Environmental Sustainability and Industrial Policy: Key Items on the European Agenda

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Abstract

This paper explores the industrial policy needed at EU level to manage the trade-offs between the key objectives of decarbonisation and economic competitiveness. After highlighting the relative position of the European economy compared to its two main international competitors – the United States and China – and clarifying that an economic weakening of Europe would make it more difficult to pursue the environmental objectives at a global level, the paper traces the evolution of the Green Deal strategy from the initial phase, marked by an environmentally unilateral approach, to the current gradual re-emergence of the need for industrial policy. In light of the limitations that still exist in the European approach, the paper concludes by proposing a vision of the decarbonisation process and industrial policy – in terms of both approach and instruments – aimed at supporting a major qualitative leap in EU strategy.

1. Introduction: the challenge facing Europe

As discussed in this volume in the chapter dedicated to energy issues, European Union is now facing a difficult transition[1]: after an initial long phase in which the Green Deal was implemented without adequate consideration of industrial policy issues and social policy implications, it has now become unavoidable for the European Union to address the complex task of balancing three objectives – decarbonisation, economic competitiveness and energy security – and one constraint – European citizens' consensus on the policies adopted. It is a difficult challenge, because the three objectives involve mutual trade-offs and possible undesirable social effects that could derail the process, leading to

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[1] See De Vincenti, Macchiati and Ranci (2025).

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the sacrifice of one or more of the objectives and a loss of consensus. Some examples of the trade-offs in question:

- the costs associated with the adoption by industry of clean and lower carbon technologies, with investments in upgrading energy networks, and with reducing emissions in the transport sectors (sustainability-competitiveness trade-off);
- the displacement of European companies by foreign competitors in the event of an acceleration of emission reduction targets for certain sectors (sustainability-competitiveness trade-off);
- the social impact of these losses in competitiveness of the European production system (sustainability-social consensus trade-off);
- the increase in gas prices due to the rapid activation of international supply sources alternative to Russia (security-competitiveness trade-off and – due to redistributive effects - security-social consensus trade-off).

And, it is clear that significant political and institutional risks may arise from an inadequate management of these delicate trade-offs.

2. The race between the three main global competitors

The management of these trade-offs is the central theme of this paper. But before addressing this issue, it may be useful to briefly assess the relative position of the European economy compared to those of the United States and China. In this regard, some statistical evidence may be helpful, with no claim to be exhaustive, of course.

First of all, some aggregate indicators of the relative size of the three economies and the average per capita availability of goods and services[2]. Thus, according to 2024 data, the United States ranks first in terms of GDP in current dollars (29,200 billion), followed by the European Union (19,400) and China (18,770) in third place. The gap between the EU and the US narrows when GDP is measured in purchasing power parity (PPP), with European GDP reaching $28,100 billion in PPP and even exceeding that of the United States if the United

[2]Source: OCPI calculations based on World Bank data; see Osservatorio CPI (2025).

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Kingdom is added to the EU, with a total GDP of $32,300 billion. And it is significant that in PPP terms, China now already has the highest GDP: 38,200 billion. However, in terms of GDP per capita, there is still a gap, even in purchasing power parity, between the United States (86,000 dollars) and the European Union (62,000), and an even greater gap between these two economies and China (26,000).

With regard to the manufacturing core of the industry, the European Union and the United Kingdom together outperform the United States, with a share of global production of 17.9% in 2024 compared to 17.3 of US. However, it is worth noting the now predominant share of Chinese manufacturing (27.7%). Within the manufacturing sector[3], the EU leads in aircraft production – with the United States in second place and China far behind – and in railway equipment – with China in second place and the US in third – and ranks between China and the United States in the automotive sector. The United States clearly stands out in semiconductor production and dominates even more clearly investment in artificial intelligence, followed at a distance in both sectors by Europe and China. Finally, China clearly dominates steel and metallurgical production, followed by Europe and then the United States, and also makes greater use of industrial robots, followed in this case first by the United States and then by Europe.

In any case, the EU's position on global markets is strong, as attested by the share of its goods and services exports (around 17% in 2023), which is significantly higher than that of the United States (just over 10%) - as shown in Figure 1 - although it has been gradually declining over the last twenty-five years (while the US share recorded a more pronounced decline, but concentrated in the first decade of the century). Furthermore, the EU's trade balance is largely positive, fluctuating around 3% of its GDP, and has continued to do so for about ten years.

