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WORKING PAPER

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From:	Presidency
To:	Working Party on Competitiveness and Growth (Industry)
N° Cion doc.:	ST 7613/23 + ADD 1
Subject:	Proposal for a Regulation of the European Parliament and of the Council on establishing a framework of measures for strengthening Europe's net-zero technology products manufacturing ecosystem (Net Zero Industry Act)

Delegations will find attached the amendments adopted by the European Parliament on 21 November 2023 on the Net Zero Industry Act proposal.



TEXTS ADOPTED

P9_TA(2023)0401

Framework of measures for strengthening Europe's net-zero technology products manufacturing ecosystem (Net Zero Industry Act)

Amendments adopted by the European Parliament on 21 November 2023 on the proposal for a regulation of the European Parliament and of the Council on establishing a framework of measures for strengthening Europe's net-zero technology products manufacturing ecosystem (Net Zero Industry Act) (COM(2023)0161 – C9-0062/2023 – 2023/0081(COD))¹

(Ordinary legislative procedure: first reading)

¹

The matter was referred back for interinstitutional negotiations to the committee responsible, pursuant to Rule 59(4), fourth subparagraph (A9-0343/2023).

Amendment 1

AMENDMENTS BY THE EUROPEAN PARLIAMENT*

to the Commission proposal

2023/0081 (COD)

Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

**on establishing a framework of measures for strengthening Europe's net-zero
technology products manufacturing ecosystem (Net Zero Industry Act)**

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular
Articles 114 thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national Parliaments,

Having regard to the opinion of the European Economic and Social Committee²,

Having regard to the opinion of the Committee of the Regions³,

Acting in accordance with the ordinary legislative procedure,

Whereas:

***(-1) The prime medium-term objective of European industrial policy is to enable Union
industry to implement the energy, climate, environmental and digital transitions,
while preserving its competitiveness on the global market, maintaining quality jobs***

* Amendments: new or amended text is highlighted in bold italics; deletions are indicated
by the symbol ▮.

² *OJ C 349, 29.9.2023, p.179.*

³ *OJ C, C/2023/254, 26.10.2023, ELI: <http://data.europa.eu/eli/C/2023/254/oj>*

in Europe and strengthening its ability to innovate and produce in Europe, particularly with regard to clean technologies.

- (1) The Union has committed to the accelerated decarbonisation of its economy and ambitious deployment of renewable energy sources to achieve climate neutrality or net zero emissions (emissions after deduction of removals) by 2050. That objective is at the heart of the European Green Deal, the updated EU Industrial Strategy, and in line with the Union's commitment to global climate action under the Paris Agreement⁴. To reach the climate neutrality goal, Regulation (EU) 2021/1119 of the European Parliament and of the Council⁵ sets a binding Union climate target to reduce net greenhouse gas emissions by at least 55% by 2030 compared to 1990. The proposed "Fit for 55"⁶ package aims to deliver on the Union's 2030 climate target and revises and updates Union legislation in this respect.
 - (1a) *As outlined in the Green Deal Industrial Plan, the Union needs to take measures to ensure it can speed up net-zero industrial transformation at home. This Regulation is part of those measures and aims to enhance the business case for industrial decarbonisation in the Union.*
 - (1b) *In the interest of the Union's strategic autonomy, a greater focus on the circularity and long lifespans of technologies is essential to strengthen the resilience of Union's manufacturing industry, while reducing its environmental impacts to contribute to its sustainable competitiveness.*
- (2) The Single Market provides the appropriate environment for enabling access at the necessary scale and pace to the technologies required to achieve the Union's climate ambition *as well as the promise of the European Green Deal to turn decarbonisation into sustainable competitiveness*. Given the complexity and the transnational character of net-zero technologies, uncoordinated national measures to ensure access

⁴ Council Decision (EU) 2016/1841 of 5 October 2016 on the conclusion, on behalf of the European Union, of the Paris Agreement adopted under the United Nations Framework Convention on Climate Change OJ L 282, 19.10.2016, p. 4.

⁵ ***Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law') (OJ L 243, 9.7.2021, p. 1).***

⁶ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. 'Fit for 55': delivering the EU's 2030 Climate Target on the way to climate neutrality. COM(2021) 550, 14.7.2021.

to those technologies would have a high potential of distorting competition and fragmenting the Single market. Therefore, to safeguard the functioning of the Single market it is necessary to create a common Union legal framework to collectively address this central challenge by increasing the Union's resilience and security of supply in the field of net-zero technologies.

- (2a) *Any additional mobilisation of State aid should be targeted and temporary, and should be consistent with Union policy objectives such as the Green Deal and the European Pillar of Social Rights. Such financing should not lead to additional disparities among Member States in line with the Union's competition and cohesion policies.*
- (2b) *The International Energy Agency estimates that the global market for key mass manufactured clean energy technologies will be worth around USD 650 billion a year by 2030, which is more than three times the current level. The net-zero industry globally is growing at an increasing rate, to the extent of demand sometimes outpacing supply. The Union industry is part of an open, export-oriented, capital intensive, social market economy that can deliver prosperity for Union citizens only if it is competitive on and open to the global market. The Union's ambition for the net-zero industry should be aligned with that reality and should aim to capture a significant global market share.*
- (3) Regarding external aspects, *the Union will step up its efforts to join forces with open, democratic partners committed to the Paris Agreement.* Regarding emerging markets and developing economies, the *Union* will seek *mutually beneficial* partnerships in the framework of its Global Gateway strategy, which contribute to the diversification of its raw materials supply chain, *to the achievement of global climate objectives* as well as to partner countries' efforts to pursue twin transition and develop local value addition.
- (4) To fulfil those commitments, the Union must accelerate its pace of transition to *a net-zero economy, including by increasing the share of clean energy in its energy mix, as well as* by increasing energy efficiency and the share of renewable energy sources. This will contribute to achieving the *Union* targets of the European Pillar of Social Rights Action Plan for 2030 of an employment rate of at least 78% and participation

in training of at least 60% of adults. It will also contribute to ensuring that the green transition is fair and equitable⁷.

- (5) The higher energy prices after the unjustified and unlawful military aggression by the Russian Federation against Ukraine, gave a strong impetus to accelerate the implementation of the European Green Deal and reinforce the resilience of the Energy Union by speeding up the clean energy transition and ending any dependence on fossil fuels exported from the Russian Federation. The REPowerEU plan⁸ plays a key role in responding to the hardships and global energy market disruption caused by the invasion of Ukraine by the Russian Federation. That plan aims to accelerate the energy transition in the European Union, in order to reduce the Union's gas and electricity consumption and to boost investments in the deployment of energy efficient and low carbon solutions. That plan sets inter alia the targets to double solar photovoltaic capacity by 2025 and to install 600 GW of solar photovoltaic capacity by 2030; to double the rate of deployment of heat pumps; to produce 10 million tonnes of domestic renewable hydrogen by 2030; and to substantially increase production of biomethane ***up to 35 billion cubic meters by 2030***. The plan also sets out that achieving the REPowerEU goals will require diversifying the supply of low carbon energy equipment and of critical raw materials, reducing sectoral dependencies, overcoming supply chain bottlenecks and expanding the Union's clean energy technology manufacturing capacity. As part of its efforts to increase the share of renewable energy in power generation, industry, buildings and transport, the Commission proposes to increase the target in the Renewable Energy Directive to 45% by 2030 and to increase the target in the Energy Efficiency Directive to 13%. This would bring the total renewable energy generation capacities to 1236 GW by 2030, in comparison to 1067 GW by 2030 envisaged under the 2021 proposal and will see increased needs for storage through batteries to deal with intermittency in the electricity grid. Similarly, policies related to the decarbonisation of the road sector, such as Regulation (EU)

⁷ Council Recommendation on ensuring a fair transition towards climate neutrality, adopted on 16 June 2022 as part of the Fit for 55 package.

⁸ ***Communication of 18 May 2022 from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, REPowerEU Plan, COM/2022/230 final, 18.05.2022.***

2019/631⁹ and Regulation (EU) 2019/1242¹⁰ *of the European Parliament and the Council* will be strong drivers for a further electrification of the road transport sector and thus increasing demand for batteries.

- (6) The net-zero transformation is already causing huge industrial, economic, and geopolitical shifts across the globe, which will become ever more pronounced as the world advances in its decarbonisation efforts. The road *towards a climate neutral, resource-efficient and net zero economy* translates into strong opportunities for the expansion of Union's net-zero industry, making use of the strength of the Single Market, by promoting investment in *net-zero* technologies and their supply chains. These are the technologies *needed to deliver the objectives of the National Energy and Climate Plans, contributing to the resilience and competitiveness of Union industry*, allowing for the decarbonisation of our economic sectors, from energy supply to transport, buildings, and industry. A strong net zero industry within the Union can help significantly in reaching the Union's climate and energy targets effectively, as well as in supporting other Green Deal objectives, *such as* creating *quality* jobs and *sustainable* growth, *by creating an industrial base geared towards export as well as domestic supply*.
- (7) To meet the *Union's* climate and energy targets, energy efficiency needs to be prioritised. Saving energy is the cheapest, safest and cleanest way to meet those targets. 'Energy efficiency first' is an overall principle of *Union's* energy policy and is important in both its practical applications in policy and investment decisions. Therefore, it is essential to expand the Union's manufacturing capacity for energy efficient technologies, such as heat pumps and smart grid technologies, that help the EU reduce and control its energy consumption.
- (8) The Union's decarbonisation objectives, security of energy supply, digitalisation of the energy system and electrification of demand, for example in mobility and the need for fast recharging points, require an enormous expansion of electricity grids in the

⁹ *Regulation (EU) 2019/631 of the European Parliament and of the Council of 17 April 2019 setting CO₂ emission performance standards for new passenger cars and for new light commercial vehicles, and repealing Regulations (EC) No 443/2009 and (EU) No 510/2011 (recast) (OJ L 111, 25.4.2019, p. 13).*

¹⁰ *Regulation (EU) 2019/1242 of the European Parliament and of the Council of 20 June 2019 setting CO₂ emission performance standards for new heavy-duty vehicles and amending Regulations (EC) No 595/2009 and (EU) 2018/956 of the European Parliament and of the Council and Council Directive 96/53/EC (OJ L 198, 25.7.2019, p. 202).*

Union, both at transmission level and at distribution level. At transmission level, high-voltage direct current (HVDC) systems are needed to connect offshore renewable energies; while at distribution level, connecting electricity providers and managing demand-side flexibility builds on investments in innovative grid technologies, such as electric vehicles smart charging (EVSC), energy efficiency building and industry automation and smart controls, advanced meter infrastructure (AMI) and home energy management systems (HEMS). The electricity grid needs to interact with many actors or devices based on a detailed level of observability, and hence availability of data, to enable flexibility, smart charging and smart buildings with smart electricity grids *and small-scale flexibility services* enabling *demand-side* response from consumers and the uptake of renewables. Connecting the net-zero technologies to the network of the Union requires the substantial expansion of manufacturing capabilities for electricity grids in areas such as offshore and onshore cables, substations and transformers.

- (8a) *Clustering industrial activity directed towards industrial symbiosis can minimise the environmental impact of the activities as well as providing efficiency gains for industry. As such, clustering can contribute substantially to achieving the objectives of this Regulation. In this regard; this Regulation promotes the development of Net-Zero Industry Valleys (Valleys). Those Valleys should be limited in geographical and technology scope in order to promote industrial symbiosis. Valleys should be designated by Member States and each designation should be accompanied by a Plan with concrete national measures to increase the attractiveness of the Valley as a location for manufacturing activities. Valleys should in particular be used as a tool for re-industrialisation of regions, especially for coal regions in transition.*
- (8b) *Member States should be able to designate and support Valleys. When designating a Valley the Member State should draw up a plan for the Valley specifying which net-zero manufacturing activity is to be covered in the Valley (Plan). The Member State should also conduct environmental impact assessments as required for the net-zero manufacturing activities that are to take place in the Valley. Such impact assessments substantially limits the need for undertakings to perform those assessments for permits for the net-zero manufacturing activities in the scope of the Valley. The Plan should include the results of the environmental impact assessments as well as the national measures to be taken to minimise or mitigate negative environmental impact. The Plan should also include concrete national measures to support industrial activity in the scope of the Valley. Those measures should include*

measures to invest in or trigger private investment in energy, digital and transport infrastructure as well as measures to reduce the operational expenditure for the industry in the Valley, such as contracts of difference for energy prices. Other measures to be considered are measures to strengthen IP protection, the setting up of an innovation hub in the Valley as well as to attract start-ups to the Valley. In order to provide investment security for industry, the Plan should also specify the duration of the support measures.

- (9) Additional policy effort is necessary to support those technologies that are commercially available and have a good potential for rapid scale up to support the Union's climate targets, improve the security of supply for net-zero technologies and their supply chains, and safeguard or strengthen the overall resilience and competitiveness of the Union's energy system. It includes access to a safe and sustainable source of best-in-class fuels, as described in recital 8 of Commission Delegated Regulation (EU) 2022/1214.
- (10) To achieve the 2030 objectives a particular focus is needed on the net-zero ***strategic projects***, also in view ***of*** their significant contribution towards the path to net zero by 2050. These ***projects*** play a key role in the Union's open strategic autonomy, ensuring that citizens have access to clean, affordable, secure energy. Given their role, these ***projects*** should benefit from even faster permitting procedures, obtain the status of the highest national significance possible under national law and benefit from additional support to crowd-in investments. ***To be recognised as a strategic project, the project promoter should comply with applicable obligations in the fields of social and labour law established by Union or national law.***
- (10a) ***Net-zero strategic projects should be implemented sustainably by relying on the use of socially responsible practices including respect of human and labour rights, by meaningfully engaging with local communities and by relying on transparent business practices with adequate compliance policies to prevent and minimise risks of adverse impacts on the proper functioning of public administration, including corruption and bribery.***
- (11) In order to ensure that the Union's future energy system is resilient this scaling-up should be carried out across the whole supply chain of the technologies in question, in full complementarity with the Critical Raw Materials Act.
- (11a) ***Since 2007 and the Commission communications of 22 November 2007 entitled 'A***

European Strategic Energy Technology Plan (Set-Plan) - Towards a low carbon future' and 20 October 2023 on the revision of the Strategic Energy Technology (SET) Plan, the Strategic Energy Technology Plan (SET Plan) has been driving the Union's innovation in energy technologies. As such, the SET Plan has significantly contributed to strong knowledge base on energy technologies and has been essential for the alignment of strategic priorities on research, innovation and deployment of clean energy technologies. To ensure that the Union can deliver its full carbon-neutrality objectives by 2050, that knowledge base needs to be leveraged and further enhanced. The SET Plan is therefore an irreplaceable instrument for the achievement of the objectives of this Regulation and is the backbone for the innovation agenda of this Regulation.

- (12) In 2020 the Commission adopted an EU strategy for energy system integration. It set out a vision on how to accelerate the transition towards a more integrated energy system, one that supports a climate neutral economy at the least cost across sectors. It encompasses three complementary and mutually reinforcing concepts: first, a more 'circular' energy system, with energy efficiency at its core; second, a greater direct electrification of end-use sectors; third, the use of renewable and low-carbon fuels, including hydrogen . Considerations related to energy system integration refer to solutions for fully integrating all the electricity generated by renewable energy installations into the wider energy system. This means, for instance, adopting technical solutions that allow for the integration of surplus electricity generated by renewable electricity installations, including through storage *and by expanding plannable fossil free power sources in the grid*, in its various forms and demand-side management.
- (12a) *Carbon dioxide capture and storage (CCS) is a technology that will contribute to mitigating climate change. It consists of the capture of carbon dioxide (CO₂) from industrial installations, its transport to a storage site and its injection into a suitable underground geological formation for the purposes of permanent storage.*
- (13) The development of carbon capture and storage solutions for industry is confronted with a coordination failure. **First**, despite the growing CO₂ price incentive provided by the EU Emissions Trading System, for industry to invest into capturing CO₂ emissions making such investments economically viable, they face a significant risk of not being able to access a permitted geological storage site. **Second**, investors into first CO₂ storage sites face upfront costs to identify develop and appraise them even

before they can apply for a regulatory storage permit. Transparency about potential CO₂ storage capacity in terms of the geological suitability of relevant areas and existing geological data, in particular from the exploration of hydrocarbon production sites, can support market operators to plan their investments. Member State should make such data publicly available and report regularly in a forward-looking perspective about progress in developing CO₂ storage sites and the corresponding needs for injection and storage capacities above, in order to collectively reach the Union-wide target for CO₂ injection capacity. ***Third, CO₂ storage projects are only economically viable when there is a business case along the full value chain, including transportation. Any legal storage obligations should therefore be accompanied by effective Union and national policies and measures to ensure coordination and investment across the value chain.***

- (14) A key bottleneck for carbon capture investments that are today increasingly economically viable is the availability of operating CO₂ storage sites in ***the Union***, which underpin the incentives from Directive 2003/87/EC ***of the European Parliament and the Council***¹¹. To scale up the technology and expand its leading manufacturing capacities, the ***Union*** needs to develop a forward-looking supply of permanent geological CO₂ storage sites permitted in accordance with Directive 2009/31/EU ***of the European Parliament and of the Council***¹². By defining a Union target of 50 million tonnes of annual operational CO₂ injection capacity by 2030, in line with the expected capacities needed in 2030, the relevant sectors can coordinate their investments towards a ***Union*** Net-Zero CO₂ transport and storage value chain that industries can use to decarbonise their operations. This initial deployment will also support further CO₂ storage in a 2050 perspective. According to the Commission's estimates, the Union could need to capture up to 550 million tonnes of CO₂ annually by 2050 to meet the net zero objective, including for carbon removals. Such a first industrial-scale storage capacity will de-risk investments into the capturing of CO₂ emissions as important tool to reach climate neutrality. ***In view of the expected***

¹¹ ***Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC (OJ L 275, 25.10.2003, p. 32).***

¹² ***Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide and amending Council Directive 85/337/EEC, European Parliament and Council Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC, 2008/1/EC and Regulation (EC) No 1013/2006 (OJ L140, 5.6.2009, p. 114).***

storage requirements in 2050, the Union's CO₂ storage market will have to be complemented by a market that covers third countries in Europe with large storage potential. When this regulation is incorporated into the EEA Agreement, the Union target of █ annual operational CO₂ injection capacity █ will be adjusted accordingly. *To ensure the achievement of Union's target, Member States should take the necessary measures to facilitate and incentivize the deployment of carbon capture and storage projects. Such measures should be able to include measures incentivizing emitters to capture emissions, funding support for investors for needed infrastructure to transport CO₂ to the storage site and direct funding of CO₂ storage projects.*

- (15) By defining CO₂ storage sites that contribute to the Union's 2030 target as *net-zero technology manufacturing* projects, *or net-zero strategic projects*, the development of CO₂ storage sites can be accelerated and facilitated, and the increasing industrial demand for storage sites can be channelled towards the most-cost-effective storage sites. An increasing volume of depleting gas and oil fields that could be converted in safe CO₂ storage sites are at the end of their useful production lifetime. In addition, the oil and gas industry has affirmed its determination to embark on an energy transition and possesses the assets, skills and knowledge needed to explore and develop additional storage sites. To reach the Union's target of 50 million tonnes of annual operational CO₂ injection capacity by 2030, the sector needs to pool its contributions to ensure that carbon capture and storage as a climate solution is available ahead of demand. In order to ensure a timely, Union-wide and cost-effective development of CO₂ storage sites in line with the *Union* objective for injection capacity, licensees of oil and gas production in the *Union* should contribute to this target pro rata of their oil and gas manufacturing capacity, while providing flexibilities to cooperate and take into account other contributions of third parties. *Licensees of oil and gas production within the Union should make every effort within their authority to undertake the requisite investments in order to meet their respective contribution towards the achieving of annual operational CO₂ injection capacity. However, these efforts should be subject to objective commercial, financial, technical, legal, and environmental limitations beyond the control of these companies, which may lead to individual storage projects, despite reasonable and commercially prudent efforts, being objectively unable to be completed in time to fulfil the obligations set out under this Regulation.*

- (15a) *Additional policy effort is necessary to support the cross-border transportation of CO₂ as the London Protocol initially prohibits export of CO₂ for permanent geological storage below the seabed. The London Protocol was amended by contracting parties in 2009 to allow for cross border transportation of CO₂ for sub-seabed storage, but the amendment must be ratified by two thirds of contracting parties to enter into force. It is unlikely that this will occur in the near term. Additional policy effort is necessary to address the barrier to deployment and the creation of an internal market for cross-border transportation of CO₂.*
- (15b) *Additional policy effort is essential to secure the deployment of cross-border infrastructure planning. Accessibility and connectivity of the full range of CO₂ transportation arrangements play a critical role for the deployment of CCS and Carbon Capture and Utilisation (CCU) projects. Such arrangements cover ship, barge, train and truck as well as fixed facilities for connecting and docking, for liquefaction, buffer storage and converters of CO₂ in view of its further transportation through pipelines and in dedicated modes of transport.*
- (15c) *The Commission should ensure a continuous revision and extension of the CO₂ injection capacity and storage target for the period post-2030 to reflect the needs of the Union to reach its 2040 climate target and climate neutrality by 2050 in synergy with related Union law.*
- (15d) *Using captured CO₂ in certain production processes can permanently store CO₂ and/or contribute to reducing the Union's dependence on fossil fuels. Therefore, all entities involved in the value chain of CO₂ injection activities set out in this Regulation should be encouraged to consider if the CO₂ that is to be stored could be permanently stored in new products or could support the Union's objectives to reduce its reliance on fossil fuels.*
- (16) The Union has helped build a global economic system based on open, **transparent** and rules-based trade, pushed for respecting and advancing social and environmental sustainability **and climate transition** standards, and is fully committed to those values. *The Union aims to level the playing field, in particular by fighting against unfair trading practices and production overcapacity, to secure a fair competitive environment for Union industry, including through net-zero industrial partnerships (Net-Zero Industrial Partnerships), providing quality jobs for workers.*
- (17) To address security of supply issues and contribute to supporting the resilience of

