Questions and Answers on the Net-Zero Industry Act

Brussels, 27 May 2024

1. **What is the Net-Zero Industry Act and how does it relate to the EU's energy and climate goals?**

The EU has committed to achieve climate neutrality by 2050. This objective is at the heart of the European Green Deal and in line with the EU's commitment to global climate action under the Paris Agreement. The Net-Zero Industry Act (NZIA) aims to scale up the EU's manufacturing capacity of the technologies needed to achieve climate-neutrality such as solar panels, wind turbines, heat pumps, batteries, electrolysers and nuclear technologies, among others, including key components of such technologies, such as photovoltaic cells or the blades on wind turbines. The objective is to ensure the Union can transform its economy while maintaining the Union's open strategic autonomy, ensuring that citizens have access to clean, affordable, secure energy and avoiding to create new dependencies. The Net-Zero Industry Act was announced by President **von der Leyen** as part of the Green Deal Industrial Plan presented in February 2023. The Plan set out how the EU will sharpen its competitive edge by scaling up the EU's manufacturing capacity for net-zero technologies and products required to meet the EU's ambitious climate targets. In addition to the Net-Zero Industry Act, the Green Deal Industrial Plan announced the Critical Raw Materials Act to ensure sufficient access to those materials, like rare earths, that are vital for manufacturing key technologies, and the reform of the electricity market design, to make consumers benefit from the lower costs of renewables. The Critical Raw Materials Act entered into force on 23 May 2024.

2. **How will the Net-Zero Industry Act boost the competitiveness of EU's industry?**

The objective of the Regulation is to have at least 40% of the annual deployment needs for net-zero technologies manufactured in the EU by 2030.

The Net-Zero Industry Act simplifies the regulatory framework for attracting investments and scaling up the manufacturing of these technologies and therefore helps increase the competitiveness of the net-zero technology industry in Europe.

In addition, public authorities will have to consider **sustainability, resilience, cybersecurity** and other qualitative criteria in procurements procedures for clean technologies, auctions for the deployment of renewable energy and for other forms of public intervention.

Member States will be able to **support a set of net-zero technologies** such as solar photovoltaic, wind, heat pumps, nuclear technologies, hydrogen technologies, batteries and grid technologies by establishing 'strategic projects' which would benefit from priority status at national level, shorter permitting timelines, streamlined procedures and assistance in accessing finance.

The creation of **Net-Zero Acceleration Valleys** will further facilitate the establishment of clusters of net-zero industrial activity in the EU.

NZIA includes measures for investment in education, training and innovation with the establishment of **Net-Zero Industry Academies to train 100,000 workers** within three years and support the mutual recognition of professional qualifications. **Regulatory sandboxes** will be established for testing innovative net-zero technologies under flexible regulatory conditions. Finally, the **Net-Zero Europe Platform** will serve as a central coordination hub, where the Commission and EU countries can discuss and exchange information as well as gather input from stakeholders.

3. **Which are the net-zero technologies covered?**

The Act supports the following net-zero technologies:

a) Solar technologies;

b) Onshore wind and offshore renewable technologies;

c) Battery and energy storage technologies;

d) Heat pumps and geothermal energy technologies;

e) Hydrogen technologies;

f) Sustainable biogas and biomethane technologies;

g) Carbon capture and storage technologies;

h) Electricity grid technologies;

i) Nuclear fission energy technologies;

j) Sustainable alternative fuels technologies;

k) Hydropower technologies;

l) Any other renewable energy technologies;

m) Energy system-related energy efficiency technologies;

n) Renewable fuels of non-biological origin technologies;

o) Biotech climate and energy solutions;

p) Any other transformative industrial technologies for decarbonisation;

q) CO_2 transport and utilization technologies;

r) Wind propulsion and electric propulsion technologies for transportation; and

s) Any other nuclear technologies.

In view of the need to increase competitiveness across the full net-zero supply chains, the Net-Zero Industry Act also covers manufacturers from energy intensive industries such as steel, chemicals or cement that produce components that are used in these net-zero technologies and that invest in decarbonisation.

4. **What are Net-Zero Strategic Projects and how will they be supported?**

The Act introduces the notion of **"Net-Zero Strategic Projects"**, which are projects essential for improving and reinforcing the resilience and autonomy of the EU's net-zero industry. Such projects can be proposed by project promoters and will be selected by the relevant Member State based on their contribution to increasing the manufacturing capacity of (components of) net-zero technologies where the EU depends heavily on imports from a single third country or based on their contribution to the competitiveness of the EU's net-zero industry supply chain.

Net-Zero Strategic Projects benefit from `**priority status**' at national level, which ensures rapid administrative treatment as well as the fastest possible permitting under shorter time-limits. Net-Zero Strategic Projects may also be considered to be of overriding public interest. Promoters of net-zero strategic projects will also benefit from an additional focus within the Net-Zero Europe Platform, including with regards to financing advice. In addition, these projects should also be given, if necessary, urgent treatment in all judicial and dispute resolution procedures, in line with national and EU laws.

