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PROPOSAL

From:	Secretary-General of the European Commission, signed by Ms Martine DEPREZ, Director
date of receipt:	17 March 2023
To:	Ms Thérèse BLANCHET, Secretary-General of the Council of the European Union
No. Cion doc.:	COM(2023) 161 final
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 document COM(2023) 161 final.

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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)

EXPLANATORY MEMORANDUM

1. CONTEXT OF THE PROPOSAL

• Reasons for and objectives of the proposal

The transition to a climate neutral, clean economy and the corresponding overhaul of our energy system present significant opportunities in terms of developing the net-zero technology sectors and creating quality jobs and growth. The global market for key mass-manufactured net-zero technologies is set to triple by 2030 with an annual worth of around EUR 600 billion[1]. Our partners and competitors have grasped this opportunity and are deploying ambitious measures to secure significant parts of this new market. These developments are also driven by security of supply considerations. The resilience of future energy systems will be measured notably by a secure access to the technologies that will power those systems - wind turbines, electrolysers, batteries, solar PV, heat pumps and other. In turn, a secure supply of energy will be essential for ensuring sustainable economic growth, and ultimately public order and security.

In that context, the Commission's communication on the Green Deal Industrial Plan[2] of 1 February 2023, presented a comprehensive plan for enhancing the competitiveness of Europe's net-zero industry and supporting the fast transition to climate neutrality. The plan is articulated around the following four pillars: (i) a predictable and simplified regulatory environment; (ii) faster access to funding; (iii) enhancing skills and (iv) open trade for resilient supply chains.

The Net-Zero Industry Act is part of the actions announced in that context, aiming at simplifying the regulatory framework, and improving the investment environment for the Union's manufacturing capacity of technologies that are key to meet the Union's climate neutrality goals and ensure that our decarbonised energy system is resilient whilst contributing to reducing pollution, to the benefit of public health and planetary environmental wellbeing.

Global production of electric vehicles will increase 15-fold by 2050, while the deployment of renewables will nearly quadruple. Deployment of heat pumps will increase more than six times by 2050, compared to today and production of hydrogen from electrolysis or natural gas-based hydrogen with carbon capture and storage will reach 450 Mt in 2050. This will translate into global cumulative manufacturing investments of USD 1.2 trillion required to bring enough capacity on track with the global 2030 targets[3]. China accounts for 90% of investments in manufacturing facilities.

Europe is currently a net importer of net-zero energy technologies, with about one-quarter of electric cars and batteries, and nearly all solar PV modules and fuel cells imported, mostly from China. For solar photovoltaic technologies and their components, this dependency exceeds 90% of products in certain upstream segments of the value chain, such as ingots and wafers. In other sectors, where the EU industry is still strong, such as wind turbines and heat pumps, our trade balance is deteriorating and EU producers face rising energy and input costs.

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[1] Energy Technology Perspectives (2023), International Energy Agency.

[2] 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, Brussels, COM(2023) 62 final, 1.2.2023.

[3] Energy Technology Perspectives (2023), International Energy Agency.

Furthermore, in the area of carbon capture and storage, the emergence of a CCS value chain in the EU is currently being hampered by a lack of CO_2 storage sites.

At the same time, net-zero energy technologies are at the centre of strong geostrategic interests and at the core of the global technological race. Countries are keen to secure their supply in the most advanced energy production technologies and drive the clean transition. Other world regions are heavily investing and rolling out support measures to innovate and strengthen their production capabilities. The United States' Inflation Reduction Act will mobilise over USD 360 billion by 2032. Japan's green transformation plans aim to raise up to JPY 20 trillion (approximately EUR 140 billion) – through 'green transition' bonds. India has put forward the Production Linked Incentive Scheme to enhance competitiveness in sectors like solar photovoltaics and batteries. The United Kingdom, Canada and many others have also put forward their investment plans in net-zero technologies.

Furthermore, within the past year, many European sectors, in particular the energy-intensive industries such as fertilisers, steel, and cement, have been severely impacted by the energy crisis. To remain competitive and circular whilst reaching their decarbonisation and zero pollution goals, these industries need access to net-zero technologies such as batteries, heat pumps, solar panels, electrolysers, fuel cells, wind turbines, and carbon capture and storage. In addition, these technologies also play a key role in the Union's open strategic autonomy, ensuring that citizens have access to clean, affordable, secure energy. The Union has all the elements to become an industrial leader in the net-zero technologies market of the future: the Union's Climate Law provides clear long-term objective; the Union has a strong economy combined with a talented workforce and first-of-a-class infrastructure. The goal is not only to reduce dependencies, but also to contribute to providing industry in the EU with the technologies it needs to decarbonise, and to provide citizens with clean, affordable, and secure energy, including for vulnerable low- and lower middle-income households and consumers. The Union's net-zero ecosystem was worth over EUR 100 billion in 2021, doubling in value since 2020[4].

This explanatory memorandum accompanies the proposal for a Regulation of the European Parliament and of the Council establishing a framework of measures for strengthening Europe's net-zero energy technologies manufacturing ecosystem (Net-Zero Industry Act).

This proposal delivers on the objective to strengthen Europe's net-zero energy technologies manufacturing ecosystem outlined in the Commission Communication on the Green Deal Industrial Plan.

The Net-Zero Industry Act aims at addressing the following core drivers of net-zero technology manufacturing investments:

- improving investment certainty, policy focus and coordination through the setting of clear objectives and monitoring mechanisms;
- lowering administrative burden for developing net-zero manufacturing projects including by streamlining administrative requirements and facilitating permitting, setting up regulatory sandboxes and ensuring access to information;
- facilitating access to markets by specific measures related to public demand through public procurement procedures and auctions, as well as through schemes to support private demand by consumers;

[4] The rise of European Clean Tech – Report, https://dealroom.co/uploaded/2022/04/Dealroom-Talis-Climate-Tech-Europe-2022.pdf

– facilitating and enabling carbon capture and storage projects, including by enhancing the availability of CO_2 storage sites;

– supporting innovation, including through regulatory sandboxes;

– enhancing skills for quality job creation in net-zero technologies;

– coordinating net-zero industrial partnerships.

- **Consistency with existing policy provisions in the policy area**

The uptake in clean energy technologies is a powerful enabler for the sustainability transition and can lead to new products and more efficient and effective ways of generating energy that contribute to the European Green Deal[5] objectives, contributing to both the 2030 climate and energy targets and to the 2050 objective of climate neutrality. These technologies are also key to decarbonising the Union's industry and preserving it in Europe.

Supply disruptions and dependencies on other regions for the provision of clean energy technologies can slow down the sustainability transition of the EU and affect all sectors of the economy. To address the disruptions and dependencies, the proposal strengthens Europe's manufacturing capacity of net-zero energy technologies. Where applicable, facilities should be fully compliant with requirements stemming from Union legislation such as related to environmental impact assessment, emissions to air, water and soil, including the risk and prevention of industrial accidents, and seek to ensure high energy and resource and water efficiency. It is also in line with the Critical Raw Materials Act Regulation, proposed in parallel to this Regulation[6].

This proposal is consistent with the Commission's Communication updating the 2020 new industrial strategy[7] in May 2021 that identifies areas of strategic dependencies that could lead to vulnerabilities such as supply shortages. The proposed Regulation is also fully aligned with the proposals in the final outcome report of the Conference on the Future of Europe.

This proposal is provided in light of the opportunities offered by the Innovation Fund, the InvestEU[8] programme, the Recovery and Resilience Facility, Horizon Europe and cohesion policy programmes which will provide possibilities for supporting the objectives of this Act.

Lastly, this initiative is also consistent with Regulation (EU) 2020/852 of the European Parliament and of the Council establishment of a framework to facilitate sustainable investment (Taxonomy)[9].

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5 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, The European Green Deal, COM(2019) 640, 11.12.2019.

6 OJ: Please insert in the text the number of the the Critical Raw Materials Act Regulation and insert the number, date, title and OJ reference of that Regulation in the footnote.

7 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, "Updating the 2020 New Industrial Strategy: Building a stronger Single Market for Europe's recovery" COM(2021) 350 final, 5.5.2021.

8 Regulation (EU) 2021/523 of the European Parliament and of the Council of 24 March 2021 establishing the InvestEU Programme and amending Regulation (EU) 2015/1017, OJ L 107, 26.3.2021, p. 30.

9 Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment and amending Regulation (EU) 2019/2088 (Text with EEA relevance), (OJ L 198, 22.6.2020, p. 13).

- **Consistency with other Union policies**

The proposal contributes to the objectives of parts of the Fit for 55 package that focus on decarbonising EU industry, in particular hard-to-abate sectors, increased electrification and promoting cleaner vehicles and fuels in a technologically neutral way[10]. The revision of the CO_2 emission standards for new cars and vans aims at further reducing the greenhouse gas emissions of these vehicles, providing a clear and realistic pathway towards zero-emission mobility. Consumer demand for zero emission vehicles, such as electrically chargeable vehicles, is increasing already[11] and can also create significant co-benefits for the achievement of the zero pollution ambition[12].

The proposed measures will also contribute to the EU's resilience and open strategic autonomy by ensuring the security of supply of key energy-related technologies, which is crucial both for supporting the development of other sectors of the economy and for public order and security.

This proposal is consistent with the EU's approach to achieve a fair and just green transition[13]. It is also consistent with actions foreseen under the 2023 European Year of Skills and ongoing initiatives under the EU Pact for Skills and its large-scale skills partnerships as well as other existing skills policies, such as the Blueprints for sectoral cooperation on skills. The assessment, monitoring and forecasting of skills needs will build upon and fully take into account the work of the European Centre for the Development of Vocational Training (Cedefop) and the European Labour Authority (ELA), among others. The European Network of Employment Services (EURES) facilitates job placements and has on average more than 3 million job vacancies available on the portal. Given the variety of job vacancies and employers and its tool for automated skills-based matching, the placements facilitated by the EURES network and EURES portal also provide concrete results as it comes to jobs relevant for the Net-Zero Industry. To stimulate increased investment in training in new Net-Zero technologies and production processes, the Commission in its Green Deal Industrial Plan announced, among others, an increase in the General Block Exemption Regulation ceiling for aid to SMEs for training from EUR 2 million to EUR 3 million, that skills measures will be taken into account in assessing Important Project of Common European Interest (IPCEI), and that the Commission will explore the treatment of training expenditure by companies as an investment rather than an expense or operating cost.

The proposal is consistent with the Communication 'harnessing talent in Europe's regions' by aiming to reskill and upskill Europe's workforce, including in regions having fallen or at the risk of falling in talent development traps. It will inter alia take into account the talent booster mechanism developed to support EU regions affected by the accelerated decline of their working age population. The proposal is moreover consistent with actions under the New European Innovation Agenda, which includes a flagship action on fostering, attracting and

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10 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.

11 For instance, the share of electric cars in new sales in Europe is increasing and is expected to make up 14% in 2021.

12 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Pathway to a Healthy Planet for All EU Action Plan: 'Towards Zero Pollution for Air, Water and Soil', COM(2021) 400 final, 12.05.2021.

13 Council recommendation of 16 June 2022 on ensuring a fair transition towards climate neutrality, (OJ C 243, 27.6.2022, p. 35).

retaining deep tech talents and targets 1 million deep tech talents over a 3-year period across all Member States.[14]

The proposal promotes the development of net-zero manufacturing projects in less developed and transition regions by granting them a simple and automatic access to strategic status. The proposal thus pursues cohesion objectives and contributes to the convergence of these regions by building sustainable and future proof economic assets. By creating a framework for the manufacturing of specific net-zero technologies, the proposal complements any applicable requirements under the Ecodesign Regulation[15], as well as with its proposed amendment[16] and their implementing measures.

2. LEGAL BASIS, SUBSIDIARITY AND PROPORTIONALITY

• Legal basis

This Regulation pursues the general objective of setting up a legal framework which supports the development of the manufacturing of net-zero energy technologies in the Union, in order to support the Union's 2030 decarbonisation targets and 2050 climate neutrality target and to ensure the security of supply for net-zero technologies needed to safeguard the resilience of the Union's energy system.

This general objective translates into specific objectives of facilitating investments for net-zero technologies (pillar 1), reducing CO_2 emissions (pillar 2), facilitating access to markets (pillar 3), enhancing skills for quality job creation in net-zero technologies (pillar 4), supporting innovation (pillar 5) and creating a specific structure for implementing these objectives both in terms of governance and of monitoring (pillars 6 and 7).

The appropriate legal basis is therefore Article 114 of the Treaty on the Functioning of the European Union ('the Treaty') which allows the Union to take measures that increase harmonisation in order to create a level playing field within the Union in which net-zero technology manufacturing can flourish, which is conducive to innovation and facilitates the green transition.

First, the specific objective of ensuring the proper functioning of the internal market by setting harmonised rules for the increase in manufacturing capacity for net-zero technologies in the Union will allow to address the existing fragmentation of the internal market on essential elements regarding for instance permit granting processes for producers of net-zero technologies. It will also increase legal certainty and simplify administrative burden for producers wishing to build new or expand existing production facilities within the Union, while creating the conditions for facilitating access to funding. The legal basis for this pillar is therefore Article 114 of the Treaty, which provides for the adoption of measures to ensure the establishment and functioning of the internal market.

To help reduce CO_2 emissions in the Union, a Union target for CO_2 injection capacity is defined under the second pillar, along with measures needed to achieve it.

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14 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on A New European Innovation Agenda, COM(2022)332 final, 05.07.2022.

15 Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products (recast) (Text with EEA relevance), (OJ L 285, 31.10.2009, p.10).

16 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.

The third specific objective of facilitating access to the single market for net-zero technologies under the third pillar, requires encouraging public and private demand for sustainable products, including by ensuring that public buyers consistently apply criteria to ensure a high level of sustainability and resilience of the net-zero products they procure.

The fourth specific objective aims at creating synergies between Member States and harmonising the promotion of a skilled, trained and adaptable workforce and labour markets responsive to economic change in the clean energy transition.

Supporting innovation under the fifth pillar also requires coordination among Member States for setting up sandboxes in order to ensure a level playing within the Union for experimentation and to allow for similar exemptions from Union law.

