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NOTE

From: General Secretariat of the Council
To: Council

Subject: Technologies scope and related benefits in the Net Zero Industry Act proposal
- *Information from the Commission*

Delegations will find attached a non-paper from the Commission on “Technologies scope and related benefits in the Net Zero Industry Act proposal” with a view to the AOB items at the meeting of the Competitiveness Council on 22 May 2023.

Technologies scope and related benefits in the Net Zero Industry Act proposal

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The Net Zero Industry Act (proposal for a Regulation, “NZIA”) presented on 16 March 2023 aims at strengthening Europe’s net-zero technologies manufacturing capacities. This non-paper recalls the technological scope of the NZIA proposal, as well as the benefits associated for the relevant project promoters.

The scope of the proposed Regulation is twofold:

(1) Net-zero technologies

Net-zero technologies cover, in a technologically neutral way, all technologies expected to contribute to our long-term climate neutrality objective.

These technologies are listed in Article 3(1) and include: renewable energy technologies; electricity and heat storage technologies; heat pumps; grid technologies; renewable fuels of non-biological origin technologies; sustainable alternative fuels technologies; electrolyzers and fuel cells; advanced technologies to produce energy from nuclear processes with minimal waste from the fuel cycle, small modular reactors, and related best-in-class fuels; carbon capture, utilisation, and storage technologies; and energy-system related energy efficiency technologies.

Focus is put on commercially available technologies with Technology Readiness Level (TRL)¹ 8 or above out of 11, that are expected to contribute to climate neutrality, while securing the resilience and competitiveness of the Union’s energy system.

¹ The TRL refers to a method of estimating the maturity of technologies and draws on the classification used by the International Energy Agency.

Importantly, the NZIA proposal ensures a value chain approach and coverage. In other words, the definition of “net-zero technologies” refers to the final products but also includes the specific components and specific machinery primarily used for the production of those products. “Component” means a small part of a net-zero technology that is manufactured and traded by a company starting from processed materials².

The NZIA proposal gives some automatic benefits to all net-zero technology manufacturing projects. These benefits range from improved conditions for investment and planning certainty via streamlined permitting procedures, to clear permitting time-limits (12-18 months) and “administrative certainty” – i.e., ensuring a one-stop shop approach for the administrative steps.

The NZIA proposal also gives importance to innovation. Project promoters of such technologies can benefit from regulatory sandboxes to test and develop innovative technologies and ensure a faster go-to-market phase. Finally, under the NZIA proposal, workers in these sectors will have access to Net-Zero Industry Academies that will provide up-skilling and re-skilling programmes and foster the recognition of professional qualifications within the Single Market.

(2) Technologies listed in the Annex

A smaller sub-set of technologies is identified in the Annex: the strategic net-zero technologies. The technologies listed in the Annex draw on three main criteria:

- 1) technology readiness level;
- 2) contribution to decarbonisation and competitiveness; and
- 3) security of supply risks.

These were selected based on the overall Net-Zero Industry Act objectives of scaling up the manufacturing capacity of net-zero technologies in the EU, particularly those that are commercially available and have a good potential for rapid scale-up.

² Please note that, in order to avoid double regulation, all processed materials already falling under the scope of the Critical Raw Materials Act proposal will be excluded from the scope of NZIA.

Based on these criteria, eight types of technologies are listed in the Annex of the proposed Regulation as strategic net-zero technologies: (1) Solar photovoltaic and solar thermal technologies; (2) Onshore wind and offshore renewable technologies, (3) Battery/storage technologies, (4) Heat pumps and geothermal energy technologies, (5) Electrolysers and fuel cells, (6) Sustainable Biogas/Biomethane technologies, (7) Carbon Capture Storage (CCS) technologies, (8) Grid technologies.

For the strategic net-zero technologies listed in the Annex – which include specific components and machineries – the NZIA proposal includes measures with the view of ensuring that by 2030, manufacturing capacity in the Union approaches or reaches an overall benchmark of at least 40% of the Union’s annual deployment needs for the corresponding technologies necessary to achieve the Union’s 2030 climate and energy targets. In addition, Member States’ public schemes to support the deployment of such technologies (through public procurement, auctions or schemes benefitting households or consumers which incentivise the purchase of net-zero technology final products) will need to include enhanced sustainability and resilience criteria.

Manufacturing projects that focus on these strategic technologies can become Strategic Net-Zero Projects. Such projects will be selected upon application of the project promoter by the Member State concerned, based on compliance with the criteria set out in Article 10 of the proposal. Strategic Net-Zero Projects enjoy permitting priority status and shorter permitting time-limits (9-12 months) with the possibility of being considered to be in the overriding public interest, depending on a case-by-case assessment of each project. In addition, Member States and the Commission will, without prejudice to State aid rules, undertake activities to accelerate and crowd-in private investments in net-zero strategic projects to accelerate their implementation in the form of administrative support. In addition, net-zero strategic projects will also be able to benefit from financing advice provided by the Net-Zero Europe Platform.

	One-stop shop; online access to information; streamlined procedures	Access to regulatory sandboxes	Access to net-zero academies	Benchmarks	Public schemes	Permitting deadlines	Overriding public interest	Priority status for projects	Financing
Net-Zero Technologies Renewable energy; storage; heat pumps; grid; RFNBO; SAF; electrolysers and fuel cells; nuclear; CCS; energy efficiency	Yes	Yes	Yes	-	-	12 – 18 months (depending on size of project)	-	-	-

Annex Solar PV and solar thermal; Onshore and offshore renewables; Battery/storage; Heat pumps and geothermal energy; Electrolysers and fuel cells; Sustainable Biogas/Biomethane; CCS; Grid.	Yes	Yes	Yes	EU manufacturing capacity benchmark of 40% of 2030 deployment needs for the corresponding technology (incl. specific components)	Public schemes (public procurement, auctions) to include enhanced sustainability and resilience criteria	<i>If strategic project, 9 - 12 months (depending on size)</i>	Yes, if strategic project, on a case by case basis	<i>Yes, if strategic project</i>	<i>If strategic project:</i> <ul style="list-style-type: none"> - MS and Commission to crowd-in private investment; - Financing advice from the Net Zero Platform
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