

Net-Zero Industry Act: The EU Commits to an Active Industrial Policy

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After just over a year of negotiations between the European Commission, Parliament and Council, the Net-Zero Industry Act (NZIA) was adopted on 25 April 2024 and will soon enter into force. The European Commission proposed the first draft of the law in the middle of March last year. The aim is to put forward a joint European response to the industrial policy initiatives introduced by other leading industrialised nations, such as the Inflation Reduction Act in the United States, Japan's Green Transformation package and the Chinese Made in China 2025 strategy. In the face of increasingly fierce international competition, the act is intended to support key industries in Europe for the purposes of strengthening their competitiveness and mitigating unilateral reliance on imports, thereby reducing the risk of unstable supply chains, as a basis for achieving the objectives of the European Green Deal.

The essentials of the Net-Zero Industry Act

The NZIA defines the industries that will be key to the successful implementation of the European Green Deal. The list includes technologies relating to renewable energy – wind, solar, heat pumps and geothermal energy –, hydrogen and CO₂ capture and storage, but also technologies for the production of climate-friendly basic materials such as cement, steel and basic chemicals. The act covers the entire value chains for these products. Even nuclear power plants are listed. However, member states may choose to exclude individual technologies when implementing the act at national level. For all of these key industries, the NZIA has set a target of satisfying 40 per cent of European Union demand from production in the member states by 2030. It envisages the EU achieving a global market share of 15 per cent by 2040.

With a view to achieving these objectives, the NZIA contains a number of measures:

- **The reduction of bureaucracy to speed up the approval of net-zero strategic projects** by establishing a single authority in each EU member state and tightening processing time frames. In addition, member states are encouraged to designate net-zero acceleration valleys, areas in which steps such as environmental impact assessments can be carried out in advance at regional level for clearly defined industrial sectors, thereby significantly reducing the administrative hurdles for individual projects. The act also provides for the establishment of regulatory sandboxes for research projects, allowing companies to test innovative products and services in a controlled environment without having to comply with all of the usual requirements straight away.
- **The establishment of a European market for captured CO₂** with the aim of guaranteeing storage capacity for 50 million tonnes of CO₂ by 2030. The act obliges EU member states to systematically identify potential storage

sites and the infrastructure needed to enable their use. Among other measures, companies from the oil and gas sector will be required to contribute towards this storage capacity target in proportion to their share of European oil and gas production, i.e. they must make corresponding storage capacity available in depleted oil and gas fields, for example.

- **The creation of lead markets for net-zero technologies by incorporating new sustainability and resilience criteria into public tenders.** For example, at least 30 per cent of the renewable energy capacity auctioned each year, or a minimum of 6 gigawatts, must meet these additional criteria. The intention is to contribute to the further development of European supply chains. However, the criteria may be disregarded if their application would result in significant cost increases of more than 20 per cent, or 15 per cent in the case of auctions for renewable energy.
- **The development of capacity for the training and further education** of employees in key industries via European net-zero industry academies.
- **The creation of a net-zero Europe platform** as a central hub for cooperation and the exchange of information between the European Commission, EU member states, the industrial sector and other stakeholders in order to promote the development and use of net-zero technologies in Europe.

With the NZIA, the EU commits to pursuing strategic policies aimed at industrial development

For a long time, industrial policy was a taboo subject in European politics. In reality, however, industrial policy has been implemented for many years, although it has not been referred to in those terms. And recent empirical studies show that it often achieves the desired effects.¹ With the NZIA, active industrial policy is now finally being explicitly pursued. This is an important step in the right direction – and not only in light of the challenges of climate change and the intensified international competition for the green technologies of the future. It also reflects the realisation triggered by the upheaval following the Russian war of aggression against Ukraine and the subsequent sanctions against Russia that excessive economic dependencies can hinder strategic geopolitical action.

This strategic approach is urgently needed given the present situation in which Europe is heavily reliant on imports from a single country – China – at a rate of over 90 per cent in the case of key components for photovoltaic systems. China and other key competitors such as the USA and India support their own domestic production of net-zero technologies with substantial subsidies. In these circumstances, it is right for policy-making to not only focus on the costs and the efficiency of the transformation, but also to keep an eye on the resilience of the system as a whole and give much greater attention to security of supply.

There was considerable pressure for the EU to respond in kind to the protectionist measures taken under the Inflation Reduction Act in the US and China's subsidy

¹ Juhász, R., Lane, N. J., & Rodrik, D. (2023). *The New Economics of Industrial Policy* (Working Paper 31538). National Bureau of Economic Research. <https://doi.org/10.3386/w31538>

policy. The EU did not succumb to this temptation. Fortunately, the NZIA that has now been adopted largely avoids restrictive constraints on international trade and, in our view, will therefore not contribute to a further escalation of international trade conflicts.

Cutting red tape: the NZIA poses huge challenges for EU member states

Complex planning and approval processes are indeed a major obstacle to rapid investment in key industries. The NZIA puts the onus on the member states: they must greatly expand their administrative structures within a short space of time in order to comply with the deadlines and procedures that have now been laid down.

There is certainly considerable potential to simplify approval processes without risking negative impacts on the environment and society and without suspending opportunities for public consultation. However, the devil is in the details. Where environmental protection regulations or opportunities for the public to have a say and raise objections are stripped back too far, there is a risk of a political backlash. In Germany, the example of the Tesla factory in Grünheide or the construction of the LNG terminal on the island of Rügen illustrate the social tensions that the acceleration of approval processes by politicians can trigger. In view of the growing strength of right-wing populist and far-right movements in the EU, the loss of trust in effective and democratic institutions – either due to investors disproportionately benefiting from the simplification of planning and approval processes or because approval bodies are overstretched – would put the implementation of the European Green Deal at risk. And that in turn would jeopardise the achievement of EU climate targets as a whole.