Finally, the sixth and seventh pillar create a harmonised governance structure and uniform monitoring requirements to assess the progress made towards the common target of increasing manufacturing of net-zero technologies.

- **Subsidiarity (for non-exclusive competence)**

The objectives of the proposal cannot be achieved by Member States acting alone, as the problems are of a cross-border nature, and not limited to single Member States or to a subset of Member States. The proposed actions focus on areas where there is a demonstrable value added in acting at Union level due to the scale, speed and scope of the efforts needed.

Providing a comprehensive response to the energy crisis affecting the EU requires a rapid and coordinated joint action from a variety of stakeholders, and in cooperation with Member States. Moreover, given the challenges for accelerating the deployment of net-zero technologies, intervention at the level of the Union helps coordinate responses to address the Union's needs for additional manufacturing capacities for net-zero technologies and to prevent structural dependencies. In addition, carbon capture and storage require a cross-border, single market approach to be an effective solution for industries in all Member States, including in those Member States with no CO_2 storage capacity, and is therefore best addressed in a coordinated way at EU level.

Action at Union level can clearly drive European actors towards a common vision and implementation strategy. This is key to generate economies of scale and of scope and to generate critical mass necessary for scaling up net-zero technologies manufacturing in the EU, while limiting, fragmentation of efforts and self-harming subsidy races between Member States.

Union action is needed in relation to the areas that this proposal addresses through its several pillars.

– With regard to the first pillar ("Facilitating investments"), the Initiative will support large scale technological capacity building throughout the Union to enable the development and manufacturing net-zero technologies, to foster the set-up of net-zero manufacturing projects, including strategic projects, by streamlining administrative and permit-granting processes. These actions require Union action to ensure a level playing field within the Single market.

– For reaching the target for CO_2 injection capacity in the Union under the second pillar, coordinated action is needed at Union level to support efforts at national level.

– Regarding the third pillar ("Access to market"), actions aimed at accelerating investments in net-zero technologies can only be adequately designed and implemented at Union level, given the scale of the investments needed and because

such manufacturing facilities can help serve the internal market, strengthen the whole ecosystem, and contribute to guarantee security of supply.

- The fourth pillar ("Enhancing skills for quality job creation in net-zero technologies") coordinates efforts to ensure the availability of a skilled workforce required for net-zero industry in Europe by supporting the setting up of specialised skills Academies and through the establishment of a net-zero Europe platform.
- Regarding the fifth pillar ("Innovation"), the creation of regulatory sandboxes aims at creating a level playing field for innovation on net-zero technologies in the Union, and to ensure targeted exemptions from Union law, where necessary and without undermining other regulatory objectives.
- Under the sixth pillar ("Governance") the creation of a unique structure at Union level, the Net-Zero Europe Platform, will allow to the Commission to coordinate the above actions jointly with Member States to ensure a uniform application of the Regulation throughout the Union, as well as knowledge sharing.
- In relation to the seventh pillar ("Monitoring"), enhanced Union cooperation will ensure the necessary and comparable intelligence gathering. This will enable Member States and Commission to anticipate and prevent shortages and put in place the necessary measures to strengthen Europe's clean energy technologies manufacturing ecosystem in more effective ways than through a patchwork of national measures.

- **Proportionality**

The proposal is designed to strengthen Europe's net-zero technologies manufacturing ecosystem via measures to facilitate investments, incentivise demand and up- and re-skill Europe's labour force.

While a wide range of net-zero technologies will benefit from the proposal, it gives more emphasis on those parts of the net-zero technologies ecosystem that contribute most to climate, and energy objectives for 2030. The focus on solar, batteries/storage, wind, electrolysers and fuel cells, heat pumps, biomethane, grids and carbon capture and storage (CCS) is intended to focus actions to strategic net-zero products and components for ensuring Europe's green transition.

The Net-zero strategic projects and Net-zero regulatory sandboxes put in place the mechanisms necessary for ensuring longer-term competitiveness and innovation capacity of European industry via manufacturing capabilities, pilot environments for testing and experimentation, provisions on CO_2 storage capacity, de-risking of investments into strategic projects, as well as by start-ups, scale-ups and SMEs. Member States are required to ensure permits for such manufacturing projects are granted through faster and less cumbersome procedures, to both speed up the installation of new manufacturing capacities in response to the Union's energy crisis and to cut costs and administrative burden for businesses wishing to expand their manufacturing capacities for clean energy technologies in Europe.

Furthermore, sufficient CO_2 injection capacity should be made available by 2030 under pillar 2, as this lack of infrastructure is the single largest bottleneck for CO_2 capture investments to materialise, including by hard-to abate sectors. Oil and gas producers have the assets, resources and skills to enable this capacity. In working together, they are able to find the most cost-effective projects to provide the necessary injection capacity ahead of demand.

The incentives under pillar 3 are designed to ensure a stable demand for net-zero technologies that will make it economically attractive for business to scale-up the production of tailor-made

net-zero technologies with a high sustainability performance. They will also ensure that the Regulation incentivises public funds to be directed towards such technologies. It is only by a rapid shift towards sustainable net-zero technologies that the EU will be able to fulfil its climate ambitions for 2030.

The actions on skills for net-zero technologies in pillar 4 will allow the Union to empower its labour force to best contribute to the clean energy transition.

The creation of regulatory sandboxes in pillar 5, is subject to appropriate safeguards to ensure that any exemption from Union and national law is accompanied by appropriate mitigation measures to ensure that other regulatory objectives of equal importance are fulfilled while supporting innovation.

For the measures set out above to perform at their best, a governance structure is set up in pillar 6, bringing together Member States and the Commission in order to coordinate their actions to achieve their common goals for Europe's energy security and green transition.

Finally, monitoring under pillar 7 is necessary to ensure the fulfilment of the Union-level objective for the manufacturing of net-zero technologies and CO_2 storage objectives, as well as more generally for the application of this Regulation and information exchange by Member States and the Union to prevent possible supply chain disruptions.

- **Choice of the instrument**

The proposal takes the form of a Regulation of the European Parliament and of the Council. This is the most suitable legal instrument for pillar 1 given the need for a uniform application of the new rules, in particular the definition of the Net Zero Strategic Projects, as well as a uniform procedure for their recognition, and supporting an industrial sector across the internal market, while also enabling the creation of whole value chains of production by matching the needs of market actors from the entire EU. The choice of a Regulation as a legal instrument for pillars 2 and 3 is justified, as only a Regulation, with its directly applicable legal provisions, can provide the necessary degree of uniformity needed for the reduction of CO_2 emissions and the establishment and operation of a Union Initiative to incentivise demand uniformly across the internal market. Pillar 4 is also best addressed through a Regulation which supports the development of skills uniformly throughout the Union. Additionally, a Regulation is the most suitable instrument for pillar 5 to support innovation on the internal market, as well as for pillar 6, which creates a governance structure that allows Member States and Commission to coordinate their actions, and for pillar 7 under which uniform monitoring mechanisms are set out. The mechanism does not require the transposition through national measures and is directly applicable.

3. RESULTS OF EX-POST EVALUATIONS, STAKEHOLDER CONSULTATIONS AND IMPACT ASSESSMENTS

- **Ex-post evaluations/fitness checks of existing legislation**

This proposal brings additional harmonization and constitutes the first coherent legal framework at EU level for clean energy technologies. It is therefore not supported by ex-post evaluations.

- **Stakeholder consultations**

The Net Zero Industry Act was announced by Commission President Ursula von der Leyen on 17 January 2023 at the World Economic Forum in Davos[17]. The first pillar is about speed. We

[17] https://ec.europa.eu/commission/presscorner/detail/en/speech_23_232

need to create a regulatory environment that allows us to scale up fast and to create conducive conditions for sectors crucial to reaching net zero. This includes wind, heat pumps, solar, clean hydrogen, storage and others – for which demand is boosted by our NextGenerationEU and REPowerEU plans. To help make this happen, we will put forward a new Net-Zero Industry Act. This will follow the same model as our Chips Act. The new Net-Zero Industry Act will identify clear goals for European clean tech by 2030. The aim will be to focus investment on strategic projects along the entire supply chain. We will especially look at how to simplify and fast-track permitting for new clean-tech production sites." Given the urgent need to act, no impact assessment was carried out and no online public consultation was foreseen. The analysis and all supporting evidence will be set out in a staff working document published at the latest within three months of the proposal's publication.

A high-level discussion and first round of consultation of Member States and net-zero industry stakeholders took place at the first Clean Tech Europe Platform meeting, organised by the Commission on 30 November 2022. The meeting brought together high-level representatives from 23 Member States, along with representatives from the wind, batteries, electricity grid, heat pumps and solar PV industries and value chain. During the meeting, participants underlined the urgent need to ramp up manufacturing capacity of net zero technologies in response to Russia's war of aggression against Ukraine and to global regulatory competition in the sector, such as the United States Inflation Reduction Act. The industry representatives pointed to several bottlenecks in the Union, highlighting lengthy permitting procedures for the construction or expansion of net zero manufacturing capacity that would also hamper the mobilisation of private investments as well as shortages of qualified staff.

In addition to long standing regular exchanges with relevant stakeholders, a targeted additional survey with a short deadline was carried out in February 2023 with a selection of industrial stakeholder organisations from the wind, solar, battery, heat pump and hydrogen/electrolyser industries to provide additional insights. The stakeholders reported challenges with regard to:

(1) long lead times and lengthy permitting for projects and ramping up production capabilities;

(2) lack of level playing field with international competitors;

(3) disruption and shortages in materials;

(4) a patchwork, unclear or constraining legislative frameworks at Union and/or national level;

(5) difficulties to find suitable production and deployment sites;

(6) barriers related to public tenders;

(7) shortage of a skilled workforce;

(8) insufficient own production and dependency on manufacturing capacities of key components;

(9) high production costs.

Furthermore, additional input relevant for the proposal's policy options was considered from meetings with industry representatives and public authorities in the framework of the work carried out in the industrial alliances launched by the European Commission, most notably the European Batteries Alliance, the European Clean Hydrogen Alliance (including its Electrolyser Partnership), the Raw Materials Alliance and the European Solar PV Industry

Alliance. Moreover, the European Clean Energy Industrial Forum, organised in regular meetings throughout 2021 and 2022 provided a large platform for discussion on industrial needs. As regards carbon capture and storage, at the 2022 EU CCUS Forum, stakeholders have estimated a demand for annual storage services in the European Economic Area (EEA) to grow from a very low base to 80 million tonnes of CO_2 in 2030 and to reach at least 300 million tonnes of CO_2 in 2040.

Moreover, long-standing and regular contacts with industry stakeholders, Member States and trade associations enabled the collection of relevant information and feedback.

- **Collection and use of expertise**

Long-standing and regular contacts with industry stakeholders, Member States, trade associations and user associations enabled the collection of a fair amount of information and feedback relevant to the proposal.

Many studies and reports have been published in the last years on the net-zero technology manufacturing sector describing trends and providing facts and figures, and served to inform the proposal, including:

(1) European Commission. Progress on competitiveness of clean energy technologies. COM/2022/643 final

(2) European Commission. Annual JRC report of the European Climate Neutral Industry Competitiveness Scoreboard (CIndECS). 2021

(3) Clean Energy Technology Observatory (CETO). Reports 2022.

(4) IEA- Energy Technology Perspectives. 2023

- **Impact assessment**

This proposal is not accompanied by a formal impact assessment. Considering the urgency to act for the reasons explained above, an impact assessment could not have been delivered in the timeframe available prior to the adoption of the proposal. The analysis and all supporting evidence will be set out in a staff working document published at the latest within three months of the proposal's publication.

- **Regulatory fitness and simplification**

This proposal lays down measures aimed at reinforcing the net-zero technologies ecosystem. For companies manufacturing clean energy technology in Europe, it will increase legal certainty, facilitate the set-up of new manufacturing facilities through simplified and quicker permitting procedures, as well as facilitate access to finance by de-risking projects and provide for a trained labour force in the Union. For providers of net-zero technology solutions, it will secure a stable source of demand of highly sustainable clean energy equipment, products and components. For national public administrations, it will increase the uptake of net-zero technologies in the Union and strengthen coordination (by introducing a Net-Zero Europe Platform). Moreover, the framework will envisage specific measures supporting innovation, including regulatory sandboxes and dedicated support for small-scale users and providers of high-quality sustainable net-zero technologies to find output markets in Europe and to match their needs with other market actors in order to create entire value chains within the EU.

The proposal also specifically aims to strengthen Europe's competitiveness and industrial base in net-zero technologies. Full consistency is ensured with existing sectoral Union legislation applicable to net-zero technologies (e.g., on energy savings, energy labelling, and

deployment) that will bring further clarity and simplify the enforcement of the new rules, as well as and with proposed legislation on critical raw materials.

- **Fundamental rights**

Article 16 of the Charter of Fundamental Rights of the European Union ('the Charter') provides for the freedom to conduct a business. The measures under this proposal create innovation capacity and foster demand for clean energy technologies, which can reinforce the freedom to conduct a business in accordance with Union law and national laws and practices. Nevertheless, some measures under pillar 2 needed to address serious disruptions of the net-zero technologies supply in the Union may temporarily limit the freedom to conduct a business and the freedom of contract, protected by Article 16 and the right to property, protected by Article 17 of the Charter. Any limitation of those rights in this proposal will, in accordance with Article 52(1) of the Charter, be provided for by law, respect the essence of those rights and freedoms, and comply with the principle of proportionality.

The obligation to disclose specific information to the Commission, provided that certain conditions are met, respects the essence of and will not disproportionately affect the freedom to conduct a business (Article 16 of the Charter). Any information request serves the objective of general interest of the Union to enable the identification of potential mitigation measures to an energy supply crisis. These information requests are appropriate and effective to attain the objective by providing information necessary to assess the crisis at hand. The Commission in principle only requests the desired information from representative organisations and may issue requests to individual undertakings only if it is necessary in addition. Since information on the supply situation is not available otherwise, there is not any equally effective measure to attain the information necessary to enable European decision-makers to take mitigation action. In light of the serious economic and societal consequences of energy supply shortages and the respective importance of mitigation measures, information requests are proportionate to the desired aim.