Union's energy system and decarbonisation and modernisation efforts, the net-zero technology manufacturing capacity in the Union needs to expand. Union manufacturers of solar photovoltaic (PV) technologies need to increase their competitive edge and improve security of supply perspectives, by aiming to reach at least 30 gigawatt of operational solar PV manufacturing capacity by 2030 across the full PV value chain, in line with the goals set out in the European Solar Photovoltaic Industry Alliance, which is supported under the Union's Solar Energy Strategy¹³. Union manufacturers of wind and heat pump technologies need to consolidate their competitive edge and maintain or expand their current market shares throughout this decade, in line with the Union's technology deployment projections that meet its 2030 energy and climate targets. This translates into a Union manufacturing capacity for wind of at least 36 GW and, respectively, for heat pumps of at least 31 GW in 2030. Union manufacturers of batteries and electrolyzers need to consolidate their technology leadership and actively contribute to shaping these markets. For battery technologies this would mean contributing to the objectives of the European Battery Alliance and aim at almost 90% of the Union's battery annual demand being met by the Union's battery manufacturers, translating into a Union manufacturing capacity of at least 550 GWh in 2030. For *Union* electrolyser manufacturers, the REPowerEU plan projects 10 million tonnes of domestic renewable hydrogen production and a further up to 10 million tonnes of renewable hydrogen imports by 2030. To ensure *Union's* technological leadership translates into commercial leadership, as supported under the Electrolyser Joint Declaration of the Commission and the European Clean Hydrogen Alliance, *Union's* electrolyser manufacturers should further boost their capacity, such that the overall installed electrolyser capacity being deployed reaches at least 100 GW hydrogen by 2030. *The RePowerEU plan sets furthermore an objective of boosting sustainable biomethane production to 35 billion cubic meter by 2030. With its supply chain largely based in Europe today, biomethane already makes a contribution to Union's resilience which should be further promoted.*

- (18) Considering these objectives together, while also taking into account that for certain elements of the supply chain (such as inverters, as well as solar cells, wafers, and ingots for solar PV or cathodes and anodes for batteries) the Union manufacturing capacity

¹³ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: EU Solar Energy Strategy, SWD(2022) 148 final, 18.05.2022.

is low, the **Union's** annual **manufacturing** capacity should aim **to reach** least 40% of annual deployment needs by 2030 for the **net-zero** technologies **defined in this Regulation**. **Moreover, the Union's net-zero technologies annual manufacturing capacity should cover at least 25% of global demand for the corresponding technologies.**

- (19) Increasing the manufacturing capacity of net-zero technologies in the **Union** will **increase** the global supply of net-zero technologies and the transition towards clean **economic development** globally. **Together with other measures to enhance the Union's competitiveness, measures to increase the manufacturing capacity in the Union should also ensure that the Union should play a dominant role in strategic parts of the value chain, including final products, to ensure the level of security of supply that the Union needs for the purpose of achieving its climate objectives.**
- (20) At the same time, net-zero technology products will contribute to the Union's resilience and security of supply of clean energy. A secure supply of clean energy is a prerequisite for economic development, as well as for public order and security. Net-zero technology products will also yield benefits to other strategically important economic sectors, such as farming and food production by securing access to clean energy and machinery at competitive prices, thus contributing sustainably to EU food security and to providing an increasing outlet for bio-based alternatives through circular economy. In the same way, the fulfilment of the Union's climate ambitions will translate both into economic growth and social well-being.
- (21) **The manufacturing of net-zero technologies depends on complex and globally interlinked value chains.** In order to maintain competitiveness and reduce current strategic import dependencies in key net-zero technology products and their supply chains, while avoiding the formation of new ones, the Union needs to continue strengthening its **industrial base** and become more competitive and innovation friendly. The Union needs to enable the development of manufacturing capacity faster, simpler and in a more predictable way **by reducing the regulatory and administrative burden on industrial activities within its territory and levelling the playing field with international competitors. In particular, the Union should, by 2030, aim to achieve a 20% reduction of the general regulatory burden on industry, a 40% reduction of the regulatory burden for placing a new product on the internal market, and a 40% reduction of the administrative burden for SMEs and start-ups. Those efforts**

should, in particular, be made within the Better Regulation framework and without prejudice to the Union's environmental and labour standards. The Commission should report on the progress towards those objectives in its Annual Burden Survey.

- (21a) In order to ensure the Union's access to a secure and sustainable supply of net-zero technologies needed to safeguard the Union's resilience and in order to reach its climate neutrality targets, the internal market needs to be a supportive environment for innovation in net-zero technologies to take place. Innovation will be a crucial factor in ensuring the Union's competitiveness as well as reaching net-zero objectives as soon as possible. Given the rapid developments in net-zero technologies as well as the significant regulatory guidance provided for the green transition, it is of utmost importance for the achievement of the objectives of this Regulation that the potential impacts of Union legislation and policy initiatives on innovation are thoroughly considered during their preparation, review and revision through the application of the innovation principle as set out in the Better Regulation Tool #22 as well as the Commission communication of 15 May 2018 entitled "A renewed European Agenda for Research and Innovation - Europe's chance to shape its future".*
- (21b) The reduction of the regulatory and administrative burdens as well as having a suitable regulatory framework is particularly important for SMEs. Therefore, the Commission should appoint an SME Envoy as an adviser to its President. The SME Envoy should have a mandate to ensure that the interests of SMEs are sufficiently reflected the Union's policies and legal acts. Every new Commission should be able to appoint an SME Envoy within six months of its own appointment.*
- (21c) The Transition Pathways that are being developed following the Updated EU Industry Strategy of 2021 should be updated to reflect the objectives of this Regulation and should identify enablers as well as bottlenecks for the transition and global competitiveness of Union industry.*
- (22) Pursuant to Regulation (EU) 2018/1999 of the European Parliament and of the*

Council¹⁴ Member States should submit updated drafts of their 2021-2030 National Energy and Climate Plans (NECPs) in June 2023. As emphasised in the Commission's Guidance to Member States for the update of the 2021-2030 national energy and climate plans¹⁵, the updated plans should describe Member States' objectives and policies to facilitate the scale-up of manufacturing projects of commercially available energy efficient and low-carbon technologies, equipment and key components within their territory. Those plans should also describe Member States' objectives and policies to achieve such scale-up through diversification efforts in third countries, and to enable their industries to capture and store CO₂ emissions permanently in geological storage sites. ***Those national energy and climate plans should form the basis upon which the need for net-zero technologies are determined.***

- (23) In addition, the Communication on the Green Deal Industrial Plan for the Net-Zero Age¹⁶ sets out a comprehensive approach to support a clean energy technology scale up based on four pillars. The first pillar aims at creating a regulatory environment that simplifies and fast-tracks permitting for new net-zero technology manufacturing and assembly sites and facilitates the scaling up of the net-zero industry of the Union. The second pillar of the plan is to boost investment in and financing of net-zero technology production, through the revised Temporary Crisis and Transition Framework adopted in March 2023 and the creation of a European Sovereignty fund to preserve the **Union's** edge on critical and emerging technologies relevant to the green and digital transitions. The third pillar relates to developing the skills needed to make the transition happen and increase the number of skilled workers in the clean energy technology sector. The fourth pillar focuses on trade and the diversification of the supply chain of critical raw materials. That includes creating a critical raw materials

¹⁴ ***Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, p. 1).***

¹⁵ ***Commission Notice on the Guidance to Member States for the update of the 2021-2030 national energy and climate plans 2022/C 495/02, (OJ C 495, 29.12.2022, p. 24).***

¹⁶ Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions: A Green Deal Industrial Plan for the Net-Zero Age, COM/2023/62 final, 01.02.2023.

club, working with like-minded partners to collectively strengthen supply chains and diversifying away from single suppliers for critical input.

- (24) Under the first pillar, the Union should develop and maintain an industrial basis for the provision of net-zero technology solutions to secure its energy supply, while also living up to its ambitions on climate neutrality. To support that goal and to avoid dependencies for the supply of net-zero technologies that would delay the Union's greenhouse gas emission reductions efforts or put at risk the security of supply of energy, this Regulation shall set out provisions to encourage demand for sustainable and resilient net-zero technologies.
- (25) Directives 2014/23/EU¹⁷, 2014/24/EU¹⁸ and 2014/25/EU¹⁹ *of the European Parliament and of the Council* already allow contracting authorities and entities awarding contracts through public procurement procedures to rely, in addition to price or cost, on additional criteria for identifying the most economically advantageous tender. Such criteria concern for instance the quality of the tender including social, ***governance***, environmental and innovative characteristics. When awarding contracts for net-zero technology through public procurement, contracting authorities and contracting entities should duly assess the tenders' contribution to ***environmental and social*** sustainability and resilience in relation to a series of criteria relating to the tender's environmental sustainability, innovation, system integration and to resilience. ***Contracting authorities and entities must ensure that procedures treat providers established in other Member States equally to national providers and to ensure non-discrimination when establishing criteria.***
- (26) Social sustainability criteria can already be applied under existing legislation and can include working conditions and collective bargaining in line with the European Pillar of Social Rights in line with ***Article*** 30(3) of Directive 2014/23/EU, ***Article*** 18(2) of Directive 2014/24/EU and ***Article*** 36(2) of Directive 2014/25/EU. Contracting authorities should ***consider the tenders*** contribute to social sustainability by taking the

¹⁷ ***Directive 2014/23/EU of the European Parliament and of the Council of 26 February 2014 on the award of concession contracts (OJ L 94, 28.3.2014, p. 1).***

¹⁸ ***Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC (OJ L 94, 28.3.2014, p. 65).***

¹⁹ ***Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC (OJ L 94, 28.3.2014, p. 243).***

appropriate measures to ensure that in the performance of public contracts economic operators comply with applicable obligations in the fields of *Union and national* social and labour law *as well as in* collective agreements or by the international environmental, social and labour law provisions listed in Annex X *to* Directive 2014/23/EU, Annex X *to* Directive 2014/24/EU and Annex XIV *to* Directive 2014/25/EU, *and offer attractive employment.*

- (27) Without prejudice to Union legislation applicable to a specific technology, including under the Proposal for a Regulation of the European Parliament and of the Council establishing a framework for setting ecodesign requirements for sustainable products²⁰ and the Proposal for a Regulation of the European Parliament and of the Council concerning batteries and waste batteries²¹, and unless otherwise indicated therein, when evaluating the environmental sustainability of net-zero solutions procured on the basis of this Regulation, contracting authorities and contracting entities *are encouraged to* take into account various elements with an impact on the climate and the environment. These may include, for instance, the durability and reliability of the solution; the ease of repair and maintenance; the ease of upgrading and refurbishment; the ease and quality of recycling; the use of *certain* substances; the consumption of energy, water and other resources in one or more life cycle stages of the product; the weight and volume of the product and its packaging; the incorporation *renewable materials or* of used components; the quantity, characteristics and availability of consumables needed for proper use and maintenance; the environmental footprint of the product and its life cycle environmental impacts; the carbon footprint of the product; the microplastic release; emissions to air, water or soil released in one or more life cycle stages of the product; the amounts of waste generated; the conditions for use. *In line with the Union's Cybersecurity Strategy, contracting authorities for tenders under this Regulation should reject offers which have not been certified under the relevant cyber security certification scheme.*
- (28) For the purposes of *ensuring a more secure supply by* taking into account within a public procurement procedure the need to diversify sources of supply of net-zero

²⁰ Proposal for a Regulation of the European Parliament and of the Council establishing a framework for setting ecodesign requirements for sustainable products and repealing Directive 2009/125/EC, COM/2022/142 final, 30.03.2022.

²¹ Proposal for a Regulation of the European Parliament and of the Council concerning batteries and waste batteries, repealing Directive 2006/66/EC and amending Regulation (EU) No 2019/1020, COM/2020/798 final, 10.12.2020.

technologies away from single sources of supply within the meaning of Article 19(2), and without prejudice to the Union's international commitments, the supply should at least be deemed insufficiently diversified where a single source supplies for more than 65% of the demand for a specific net-zero technology within the Union.

- (29) For the purposes of setting up schemes benefitting households, *businesses*, or consumers which incentivise the purchase of net-zero technology final products, and without prejudice to the Union's international commitments, the supply should be deemed insufficiently diversified where a single source supplies more than 50% of the total demand *within the Union* for a specific net-zero technology ■. To ensure a consistent application, the Commission should publish a yearly list starting on the date of application of this Regulation, of the distribution of the origin of net zero technology final products which fall under this category, broken down by the share of Union supply originating in different sources in the last year for which data is available.
- (30) Council Decision 2014/115/EU²² approved in particular the amendment to the World Trade Organisation Agreement on Government Procurement (the 'GPA') ■. The aim of the GPA is to establish a multilateral framework of balanced rights and obligations relating to public contracts with a view to achieving the liberalisation and expansion of world trade. For contracts covered by the Union's Appendix I to the GPA, as well as by other relevant international agreements by which the Union is bound, including free trade agreements and the Article III:8(a) of the General Agreement on Tariffs and Trade of 1994 for procurement by governmental agencies of products purchased with a view to commercial resale or with a view to use in the production of goods for commercial sale, contracting authorities and contracting entities should not apply the requirements of Article 19(2a) and Article 19(4a), point (a) to economic operators of sources of supply that are signatories to the agreements.
- (31) The application of the provisions on resilience in public procurement procedures set out in Article 19 of this Regulation should be without prejudice to the application of

²² Council Decision 2014/115/EU of 2 December 2013 on the conclusion of the Protocol Amending the Agreement on Government Procurement (OJ L 68, 7.3.2014, p. 1).

Regulation (EU) 2022/1031 of the European Parliament and the Council²³, Article 25 of Directive 2014/24/EU²⁴, and Articles 43 and 85 of Directive 2014/25/EU²⁵, in accordance with the Commission's guidance of 2019²⁴. The same way, public procurement provisions should continue to apply to works, supplies and services subject to Article 19, including Article 67(4) of Directive 2014/24/EU and any implementing measures resulting from the Proposal for a Regulation establishing a framework for setting ecodesign requirements for sustainable products **and the Regulation (EU) 2023/1542 of the European Parliament and of the Council²⁵**.

- (32) The weighting of criteria on the sustainability and resilience contribution of the tender in relation to public procurement procedures is **a minimum threshold. Within this minimum threshold**, the contracting authorities and contracting entities **may differentiate the weighting of the individual criteria, without ignoring one completely. Contracting authorities and contracting entities may always** set a higher threshold for **one or several relevant criteria on sustainability and resilience contribution. Given the importance of increasing the resilience of the Union's energy system, the contracting authorities and contracting entities should pay significant attention to the resilience contribution.**
- (33) In order to limit administrative burden resulting from the need to take into account criteria relating to the sustainability and resilience contribution of the tender, in particular for smaller public buyers and for contracts of lower value which do not have an important impact on the market, the application of the relevant provisions of this Regulation should be deferred for two years for public buyers which are not central purchasing bodies and for contracts of a value below EUR 25 million.
- (34) For the purposes of the application of the provisions on public procurement according

²³ **Regulation (EU) 2022/1031 of the European Parliament and of the Council of 23 June 2022 on the access of third-country economic operators, goods and services to the Union's public procurement and concession markets and procedures supporting negotiations on access of Union economic operators, goods and services to the public procurement and concession markets of third countries (International Procurement Instrument – IPI) (OJ L 173, 30.6.2022, p. 1).**

²⁴ Communication from the Commission: Guidance on the participation of third country bidders and goods in the EU procurement market, Brussels, 24.7.2019, C(2019) 5494 final.

²⁵ **Regulation (EU) 2023/1542 of the European Parliament and of the Council of 12 July 2023 concerning batteries and waste batteries, amending Directive 2008/98/EC and Regulation (EU) 2019/1020 and repealing Directive 2006/66/EC (OJ L 191, 28.7.2023, p. 1).**

to Article 19 *of this Regulation*, where a product is covered by a delegated act adopted under Regulation (EU) 2017/1369 of the European Parliament and of the Council²⁶, contracting authorities or contracting entities should purchase only the products that comply with the obligation laid down in Article 7(2) of that Regulation.

- (35) Households, **business** and final consumers are an essential part of the Union's demand for net-zero technologies final products and public support schemes to incentivize the purchase of such product by households, in particular for vulnerable low- and lower middle-class income households and consumers, are important tools to accelerate the green transition. Under the solar rooftop initiative announced in the EU solar strategy²⁷ **■**, Member States should for instance set-up national programmes to support the massive deployment of rooftop solar energy. In the REPowerEU plan, the Commission called Member States to make full use of supporting measures which encourage switching to heat pumps. Such support schemes set up nationally by Member States or locally by local or regional authorities should also contribute to improving the sustainability and resilience of the **Union** net-zero technologies. Public authorities should for instance provide higher financial compensation to beneficiaries for the purchase of net-zero technology final products that will make a higher contribution to resilience in the Union. Public authorities should ensure that their schemes are open, transparent and non-discriminatory, so that they contribute to increase demand for net-zero technology products in the Union. Public authorities should also limit the additional financial compensation for such products so as not to slow down the deployment of the net-zero technologies in the Union. To increase the efficiency of such schemes Member States should ensure that information is easily accessible both for consumers and for net-zero technology manufacturers on a free website. The use by public authorities of the sustainability and resilience contribution in schemes targeted at consumers or households should be without prejudice to State aid rules and to WTO rules on Subsidies.
- (36) When designing schemes benefitting households, **businesses** or consumers which incentivise the purchase of net-zero technology final products listed in *Article 3 of this*

²⁶ Regulation (EU) 2017/1369 of the European Parliament and of the Council of 4 July 2017 setting a framework for energy labelling and repealing Directive 2010/30/EU (OJ L 198, 28.7.2017, p. 1).

²⁷ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions : EU Solar Energy Strategy, COM(2022) 221 final, 18.05.2022.

Regulation, Member States, regional or local authorities, bodies governed by public law or associations formed by one or more such authorities or one or more such bodies governed by public law, should ensure the respect of the Union's international commitments, including by ensuring that schemes *are compatible with WTO provisions and* do not reach a magnitude that causes serious prejudice to the interest of WTO members.

- (37) *A net-zero Europe platform (Net-Zero Europe Platform)* should also play an important role in accelerating the implementation of the sustainability and resilience contribution by Member States and public authorities in their public procurement and auctioning practices *and the Commission should also assist Member States in the design of schemes targeted at households, businesses and consumers to build synergies and exchange best practices. It is important that both the contracting authorities or contracting entities and the producing companies have a clear understanding of each of the sustainability and resilience criteria. Therefore, the Commission should, in close collaboration with the Net-Zero Europe Platform, adopt an implementing act specifying the criteria to assess the resilience and sustainability contribution, with a particular attention for SMEs, who should have a fair chance to participate in the substantial market for public procurement. Coherence with all existing legislation will be key. Furthermore, that implementing act should clarify the derogations provided for in Article 19(4). Besides, the Commission should, in close collaboration with the Net-Zero Europe Platform, issue guidance on how to link the sustainability and resilience criteria with future legislation. That guidance can further provide concrete and specific examples and best practices. In order to be coherent with all future legislation, the Commission should update its guidance at least every six months.*
- (38) *In order to ensure that public procurement and auctions to deploy renewable energy sources truly contribute to the Union's resilience, these activities need to be predictable for industry.* To enable the industry to adjust its production on time, contracting authorities and contracting entities should inform the market in advance of their estimated procurement needs for net-zero technology products. *Auctions should also reflect that inflation, together with the long lead time of renewable energy deployment projects, creates a significant risk for businesses and this might discourage businesses from bidding. To provide certainty about the business case of an auction bid, Member States should ensure that all auctions include an inflation*

indexation mechanism. Furthermore, Member States should, where appropriate, exclude negative bids from auctions as these bids might lead to unexpectedly high energy prices for customers of the deployed renewable energy production.

- (39) As indicated in the Communication on the Green Deal Industrial Plan for the Net-Zero Age, published on 1 February 2023, the Union's industry's market shares are under strong pressure, due to subsidies in third countries which undermine a level playing field. *Some third countries are rolling out support schemes that aim to anchor and attracting clean tech industry. This situation presents a competitive challenge for the Union to maintain and develop its own industry.* This translates in a need for a rapid and ambitious reaction from the Union in modernising its legal framework *to compete globally defending open and fair trade by making full and efficient use of all available tools including trade defence instruments, and by promoting Union standards for net-zero technologies.*
- (39a) *Considering the Union's goal to reduce strategic dependencies on third countries for net-zero technologies, it is crucial that public support mechanisms, such as procurement and auctions, do not exacerbate such dependencies. Therefore, limitations should be set on the proportion of products in supply contracts sourced from third countries, in accordance with Regulation (EU) No 952/2013 of the European Parliament and of the Council²⁸ and Directive 2014/25/EU of the European Parliament and of the Council²⁹. Furthermore, Regulation (EU) 2022/1031 and Regulation (EU) 2022/2560 of the European Parliament and of the Council³⁰ should be used to their fullest extent in order to ensure that Union companies do not face unfair competition for public contracts.*
- (39b) *To achieve the objectives of this Regulation, a dedicated source of public funding is necessary to support the projects carried out pursuant to it. That funding should ensure that companies across the Union have access to the needed funding, regardless of the fiscal capacities of the Member States in which the project is to be*

²⁸ Regulation (EU) No 952/2013 of the European Parliament and of the Council of 9 October 2013 laying down the Union Customs Code (OJ L 269, 10.10.2013, p. 1).

²⁹ Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC Text with EEA relevance (OJ L 94, 28.3.2014, p. 243).

³⁰ Regulation (EU) 2022/2560 of the European Parliament and of the Council of 14 December 2022 on foreign subsidies distorting the internal market (OJ L 330, 23.12.2022, p. 1).

developed. The 2021-2027 Multiannual Financial Framework (MFF) as agreed in 2020 does not provide for this. The Strategic Technologies for Europe Platform 'STEP' partly addresses the needed support for projects under this Regulation. While the STEP relies on the reprogramming and reinforcement of existing programmes for supporting strategic investments, it is also an important element for testing the feasibility and preparation of new interventions as a step towards a European Sovereignty Fund. The evaluation of STEP in 2025 is to assess the relevance of the actions undertaken and serve as basis for assessing the need for an upscaling of the support towards strategic sectors.

