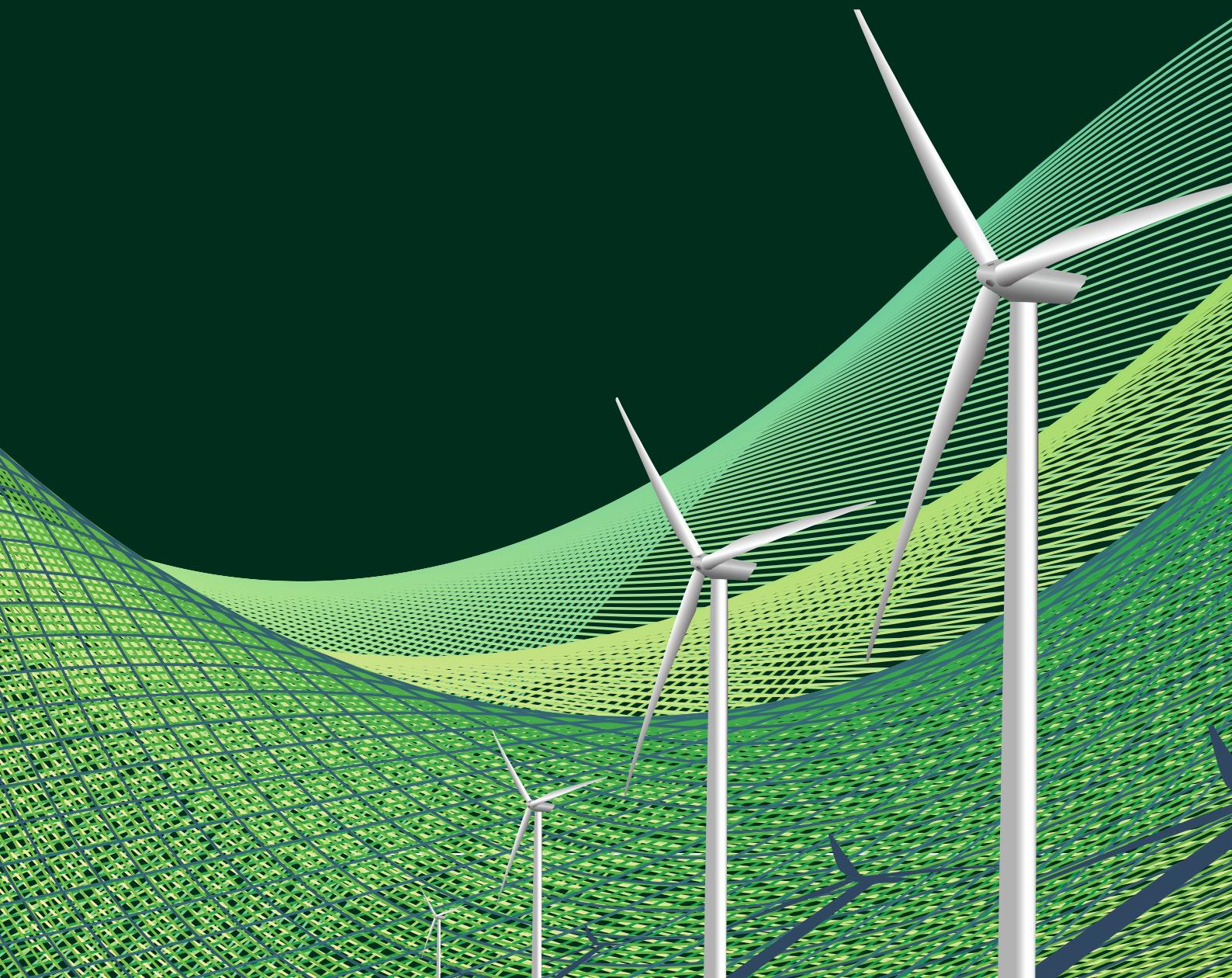
AGENCY

TRANSITIONING TOWARDS THE EUROPEAN GREEN FUTURE.