4. BUDGETARY IMPLICATIONS

The proposal establishes a Net-Zero Europe Platform. Heading 7 of the EU budget will support the organisation of the Net-Zero Europe Platform with a total of EUR 5.130 million for six officials. This translates into an annual expenditure of EUR 1.026 million. The staff will be responsible to carry out the tasks in relation to the Net-Zero Europe Platform as well as the Net-Zero Industry Academies as set out in this Regulation. Furthermore, the proposal estimates additional costs for committees with a budget of EUR 125.000.

The funding of the associated operational costs of this initiative will be supported by the budget for the 'Operation and development of the internal market of goods and services' under the current Multiannual Financial Framework until 2027.

In order to conduct research and data analysis for monitoring the initiative and market developments as well as to obtain up-to-date data on net-zero technology supply chains to tackle issues related to this Regulation a budget of EUR 720.000 is allocated.

This proposal will support Net-Zero Industry Academies with seed funding in form of EUR 3 million from the budget for the Clean Hydrogen Joint Undertaking and EUR 2.5 million from the budget of the Single Market Programme, SME pillar.

Further details are provided in the legislative financial statement annexed to this proposal.

5. OTHER ELEMENTS

- **Implementation plans and monitoring, evaluation and reporting arrangements**

The Commission will evaluate the output, results and impact of this proposal three years after the date on which it becomes applicable and every four years thereafter. The main findings of the evaluation will be presented in a report to the European Parliament and the Council, which will be made public.

- **Detailed explanation of the specific provisions of the proposal**

1.1 Chapter I – Subject matter, scope and definitions

Chapter I sets out the objectives of this Regulation and its subject matter. The objectives of the Regulation are translated into a quantified overall headline benchmark aimed at ensuring that by 2030, the manufacturing capacity in the Union of the strategic net-zero technologies listed in the Annex approaches or reaches at least 40% of the Union's annual deployment needs. This benchmark represents an overall political ambition of achieving high resilience across strategic net-zero technologies and the overall energy system, while taking into account the need to pursue that ambition in a flexible and diversified way. The level of this benchmark takes into account the indicative technology-specific objectives outlined in Recital 16 of the proposal. It does not equal to the average of the latter, given that:

(i) The scope of the Annex is broader than the five technologies for which indicative technology-specific objectives have been identified in Recital 16;

(ii) For some strategic net-zero technologies, such as solar PV, 40% represents a realistic but ambitious scale-up effort of the corresponding manufacturing capacity;

(iii) The overall headline benchmark takes into account the need for scaling up manufacturing capacity not only for end-products but also for specific components . For some of these, such as (wafers, ingots or solar cells in the case of solar PV or anodes and cathodes for batteries, reaching the 40% headline benchmark represents a realistic but highly ambitious objective).

(iv) The headline benchmark combined with the monitoring modalities laid out in Article 31 will help identify, early on, existing or potential vulnerabilities or challenges linked to the resilience of strategic net-zero technologies and take action, as appropriate.

Chapter I also clarifies definitions used throughout the instrument, including the concept of net-zero technologies. The Regulation establishes a framework, consisting of seven "pillars", for strengthening the competitiveness of Europe's net-zero technology manufacturing ecosystem. In particular, the Regulation sets the conditions necessary to promote net zero technology manufacturing projects, streamlining administrative and permit-granting processes and defining Net-Zero Strategic Projects (pillar 1). The Regulation sets the conditions to increase CO_2 injection capacity (pillar 2) as well as to incentivise demand for net-zero technologies (pillar 3). It also creates a framework for ensuring a skilled labour force in the sector (pillar 4), foster innovation (pillar 5), creates a governance structure (pillar 6) and establishes the framework for monitoring the implementation of these measures (pillar 7).

1.2. Chapter II – Enabling conditions for net-zero technology manufacturing

Section 1 sets up streamlined permitting processes for net-zero technology manufacturing projects. All net-zero technology manufacturing projects will benefit from Member States designating a national competent authority acting as a single point of contact, in charge of coordination and facilitation of permitting, guiding economic operators, ensuring that

information is publicly accessible and that all documents can be digitally submitted. The Regulation sets detailed timelines for permitting procedures according to the nature of the project developed. The proposal is consistent with Union legislation on permitting such as the Renewable Energy Directive (EU) 2018/2001[18], the TEN-E Regulation[19], the Gas Directive[20] and the Council Regulation on permitting for renewable energy deployment[21], as well as with the proposals on the REPowerEU amendment to the Renewable Energy Directive[22], the Chips Act Regulation proposal[23] and the Critical Raw Materials Act Regulation proposal. Faster permitting procedures are without prejudice to environmental assessments and authorisations as detailed in EU law.

Section 2 sets up rules pertaining to the selection and implementation of net-zero strategic projects. The criteria to select strategic projects will cover the contribution made by the project to the technological and industrial resilience of the Union's energy system and/or the project's contribution to the competitiveness of the EU's net-zero industry supply chain. The Regulation defines the procedures for projects to apply and be recognised as net-zero strategic project by Member States. Net-zero strategic projects will be granted priority status to ensure the fastest permitting processes in line with national and EU laws and will benefit from predictable permitting timelines. They may also be considered of overriding public interest for permitting purposes provided the conditions set in EU law are fulfilled. Without prejudice to State aid rules, Member States will undertake activities to accelerate and crowd-in private investments in net-zero strategic projects to accelerate their implementation. Promoters of net-zero strategic projects will also be able to benefit from financing advice stemming from the Net-Zero Europe Platform established in Chapter VII.

1.3. Chapter III – CO_2 injection capacity

Chapter III sets a Union-level objective to be achieved by 2030 for an annual injection capacity in CO_2 storage of 50Mt CO_2 and includes measures to implement it. These measures aim at bringing together key relevant assets to establish a Union single market for CO_2 storage services that large-scale CO_2 emitters, including hard-to-abate industrial sectors, can rely on to decarbonise their operations. This includes better information on geological data relating to oil and gas production sites, CO_2 capture projects in progress or envisaged in the following 5 years, estimation of the corresponding needs for injection and storage capacities. Net-zero strategic projects for CO_2 storage, that are located in the territory of the Union, aim to provide operationally available CO_2 injection capacity by 2030 or earlier and have applied for a

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18 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 (recast) (Text with EEA relevance), (OJ L 328, 21.12.2018, p. 82).

19 Regulation (EU) 2022/869 of the European Parliament and of the Council of 30 May 2022 on guidelines for trans-European energy infrastructure, amending Regulations (EC) No 715/2009, (EU) 2019/942 and (EU) 2019/943 and Directives 2009/73/EC and (EU) 2019/944, and repealing Regulation (EU) No 347/2013, (OJ L 152, 3.6.2022, p. 45).

20 Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC (Text with EEA relevance) Text with EEA relevance, (OJ L 211, 14.8.2009, p. 94).

21 Council Regulation (EU) 2022/2577 of 22 December 2022 laying down a framework to accelerate the deployment of renewable energy, (OJ L 335, 29.12.2022, p. 36.

22 Proposal for a Directive of the European Parliament and of the Council amending Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources, Directive 2010/31/EU on the energy performance of buildings and Directive 2012/27/EU on energy efficiency, COM/2022/222 final, 18.05.2022.

23 Proposal for a Regulation of the European Parliament and of the Council establishing a framework of measures for strengthening Europe's semiconductor ecosystem (Chips Act), COM/2022/46 final, 08.02.2022.

permit for the safe and permanent geological storage of CO_2 in accordance with Directive 2009/31/EU[24], will be supported by Member States authorities. Contributions from oil and gas producers holding an authorisation under Directive 94/22/EC[25] are foreseen to achieve the Union-level 2030 objective.

1.4. Chapter IV – Access to markets

Chapter IV contains actions aimed at accelerating access to markets for net-zero technologies. This is first achieved through measures designed to help public authorities create and maintain a stable public demand for net-zero technologies that will make it economically attractive for business to scale-up the production of tailor-made products for the European market designed with high sustainability and resilience criteria in mind. Such measures relate first to public procurement procedures and auctions to deploy renewable energy sources for which public authorities must take into account criteria related to sustainability and resilience when awarding the contracts or ranking the bids. Secondly, the chapter includes measures to ensure that other forms of public support to private demand contribute to the same aim.

1.5 Chapter V – Enhancing skills for quality job creation in net-zero technologies

Chapter V proposes measures to ensure the availability of a skilled workforce needed for net-zero technology industries in the Union. Current skills shortages, and their projected rise, and skills mismatches endanger the rise of European net-zero technology industries. The proposal aims to create mechanisms to design and deploy necessary skills in a manner that effectively targets the needs of net-zero industries at both European and local levels. It does so by providing for the Commission to support the setting up of specialised European skills Academies, each focussing on a net-zero technology and working together with Member States, industry, social partners, and education and training providers to design and deploy education and training courses to reskill and upskill workers required for net-zero technology industries. The Net-Zero Europe Platform would assist the availability and deployment of people with skills needed in net-zero technologies through a series of tasks set out in this Regulation, including with respect to the activation of more women and young people, who are not in education, employment or training (NEETs). The Act thereby seeks to complement a number of Commission actions aimed at meeting the skills needs stemming from the EU's green transition, such as the EU Pact for Skills, the EU Skills Agenda, the industrial transition pathways, and the 2023 European Year of Skills.

1.6 Chapter VI – Innovation

Chapter VI sets up Net-zero regulatory sandboxes to promote innovation in the field of net zero technologies. The proposal introduces regulatory sandboxes to test innovative net-zero technologies in a controlled environment for a limited amount of time. The innovative technologies falling under the sandboxes could eventually be considered 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 strategic net-zero technologies under this regulation.

1.7 Chapter VII – Governance

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24 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 (Text with EEA relevance), (OJ L 140, 5.6.2009, p. 114).

25 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).

Chapter VII sets up a structure, the Net-Zero Europe Platform, allowing the Commission to coordinate the above actions jointly with Member States. The Platform is a reference body, in which the Commission and Member States can discuss, exchange information, share best practices on issues related to this Regulation, and in which the Commission may get input from third parties such as experts and representatives e.g., from the net-zero industry. The work may be organised in different standing or temporary sub-groups. Activities for the platform are outlined in the different Articles of this Regulation, and comprise notably the streamlining administrative procedures and permit granting processes, including one-stop shops [Article 4], net-zero strategic projects [Article 11], coordination of financing [Article 15], access to markets [Article 19, 20 and 21], skills [Article 25] innovative net-zero regulatory sandboxes [Article 26] and providing advice on the preparation of the annual reports on competitiveness of clean energy technologies, under the State of the Energy Union Report[26]. In addition, the Commission and Member states may discuss on Net-Zero Industrial Partnerships within the Platform [Article 28]. Furthermore, the Commission and Member States may get active under the Platform to foster cross-country contacts between undertakings active in net-zero sectors within the European Union, in particular by making use of the work of industrial alliances.

1.8 Chapter VIII – Monitoring

Chapter VIII contains uniform provisions allowing to monitor supply chains to track the progress with respect to the objectives referred to in Article 1, as well as progress towards reaching the CO_2 storage target. It also contains monitoring provisions in general for the application of this Regulation.

1.9 Chapter IX – Final Provisions

Chapter IX contains provisions on delegation of power, amendments to other acts, including Regulation (EU) 2018/1724 of the European Parliament and of the Council[27] and Directive (EU) 2013/34/EU[28], an obligation for the Commission to prepare regular reports to the European Parliament and to the Council for the evaluation of this Regulation, and entry into force and application.

1.10 Annex – Strategic net-zero technologies

The technologies listed in the Annex draw on three main criteria: 1) technology readiness level; 2) contribution to decarbonisation and competitiveness; and 3) security of supply risks. These were selected based on the overall Net-Zero Industry Act objectives of scaling up the manufacturing capacity of net-zero technologies in the EU, particularly those that are commercially available and have a good potential for rapid scale up.

The first criterion of technology readiness level (TRL) refers to a method of estimating the maturity of technologies and draws on the classification used by the International Energy

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[26] Under the State of the Energy Union Report pursuant to Article 35, and Article 35 (2) point (m) of Regulation (EU) 2018/1999.

[27] 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).

[28] Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 on the annual financial statements, consolidated financial statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives 78/660/EEC and 83/349/EEC Text with EEA relevance, (OJ L 182, 29.6.2013, p. 19).

Agency (IEA). The scope of this Regulation generally refers to those net-zero technologies that fall under TRL 8 (first-of-a-kind commercial – commercial demonstration, full-scale deployment in final form) or above.

The second criterion of decarbonisation and competitiveness identifies those net-zero technologies that are projected to deliver a significant contribution to the 2030 Fit-for-55 target of reducing net greenhouse gas emissions by at least 55% relative to 1990 levels.

Finally, the third criterion relates to security of supply ensuring the technological and industrial resilience of the Union's energy system by increasing the manufacturing capacity of a component or part in the net-zero technology value chain for which the Union heavily or growingly depends on imports, particularly those coming from a single third country.

Based on these criteria, 8 groups of net-zero technologies were selected. In addition, the respective net-zero technology groups refer not only to the final technological product or assemblies, but also to the main upstream components that are a central part of the respective technologies (e.g., ingots, wafers, and solar cells for solar modules; nacelles, towers, and blades for wind turbines, etc).

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 Committee[29],

Having regard to the opinion of the Committee of the Regions[30],

Acting in accordance with the ordinary legislative procedure,

Whereas:

(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 Agreement[31]. To reach the climate neutrality goal, Regulation (EU) 2021/1119 of the European Parliament and of the Council[32] 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"[33] package aims to deliver on the Union's 2030 climate target and revises and updates Union legislation in this respect.

(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. Given the complexity and the transnational character of net-zero

29 OJ C [...], [...], p. [...]

30 OJ C [...], [...], p. [...]

31 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.

32 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).

33 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.

technologies, uncoordinated national measures to ensure access 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.