- (40) Access to **public and private** finance is key for ensuring the Union's open strategic autonomy and for establishing a solid **and competitive** manufacturing base for net-zero technologies and their supply chains across the Union. The majority of investments necessary to reach the Green Deal objectives will come from private capital³¹ attracted by the growth potential of the net-zero ecosystem. Well-functioning, deep and integrated capital markets will therefore be essential to raise and channel the funds needed for the green transition and net-zero **technology** manufacturing projects. Swift progress towards the Capital Markets Union is thus necessary for the **Union** to deliver on its net-zero objectives. The sustainable finance agenda (and blended finance) also plays a crucial role in scaling up investments into the net-zero technologies, while guaranteeing the competitiveness of the sector. *As indicated in the Staff Working Document accompanying this Regulation, investment needs amount to around EUR 92 billion over the period 2023 to 2030, with a range of between about EUR 52 to 119 billion depending on various scenarios, which would result in public funding requirements of EUR 16 to 18 billion. Considering that this assessment only takes into account five specific technologies, the real investment need is likely to be significantly higher.*
- (41) Where private investment alone is not sufficient, the effective roll-out of net-zero manufacturing projects may require public support in the form of State aid. Such aid must have an incentive effect and be necessary, appropriate and proportionate. The

³¹ Commission Staff Working Document Identifying Europe's recovery needs Accompanying the document Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions - Europe's moment: Repair and Prepare for the Next Generation, SWD(2020) 98 final, Identifying Europe's recovery needs, 27.05.2020.

existing State aid guidelines that have recently undergone an in-depth revision in line with the twin transition objectives provide ample possibilities to support investments for projects in the scope of this Regulation subject to certain conditions. Member States can have an important role in easing access to finance for net-zero technologies manufacturing projects by addressing market failures through targeted State aid support. The Temporary Crisis and Transition Framework (TCTF) adopted on 9 March 2023 aims at ensuring a level playing field within the internal market, targeted to those sectors where a third-country delocalisation risk has been identified, and proportionate in terms of aid amounts. It would enable Member States to put in place measures to support new investments in production facilities in defined, strategic net-zero sectors, including via tax benefits. The permitted aid amount can be modulated with higher aid intensities and aid amount ceilings if the investment is located in assisted areas, in order to contribute to the goal of convergence between Member States and regions. Appropriate conditions are required to verify the concrete risks of diversion of the investment outside the European Economic Area (EEA) and that there is no risk of relocation within the EEA *to avoid a fragmentation of the internal market*. To mobilise national resources for that purpose, Member States may use a share of the *Union's Emissions Trading System (EU ETS)* revenues that Member States have to allocate for climate-related purposes.

- (41a) *Multiple sources of financing should be made fully available such as unused amounts of the Recovery and Resilience Facility, dedicated support from the EU Innovation Fund, dedicated financing schemes from the European Investment Bank, and utilisation to the greatest extent possible, of all MFF funds that have not yet been utilised. More investments from the private sector should be stimulated through dedicated State guarantees, especially when it comes to industrial investments in net-zero technology manufacturing projects, including net-zero strategic projects.*
- (42) Several Union funding programmes, such as the Recovery and Resilience Facility, InvestEU, cohesion policy programmes or the Innovation Fund are also available to fund investments in net-zero technology manufacturing projects. *The current EU budget is not sufficient for supporting the objectives of this Regulation or for ensuring a level-playing field among Member States. The revision of the 2021-2027 MFF should therefore provide for a European budget fit for purpose. In this regard, the STEP should also provide additional financial means partly dedicated to net-*

zero manufacturing projects contributing to the reduction of strategic dependencies of the Union and the competitiveness of its industry.

- (43) The amended Recovery and Resilience Facility Regulation³² made available an additional EUR 20 billion of non-repayable support to Member States in order to promote energy efficiency and replace fossil fuels, amongst others through EU net-zero industry projects. As pointed out in the Commission Guidance on the REPowerEU chapters³³, Member States are encouraged to include in the REPowerEU chapter of their recovery and resilience plans, measures supporting investments in net-zero technologies manufacturing and industrial innovation, in accordance with Regulation (EU) 2021/241 of the European Parliament and of the Council³⁴.
- (43a) ***With the increase of EU ETS prices, revenues from the EU ETS for Member States have increased substantially. To promote the decarbonisation of Union industry, Member States should significantly increase their allocation of national revenues stemming from the EU ETS to support the decarbonisation of industry and should therefore allocate at least 25% of their national revenues stemming from the EU ETS to support the objectives of this Regulation.***
- (44) InvestEU is the **Union** flagship programme to boost investment, especially the green and digital transition, by providing financing and technical assistance, for instance through blending mechanisms. Such approach contributes to crowd in additional public and private capital. In addition, Member States are encouraged to contribute to the InvestEU Member State compartment to support financial products available to net-zero technology manufacturing, without prejudice to applicable State aid rules.
- (45) Member States can provide support from cohesion policy programmes in line with applicable rules under Regulation (EU) 2021/1060 of the European Parliament and of

³² Regulation (EU) 2023/435 of the European Parliament and of the Council of 27 February 2023 amending Regulation (EU) 2021/241 as regards REPowerEU chapters in recovery and resilience plans and amending Regulations (EU) No 1303/2013, (EU) 2021/1060 and (EU) 2021/1755, and Directive 2003/87/EC, (OJ L 63, 28.2.2023, p. 1).

³³ Commission Notice Guidance on Recovery and Resilience Plans in the context of REPowerEU 2023/C 80/01, (OJ C 80, 3.3.2023, p. 1).

³⁴ Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Recovery and Resilience Facility, (OJ L 57, 18.2.2021, p. 17).

the Council³⁵ to encourage the take up of net-zero strategic *projects as well as net-zero technology manufacturing* projects in *all regions, especially in* less developed *regions* transition regions *and Just Transition Funds territories*, through investment packages of infrastructure, productive investment in innovation, manufacturing capacity in SMEs, services, training and upskilling measure, including support to capacity building of the public authorities and promoters. The applicable co-financing rates set in programmes may be up to 85% for less developed regions and up to 60% or 70% for transition regions depending on the fund concerned and the status of the region but Member States may exceed these ceilings at the level of the project concerned, where feasible under State aid rules. The Technical Support Instrument can help Member States and regions in preparing net-zero growth strategies, improve the business environment, reducing red tape and accelerating permitting. Member States should be encouraged to promote the sustainability of net-zero ■ projects by embedding these investments in European value chains, building notably on interregional and cross border cooperation networks. *The adoption of such measures should be considered in particular with regard to Valleys.*

- (46) The Innovation Fund also provides a very promising and cost efficient avenue to support the scaling up of manufacturing and deployment of *clean* hydrogen and other net zero technologies in Europe, thus reinforcing Europe's sovereignty in key technologies for climate action and energy security.
- (47) A European Sovereignty Fund would provide a structural answer to the investment needs. It will help preserving a European edge on critical and emerging technologies relevant to the green and digital transitions, including net-zero technologies. This structural instrument will build on experience of coordinated multi-country projects under the IPCEIs and seek to enhance all Member States' access to such projects, thereby safeguarding cohesion and the Single Market against risks caused by unequal availability of State Aids. *The [STEP Regulation] can be considered to be a step towards the establishment of a European Sovereignty Fund that could contribute to*

³⁵ Regulation (EU) 2021/1060 of the European Parliament and of the Council of 24 June 2021 laying down common provisions on the European Regional Development Fund, the European Social Fund Plus, the Cohesion Fund, the Just Transition Fund and the European Maritime, Fisheries and Aquaculture Fund and financial rules for those and for the Asylum, Migration and Integration Fund, the Internal Security Fund and the Instrument for Financial Support for Border Management and Visa Policy (OJ L 231, 30.6.2021, p. 159).

shaping and strengthening a European industrial policy by providing increased funding to European industry in the MFF after 2027.

- (48) To overcome the limitations of the current fragmented public and private investments efforts, facilitate integration and return on investment, the Commission, and Member States should better coordinate and create synergies between the existing funding programmes at Union and national level as well as ensure better coordination and collaboration with industry and key private sector stakeholders. The Net-Zero Europe Platform has a key role to play to build a comprehensive view of available and relevant funding opportunities and to discuss *and coordinate support* for the individual financing needs of net-zero strategic projects. *The projects for discussion should be those brought forward by a Member State or by the Commission.*
- (49) In order for net-zero technology manufacturing projects and *for* net-zero strategic projects, to be deployed or expanded as quickly as possible *to contribute to* the Union's security of supply for net-zero technologies, it is important to create planning and investment certainty by keeping the administrative burden on project promoters to a minimum *without compromising on the environmental and social standards of the Union*. For that reason, permit-granting processes of the Member States for net-zero technology manufacturing projects *and for net-zero strategic projects*, should be streamlined, whilst at the same time ensuring that such projects are safe, secure, environmentally performant, and comply with environmental, social and safety requirements. Union environmental legislation sets common conditions for the process and content of national permit-granting processes, thereby ensuring a high level of environmental protection. ■ .
- (50) At the same time, the unpredictability, complexity and at times, excessive length of national permit-granting processes undermines the investment security needed for the effective development of net-zero *technology* manufacturing projects. Therefore, in order to ensure and speed up their effective implementation, Member States should apply streamlined and predictable permitting procedures. In addition, net-zero *strategic projects* should be given priority status at national level to ensure rapid administrative treatment and urgent treatment in all judicial and dispute resolution procedures relating to them. *Furthermore, Member States should consider policy innovation in this field. In order to ensure that net-zero strategic projects can be*

treated with priority, Member States should ensure that the competent authorities are adequately equipped and staffed.

- (51) Given their role in ensuring the Union's security of supply for net-zero technologies, and their contribution to the Union's open strategic autonomy and the green and digital transition, responsible permitting authorities should consider net-zero strategic projects to be in the public interest. Based on its case-by-case assessment, a responsible permitting authority may conclude that the public interest served by the project overrides the public interests related to nature and environmental protection and that consequently the project may be authorised, provided that all relevant conditions set out in Directive 2000/60/EC *of the European Parliament and of the Council*³⁶, Council Directive 92/43/EEC³⁷ and Directive 2009/147/EC *of the European Parliament and of the Council*³⁸.
- (52) In order to reduce complexity and increase efficiency and transparency, project promoters of net-zero technologies manufacturing projects, *including of net-zero strategic projects*, should be able to interact with a single national authority responsible for coordinating the entire permit granting process and issuing a comprehensive decision within the applicable time limit. To that end, Member States should designate *or set up* a single competent authority (*designated authority*). Depending on a Member State's internal organisation, it should be possible for the tasks of the ■ competent authority to be delegated to a different authority, subject to the same conditions. *In order to guarantee the high level of scrutiny along the permitting process, and* to ensure the effective implementation of their responsibilities, Member States should provide their ■ competent authority, or any authority acting on their behalf, with sufficient personnel and resources.
- (52a) *Member States should be responsible for the selection of Net-Zero Strategic Projects in order to allow strategic considerations, particularly when it comes to the implementation of the NECPs. However, to ensure that the projects also serve the common Union interest, including the Union's budgetary interests, the Commission*

³⁶ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (OJ L 327, 22.12.2000, p. 1).

³⁷ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ L 206, 22.7.1992, p. 7).

³⁸ Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (OJ L 20, 26.1.2010, p. 7).

should have the authority to object to a decision by a Member State to designate a project as Strategic Project. Where the Commission object to a designation, the project should be brought to the Net-Zero Europe Platform. The Net-Zero Europe Platform should take the final decision on the status of the project.

- (53) In order to ensure clarity about the permitting status of net-zero **technology manufacturing** projects and net-zero strategic projects and to limit the effectiveness of potential abusive litigation, while not undermining effective judicial review, Member States should ensure that any dispute concerning permit granting process is resolved in a timely manner. To that end, national competent authorities should ensure that applicants and project promoters have access to a simple dispute settlement procedure and that **those** projects are granted urgent treatment in all judicial and dispute resolution procedures relating to them while ensuring respect for the rights of **defence**.
- (54) In order to allow businesses and project promoters, including for cross-border projects, to directly enjoy the benefits of the internal market without incurring an unnecessary additional administrative burden, Regulation (EU) 2018/1724 of the European Parliament and of the Council³⁹ provides for general rules for the online provision of procedures relevant for the functioning of the internal market. The information that needs to be submitted to national competent authorities as part of the permit-granting processes covered by this Regulation are to be covered in Annex I of Regulation (EU) 2018/1724 following its amendment by this Regulation, and the related procedures are included in its Annex II so as to ensure that project promoters can benefit from fully online procedures and the Once-Only Technical System. ■ Designated authorities acting as one stop shop pursuant to this Regulation are included in the list of assistance and problem-solving services in Annex III of Regulation (EU) 2018/1724.
- (55) Net-zero technology manufacturing projects undergo lengthy and complex permitting procedures of 2-7 years, depending on the Member State, technology and value chain segment. Considering the size of required investments – in particular for gigafactory-size projects which are needed to reach the expected economies of scale – inadequate permitting creates an additional and often detrimental barrier to increase net-zero

³⁹ *Regulation (EU) 2018/1724 of the European Parliament and of the Council of 2 October 2018 establishing a single digital gateway to provide access to information, to procedures and to assistance and problem-solving services and amending Regulation (EU) No 1024/2012 (OJ L 295, 21.11.2018, p. 1).*

technology manufacturing capacity in the Union. In order to provide project promoters and other investors with the security and clarity needed to increase development of net-zero technologies manufacturing projects, Member States should ensure that the permit-granting process related to such projects does not exceed pre-set time limits. For **Net-Zero Strategic Projects**, the length of the permit-granting process should not exceed 9 months for facilities with a yearly production output of more than 1 GW, and 6 months for those with a yearly production output of less than 1 GW. For net-zero technology manufacturing projects, the length of the permit-granting process should not exceed **12** months for facilities with a yearly production output of more than 1 GW, and **9** months for those with a yearly production output of less than 1 GW. For net-zero technologies for which the GW metric is not relevant, such as grids and **CCS** or **CCU** technologies, the upper limits of the aforementioned deadlines should apply. For the expansion of existing production lines, each of the aforementioned time limits should be halved.

- (56) In addition, given the importance of net zero **technology manufacturing projects** and **net-zero strategic projects** for the Union's energy supply certain administrative restrictions should be partly lifted or simplified to speed up their implementation.
- (57) The environmental assessments and authorisations required under Union law, including in relation to water, air, ecosystems, habitats, biodiversity and birds, are an integral part of the permit granting procedure for a net zero technologies manufacturing project and an essential safeguard to ensure negative environmental impacts are prevented or minimised. However, to ensure that permit granting procedures for net zero technologies manufacturing projects are predictable and timely, any potential to streamline the required assessments and authorisations while not lowering the level of environmental protection should be realised. In that regard, it should be ensured that the necessary assessments are bundled to prevent unnecessary overlap and it should be ensured that project promoters and responsible authorities explicitly agree on the scope of the bundled assessment before the assessment is carried out to prevent unnecessary follow-up.
- (58) Land use conflicts can create barriers to the deployment of net zero technologies manufacturing projects. Well-designed plans, including spatial plans and zoning, that take into account the potential for implementing net-zero technologies manufacturing projects and whose potential environmental impacts are assessed, have the potential to

help balance public goods and interests, decreasing the potential for conflict and accelerating the sustainable deployment of net-zero technologies manufacturing projects in the Union. Responsible national, regional and local authorities should therefore consider the inclusion of provisions for net-zero technologies manufacturing projects when developing relevant plans.

- (59) Space data and services derived from EU Space Programme, and in particular Copernicus, shall be used to the extent possible to provide information on the geology, biology, ecology, socio-economic development, and resource availability for the environmental assessments and authorisations; such data and services and in particular the Copernicus anthropogenic CO₂ emission monitoring and verification capacity are most relevant to assess the impact of industry projects and the impact of anthropogenic CO₂ sinks on the global greenhouse gas concentrations and fluxes.
- (60) The Commission should, as provided in Article 10(1) of Regulation (EU) No 1025/2012 *of the European Parliament and of the Council*⁴⁰, request one or more European standardisation organisation to draft European standards in support of the objectives of this Regulation.
- (61) Hydrogen Valleys with industrial end-use applications play an important role in decarbonising the energy-intensive industries. REPowerEU set the objective of doubling the number of Hydrogen Valleys in the Union. In order to achieve this objective, Member States should accelerate permitting and consider regulatory sandboxes and prioritise access to funding. To strengthen the net zero resilience, Member States should ensure the interconnection of Hydrogen Valleys across the Union's borders. Industrial installations which produce their own energy, and which can provide a positive contribution to the production of electricity, should be encouraged to contribute to the smart electricity grid as energy producers by simplifying regulatory requirements.
- (62) Net-zero regulatory sandboxes can be an important tool to promote innovation in the field of net-zero technologies and regulatory learning. Innovation needs to be enabled

⁴⁰ ***Regulation (EU) No 1025/2012 of the European Parliament and of the Council of 25 October 2012 on European standardisation, amending Council Directives 89/686/EEC and 93/15/EEC and Directives 94/9/EC, 94/25/EC, 95/16/EC, 97/23/EC, 98/34/EC, 2004/22/EC, 2007/23/EC, 2009/23/EC and 2009/105/EC of the European Parliament and of the Council and repealing Council Decision 87/95/EEC and Decision No 1673/2006/EC of the European Parliament and of the Council (OJ L 316, 14.11.2012, p. 12).***

through experimentation spaces as scientific outcomes need to be tested in a controlled real-world environment. Regulatory sandboxes should be introduced to test innovative net-zero technologies **and other innovative technologies** in a controlled environment for a limited amount of time. It is appropriate to strike a balance between legal certainty for participants in the Net-Zero regulatory sandboxes and the achievement of the objectives of Union law. As Net-Zero regulatory sandboxes must in any case comply with the essential requirements on Net-Zero technology laid out in Union and national law, it is appropriate to provide that participants, who comply with the eligibility requirements for Net-Zero regulatory sandboxes and who follow, in good faith, the guidance provided by the competent authorities and the terms and conditions of the plan agreed with those authorities, are not subject to any administrative fines or penalties. This is justified as the safeguards in place will, in principle, ensure effective compliance with Union or Member State law on the Net-Zero technology supervised in the regulatory sandboxes. The Commission will publish a Guidance for Sandboxes document in 2023 as announced in the New European Innovation Agenda to support Member States in preparing the net zero technology sandboxes. Those innovative technologies could eventually be essential to achieve the Union's climate neutrality objective, ensure the security of supply and resilience of the Union's energy system, and consequently enter the scope of net-zero technologies.

- (63) An overall benchmark and indicative objectives for the manufacturing of key net-zero technology products in the European Union are put forward in order **to improve the Union's industrial global competitiveness as well as** to help tackle import dependency and vulnerability concerns and ensure the Union's climate and energy targets are met.
- (64) **One of the main objectives of Union's industrial policy is to enable the green and digital transitions while preserving the sustainable growth and competitiveness of the Union, maintaining quality jobs and strengthening its ability to innovate and produce, particularly with regard to clean technologies.** The scaling up of European net-zero technology industries **as well as ensuring Union's open strategic autonomy require** significant additional skilled workers which implies important investment needs in re-skilling and upskilling, including in the field of vocational education and training. **More specifically,** the energy transition will require a significant increase in the number of skilled workers in a range of sectors, including renewable energy and energy storage, **grid technologies, battery production as well as IT or Smart solutions for energy system optimization and management, and other industrial**

decarbonisation technologies. According to studies, the circular economy could contribute to the creation of around 700 000 jobs in the Union alone by 2030⁴¹. It is therefore of utmost importance to make jobs in net zero technologies attractive and accessible, especially technical careers including through Union information campaigns to promote technical and vocational education, as well as jobs related to circular economy, resource management and industrial transformation and decarbonisation in general. Furthermore, it is necessary to tackle the current mismatch between the skills of Union workers and the needs of companies. The skill needs for the fuel cell hydrogen sub-sector in manufacturing alone are estimated at 180.000 trained workers, technicians and engineers by the year 2030, according to the Commission's European Strategic Energy Technology Plan⁴². In the photo-voltaic solar energy sector, up to 66.000 jobs would be needed in manufacturing alone. In addition, the absence of educational programmes that promote skills necessary for net zero technologies, which also cause a scarcity of skilled employees and a lack of understanding within local administration in certain regions of the Union, could create a significant bottleneck for sustainable industrial development.

- (65) Since strengthening the manufacturing capacity of key net-zero technologies in the Union will not be possible without a sizeable skilled workforce, it is necessary to introduce measures to boost the *integration* of more people to the labour market, *and to make the industries and the technical careers concerned by this Regulation more attractive, especially to women as the gender balance is far from being reached in technology-oriented professions, and to young people* including via skills first approaches as a complement to qualifications-based recruitment. *In addition, workers from third countries should also be targeted as the Union only attracts a small share of qualified migrants.* In addition, in line with the objectives of the Council Recommendation on ensuring a fair transition towards climate-neutrality, specific support for job-to-job transition *and with a view of favouring lifelong learning and training* for workers in redundant and declining sectors are important. This means investing in skills *for all, while, at the same time, having a targeted approach towards*

⁴¹ *European Parliament resolution of 10 February 2021 on the New Circular Economy Action Plan (2020/2077(INI)) (OJ C 465, 17.11.2021, p. 11).*

⁴² *European Commission, Directorate-General for Research and Innovation, Joint Research Centre, The strategic energy technology (SET) plan, Publications Office, 2019, <https://data.europa.eu/doi/10.2777/04888>*

*vulnerable groups. This includes groups of people who are not in employment, education or training (NEETs), legally residing migrant workers as well as people who are excluded from the labour market, have limited access to training opportunities or are in jobs, which are either at risk of disappearing or whose content and tasks are being highly transformed by new technologies, especially in regions affected by the impacts of the transition towards the Union's 2030 targets pursuant to Article 2 of Regulation (EU) 2021/1056 of the European Parliament and the Council⁴³ and Article 5(1) of Regulation (EU) 2021/1060. The end objective should be the creation of quality job required for net-zero technologies in the Union in line with the targets for employment and training of the European Pillar of Social Rights, including fair and adequate wages, improving living and working conditions pursuant to Directive (EU) 2022/2041⁴⁴ of the European Parliament and of the Council, access to social protection, lifelong learning opportunities, good working conditions in safe and healthy workplaces, as well as collective bargaining rights. In fact, upskilling and reskilling are important tools but do not guarantee quality jobs. Labour shortages might also be the result of low wages, unattractive jobs, poor working conditions, and a lack of investment in vocational education and training (VET). Addressing these issues and improving job quality in sectors and companies with poor working conditions are also important elements to attract workers and address the issue of brain drain which results in growing inequalities between regions, unequal development as well as unequal capacity to drive innovation and create quality jobs. Building on and fully taking into account existing initiatives such as the EU Pact for Skills, EU level activities on skills intelligence and forecasting, such as by the European Centre for the Development of Vocational Training, **Eurofound**, and the European Labour Authority and the Blueprints for sectoral cooperation on skills, the objective is to mobilise all actors: Member States authorities, including at regional and local levels, education and training providers **including universities, research universities, universities of applied science and university alliances, as well as** social partners and industry, SMEs, **start-ups, and social enterprises** to identify skills needs, develop education and training programmes and deploy these at large*

⁴³ *Regulation (EU) 2021/1056 of the European Parliament and of the Council of 24 June 2021 establishing the Just Transition Fund (OJ L 231, 30.6.2021, p. 1).*

⁴⁴ *Directive (EU) 2022/2041 of the European Parliament and of the Council of 19 October 2022 on adequate minimum wages in the European Union (OJ L 275, 25.10.2022, p. 33).*

scale in a fast and operational manner. **Net-zero** strategic projects have a key role to play in this regard. Member States and the Commission **should** ensure financial support **to deploy their impact and outreach** by leveraging the possibilities of the Union budget through instruments such as the European Social Fund Plus, **InvestEU**, Just Transition Fund, European Regional Development Funds, the Recovery and Resilience Facility, the Modernisation Fund, REPowerEU and the Single Market Programme.