Brief for the Renewable Energy Business



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TOWARDS THE EUROPEAN GREEN FUTURE.

Brief for the Renewable Energy Business

1. Introduction

The von der Leyen Commission took office in 2019 for a five-year term (2019-2024) with an ambitious set of goals for the European Union, amongst which the European Green Deal, to become a modern, resource-efficient economy. Described as the EU's new growth strategy, the Green Deal aims to transform the EU's economy into a competitive and strategically autonomous one, where economic growth is decoupled from resources use and no one is left behind[1]. Under this strategy the EU aims to become a global leader in the green transition and the world's first climate-neutral continent by 2050, cutting emissions by 55 percent compared to 1990 levels.

In the past years, a number of interrelated challenges have highlighted that the EU's ambition to pursue what can be defined as **a green industrial policy** is crucial to ensure that Europe maintains its competitiveness on the international stage, its strategic independence from other markets and that it fully benefits from the growth opportunities of the green transition, to maintain and strengthening its socio-economic model[2]. The COVID-19 pandemic exposed the interdependence of the European economy, and the Russian invasion of Ukraine highlighted the need for the EU to diversify its energy resources, starting from gas, beyond phasing out fossil fuels.

The EU has now the opportunity to make the most of its economic recovery to achieve a more dynamic, resilient, and competitive market by investing in the **green transition**[3]. Renewable energy can both support Europe's fight against the climate crisis and foster the emergence of a more competitive and independent economy. According to a report by Boell, renewable energy can reduce fossil fuel-induced price shocks and inflation, thus boosting European industrial competitiveness and easing household costs. Additionally, by switching to locally produced renewable energy the EU can strengthen local economies. The EU has the potential

1 European Commission (n.d.) *The European Green Deal: Striving to be the first climate-neutral continent:* https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en

2 Tagliapietra, S., Trasi, C. & Veugelers, R. (2023) Europe's green industrial policy in Tagliapietra, S., & Veugelers, R. (2023) *Sparking Europe's New Industrial Revolution,* Bruegel

3 Council of the EU (November 16, 2020) A recovery advancing the transition towards a more dynamic, resilient and competitive European industry, Council conclusions https://www.consilium.europa.eu/en/press/press-releases/2020/11/16/towards-a-more-dynamic-resilient-and-competitive-european-industry-council-adopts-conclusions/

to meet its energy needs with domestic renewable sources, reducing its dependency on imports for its energy needs and thus also enhancing resilience to geopolitical crises.

Major challenges for the EU remain. These include attracting adequate investment that matches the innovation requirements necessary to achieve the EU's ambitious goals in terms of renewable energy (42.5% share of renewables by 2030[4]); the presence of slow and complex permitting procedures for renewable energy products; pressure from international competitors, in particular the US and China; and finally, the unavailability of skilled workers in the EU to match the speed of increased European capacity. According to EU official data[5] Europe is currently a net importer of net-zero energy technologies: for some technologies such as solar photovoltaic technology, the EU's dependency exceeds 90% of products in certain segments of the value chain and even in sectors where the EU industry is strong (e.g. wind turbines), the balance is deteriorating with increased energy and input costs.

Nonetheless, the EU can seize the opportunities to invest in net-zero and green energy technologies. The past two years have shown that the green transition can strengthen the EU's competitiveness and that there is a great potential ready to be deployed[6]. Between 2021 and 2022, the net-zero ecosystem doubled in value from over EUR 100 billion[7]. Through a number of policies, including Action Plans, Strategies, and binding Regulations that are explored in this section, the EU seeks to address these issues *in order to achieve its competitiveness, independence and green transition goals.* **But what does the EU's approach to recovery based on the green transition entail for green energy businesses?**

