordinated EU-wide policies, possibly using EU-wide funds, and a return to the regular state-aid rules in order to prevent fragmentation within the EU. Europe's industrial policy response should not be dictated by the IRA, but rather based on Europe's own economic, social and strategic needs and on its global commitment to decarbonization.

The IRA's strategy, which essentially consists of subsidies for production and investment, seems less effective in meeting the challenges of decarbonization than that adopted by the EU, which includes both carbon pricing and targeted industrial interventions. Carbon pricing efficiently leverages many more margins of emission reduction, e.g. energy conservation and the phase out of carbon intensive legacy activities like coal-fired electricity generation. Overall, the implied abatement cost of carbon emissions are much lower under carbon pricing than under a subsidy scheme such as the IRA (**Figure 5**). Moreover, while the incentives from production subsidies through tax credits expire after ten years (or the respective period they are awarded), firms expect long-lasting and even increasing incentives for climate-friendly production under the EU's emission trading scheme.

⁷ International Council on Clean Transportation, Annual update on the global transition to electric vehicles: 2022, in: Briefing, ICCT, 2023.

⁸ IEA, World Energy Outlook 2022, IEA, 2022.

⁹ IEA, Global EV Outlook 2023, IEA, 2023.

¹⁰ Chad B., Industrial policy for electric vehicle supply chains and the US-EU fight over the Inflation Reduction Act, in: Working Paper, n°23-1, PIIE, 2023.

¹¹ Nationaler Wasserstoffrat, Einschätzung zum Inflation Reduction Act, Stellungnahme, Nationaler Wasserstoffrat, Berlin 2022.

¹² This calculation assumes transport cost as reported by IEA (2022a) and a distance of 7,500 km (roughly the geodesic distance from Texas to Portugal). IEA, Global Hydrogen Review 2022, IEA, Paris 2022.

Figure 5: The IRA achieves carbon emissions reduction at much higher implied cost than a comparable carbon tax

	IRA	Carbon Tax
Generation Share (change in pp from 2021 to 2035)		
Coal	-14	-18
Natural Gas	-21	-5
Coal CCS	+3	+0
Wind & Solar	+28	+19
Other	+7	+4
CO ₂ (% drop from 2005)	68 %	68 %
Abatement Cost (\$/T-CO ₂)	\$83	\$15

Source: Bistline et al. (2023), see footnote 3.

Nonetheless the EU should look to streamline its subsidy processes, learning from the IRA's straightforward and direct investment incentives. By simplifying the application and approval processes for subsidies, the EU can enhance predictability and reduce bureaucratic barriers, making it easier for businesses to plan and invest in long-term projects. This reform should aim at targeting subsidy policies more towards environmental and technological externalities and include regular assessments to adjust and improve policy efficacy.

Focus on greening and expanding energy supply in Europe

Rather than the IRA itself, it is the existing and sizable energy price differentials between the EU and the US that is likely to have substantial macroeconomic effects by negatively affecting Europe's attractiveness for investments and the competitiveness of its industries¹³. This is why concerted efforts to reduce energy prices in Europe are essential. This involves accelerating the deployment of renewable energy sources, which not only supports energy security but also aids in achieving climate neutrality goals. Implementing auctions to set support levels for renewable electricity appears more cost-effective than direct subsidies, as seen in the IRA. Such measures not only encourage the competitive allocation of subsidies but also ensure that investments in renewable energy are economically viable and contribute positively to the EU's energy landscape.

In the field of conventional energy production, Germany and France have adopted different strategies, and we are calling for mutual support, in particular by designating nuclear power plants and (hydrogen-ready) gas power plants as transition technologies on the road to climate neutrality in the EU taxonomy. In addition, both countries stand to gain from intensifying their collaboration to develop Europe's electricity and hydrogen infrastructure and on joint procurement of clean energy imports in particular green hydrogen. The reform of the European electricity markets should also be a central element of any European green industrial policy, with the wholesale market being the main coordination instrument for guaranteeing secure, decarbonised and affordable electricity on a European scale.

¹³ Bialek S., Schaffranka, C. and Schnitzer M. (2023): 'The energy crisis and the German manufacturing sector: Structural change but no broad deindustrialisation to be expected', Vox EU column, 17 January 2023.

¹⁴ This need has also been articulated in Recommendation 1 of ECA's special report 15/2023 The EU's industrial policy on batteries – New strategic impetus needed, Luxembourg 2023.