- (66) Building **on local and regional initiatives and** on previous experiences, such as **hubs for skills development**, the EU Pact for Skills and the European Battery Alliance, **or the Offshore Renewable Energy Alliance, the** European Net-Zero Industry Academies, **which are a network of relevant experts (Academies)**, should develop and deploy education and training content to upskill and reskill workers required for key net-zero technology value chains, such as solar photovoltaic and solar thermal technologies, **marine renewable energy**, renewable hydrogen technologies and raw materials, **and CCU. The scope and number of the Academies should be determined by the Commission and the Member States in the framework of the Net-Zero Platform on the basis of existing and objective studies in line with the principle of technological neutrality as well as based on a mapping exercise of current and forecasted needs in net-zero industries, including in regions in transition. Such a mapping exercise should provide information about current and upcoming skills shortages in key net-zero industries across the Union and how training opportunities are provided in such industries. The mapping exercise should also analyse the root cause of skills and labour shortages in particular related to the quality of the job offer in net-zero industries such as by assessing the working conditions and the coverage of collective bargaining. Additionally, based on the results of the mapping exercise and existing studies and in consultation with the Net-Zero Europe Platform, the Commission should issue a call for proposals to launch an academy in a given technology when a critical level of skills shortage in relation to a net zero technology is identified (Academy). Union's seed-funding should be made available to set up the Academies and allow their functioning in view of becoming financially sustainable three years after their establishment by receiving financial contributions from the private sector. A strong governance is needed to make the Academies operational as fast as possible in order to develop training programmes in net zero technologies. This should be done without prejudice to the determining role that**

social partners *and universities can also play in the creation of such Academies, as in the case in the Battery Alliance. The role of international and interdisciplinary university alliances, such as Transform4Europe, should in particular be considered to achieve more unified and common standards in training and reskilling or upskilling activities. In general, the use of already existing research and teaching infrastructures should also be prioritised.*

- (66a) *One of the aims of the Academies should be to contribute to the Union's re-industrialisation and decarbonisation as well as to its open strategic autonomy. The Academies should also address the need for net zero technologies with high social and climate standards that are produced in the Union. The Academies should be established by 31 December 2024 and should provide learning content in as many of the languages of the Union institutions as possible, with the aim of achieving geographical balance across Member States. By 31 December 2025, they should start disseminating initial learning content to relevant education and training providers in Member States, such as universities, research universities, universities of applied sciences and university alliances, undertakings that provide such education and training, including SMEs, start-ups and social enterprises, social partners and by training trainers. The Academies should aim to enable the training and education of 100 000 learners each within three years of their establishment, taking the extent of the identified skills shortages into account which may result in a variation of the number of learners per Academy. The Academies should contribute to the availability of skills required for the net-zero technologies, including in SMEs. The learning content should take into account already existing learning programmes developed in the framework of the local Pact for Skills and the centres of professional excellence and should target all levels of education and qualification and all workers, including apprentices, along the value chain in the sectors concerned whereby all successive industrial phases are taken into account, from the design of the product (or the service), to the manufacturing phase, including the recycling and reuse of materials, whereby all the different professions across the value chain are considered. That content should also include learning modules with relevant information about health and safety at work for each specific technology as well as general relevant information on workers' rights and working conditions, including on working time and workers' rights to information and consultation. That content could, where relevant, be further adjusted to national*

law, applicable collective agreements and territorial and sectoral specificities by the education and training providers. The learning content should also target employees in national and local administrations (particularly responsible for permitting, impact assessment and regulations of new technologies), thus contributing to capacity building among national administrations and to a reduction of disparities among Member States.

- (66b) Member States should use and deploy the learning content developed by the Academies in existing instruments such as in the reinforced Youth Guarantee whose one of its objectives is to provide education and training to NEETs, and in existing mentoring programmes. To ensure skills transparency and portability and the mobility of workers, and support the Member States in these efforts, the Academies will develop and deploy credentials, including micro-credentials, covering learning achievements. They should be issued in the format of European credentials for learning and could be integrated into the EUROPASS and, where relevant, included in National Qualifications Frameworks. Member States should be encouraged to use the content developed by the Academies for supporting the continuous reskilling and upskilling and the relevant education and training providers in their territories through national programmes and Union funding, including from the European Social Fund Plus, the reinforced Youth Guarantee, the Recovery and Resilience Facility, InvestEU the European Regional Development Fund, the Just Transition Mechanism, the Modernisation Fund and the Technical Support Instrument, and to support the integration of women in line with the European Strategy for Gender Equality in order to address educational and occupational gender stereotypes. The European network of employment services can play a significant role in using the learning content of training programmes delivered by the skills Academies in the creation and deployment of European occupation profiles and by providing information to national employment services about them.*
- (66c) The Net-Zero Europe Platform should assist in guiding the work of the Academies ensuring that their content addresses the skills shortages identified by the mapping exercise and providing oversight. Member States should ensure that the appointed national representative can act as a bridge between the relevant national ministries and competent authorities of the Member States as well as the national social partners and industry representatives. The Net-Zero Europe Platform should collect information on the progress made by the different Academies and produce by the*

end of 2026 an overview report on the deployment of the learning programmes, including the number of learners benefiting from the Academies' programmes disaggregated by industrial sectors, gender, age, and levels of education and qualification.

- (67) While in the absence of specific provisions introducing minimum training requirements for the access to a regulated profession or the pursuit thereof laid down in the Union law, it is a Member State's competence to decide whether and how to regulate a profession, national rules organizing access to regulated professions must not constitute an unjustified or disproportionate obstacle to the exercise of those fundamental rights. The competence to regulate access to a profession must be exercised within the limits of the principles of non-discrimination and proportionality, in accordance with Directive (EU) 2018/958 of the European Parliament and of the Council **■**. In their assessment Member States should take into account any detrimental effects that regulation or professions may have on the availability of skills in the Net-Zero Industry and seek to limit the regulation in these fields to the maximum extent possible.
- (68) Where the learning programmes developed by **■** Academies lead to credentials that would be of assistance *including* to persons seeking access to a profession that is regulated, Member States *and employers* should, in order to facilitate the mobility in strategic net-zero industry professions, accept these credentials as sufficient proof of the knowledge, skills and competences to which they attest.
- (68a) *The contribution of net-zero technologies to the decarbonisation objectives of the Union can materialise only when those technologies are deployed. Such a deployment, to an extent, is likely to happen in private households, but most decarbonisation is likely to come from decarbonising industrial processes. In order to ensure that investments for such decarbonisation take place in the Union, which is essential to secure good jobs and prosperity in the Union as well as for fulfilling the Union's decarbonisation objectives, it is crucial that it contributes to an improvement of the investment climate for industry in the Union.*
- (69) At Union level, a Net-Zero Europe Platform, should be established, composed of the Member States *and of the European Parliament*, and chaired by the Commission. The Net-Zero Europe Platform may advise and assist the Commission and Member States on specific questions and provide a reference body, in which the Commission

and Member States coordinate their action and facilitate the exchange of information on issues relating to this Regulation. The Net-Zero Europe Platform should further perform the tasks outlined in the different Articles of this Regulation, notably in relation to permitting, including one-stop shops, Net-Zero Strategic Projects, coordination of *and access to* financing, access to markets and skills as well as *regulatory sandboxes for* innovative net-zero technologies *and other innovative technologies*. Where necessary, the *Net-Zero Europe* Platform *should be able to* establish standing or temporary subgroups and invite third parties, such as experts or representatives from net-zero industries.

- (70) As part of the Green Deal Industrial Plan the Commission announced its intention to conclude Net-Zero Industrial Partnerships covering net-zero technologies. *Cooperation through such Partnerships is likely to promote the adoption of* net-zero technologies globally, to support *mutually reinforcing partnerships between the Union and third countries, including sustainable investments and technical assistance. Net-Zero Industrial Partnerships can also contribute to the diversification and resilience of the Union's supply of net-zero technologies and their components, enhance information sharing between the Union and its partners on the development of net-zero technologies and support Union's net-zero industries in accessing* the global clean energy market, *while supporting nascent industries in the field of clean energy technologies in third countries with clear comparative advantages*. The Commission and Member States *should* coordinate within the *Net-Zero Europe* Platform the Partnerships, discussing existing relevant partnerships and processes, such as green partnerships, energy dialogues and other forms of existing bilateral contractual arrangements, as well as potential synergies with relevant Member States' bilateral agreements with third countries. Agreements with third countries including Net-Zero Industrial Partnerships should reflect core *Union* values and objectives notably with regard to promoting labour and international *environmental standards in those* countries. Moreover, *Net-Zero Industrial Partnerships should aim to contribute* to the industrial transformation across the whole value chain of *Union* and third country undertakings while ensuring open markets and fair trade.
- (71) The Union should aim to diversify international trade and investments in net-zero technologies *forging mutual* reinforcing partnerships, building on partners' own sustainable development plans, relevant environmental and human rights standards

while promoting globally high social, **labour** and environmental standards. ***This*** should be done in close cooperation and partnership with like-minded countries ***by means of*** existing agreements or new strategic deals. ***Similarly, stronger international cooperation on*** research and innovation efforts to develop and deploy net-zero technologies should be pursued in close cooperation with partner countries in an open ***and balanced manner, with due regard to the Union's strategic interests and needs.***

- (71a) ***In her 2023 State of the Union address, the Commission President announced that the Competitiveness Check will be conducted by an independent board. This work should be informed by an ongoing body of work regarding the regulatory burden created by Union and national law and its impact on competitiveness of Union's industry, including net-zero industries. To facilitate that work, this Regulation establishes a European Scientific Advisory Board on Review and Regulatory Burden. The Advisory Board should develop science-informed advice on the impact of the regulatory burden in the Union, on the basis of individual cases.***
- (72) Where the power to adopt acts in accordance with Article 290 of the Treaty ***of the Functioning of the European Union (TFEU)*** is delegated to the Commission under this Regulation, it is of particular importance that the Commission carries out appropriate consultations during its preparatory work, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Inter-institutional Agreement on Better Law-Making of 13 April 2016⁴⁵. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as Member States' experts, and their experts systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts.
- (73) To the extent that any of the measures envisaged by the present Regulation constitute State aid, the provisions concerning such measures are without prejudice to the application of Articles 107 and 108 ***TFEU***.
- (74) Since the objective of this Regulation cannot be sufficiently achieved by the Member States and can rather, by reason of the scale or effects of the action, be better achieved at Union level, the Union may adopt measures in accordance with the principle of

⁴⁵ ***Interinstitutional Agreement between the European Parliament, the Council of the European Union and the European Commission on Better Law-Making (OJ L 123, 12.5.2016, p. 1).***

subsidiarity as set out in Article 5 of the Treaty. In accordance with the principle of proportionality as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve that objective,

HAVE ADOPTED THIS REGULATION:

Chapter I

Subject matter, scope and definitions

Article 1

Subject matter

1. This Regulation establishes the framework of measures ***to ensure a coordinated approach, throughout the Union, to the innovation and scaling up of the manufacturing capacity of net-zero technologies as well as of the components, materials and machinery along the supply chains of those technologies that are indispensable for their production and functioning*** in the Union to:
 - (a) support the Union's ***climate targets and climate neutrality objective***, as defined by Regulation (EU) 2021/1119;
 - (b) ***foster the Union's international industrial competitiveness in order to contribute to the creation of quality jobs;***
 - (c) ***improve*** the Union's access to a secure and sustainable supply of net-zero technologies;
 - (d) ***strengthen Union's open strategic autonomy;***
 - (e) ***safeguard the resilience of the corresponding Union's supply chains; and***
 - (f) ***achieve the decarbonisation of the Union's economy and society.***
2. To achieve the general objective referred to in paragraph 1, this Regulation contains measures with a view to ensuring:
 - (a) ***the reduction of strategic dependencies*** in the Union of the strategic net-zero technologies ***as well as of the components, materials and machinery along the***

supply chains of those technologies that are indispensable for their production and functioning and that by 2030 reaches a manufacturing capacity corresponding to:

- (i) at least 40 % of the Union's annual deployment needs for the corresponding technologies necessary to achieve the Union's climate and energy targets, based on the technological deployment planned across the Union according to the national energy and climate plans prepared and submitted by the Member States pursuant to Regulation (EU) 2018/1999; and*
 - (ii) at least 25 % of global demand for the corresponding technologies;*
- (b) the **guaranteed** free movement of net zero technologies *and related service* placed on the *internal* market.
3. Where, based on the report referred to in Article 35, the Commission concludes that the Union is likely not to achieve the objectives set out in *paragraphs 1 and 2*, it shall assess the feasibility and proportionality of proposing measures or exercising its powers at Union level in order to ensure the achievement of those objectives. *In particular, the Commission shall assess the possibility of establishing including by means of delegated acts in accordance with Article 33, supplementing this Regulation, more granular targets for key technologies and components in order to ensure the achievement of those objectives. The Commission shall consult the Net-Zero Europe Platform to determine which measures or powers to apply.*

Article 2

Scope

With the exception of Articles 26 and 27 of this Regulation, which apply to net-zero innovative technologies, this Regulation applies to net-zero technologies, as listed in Article 3a(1), well as to the components, materials and machinery along the supply chains of those technologies that are indispensable for their production and functioning. Raw materials processed materials *and* components falling under the scope of Regulation (EU) .../... [add footnote with publication references of the Critical Raw Materials Regulation] *and under the scope of Regulation (EU) 2023/1781* shall be excluded from the scope of this Regulation.

Article 3

Definitions

1. For the purpose of this Regulation, the following definitions shall apply:
 - (a) 'net-zero technologies' means *the technologies listed in Article 3a(1)*;
 - (b) 'component' means a manufactured *element of a net-zero technology final product*;
 - (ba) 'materials' means *any raw or processed materials needed for the production of a component of a net-zero technology or of the final product*;
 - (c) 'innovative net-zero technologies' means technologies *that comprise a genuine innovation, which are currently not available on the internal market and improve on the dominant comparable net-zero technology in at least one way as well as any technology included in the Strategic Energy Technology Plan referred to in Article 26d*;
 - (ca) 'other innovative technologies' means *technologies with potential to enable the transition to a climate neutral, clean economy and reduce strategic dependencies, which comprise genuine innovation not currently available on the internal market and which are advanced enough to be tested in a controlled environment*;
 - (cb) 'pre-commercial innovative net-zero technologies' means *innovative net-zero technologies that are not commercially available but that are advanced enough to be tested in a controlled environment*;
 - (cc) 'new commercial net-zero technologies' means *net-zero technologies which are not yet available on a large-scale commercial basis, which have a low market share, which improve on the dominant comparable technologies in at least one way, and which carry a clear degree of risk when included in a procurement*;
 - (cd) 'pre-commercial procurement' means *the procurement of pre-commercial innovative net-zero technologies involving risk-benefit sharing under market conditions, and competitive development in phases, where there is a clear separation between the development activities of the procured products and the deployment of commercial volumes of the end-products*;

- (ce) *'public procurement of innovative solutions' means procurement for which contracting authorities act as a launch customer for commercial innovative net-zero technologies, which may include conformity testing;*
- (d) *'net-zero technology manufacturing project' means a planned industrial facility or extension or repurposing of an existing facility for manufacturing of net-zero technologies, final products or components, materials or machinery along the supply chains of those technologies that are indispensable for their production and functioning;*
- (e) *'net-zero strategic project' means a net-zero technology manufacturing project which is selected in accordance with criteria laid down in Article 10;*
- (ea) *'net-zero industry valley' or 'Valley' means a specific land area which has been designated by a Member State for the purpose of promoting the construction or expansion of manufacturing facilities in the net-zero industry supply chain;*
- (f) *'permit granting process' means a process covering all relevant administrative permits to plan, build, expand and operate net-zero technology manufacturing projects, such as net-zero strategic projects, including building, chemical and grid connection permits and environmental assessments and authorisations where these are required, and encompassing all administrative applications and procedures from the receipt of the application to the designated authority until the notification of the comprehensive decision on the outcome of the procedure by the responsible national competent authority or, where relevant, a responsible grid operator;*
- (g) *'comprehensive decision' means the decision or set of decisions taken by Member State authorities not including courts or tribunals that determines whether or not a project promoter is authorised to implement a net-zero technology manufacturing project, without prejudice to any decision taken in the context of an administrative appeal procedure;*
- (h) *'project promoter' means any undertaking or consortium of undertakings developing a net-zero technology manufacturing project or a net-zero strategic project;*

- (ia) *‘net-zero regulatory sandbox’ means a scheme that enables undertakings to test innovative net-zero technologies and other innovative technologies in a controlled real-world environment, under a specific plan, developed and monitored by a competent authority;*

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- (k) ‘authority concerned’ means an authority that, under national law, is competent to issue permits and authorisations related to the planning, design and construction of immovable assets, including energy infrastructure;
- (l) ‘public procurement procedure’ means any of the following:
- (i) any type of award procedure covered by Directive 2014/24/EU for the conclusion of a public contract or Directive 2014/25/EU for the conclusion of a supply, works and service contract;
 - (ii) a procedure for the award of works or a service concession covered by Directive 2014/23/EU;
- (m) ‘contracting authority’ in the context of public procurement procedures, means contracting authority as defined in Article 6 of Directive 2014/23/EU, Article 2(1), point (1) of Directive 2014/24/EU and Article 3 of Directive 2014/25/EU;
- (n) ‘contracting entity’ in the context of public procurement procedures, means contracting entity as defined in, Article 7 of Directive 2014/23/EU and Article 4 of Directive 2014/25/EU;
- (o) ‘contract’, in the context of public procurement procedures, means a public contract as defined in Article 2(1), point (5) of Directive 2014/24/EU, ‘contracts’ as defined in ‘supply, works and service contracts’ as defined in Article 2, point (1), of Directive 2014/25/EU, and ‘concessions’ as defined in Article 5, point (1), of Directive 2014/23/EU;
- (p) ‘auction’ means a mechanism for competitive tendering procedures, not falling under the definition of ‘concessions’ according to Article 5, point (1), of Directive 2014/23/EU;
- (q) ‘CO₂ injection capacity’ means the annual amount of CO₂ that can be injected in an operational geological storage site, permitted under Directive 2009/31/EC,

including saline aquifers, provided with the means of capturing CO₂ and transporting it to the site, and with the purpose to reduce emissions or increase carbon removals, in particular from large scale industrial installations and which is measured in tonnes per annum;

- (qa) 'CO₂ transport networks' means multimodal CO₂ transport infrastructure, including the network of pipelines, including associated booster stations, for the transport of CO₂ to the storage site;*
- (r) 'energy system integration' means solutions for the planning and operating of the energy system as a whole, across multiple energy carriers, infrastructures, and consumption sectors, by creating stronger links between them with the objective of delivering fossil-free, reliable and resource-efficient energy services, at the least possible cost for society.
- (s) 'manufacturing capacity' means the total amount of output capacity of the net-zero technologies produced in a manufacturing project. If the manufacturing project does not produce final products but specific components or specific machinery primarily used for the production of such products, then manufacturing capacity refers to output capacity of the final product that would use such components or specific machinery to be produced.

Article 3a

Net-zero technologies

1. The net-zero technologies within the scope of this Regulation shall be:

- (a) technologies used for production of energy from renewable sources as defined in Directive (EU) 2018/2001;*
- (b) nuclear fission and fusion energy technologies, including nuclear fuel cycle technologies;*
- (c) energy storage technologies;*
- (d) carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), removal, capture, transport, injection (EPP), storage and utilisation technologies;*
- (e) hydrogen (H₂) transport infrastructure technologies;*
- (f) electrolyser and fuel cell technologies;*
- (g) electric, hydrogen (H₂), sustainable alternative fuels as defined in Regulation (EU) .../... [OJ to include reference to Sustainable maritime fuels*

[Regulation 2021/0210(COD)], and wind propulsion technologies for transportation;

- (h) electric charging technologies for transportation;*
- (i) hydrogen (H₂), sustainable alternative fuels as defined in Regulation (EU) .../...(OJ to include reference to ... [ReFuel Aviation 2021/0205(COD)], biomethane (CH₄) production and refuelling infrastructure technologies;*
- (j) heat pump technologies;*
- (k) energy efficiency technologies;*
- (l) thermal energy distribution and electric grid technologies;*
- (m) energy management technologies;*
- (n) high-efficiency industrial process and electrification technologies for energy and carbon intensive industries;*
- (o) biomaterials production technologies, including bio-based chemical production technologies;*
- (p) recycling technologies.*

2. *Within six months of the deadline for notification of each national energy and climate plans pursuant to Article 3(1) of Regulation (EU) 2018/1999 and within six months of the deadline for the submission of each update of the updated national energy and climate plans pursuant to Article 14(2) of that Regulation, the Commission shall assess the list of net-zero technologies set out in paragraph 1 of this Article and may propose delegated acts, in accordance with Article 33 of this Regulation, amending that list in order to ensure that it reflects the technology needs stemming from the Member States' national energy and climate plans.*

Chapter II.

Enabling conditions for net-zero technology manufacturing

SECTION I.