(3) Regarding external aspects, in particular regarding emerging markets and developing economies, the EU will seek win-win partnerships in the framework of its Global Gateway strategy, which contribute to the diversification of its raw materials supply chain 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 clean energy, notably by increasing energy efficiency and the share of renewable energy sources. This will contribute to achieving the EU 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 equitable[34].

(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 plan[35] 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. 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) 2019/631 and Regulation (EU) 2019/1242 will be strong

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

[35] 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.

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 to net zero 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 technologies in the field of renewable energy technologies , electricity and heat storage technologies, heat pumps, grid technologies, renewable fuels of non-biological origin technologies, electrolysers and fuel cells, fusion, small modular reactors and related best-in-class fuels, carbon capture, utilisation, and storage technologies, and energy-system related energy efficiency technologies and their supply chains, allowing for the decarbonisation of our economic sectors, from energy supply to transport, buildings, and industry. A strong net zero industry within the European Union can help significantly in reaching the Union's climate and energy targets effectively, as well as in supporting other Green Deal objectives, while creating jobs and growth.

(7) To meet the 2030 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 EU 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 European 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 enabling demand side response from consumers and the uptake of renewables. Connecting the net-zero technologies to the network of the European Union requires the substantial expansion of manufacturing capabilities for electricity grids in areas such as offshore and onshore cables, substations and transformers.

(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 2030 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 some of the net-zero technologies, also in view their significant contribution towards the path to net zero by 2050. These technologies include solar photovoltaic and solar thermal technologies, onshore and offshore renewable technologies, battery/storage technologies, heat pumps and geothermal energy technologies, electrolysers and fuel cells, sustainable biogas/biomethane, carbon capture and storage technologies and grid technologies. These technologies 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 technologies 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.

(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.

(12) In 2020 the European 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, for end-use applications where direct heating or electrification are not feasible, not efficient or have higher costs. 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 in its various forms and demand-side management.

(13) The development of carbon capture and storage solutions for industry is confronted with a coordination failure. On the one hand, despite the growing CO_2 price incentive provided by the EU Emissions Trading System, for industry to invest into capturing CO_2 emissions making such investments economically viable, they face a significant risk of not being able to access a permitted geological storage site. On the other hand, investors into first CO_2 storage sites face upfront costs to identify develop and appraise them even before they can apply for a regulatory storage permit. Transparency about potential CO_2 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 CO_2 storage sites and the corresponding needs for injection and storage capacities above, in order to collectively reach the Union-wide target for CO_2 injection capacity.

(14) A key bottleneck for carbon capture investments that are today increasingly economically viable is the availability of operating CO_2 storage sites in Europe, which underpin the incentives from Directive 2003/87/EC. To scale up the technology and expand its leading manufacturing capacities, the EU needs to develop a forward-looking supply of permanent geological CO_2 storage sites permitted in accordance

with Directive 2009/31/EU[36]. By defining a Union target of 50 million tonnes of annual operational CO_2 injection capacity by 2030, in line with the expected capacities needed in 2030, the relevant sectors can coordinate their investments towards a European Net-Zero CO_2 transport and storage value chain that industries can use to decarbonise their operations. This initial deployment will also support further CO_2 storage in a 2050 perspective. According to the Commission's estimates, the Union could need to capture up to 550 million tonnes of CO_2 annually by 2050 to meet the net zero objective[37], including for carbon removals. Such a first industrial-scale storage capacity will de-risk investments into the capturing of CO_2 emissions as important tool to reach climate neutrality. When this regulation is incorporated into the EEA Agreement, the Union target of 50 million tonnes of annual operational CO2 injection capacity by 2030 will be adjusted accordingly.

(15) By defining CO_2 storage sites that contribute to the Union's 2030 target as net-zero strategic projects, the development of CO_2 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 CO_2 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 CO_2 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 CO_2 storage sites in line with the EU objective for injection capacity, licensees of oil and gas production in the EU 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.

(16) The Union has helped build a global economic system based on open and rules-based trade, pushed for respecting and advancing social and environmental sustainability standards, and is fully committed to those values.

(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 Strategy.[38]

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36 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 (Text with EEA relevance), (OJ L 140, 5.6.2009, p. 114).

37 In depth analysis in support of the Commission Communication (2018/773) A Clean Planet for all. A European long-term strategic vision for a prosperous, modern, competitive and climate neutral economy.

38 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.

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.[39] 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 electrolysers 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 EU 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 EU's technological leadership translates into commercial leadership, as supported under the Electrolyser Joint Declaration of the Commission and the European Clean Hydrogen Alliance, EU electrolyser manufacturers should further boost their capacity, such that the overall installed electrolyser capacity being deployed reaches at least 100 GW hydrogen by 2030.

(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 is low, the Union net-zero technologies annual capacity should aim at approaching or reaching an overall annual manufacturing benchmark of at least 40% of annual deployment needs by 2030 for the technologies listed in the Annex .

(19) Increasing the manufacturing capacity of net-zero technologies in the European Union will also facilitate the global supply of net-zero technologies and the transition towards clean energy sources globally.

(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) 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 net zero 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.

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[39] As per REPowerEU objectives set out in the REPowerEU Plan, COM/2022/230 final, and accompanying Commission Staff Working Document Implementing the Repower EU Action Plan: Investment Needs, Hydrogen Accelerator and achieving the Bio-Methane Targets 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 REPowerEU Plan, SWD/2022/230 final, 18.05.2022

(22) Member States should submit updated drafts of their 2021-2030 National Energy and Climate Plans (NECPs) in June 2023[40]. As emphasised in the Commission's Guidance to Member States for the update of the 2021-2030 national energy and climate plans[41], 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 CO_2 emissions permanently in geological storage sites.

(23) In addition, the Communication on the Green Deal Industrial Plan for the Net-Zero Age[42] 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 European 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 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/EU, 2014/24/EU and 2014/25/EU 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, 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 sustainability and resilience in relation to a series of criteria relating to the tender's environmental sustainability, innovation, system integration and to resilience.

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40 Member States shall update their national plans for 2021-2030 by June 2023 (draft plans) and June 2024 (final plans). See Article 14 and requirements of Chapter 2 and Annex I of the Regulation (EU) 2018/1999.

41 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).

42 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.

(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 Articles, 30 (3) of Directive 2014/23/EU, 18 (2) of Directive 2014/24/EU and 36 (2) of Directive 2014/25/EU. Contracting authorities should contribute to social sustainability by taking the appropriate measures to ensure that in the performance of public contracts economic operators comply with applicable obligations in the fields of social and labour law established by Union law, national law, collective agreements or by the international environmental, social and labour law provisions listed in Annex X of Directive 2014/23/EU, Annex X of Directive 2014/24/EU and Annex XIV of Directive 2014/25/EU[43].

(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 products[44] and the Proposal for a Regulation of the European Parliament and of the Council concerning batteries and waste batteries[45], and unless otherwise indicated therein, when evaluating the environmental sustainability of the net-zero solutions procured on the basis of this Regulation, contracting authorities and contracting entities may 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 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 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.

(28) For the purposes of taking into account within a public procurement procedure of the need to diversify sources of supply of net-zero 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 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 65% of the total demand for a specific net-zero technology within the Union. 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

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43 Commission Notice "Buying Social - a guide to taking account of social considerations in public procurement (2nd edition)", C(2021) 3573 final.

44 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.

45 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.

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/EU approved in particular the amendment to the World Trade Organisation Agreement on Government Procurement (the 'GPA')[46]. 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 European 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 (1) point (d) 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 should be without prejudice to the application of Article 25 of Directive 2014/24/EU of the European Parliament and of the Council[47], and Articles 43 and 85 of Directive 2014/25/EU of the European Parliament and of the Council[48], as according with the Commission's guidance of 2019[49]. 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.

(32) The weighting of criteria on the sustainability and resilience contribution of the tender in relation to public procurement procedures is without prejudice to the possibility for contracting authorities and contracting entities to set a higher threshold for the criteria relating to environmental sustainability and innovation, in line with Article 41 (3) and Recital 64 of Directive 2014/23/EU of the European Parliament and of the Council[50], Article 67 (5) of Directive 2014/24/EU and Article 82 (5) of Directive 2014/25/EU.

(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 to Article 19, where a product is covered by a delegated act adopted under Regulation

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46 Council decision 2014/115/EU of 2 December 2013 on the conclusion of the Protocol Amending the Agreement on Government Procurement, (OJ L68, 7.3.2014, p. 1).

47 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).

48 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).

49 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.

50 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).

(EU) 2017/1369 of the European Parliament and of the Council[51], 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 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 strategy[52], 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 EU 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 or consumers which incentivise the purchase of net-zero technology final products listed in the Annex, 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 do not reach a magnitude that causes serious prejudice to the interest of WTO members.

(37) The Commission should also assist Member States in the design of schemes targeted at households and consumers to build synergies and exchange best practices. The 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. It should issue guidance and identify best practices on how to define the contribution and use it, providing concrete and specific examples.

(38) 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.

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[51] 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).

[52] 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.

(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. This translates in a need for a rapid and ambitious reaction from the Union in modernising its legal framework.

(40) Access to finance is key for ensuring the Union's open strategic autonomy and for establishing a solid 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 capital[53] 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 manufacturing projects. Swift progress towards the Capital Markets Union is thus necessary for the EU 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.

(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 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 mobilise national resources for that purpose, Member States may use a share of the ETS revenues that Member States have to allocate for climate-related purposes.

(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.

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[53] 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.

(43) The amended Recovery and Resilience Facility Regulation[54] 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 chapters[55], 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 Council[56].

(44) InvestEU is the EU 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 the Council[57] to encourage the take up of net-zero strategic projects in less developed and transition regions 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 strategic projects by embedding these investments in European value chains, building notably on interregional and cross border cooperation networks.

(46) The Innovation Fund also provides a very promising and cost efficient avenue to support the scaling up of manufacturing and deployment of renewable hydrogen and other strategic net zero technologies in Europe, thus reinforcing Europe's sovereignty in key technologies for climate action and energy security.

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54 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).

55 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).

56 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).

57 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).

(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.

(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 the individual financing needs of net-zero strategic projects.

(49) In order for net-zero technology manufacturing projects to be deployed or expanded as quickly as possible to ensure 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. For that reason, permit-granting processes of the Member States for net zero technology manufacturing 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. Being granted the status of Net-Zero Strategic Project should be without prejudice to any applicable permitting conditions for the relevant projects, including those set out in Directive 2011/92/EU of the European Parliament and of the Council[58], Council Directive 92/43/EEC[59], Directive 2000/60/EC of the European Parliament and of the Council[60], Directive 2004/35/EC of the European Parliament and of the Council[61], and Directive (EU) 2010/75 of the European Parliament and of the Council[62].

(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 technologies 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

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58 Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (OJ L 26, 28.1.2012, p. 1).

59 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).

60 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).

61 Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage (OJ L 143, 30.4.2004, p. 56).

62 Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (recast) (OJ L 334, 17.12.2010, p. 17).

administrative treatment and urgent treatment in all judicial and dispute resolution procedures relating to them, without preventing competent authorities to streamline permitting for other net-zero technologies manufacturing projects that are not Net-Zero Strategic Projects or more generally.

(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, Directive 92/43/EEC and Directive 2009/147/EC[63] are met.

(52) In order to reduce complexity and increase efficiency and transparency, project promoters of net-zero technologies manufacturing 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 a single national competent authority. Depending on a Member State's internal organisation, it should be possible for the tasks of the national competent authority s to be delegated to a different authority, subject to the same conditions. To ensure the effective implementation of their responsibilities, Member States should provide their national competent authority, or any authority acting on their behalf, with sufficient personnel and resources.

(53) In order to ensure clarity about the permitting status of 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 Net-Zero Strategic 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 the Council[64] 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. National competent authorities acting as one stop shop pursuant to this Regulation are included in the list

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63 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. 7–25).

64 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).

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 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 twelve 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 all other net-zero technology manufacturing projects, the length of the permit-granting process should not exceed eighteen months for facilities with a yearly production output of more than 1 GW, and twelve 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 carbon capture and storage (CCS) or carbon capture and usage (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 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 CO_2 emission monitoring and verification capacity are most relevant to assess the impact of industry projects and the impact of anthropogenic CO_2 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, 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 through experimentation spaces as scientific outcomes need to be tested in a controlled real-word environment. Regulatory sandboxes should be introduced to test innovative net-zero 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 strategic 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 help tackle import dependency and vulnerability concerns and ensure the Union's climate and energy targets are met.

(64) The scaling up of European net-zero technology industries requires significant additional skilled workers which implies important investment needs in re-skilling and upskilling, including in the field of vocational education and training. This should contribute to the creation of quality jobs in line with the targets for employment and training of the European Pillar of Social Rights. 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, and has a great potential for quality job creation. 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 Plan[65]. In the photo-voltaic solar energy sector, up to 66.000 jobs would be needed in manufacturing alone. The European network of employment services (EURES) is providing information, advice and recruitment or placement for the benefit of workers and employers, including across internal market borders.

(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 activation of more people to the labour market, notably women and young people not in employment, education or training (NEETs), including via skills first approaches as a complement to qualifications-based recruitment. 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 for workers in redundant and declining sectors are important. This means investing in skills and in quality job creation required for net-zero technologies in the Union. 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 (Cedefop) 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, social partners and industry, in particular SMEs, to identify skills needs, develop education and training programmes and deploy these at large 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 may ensure financial support including by leveraging the possibilities of the Union budget through instruments such as the European Social Fund Plus, Just Transition Fund, European Regional Development Funds, the Recovery and Resilience Facility, the Modernisation Fund, REPowerEU and the Single Market Programme.