4 European Commission (n.d.) Renewable Energy Directive
5 European Commission (2023) Explanatory Memorandum in Proposal for a Regulation of the European Parliament and of the Council on establishing a framework of measures for strengthening Europe's net-zero technology products manufacturing ecosystem (Net-Zero Industry Act), COM(2023) 161 final
6 European Commission (2023) A Green Deal Industrial Plan for the Net-Zero Age, COM(2023) 62 final https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023DC006
7 The rise of European Clean Tech – Report, https://dealroom.co/uploaded/2022/04/Dealroom-Talis-Climate-Tech-Europe-2022.pdf

With the mandate of the current Commission coming to an end this year, and the continued geopolitical challenges that the EU is set to face, this brief seeks to both explore developments in a number of policies related to the EU's green transition and economic recovery and to define potential challenges (as well as opportunities) for green energy companies, both those in the EU and those seeking to enter Europe either by importing energy or producing it within the EU.

Renewable energy is a key component of the EU's plan to reach climate neutrality by 2050 and central to the European Green Deal and the REPowerEU Plan to phase out imports of Russian fossil fuels. Legally binding measures such as the Revised Energy Directive set forth an ambitious goal for the EU to achieve a legally binding minimum target of at least 42.5% renewable energy by 2030. To match its goals, the EU has set forth a number of policies that support green energy businesses by streamlining and simplifying permitting to increase innovation, provide financing of green energy technologies through funds and investments, promote innovation through expertise sharing (forums for dialogue and joint research) and ensure that the green transition is socially fair. With regard to renewables in particular, specific initiatives were recently taken to ensure European industries' competitiveness, notably the European Wind Power Action Plan and the European Wind Charter, as well as the European Solar Charter.

2. Current framework: The European Green Deal, Industry and Energy

The European Green Deal, the EU's new growth strategy, outlines a comprehensive plan for transitioning to a sustainable energy system, essential for meeting the 2030 climate objectives and the 2050 goal of carbon neutrality. Since energy production and use account for over 75% of the EU's greenhouse gas emissions[8], the Deal emphasises three key principles: ensuring an affordable and reliable energy supply, developing an integrated and digitised energy market, and prioritising energy efficiency with a focus on renewable sources. The importance of this transition was highlighted by Russia's invasion of Ukraine in February 2022, which underscored the need for Europe to become independent of Russian fossil fuels, particularly gas. In 2023, the EU introduced the REPowerEU plan to diversify energy supplies, reduce consumption, and significantly increase the deployment of renewable energy.

The green energy industry is a **key stakeholder** and **driver** in the EU's future growth and in the European green energy transition. A number of policies and frameworks outline how the EU seeks to *concretely harness the potential in global markets for low-emission technologies, sustainable products, and services to achieve climate neutrality by 2050*[9], and the role of green energy businesses in this process. This section outlines how the EU seeks to support green energy businesses to **innovate and become more competitive** through, amongst other, **investments and faster permitting** under the Revised renewable energy Directive (RED III),

8 European Commission (n.d.) Energy and the Green Deal, https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/energy-and-green-deal_en

9 European Commission (n.d.) Industry and the Green Deal, https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/industry-and-green-deal_en

the Emergency Regulation on Permitting, the Net-Zero Industry Act (part of the Green Deal Industrial Plan for the Net-Zero Age) and the EU's Industrial Strategy. It furthermore outlines policies that aim to incentivise innovation in specific energies, including the EU Solar Energy Strategy, the Biomethane Action Plan and the EU Strategy on Offshore Renewable Energy.

A. The Fit for 55 Package and REPowerEU: Accelerating the move away from fossil fuels

In July 2021, the European Commission adopted the **Fit for 55 Package**, a number of policy proposals to implement the Green Deal and achieve the EU's greenhouse gas reduction emissions targets (55% by 2030). The Fit for 55 Package provides a *plan* to achieve a **fair transition**, in which the EU can lead the fight against climate change while promoting the innovation and competitiveness of European industry.