STREAMLINING ADMINISTRATIVE AND PERMIT-GRANTING PROCESSES

Article 4

One-stop shop

1. By ...[3 months ***from*** the date of entry into force of this Regulation], Member States shall designate ***or establish a single*** one competent authority (***designated authority***). ***The designated authority*** shall be responsible for facilitating and coordinating the permit-granting process for net-zero technology manufacturing projects ■ and to provide advice on reducing administrative burden in line with Article 5.
2. The ***designated*** authority ■ shall be the sole point of contact for the project promoter in the permit-granting process leading to a comprehensive decision for a given project and shall coordinate the submission of all relevant documents and information.
3. The responsibilities of the ***designated*** authority referred to in paragraph 1 or the tasks related to it may be delegated to, or carried out by, another authority, for any given project, provided that:
 - (a) the ***designated*** authority notifies the project promoter of that delegation;
 - (b) a single authority is responsible for each of the projects;
 - (c) a single authority coordinates the submission of all relevant documents and information.
4. Project promoters shall be allowed to submit any documents relevant to the permit-granting process in electronic form.
5. The ***designated*** authority shall take into consideration any valid studies conducted, and permits or authorisations issued, for a given project before the project entered the permit-granting process in accordance with this Article and shall not require duplicate studies and permits or authorisations, unless otherwise required under Union law.
6. The ***designated*** authority shall ensure that applicants have easy access to information on and simple procedures for the settlement of disputes concerning the permit-granting

process and the issuance of permits to construct or expand projects, including, where applicable, alternative dispute resolution mechanisms.

7. Member States shall ensure that the national *authorities concerned and other* competent *authorities* responsible for *any step along the* permit-granting processes, including all procedural steps, *have* a sufficient number of qualified staff and sufficient financial, technical and technological resources necessary, including for up- and re-skilling, for the effective performance of its tasks under this Regulation.
8. The Platform referred to in Article 28 and 29 shall periodically discuss the implementation of this Section and Articles 12 and 13 and share best-practices for organising national competent authorities and speeding up permitting procedures.
- 8a. ***Member States shall consider increasing direct support to the designated authority under national Recovery and Resilience Plans. The Commission shall provide technical support to the designated authority and Member States to carry out the permit-granting process.***
- 8b. ***The designated authority shall specify and make available the detailed requirements and extent of information requested of a project promoter before the permit-granting process commences.***

Article 5

Online accessibility of information

Member States shall provide the following information on administrative processes relevant to net-zero technology manufacturing projects, including net zero strategic projects, online and in a centralised and easily accessible manner:

- (a) the permit-granting process;
- (b) financing and investment services;
- (c) funding possibilities at Union ***and*** Member State level;
- (d) business support services, including but not limited to corporate tax declaration, local tax laws, labour law.

Article 5a

Accelerating implementation

1. *Member States and, where appropriate, the Commission shall undertake activities to accelerate and crowd-in public and private investments in net-zero technology manufacturing projects. Such activities may, without prejudice to Article 107 and Article 108 TFEU, include providing and coordinating support to net-zero technology manufacturing projects facing difficulties in accessing finance. The Commission and the Member States shall ensure that the support is provided to the project promoter within six months of the submission of the request of the net-zero technology manufacturing project.*
2. *Member States shall provide administrative and operational support to net-zero technology manufacturing projects located on their territory, to facilitate their rapid and effective implementation, paying particular attention to SMEs involved in the projects, including by providing:*
 - (a) *assistance to ensure compliance with applicable administrative and reporting obligations;*
 - (b) *assistance to project promoters to further increase the public acceptance of the project;*
 - (c) *assistance to project promoters along the permit-granting process, in particular for SMEs.*

In addition to the support provided by the Member States, the Commission shall provide the net-zero strategic projects with assistance as referred to in the first subparagraph.

In order to do so, Member States shall ensure that the relevant administrative bodies are adequately resourced and staffed to respond within the applicable time limits to future requests.

3. *By 31 December 2024, the Commission shall propose to the European Parliament and to the Council a means of coordinating the various sources of public funding for net-zero technology manufacturing projects from the Union and the Member States with the objective of accelerating their deployment.*

Article 6

Duration of the permit-granting process

1. The permit-granting process for net-zero technology manufacturing projects shall not exceed any of the following time limits:
 - (a) **9** months for the construction of net-zero technology manufacturing projects with a yearly manufacturing capacity of less than 1 GW;
 - (b) **12** months for the construction of net-zero technology manufacturing projects, with a yearly manufacturing capacity of more than 1 GW.
2. For net-zero technology manufacturing projects for which a yearly manufacturing capacity is not measured in GW, the permit-granting process shall not exceed a time limit of **12** months.
3. For the expansion of manufacturing capacity in existing manufacturing facilities, the time limits referred to in **paragraphs** 1 and 2 shall be halved.
4. In exceptional cases, where the nature, complexity, location or size of the proposed project so requires, competent authorities may extend the time limits referred to in paragraph 1 and 2 by a maximum of 1 month before their expiry and on a case-by-case basis.

Where competent authorities consider that the proposed project raises exceptional risks for the health and safety of workers or of the general population, and where additional time is necessary to establish that adequate safeguards are put in place, they may extend those time limits by a further 6 months, before their expiry and on a case-by-case basis.

5. In either such event, the **designated** authority shall inform the project promoter of the reasons for the extension and of the date when the comprehensive decision is expected in writing.
6. No later than one month following the receipt of the permit-granting application, competent authorities shall validate the application or, if the project promoter has not sent all the information required to process an application, request the project promoter to submit a complete application within fourteen days from that request. The date of the acknowledgement of **initial receipt** of the application by the national **designated** authority ■ shall serve as the start of the permit granting process.

7. No later than one month following the date of the acknowledgement of the validity of the application, the **designated** authority shall draw up, in close cooperation with the project promoter and other authorities concerned, a detailed schedule for the permit granting process. The schedule shall be published by the **designated** authority on a free access website.
8. The time limits set in this Article shall be without prejudice to obligations arising from Union and international law, and without prejudice to administrative appeal procedures and judicial remedies before a court or tribunal.
9. The time limits set in this Article for any of the permit granting procedures shall be without prejudice to any shorter time limits set by Member States.
- 9a. *The designated authority shall ensure that the lack of reply of the relevant administrative bodies within the applicable time limits referred to in this Article results in the specific intermediary steps to be considered as approved, except where the principle of administrative tacit approval does not exist in the national legal order. This paragraph shall also apply to final decisions on the outcome of the process. When a final decision on the outcome of the process is adopted on the basis of tacit approval, an explicit notice shall be sent to the project promoter within a week after the tacit approval came into effect. All decisions, including a notice of tacit approval, shall be made publicly available.*
- 9b. *In accordance with this Regulation, the Commission shall adopt guidelines to establish a minimum set of permit-granting requirements that Member States are to comply with regard to net-zero technology manufacturing projects, in particular to simplify the preparatory work for promoters submitting manufacturing projects, while facilitating the instruction of requests by administrations.*

Article 7

Environmental assessments and authorisations

1. Where an environmental impact assessment must be carried out in accordance with Articles 5 to 9 of Directive 2011/92/EU, the project promoter concerned shall request an opinion to the competent authority referred to in Article 4 on the scope and level of detail of the information to be included in the environmental impact assessment report pursuant to Article 5(1) of that Directive. The national competent authority shall

ensure that the opinion referred to in the first subparagraph is issued as soon as possible and within a period of time not exceeding **20 days** *without exception* from the date on which the project promoter submitted its request, *provided that this request includes all required documentation. Competent authorities shall provide a list of required documentation to the project promoter at the outset of their request, aim to streamline the process and guide the project promoter through the process.*

2. Where the obligation to assess the effects on the environment arises simultaneously from Directive 2011/92/EU, Directive 92/43/EEC, Directive 2009/147/EC of the European Parliament and the Council, Directive 2000/60/EC, Directive 2001/42/EC of the European Parliament and the Council⁴⁶, Directive 2008/98/EC of the European Parliament and of the Council⁴⁷, Directive 2010/75/EU or Directive 2012/18/EU of the European Parliament and the Council⁴⁸, the national competent authority shall provide for coordinated or joint procedures fulfilling the requirements of that Union legislation.

Under the coordinated procedure referred to in the first subparagraph, the national competent authority shall coordinate the various individual assessments of the environmental impact of a particular project required by the applicable Union legislation.

Under the joint procedure referred to in the first subparagraph, the national competent authority shall provide for a single assessment of the environmental impact of a particular project required by the applicable Union legislation.

The application of the joint or coordinated procedure shall not affect the content of the environmental impact assessment.

3. The national competent authority shall ensure that the authorities concerned issue a reasoned conclusion as referred to in Article 1(2), point (g)(iv) of Directive 2011/92/EU on the environmental impact assessment within **80 days** of receiving all necessary information gathered pursuant to Articles 5, 6 and 7 of that Directive,

⁴⁶ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment (OJ L 197, 21.7.2001, p. 30).

⁴⁷ Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3).

⁴⁸ Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC (OJ L 197, 24.7.2012, p. 1).

verifying its quality, and completing the consultations referred to in Articles 6 and 7 of that Directive.

- 3a** *In exceptional cases, where the nature, complexity, location or size of the proposed project so require, the national competent authority referred to in Article 8(1) may extend the time limits referred to in paragraph 3 of this Article by a maximum of 30 days, before their expiry and on a case-by-case basis. In that event, the national competent authority referred to in Article 8(1) shall inform the project promoter of the reasons justifying the extension and of the date when the reasoned conclusion is expected in writing.*
4. The timeframes for consulting the public concerned on the environmental report referred to in Article 5(1) of Directive 2011/92/EU shall not be longer than 80 days *and not be shorter than 40 days*. In cases falling under the second sub-paragraph of Article 6(4), this period can be extended to *a maximum of 90 days on a case-by-case basis. In that event, the national competent authority shall inform the project promoter of the reasons justifying the extension. Public consultation shall begin as soon as the file submitted by the project promoter is deemed to be complete by the competent administrative authority and be conducted in parallel to the assessment of the project request by the national competent authority, while complying with the requirements on consulting the public concerned set out in Directive 2011/92/EU and making the results of the public consultation available to the competent authority.*
- 4a.** *Where a project would affect a designated Natura 2000 area, the environmental assessment shall be subject to the conditions set out in Directive 92/43/EEC.*
- 4b** *The Member States shall ensure that their national competent authorities and other authorities pursuant to Article 6(1) of Directive 2011/92/EU are adequately equipped to fulfil its obligations under this Article.*

Article 8

Planning

1. When preparing plans, including zoning, spatial plans and land use plans, national, regional and local authorities shall, where appropriate, include in those plans provisions for the development of net-zero technology manufacturing projects, including net-zero strategic projects, *as well as the necessary infrastructure and net-*

zero industry valleys. Priority shall be given to artificial and built surfaces, industrial sites, brownfield sites, and, where appropriate, greenfield sites not usable for agriculture and forestry. ***To facilitate the development of net-zero technology manufacturing projects, the Member States shall ensure that all relevant spatial planning data is available online in accordance with Article 5.***

2. Where plans include provisions for the development of net-zero technology manufacturing projects, including net-zero strategic projects, ***and their required infrastructure***, are subject to an assessment pursuant to Directive 2001/42/EC and pursuant to Article 6 of Directive 92/43/EEC, those assessments shall be combined. Where relevant, that combined assessment shall also address the impact on potentially affected water bodies and verify whether the ***specific projects under the plan could*** potentially prevent a water body from achieving good status or good potential or cause deterioration of status or of potential referred to in Article 4 of Directive 2000/60/EC or would potentially hamper that a water body achieves good status or good potential. Where relevant Member States are required to assess the impacts of existing and future activities on the marine environment, including land-sea interactions, as referred to in Article 4 of Directive 2014/89/EU, these impacts shall also be covered by the combined assessment. ***The fact that assessments are combined pursuant to this paragraph shall not affect their content or quality. Combined assessments shall be conducted in such a way that it does not lead to a prolongation of the time limits set out in this Regulation.***

Article 9

Applicability of UNECE Conventions

1. The provisions set out in this Regulation are without prejudice to the obligations under **■** of the United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, signed at Aarhus on 25 June 1998, and under the UNECE Convention on environmental impact assessment in a transboundary context, signed at Espoo on 25 February 1991.
2. All decisions adopted pursuant to this Section and Articles 12, 13, ***14 and 21*** shall be made publicly available ***in an easily understandable manner, with all decisions concerning one project retrievable from a single source.***

SECTION II

NET-ZERO STRATEGIC PROJECTS

Article 10

Selection criteria

1. Member States shall recognise as net-zero strategic projects net-zero technology manufacturing projects, ***which take into account the Union's climate and energy targets***, located in the Union that contributes to the realisation of the objectives set out in Article 1 of this Regulation and meet at least one of the following criteria:
 - (a) the ■ project contributes to the technological and industrial resilience of the Union ■ by:
 - (i) ***adding manufacturing capacity in the Union for a net-zero technology or for specific components and specific machinery primarily used for the production of those technologies, for which the Union depends for more than 50% on imports coming from a single third country; or***
 - (ii) ***adding manufacturing capacity or updating existing manufacturing capacity in the Union for a net-zero technology or for specific components and specific machinery primarily used for the production of those technologies, of which the Union exports more than 25% of its production output;***
 - (b) the ■ project ***contributes*** to the competitiveness ***in the Union and on the global markets and to the creation of quality jobs by providing innovation with regard to the manufacturing process of net-zero technologies, or of components or materials along the supply chain of those technologies that are not yet substantively present or committed to be built within the Union or by ensuring the production of the best available net-zero technology, including best available components or materials in their supply chain, as well as by:***
 - (i) ***contributing to the competitiveness of SMEs;***
 - (ii) ***putting*** into place measures to attract, ***retain***, upskill or reskill a workforce required for net-zero technologies, including through apprenticeships, ***traineeships, continuing or post graduate academic education*** in close

cooperation with *regional and local authorities and* social partners *including trade unions; or*

- (c) *the project contributes to reaching the Union's climate and energy objectives by complying with the do no significant harm principle as well as by:*
 - (i) *manufacturing a net-zero technology or specific components and specific machinery primarily used for the production of those technologies with improved environmental sustainability and performance or circularity features, including comprehensive low-carbon, energy, water and material efficiency;*
 - (ii) *adopting manufacturing practices related to a net-zero technology or specific components and specific machinery primarily used for the production of those technologies with improved environmental sustainability and performance or circularity features, including comprehensive low-carbon, energy, water and material efficiency and circular practices, as well as waste heat recovery; or*
 - (iii) *adding significant manufacturing capacity which will make a substantive contribution to the 2030 climate objectives of the Union.*

1a. *By ... [3 months from the date of entry into force of this Regulation], the Commission shall adopt an implementing act in accordance with the examination procedure referred to in Article 34(3) setting out guidelines ensuring uniform conditions for the implementation of the criteria listed in this Article. Those guidelines should at least include specific guidance on the criteria to be used to assess:*

- (a) *whether a component or machinery is primarily used for the production of a net-zero technology;*
- (b) *whether added manufacturing capacity concerns first-of-a-kind or best available technology manufacturing capacity;*
- (c) *whether the additional manufacturing capacity can be considered to be significant.*

2. Member States shall recognise *the following* as net-zero strategic projects CO₂ *strategic* projects:

- (a) *the CO₂ capture projects and the CO₂ infrastructure projects necessary for the transport of captured CO₂ to CO₂ storage sites that:*
 - (i) *meet the conditions laid down in Article 18(6), point (a); and*

- (a) relevant evidence related to the fulfilment of the criteria laid down in Article 10(1) or (2);
 - (b) a business plan evaluating the financial viability of the project consistent with the objective of creating quality jobs.
3. Member States shall assess the application referred to in paragraph 1 through a fair and transparent process within a month. ***The decision resulting from this process shall be reasoned and shall be communicated to the project promoter, the Platform as well as to the European Parliament.*** The absence of a decision by Member States within that time frame shall constitute an approval of the project.
- 3a. By ... [6 months from the date of entry into force of this Regulation], each Member State shall publish a list establishing which of the net-zero technologies listed in Article 3a(1) can benefit from the provisions related to strategic projects recognised under this Article in the relevant Member State.***
4. The Commission may provide its opinion on the approved projects. In the case of a rejection of the application by a Member State, the applicant shall have the right to submit the application to the Commission, which shall assess the application within 20 working days.
5. Where the Commission, following its assessment in accordance with paragraph 4, confirms the rejection of the application by the Member State, it shall notify the applicant of its conclusion in the form of a letter. Where the Commission differs in its assessment from the Member State, **■** Platform shall discuss the project in question ***and decide on its status.***
6. Where the Commission or a Member State finds that a net-zero strategic project has undergone substantial changes or that it no longer fulfils the criteria set out in Article 10 **■** , or where its recognition was based on an application containing incorrect information, it shall inform the project promoter concerned. After hearing the project promoter, the Member State may repeal the decision granting a project the status of net-zero strategic project.
7. Projects which are no longer recognised as net-zero strategic project shall lose all rights connected to that status under this Regulation.
8. The Commission shall set up and maintain an openly available registry of net-zero strategic projects.

Article 12

Priority status of net-zero strategic projects

1. Project promoters and all authorities that, under national law, are competent to issue various permits and authorisations related to the planning, design and construction of immovable assets, including energy infrastructure, shall ensure that for net-zero strategic projects those processes are treated in the most rapid way possible in accordance with Union and national law.
2. Without prejudice to obligations provided for in Union law, Member States shall grant net-zero strategic projects the status of the highest national significance possible, where such a status exists in national law, and be treated accordingly in the permit-granting processes including those relating to environmental assessments and if national law so provides, to spatial planning.
3. Net-zero strategic projects shall be considered to contribute to the security of supply of strategic net-zero technologies in the Union and therefore to be in the public interest. With regard to the environmental impacts addressed in Articles 6(4) and 16(1)I of Directive 92/43/EEC, Article 4(7) of Directive 2000/60/EC and Article 9(1)(a) of Directive 2009/147/EC, net-zero strategic projects in the Union shall be considered as being of public interest and may be considered as having an overriding public interest provided that all the conditions set out in those Directives are fulfilled.
4. All dispute resolution procedures, litigation, appeals and judicial remedies related to net-zero strategic projects in front of any national courts, tribunals, panels, including mediation or arbitration, where they exist in national law, shall be treated as urgent, if and to the extent to which national law provides for such urgency procedures and provided that the normally applicable rights of defence of individuals or of local communities would be respected Project promoters of net-zero strategic projects shall participate in such urgency procedure, where applicable.

Article 13

Duration of the permit-granting process for net-zero strategic projects

1. The permit-granting process for net-zero strategic projects shall not exceed any of the following time limits:

- (a) **six** months for the construction of net-zero strategic projects with a yearly manufacturing capacity of less than 1 GW;
 - (b) **nine** months for the construction of net-zero strategic projects, with a yearly manufacturing capacity of more than 1 GW;
 - (c) 18 months for all necessary permits to operate a storage site in accordance with Directive 2009/31/EC.
2. For net-zero strategic technologies for which a yearly manufacturing capacity is not measured in GW, the permit-granting process shall not exceed a time limit of **nine** months.
3. For the expansion of manufacturing capacity in existing manufacturing facilities, the time limits referred to in paragraphs 1 and 2 shall be halved.
4. National competent authorities shall ensure that the lack of reply of the relevant administrative bodies within the applicable time limits referred to in this Article results in the specific intermediary steps to be considered as approved, except where the specific project is subject to an environmental impact assessment pursuant to Council Directive 92/43/EEC or Directive 2000/60/EC, Directive 2008/98/EC, Directive 2009/147/EC, Directive 2010/75/EU, 2011/92/EU or Directive 2012/18/EU or a determination of whether such environmental impact assessment is necessary and the relevant assessments concerned have not yet been carried out, or where the principle of administrative tacit approval does not exist in the national legal system. This provision shall not apply to final decisions on the outcome of the process, which are to be explicit. All decisions shall be made publicly available.
- 4a. *Where the principle of administrative tacit approval does not exist in the national legal order and, in the case of an environmental impact assessment pursuant to Directive 92/43/EEC, 2000/60/EC, 2008/98/EC, 2009/147/EC, 2010/75/EU, 2011/92/EU or 2012/18/EU or a determination of whether such environmental impact assessment is necessary, the lack of reply of the relevant administrative bodies within the applicable time limits referred to in this Article shall result in effective, proportionate and dissuasive penalties. The revenue of the penalty shall be allocated to the project affected by the delay and shall correspond to the missed economic value as a result of the delay.***

Article 13a

Net-zero industry valleys

- 1. In order to fulfil the objectives of this Regulation, each Member State may designate geographical areas as net-zero industry valleys (Valleys).***
- 2. The objectives of the Valleys shall be to:***
 - (a) create clusters of net-zero industrial activity which lead to efficiency gains for all industrial actors involved;***
 - (b) increase the attractiveness of the Union as a location for manufacturing activities;***
 - (c) further streamline, beyond the streamlining set out in other Chapters of this Regulation, the administrative procedures for setting up net-zero manufacturing capacities.***
- 3. When identifying areas for setting up the Valleys, Member States shall take into account:***
 - (a) the need to favour multiple uses of the areas identified to ensure the expansion, reindustrialisation or creation of European industrial clusters;***
 - (b) the availability of relevant transportation and network infrastructure, storage and other flexibility tools or the potential to create such infrastructure and storage;***
 - (c) the just transition and its objectives, particularly with regard to coal regions in transition;***
 - (d) any planned or already existing project pipeline and plan;***
 - (e) the potential to organise education and training provisions for the availability of skills in net-zero technology products;***
 - (f) the potential for the creation of quality jobs and the employment of local employees at potential production sites;***
 - (g) the need to select areas where the construction or expansion of a specific type or types of net-zero technology manufacturing project does not lead to significant environmental impacts.***
- 4. For the purposes of reducing the environmental impact of the construction or expansion of a specific type or types of strategic net-zero technology manufacturing project in Valleys to the minimum, Member States shall:***
 - (a) give priority to artificial and built surfaces, industrial sites, brownfield sites,***

- and, where appropriate, greenfield sites not usable for agriculture;*
- (b) in exceptional circumstances, establish Valleys in areas subject to restoration measures according to the National Restoration Plans prepared under the Regulation on Nature Restoration or designated Natura 2000 areas.*

Article 13b

Designation of Valleys

- 1. A decision by a Member State to designate a Valley shall be accompanied by a plan (Plan) setting out:*
 - (a) which specific net-zero manufacturing activities are covered by the Valley;*
 - (b) concrete national measures to increase the attractiveness of the Valley as a location for manufacturing activities;*
 - (c) the results of the environmental assessment as well as the measures the Member State will take to mitigate negative environmental impacts, referred to in paragraph 2.*
- 2. As part of the decision-making process for designating a Valley and before adopting a plan or plans designating Valleys, Member States shall carry out an environmental assessment in accordance with Directive 2001/42/EC, and where applicable, the assessments referred to in Article 6(3) of Directive 92/43/EEC for the specific net-zero technologies manufacturing activities to which the Net-Zero Industry Valley are dedicated. Those assessments should cover all technologies and related manufacturing activities to which the Valley is to be dedicated.*

Based on the outcome of the assessments, Member States shall provide, for each type of project, clear parameters for the implementation of projects with proportionate rules and measures to address the adverse environmental impacts.