(66) Building on previous experiences, such as the EU Pact for Skills and the European Battery Alliance, European Net-Zero Industry 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, renewable hydrogen technologies and raw materials. The academies would aim to enable the training and education of 100.000 learners each, within three years of their establishment, to contribute to the availability of skills required for the net-zero technologies, including in small and medium-sized enterprises. That content should be developed and deployed with education and training providers in Member States, relevant Member States authorities and social partners. Education and training providers, industry and other actors involved in up- and reskilling in the Member States, such as Public Employment Services, should deliver the content produced by the academies. To ensure skills transparency and portability and the mobility of workers, the European Net-Zero Industry Academies will develop and deploy

[65] 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.

credentials, including micro-credentials, covering learning achievements. They should be issued in the format of European credentials for learning and could be integrated in EUROPASS and, where relevant, included in National Qualifications Frameworks. Member States are encouraged to support the continuous reskilling and upskilling offered via the academies and the relevant education and training providers in their territories through national programmes and Union funding, including from the European Social Fund Plus, the Recovery and Resilience Facility, the European Regional Development Fund, the Just Transition Mechanism, the Modernisation Fund and the Technical Support Instrument. The Net-Zero Europe Platform should assist in guiding the work of the Academies and providing oversight.

(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 of 28 June 2018 on a proportionality test before adoption of new regulation of professions. 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 the European net-zero industry academies lead to credentials that would be of assistance to persons seeking access to a profession that is regulated, Member States 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.

(69) At Union level, a Net-Zero Europe Platform, should be established, composed of the Member States 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 financing, access to markets and skills as well as innovative net-zero technologies regulatory sandboxes. Where necessary, the Platform may 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, to adopt net-zero technologies globally and to support the role of EU industrial capabilities in paving the way for the global clean energy transition. The Commission and Member States may coordinate within the 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.

(71) The Union should aim to diversify international trade and investments in net-zero technologies and to promote globally high social and environmental standards should be done in close cooperation and partnership with like-minded countries. Similarly, stronger research and innovation efforts to develop and deploy net-zero technologies should be pursued in close cooperation with partner countries in an open but assertive approach.

(72) Where the power to adopt acts in accordance with Article 290 of the Treaty 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 2016. 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 of the Treaty.

(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 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 for innovating and scaling up the manufacturing capacity of net-zero technologies in the Union to support the Union's 2030 target of reducing net greenhouse gas emissions by at least 55 % relative to 1990 levels and the Union's 2050 climate neutrality target, as defined by Regulation (EU) 2021/1119, and to ensure the Union's access to a secure and sustainable supply of net-zero technologies needed to safeguard the resilience of the Union's energy system and to contribute to the creation of quality jobs.

2. To achieve the general objective referred to in paragraph 1, this Regulation contains measures with a view to ensuring:

   a) that by 2030, manufacturing capacity in the Union of the strategic net-zero technologies listed in the Annex approaches or reaches a benchmark of at least 40% of the Union's annual deployment needs for the corresponding technologies necessary to achieve the Union's 2030 climate and energy targets;

   b) the free movement of net zero technologies placed on the Single 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 paragraph 1, 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.

Article 2
Scope

This Regulation applies to net-zero technologies, except for Articles 26 and 27 of this Regulation, which apply to innovative net-zero technologies. Raw materials processed materials or components falling under the scope of Regulation (EU) …/… [add footnote with publication references of the Critical Raw Materials Regulation] 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 renewable energy technologies[66]; electricity and heat storage technologies; heat pumps; grid technologies; renewable fuels of non-biological origin technologies; sustainable alternative fuels technologies[67]; electrolysers and fuel cells; advanced technologies to produce energy from nuclear processes with minimal waste from the fuel cycle, small modular reactors, and related best-in-class fuels; carbon capture, utilisation, and storage technologies; and energy-system related energy efficiency technologies. They refer to the final products, specific components and specific machinery primarily used for the production of those products. They shall have reached a technology readiness level of at least 8.

   (b) 'component' means a small part of a net-zero technology that is manufactured and traded by a company starting from processed materials;

   (c) 'innovative net-zero technologies' means technologies which satisfy the definition of 'net-zero technologies', except that they have not reached a technology readiness level of at least 8, and that comprise genuine innovation which are not currently available on the market and are advanced enough to be tested in a controlled environment.

   (d) 'net-zero technology manufacturing project' means a planned industrial facility or extension or repurposing of an existing facility manufacturing net-zero technologies;

   (e) 'net-zero strategic project' means a net-zero technology manufacturing project located in the Union that complies with the criteria set out in Article 10;

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66 'renewable energy' means 'renewable energy' as defined in 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

67 'sustainable alternative fuels' means fuels covered by the Proposal for a Regulation of the European Parliament and of the Council on ensuring a level playing field for sustainable air transport, COM/2021/561 final and by the Proposal for a Regulation of the European Parliament and Council on the use of renewable and low-carbon fuels in maritime transport COM/2021/562 final.

(f) ‘permit granting process’ means a process covering 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 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;

(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;

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

(j) ‘technology readiness level’ means a method of estimating the maturity of technologies, according to the classification used by the International Energy Agency;

(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, 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;

(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.

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 after the date of entry into force of this Regulation], Member States shall designate one national competent authority which shall be responsible for facilitating and coordinating the permit-granting process for net-zero technology manufacturing projects, including for net-zero strategic projects, and to provide advice on reducing administrative burden in line with Article 5.

2. The national competent authority referred to in paragraph 1 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 national competent 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 national competent 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 national competent 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 national competent 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 competent authority responsible for the entire permit-granting processes, including all procedural steps, has 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.

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 or Member State level;

(d) business support services, including but not limited to corporate tax declaration, local tax laws, labour law.

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) 12 months for the construction of net-zero technology manufacturing projects with a yearly manufacturing capacity of less than 1 GW;

   (b) 18 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 18 months.

3. For the expansion of manufacturing capacity in existing manufacturing facilities, the time limits referred to in paragraph 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 competent 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 the validity of the application by the national competent authority referred to in Article 4(1) 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 national competent 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 national competent authority referred to in Article 4(1) 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.

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 30 days from the date on which the project promoter submitted its request.

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 Council[68], Directive 2008/98/EC of the European

[68] 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).

Parliament and of the Council[69], Directive 2010/75/EU or Directive 2012/18/EU of the European Parliament and the Council[70], 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.

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 three months of receiving all necessary information gathered pursuant to Articles 5, 6 and 7 of that Directive and completing the consultations referred to in Articles 6 and 7 of that Directive.

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 45 days. In cases falling under the second sub-paragraph of Article 6(4), this period shall be extended to 90 days.

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. Priority shall be given to artificial and built surfaces, industrial sites, brownfield sites, and, where appropriate, greenfield sites not usable for agriculture and forestry.

2. Where plans include provisions for the development of net-zero technology manufacturing projects, including net-zero strategic projects, 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 plan 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

[69] 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).

[70] 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).

land-sea interactions, as referred to in Article 4 of Directive 2014/89/EU, these impacts shall also be covered by the combined assessment.

Article 9

Applicability of UNECE Conventions

1. The provisions set out in this Regulation are without prejudice to the obligations under Articles 6 and 7 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 and 13 shall be made publicly available.

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 corresponding to a technology listed in the Annex and 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 net-zero technology manufacturing project contributes to the technological and industrial resilience of the Union's energy system by increasing the manufacturing capacity of a component or part in the net-zero technology value chain for which the Union heavily depends on imports coming from a single third country ;

   (b) the net-zero technology manufacturing project has positive impact on the Union's net-zero industry supply chain or downstream sectors, beyond the project promoter and the Member States concerned, contributing to the competitiveness and quality job creation of the Union's net-zero industry supply chain, according to at least three of the following criteria:

      (i) it adds significant manufacturing capacity in the Union for net-zero technologies;

      (ii) it manufactures technologies with improved sustainability and performance;

      (iii) it puts into place measures to attract, upskill or reskill a workforce required for net-zero technologies, including through apprenticeships, in close cooperation with social partners;

      (iv) it adopts comprehensive low-carbon and circular manufacturing practices, including waste heat recovery.

2. Member States shall recognise as net-zero strategic projects CO_2 storage projects that meet the following cumulative criteria:

(a) the CO2 storage site is 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 (UNCLOS);

(b) the CO_2 storage project contributes to reaching the objective set out in Article 18;

(c) the CO_2 storage project has applied for a permit for the safe and permanent geological storage of CO_2 in accordance with Directive 2009/31/EC.

3. Net-zero technology manufacturing projects corresponding to a technology listed in the Annex located in 'less developed and transition regions' and Just Transition Fund Territories and eligible for funding under cohesion policy rules, shall be recognised by Member States as net-zero strategic projects under Article 11(3) upon request of the project promoter without the project promoter having to submit a formal application under Article 11(2).

4. A net-zero technology manufacturing project located in the Union that contributes to the realisation of the objectives set out in Article 1(1) and that either benefits from the ETS Innovation Fund, or is part of Important Projects of Common European Interest, European Hydrogen Valleys, or of the Hydrogen Bank, when the funds support investment in manufacturing capacities corresponding to a technology listed in the Annex, shall be recognised by Member States as net-zero strategic project under Article 11(3) upon request of the project promoter without the project promoter having to submit a formal application under Article 11(2).

Article 11
Application and recognition

1. Applications for recognition of net-zero technology projects as net-zero strategic projects shall be submitted by the project promoter to the relevant Member State.

2. The application referred to in paragraph 1 shall contain all of the following:

(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 absence of a decision by Member States within that time frame shall constitute an approval of the project.

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, the Net-Zero Europe Platform shall discuss the project in question.

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(1) or 10(3), 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) 9 months for the construction of net-zero strategic projects with a yearly manufacturing capacity of less than 1 GW;

   (b) 12 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 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. 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.

Article 14

Accelerating implementation

1. The Commission and the Member States shall undertake activities to accelerate and crowd-in private investments in net-zero strategic projects. Such activities may, without prejudice to Article 107 and Article 108 of the TFEU, include providing and coordinating support to net-zero strategic projects facing difficulties in accessing finance.

2. Member States may provide administrative support to net-zero strategic projects to facilitate their rapid and effective implementation, 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.

Article 15

Coordination of financing

1. The Net-Zero Europe Platform as established in Article 28 shall discuss financial needs and bottlenecks of net-zero strategic projects, potential best practices, in particular to develop EU cross-border supply chains, notably based on regular exchanges 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, 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.

Chapter III
CO_2 injection capacity

Article 16

Union level objective of CO_2 injection capacity

An annual injection capacity of at least 50 million tonnes of CO_2 shall be achieved by 2030, in storage sites located in the territory of the European Union, its exclusive economic zones or on its continental shelf within the meaning of the United Nations Convention on the Law of the Sea (UNCLOS) and which are not combined with Enhanced Hydrocarbon Recovery (EHR).

Article 17

Transparency of CO_2 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 Council[71] on their territory to make publicly available all geological data relating to production sites that have been decommissioned or whose decommissioning has been notified to the competent authority.

   (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.

2. By six months from the entry into force of this Regulation and each year thereafter, each Member State shall submit to the Commission a report describing:

   (a) CO2 capture projects in progress and an estimation of the corresponding needs for injection and storage capacities;

   (b) CO_2 storage 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 could be adopted to prompt projects referred to in points (a) and (b).

[71] 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).

Article 18

Contribution of authorised oil and gas producers

1. Each entity holding an authorisation as defined in Article 1, point 3, of Directive 94/22/EC shall be subject to an individual contribution to the Union-wide target for available CO_2 injection capacity set in Article 16. Those individual contributions shall be calculated pro-rata on the basis of each entity's share in the Union's crude oil and natural gas production from 1 January 2020 to 31 December 2023 and shall consist of CO_2 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.

2. Within three months of the entry into force of this Regulation, Member States shall, identify and report to the European Commission the entities referred to in paragraph 1 and their volumes in crude oil and natural gas production 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.

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 CO_2 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) develop CO2 storage projects alone or in co-operation;

   (b) enter into agreements with other entities referred to in paragraph 1;

   (c) enter into agreements with third party storage project developers or investors to fulfil their contribution.

6. Two years after the entry into force of the Regulation and every year thereafter, the entities referred to in paragraph 1 shall submit a report to the Commission detailing their progress towards meeting their contribution. The Commission shall make these reports public.

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.

Chapter IV.
Access to markets

Article 19

Sustainability and resilience contribution in public procurement procedures

1. Contracting authorities or contracting entities shall base the award of contracts for net-zero technology listed in the Annex in a public procurement procedure on the most economically advantageous tender, which shall include the best price-quality ratio, comprising at least the sustainability and resilience contribution of the tender, in compliance with Directives 2014/23/EU, 2014/24/EU, or 2014/25/EU and applicable sectoral legislation, as well as with the Union's international commitments, including the GPA and other international agreements by which the Union is bound.

2. The tender's sustainability and resilience 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 resilience, taking into account the proportion of the products originating from a single source of supply, as determined in accordance with Regulation (EU) No 952/2013 of the European Parliament and of the Council[72], from which more than 65% of the supply for that specific net-zero technology within the Union originates in the last year for which data is available for when the tender takes place.

3. Contracting authorities and contracting entities shall give the tender's sustainability and resilience contribution a weight between 15% and 30% of the award criteria, without prejudice of the application of Article 41 (3) of Directive 2014/23/EU, Article 67 (5) of Directive 2014/24/EU or Article 82 (5) of Directive 2014/25/EU for giving a higher weighting to the criteria referred to in paragraph 2, points (a) and (b).

4. 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 oblige that authority or entity to acquire equipment having disproportionate costs, or technical characteristics different from those of existing equipment, resulting in incompatibility, technical difficulties in operation and maintenance. Cost differences above 10% may be presumed by contracting authorities and contracting entities to be disproportionate.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, and without prejudice to other contract award criteria according to the EU legislation, including social aspects according to Articles 30 (3) and 36 (1), second intent of

[72] 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).

Directive 2014/23/EU, Articles 18 (2) and 67 (2) of Directive 2014/24/EU and Articles 36 (2) and 82 (2) of Directive 2014/24/EU.

Article 20

Auctions to deploy renewable energy sources

1. Without prejudice to Article 4 of Directive (EU) 2018/2001 and Articles 107 and 108 the Treaty, and to the 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) 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.

2. The sustainability and resilience contribution shall be given a weight between 15% and 30% of the award criteria, without prejudice of 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.

3. The 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 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, or technical characteristics different from those of existing equipment, resulting in incompatibility, technical difficulties in operation and maintenance. Cost differences above 10% may be presumed by contracting authorities and contracting entities to be disproportionate.