However, the EU also has some critical import dependencies, particularly from China[4]. Figure 2 shows the percentage shares of EU and US critical and technological imports from China, where the former refer

[3] For further details, see Osseratorio CPI (2025).
[4] See Banca d'Italia (2025) and Centro Studi Confindustria (2025).

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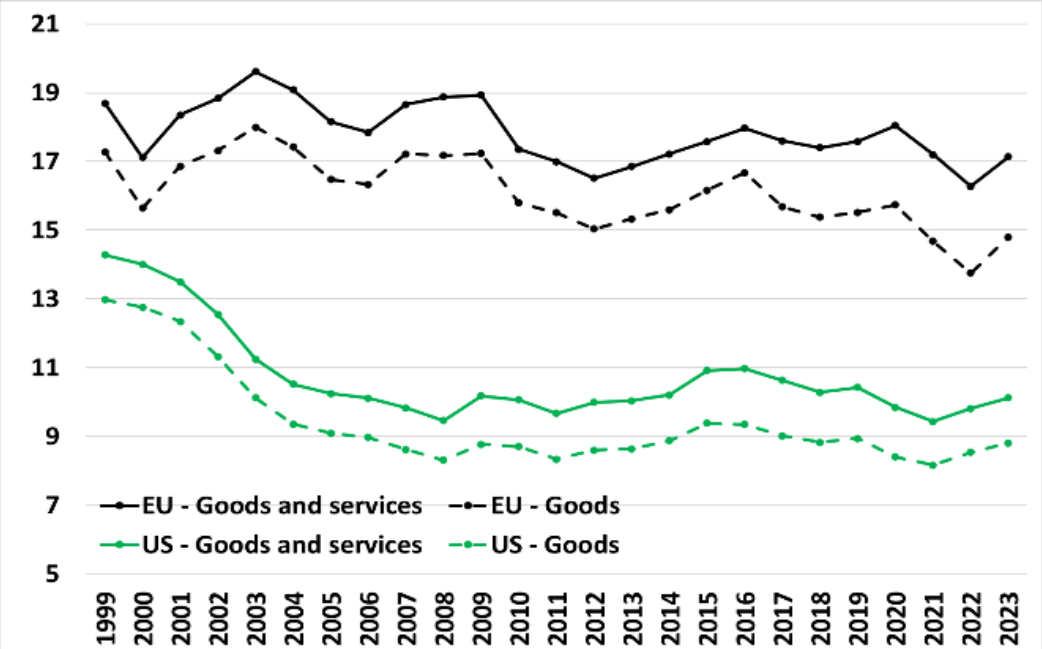
to the main critical goods for the energy transition – such as lithium batteries, electric vehicles, photovoltaic cells, rare earth elements, critical raw materials – and the latter refer to the so-called advanced technology products (ATP) – such as biotechnology, life science, opto-electronics, information and communication, flexible manufacturing, advanced materials, aerospace, weapons and nuclear technology. As can be seen, the EU's dependence on China is higher than that of the US: particularly high for critical materials and still high for ATPs, although declining after the 2021 peak that coincided with the pandemic.

The fact is that, as Figure 3 shows, the manufacturing capacity for the production of goods critical to the energy transition is currently heavily concentrated in China: more than 80% for batteries and solar PV and, with a few exceptions, generally above 50% for the other goods. It is also interesting to note that for some products – electric cars and wind turbines in particular – the European Union ranks second, albeit significantly behind.

Figure 1. EU and US export market shares
(percentage shares; current prices and exchange rates)



Source: BdI (2025) calculations on Eurostat and IMF WEO.