The package includes a comprehensive array of actions to support the reduction of greenhouse gas emissions, from the creation of an EU emissions trading system, to binding annual greenhouse gas emission targets for member states, and the introduction of a carbon border adjustment mechanism[10].

Revised renewable energy Directive (RED III)[11]

Fit for 55 foresaw **a revision of the renewable energy directive** (RED)[12], which was introduced in 2008 to make the EU more competitive in the global renewable energy market[13].

10 More on the complete actions covered by Fit for 55 is available here: https://www.consilium.europa.eu/en/policies/green-deal/fit-for-55/#package

11 Directive (EU) 2023/2413 of the European Parliament and of the Council of 18 October 2023 amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023L2413&qid=1699364355105

12 European Commission (n.d.) Renewable Energy Directive

13 The Directive was already revised in 2018. The Renewable Energy Directive (2018/2001/EU) entered into force in December 2018, as part of the Clean energy for all Europeans package, aimed at maintaining the EU's status as a global leader in renewables and, more broadly, helping it to meet its emissions reduction commitments under the Paris Agreement. It established a new binding renewable energy target for the EU for 2030 of at least 32%, with a clause for a possible upwards revision by 2023. This target is a continuation of the 20% target for 2020.

The revised directive (RED III) was adopted in October 2023 and includes a binding commitment for member states to "raise the share of renewable energy in the EU's **overall energy consumption to 42.5% by 2030** with an additional 2.5% indicative top up to allow the target of 45% to be achieved."[14].

To achieve this, RED III includes specific provisions for renewable electricity. A new paragraph (Art. 3 para 4(a)) requires Member States to establish a framework that may include support schemes and measures to facilitate the uptake of renewable power purchase agreements[15]. This aims to increase the deployment of renewable electricity by addressing remaining barriers, such as permit-granting procedures and the development of transmission, distribution, and storage infrastructure. The goal is to ensure a high level of renewable electricity supply, particularly to meet targets in the transport, industry, building, heating, and cooling sectors. Additionally, the Directive outlines specific provisions for granting administrative permits to build, repower, and operate renewable energy plants, including the installation of solar energy equipment (Art. 16d).

The targets outlined in the Directive must be considered inter alia in member states' revised National Energy and Climate Plans (NECP) for 2021-2030 under Regulation (EU) 2018/1999[16], the final draft on which must be adopted by June 2024. The plans are meant to "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".

Under RED III Member States are invited to include a summary of the policies and measures introduced as part of their framework in their NECPs. These are welcome developments to increase member states' commitments to achieve renewable energy consumption goals, although they are non-binding and far from representing a comprehensive framework for the transition. Member States' plans must be analysed on a case by case basis to evaluate the opportunities set forth to increase the uptake of renewables.

Emergency Regulation on Permitting[17]

To accelerate the short-term deployment of renewable energy, the Commission introduced an **emergency regulation on permitting** that simplifies and shortens the approval process for renewable energy projects. This regulation mandates that the planning, construction, and operation of renewable energy plants and installations must be considered by member states as being **in the overriding public interest and serving public health and safety**[18].

14 Council of the EU (2023, October 7) Renewable Energy: Council adopts new rules, https://www.consilium.europa.eu/en/press/press-releases/2023/10/09/renewable-energy-council-adopts-new-rules/

15 As per the Directive EU 2023/2413 Art.1(14q), these are defined as "contracts under which a natural or legal person agrees to purchase renewable energy directly from a producer, which encompasses, but is not limited to, renewables power purchase agreements and renewables heating and cooling purchase agreements"

16 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 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2018.328.01.0001.01.ENG&toc=OJ:L:2018:328:TOC

17 European Commission (2023, November 28) Commission prolongs energy emergency measures by 12 months https://energy.ec.europa.eu/news/commission-prolongs-energy-emergency-measures-12-months-2023-11-28_en#:~:text=The%20emergency%20measures%20on%20permitting,energy%20into%20the%20electricity%20system.