5. **How will permitting of net-zero technologies be simplified?**

Currently, the unpredictability, complexity and, in certain cases, excessive length of national permit-granting processes undermines the planning and investment security needed for an effective development of net-zero technology manufacturing projects in the EU. To increase efficiency and transparency, the Net-Zero Industry Act will thus require Member States to set up one-stop shops that act as single points of contact for project promoters within 6 months of entry into force of the Act. These single points of contact will facilitate and coordinate the entire permit-granting process and will also advise net-zero projects with regard to other important questions relevant to attracting investments and scaling-up net-zero projects in the EU.

The Net-Zero Industry Act introduces binding time limits on Member States for the entire permit-granting process, depending on a projects' status and size:

- For net-zero *strategic* projects: 9 months if the yearly manufacturing capacity is less than 1 GW, and 12 months if that capacity is more than 1 GW or if production is not measured in GW.
- For *other* net-zero technology manufacturing projects: 12 months if the yearly manufacturing capacity is less than 1 GW, and 18 months if that capacity is more than 1 GW or if production is not measured in GW.

To further reduce red tape, the Net-Zero Industry Act ensures that authorities accept all documents electronically and that they take into account pre-existing relevant studies and permits to avoid duplication. It will also allow project promoters to have easy access to information on procedures for the settlement of disputes.

At the same time, the environmental assessments and authorisations required under EU law that are an essential safeguard against negative environmental impacts will remain an integral part of the permit-granting procedures.

6. **What are Net-Zero Acceleration Valleys and what benefits do they bring?**

Member States **may designate Net-Zero Acceleration Valleys** to foster clusters of net-zero industrial activity. These Net-Zero Acceleration Valleys will attract investments in areas where infrastructure and other needs can be leveraged among industrial actors, further streamlining administrative procedures via their own dedicated Single points of contact. Under NZIA, the competent authorities will have to carry out environmental assessments (under Strategic Environmental Assessment directive and Habitats directive) of the geographic area, with the aim to streamline subsequent planning for individual projects.

Moreover, these Net-Zero Acceleration Valleys and projects located therein may be considered as having an overriding public interest, irrespective of whether they are strategic projects. This means that, where necessary, they can get a simplified assessment for specific derogations under the relevant Union environmental legislation. Public investment in these Net-Zero Acceleration Valleys may also benefit from the maximum co-financing rates under European Regional Development Fund, Cohesion Fund, Just Transition Fund and European Social Fund +.

7. **How does the Act incentivise the purchase of net-zero technology products that are sustainable, secure and contribute to resilience?**

The Net-Zero Industry Act incentivises the purchase of net-zero technologies from a diversified set of suppliers, contributing thus to resilient supply chains, and meeting ambitious standards with respect to several dimensions, including environmental sustainability, cybersecurity, innovation, and social considerations.

The above non-price criteria will have to be factored in the purchase of net-zero technology products through public procurement and the subsidy schemes aimed at incentivising the private purchasing of net-zero technologies. Moreover, the non-price criteria will also have to be considered in auctions for renewable energies (see question 8).

Overall, the inclusion of those so-called "non-price criteria" emphasizes that t, next to price and an economically advantageous offer, qualitative criteria will play an important role in the purchase of net-zero technologies, giving the producers who offer such products an advantage.

8. **How does the Act support deployment of renewable energy?**

By strengthening the EU supply chain of net-zero technologies that are key for the clean energy transition, the Net-Zero Industry Act will ensure that the supply of renewable energy technologies will match the demand needed to achieve the ambitious deployment targets set in the revised Renewable Energy Directive. It will further help to avoid supply chain bottlenecks which slow down the roll-out of renewable energy and thereby delay the clean energy transition.

Specifically on renewable energy, the Net-Zero Industry Act introduces provisions on the inclusion of non-price criteria in auctions for renewable energy. These will support the deployment of renewable energy technologies with high sustainability and resilience standards, while currently auctions are largely centered on the price criteria. The new rules require that Member States introduce criteria related to cybersecurity, the ability to deliver projects fully and on time, responsible business conduct, environmental sustainability, innovation, energy system integration and resilience, either at the pre-qualification or at the award stages of the auctions. Member States will have to apply these rules to 30% of their volume of auctions or to at least 6 GW of volume auctioned. Preparing the ground for the entry into force of the new provisions and to ensure harmonization, the Commission has recently issued recommendations and guidance to the Member States on auctions design for renewable energy with a specific focus on the inclusion of non-price criteria.

