

Net-Zero Industry Act (NZIA)



Status

A provisional agreement on the Net-Zero Industry Act was endorsed by Member States and by the Parliament. The formal adoption and publication in the EU's Official Journal is soon.



Introduction

Considerable deployment of clean energy technologies is required to support the achievement of Europe's 2030 and 2050 climate targets. Currently, Europe largely imports these technologies, but it is increasing its efforts to expand its clean energy manufacturing capacity in order to reduce strategic dependencies.

On 16 March 2023, the Commission put forward a proposal for a Net-Zero Industry Act that aims to provide a regulatory environment which will support the scale-up of net-zero technologies. NZIA aims to reach by 2030 a goal of at least 40% manufacturing capacity of strategic net zero technologies and set an EU-level target for annual CO₂ injection capacity by 2030 (50 million tonnes).



Bioenergy Europe's Activity

The NZIA is discussed in the Working Group Competitiveness. Bioenergy Europe advocated for inclusion of bioenergy, as defined in the Renewable Energy Directive, in the definition of Net-zero technologies.

Timeline

- 16 Mar. 2023 • European Commission [legislative proposal on the Net Zero Industry Act \(NZIA\)](#)
- 21 Nov. 2023 • EU Parliament plenary adopted the [parliament's report](#)
- 7 Dec. 2023 • The Council adopted its [general approach](#)
- 6 Feb. 2024 • Provisional agreement between co-legislators
- 25 Apr. 2024 • The EU Parliament plenary adopted the provisional agreement
- 27 May 2024 • The Council [adopted the final text](#)
- TBD • Publication in the Official Journal of the European Union and entry into force



What's in it for the Bioenergy Sector?

By including Bioenergy in the list of net-zero technologies, its role in delivering the energy and climate target and improving EU resilience is acknowledged and it can receive preferential treatment.



Changes

Objective

The regulation aims at establishing a framework for innovating and expanding the manufacturing capacity of net-zero technologies in the EU, supporting the 2030 and 2050 climate targets, and enhancing the resilience of the EU's energy system by securing the supply of net-zero technologies.

Net-Zero Technologies

The regulation applies to the following 19 "net-zero technologies" (final products, components or machinery primarily used for the production of those products):

1. Solar technologies, including: solar photovoltaic, solar thermal electric and solar thermal technologies.
2. Onshore wind and offshore renewable technologies.
3. Battery and energy storage technologies.
4. Heat pumps and geothermal energy technologies.
5. Hydrogen technologies, including electrolysers and fuel cells.
6. **Sustainable biogas and biomethane technologies.**
7. **Carbon capture and storage technologies.**
8. Electricity grid technologies, including electric charging technologies for transportation and technologies to digitalise the grid.
9. Nuclear fission energy technologies, including nuclear fuel cycle technologies.
10. Sustainable alternative fuels technologies.
11. Hydropower technologies.
12. **Renewable energy technologies, not covered under the previous categories.**
13. **Energy system-related energy efficiency technologies, including heat grid technologies.**
14. Renewable fuels of non-biological origin technologies.
15. Biotech climate and energy solutions.
16. Transformative industrial technologies for decarbonisation not covered under the previous categories.
17. **CO₂ transport and utilisation technologies.**
18. Wind propulsion and electric propulsion technologies for transport.
19. Nuclear technologies not covered under previous categories.

Benchmarks

The Commission and Member States should support manufacturing projects to reduce the EU's strategic dependencies on these net-zero technologies by reaching a manufacturing capacity of:

- A benchmark of at least 40 % of the EU's annual deployment needs for the corresponding technologies necessary to achieve the EU's 2030 climate and energy targets.
- Reaching 15% of world production by 2040, except where the increased EU manufacturing capacity would be higher than needed to achieve EU 2040 climate and energy targets.

Net-Zero Strategic Projects

Projects which meet certain criteria can also be considered as **net-zero strategic projects**. Net-zero strategic projects receive preferential treatment and Member States should ensure that net-zero strategic projects receive expedited consideration. For this reason, fast permit-granting procedures are encouraged in the regulation:

- **9 months maximum** for the construction or expansion of net-zero strategic projects with a yearly manufacturing capacity of less than 1 GW.
- **12 months** for the construction or expansion of net-zero strategic projects, with a yearly manufacturing capacity of 1 GW or more.
- **18 months** for all necessary permits to operate a storage site in accordance with Directive 2009/31/EC.

In order to be considered as a net-zero strategic project, an initiative must be located in the EU, contribute to the regulation's objectives, and meet at least one of the following criteria.

- **The net-zero strategic project contributes to the technological and industrial resilience of the EU**
 - by adding manufacturing capacity for a net-zero technology, for which the **EU depends for over 50% on imports** from third countries;
 - or by adding manufacturing capacity by making a **substantive contribution to the 2030 climate or energy objectives** of the EU;
 - or by adding or updating existing manufacturing capacity for a net-zero technology of which the EU's manufacturing capacity represents a **significant share of world production** and that plays a crucial role in the resilience of the EU.
- **The net-zero strategic project has a clear positive impact on the EU's net-zero industry supply chain or downstream sectors**
 - by providing EU net-zero industries with **access to the best available net-zero technology** or to products produced in a first-of-a-kind manufacturing facility, and complies with one of the following criteria:
 - △ It sets measures to enhance **the skills of the workforce** required for net-zero technologies;
 - △ or it contributes to **SME competitiveness** as part of the supply chain of net zero technologies.
- **The net-zero strategic project** contributes to reaching the EU's climate or energy objectives by manufacturing net-zero technologies using practices that are **more environmentally friendly and more circular**.

Net-zero acceleration valleys

Member States may decide to designate "**net-zero acceleration valleys**" (NZAV), which are specific areas to accelerate net-zero industrial activities. The objectives of the valleys are to create clusters of net-zero industrial activity and further streamline administrative procedures.

Member States designating NZAVs should take measures to increase their attractiveness, such as support schemes facilitating the development of the necessary infrastructure in the valley, fostering private investments or enhancing the skills of the local workforce. Net-zero technology manufacturing projects in NZAVs should contribute to the security of supply of net-zero technologies in the Union and therefore to be in the public interest.

Net-zero regulatory sandboxes

Member States may establish "**net-zero regulatory sandboxes**" allowing for the development, testing and validation of innovative net-zero technologies. The Commission shall define the modalities and the conditions for the establishment and operation of the net-zero regulatory sandboxes through implementing acts.

CO₂ injection capacity

The regulation also establishes an EU-level annual target for CO₂ injection capacity of at least 50 million tonnes to be achieved by 2030. Each Member State should submit an annual report to the Commission providing relevant information, e.g. mapping CO₂ capture projects within its territory or an estimation of the need for CO₂ injection, storage and transport capacities.

The text also introduces new provisions to develop the necessary CO₂ transport infrastructure, including cross-border infrastructure, to facilitate achievement of the annual injection capacity target. The Commission should carry out an assessment of the functioning of the market for captured CO₂ by three years from the date of entry into force of the new regulation.

Key issue for the bioenergy sector

The agreed text includes “Biomass technologies”, in the Annex which is a list of final products and considered as primarily used for the production of net-zero technologies.

In the list of net zero technologies, carbon capture and transport technologies (CCS) are included, but carbon removals are not. However, CCS-based removal methods, such as Bioenergy with Carbon Capture and Storage (BECCS), could fall within the scope of the regulation, as part of the CCS definition.