18 It must be noted that, as per Directive (EU) 2018/2001 Art.3(1) "Member States may restrict the application of those provisions to certain parts of their territory as well as to certain types of technologies or to projects with certain technical characteristics in accordance with the priorities set in their integrated national energy and climate plans". It is crucial thus to refer back to countries' national energy and climate plans, as previously discussed.

This designation allows member states to prioritise these projects (Art. 3(1)). The regulation also includes specific provisions for installing solar energy equipment, such as solar installations and rooftop solar panels, with a maximum permit-granting period of **three months** (Art. 4).

In effect since the end of 2022, the regulation was extended in November 2023 making the new expiry date June 30, 2025. Many of the provisions in the emergency regulation are also included in the Regulation on the Promotion of Renewable Energies within the EU[19], which provides a long-term framework to streamline permit-granting procedures. This regulation must be transposed by member states by May 21, 2025. The emergency regulation aims to bridge the gap in the legal framework in the short term.

REPowerEU[20]

Russia's invasion of Ukraine in February 2022 heightened the importance of diversifying the EU's energy dependencies on imported fossil fuels, especially on Russian gas - one of the main objectives of the REPowerEU Plan presented by the European Commission in May 2022. Amongst the priorities of the Plan is

that of reducing EU dependence on fossil fuels by increasing the European use of solar, wind and heat energy (Point 2.2. Of the Strategy). Accelerating the roll out of green energy technologies and reducing the demand of energy are key elements in supporting the transition away from Russian gas, substituting with other energy sources. Pushing for the

full implementation of the number of initiatives under Fit for 55, REPowerEU increases the ambitions of these initiatives by proposing higher targets and a number of reforms. The revision of the Directive must be understood within the border objectives of accelerating the transition under the REPowerEU Plan.

19 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.) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2018.328.01.0082.01.ENG&toc=OJ:L:2018:328:TOC

20 European Commission (2022) REPowerEU: Joint European Action for more affordable, secure and sustainable energy, COM(2022) 108 final https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2022%3A108%3AFIN

The Plan sets out some very ambitious goals for the Union namely:

- *to prioritise (front-load) solar energy, aiming at over 320 GW of solar photovoltaic newly installed by 2025, over twice today's level, and almost 600 GW by 2030*
- *to further strengthen the EU windsector's global competitiveness, and achieve the REPowerEU ambition with fast wind energy deployment*
- *to sustainably increase the production of biomethane, doubling the objective of Fit for55 of biomethane to produce 35 billion cubic metres per year by 2030*

In order to achieve these targets, REPowerEU sets out a number of concrete actions. Amongst these the Plan includes:

- **Accelerating permitting** for the development of green energy technologies. The Plan includes a **Recommendation on permitting**[21] emphasising the need to enforce the Renewable Energy Directive. It urges member states to set clear, fast, and short deadlines for granting permits to build and operate renewable energy projects. Additionally, it calls for the creation of a unified and digital application process to simplify the entire permit application and granting procedure, including the establishment of a one-stop shop for permits. The Plan also encourages the involvement of citizens and energy communities in renewable energy projects.

- **Fostering national reforms and investments** that can drive actual change on the European targets and objectives. For this, under the Plan the Commission invited Member States to add REPowerEU chapters in their Recovery and Resilience Plans (RRPs), outlining their new actions to deliver on the REPowerEU objectives. The RRPs in fact can provide a fast and effective way of prioritising investments within the REPowerEU objectives, that can be supported under both the REPowerEU chapter and cohesion policy funds.