Any environmental assessment requirements and mitigating measures for a permit for new or expanded manufacturing capacity that is in accordance with the Plan's requirements and applicable law shall be considered fulfilled by an environmental assessment carried out pursuant to this paragraph and benefit from fast track procedure and validation.

- 3. Member States shall provide an opinion, as set out in Article 7(1) as well as a detailed schedule for the permitting procedure as set out in Article 6(7), for all activities*

foreseen in the Valley. The opinion shall also include a detailed description of any data, information or analysis gathered by the Member State when conducting the assessment referred to in paragraph 2 can be relied upon by the applicant as well as, where applicable, which additional information, data or analysis is still required from the applicant. In accordance with Article 5, all data, information and analysis gathered by the Member State shall be made accessible online for applicants.

- 4. A decision designating a Valley pursuant to Article 13a(1) and in accordance with this Article shall include a date of application and a date of expiry. A Member State may renew such a decision. Member States shall make these decisions public.*
- 5. Net-zero manufacturing projects in Valleys shall be considered to contribute to the security of supply of net-zero technologies in the Union and therefore to be in the public interest. With regard to the environmental impacts addressed in Articles 6(4) and 16(1) of Directive 92/43/EEC, Article 4(7) of Directive 2000/60/EC and Article 9(1), point (a), of Directive 2009/147/EC, net-zero manufacturing projects in Valleys shall be considered as being of public interest and may be considered as having an overriding public interest provided that all the conditions set out in those Directives are fulfilled.*
- 6. The national measures referred to in paragraph 1, point (b) shall at least include the following economic and administrative support schemes:*
 - (a) ensure the fast administrative set-up of Valley;*
 - (b) develop the necessary infrastructure in the Valley;*
 - (c) support private investments in the Valley;*
 - (d) ensure the adequate reskilling and upskilling of the local workforce.*
- 7. Public investments aimed at setting up Valleys, at equipping Valleys with appropriate infrastructure, converting brownfield sites and developing the adequacy of the local skills pool may benefit from increased co-financing rates by up to 10% under the European Fund for Regional Development, the Just Transition Fund and the European Social Fund Plus, if the Valley is located in less developed and transition regions or in Just Transition.*

Article 15

Coordination of financing

1. The Net-Zero Europe Platform as established in Article 28 shall **assess** financial needs and bottlenecks of net-zero strategic projects, **collect** potential best practices, in particular to develop EU cross-border supply chains, notably based on regular exchanges **and recommendations of the Net-Zero Industry Expert Group and** with the relevant industrial alliances.
2. The Net-Zero Europe Platform shall, at the request of the net-zero strategic project promoter, discuss and advise on how the financing of its project can be completed, **provide and coordinate support for its project to be completed, in particular to meet the criteria defined in Article 19(2)** taking into account the funding already secured and considering at least the following elements:
 - (a) additional private sources of financing;
 - (b) support through resources from the European Investment Bank Group or other international financial institutions including the European Bank for Reconstruction and Development;
 - (c) existing Member State instruments and programmes, including from national promotional banks and institutions;
 - (d) relevant Union funding and financing programmes **including through STEP**.
- 2a. **By ... [3 months from the date of entry into force of this Regulation] and every two years thereafter, the Net-Zero Europe Platform shall issue recommendations to the Commission to guarantee sufficient funding, including through the Union budget, to pursue the objectives of this Regulation.**

Article 15a

Financing of net-zero technologies

1. **Without prejudice to Directive 2003/87/EC, Member States shall report annually on the percentage of national revenues generated from the auctioning of the allowances, in accordance with the activities allowed under Article 10(3) of that Directive, that is used**

to support the objectives of this Regulation with a view of reaching at least 25%.

2. *In accordance with Article 2 of [STEP Regulation] Net-Zero Strategic Projects selected pursuant to Article 10(1), points (a) or (b), of this Regulation are recognised as fulfilling the STEP objectives and shall therefore be eligible to receive the Sovereignty Seal under Article 4 of that Regulation as well as to receive funds in accordance with Article 9 of that Regulation.*

Chapter III

CO₂ injection capacity

Article 16

Union level objective of CO₂ injection capacity

1. *An annual injection capacity of at least 50 million tonnes of CO₂ shall be achieved by 2030, in storage sites, meaning geological storage sites permitted under Directive 2009/31/EC including depleted oil and gas fields and saline aquifers, located in the territory of the Union, its exclusive economic zones or on its continental shelf within the meaning of the United Nations Convention on the Law of the Sea and which are not combined with Enhanced Hydrocarbon Recovery (EHR).*
2. *The storage sites referred to in paragraph 1 shall be designed to operate for a minimum of five years.*
3. *By 31 December 2026, the Commission shall propose, if appropriate, to the European Parliament and Council requirements for the annual CO₂ injection capacity to be provided by 2035, 2040 and 2050, paying regard to the needs of Member States across the Union.*
4. *By ... [two years from the date of entry into force of this Regulation] and every two years thereafter, the Commission shall submit a report to the European Parliament and to the Council on the progress achieved towards the Union annual injection capacity target, including the state of the market related to the injection capacity. The report shall include an overview of the geographical spread of storage sites across the Union.*
5. *The report referred to in paragraph 4 shall include a CO₂ storage and injection capacity adequacy assessment, using, in particular, the information collected pursuant to Article 17(2) and to Article 18 (6), which shall:*

- (a) *provide a detailed analysis of the geographical and temporal adequacies between the existing and planned CO₂ storage sites and the CO₂ capture projects for CO₂ emissions from industrial installations within the Union;*
 - (b) *identify the main infrastructure needed for the transportation and storage of CO₂ emissions from industrial installations throughout the Union;*
 - (c) *identify specific potential for CO₂ usage to contribute to the permanent storage of CO₂, which could lead to reduced needs for CO₂ storage, or to reducing the Union's dependence on fossil fuels.*
- 6. *Where the report referred to in paragraph 4 shows that the demand for CO₂ injection capacity is significantly higher or lower than reflected in the capacity targets set out under paragraphs 1 and 3, the Commission shall adopt a delegated act in order to align the capacity targets with the demand.*
- 7. *Where the report referred to in paragraph 4 of this Article shows that the market is insufficiently developed to provide an adequate injection capacity, the Commission may adjust the contributions under Article 18 while ensuring that the entities affected will have sufficient time to adjust their business plans to the newly defined obligations.*
- 8. *The Union may integrate its neighbouring countries into its efforts under this Chapter by integrating the provisions of this Chapter in agreements with these countries or by establishing new agreements covering the provisions of this Chapter. When integrating these provisions in existing agreements or when establishing new agreements, the agreement shall ensure that all Union environmental, safety and security standards and requirements applicable for projects under this Chapter are respected in the third country. The agreement shall also set out an additional proportionate injection target for the third country as well as, in accordance with Article 18, a pro rata contribution for the relevant entities in the third country.*

Article 17

Transparency of CO₂ storage capacity data

- 1. By ... [3 months from the entry into force of this Regulation], Member States shall:
 - (a) make publicly available data on areas where CO₂ storage sites can be permitted on their territory.
 - (b) oblige entities holding an authorisation as defined in Article 1, point 3, of

Directive 94/22/EC of the European Parliament and of the Council⁴⁹ on their territory to make publicly available *on a non-reliance basis* all *raw* geological data relating to production sites that have been decommissioned or whose decommissioning has been notified to the competent authority, *and preliminary economic assessments of the respective costs of enabling CO2 injection on each site, including data on:*

- (i) *whether the site is suitable for sustainably, safely and permanently injecting and storing CO2;*
- (ii) *whether transport infrastructure and modes suitable for safely transporting CO2 to reach the site is available or can be constructed.*

(c) For the purposes of point (a), the data shall include at least the information requested in the Commission Notice on the Guidance to Member States for the update of the 2021-2030 National Energy and Climate Plans *and its subsequent updates.*

2. By ... /six months from the *date of* entry into force of this Regulation/ and each year thereafter, each Member State shall submit to the Commission a report, *which shall be made publicly available*, describing:

- (a) *a mapping of CO2 capture projects in progress on its territory or in cooperation with other Member States*, and an estimation of the corresponding needs for injection and storage capacities, *and CO2 transport;*
- (b) *a mapping of CO2 storage and CO2 transport* projects in progress on its territory, including the status of permitting under Directive 2009/31/EC, expected dates for Final Investment Decision (FID) and entry into operation;
- (c) the national support *measures that have been adopted and* measures that could be adopted to prompt projects referred to in points (a) and (b).
- (ca) *the national strategy and targets that have been set for the capture of CO2 by 2030, and when applicable in accordance with Article 16(3) for 2035, 2040 and 2050;*
- (cb) *the arrangements, including bilateral agreements made to facilitate cross-*

⁴⁹ Directive 94/22/EC of the European Parliament and of the Council of 30 May 1994 on the conditions for granting and using authorizations for the prospection, exploration and production of hydrocarbons (OJ L 164, 30.6.1994, p. 3).

- border transportation of CO₂, made to ensure that entities capturing CO₂ have access to a safe and non-discriminatory means of transporting CO₂;*
- (cc) CO₂ transportation projects in progress and an estimation of the necessary future CO₂ transport projects' capacity to match the corresponding capture and storage capacity.*
- 2a. Should the report referred to in paragraph 2 show that no CO₂ storage projects are in progress on their territory, Member States shall report on plans to facilitate the decarbonisation of industrial sectors faced with unavoidable CO₂ emissions. This should include cross-border transport of CO₂ to storage sites located in other Member States, as well as CO₂ utilisation projects.*

Article 17a

CO₂ transport infrastructure

- 1. In order to facilitate the achievement of the objective set out in Article 16, the Union and its Member States in partnership with the companies benefiting shall ensure the needed investments in CO₂ transport infrastructure, including cross-border infrastructure, are being made.*
- 2. Member States shall take the necessary measures to ensure that potential users of storage sites are able to obtain access to CO₂ transport networks and to storage sites for the purposes of geological storage of the produced and captured CO₂.*
- 3. In order to minimise the environmental impact of CO₂ transport, the Union, its Member States and all other actors involved shall aim to minimise the need for CO₂ transport.*
- 4. Member States may form, or may provide support for the formation of, entities that have the objective of creating CO₂ transport networks including the construction of infrastructure or the provision of vessels or other means of conveyance. The formation of such entities shall be reviewed at least every two years.*
- 5. By ... [by six months from the date of entry into force of this Regulation], the Commission and Member States shall draw up a common strategy to finance the infrastructure referred to in paragraph 1.*

Article 18

Contribution of authorised oil and gas producers

1. Each entity ***selling crude oil, petroleum products or natural gas in the Union*** shall be subject to an individual ***and obligatory*** contribution to the Union-wide target for available CO₂ injection capacity set in Article 16. Those individual contributions shall be calculated pro-rata on the basis of each entity's share in ***crude oil, petroleum products and natural gas sold in the Union*** ■ from 1 January 2020 to 31 December 2023 and shall consist of CO₂ injection capacity in a storage site permitted in accordance with Directive 2009/31/EC on the geological storage of carbon dioxide and available to the market by 2030.
 - 1a. ***Entities referred to in paragraph 1 shall be able to meet their individual contribution to the Union-wide target for available CO₂ injection capacity through making available injection capacity in storages located in countries referred to in Article 16(8).***
 - 1b. ***Member States shall take the necessary measures to facilitate and incentivise emitters to capture emissions, to incentivise investors to finance the needed infrastructure to transport CO₂ to the storage site, and where needed, to directly fund of CO₂ storage projects.***
 - 1c. ***Where CO₂ is captured and transported in one Member State and transported and stored in other Member States, Member States shall coordinate measures stated in paragraph 1b. The Commission shall ensure and facilitate such coordination through the establishment of CCS Regional Groupings.***
2. Within three months of the entry into force of this Regulation, Member States shall, identify and report to the ■ Commission the entities referred to in paragraph 1 and their volumes in crude oil and natural gas ***sale*** from 1 January 2020 to 31 December 2023.
3. Following the receipt of the reports submitted pursuant to Article 17(2), the Commission after having consulted Member States and interested parties, shall specify the share of the contribution to the Union CO₂ injection capacity objective by 2030 from entities referred to in paragraph 1 ***of this Article***.
4. Within twelve months of the entry into force of the Regulation, the entities referred to in paragraph 1 shall submit to the Commission a plan detailing how they intend to meet their contribution to Union CO₂ injection capacity objective by 2030. Those plans shall:

- (a) confirm the entity's contribution, expressed in terms of targeted volume of new CO₂ storage and injection capacity commissioned by 2030;
 - (b) specify the means and the milestones for reaching the targeted volume.
- 5. To meet their targeted volumes of available injection capacity, entities referred to in paragraph 1 can do any of the following:
 - (a) ***invest in, or*** develop, CO₂ storage projects alone or in co-operation;
 - (b) enter into agreements with other entities referred to in paragraph 1, ***thereby considering the overall aim of increasing regional storage capacity across the Union;***
 - (c) enter into agreements with third party storage, ***capture and transport***, project developers or investors to fulfil their contribution.
- 6. ***By ... [two years from the entry into force of the Regulation] and every year thereafter,*** the entities referred to in paragraph 1 shall submit a report to the ***competent authorities of the Members States and the Commission*** detailing their progress towards meeting their contribution. ***In accordance with Directive 2009/31/EC, that report shall include details on the newly commissioned storage capacities, the extent of its utilisation, and an overview of the economic feasibility of planned injection capacities and recommendations to the Member States on additional measured required to reach the CO₂ injection targets.*** The Commission shall make these reports public.
- 6a. ***The Commission shall assess the compliance of the entities referred to in paragraph 1 with the requirements of this Chapter. In this assessment the Commission shall take into account the development of CO₂ transport modalities to the injection sites as well as the development of CO₂ capture activities to produce the demand for CO₂ injection. If either or both infrastructure and capture activities, needed for a specific injection project to become operational, are lacking resulting in a specific entity not meeting its obligations this Article the Commission may reduce the injection obligation of a specific entity for a specific year. Any reduction shall be recovered within five years after the reduction took place.***
- 7. The Commission is empowered to adopt delegated acts in accordance with Article 32 to supplement this Regulation concerning:

- (a) The modalities in which agreements between entities referred to in paragraph 1 and investments in storage capacity held by third parties are taken into account to meet their individual contribution under paragraph 5, points b and c.
 - (b) The content of the reports referred to in paragraph 6;
 - (ba) *Dissuasive and proportionate sanctions and penalties that may be applied to entities referred to in paragraph 1 that fail to comply with the requirements of this Regulation.*
- 7a. *To contribute to the Union CO₂ injection capacity objective, entities referred to in paragraph 1 are entitled to account the CO₂ injection capacity corresponding to the project shares owned by another shareholder involved in a storage project, in case that shareholder does not fall under the scope of paragraph 1.*

Article 18a

Regulatory framework for the market for captured CO₂

1. *By ... [six months from the date of entry into force of the Regulation], the Commission shall publish guidelines indicating the maximum appropriate levels of CO₂ purity and of trace elements within the flow that is to be specified by an entity seeking to have a CO₂ storage project confirmed as contributing to the Union's injection capacity objective.*
2. *By ... [2 years from the date of entry into force of this Regulation], the Commission shall carry out an assessment in accordance with paragraph 2 and, if appropriate, submit a legislative proposal to establish a regulatory framework for a Union-wide CO₂ capture, usage, storage and transport market to complement the rules set out in Directive 2009/31/EC, laying down rules on:*
 - (a) *open, fair and non-discriminatory access and safety of the CO₂ storage and transport network;*
 - (b) *open, fair and non-discriminatory access to capture CO₂ for usage or storage purposes;*
 - (c) *the functioning and interconnection of the CO₂ transport network and other infrastructure across the Union;*
 - (d) *economic incentives, funding and financial assistance mechanisms;*
 - (e) *specification standards for CO₂ storage and transport;*

- (f) environmental standards;*
 - (g) guarantees for the origin of CO₂;*
 - (h) enforcement mechanisms.*
- 2a. Before adopting any legislative proposal as referred to in paragraph 2, the Commission shall assess whether:*
- (a) the functioning of the CO₂ market ensures sufficient access to injection capacity for unavoidable CO₂ emissions;*
 - (b) the obligations set out in Article 18(1) effectively promote the development of the CO₂ storage market in the Union.*

Where the assessment pursuant to this paragraph shows that the market is not developing in line with the objectives of this Regulation, the Commission may decide to include rules to provide priority access for unavoidable emissions to injection capacity as well as to amend this Regulation to change the obligations set out in Article 18(1).

The Commission shall ensure that all sectors with unavoidable industrial process emissions have sufficient access to the CO₂ injection capacity. Where its assessments show the market is not developing in line with this objective, the Commission shall develop rules to provide priority access for unavoidable industrial process emissions to the CO₂ injection capacity.

To facilitate the assessment pursuant to this paragraph, the Commission shall develop a list of sectors with unavoidable industrial process emissions from large-scale industrial installations for which no direct emissions reduction options are available after the best available techniques have been applied, based on a clear methodology including scientific evidence, the current state-of-the-art of relevant technologies, economic feasibility, as well as appropriate demand-side emissions reduction measures.

Chapter IV.

Access to markets

Article 19

Sustainability and resilience contribution in public procurement procedures

1. *Without prejudice to the World Trade Organization Agreement on Government Procurement (GPA) and other international agreements by which the Union is bound as well as applicable sectoral legislation, in particular Regulations (EU) 2022/1031 and (EU) 2022/2560, contracting authorities and contracting entities shall base the award of contracts for purchase or use for net-zero technology listed in Article 3 of this Regulation, as well as, particularly through public procurement of innovative solutions and pre-commercial public procurement, innovative net-zero technologies or other innovative technologies, in a public procurement procedure on the most economically advantageous tender, which shall include the best price-quality ratio, comprising at least the environmental and social sustainability and resilience contribution of the tender, in compliance with Directives 2014/23/EU, 2014/24/EU, or 2014/25/EU. Contracting authorities and contracting entities shall ensure that the procurement process is open, non-discriminatory and transparency, allowing fair competition among all eligible suppliers.*

Where a net-zero technology is not the main object of the contract but only part of it and the estimated value of the relevant part of the contract is above the thresholds set out in Directive 2014/23/EU, 2014/24/EU or 2014/25/EU, contracting authorities or contracting entities shall do one of the following:

- (a) separate the net-zero technology part into dedicated lot or lots;*
- (b) prepare a separate contract or contracts for the net-zero technology part; or*
- (c) impose on the main contractor an obligation of competitive subcontracting for the supply of the respective net-zero technology products applying Directive 2014/23/EU, 2014/24/EU or 2014/25/EU, as appropriate, and this Article.*

2. The tender's *environmental and social* sustainability contribution shall be based on the following cumulative criteria which shall be objective, transparent and non-discriminatory:

- (a) environmental sustainability going beyond the minimum requirements in applicable legislation;
- (b) where an innovative solution needs to be developed, the impact and the quality of the implementation plan, including risk management measures;
- (c) where applicable, the tender's contribution to the energy system integration;
- (d) the tender's contribution to *decent wages and working conditions, including where relevant the offering of apprenticeships as well as well-defined objectives in terms of skilling, reskilling and upskilling, to increase the attractiveness of employment in net-zero industry sectors.*

2a. The tender's resilience contribution shall be based on the following cumulative criteria, which shall be objective, transparent and non-discriminatory:

- (a) *where applicable, the tender's contribution to the energy security of the Union;*
- (b) *the tender's contribution to the resilience of the Union, taking into account the security of supplies by considering the proportion of the products originating from a single source of supply, as determined in accordance with Regulation (EU) No 952/2013. The supply shall be deemed insufficiently secured where a single source supplied, in the last year for which data is available, more than 50% of the total demand within the Union for a specific net-zero technology or the components primarily used for the production of these technologies;*
- (c) *where applicable, contribution to innovation by providing entirely new solutions or improving comparable state-of-the-art solutions.*

3. Contracting authorities and contracting entities shall give the sustainability and resilience contribution a weight *of at least 30%* of the award criteria *for the net-zero technology part of a tender, taking into account both the sustainability and the resilience contribution in a balanced way.*

For the implementation of the criteria referred to in paragraph 2a of this Article, the contracting authorities or contracting entities refer to the latest data entered in the list referred to in Article 22(2) of this Regulation, and the origin of supply shall be determined in accordance with Regulation (EU) No 952/2013..

4. *By way of derogation from paragraph 3 of this Article,* the contracting authority or the contracting entity shall not be obliged to apply the considerations relating to the

sustainability and resilience contribution of net-zero technologies where their application would **clearly** oblige that authority or entity to acquire equipment having disproportionate costs **■**. Cost differences **shall be calculated only for the cost of the equipment, excluding related services, and may be presumed by contracting authorities and contracting entities to be disproportionate when they are above 30%, compared to a tender without the sustainability and resilience contribution.** This provision shall be without prejudice of the possibility to exclude abnormally low tenders under Article 69 of Directive 2014/24/EU and Article 84 of Directive 2014/25/EU, **■** without prejudice to other contract award **and exclusion** criteria according to the EU legislation, **and without prejudice to prerogative of contracting authorities to formulate technical specifications in line with Article 42 of Directive 2014/24/EU in order to ensure the application of paragraph 3 of this Article does not lead to the procurement of incompatible equipment requiring unreasonably high costs to ensure the compatibility with the existing equipment.**

The Net-Zero Europe Platform may issue recommendations to the contracting authorities and entities across the Union regarding appropriate higher thresholds for defining disproportionate costs in light of the market circumstances for specific net-zero technologies.

Member States may adjust their overall budgets allocated to public procurement procedures as well as the related maximum bid levels in order to accommodate the implementation of non-price criteria.