Article 21

Other forms of public intervention

1. Without prejudice to Articles 107 and 108 of the Treaty and Article 4 of Directive 2018/2001[73] and in line with the Union's international commitments, when deciding to set up schemes benefitting households or consumers which incentivise the purchase of net-zero technology final products listed in the Annex, 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), 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) (b) (c)

[73] 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

and (d) shall not exceed 5 % of the cost of the net-zero technology final product for the consumer.

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.

Article 22

Coordination of access to markets initiatives

1. Where relevant, the Commission shall provide guidance on 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.

2. The Commission shall make available and regularly update a list of each of the net-zero technology final products listed in the Annex, broken down by the share of Union supply originating in different third countries in the last year for which data is available.

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. The Commission shall support, including through the provision of seed-funding, the establishment of European Net Zero Industry Academies, 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, on raw materials, 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;

   (b) enable and promote the use of the learning programmes, content and materials by education and training providers in the Member States, among others by training trainers and develop mechanisms to ensure the quality of the training offered by education and training providers in the Member States based on the above learning programmes, content and materials;

(c) develop and deploy credentials, including micro-credentials, to facilitate the transparency of skills acquired and enhance the transferability between jobs and the cross-border mobility of the workforce, and to promote matching with relevant jobs through tools such as the European Employment Services (EURES) network and EURAXESS.

2. European Net Zero Industry Academies shall counter gender stereotypes and pay particular attention to the need to activate more women and young people, who are not in education, employment or training for the labour market.

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. Member States shall ensure that the results of the assessments are made public and easily accessible online.

2. If a Member State concludes there is equivalence, as described in the first paragraph of this Article, it shall 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 Council[74], 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:

(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

[74] 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).

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 of education and training providers who offer the learning programmes developed by the Academies, foster synergies with other national and Union skills initiatives and projects, and provide oversight;

(3) assist the mobilisation of stakeholders including industry, social partners and education and training providers for the roll-out of learning programs 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 labour market of the European Union;

(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 adequate working conditions in jobs in net-zero technology industries, the activation of youth, women and seniors to the labour market for net-zero technology industries, and the attraction of skilled workers from third countries, and thereby achieve a more diverse workforce;

(7) facilitate closer coordination and the exchange of best practices between Member States 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.

Chapter VI.
Innovation

Article 26

Net-Zero regulatory sandboxes

1. Member States may at their own initiative establish net-zero regulatory sandboxes, allowing for the development, testing and validation of innovative net-zero 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 accordance with paragraph 1 at the request of any company developing innovative net-zero 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 36. 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, including start-ups. The implementing acts referred to in paragraph 3 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 sandbox. The testing, development and validation of innovative net-zero 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 EU 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 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 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 27
Measures for small and medium enterprises

1. Member States shall undertake the following actions:
   (a) provide small and medium enterprises 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 small and medium enterprises;
   (c) where appropriate, establish a dedicated channel for communication with small and medium enterprises 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 small and medium enterprises , and provide adequate administrative support to take part in the regulatory sandboxes. Without prejudice to the application of Articles 107 and 108 of the Treaty, Member States should inform small and medium enterprises of available financial support to their activities in the regulatory sandboxes.

Chapter VII.
Governance

Article 28
Establishment and tasks of the Net-Zero Europe Platform

1. The Net-Zero Europe Platform ('the Platform') is 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 outlined in Chapter I of this Regulation, taking into account Member States' national energy and climate plans submitted under Regulation (EU) 2018/1999[75].

[75] 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).

4. The Commission and Member States may coordinate within the Platform on the Net-Zero Industrial Partnerships and also with relevant third countries to help promote the adoption of net-zero technologies globally 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 may periodically discuss:

   (a) how to improve cooperation along the net-zero value chain between the Union and third countries;

   (b) how to address non-tariff barriers to trade, such as through mutual recognition of conformity assessment or commitments to avoid export restrictions;

   (c) 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.

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.

Article 29

Structure and functioning of the Net-Zero Europe Platform

1. The Platform shall be composed Member States and of the Commission. It shall be chaired by a representative of the Commission.

2. Each Member State shall appoint a high-level representative to the Platform. 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 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.

7. The Platform shall invite representatives of the European Parliament to attend, as observers, its meetings, including of the standing or temporary sub-groups referred to in paragraph 6.

8. Where appropriate, the Platform or the Commission may invite experts 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.

Article 30
Articulation with National Energy and Climate Plans

Member States shall take into consideration this Regulation when preparing 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.

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 CO_2 injection capacity referred to in Article 16.

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;

   (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 CO_2 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 Council[76]. 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) and publish related reccomendations 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 Parliament and the Council.

Chapter IX.
Final provisions

Article 32
Delegation of power

The Commission is empowered to adopt delegated acts in accordance with Article 33 to amend the modalities in which agreements between entities referred to in Article 18(1) and investments in storage capacity held by third parties are taken into account to meet their individual contribution set out in Article 18 (5), as well as the content of the reports referred to in Article 18 (6).

[76] 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).

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 32 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 in Article 32 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 32 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 after 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 point 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), point (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 Brussels,

For the European Parliament	*For the Council*
The President	*The President*

LEGISLATIVE FINANCIAL STATEMENT

1. FRAMEWORK OF THE PROPOSAL/INITIATIVE

1.1. Title of the proposal/initiative

1.2. Policy area(s) concerned

1.3. The proposal/initiative relates to:

1.4. Objective(s)

1.4.1. General objective(s)

1.4.2. Specific objective(s)

1.4.3. Expected result(s) and impact

1.4.4. Indicators of performance

1.5. Grounds for the proposal/initiative

1.5.1. Requirement(s) to be met in the short or long term including a detailed timeline for roll-out of the implementation of the initiative

1.5.2. Added value of Union involvement (it may result from different factors, e.g. coordination gains, legal certainty, greater effectiveness or complementarities). For the purposes of this point 'added value of Union involvement' is the value resulting from Union intervention, which is additional to the value that would have been otherwise created by Member States alone.

1.5.3. Lessons learned from similar experiences in the past

1.5.4. Compatibility with the Multiannual Financial Framework and possible synergies with other appropriate instruments

1.5.5. Assessment of the different available financing options, including scope for redeployment

1.6. Duration and financial impact of the proposal/initiative

1.7. Method(s) of budget implementation planned

2. MANAGEMENT MEASURES

2.1. Monitoring and reporting rules

2.2. Management and control system(s)

2.2.1. Justification of the management mode(s), the funding implementation mechanism(s), the payment modalities and the control strategy proposed

2.2.2. Information concerning the risks identified and the internal control system(s) set up to mitigate them

2.2.3. Estimation and justification of the cost-effectiveness of the controls (ratio of "control costs ÷ value of the related funds managed"), and assessment of the expected levels of risk of error (at payment & at closure)

2.3. Measures to prevent fraud and irregularities

3. ESTIMATED FINANCIAL IMPACT OF THE PROPOSAL/INITIATIVE

3.1. Heading(s) of the multiannual financial framework and expenditure budget line(s) affected

3.2. Estimated financial impact of the proposal on appropriations

3.2.1. Summary of estimated impact on operational appropriations

3.2.2. Estimated output funded with operational appropriations

3.2.3. Summary of estimated impact on administrative appropriations

3.2.3.1. Estimated requirements of human resources

3.2.4. Compatibility with the current multiannual financial framework

3.2.5. Third-party contributions

3.3. Estimated impact on revenue

1. FRAMEWORK OF THE PROPOSAL/INITIATIVE

1.1. Title of the proposal/initiative

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)

1.2. Policy area(s) concerned

Single Market

A European Green Deal

A Europe fit for the digital age

A stronger Europe in the world

1.3. The proposal/initiative relates to:

☒ a new action

☐ a new action following a pilot project/preparatory action[77]

☐ the extension of an existing action

☐ a merger or redirection of one or more actions towards another/a new action

1.4. Objective(s)

1.4.1. General objective(s)

The Green Deal Industrial Plan sets out a comprehensive approach for supporting clean energy technology scale up articulated around four pillars. The first pillar, which is the focus of this Net Zero Industry Act, aims at creating a regulatory environment that simplifies and fast-tracks permitting for new net-zero technology products production sites and facilitates the scaling up of the European net zero industry.

The Net Zero Industry Act aims to increase the Union's resilience and ensure the security of energy supply in the Union, as well as to promote energy efficiency and the development of new and renewable forms of energy.

The general objective of the Net Zero Industry Act is to establish the conditions for scaling up the manufacturing capacity of net-zero technologies in the Union, to support the Union's 2030 decarbonisation targets and to ensure the security of supply for net-zero technologies needed to safeguard the resilience of the Union's energy system.

The general objective of this proposal translates first through the objective to ensure the proper functioning of the internal market by setting harmonised rules for the installation of manufacturing capacity for net-zero technologies in the Union.

1.4.2. Specific objective(s)

This Regulation establishes a framework for increasing the competitiveness of the Union's industrial base for net-zero technologies and strengthening the Union's

[77] As referred to in Article 58(2)(a) or (b) of the Financial Regulation.

contribution to net-zero transition globally, while accelerating the Union's transition to low-carbon energy sources, including by decarbonising heavy industries.

The Regulation contains measures to meet a specific objective to ensure that, by 2030, the net-zero technologies manufacturing capacity in the Union approaches or reaches a benchmark of at least 40% of the Union's annual deployment needs for the corresponding technologies necessary to achieve the Union's 2030 climate and energy targets.

1.4.3. *Expected result(s) and impact*

Specify the effects which the proposal/initiative should have on the beneficiaries/groups targeted.

The Net-Zero Industry Act aims to scale up the manufacturing of net-zero technologies and increase the competitiveness of the net-zero tech industrial base. As a result this initiatve will strengthen the resilience and competitiveness of our future decarbonised energy system.

The Net-Zero Industry Act aims at addressing the following core drivers of net-zero technology manufacturing investments:

- improving investment certainty, policy focus and coordination through the setting of clear objectives and monitoring mechanisms;
- lowering administrative burden for developing net-zero manufacturing projects including by streamlining administrative requirements and facilitating permitting, setting up regulatory sandboxes and ensuring access to information;
- facilitating access to markets by specific measures related to public demand through public procurement procedures and auctions, as well as through schemes to supports private demand by consumers;
- facilitating and enabling carbon capture and storage projects, including by enhancing the availability of CO2 storage sites;
- supporting innovation, including through regulatory sandboxes;
- enhancing skills for net-zero technologies and thereby promoting quality job creation;
- coordinating net-zero industrial partnerships.

1.4.4. *Indicators of performance*

Specify the indicators for monitoring progress and achievements.

The Regulation foresees a pillar dedicated to the monitoring of the initiative. Enhanced cooperation within the European Union will ensure the necessary and comparable information and data gathering.

The Commission will monitor developments and trends in achieving the respective objectives for EU net-zero technology manufacturing of the Act. The Commission will assess the output, results and impact of the initiative after three years. The main findings of the evaluation will be presented in a report to the European Parliament and the Council, as well as to the European Economic and Social Committee and the Committee of the Regions. The report will also be made public.

The Commission will also establish a detailed programme for monitoring the outputs, results and impacts of this Regulation with a monitoring programme setting out the means and intervals of the data collection.

The Commission will monitor the technology developments, market trends and competitiveness of the EU net-zero technologies, and the impact of this Regulation. The results of that monitoring and related recommendations will be published on an annual basis as part of the Annual Reports on Competitiveness of Clean Energy Technologies.

The Commission will work with Member States regarding increased market surveillance of product-specific requirements to ensure that only products that are compliant with Union legislation are placed on the market, ensuring a level playing field both internally and globally.

To meet the target for annual injection capacity in CO2 storage sites the Commission will monitor the progress towards reaching the Union-wide target for CO2 injection capacity and report annually.

The targets stipulated above will be reassessed and the Commission, assisted by the Net-Zero Europe Platform on a regular basis, will monitor the progress. The Net-Zero Europe Platform will monitor the performance and contribute to the evaluation. The Net-Zero Europe Platform will play an important role for gathering evidence from the industry and EU Member States, and for defining and implementing policy support for clean energy technology supply chains. The Net-Zero Europe Platform will also play an important role in monitoring the enhancing of skills through monitoring the Net-Zero Academies and assessing the demand and supply of a workforce with the skill sets needed in Net-Zero industries.

Following developments may further be measured in the net-zero industries as part of the monitoring exercise beyond the core monitoring undertaking by the platform:

- The number of legal entities involved (subdivided by size, type and country of establishment) in the actions supported by the Initiative.
- The total amount of investment in net-zero industries, including leveraging funding from both public and private sectors invested.
- The amount of investment by companies taking into consideration the segment of the value chain in which they operate.
- Monitoring data on projects evolution, demand and supply developments.
- The tenders awarded on the basis of criteria relating to environmental sustainability, innovation and system integration .
- Monitor reskilling and upskilling activities by the Net-Zero Academies as supported by the Net-Zero Europe Platform, including the number of learners and related investments. Monitor the creation of additional jobs in net-zero industries and their main quality characteristics, including in relation to wages, working conditions, and industrial relations.

1.5. Grounds for the proposal/initiative

1.5.1. Requirement(s) to be met in the short or long term including a detailed timeline for roll-out of the implementation of the initiative

The Regulation should be fully applicable shortly after its adoption, i.e. the day following that of its publication in the Official Journal of the European Union. However, initial elements will be in place before, such as the Net-Zero Europe Platform, which was set up in November 2022. The Net-Zero Industry Act further defines the platform's governing structure.

Delegated acts and may be adopted after thorough assessment of impacts and consultation of stakeholders in order to reflect technological change and market developments, consistent with the objectives and criteria of the Initiative.

Information gathering from representative organisations of clean technology manufacturing undertakings should already be on going and Member States have already discussed a number of possible measures with the Commission to support the clean technology and net-zero industries in Europe and carry out monitoring of their value chains.