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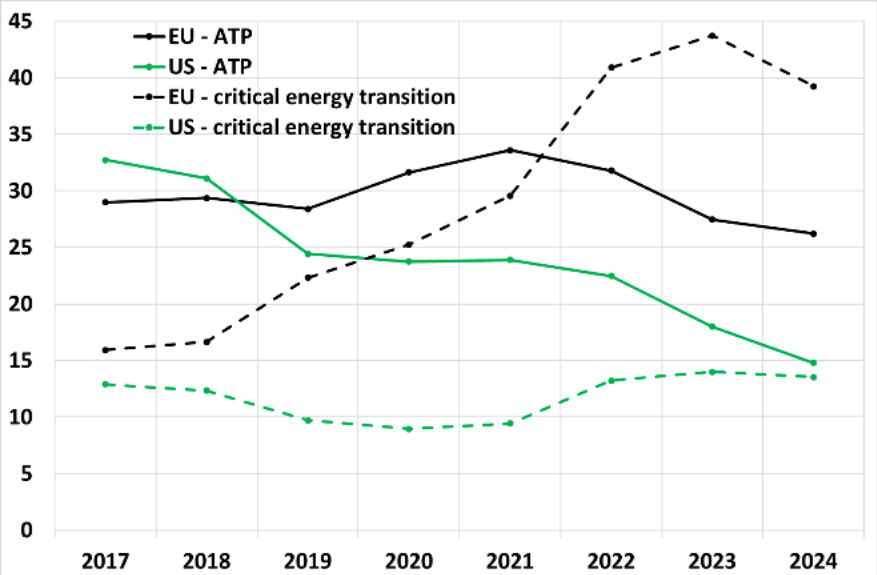
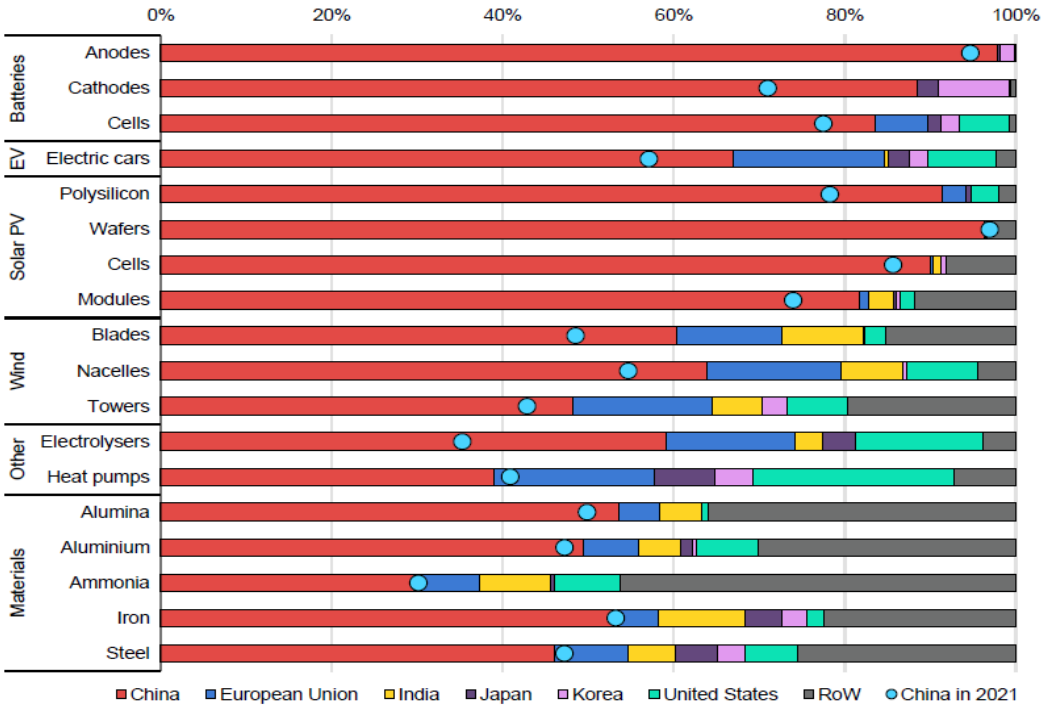
Figura 2. Tech and critical import: EU and US percentage shares from China



Source: BdI (2025).

Figure 3. Installed manufacturing capacity of critical goods for the energy transition

(percentage shares 2023)



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Source: BdI (2025), based on International Energy Agency (2024)

To sum up:

- the EU economy is one of the world's three largest economies in terms of GDP, manufacturing output, export capacity and the size of its internal market;
- Europe stands out in traditional manufacturing sectors, to which we can add infrastructure networks and service provision in the energy, telecommunications and transport sectors;
- but the EU (i) is lagging behind in some of the most innovative sectors, such as semiconductors and artificial intelligence, where the United States has clear leadership, and (ii) depends heavily on China for imports of goods (and raw materials) that are critical for the green transition, and often incorporate advanced technologies.

So, in the (probably near) future, there is a real risk of erosion of Europe's traditional industrial and productive strength.