21 European Commission (2022) Commission Recommendation of 18.05.2022 on speeding up permit-granting procedures for renewable energy projects and facilitating Power Purchase Agreements, C(2022) 3219 final https://energy.ec.europa.eu/document/download/98a9b587-4491-480c-be75-af72f1a6cad6_en?filename=C_2022_3219_1_EN_ACT_part1_v6.pdf

- Financing is crucial to advance the goals set out by the REPowerEU Plan. To mobilise finance in the short term Member States can cooperate with each other through **Important Projects of Common European Interest** (IPCEI). IPCEI are transnational projects that allow Member States to bring together expertise and financial resources to develop innovative technologies. While no IPCEI on the green energy technologies considered in this brief have been approved yet, renewable energies are already at the heart of many such projects with two IPCEI on batteries and four IPCEI on hydrogen

  technologies[22] adopted in the past 7 years. Additionally, funding is supported under the **InvestEU Programme** - which mobilises private finance to support investments contributing to REPowerEU goals - and the **Innovation Fund** (*see also: Table 1. Funding opportunities for net-zero and green energy innovative projects*)

- Ambitious targets for **specific renewable energies**. Crucial actions for solar energy are outlined in the **EU Solar Strategy and European Solar Rooftop Initiative** (with legally binding EU solar rooftop obligation for certain categories of buildings) presented as part of the REPowerEU plan.

- Through the **Biomethane Action Plan** the Commission proposes to increase the production of sustainable biomethane by establishing biogas and biomethane partnerships, providing incentives for biogas upgrading into biomethane, and encouraging the creation of energy communities[23]. While there are no actions to accelerate investments specific to biomethane (these are more generally those foreseen under RED III and the Recommendation on Permitting), what is important to highlight is the launch of the **Biomethane Industrial Partnership**[24]. The Partnership aims to support the achievement of the EU's targets by promoting active engagement between stakeholders (the Commission, EU Member States, industry representatives, academics, NGOs, and feedstock producers) to support countries in developing national strategies in biomethane production. *All companies active in biomethane and other stakeholders that wish to be involved can sign up for a Task Force membership.*

22 European Commission (n.d.) Approved integrated Important Projects of Common European Interest (IPCEI) https://competition-policy.ec.europa.eu/state-aid/ipcei/approved-ipceis_en

23 European Commission (2022) Commission Staff Working Document, implementing the REPowerEU Action Plan: Investment needs, hydrogen accelerator and achieving the bio-methane targets, SWD(2022) 230 final, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022SC0230&from=EN

24 Biomethane Industrial Partnership: https://bip-europe.eu, including information on work priorities and membership opportunities

Spotlight: The EU Solar Energy Strategy[25]

The EU has always been a forerunner in the development and use of solar energy technologies, which are key to the green transition and the EU's strategic independence. According to the European Commission, solar energy and in particular photovoltaics (PV), is currently the fastest growing renewable energy source in the EU. Solar energy installations in 2022 and 2023 saved the equivalent of 15 billion cubic metres of Russian gas imports in total. As part of the REPowerEU Plan, the Commission presented a Strategy to identify remaining challenges in the solar energy sector and define actions to accelerate the deployment of solar technologies[26]. The Strategy also sets out the goal for the EU to reach at least 320 GW of newly installed solar photovoltaic (PV) manufacturing capacity by 2025 and almost 600 GW by 2030. The Strategy places industry, SMEs and citizens at its centre and includes initiatives that can support the production of solar energy in the block.

Important initiatives in the Strategy are:

- **European Solar Rooftops Initiative**, which seeks to accelerate the use of rooftop PV to produce clean energy. To achieve this, the European Commission foresees to limit the length of permitting for rooftop solar installations to a maximum of 3 months and make the installation of rooftop solar energy mandatory for a number of buildings by 2029[27]. Obligations for new buildings to be solar-ready are also included in in the revised Energy Performance of Buildings Directive[28]. In 2023, 56 GW of solar PV were installed in the EU, two thirds of which on rooftops. This can protect consumers from high electricity prices and reduce land use.

- **EU Solar PV Industry Alliance**[29], which was launched by the Commission together with industrial actors and research institutes in December 2022 to ensure **investment opportunities** to increase the development of efficient and sustainable PV products. Significantly, the Alliance can also provide policy input to the EU on reducing the risk of supply disruptions to support domestic industries. Membership to the Alliance is open to any organisation with relevant activity in the EEA[30]. The Alliance currently works on more than 20 projects, including several at multi-GW scale.