1.5.2. *Added value of Union involvement (it may result from different factors, e.g. coordination gains, legal certainty, greater effectiveness or complementarities). For the purposes of this point 'added value of Union involvement' is the value resulting from Union intervention, which is additional to the value that would have been otherwise created by Member States alone.*

The Green Deal Industrial Plan is based on four pillars, the first of which is made up by this initiative, the Net Zero Industry Act. This Act is creating a regulatory environment with simplified and fast-tracked permitting for new clean energy technologies production sites and facilitates the scaling up of the European net zero industry.

The increase in uptake of clean energy and net-zero technologies is essential in helping the EU meet its objective of achieving its Fit for 55 commitments for a climate-neutral EU by 20503. The transition towards renewable sources of energy is also key in ensuring the EU a stable energy supply that will support its industry and ultimately its role in ensuring Member States' national security. It thereby contributes to EU's drive towards Open Strategic Autonomy.

Within the past year, Europe has witnessed disruptions in the supply chains for renewable energy and net-zero technolgies, causing shortages across multiple economic sectors and potentially serious societal consequences.

In the net-zero technologies ecosystem, there is relatively little diversification of supply sources and for some products a high dependency on third country exports. The EU industry's market shares are under strong pressure, due to subsidies in third countries which undermine a level playing field. This initiative will enable favourable conditions through a number of measures such as shorter permimtting timelines and increasing public demand. This will help industries in Europe to attract financing for the net-zero technologies manufacturing. Increased investments into the European net-zero technology manufacturing is key for establishing a solid industrial base for net-zero technologies and their supply chains across the EU.

The goal is not only to reduce dependencies, but also to seize the economic opportunities stemming from the global market for net zero industry technologies which is expected to reach an annual worth of around EUR 600 billion a year by 2030 according to the International Energy Agency as set out in the Staff Working Document accompanying the proposal. Furthermore, the Act will increase competitiveness of the European net-zero industrial ecosystem and of European industry at large, through the provision of innovative products for European citizens. The Union has the assets to become an industrial leader in the clean energy and net-zero technologies market of the future.

Furthermore, this action at EU-level prevents fragmentation between 27 regulatory approaches and will facilitate with achieving the EU-level climate ambitions.

1.5.3. Lessons learned from similar experiences in the past

The Communication: A Green Deal Industrial Plan for the Net-Zero Age from Januray 2023 sets out why a strong joint European response to boost the net-zero industry is needed. As part of the Green Deal Industrial Plan, the Commission proposes to put forward a Net-Zero Industry Act to underpin industrial competitiveness of net zero technologies in the EU.

The starting point for the Plan is the need to massively increase the technological development, manufacturing production and installation of net-zero industry technologies in the next decade, and the value added of an EU-wide approach to meet this challenge together. This is made more difficult by the global competition for raw materials and skilled personnel. The Plan aims to address this dichotomy by focusing on the areas where Europe can make the biggest difference. It also seeks to avert the risk of replacing our reliance on Russian fossil fuels with other strategic dependencies that could impede our access to key technologies and inputs for the green transition, through a mix of diversification and own development and production. The Plan will complement ongoing efforts to transform industry under the European Green Deal and the EU Industrial strategy, in particular the Circular Economy Action Plan. Modernising and decarbonising energy-intensive industries also remains a top priority, as does ensuring job transitions and quality job creation through training and education.

The EU has traditionally relied on a strong regulatory environment for setting conducive conditions for business, for providing quality employment for our workforce and a high level of protection for our environment. These three dimensions can be mutually reinforcing, if regulation is balanced and smartly designed, which requires continuous attention. This is why the Commission has introduced a 'competitiveness check' on all new regulation to ensure that all potential competitiveness impacts are addressed. A simple, predictable and clear regulatory environment is key to promoting investment.

1.5.4. Compatibility with the Multiannual Financial Framework and possible synergies with other appropriate instruments

The Commission and the Member States shall undertake activities to facilitate conditions to foster investment for the EU net-zero industry supply chain. These activities will in particular focus on accelerating investment in Net-Zero Strategic Projects.

The Net-Zero Industry Platform will help the Commission and the Member States to identify bottlenecks and potential best practices, notably based on regular exchanges with the relevant industrial alliances, such as the alliances on batteries, on solar panels, and the Electrolyser Partnership.

The initiative intends to support mobilising funds that fall under the following titles of the Multiannual Financial Framework:

Heading 1 Single Market, Innovation and Digital: Title 2 European Strategic Investments

_InvestEU Fund

Heading 1 Single Market, Innovation and Digital: Title 3 Single Market

_Single Market Programme

Heading 2 Cohesion, Resilience and Values: Title 5 Regional Development and Cohesion

_European Regional Development Fund

Heading 2 Cohesion, Resilience and Values: Title 6 Recovery and Resilience

_Recovery and Resilience Facility

Heading 2 Cohesion, Resilience and Values: 7 Investing in People, Social Cohesion and Values

_European Social Fund

Heading 3 Natural Resources and Environment: Title 9 Environment and Climate Action

_Just Transition Fund

Under NextGenerationEU, the 27 national recovery and resilience plans funded by the Recovery and Resilience Facility (RRF) already make available EUR 250 billion for green measures, including investments supporting the decarbonisation of industry. Horizon Europe dedicates EUR 40 billion to Green Deal research and innovation, also in partnership with industry. Cohesion policies make around EUR 85 billion available for green transition, including the Just Transition Fund. The Commission will further facilitate the swift mobilisation of Cohesion investments in support of the Green Deal Industrial Plan, including by speeding up the design and reimbursements of energy efficiency and renewable projects through standard reimbursement schemes. To date, these EU funding sources have largely benefitted research and innovation and deployment of renewable energy and related infrastructures, rather than targeting manufacturing capacity in the sector. Funding for net-zero industrial value chains can be stepped up in scale and speed. But to avoid fragmenting the Single Market due to varying levels of national support – and varying capacities to grant such support – there also needs to be adequate EU-level funding to facilitate the flourishing of such industrial value chains across the Union as a whole.

1.5.5. Assessment of the different available financing options, including scope for redeployment

The initiative falls under the Green Deal Industrial Plan which sets out support for the European net-zero industry. The financing options set out in the section are not dependent on the proposal, but may be carried out on the basis of previously existing legislation linked to this proposal.

The proposal aims to enhance the competitiveness of Europe's net-zero industry and support the fast transition to climate neutrality. The Plan aims to provide a more supportive environment for the scaling up of the EU's industial capacity for the net-zero technologies and products required to meet Europe's ambitious climate targets. The plan builds on previous initiatives and relies on the strengths of the EU Single Market, complementing ongoing efforts under the European Green Deal which recognises the advantages of investing in our competitive sustainability by building a fairer, greener and more digital Europe. It also supplements efforts under the REPowerEU which was the EU’s response to the hardships and global energy market disruption caused by Russia's invasion of Ukraine, with the aim to transform Europe's energy system through ending the EU's dependence on Russian fossil fuels

and tackling the climate crisis. Overall, this will result in increased energy savings, diversification of energy supplies, and accelerated rollout of low carbon energy.

In the plan, the Commission announced its intention to allow further flexibility for the Member States to grant State aid limited to carefully defined areas and on a temporary basis. With regard to state aid, the plan explains that EU competition policy provides tools to support the development and deployment of key cutting edge technologies, including training, strategic for the green and digital transitions, while preserving the integrity of the Single Market and respecting EU's international obligations.

The Commission will consult Member States on a proposal to adapt State aid rules on a temporary basis, until end 2025, to further speed up and simplify, with easier calculations, simpler procedures, and accelerated approvals. These changes will also assist Member States in delivering on specific projects under National Recovery Plans which fall within their scope. The plan further explains that, to accelerate the roll-out of new projects, the approval of IPCEI related projects will be further streamlined and simplified.

There are a number of instruments that are linked to the Net-Zero Industry Act and may be carried out on the basis of existing legislation.

<u>InvestEU</u>

The InvestEU Programme is well placed to boost net-zero investments in the EU. InvestEU is the Union's instrument for catalysing private investments in EU priority areas. Through the EIB, the EIF, the EBRD and 14 other implementing partners, the EU supports public and private investments in net-zero tech and industrial innovation.

<u>Innovation Fund</u>

The Innovation Fund supports the development and first-of-a-kind deployment of technologies and solutions that decarbonise energy intensive industry, boost renewable energy and energy storage (including batteries and hydrogen) and strengthen net-zero supply chains by supporting the manufacturing of critical components for batteries, wind and solar energy, electrolysers, fuel cells and heat pumps.

<u>Important projects of common European interest (IPCEI)</u>

IPCEI may represent an important contribution to the achievement of strategic objectives of the Union, notably in view of their positive spillover effects. IPCEIs can make it possible to bring together Member States and stakeholders throughout the Union, so as to overcome important market or systemic failures and societal challenges which could not otherwise be addressed.

<u>European Sovereignty Fund</u>

For the mid-term, the Commission intends to give a structural answer to the investment needs, by proposing a European Sovereignty Fund in the context of the review of the Multi-annual financial framework before summer 2023. Moreover, the Commission is assessing how the overall funding for InvestEU could be increased, in particular for the period covering 2024-2027.

To close the investment-gap for the net-zero transition, these initiatives aim at attracting private funding to complement the achievement of the targets.

As detailed below, the implementation of this piece of legislation will require additional human resources and aldo some supporting expenditure.

1.6. Duration and financial impact of the proposal/initiative

☐ **limited duration**

– ☐ in effect from [DD/MM]YYYY to [DD/MM]YYYY

– ☐ Financial impact from YYYY to YYYY for commitment appropriations and from YYYY to YYYY for payment appropriations.

☒ **unlimited duration**

– Implementation with a start-up period from YYYY to YYYY,

– followed by full-scale operation.

1.7. Method(s) of budget implementation planned[78]

☒ **Direct management** by the Commission

– ☒ by its departments, including by its staff in the Union delegations;

– ☐ by the executive agencies

☐ **Shared management** with the Member States

☐ **Indirect management** by entrusting budget implementation tasks to:

– ☐ third countries or the bodies they have designated;

– ☐ international organisations and their agencies (to be specified);

– ☐ the EIB and the European Investment Fund;

– ☐ bodies referred to in Articles 70 and 71 of the Financial Regulation;

– ☐ public law bodies;

– ☐ bodies governed by private law with a public service mission to the extent that they are provided with adequate financial guarantees;

– ☐ bodies governed by the private law of a Member State that are entrusted with the implementation of a public-private partnership and that are provided with adequate financial guarantees;

– ☐ bodies or persons entrusted with the implementation of specific actions in the CFSP pursuant to Title V of the TEU, and identified in the relevant basic act.

– *If more than one management mode is indicated, please provide details in the 'Comments' section.*

Comments

[78] Details of budget implementation methods and references to the Financial Regulation may be found on the BUDGpedia site: https://myintracomm.ec.europa.eu/corp/budget/financial-rules/budget-implementation/Pages/implementation-methods.aspx

2. MANAGEMENT MEASURES

2.1. Monitoring and reporting rules

Specify frequency and conditions.

This Legislative Financial Statement includes staff expenditure, procurement and possibly administrative arrangements. Standard rules for this type of expenditure apply. The Commission will evaluate the output, results and impact of this proposal three years after the date on which it becomes applicable. In order to conduct the evaluation, the Net Zero Europe Platform, Member States and national competent authorities will provide information to the Commission on its request.

2.2. Management and control system(s)

2.2.1. Justification of the management mode(s), the funding implementation mechanism(s), the payment modalities and the control strategy proposed

The management mode for the initiative is direct management by the Commission. The Commission will be assisted by the governing body, which is the Net-Zero Europe Platform with Member States representatives and stakeholders. In summary, the initiative requires staff expenditure, procurement and possibly administrative arrangements. Standard rules for this type of expenditure apply.

2.2.2. Information concerning the risks identified and the internal control system(s) set up to mitigate them

Overall, the initiative requires staff expenditure, expenditures for studies and research, seed funding to support the creation and functioning of Net-Zero Academies and other administrative arrangements. Standard rules for this type of expenditure apply.

Most aspects of the initiative follow standard procedures for procuring technical support, involving stakeholders and the adoption of secondary legislation. The main risk, already illustrated in the past, is insufficient human resources to implement working plans.

This proposal is not accompanied by a formal impact assessment. Considering the urgency to act for the reasons explained above, an impact assessment could not have been delivered in the timeframe available prior to the adoption of the proposal. The analysis is set out in the Staff Working Document on 'Investment needs assessment and funding availabilities to strengthen EU's net-zero technology manufacturing capacity' accompanying this proposal. The preparation of this initiative included a targeted stakeholder consultation and long-standing and regular contacts with industry stakeholders, Member States and trade associations enabled the collection of a fair amount of information and feedback relevant to the proposal. Despite the consideration of input relevant for the proposal's policy options, unintentional consequences and impacts of this initiative may still occur in the future. The Commission intends to identify such as soon as they may occur through the robust monitoring procedures laid out in the Regulation and will address any unintentional consequences with suitable means and actions.

2.2.3. Estimation and justification of the cost-effectiveness of the controls (ratio of "control costs ÷ value of the related funds managed"), and assessment of the expected levels of risk of error (at payment & at closure)

Overall, the initiative requires staff expenditure, possibly procurement and possibly administrative arrangements. Standard rules for this type of expenditure apply.

2.3. Measures to prevent fraud and irregularities

Specify existing or envisaged prevention and protection measures, e.g. from the Anti-Fraud Strategy.

The Commission will ensure that procedures to fight against fraud at all stages of the management process are applied by the Net-Zero Europe Platform as the governing body.

The Commission will ensure that appropriate measures are in place so that, when actions financed under the relevant acts, taking into consideration the Net-Zero Industry Act are implemented, the financial interest of the Union is protected by the application of preventive measures against fraud, corruption and any other illegal activities, by effective checks and, if irregularities are detected, by the recovery of the amounts wrongly paid and, where appropriate, by effective, proportionate and deterrent penalties.