3. Would an industrially weak Europe be beneficial for the green transition?

The answer is no, for at least four good reasons:

- the European Union is the region of the world that has adopted the most advanced standards in terms of the environment, health and social protection, so that a shift of production activities outside Europe would result in a net increase in CO_2 and pollutant emissions, slow down the process of reducing them and, more generally, hinder the pursuit of the Sustainable Development Goals;
- the EU has so far played a leading role in international conferences on climate change and sustainable development: an economically weakened EU would not be able to play a similar role in the future;
- the reversal of environmental policies currently in place in the US makes this EU's role even more essential;

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- an economically weakened Europe would see its social model enter into crisis, and with it the possibility of building the necessary social consensus around the objectives of decarbonisation and green transition: in order to pursue environmental sustainability, it is absolutely necessary to nurture and promote social sustainability.

In a nutshell, the green transition needs a stronger, not weaker, Europe.

4. The story of the Green Deal strategy so far

The early stages

The Green Deal was launched by the Communication of December 2019, the policy document at the start of the first von der Leyen Commission's term of office[5]. The Communication presented the Green Deal as "a new growth strategy that aims to transform the EU", in order "to put Europe firmly on a new path of sustainable and inclusive growth"[6].

As a key element of the strategy, the Regulation on the Taxonomy of Sustainable Investments was adopted in June 2020[7], with the aim of providing a framework of criteria to support the allocation of private and public resources towards environmentally sustainable investments. Article 3 of the Regulation specifies that an economic activity qualifies as environmentally sustainable where (a) it "contributes substantially to one or more of the environmental objectives set out in article 9" – climate change mitigation and adaptation, protection of water, transition to a circular economy, pollution prevention, protection of biodiversity - and (b) "does not significant harm any" of them, the so called DNSH principle.

Subsequent acts, adopted during 2021[8], provided a specific interpretation of the DNSH principle. In particular, "the assessment of the negative environmental impact of each measure should be carried out

[5] COM(2019) 640.
[6] Ibid., p. 2.
[7] Regulation 2020/852.
[8] Regulation 2021/241, Communication COM(2021) 1054, Commission Delegated Regulation 2021/2139. For a reconstruction of these steps, see De Vincenti (2022).

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against a 'no intervention' scenario by taking into account the environmental effect of the measure *in absolute terms* (my italics). This approach consists of considering the environmental impact of the measure, compared to a situation with no negative environmental impact," and therefore it "is not assessed in comparison to the impact of another existing or envisaged activity that the measure in question may be replacing"[9]. This *environmentally unilateral interpretation* implied that, in the first versions of the Taxonomy[10], natural gas transport and distribution infrastructure, nuclear and gas-fired power plants, waste-to-energy plants, investments in replacing oil and coal with gas in industry and transport, and the replacement of old vehicles or aircrafts or ships with new more energy efficient types were found to be non-compliant with the DNSH principle.

The consequences have been paradoxical, for instance:

- the replacement of coal-fired power plants with gas-fired (which produce lower CO_2 emissions) or nuclear power plants (which do not emit CO_2) has been penalised;
- the technologies that use gas to replace oil and coal in the so called hard-to-abate sectors (steel and metal production, maritime and air transport, etc.) and that therefore would accelerate the abatement of CO_2 emissions, as well as other pollutants, have been hindered;
- the introduction and diffusion of "cleaner" technologies in a number of other sectors have been slowed down: the most striking example, in this regard, is that of incinerators;
- the same applies to replacement of old vehicles or aircrafts or ships with new more energy efficient types.

The error underlying these paradoxes essentially consists in assessing the environmental impact of each intervention in absolute terms, rather than assessing the contribution of the intervention to reducing emissions and pollutants compared to existing activities that the intervention can replace[11]. In this way, trade-offs are "removed", i.e. the timing, investments and costs required to develop, make economically and socially sustainable, and disseminate increasingly cleaner

[9] COM(2021) 1054, p. 7.
[10] See, for instance, Commission Delegated Regulation 2021/2139.
[11] See De Vincenti (2023).

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technologies are not taken into account. The actual result is, on the one hand, to hinder and delay rather than accelerate the decarbonisation process and the green transition and, on the other hand, to amplify its economic and social costs.