International cooperation not competition

Finally, we recommend fostering international cooperation instead of escalating trade disputes e.g. through a complaint against local content requirements to the WTO. While such a complaint could be a clear signal that the European Union supports multilateralism, it would likely trigger retaliatory measures, with little chance of success. It would be more efficient to cooperate with the US on rules about subsidies linked to environmental protection, ideally with the goal of deepening trade cooperation and establishing a framework that might be shared with a number of partners. In addition, international cooperation on raw materials needed for the green transition¹⁴, such as through the Minerals Security Partnership, could help to diversify sources and reduce dependencies, in particular on geopolitically sensitive regions.

The need for greater EU coordination

In conclusion, in our analysis, we find minimal macroeconomic effects of the IRA on the EU member states. There is some heterogeneity across industries but even in the most affected industries output declines by only a little. However, it poses challenges that warrant strategic responses, including coordinating its industrial policy with a focus on areas with significant externalities.

To manage the green transition, the EU should continue to focus on carbon pricing as the main instrument. A blanket increase in subsidies should be avoided as it could lead to a subsidy race with the US. National subsidies should be better coordinated at the EU level to prevent a fragmentation of the single market and could be supported by EU-wide funds. State aid rules should ensure that these subsidies are targeted at activities with significant positive externalities.

Better coordination of EU member states' energy policies, e.g. through more intense collaboration on energy infrastructure, would also help to spur the green transition and improve the resilience of EU energy supply. Finally, instead of engaging in a subsidy race, the EU should focus on strengthening international cooperation through trade agreements and joint rules on admissible environmental subsidies.

Special report 05/2024

Published on 17/04/2024

EU Transparency Register – provides useful but limited information on lobbying activities



Lobbying is an essential democratic tool allowing organisations and individuals to provide input into policy and decision-making. The European Parliament and the European Commission set up the EU Transparency Register through an interinstitutional agreement, later joined by the Council. We assessed whether the register is a useful means of providing transparency on the lobbying activities in EU policy and decision-making. We found that it provides useful information to citizens. However, weaknesses and gaps in that information reduce the transparency of lobbying activities taking place in the three signatory institutions. We recommend strengthening the register's framework and publishing information on non-scheduled meetings with lobbyists. Moreover, we recommend improving data quality checks and the user-friendliness and relevance of the public website.

[Click here for our review](#)

Special report 06/2024

Published on 24/04/2024

The Facility for Refugees in Turkey – Beneficial for refugees and host communities, but impact and sustainability not yet ensured



The Facility for Refugees in Turkey channels support to refugees and host communities in Türkiye. We followed up on our 2018 recommendations and examined whether the Facility provided efficient and effective support. We found that it provided relevant support in difficult circumstances and that the Commission had improved the Facility's management by implementing our previous recommendations. All audited projects addressed beneficiaries' needs and were delivering their planned outputs, but implementation was delayed significantly for various reasons. There was no systematic assessment of project costs, and insufficient measurement of impact. Sustainability was only ensured for infrastructure projects. We conclude that the Facility could have achieved greater value for money and demonstrable impact, and we make recommendations for future action.

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Special report 07/2024

Published on 07/05/2024



The Commission's systems for recovering irregular EU expenditure – Potential to recover more and faster

We assessed whether the Commission's systems for managing and recovering irregular expenditure incurred by beneficiaries of EU funds were effective in protecting the EU budget and as a deterrence from future irregular activities. Under direct and indirect management, the Commission ensures the accurate and prompt recording of irregular expenditure, but takes too long to recover it. Under shared management, where member states have primary responsibility for recording and recovering irregular expenditure, recovery rates are generally low, but with significant differences between member states. We recommend examining systemic irregularities and improving audit planning for external actions. In agriculture, the Commission should assess the need for incentives for member states to improve recovery rates. Finally, the Commission should provide complete information on established irregular expenditure and its correction.

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Special report 08/2024

Published on 29/05/2024



EU Artificial intelligence ambition – Stronger governance and increased, more focused investment essential going forward

Embracing AI technology will likely determine the path of the EU's future economic development. In 2018, the Commission adopted a coordinated plan with the member states to scale up investment in artificial intelligence and adapt the regulatory environment, which was updated in 2021. We assessed whether the Commission's implementation of the framework was being effective. We found that the Commission's actions covered key dimensions that are important for the development of an EU ecosystem for artificial intelligence. However, the multiple actions (many of which are still ongoing) had a limited effect in developing the EU AI ecosystem by the time of the audit and did not accelerate AI investment in line with global leaders. The Commission and national measures were not effectively coordinated, as the Commission lacked the necessary governance tools and information. We recommend that the Commission re-assess the EU investment target for AI and how member states might contribute to it, evaluate the need for a more AI-focused capital support instrument, reinforce coordination and monitoring, and steps up support for the exploitation of results in the

EU. [Click here for our review](#)

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