The Court of Auditors shall have the power of audit, on the basis of documents and on-the-spot checks, relating to the Programme. The European Anti-fraud Office (OLAF) may carry out on-the-spot checks and inspections on economic operators concerned directly or indirectly by such funding in accordance with the procedures laid down in Regulation (Euratom, EC) No 2185/96 and Regulation 883/2013 with a view to establishing whether there has been fraud, corruption or any other illegal activity affecting the financial interests of the Union in connection with a grant agreement or grant decision or a contract concerning Union funding. The Joint Undertakings will also need to accede to the Interinstitutional Agreement of 25 May 1999 between the European Parliament, the Council of the European Union and the Commission of the European Communities concerning internal investigations by the European Anti-fraud Office (OLAF). The European Public Prosecutor's Office (EPPO) may carry out investigations in accordance with the provisions and procedures laid down in Council Regulation (EU) 2017/193923, with a view to investigating criminal offences affecting the financial interests of the Union.

3. ESTIMATED FINANCIAL IMPACT OF THE PROPOSAL/INITIATIVE

3.1. Heading(s) of the multiannual financial framework and expenditure budget line(s) affected

- Existing budget lines

In order of multiannual financial framework headings and budget lines.

Heading of multiannual financial framework	Budget line	Type of expenditure	Contribution			
	Number	Diff./Non-diff.[79]	from EFTA countries [80]	from candidate countries and potential candidates [81]	fromother third countries	other assigned revenue
1	03.02.01.01	Diff./~~Non-diff.~~	YES/~~NO~~	YES/~~NO~~	~~YES~~/NO	~~YES~~/NO
1	03.02.02.00	Diff./~~Non-diff.~~	YES/~~NO~~	YES/~~NO~~	~~YES~~/NO	~~YES~~/NO
1	01.02.02.54	Diff./~~Non-diff.~~	YES/~~NO~~	YES/~~NO~~	~~YES~~/NO	~~YES~~/NO

- New budget lines requested

In order of multiannual financial framework headings and budget lines.

Heading of multiannual financial framework	Budget line	Type of expenditure	Contribution			
	Number	Diff./Non-diff.	from EFTA countries	from candidate countries and potential candidates	from other third countries	other assigned revenue

[79] Diff. = Differentiated appropriations / Non-diff. = Non-differentiated appropriations.
[80] EFTA: European Free Trade Association.
[81] Candidate countries and, where applicable, potential candidates from the Western Balkans.

3.2. Estimated financial impact of the proposal on appropriations

3.2.1. Summary of estimated impact on operational appropriations

– ☐ The proposal/initiative does not require the use of operational appropriations

– ☒ The proposal/initiative requires the use of operational appropriations, as explained below:

EUR million (to three decimal places)

Heading of multiannual financial framework	Number	

DG: GROW			Year 2023	Year **2024**	Year **2025**	Year **2026**	Year **2027**	Enter as many years as necessary to show the duration of the impact (see point 1.6)			**TOTAL**
• Operational appropriations											
Budget line[82] 03.020101 - Operation and development of the internal market of goods and services	Commitments	(1a)		0,180	0,180	0,180	0,180				**0.720**
	Payments	(2a)		0.060	0.180	0.180	0.180	0.120			**0.720**
Budget line 03.02.02.00 – Single Market Programme SME Pillar	Commitments	(1b)	2.500								**2.500**
	Payments	(2b)	0.500	2.000							**2.500**
Budget line 01 02 02 54 - Clean Hydrogen Joint Undertaking	Commitments	(1b)	3.000								**3.000**
	Payments	(2b)	0.750	2.250							**3.000**
Appropriations of an administrative nature financed from the envelope of specific programmes[83]											
Budget line		(3)									

[82] According to the official budget nomenclature.

[83] Technical and/or administrative assistance and expenditure in support of the implementation of EU programmes and/or actions (former 'BA' lines), indirect research, direct research.

TOTAL appropriations for DG GROW	Commitments	=1a+1b +3	5.500	0,180	0,180	0,180	0,180				**6.220**
	Payments	=2a+2b +3	1.25	4.310	0.180	0.180	0.180	0.120			**6.220**

• TOTAL operational appropriations	Commitments	(4)	5.500	0,180	0,180	0,180	0.180			**6.220**
	Payments	(5)	1.250	4.310	0.180	0.180	0.180	0.120		
• TOTAL appropriations of an administrative nature financed from the envelope for specific programmes		(6)								
TOTAL appropriations under HEADING 1 of the multiannual financial framework	Commitments	=4+ 6	5.500	0,180	0,180	0,180	0.180			**6.220**
	Payments	=5+ 6	1.250	4.310	0.180	0.180	0.180	0.120		**6.220**

<u>If more than one operational heading is affected by the proposal / initiative, repeat the section above:</u>

• TOTAL operational appropriations (all operational headings)	Commitments	(4)								
	Payments	(5)								
TOTAL appropriations of an administrative nature financed from the envelope for specific programmes (all operational headings)		(6)								
TOTAL appropriations under HEADINGS 1 to 6 of the multiannual financial framework (Reference amount)	Commitments	=4+ 6								
	Payments	=5+ 6								
	Payments	=5+ 6								

Heading of multiannual financial framework	**7**	'Administrative expenditure'

This section should be filled in using the 'budget data of an administrative nature' to be firstly introduced in the Annex to the Legislative Financial Statement (Annex 5 to the Commission decision on the internal rules for the implementation of the Commission section of the general budget of the European Union), which is uploaded to DECIDE for interservice consultation purposes.

EUR million (to three decimal places)

		Year 2023	Year **2024**	Year **2025**	Year **2026**	Year **2027**	Enter as many years as necessary to show the duration of the impact (see point 1.6)			**TOTAL**
DG: GROW										
• Human resources			0.513	0.513	0.513	0.513	0.513			**2.565**
• Other administrative expenditure			0.025	0.025	0.025	0.025	0.025			**0.125**
TOTAL DG GROW	Appropriations		0.538	0.538	0.538	0.538	0.538			**2.69**

		Year 2023	Year **2024**	Year **2025**	Year **2026**	Year **2027**	Enter as many years as necessary to show the duration of the impact (see point 1.6)			**TOTAL**
DG: ENER										
• Human resources			0.513	0.513	0.513	0.513	0.513			**2.565**
• Other administrative expenditure										
TOTAL DG ENER	Appropriations		0.513	0.513	0.513	0.513	0.513			**2.565**

TOTAL appropriations under HEADING 7 of the multiannual financial framework	(Total commitments = Total payments)		1.051	1.051	1.051	1.051	1.051			**5.255**

EUR million (to three decimal places)

		Year 2023	Year **2024**[84]	Year **2025**	Year **2026**	Year **2027**	Enter as many years as necessary to show the duration of the impact (see point 1.6)			**TOTAL**
TOTAL appropriations under HEADINGS 1 to 7 of the multiannual financial framework	Commitments	5.500	1.231	1.231	1.231	1.231	1.051			**11.457**
	Payments	1.250	5.361	1.231	1.231	1.231	1.171			**11.457**

3.2.2. Estimated output funded with operational appropriations

Commitment appropriations in EUR million (to three decimal places)

Indicate objectives and outputs ⇩			Year **N**		Year **N+1**		Year **N+2**		Year **N+3**		Enter as many years as necessary to show the duration of the impact (see point 1.6)						**TOTAL**	
	OUTPUTS																	
	Type[85]	Average cost	No	Cost	No	Cost	No	Cost	No	Cost	No	Cost	No	Cost	No	Cost	Total No	Total cost
SPECIFIC OBJECTIVE No 1[86]…																		
- Output																		
- Output																		
- Output																		
Subtotal for specific objective No 1																		
SPECIFIC OBJECTIVE No 2 ...																		

84 Year N is the year in which implementation of the proposal/initiative starts. Please replace "N" by the expected first year of implementation (for instance: 2021). The same for the following years.

85 Outputs are products and services to be supplied (e.g.: number of student exchanges financed, number of km of roads built, etc.).

86 As described in point 1.4.2. 'Specific objective(s)…'

- Output																		
Subtotal for specific objective No 2																		
TOTALS																		

3.2.3. *Summary of estimated impact on administrative appropriations*

– ☐ The proposal/initiative does not require the use of appropriations of an administrative nature

– ☒ The proposal/initiative requires the use of appropriations of an administrative nature, as explained below:

EUR million (to three decimal places)

	Year **2023**	Year **2024** [87]	Year **2025**	Year **2026**	Year **2027**	Enter as many years as necessary to show the duration of the impact (see point 1.6)			**TOTAL**
HEADING 7 of the multiannual financial framework									
Human resources		1.026	1.026	1.026	1.026	1.026			**5.13**
Other administrative expenditure		0.025	0.025	0.025	0.025	0.025			**0.125**
Subtotal HEADING 7 of the multiannual financial framework		1.051	1.051	1.051	1.051	1.051			**5.255**

Outside HEADING 7[88] of the multiannual financial framework									
Human resources									
Other expenditure of an administrative nature									
Subtotal outside HEADING 7 of the multiannual financial framework									
Outside HEADING 7[89] of the multiannual financial framework									
Human resources									

87 Year N is the year in which implementation of the proposal/initiative starts. Please replace "N" by the expected first year of implementation (for instance: 2021). The same for the following years.

88 Technical and/or administrative assistance and expenditure in support of the implementation of EU programmes and/or actions (former 'BA' lines), indirect research, direct research.

89 Technical and/or administrative assistance and expenditure in support of the implementation of EU programmes and/or actions (former 'BA' lines), indirect research, direct research.

Other expenditure of an administrative nature									
Subtotal outside HEADING 7 of the multiannual financial framework									
TOTAL		1.051	1.051	1.051	1.051	1.051			**5.255**

The appropriations required for human resources and other expenditure of an administrative nature will be met by appropriations from the DG that are already assigned to management of the action and/or have been redeployed within the DG, together if necessary with any additional allocation which may be granted to the managing DG under the annual allocation procedure and in the light of budgetary constraints.

3.2.3.1. Estimated requirements of human resources

– ☐ The proposal/initiative does not require the use of human resources.

– ☒ The proposal/initiative requires the use of human resources, as explained below:

Estimate to be expressed in full time equivalent units

		Year **2024**	Year **2025**	Year **2026**	Year **2027**	Enter as many years as necessary to show the duration of the impact (see point 1.6)		
• Establishment plan posts (officials and temporary staff)								
20 01 02 01 (Headquarters and Commission's Representation Offices)		6	6	6	6	6		
20 01 02 03 (Delegations)								
01 01 01 01 (Indirect research)								
01 01 01 11 (Direct research)								
Other budget lines (specify)								
• External staff (in Full Time Equivalent unit: FTE)[90]								
20 02 01 (AC, END, INT from the 'global envelope')								
20 02 03 (AC, AL, END, INT and JPD in the delegations)								
XX 01 xx **yy zz** [91]	- at Headquarters							
	- in Delegations							
01 01 01 02 (AC, END, INT - Indirect research)								
01 01 01 12 (AC, END, INT - Direct research)								
Other budget lines (specify)								
TOTAL		6	6	6	6	6		

XX is the policy area or budget title concerned.

The human resources required will be met by staff from the DG who are already assigned to management of the action and/or have been redeployed within the DG, together if necessary with any additional allocation which may be granted to the managing DG under the annual allocation procedure and in the light of budgetary constraints.

Description of tasks to be carried out:

Officials and temporary staff	The three officials of DG GROW foreseen under this Act will be in charge of coordinating and organising the Net-Zero Europe Platform. The responsibilities of the Platform are estalished in the Act. This will foster the exertion of the measures under this initiative and overlook and monitor the developments of the net-zero technology manufacturing base. The three officials from DG ENER will participate in the work of the Platform, provide feedback on the net-zero strategic projects and support the monitoring of the Act through the Annual Reports on the Competitiveness of Clean Energy Technologies.

[90] AC= Contract Staff; AL = Local Staff; END= Seconded National Expert; INT = agency staff; JPD= Junior Professionals in Delegations.

[91] Sub-ceiling for external staff covered by operational appropriations (former 'BA' lines).

External staff	

3.2.4. *Compatibility with the current multiannual financial framework*

The proposal/initiative:

– ☒ can be fully financed through redeployment within the relevant heading of the Multiannual Financial Framework (MFF).

Explain what reprogramming is required, specifying the budget lines concerned and the corresponding amounts. Please provide an excel table in the case of major reprogramming.

– ☐ requires use of the unallocated margin under the relevant heading of the MFF and/or use of the special instruments as defined in the MFF Regulation.

Explain what is required, specifying the headings and budget lines concerned, the corresponding amounts, and the instruments proposed to be used.

– ☐ requires a revision of the MFF.

Explain what is required, specifying the headings and budget lines concerned and the corresponding amounts.

3.2.5. *Third-party contributions*

The proposal/initiative:

– ☒ does not provide for co-financing by third parties

– ☐ provides for the co-financing by third parties estimated below:

Appropriations in EUR million (to three decimal places)

	Year **N**[92]	Year **N+1**	Year **N+2**	Year **N+3**	Enter as many years as necessary to show the duration of the impact (see point 1.6)			Total
Specify the co-financing body								
TOTAL appropriations co-financed								

[92] Year N is the year in which implementation of the proposal/initiative starts. Please replace "N" by the expected first year of implementation (for instance: 2021). The same for the following years.

3.3. Estimated impact on revenue

– ☐ The proposal/initiative has no financial impact on revenue.

– ☒ The proposal/initiative has the following financial impact:

  – ☐ on own resources

  – ☒ on other revenue

  – please indicate, if the revenue is assigned to expenditure lines ☐

EUR million (to three decimal places)

Budget revenue line:	Appropriations available for the current financial year	Impact of the proposal/initiative[93]						
		Year **N**	Year **N+1**	Year **N+2**	Year **N+3**	Enter as many years as necessary to show the duration of the impact (see point 1.6)		
Article ……		p.m.	p.m.	p.m.	p.m.	p.m.	p.m.	p.m.

For assigned revenue, specify the budget expenditure line(s) affected.

Other remarks (e.g. method/formula used for calculating the impact on revenue or any other information).

[93] As regards traditional own resources (customs duties, sugar levies), the amounts indicated must be net amounts, i.e. gross amounts after deduction of 20 % for collection costs.