A few timid steps forward

An initial change took place with the Complementary Delegated Regulation of 9 March 2022[12], which – not without controversy – reintroduced energy production via nuclear and gas-fired power stations into the taxonomy, acknowledging that it can contribute to the decarbonisation of the economy. In any case, the regulation has adopted very restrictive parameters for assessing the compliance of these investments with the taxonomy criteria (particularly for gas-fired power plants).

A second course correction was made by the Commission with its Communication of 18 May 2022, which outlined the REPowerEU strategy in response to the energy supply crisis caused by Russia's invasion of Ukraine[13]. The Communication aims to strengthen energy transport infrastructure to ensure the immediate security of oil and gas supplies, as well as accelerating energy efficiency and the growth of renewable energies. The interpretation of the DNSH principle in absolute terms is not being questioned but anyway circumvented by providing for "a targeted exemption from the obligation to apply" the principle[14].

The subsequent Delegated Acts adopted by the Commission on 27 June 2023 also do not address the issue of reviewing the DNSH principle, but merely supplement the taxonomy by laying down additional technical screening criteria and by providing for additional types of eligible investments, particularly in the airport and aviation sector[15]. It is

[12] Delegated Regulation 2022/1214.
[13] COM (2022) 231.
[14] Ibidem, p. 7.
[15] Commission Delegated Regulations 2023/2485 and 2023/2486.

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interesting to note that, just when dealing with air transport, these new Commission Acts outline an initial departure from the DNSH assessment "in absolute terms", considering taxonomy compliant the replacement of less efficient aircraft with low-emission aircraft and the use of sustainable aviation fuels (SAF)[16].

The re-emergence of industrial policy

In parallel with these initial corrections to the taxonomy, a gradual resurgence of industrial policy began to take shape, driven by a number of structural factors: Russia's invasion of Ukraine, its consequences for the EU's energy security and cost, and the resulting change in the global economic and political landscape; the growing gap with the US in digital innovation, a key factor for competitiveness prospects; the high dependence on China for raw materials critical to the green and digital transitions, an Achilles' heel in a world that is evolving in a conflictual manner; Chinese state aid policies for companies entering international markets and American protectionist policies initiated with the IRA programme and now degenerated into a dangerous tariff confrontation.

So, a number of EU documents on industrial issues have followed one another since the beginning of 2023, reflecting the emerging need to move away from an environmentally unilateral view of the Green Deal strategy:

- in February 2023, the Commission launches the Green Deal Industrial Plan in response to US and Chinese policies, a set of guidelines - but no additional EU resources - on improving the regulatory framework and state aid rules, EU funding through the RRF Plans and InvestEU, enhancing people skills, promoting international cooperation[17];
- in March 2023, the so-called Net Zero Industry Act further elaborates these guidelines with regard to strengthening "the

[16] See Commission Delegated Regulation 2023/2485, Annex 1.
[17] COM (2023) 62.

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manufacturing capacity of net-zero technologies in the Union"[18];

- in February 2024, Regulation 2024/795 establishes the Strategic Technologies for Europe Platform (STEP) "to support critical and emerging strategic technologies and their respective value chains": assuming that "financial support for the implementation of the STEP shall be provided from existing Union programmes", the Regulation introduces "a Sovereignty Seal to any project contributing to any of the STEP objectives", to be used as a "quality label", and a "Sovereignty Portal providing information about funding opportunities for projects linked to the STEP objectives"[19];
- in April 2024, the Critical Raw Materials Act aims to establish "a framework to ensure the Union's access to a secure, resilient and sustainable supply of critical raw materials […] by identifying and supporting strategic projects that contribute to lowering dependencies and diversifying imports"[20]: a European Critical Raw Materials Board will provide advice on improvement of the regulatory framework for the projects and on the coordination of funding with regard to the involvement of private financing, EIB resources, Member States programmes, relevant Union funding programmes;
- the Communication of January 2025 - policy document at the start of the second von der Leyen Commission's term of office – presents a "Competitiveness Compass" which "sets out an approach" to address the three urgent issues raised by the Draghi Report: "closing the innovation gap; a joint roadmap for decarbonisation and competitiveness; reducing excessive dependencies and increasing security"[21]: in particular, the Commission intends to propose a new Competitiveness Coordination Tool – supported by a new Competitiveness

[18] COM (2023) 161.
[19] Regulation 2024/795, pp. 10-13.
[20] Regulation 2024/1252, p. 17.
[21] COM (2025) 30, p. 3.