4a. Contracting authorities shall apply the following prequalification conditions for procurement procedures under this Article:

- (a) no more than 50% of the net-zero technology part of the tender, measured in financial value of the equipment as determined in accordance with Regulation (EU) No 952/2013, shall originate from third countries which are not signatories of the GPA;**
- (b) all equipment supplied under the net-zero technology part of the tender shall be certified in terms of cyber security insofar as a Union or national cyber security certification framework exists for the equipment;**
- (c) economic operators supplying the net-zero technology part of the tender shall not be subject to an IPI measure as defined in the Regulation (EU) 2022/1031, in particular Articles 6 and 8 thereof.**

Where the application of those prequalification conditions in a procurement procedure results in no suitable offers, the contracting authority may restart the procedure without the application of the prequalification conditions of points (a) and (c) of this paragraph.

- 4b. *A Member State shall not discriminate against, or subject to unjustified different treatment, a provider or net-zero products from another Member State, based on sustainability and resilience criteria.*

Article 20

Auctions to deploy renewable energy sources

1. Without prejudice to Article 4 of Directive (EU) 2018/2001 *of the European Parliament and of the Council*⁵⁰ and Articles 107 and 108 *TFEU*, and Union's international commitments including the GPA and other international agreements by which the Union is bound, Member States, regional or local authorities, bodies governed by public law or associations formed by one or more such authorities or one or more such bodies governed by public law, shall assess the sustainability and resilience contribution as referred to in Article 19(2) *and (2a)* of this Regulation when designing the criteria used for ranking bids in the framework of auctions, the aim of which is to support the production or consumption of energy from renewable sources as defined in Article 2, point (1) of Directive (EU) 2018/2001. *This shall not preclude thoses entities from using other non-price criteria.*
2. The sustainability and resilience contribution shall be given a weight between 35% and 50% of the award criteria, *taking into account both the sustainability and the resilience contribution in a balanced way*, without prejudice *to* the possibility to give a higher weighting to the criteria in Article 19(2), points (a) and (b), where applicable under Union legislation, and of any limit for non-price criteria set under State aid rules. *When selecting, designing and implementing the concrete non-price criteria as part of the sustainability and resilience contribution, technology-specific characteristics shall be taken into account and effectively addressed.*
3. The Member States, regional or local authorities, bodies governed by public law or

⁵⁰ *Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (OJ L 328, 21.12.2018, p. 82).*

associations formed by one or more such authorities or one or more such bodies governed by public law shall not be obliged to apply the considerations relating to the sustainability and resilience contribution of net-zero technologies where their application would oblige those entities to acquire equipment having disproportionate costs **■**. Cost differences above 10% may be presumed by contracting authorities and contracting entities to be disproportionate *when the costs of the support offered by the public sector for the project would be more than 15% higher, compared to a procedure without the sustainability and resilience contributions. This paragraph shall be without prejudice to the prerogative of contracting authorities to formulate technical specifications in accordance with Article 42 of Directive 2014/24 in order to ensure the application of this paragraph does not lead to the procurement of incompatible equipment requiring unreasonably high costs to ensure the compatibility with the existing equipment.*

Member States may adjust their overall budgets allocated to renewable energy auctions as well as the related maximum bid levels in order to accommodate the implementation of non-price criteria.

Member States shall ensure that auctions include an inflation indexation mechanism. Negative bids shall, where appropriate, be excluded from auctions.

3a. *Authorities shall apply the following prequalification conditions for auctions under this Article:*

- (a) no more than 50% of the net-zero technology part of the tender, measured in financial value of the equipment as determined in accordance with Regulation (EU) No 952/2013, shall originate from third countries which are not signatories of the GPA;*
- (b) all equipment supplied under the net-zero technology part of the tender shall be certified in terms of cyber security insofar as a European or national cyber security certification framework exists for the equipment;*
- (c) economic operators supplying the net-zero technology part of the tender shall not be subject to an IPI measure as defined in the Regulation (EU) 2022/1031, in particular Articles 6 and 8 thereof.*

Where the application of those prequalification conditions in an auction results in no suitable bids, the contracting authority may restart the auction without the application of the prequalification conditions of points (a) and (c).

Article 20a

Commission guidance

1. *By ... [6 months from the date of entry into force of this Regulation], the Commission shall provide clear guidance on the concrete implementation on Article 19 in combination with Article 20, by providing:*
 - (a) *a catalogue of concrete and technology-specific potential non-price criteria for renewable energy auctions, which shall differentiate between non-price criteria suitable for competitive bidding processes and non-price criteria suitable as prequalification requirements in renewable energy auctions;*
 - (b) *a methodology on how to assess a tender's contribution to environmental and social sustainability and resilience referred to in Article 19(2), points (a) and (d);*
 - (c) *a methodology on how to assess the cost differences referred to in Article 20(3).*
2. *The Commission shall evaluate the contribution of non-price criteria of this Regulation aiming to provide an incentive for the innovation required for achieving the Union's 2030 and 2050 energy and climate targets and report to the European Parliament by ... [two years after the date of entry into force of this Regulation]. If necessary, the Commission shall modify the contribution of non-price criteria in order to foster manufacturing in the Union, ensuring high environmental and sustainability standards, developing value chains across the Union and increasing the competitiveness of Union businesses at global level.*

Article 20b

Pre-commercial procurement and public procurement of innovative commercial solutions

1. *Member States shall seek to use pre-commercial procurement for pre-commercial innovative net-zero technologies and public procurement of commercial innovative net-zero technologies within the framework of the implementation of their National Energy and Climate Plans. Pre-commercial procurement and public procurement may be topped up with Union-level funding within the framework of existing Union Programmes for joint pre-commercial procurement or public procurement across Member States.*
2. *NECPs, NECP-updates and NECP progress reports shall detail the timing of the*

PCPs and PPIs and their objectives. The Net-Zero Europe Platform shall prepare recommendations on the design of pre-commercial procurement or public procurement.

Article 21

Other forms of public intervention

1. Without prejudice to Articles 107 and 108 *TFEU* and Article 4 of Directive (EU) 2018/2001⁵¹ and in line with the Union's international commitments, when deciding to set up schemes benefitting households, ***business*** or consumers which incentivise the purchase of net-zero technology final products listed in ***Article 3a(1) of this Regulation***, Member States, regional or local authorities, bodies governed by public law or associations formed by one or more such authorities or one or more such bodies governed by public law, shall design them in such a way as to promote the purchase by beneficiaries of net-zero technology final products with a high sustainability and resilience contribution as referred in Article 19(2) ***of this Regulation***, by providing additional proportionate financial compensation.
2. The additional financial compensation granted by authorities in accordance with paragraph 1, due to the application of the criteria referred to in Article 19(2), ***points (b), (c) and (d) and Article 19(2a)*** shall not exceed 5 % of the cost of the net-zero technology final product for the consumer, ***except for schemes targeting citizens living in energy poverty for which the limit shall be 15%.***
3. When designing and implementing a scheme falling under paragraph 1, the authority shall base itself on an open, non-discriminatory and transparent process to assess the resilience and sustainability contribution of available products on the market. Any net-zero technology final product shall be entitled to apply to join the scheme at any time. The authority shall specify a pass mark for products to be eligible to the additional financial compensation under the support scheme.
4. Member States shall publish on a single free access website all information relating to schemes pursuant to Article 21(1) for each relevant net-zero technology product.

⁵¹ Directive 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources

Article 22

Coordination of access to markets initiatives

1. ***By ... [12 months from the date of entry into force of this Regulation], the Commission shall adopt an implementing act in accordance with the examination procedure referred to in Article 34(3) specifying the criteria to assess the resilience and sustainability contribution of available products covered by the forms of public intervention covered under Articles 19, 20 and 21, in accordance with similar provisions in existing legal acts, and establishing the criteria for a derogation as provided for in Article 19(4). The Commission shall take the specific context of SMEs into consideration.***
 - 1a. ***In the case of a conflict between the different award and sustainability criteria set under other Union legal acts, the Commission shall provide guidance on how those provisions coexist. The Commission shall review and, where necessary, update its guidance every six months.***
2. The Commission shall make available and regularly update a list of ***all*** of the net-zero technology final products listed in ***Article 3***, broken down by the share of Union supply originating in different third countries in the last year for which data is available. ***The Commission and the Net-Zero Europe Platform shall consult industrial stakeholders' associations and industrial players to this end.***
3. The Net-Zero Europe Platform shall discuss measures carried out by Member States to implement Articles 19 and 21 and exchange best practices, inter alia, as concerns the practical use of criteria defining the sustainability and resilience contribution in public procurement, or schemes incentivising the purchase of net-zero technology final products.

Chapter V.

Enhancing skills for quality job creation

Article 23

European Net Zero Industry Academies

1. ***Based on a mapping exercise and referred to in Article 23a, the Commission shall support, including through the provision of seed-funding, the establishment of***

European Net Zero Industry Academies *as a network of experts in net-zero technologies*, which have as their objectives to:

- (a) develop learning programmes, content and learning and training materials for training and education on developing, producing, installing, commissioning, operating, maintaining and recycling net-zero technologies *and*, on raw materials *that have been identified by the mapping exercise*, as well as to support the capacities of public authorities competent to issue permits and authorisations referred to in Chapter II and contracting authorities referred to in Chapter IV of this Regulation;
- (aa) *ensure that the learning programmes developed facilitate the acquisition and strengthening of transversal competences, beyond skills that are specific to a particular technology or a particular sector, to facilitate the adaptation from one industry to another, allowing learners to be mobile and adaptable to the ever-changing situation on the labour market and beyond;*
- (ab) *ensure that the learning programmes contain relevant and accessible up-to-date information and training on health and safety issues as well as relevant information on workers' rights and working conditions;*
- (ac) *aim to enable the training and education of 100 000 learners per Academy, within three years of their establishment by encouraging professional lifelong learning and upskilling or reskilling, including through apprenticeships, mentoring programmes as well as short and long duration training programmes;*
- (b) enable and promote the use of the learning programmes, content and materials by education and training providers in the Member States, *such as universities, research universities, universities of applied sciences and university alliances, undertakings that provide such education and training, including SMEs, start-ups and social enterprises, social partners, and by training trainers;*
- (ba) *develop mechanisms to ensure the quality of the training offered by education and training providers in the Member States and, where applicable, in countries associated with Union research and innovation programmes, such as Horizon Europe and Digital Europe, based on learning programmes, content and materials of the European Net-Zero Industry Academies;*

- (bb) *contribute to the long-term objective of simultaneously reindustrialising and decarbonising the Union as well as contributing to its open strategic autonomy and address the need for Union-made net-zero technologies and skilled workers;*
- (c) *develop and deploy credentials, including micro-credentials, to facilitate the recognition of skills acquired, to enhance the transferability between jobs and industries, to facilitate the cross-border mobility of the workforce, and to promote matching with relevant quality jobs through tools such as the European Employment Services (EURES) network and EURAXESS.*
2. *European Net-Zero Industry Academies shall counter gender stereotypes and shall promote equal access to learning contents for all, paying particular attention to the need to activate more women and young people, in particular those who are not in education, employment or training (NEETs), older people, workers in professions which are at risk of disappearing or the content and tasks of which are being highly transformed by new technologies and people working in regions in transition. The European Net-Zero Industry Academies shall promote diversity and inclusivity of people with disability, migrants and people in vulnerable situations.*

Article 23a

Establishment and governance of the European Net-Zero Industry Academies

A mapping exercise shall identify labour and skills shortages in key industrial sectors and net-zero industries based on the needs of industrial transformation and decarbonisation and assess the access to training opportunities related to such technologies at national level.

The mapping exercise shall analyse the root causes of such shortages, especially those related to the quality of the job offer, thus assessing whether additional measures are needed to attract more workers of all qualification levels in certain industries.

If, on the basis of the mapping exercise, a critical level of skills shortages in a strategic net-zero technology is identified, the Commission shall issue a call for proposals for the establishment of European Net-Zero Industry Academies.

The members of Net-Zero Industry Academies shall comprise several actors, such as industries in which the use of net-zero technologies is key in their value chains, education and training providers, social partners and undertakings including SMEs. The composition

of the membership shall, where possible, aim for geographical balance across Member States, while ensuring that the learning content developed by the European Net-Zero Industry Academies is available in different languages so that the learning programmes be accessed by a maximum of learners, especially among the most vulnerable groups.

A financial envelope of at least EUR 102 000 000 in current prices shall be made available for the establishment and functioning of the European Net-Zero Industry Academies between 1 January 2024 and 31 December 2027. Members States shall make use of relevant Union funds in particular the ESF+, for an effective deployment of the Academies' learning content, and shall provide information to the Commission on the amount of Union funds have been allocated to achieve that objective.

Three years after their establishment, the European Net-Zero Industry Academies shall become financially sustainable by receiving financial contributions from the private sector.

The Net-Zero Europe Platform established pursuant to Article 28(1) shall monitor the work of the European Net-Zero Industry Academies and shall issue a report by 31 December 2026 on the deployment of their learning programmes.

Without delay after the entry into force, the Commission shall launch the mapping process and issue a first call for proposals to establish European Net-Zero Industry Academies, which could benefit from the existing work and projects of relevant actors and Member States.

By [31 December 2024], European Net-Zero Industry Academies shall be established.

By [31 December 2025], the European Net-Zero Industry Academies shall start providing and disseminating initial learning content. The deployment phase of the learning content shall pay particular attention to regions in industrial transformation, with critical skills shortages or those with a high rate of unemployment, in particular youth unemployment.

Article 24

Regulated professions in Net Zero Industries and recognition of professional qualifications

1. By 31 December 2024 and every two years thereafter, Member States shall identify whether the learning programmes developed by the European net-zero industry academies are equivalent to the specific qualifications required by the host Member State to access regulated activities within the scope of a profession with particular interest for the net-zero industry *to simultaneously reindustrialise and decarbonise*

with a view to aligning the requested qualifications, covering both technical and academic qualifications. Member States shall ensure that the results of the assessments are made public and easily accessible online. *In the event that the learning programmes are deemed not to be equivalent to the qualifications required by the host Member State to access regulated activities, that Member State shall explain to the Commission the differences and specify how to achieve equivalence.*

2. If a Member State concludes there is equivalence, as described in the first paragraph of this Article, it shall, *in accordance with national law and practice, ensure* facilitate the recognition of credentials issued by education and training providers on the basis of the learning programmes developed by the academies, under Title III Chapter I of Directive 2005/36/EC of the European Parliament and of the Council⁵², whenever a holder of such a credential requests access to a regulated profession within the meaning of Article 3(1)(a) of Directive 2005/36/EC, and of particular importance for the net-zero industry, by accepting the credential as sufficient evidence of formal qualifications.
3. Where access to a profession of particular importance for the net-zero industry is regulated within the meaning of Article 3(1)(a) of Directive 2005/36/EC, Member States shall work towards developing a common set of minimum knowledge, skills and competences necessary for the pursuit of this specific profession with the purpose of establishing a Common Training Framework as referred to in Article 49a (1) of Directive 2005/36/EC of the European Parliament and of the Council to enable automatic recognition of qualifications. The Net Zero Industry Platform may also submit suggestions as referred to in Article 49a (3) of Directive 2005/36/EC.

Article 25

Net-Zero Europe Platform and skills

The Net-Zero Europe Platform referred to in Article 28 shall support the availability and deployment of skills in net-zero technologies, and in competent authorities and contracting authorities referred to in Chapter II and Chapter IV, through the following tasks, *while building upon existing structures within national educational and vocational training system:*

⁵² Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications (Text with EEA relevance), (OJ L 255, 30.9.2005, p. 22).

- (1) assist the Commission in assessing, continuously monitoring and forecasting the demand and supply of a workforce with the skill sets needed in net-zero technologies and the availability and uptake of corresponding education and training opportunities, informing as appropriate the activities of the European Net-Zero Industry Academies;
- (2) monitor the activity of the European Net-Zero Industry Academies and, ***based on the data provided by Member States and national authorities pursuant to Article 31(2), collect information on how many people have benefited from the learning programmes developed by the Academies and provide disaggregated data by industrial sectors, gender, age, and levels of education and qualification***, foster synergies with other national and Union skills initiatives and projects, and provide oversight ***so as to attract a diverse workforce, including through targeted communication campaigns***;
- (3) assist the mobilisation of stakeholders including industry, ***undertakings, including SMEs, start-ups and social enterprises***, social partners and education and training providers, ***such as universities, research universities, universities of applied sciences and university alliances*** for the roll-out of learning ***programmes*** developed by the European Net-Zero Industry Academies;
- (4) assist the uptake and recognition of learning credentials of the European Net-Zero Industry Academies in the Member States to promote the recognition of skills and the matching of skills and jobs, inter alia by promoting the validity and acceptance of the credentials throughout the ***Union's*** labour market of the European Union ***and by emphasising long-term training programmes and remunerated apprenticeships***;
- (4a) ***monitor the enforcement of the uptake and recognition of learning credentials and contribute to providing solutions where issues of non-recognition are detected***;
- (5) facilitate the development of European occupation profiles consisting of a common set of knowledge, skills and competences for key professions in the net-zero technologies, drawing inter alia upon the learning programmes developed by the European Net-Zero Industry Academies, and, where appropriate, using the terminology provided by the European Skills, Competences, Qualifications and Occupations (ESCO) classification to facilitate transparency and mobility between jobs and across internal market borders;
- (6) promote ***career prospects and quality*** working conditions, ***including fair and adequate wages*** in jobs in net-zero technology industries ***as well as the appeal of***

technical education, the labour market integration of youth, women, senior and people from disadvantaged background for net-zero technology industries, and the attraction of skilled workers from third countries through instruments such as the European Blue Card, and thereby achieve a more diverse workforce;

- (6a) encourage and support labour mobility across the Union and publish vacant posts by means of the EURES network;*
- (7) facilitate closer coordination and the exchange of best practices and knowhow between Member States and within the private sector to enhance the availability of skills in the net-zero technologies, including by contributing to Union and Member States policies to attract new talents from third countries and from all educational levels.*

Chapter VI.

Innovation

Article 26

Net-Zero regulatory sandboxes

- 1. By ... [3 months from the date of entry into force of this Regulation], Member States shall designate or establish a single national competent authority which is to be responsible for the net-zero regulatory sandboxes. That authority shall be the sole contact point for any grouping of organisations willing to request the establishment of a net-zero regulatory sandbox pursuant to this Article.*
- 1. Member States and where appropriate together with local and regional authorities and other Member States, may at their own initiative establish net-zero regulatory sandboxes, allowing for the development, testing and validation of innovative net-zero technologies and other innovative technologies, in a controlled real-world environment for a limited time before their placement on the market or putting into service, thus enhancing regulatory learning and potential scaling up and wider deployment. Member States shall establish net-zero regulatory sandboxes in close collaboration with industry and research institutes, and where relevant social partners and civil society, in accordance with paragraph 1 at the request of any company developing innovative net-zero technologies and other innovative*

technologies, which fulfils the eligibility and selection criteria referred to in paragraph 4(a) and which has been selected by the competent authorities following the selection procedure referred to in paragraph 4(b).

2. The modalities and the conditions for the establishment and operation of the net-zero regulatory sandboxes under this Regulation shall be adopted through implementing acts in accordance with the examination procedure referred to in Article 34(3). The modalities and conditions shall to the extent possible support flexibility for national competent authorities to establish and operate their Net-zero regulatory sandboxes, foster innovation and regulatory learning and shall particularly take into account the special circumstances and capacities of participating SMEs- *and* start-ups. The implementing acts referred to *this* paragraph ■ shall include common main principles on the following issues:
 - (a) eligibility and selection for participation in the net-zero regulatory sandboxes;
 - (b) procedure for the application, participation, monitoring, exiting from and termination of the net-zero regulatory sandboxes, including the sandbox plan and the exit report;
 - (c) the terms and conditions applicable to the participants.
3. The participation in the net-zero regulatory sandboxes shall not affect the supervisory and corrective powers of the authorities supervising the *regulatory* sandbox. The testing, development and validation of innovative net-zero *technologies and other innovative* technologies shall take place under the direct supervision and guidance of the competent authorities. The competent authorities shall exercise their supervisory powers in a flexible manner within the limits of the relevant legislation, adapting existing regulatory practices and using their discretionary powers when implementing and enforcing legal provisions to a specific net-zero regulatory sandbox project, with the objective of removing barriers, alleviating regulatory burden, reducing regulatory uncertainty, and supporting innovation in net-zero technologies.
4. Where relevant to achieve the objective of this article, the competent authorities shall consider granting derogations or exemptions to the extent allowed by the relevant Union or national law. The competent authorities shall ensure that the sandbox plan ensures respect for the key objectives and essential requirements of the *Union* and national legislation. Competent authorities shall make sure that any significant risks to health, safety or the environment identified during the development and testing of

innovative net-zero *technologies and other innovative* technologies is publicly communicated and results in immediate suspension of the development and testing process until such risk is mitigated. Where competent authorities consider that the proposed project raises exceptional risks for the health and safety of workers, of the general population, or of the environment, in particular because it relates to testing, development or validation involving particularly toxic substances, they shall only approve the *regulatory* sandbox plan once they are satisfied that adequate safeguards have been put in place commensurate with the exceptional risk identified.

5. Provided that the participant(s) respect the sandbox plan and the terms and conditions for their participation issued in compliance with this Article and as referred to in paragraph 2 and follow in good faith the guidance given by the authorities, no administrative fines or other penalties shall be imposed by the authorities for infringement of applicable Union or Member State legislation relating to the net zero technology supervised in the regulatory sandbox.
6. Participants in the innovative net-zero regulatory sandbox shall remain liable under applicable Union and Member States' liability legislation for any harm inflicted on third parties as a result of the testing taking place in the regulatory sandbox.
7. The duration of the net-zero regulatory sandbox may be extended through the same procedure upon agreement of the national competent authority.
8. The net-zero regulatory sandboxes shall be designed and implemented in such a way that, where relevant, they facilitate cross-border cooperation between the national competent authorities. Member States that have established net-zero regulatory sandboxes shall coordinate their activities and cooperate within the framework of the Net-Zero Europe Platform with the objectives of sharing relevant information. They shall report annually to the Commission on the results of the implementation of regulatory sandboxes, including good practices, lessons learnt and recommendations on their setup and, where relevant, on the application within the regulatory sandbox of this Regulation and other Union legislation in a manner adapted for the purposes of the sandbox.

Article 26a

Innovation for competitiveness and decarbonisation

The measures in this Section shall aim to accelerate innovation in energy technologies within

the Union, in order to accelerate the deployment of those technologies to foster the Union's decarbonisation efforts as well as to increase the global competitiveness of the Union's net-zero industry with the view of securing the Union's open strategic autonomy by increasing the export of those technologies as well as the domestic supply.