9. **How is the Net-Zero Industry Act supporting the deployment of CO_2 capture, transport, and storage projects?**

Starting a Carbon Capture, Utilization and Storage value chain requires cross-sectoral coordination to de-risk private investments in capturing CO_2 emissions. The Net-Zero Industry Act establishes an

EU-wide objective to achieve **an annual CO_2 storage capacity of 50 million tonnes in geological CO_2 storage sites in the EU by 2030,** to reassure industry investors that their captured emissions can be stored in the Union. Also, it introduces the concept of **Net-Zero Strategic Projects** for CO_2 value chains that include capture, transport, and storage to accelerate the development of Industrial Carbon Management solutions that industries can use to decarbonise their operations.

The Act removes a major barrier to developing CO_2 capture and storage as an economically viable climate solution, in particular for hard-to-abate emissions in energy-intensive industries, in line with the aims of the Industrial Carbon Management Communication.

Transparency is created by bringing together the most relevant assets to establish a single market for CO_2 storage services. This covers information from Member States about potential CO_2 storage capacity in terms of geological suitability and existing geological data, in particular from the exploration of hydrocarbon production sites. Storage site investors will benefit from information about planned CO_2 capture projects, and the necessary CO_2 transport infrastructures will benefit from Member States and the EU making all reasonable efforts to support its deployment. Furthermore, the Net-Zero Industry Act requires the EU's oil and gas producers to proportionally contribute to establishing the required CO_2 storage sites in the EU. Such sites can be recognised as Net-Zero Strategic Projects if they are located on EU territory, aim to provide operationally available CO_2 injection capacity by 2030 or earlier, and have applied for a permit for the safe and permanent geological storage of CO_2, in accordance with Directive 2009/31/EU.

10. **What are Net-Zero regulatory sandboxes?**

The Regulation empowers Member States to create Net-Zero regulatory sandboxes to test innovative net-zero technologies in a controlled environment for a limited amount of time. The Act provides for Member States to introduce such exceptional and temporary regulatory regimes allowing for the development, testing and validation of innovative, net-zero technologies before their placement on the market. Such sandboxes can be established by the Member States on their own initiative, or at the request of any company developing innovative net-zero technologies, complying with a set of eligibility and selection criteria. When eligible, small- and medium-sized enterprises will have additional support to access to sandboxes.

The modalities and the conditions for the establishment and operation of the net-zero regulatory sandboxes will be clarified in secondary legislation, namely implementing acts, stemming from the Regulation. In addition, the Commission published a Guidance for Sandboxes in July 2023 as announced in the New European Innovation Agenda. It supports Member States in preparing regulatory sandboxes.

11. **How will the Act ensure the appropriate workforce is available for net-zero industries?**

Strengthening the manufacturing capacity of Europe's net-zero technologies will not be possible without a sizeable skilled workforce. The Net-Zero Industry Act aims to mobilise all actors: industry, Member States authorities (including at regional and local level), education and training providers, and social partners, to quickly develop and deploy education and training programmes at large scale through European Net-Zero Industry Academies.

The Commission will support, including by providing seed-funding, the setting up of these European Net-Zero Industry Academies, each focusing on a net-zero technology based on an assessment of skills needs in the sector. The Academies will develop learning programmes, content and materials, and linked credentials for voluntary use by education and training providers across the EU.

The Act also seeks to foster the recognition of professional qualifications with particular interest for the net-zero industry. Member States will have to strive to check if the Net-Zero Industry Academies' learning programmes are equivalent to qualifications related to regulated professions in their country and, if so, facilitate recognition.

The Net-Zero Europe Platform via a standing sub-group on skills will support the functioning of the Academies as well as monitor trends on demand and supply of skills relevant to net-zero technologies.

12. **How will the Commission ensure implementation of the Act and involvement of industry and social partners on the road to net-zero?**

The **Net-Zero Europe Platform** brings together the Member States and the Commission to jointly assist and exchange best practices in relation to the actions and implementation of the Net-Zero Industry Act, as well as facilitate the exchange of information between stakeholders. Representatives

of the net-zero industries, organisations, experts, civil society, academia, trade unions and other third parties or established Industrial Alliances can be invited to participate in Platform meetings. The Platform will also help in coordinating the Net-Zero Academies and Net-Zero Industrial Partnerships.

Under the Platform there will also be a Net-Zero Industry Group. This group will be made up of net-zero industry representatives which will provide recommendations to the Platform.

To help reduce the regulatory burden for net-zero industries, a Net-Zero Regulatory Burden Scientific Advisory Group will be established which will develop science-informed advice on the impact of the regulatory burden in the Union on net-zero industries.

To strengthen the cooperation with European industry and social partners, Commission President von der Leyen announced the launch of the Clean Energy dialogues in her 2023 State of the Union speech, to discuss with them how to strengthen and support the implementation of the European Green Deal, contributing to a reinforced industrial approach. The Commission took stock of those series held so far in a Communication in April 2024.

For More Information

Press release

Net-Zero Industry Act

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