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Fund under the MFF 2028-34 - to act together with Member States on common competitiveness priorities;

- in February 2025, the "Clean Industrial Deal"[22] begins to develop Compass's guide-lines in order to support: (a) the energy-intensive industries in dealing with decarbonisation, high energy costs and unfair global competition; (b) the clean-tech sector, "which is at the earth of future competitiveness"[23]. Specific sectoral plans have been adopted, in particular:
- the "Action Plan for Affordable Energy"[24], which provides the lines along which the Commission intends to promote regulatory improvements in terms of network tariffs, energy taxation, the structure of the electricity and gas markets, and by supporting, also with European budget resources, infrastructure investments to support market integration (a recent development in this regard is the "European Grids Package" of December 2025[25]);
- the "Industrial Action Plan for the European Automotive Sector"[26], based on five pillars – innovation and digitalisation, clean mobility, supply chain resilience, skills and social dimension, ensuring a level playing field - to be implemented through regulatory harmonisation, cross-border projects, agreements with third countries, support for innovative investments with (limited) resources from InvestEU and Horizon Europe;
- a "European Steel and Metals Action Plan"[27], that aims to: (i) reduce energy costs through the Action Act for Energy and the flexibility allowed for state aid (reduction of fiscal and parafiscal charges), (ii) prevent relocations by developing the CBAM system, (iii) strengthening trade defence instruments, (iv) promoting the circular use of metals, (v) strengthening

[22] COM (2025) 85.
[23] Ibid., p. 1.
[24] COM (2025) 79.
[25] COM (2025) 1005.
[26] COM (2025) 95.
[27] COM (2025) 125.

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public and private demand for low-carbon metals, (vi) increasing flexibility in the use of state aid.

The proposed MFF for 2028-34

The resources referred to in the documents mentioned above are very limited, drawing on what is still available from the Multiannual Financial Framework 2021-27. It is therefore interesting to look at the proposal for a new MFF for the seven-year period 2028-34 presented by the Commission in July 2025[28]. In a very nutshell[29]:

- total available resources: €1,614 billion at 2025 prices; this represents an increase of 18% in real terms compared to 2021-27, but as a percentage of the GDP expected for the seven-year period for the Union as a whole, it is only slightly higher than that for 2021-27 (1.14 vs. 1.07%); adding the 149 billion for payments related to the NGEU debt, the budget totals 1,763 billion;
- a significant increase in funding for EU industrial policies, reaching €470 billion - European Competitiveness Fund (€398 billion) and Connecting Europe Facility (approximately €72 billion) - with a restructuring (still to be clarified) of the various funds involved (Horizon Europe, InvestEU, etc.);
- the consolidation into a single Cohesion and Agriculture Fund of resources previously allocated separately, as well as their reduction of more than 20% in real terms (405 billion and 261 billion are allocated to the two policies respectively);
- from a governance perspective, the experience acquired with the NRRPs is expected to be extended to the Cohesion and Agriculture Fund: vertical coordination in which each Member State discusses its plan (agreed with the regions) with the Commission and implements it under strict monitoring based on performance indicators and not only on expenditure.

Main shortcomings in the current EU approach

[28] COM (2025) 571.
[29] For a more comprehensive analysis, see Agrò – De Vincenti – Lepore (2025).

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The Green Deal strategy certainly has the merit of placing the transition to a climate-neutral economy and a new balance between productive activities and the environment at the heart of European economic policy. However, while acknowledging the progress made in raising awareness of competitiveness and strategic security issues, an overall assessment of the strategy at this stage cannot fail to highlight the persistence of certain factors that weaken the EU's ability to implement an adequate industrial policy:

- the environmental unilateralism of the first phase of the Green Deal is set aside but it is not overcome, with the result of hindering proper management of trade-offs between green transition, economic competitiveness, energy security, and the decarbonisation process itself (e.g. the main "hard to abate" industries have been excluded from Italian Transition 5.0 incentives in recent years);
- for too long EU documents have sought to base industrial policy solely on guidelines and rules, avoiding the issue of making adequate resources available;
- the greater flexibility granted to Member States in the field of state aid benefits countries with larger budgetary margins, with the risk that this will increase the fragmentation of the internal market and prevent the economies of scale necessary for innovative investments from being achieved[30];
- the Commission's proposal for the budget 2028-34 significantly increases the resources for EU industrial policy but, by foregoing the issuance of new European debt, it must take resources away from other policies: this penalises an important policy such as cohesion, without however achieving a sufficient endowment for industrial policy (the Draghi Report mentions €7-800 billion of public and private investments per year[31]).