Article 26b

Innovation Principle

Without prejudice to its competences under the Treaties, and in line with its Better Regulation Guidelines of 3 November 2021, the Commission shall apply the innovation principle, as described in the Better Regulation Tool #22 as well as in the Commission communication of 15 May 2018 entitled "A renewed European Agenda for Research and Innovation - Europe's chance to shape its future", during the preparation of new Union legal acts as well as during the review and revision of existing Union legal acts, with a view of ensuring that the regulatory framework of the internal market fosters and is supportive of innovation.

Article 26c

SET Plan Board

- 1. For the purpose of establishing and implementing the SET Plan referred to in Article 26d, the Commission shall set up a SET Plan Board. The SET Plan Board shall be responsible for the strategic direction as well as general decisions, including the decision on the technologies to be included on the SET Plan and its implementation.*
- 2. The SET Plan Board shall be composed Member States and of the Commission. It shall be chaired by a representative of the Commission. It shall include structural and permanent involvement of industry and research actors.*
- 3. Each Member State shall appoint a high-level representative to the SET Plan Board. Where relevant as regards the function and expertise, a Member State may have more than one representative in relation to different tasks related to the work of the SET Plan Board. Each member of the SET Plan Board shall have an alternate.*
- 4. On a proposal by the Commission, the SET Plan Board shall adopt its rules of procedure by a simple majority of its members.*
- 5. The SET Plan Board shall meet at regular intervals to ensure the effective performance of its tasks specified in this Regulation. Where necessary, the SET Plan Board shall meet at the reasoned request of the Commission or a simple majority of*

its members.

6. *The Commission shall assist the SET Plan Board by means of an executive secretariat that provides technical and logistic support.*
7. *The SET Plan Board may establish standing or temporary sub-groups dealing with specific questions and tasks.*
8. *The SET Plan Board shall invite representatives of the European Parliament to attend its meetings as observers, including of the standing or temporary sub-groups referred to in paragraph 7.*
9. *Where appropriate, the SET Plan Board or the Commission may invite experts and other third parties to SET Plan Board and sub-group meetings or to provide written contributions.*
10. *The SET Plan Board shall take the necessary measures to ensure the safe handling and processing of confidential and commercially sensitive information.*
11. *The SET Plan Board shall use its best endeavours to reach consensus.*

Article 26d-

Strategic Energy Technology Plan

1. *By ... [3 months from the date of entry into force of this Regulation], the SET Plan Board referred to in Article 26c shall establish a Strategic Energy Technology Plan (SET Plan). The objective of the SET Plan shall be to ensure a focus on and coordination between different funding schemes and sources, at Union, national and sub-national level and to support the development of climate-neutral energy technologies as well as of ensuring strategic alignment on priorities for research, innovation and deployment of clean energy technologies.*
2. *The SET Plan shall identify the energy technologies which are of strategic importance for the Union, taking into account their contribution to the Union's climate-neutrality objectives as well as to the Union's industrial competitiveness, and which require research and innovation activities to reach the maturity needed for full-scale deployment.*
3. *The SET Plan Board referred to in Article 26c shall be responsible for the implementation of the SET Plan. For the purposes of the implementation of the SET Plan, the Commission shall adopt the list of technologies identified in the SET Plan by means of an implementing act in accordance with the examination procedure referred to in Article 34(3).*

4. *Under the authority of the SET Plan Board and with deep involvement of the relevant sectors, including the research sector, research and innovation agendas shall be developed for each of the energy technologies identified in the SET Plan. Those agendas shall be the basis for coordination between the Union and the Member States regarding funding for the activities identified in the agenda as well as regarding the technology infrastructures needed for those technologies. Those agendas shall be endorsed by the SET Plan Board.*
5. *The Commission shall report annually to the Council and the European Parliament on the progress of the SET Plan. The SET Plan shall be reviewed and if necessary revised within 18 months after each election of the European Parliament.*

Article 27

Measures for SMEs and start-ups

1. Member States shall undertake the following actions:
 - (a) provide **SMEs** with priority access to the Innovative Net-zero regulatory sandboxes to the extent that they fulfil the eligibility conditions set in Article 26;
 - (b) organise awareness raising activities about participation to the regulatory sandboxes by **SMEs**;
 - (c) where appropriate, establish a dedicated channel for communication with **SMEs** to provide guidance and respond to queries about the implementation of Article 26.
 2. Member States shall take into account the specific interests and needs of **SMEs**, and provide adequate administrative support to take part in the regulatory sandboxes. Without prejudice to the application of Articles 107 and 108 **TFEU**, Member States should inform **SMEs** of available financial support to their activities in the regulatory sandboxes.
- 2a. *This Article shall apply to start-ups.*

Chapter VII.

Governance

Article 28

Establishment and tasks of the Net-Zero Europe Platform

1. The Net-Zero Europe Platform ('the Platform') is ***hereby*** established.
2. The Platform shall perform the tasks set out in this Regulation.
3. The Platform may advise and assist the Commission and Member States in relation to their actions to reach the objectives ***set out*** of this Regulation, taking into account Member States' national energy and climate plans submitted under Regulation (EU) 2018/1999⁵³.
4. The Commission and Member States ***shall*** coordinate within the Platform **■** and also with relevant third countries to help promote the adoption of net-zero technologies globally, ***to collaborate in the development of net-zero innovative technologies*** and to support the role of Union industrial capabilities in paving the way for the global clean energy transition, in line with the overall objectives of this Regulation stemming from Article 1 of this Regulation. The Platform ***shall***:
 - (a) ***discuss with and, where necessary, recommend to the Commission and Member States, ways to improve and promote cooperation, knowhow and technology sharing*** along the net-zero value chain between the Union and third countries;
 - (aa) ***discuss with and, where necessary, recommend to the Commission, ways to ensure articulation and alignment of this regulation with other Union initiatives or temporary schemes falling under the Green Deal Industrial Plan;***
 - (ab) ***monitor progress on value chains for net-zero technologies, track technological and industrial changes, and identify future emerging strategic***

⁵³ Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (Text with EEA relevance.), (OJ L 328, 21.12.2018, p. 1).

value chains;

(ac) monitor the timely notification of State aid by Member States and its authorisation by the Commission;

(ad) monitor requests for access to grants through Union funds and programmes for purposes related to this Regulation and, where necessary, issue recommendations to coordinate, accelerate and facilitate the procedure;

(ae) assess investment and funding needs, provide guidance on skills development, and discuss best practices with regard to the implementation of Section I of Chapter II as well as to Articles 12 and 13 and accelerating the permitting deadlines;

(b) discuss with and, where necessary, recommend to the Commission, how to address non-tariff barriers to trade, such as through mutual recognition of conformity assessment or commitments to avoid export restrictions;

(c) recommend to the Commission which third countries should be prioritised for the conclusion of Net-Zero Industrial Partnerships, taking into account the following:

(i) the potential contribution to security of supply, taking into account their manufacturing capacity of net-zero technologies;

(ii) whether there are existing cooperation agreements between a third country and the Union;

(iia) CO₂ injection and storage capacities within their territories;

(ca) evaluate trade defence tools to counter any measures from third countries that may arise and jeopardise the objectives set in Article 1.

5. Member States shall support the Commission in the implementation of the cooperation measures set out in the Net-Zero Industrial Partnership. Net-Zero Industrial Partnerships will have the objective of facilitating trade among participants, including by favouring necessary investments within the Union and in third countries, enhancing resilience and sustainability of the supportive value chains, and guaranteeing a level playing field.

5a. The Platform shall, on a regular basis and at least once a year, assess the global competitiveness of the European industries within the scope of this Regulation and

shall recommend actions to improve competitiveness.

- 5b. *By ... [3 months from the date of the date of entry into force of this Regulation] and every three months thereafter, the Commission shall provide the Platform as well as the Net- Zero Industry Advisory Group and the European Scientific Advisory Board on Review and Regulatory Burden with a report on the implementation of a competitiveness Competitive Check. The report shall set out which legislative proposals were made in the three months covered by the report, how the Competitiveness Check was applied in the preparation of those proposals, and which changes were made to the proposals in order to ensure that they would not unnecessarily harm the Union's competitiveness. At least twice per year, on the basis of input from the Net- Zero Industry Advisory Group, the Platform shall discuss the implementation of the Competitiveness Check.*
- 5c. *The Platform shall regularly coordinate with the High-Level Forum on Standardisation to discuss the use of standardisation to support the development of net-zero technologies in Europe.*

Article 29

Structure and functioning of the Net-Zero Europe Platform

1. The Platform shall be composed Member States the Commission, *and the European Parliament*. It shall be chaired by a representative of the Commission.
2. Each Member State *and the European Parliament* shall appoint a high-level representative to the Platform. Where relevant as regards the function and expertise, a Member State *and the European Parliament* may have more than one representative in relation to different tasks related to the work of the Platform. Each member of the Platform shall have an alternate.
3. On a proposal by the Commission, the Platform shall adopt its rules of procedure by a simple majority of its members.
4. The Platform shall meet at regular intervals to ensure the effective performance of its tasks specified in this Regulation. Where necessary, the Platform shall meet at the reasoned request of the Commission or a simple majority of its members.
5. The Commission shall assist the Platform by means of an executive secretariat that provides technical and logistic support.

6. The Platform may establish standing or temporary sub-groups dealing with specific questions and tasks.

The Platform shall establish at least the following standing sub-groups:

- (a) a sub-group to discuss financial needs and bottlenecks of net-zero strategic projects, potential best practices, in particular to develop Union cross-border supply chains, and to coordinate financing for net-zero strategic projects;*
- (b) a sub-group to discuss the implementation of the provisions pursuant to Articles 6, 7 and 8;*
- (c) a sub-group to discuss and coordinate the Net-Zero Industrial Partnerships referred to in Article 28, ensuring cooperation with other relevant coordination fora;*
- (d) a sub-group to ensure the appropriate implementation of the Net-Zero Industry Academies pursuant to Chapter V;*
- (e) a sub-group dedicated to net-zero regulatory sandboxes referred to in Article 26, to maximise the potential of spillover effects throughout the Union by facilitating cross-border cooperation and by limiting the risk of market and competition distortions.*

- 6a. *The Board shall meet at least once every year with the SET Plan Board referred to in Article 26c in order to discuss the strategic alignment of the implementation of this Regulation with the SET Plan.*

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- 7a. *The Platform shall establish a Net-Zero Industry Advisory Group. The Net-Zero Industry Advisory Group shall be composed of representatives of industrial sectors within the scope of this Regulation. At least one third of the members of the Advisory Group shall come from or represent SMEs. The Net-Zero Industry Advisory Group shall, on its own initiative or on the request of the Platform, provide recommendations to the Platform. The Net-Zero Industry Advisory Group shall facilitate interaction between the Platform and consultative or advisory bodies set up in the framework of the Union's industrial policy.*

8. Where appropriate, the Platform *shall* invite experts *representing industry, civil society, academia, trade unions* and other third parties to Platform and sub-group meetings or to provide written contributions.

9. The Platform shall take the necessary measures to ensure the safe handling and processing of confidential and commercially sensitive information.
10. The Platform shall use its best endeavours to reach consensus.
11. The Platform shall coordinate and cooperate with existing industrial alliances *and invite them to attend its meetings, including of the standing or temporary sub-groups referred to in paragraph 6 of this Article, in order to report on the status of and make recommendations on the targets set out in Article 1.*

Article 29a

European Scientific Advisory Board on Review and Regulatory Burden

1. *A European Scientific Advisory Board on Review and Regulatory Burden (the 'Scientific Advisory Board') is hereby established.*
2. *The Scientific Advisory Board shall be composed of 15 senior scientific experts covering a broad range of relevant disciplines. Members of the Scientific Advisory Board shall meet the criteria laid down in paragraph 4.*
3. *No more than two members of the Scientific Advisory Board shall hold the nationality of the same Member State. The independence of the members of the Scientific Advisory Board shall be beyond doubt.*
4. *The members of the Scientific Advisory Board shall be designated for a term of four years, which shall be renewable once, following an open, fair and transparent selection procedure. The selection of members shall be based on the following criteria:*
 - (a) scientific excellence;*
 - (b) experience in carrying out scientific assessments and providing scientific advice in the fields of expertise;*
 - (c) expertise in the field of public administration or other fields relevant for the tasks of the Board;*
 - (d) professional experience in an inter-disciplinary environment in an international context.*
5. *The members of the Scientific Advisory Board shall be appointed in a personal capacity and shall give their positions completely independently of the Member*

States and the Union institutions. The Scientific Advisory Board shall elect a chairperson from among its members for a period of four years and it shall adopt its rules of procedure.

6. *The Scientific Advisory Board shall support the work of the Commission, the European Parliament and the Member States while acting independently in discharging its tasks by providing advisory reports on:*
 - (a) *the regulatory impact and burden of existing Union law;*
 - (b) *the regulatory impact and burden of existing delegated and implementing acts;*
and
 - (c) *existing Member State law transposing Union Directives.*
7. *The Scientific Advisory Board shall establish its annual work programme independently, after consulting the Commission. The chairperson of the Scientific Advisory Board shall inform the Commission, the European Parliament and the Member States of the contents and implementation of its annual work programme. The Scientific Advisory Board may, at the request of the European Parliament, an individual Commissioner or individual Member States, or on the basis of a reasoned request of a stakeholder, provide advice on the regulatory impact and burden of draft Union law or in the decision-making process.*
8. *The advisory reports referred to in paragraph 5 shall be shared with the European Parliament, Commission and the Member States and shall be made publicly available.*
9. *The Commission shall provide the secretariat of the Scientific Advisory Board.*

Article 30

Articulation with National Energy and Climate Plans

Member States shall *provide details the measures they intend to introduce to implement the objective of* this Regulation *in* their national energy and climate plans and their updates, submitted pursuant to Articles 3, 9, and 14 of Regulation (EU) 2018/1999, in particular as regards the dimension “research, innovation and competitiveness” of the Energy Union, and in the submission of their biennial progress reports in accordance with Article 17 of that Regulation. *In particular, Member States shall identify measures to promote research, development and innovation in order to achieve the objectives of this Regulation.*

Chapter VIII.

Monitoring

Article 31

Monitoring

1. The Commission shall monitor on an ongoing basis:
 - (a) The Union's progress with respect to the Union's objectives referred to in Article 1, and the related impact of this Regulation;
 - (b) the progress with respect to the Union level objective of CO₂ injection capacity referred to in Article 16;
 - (ba) the adequacy of the administrative capacity of the Member States to fulfil their obligations under this Regulation.***
2. Member States and the national authorities they designate for this purpose shall collect and provide data and other evidence required pursuant to paragraph 1, points (a) and (b). In particular, they shall collect and report each year to the Commission data on:
 - (a) net-zero technology developments and market trends, including average manufacturing investment costs and production costs, and market prices for the respective net-zero technologies;
 - (b) net-zero technology manufacturing capacity and related activities, including data on employment and skills and progress towards achieving the 2030 targets referred to in recital 13;
 - (c) value and volume of imports into the Union and exports outside of the Union of net-zero technologies;
 - (ca) the number of SMEs that are part of net-zero technology manufacturing projects;***
 - (d) the average duration of permitting procedures under this Regulation;
 - (e) the types and number of permits granted at national level within the past 12 months;

- (f) the amount of permit-granting processes completed, stalled or cancelled within the past 12 months and the types of barriers encountered in case of interruption or cancellation;
 - (g) the number of sandboxes set up within the past 12 months;
 - (h) the amount of CO₂ stored permanently underground in accordance with Directive 2009/31/EC.
3. The data shall include at least the information requested in the Commission Notice on the Guidance to Member States for the update of the 2021-2030 National Energy and Climate Plans.
 4. The first report shall be sent to the Commission by each Member State at the end of May of the year following the date of entry into force of this Regulation. The following reports shall be sent by the end of May every year.
 5. Member States shall also transmit the data collected pursuant to paragraph 2 of this Article to national statistical offices and to Eurostat for the purposes of compiling and publishing statistics in accordance with Regulation (EC) No 223/2009 of the European Parliament and of the Council⁵⁴. Member States shall designate the national authority responsible for transmitting the data to national statistical offices and Eurostat.
 6. On the basis of the reports submitted pursuant to paragraph 2 of this Article, the Commission shall monitor the Union's progress referred to paragraph 1, point (a) *of this Article* and publish related recommendations on an annual basis as part of the Annual Reports on Competitiveness of Clean Energy Technologies, pursuant to Article 35 (2), point (m) of Regulation (EU) 2018/1999.
 7. On the basis of the draft permit applications submitted pursuant to Article 10 of the Directive 2009/31/EC and on the reports submitted pursuant to Articles 17(2) and Article 18(4) and 18(6) of this Regulation, the Commission shall monitor the progress towards reaching the Union-wide target for CO₂ injection capacity referred to paragraph 1 point (b) of this Article and shall report annually to the European

⁵⁴ Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics and repealing Regulation (EC, Euratom) No 1101/2008 of the European Parliament and of the Council on the transmission of data subject to statistical confidentiality to the Statistical Office of the European Communities, Council Regulation (EC) No 322/97 on Community Statistics, and Council Decision 89/382/EEC, Euratom establishing a Committee on the Statistical Programmes of the European Communities (OJ L 87, 31.3.2009, p. 164).

Parliament and the Council. *To that end, the Commission shall create a publicly available database of all available data related to CO₂ storage in the Union to contribute to map CO₂ storage sites and monitor the achievement of the overall target set in Article 16.*

- 7a. *On the basis of the reports referred to in Article 16(2) and Article 18(4) and submitted by entities referred to in Article 18(1) by 31 January 2025 the Commission shall assess and submit a report to the European Parliament and to the Council on the effectiveness of this Regulation, accompanied by a review if deemed necessary.*

Chapter IX.

Final provisions

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Article 33

Exercise of the delegation

1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.
2. The power to adopt delegated acts referred to in *Article 1(3), Article 3(2) and Article 18(7)* shall be conferred on the Commission for a period of five years from [date of application]. The Commission shall draw up a report in respect of the delegation of power not later than nine months before the end of the five-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension not later than three months before the end of each period.
3. The delegation of power referred to *Article 1(3), Article 3(2) and Article 18(7)* may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect on the day following the publication of the decision in the Official Journal of the European Union or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.

4. Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making.
5. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.
6. A delegated act adopted pursuant to *Article 1(3), Article 3(2) or Article 18(7)* shall enter into force only if no objection has been expressed either by the European Parliament or by the Council within a period of two months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.

Article 34

Committee procedure

1. The Commission shall be assisted by a committee. That committee shall be a committee within the meaning of Regulation (EU) No 182/2011.
2. Where reference is made to this paragraph, Article 4 of Regulation (EU) No 182/2011 shall apply.
3. Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply.
4. Where reference is made to this paragraph, Article 8 of Regulation (EU) No 182/2011, in conjunction with Article 4 thereof, shall apply.

Article 35

Evaluation

1. By...[3 years ***from*** the date of application of this Regulation], and every 3 years thereafter, the Commission shall evaluate this Regulation and present a report on the main findings to the European Parliament, the Council and the European Economic and Social Committee.

2. The evaluation shall assess whether the objectives of this Regulation as established in Article 1 have been achieved and its impact on business users, especially SMEs, and end users, and the European Green Deal objectives.
3. The evaluation shall take into account the result of the monitoring process as outlined in Article 31.
4. The competent authorities of the Member States shall provide to the Commission any relevant information they have and that the Commission may require to draw up the report referred to in paragraph 1.

Article 36

Treatment of confidential information

1. Information acquired in the course of implementing this Regulation shall be used only for the purposes of this Regulation and shall be protected by the relevant Union and national legislation.
2. Member States and the Commission shall ensure the protection of trade and business secrets and other sensitive, confidential and classified information acquired and generated in application of this Regulation, including recommendations and measures to be taken, in accordance with Union and the respective national law.
3. Member States and the Commission shall ensure that classified information provided or exchanged under this Regulation is not downgraded or declassified without the prior written consent of the originator.
4. If a Member State assesses that the presentation of aggregated information in the context of Article 18 may nonetheless compromise its national security interest, it may object to the Commission's presentation through a justified notice.
5. The Commission and the national authorities, their officials, employees and other persons working under the supervision of these authorities shall ensure the confidentiality of information obtained in carrying out their tasks and activities. This obligation also applies to all representatives of Member States, observers, experts and other participants attending meetings of the Platform pursuant to Article 29.

Article 37

Amendment to Regulation (EU) 2018/1724

Regulation (EU) 2018/1724 is amended as follows:

- (1) in Annex I, in the first column, a new row 'R. Net-zero technology manufacturing projects' is added.
- (2) in Annex I, in the second column, in the row 'R. Net-zero technology manufacturing projects', the following points are added:
- '1. information on the permit-granting process'
 - '2. financing and investment services'
 - '3. funding possibilities at Union or Member State level'
 - '4. business support services, including but not limited to corporate tax declaration, local tax laws, labour law'.
- (3) in Annex II, in the first column, a new row 'Net-zero technology manufacturing projects' is added.
- (4) in Annex II, in the second column, in the row 'Net-Zero technology manufacturing projects', the following points are added:
- 'Procedures for all relevant administrative permits to plan, build, expand and operate net-zero technology manufacturing projects, including building, chemical and grid connection permits and environmental assessments and authorisations where these are required, and encompassing all administrative applications and procedures'.
- (5) in Annex II, in the third column, in the row 'Net-Zero manufacturing projects', the following point is added:
- 'All outputs pertaining to the procedures ranging from the acknowledgment of the validity of the application to the notification of the comprehensive decision on the outcome of the procedure by the responsible national competent authority'.
- (6) in Annex III, the following point is added:
- '(8) National competent authorities acting as one stop shop pursuant to Article 4 of [the NZIA] Regulation.'

Article 38

Entry into force and application

This Regulation shall enter into force on...[the day following that of its publication in the *Official Journal of the European Union*].

It shall apply from [date of entry into force]. Until [2 years following the date of application of this Regulation], Article 19 (2), points (a), (b) and (c) shall apply only to contracts concluded by central purchasing bodies as defined in Article 2 (1), point (16), of Directive 2014/24/EU and Article 2 (1), point (12), of Directive 2014/25/EU and for contracts of a value equal to or higher than EUR 25 million.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at ■ ,

For the European Parliament

The President

For the Council

The President