To prevent this situation arising, the scaling back of bureaucracy and the creation of so-called net-zero acceleration valleys must be subject to expert monitoring and evaluation from the outset and coupled with the courage or willingness to adjust procedures again at short notice. Experience with innovative governance instruments must be systematically documented and analysed in order to facilitate learning processes and replicate successful approaches across the EU. This way, the implementation of the NZIA can be effectively supported at national and sub-national level.

The NZIA weak point: no new funding

Nevertheless, the draft NZIA reveals a major weakness of the EU, namely that no agreement has yet been reached on substantial financial support for the transformation of the industrial sector at EU level. For financing, the NZIA relies on the Strategic Technologies for Europe Platform (STEP). However, rather than being a new source of finance, STEP merely consolidates existing funding instruments, enables co-financing via multiple instruments and increases the visibility of projects by means of a label termed Sovereignty Seal.

To ensure fair competition within the European single market, national subsidies are generally prohibited in the EU or may be granted only in specific cases involving considerable red tape. The scope for national subsidies for net-zero technologies in the member states was extended by the EU guidelines on state aid, which were

revised in 2022; further exemptions also apply until the end of 2025 as part of the Temporary Crisis and Transition Framework, which was introduced in the EU in March of 2022 in response to the Russian attack on Ukraine and the subsequent economic turmoil. On the one hand, national subsidies might help to achieve the NZIA's quantitative targets for security of supply. Corresponding national measures are already being implemented in Germany, such as a programme of loans from the KfW development bank aimed at supporting transformation technologies.²

However, a fundamental dilemma remains unresolved: not all member states can afford the same level of extensive government subsidies for the industrial sector. The worst-case scenario would see richer member states subsidise their industries to the detriment of the opportunities of other member states. This carries the risk of creating distortions in the internal market, which could jeopardise European cohesion. It is also unlikely that subsidies in individual member states will be sufficient to guarantee the desired expansion of production capacity throughout the EU.

Support with a stronger pan-European focus would therefore make sense. Just last week, Enrico Letta, the special rapporteur appointed by the EU heads of government, proposed the introduction of an EU-wide state aid mechanism in order to strengthen the competitiveness of European industry.³ However, it is unlikely that there will be a consensus on this issue in the short term. An effective *financial* response from the EU to the US Inflation Reduction Act and comparable instruments introduced by other industrialised countries is therefore not materialising for the time being.

A small step in the right direction

Europe faces an enormous investment challenge. Hesitating too long before investing in new technologies may result in the climate targets for the industrial and energy sectors being missed, as many existing industrial plants will reach the end of their operational life spans in the next few years and will have to be replaced with new investments. There is also a risk that Europe will lose its international competitiveness with respect to these technologies, causing production to migrate to other countries. As well as jeopardising European prosperity, this could also delay the achievement of global climate targets. Today's high levels of reliance and unilateral dependencies in certain supply chains also pose a geopolitical risk in the event of escalating conflicts. With the NZIA, the EU has shown its willingness to pursue strategic policies aimed at industrial development.

Subsidy-based industrial policy inevitably carries the risk of cementing or supporting inefficient structures, distributing an unnecessary number of subsidies to individual or multiple companies and producing windfall effects. Companies will always find reasons to exaggerate risks and lobby for the highest possible subsidies. Policymakers

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<https://background.tagesspiegel.de/energie-klima/kfw-startet-kreditprogramm-fuer-netto-null-industrien>

³ Letta, E. (2024). *Much More Than a Market – Speed, Security, Solidarity: Empowering the Single Market to Deliver a Sustainable Future and Prosperity for All EU Citizens* [report commissioned by the European Council].

<https://www.consilium.europa.eu/media/ny3j24sm/much-more-than-a-market-report-by-enrico-letta.pdf>

must take this into account. Particularly in the case of energy-intensive industries, government subsidies cannot be sustained indefinitely. Nevertheless, they are necessary within a transitional period in order to facilitate the development of climate-friendly, resource-efficient and sustainable supply chains. Green lead markets are an important step here, and the NZIA's new rules on tendering/auctions will make an important contribution in the short and medium term. In the long term, however, climate-friendly production processes must stand up to international competition even without government support. Furthermore, there are still opportunity costs associated with industrial subsidies: policymakers must weigh up whether limited funds could be better spent in other areas, such as education or public infrastructure.

The NZIA is a first step towards developing a genuinely European response to the challenges of a new geopolitical environment for the industrial sector. Unlike the USA, the EU has a guiding instrument in the form of the emissions trading system, which provides a long-term framework and plays a pivotal role in making investments in new technologies cost-effective. In publishing its recommended climate target for 2040, the European Commission has shown that it intends to continue on its current path – and that it aims to lay the foundations for building on this enormous European policymaking success even after the EU elections. Given the major uncertainties and risks with potentially far-reaching detrimental effects, it is necessary and right that safety nets are also introduced and developments are managed strategically in order to provide desirable public goods such as climate protection and security.

Another – perhaps even greater – European policymaking success is the joint single market, which has made a hugely important contribution to the competitiveness of European industry. Industrial policy must not be a zero-sum game between the member states. Instead, it must reinforce the European community, nurture the strengths of the individual countries and continue to ensure a level playing field in the single market. To achieve this, it would have been necessary to strengthen STEP: Furnished with new resources, STEP could create a counterweight to national-level state aid by financially strong member states and thus unlock scope for more extensive subsidies. Unfortunately, the NZIA does not answer this policy question, so it cannot be the last word in European industrial policy.