5. A theoretical parenthesis: the "anchor" and the "helm"

[30] See Torrini (2025) and Banca d'Italia (2025).
[31] See also European Central Bank (2024).

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To clarify the meaning of the proposals I will put forward in the following section, I believe a brief digression on economic policy theory could be useful. In particular, allow me to refer to the two key issues of economic policy discussed in my recent book[32]: (i) nurturing and supporting a climate of mutual confidence between operators, as well as operators' confidence in public authorities; (ii) providing the market with a compass to address problems of resource allocation that it cannot manage on its own[33].

With regard to the first issue, economic policy is called upon to perform a dual function as an *anchor* in order to stabilize the market: (ia) from a macroeconomic point of view, an anchor for expectations, supporting the "state of confidence" through an "economic policy regime" that stabilises the economy around higher levels of GDP; (ib) from a microeconomic point of view, an anchor for behaviours, building the market rules as the necessary safety net for operators to make their decisions in a climate of confidence.

However, as essential as they are, the macro and microeconomic anchoring tasks outlined above do not exhaust the dimensions of public intervention in the markets: economic policy is confronted daily with other issues concerning resource allocation that the market does not appear to be able to manage on its own and that require allocative choices by public authorities and the implementation of the tools - budget expenditures and revenues, fiscal or financial incentives, public-private partnerships - necessary to achieve them. It is an allocative function that helps to guide market processes and must be conceptually distinct from that of defining and applying the rules: this second function establishes the rules for the best functioning of the markets, while the first, within the framework of those same rules, translates collective choices on resource allocation into signals for operators. They are two complementary, both essential, souls of public intervention in the economy.

Industrial policy, that is, interventions that refer to the production system, is part of this second soul. In order not to repeat the errors of the dirigisme of the past, industrial policy must start from the awareness that

[32] De Vincenti (2024), Ch. 5.

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its information endowment and the variables it takes into account are not superior but rather different in nature compared to those of market operators. What is needed, therefore, is a reciprocal interaction, a discovery process in which both companies and government gradually learn the possible alternatives of choice and their costs. In short, industrial policy must be thought of as a strategic game between government and companies, a *helm* capable of interacting with the waves and currents that run through the market.

6. A new mindset for new times

Now, it is time to address the ways to strengthen European industrial policy. Let's start with some suggestions on how to approach the decarbonisation process and then move on to the industrial policy approach to be adopted.

For a truly effective decarbonisation strategy

As noted in section 1, EU has to deal with several complex choices in order to appropriately manage the delicate trade-offs that economic policy currently faces. Additionally, it should be borne in mind that, in order to limit global warming, it is not only the goal of net zero emissions by 2050 that is important, but also the amount of greenhouse gases accumulated in the atmosphere by that date.

All of this makes it essential to carry out a comparative (not absolute) assessment of the contribution to emissions reduction of the various technologies available today or in the near future: for instance, in the "hard to abate" industrial and transport sectors, short- to medium-term emissions reductions can be achieved by replacing oil and coal with natural gas and in perspective possibly biogas, biofuels and e-fuels. It is not so much a question of technological neutrality as of assessing the various technologies available in terms of their economic viability in the transition period and their relative contribution to the CO_2 reduction target. And it's worth noting that this approach is not only more effective in terms of accelerating the decarbonisation process, but also helps to better manage the sustainability-competitiveness trade-off, supporting a

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decarbonisation process that facilitates a coherent evolution of the European production structure.

But we have to deal with several complex choices even in the long term, bearing in mind that after 2050 the technologies used to reduce emissions in the medium run could lead to prospective "stranded costs", in the sense of investments in infrastructure and plants not fully depreciated at that date. If we do not want these costs to hinder the implementation of a net-zero economy after 2050, we need to carry out a cost-benefit analysis assessing whether, from a collective point of view, bearing these kind of stranded costs is an economically and socially acceptable burden in order to achieve the maximum possible reduction of the stock of CO_2 accumulated by 2050. Without, of course, overlooking the fact that the presence of stranded costs at the end of the transition period could be significantly reduced if infrastructure or plant could be converted to transport or use energy sources other than fossil fuels.

In other words, in order to combine an acceleration of the decarbonisation process with constructive management of the necessary industrial transformation, we need an approach that is not unilateral or ideological, but scientifically, technologically and economically based. An approach – that of making choices based on comparative rather than absolute assessments – which should, of course, be adopted not only with regard to choices concerning technologies for climate change mitigation, but also for all other environmental issues. Summing up: the green transition needs everything except a unilateral and simplistic approach.

Single market and energy security

As clarified in this same volume in the chapter dedicated to energy issues, the full unification of the energy market – by completing internal interconnection infrastructure and refining trading rules – is a necessary condition in order to ensure the energy security of all Member States, enabling the matching of energy supply and demand across the Union. Just as only a European system of interconnections with third countries and coordinated energy entry points into the Union can allow for a

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diversification of sources that protects against possible abuses of dominant positions – in terms of political pressure or price increases – by individual supplier countries.

Of course, here too there are prospective trade-offs with regard to the objectives of the green transition: security depends on infrastructure within the Union and interconnections with other countries, which may pose significant problems in terms of future stranded costs, particularly for gas. Therefore, the cost-benefit analysis referred to in the previous paragraph must cover not only the comparative assessment of costs and benefits in terms of accelerating the process of reducing emissions, but also in terms of security of energy supplies.

For a more effective EU industrial policy

A premise: as indicated in section 5, industrial policy must be conceived as a strategic game between government and firms and, I add now, its tools must be built in such a way as to ensure a positive-sum game, where improvement opportunities arise both for individual operators and for the community as a whole[34]. In this vein, the main instruments of a strategic industrial policy are:

- public-private partnerships as a means of capitalising on companies' drive for efficiency and innovation and giving a strong boost to infrastructure investments, a crucial factor in developing the productivity of the economic system as a whole;
- tax and financial incentives designed in such a way to enhance – not dull - companies' capacity for innovation (Torrini 2025, Coco-Ferrara 2025); a criterion that can be met by automatic incentives, conditional on allocation targets that are predefined in terms of the general framework within which operators make their own independent business decisions (positive Italian examples: Industry 4.0 incentives and Tax Credit for Investment in the South; an Italian negative example – due to an excessive bureaucratic burden - Transition 5.0); but also by discretionary incentives that are, nevertheless, managed by a public entity operating on the basis of

[34] See Rodrik (2007), Aghion, Boulnager and Cohen (2011), Onida (2016), De Vincenti (2024, Ch. 5).

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technical and business criteria (e.g. guarantees offered by InvestEU);

- public stakes in the capital of certain strategic companies, while respecting their entrepreneurial autonomy, because only when policy guidelines are translated by company management into investment and production choices that are able to compete on the market, do they become truly effective[35].

Naturally, the above considerations apply to both national and EU industrial policies. Looking specifically at the European context, it is now clear that there is an urgent need to strengthen the EU's capacity to coordinate national policies and implement its own priorities through its own instruments[36]: those already available - InvestEU, Horizon Europe, Investment Projects of Common European Interest, to be oriented more towards supporting the technological leap that is needed – and possible innovative developments – direct EU investments in the so called European Public Goods, such as financing R&D and technology transfer investments, support for EIB and National Promotional Banks (CDP, CDC, KFW, ICO, BGK) in providing financing or equity participation to enterprises engaged in innovation processes, support for public-private partnerships for completing energy and transport networks.

But – to conclude this note – in order to strengthen the EU's coordination capacity and its own industrial policy instruments, it is essential to start building a genuine Central Fiscal Capacity (CFC) for the Union that will enable new European debt (similar to the NGEU) to be raised to finance the extraordinary investment effort that is necessary and urgent[37]. This is also the path to follow for a policy of expanding the internal market, which would significantly offset for the European firms the contraction of the American market due to US tariffs, and make Europe an attractive area for domestic and foreign investment. Finally, this is also the path to follow in order to take a leading role in building agreements with other economic areas and, in particular, with the Global South, with a view to recreating a multilateral network of trade relations

[35] See for instance Bassanini (2019).
[36] See Amato et al. (2023).
[37] See Buti and Messori (2022) and (2024).

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that excludes from its scope the bilateral conflicts imposed by the present US administration.

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