In April 2024, member states and industry representatives signed the European Solar Charter[31], which sets out voluntary actions for member states to undertake to strengthen the EU's PV sector.

25 European Commission (2022) EU Solar Energy Strategy, COM(2022) 221 final https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2022%3A221%3AFIN&qid=1653034500503
26 European Commission (n.d.) Solar Energy https://energy.ec.europa.eu/topics/renewable-energy/solar-energy_en
27 According to the outline in the EU Solar Energy Strategy these are "all new public and commercial buildings with useful floor area larger than 250 m2 by 2026; all existing public and commercial buildings with useful floor area larger than 250 m2 by 2027; all new residential buildings by 2029."
28 European Commission (n.d.) Energy Performance of Buildings Directive (Info Page), https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficient-buildings/energy-performance-buildings-directive_en
29 European Solar PV Industry Alliance: https://solaralliance.eu
30 European Commission (n.d.) European Solar Photovoltaic Industry Alliance, https://single-market-economy.ec.europa.eu/industry/strategy/industrial-alliances/european-solar-photovoltaic-industry-alliance_en
31 European Commission (2024) European Solar Charter https://energy.ec.europa.eu/topics/renewable-energy/solar-energy/european-solar-charter_en

B. The EU Industrial Strategy and The Green Deal Industrial Plan for the Net-Zero Industrial Age

In the past five years, the EU has published a number of Strategies and Plans to strengthen its industry as a central element of the EU's economic growth and green transition. Many of these actions stem from the belief that increased reliance on renewable energy technologies - needed to advance the EU's green transition and increase its strategic energy independence - must not come at the expense of Europe's long-term **energy security** and **technology leadership**. The number of actions reviewed in this section rely on the belief that the EU must nurture.

> *"An industry that becomes greener and more digital while remaining competitive on the global stage. This will help transform and grow traditional and new industries, support SMEs and drive our competitive sustainability across the EU (p.2)*

Source: European Commission (2020) A New Industrial Strategy for Europe, COM(2020) 102 final

Two policies are crucial to understand how the EU can support green energy businesses as central actors in advancing the transition to renewable energies.

The European Industrial Strategy was originally published in March 2020. Following the COVID-19 pandemic the Commission published an update to the strategy, underlining that economic recovery should be used to pursue more ambitious action and increase investments in renewable energy sources and industrial transformation. The Strategy derives from the belief that **in order to reach a net-zero-carbon economy by 2050, sustained exponential growth of the renewable energy capacity is needed**. It introduces a number of interlocked measures aiming at strengthening the single market to boost competitiveness, *innovate the energy sector by investing in green technologies and unlocking the necessary investments*. All of this serves the dual goals of maintaining Europe's competitiveness and resilience, while transitioning to a greener and digital economy.

In 2022, in light of Russian invasion of Ukraine and increased discussions on reducing the EU's strategic dependencies the Commission published a new Plan, **the Green Deal Industrial Plan for the Net-Zero Industrial Age**, which aims to support the EU's manufacturing industry to scale up the production of net-zero technologies and products by creating a more supporting environment. This entails a more predictable and simplified regulatory environment, faster access to funding, supporting the enhancement of skills and

supporting open trade to ensure resilient supply chains, rooted in the belief that the EU can be **a leading player in the net-zero industries of the future**[32].Taken together the Strategy and the Industrial Plan set forth a number of actions to advance the twin goals of making the EU more competitive internationally and reinforcing its industrial and strategic autonomy, while supporting the EU's climate neutrality ambition by 2050.

Innovation and **investment** are key words. The Industrial Strategy recognises that green technologies, which are often still emerging, are complex and uncertain and that for Europe to be a leading power when it comes to the dual transition, it must lead by **innovation**. On the one hand, this entails **unlocking investment**, on the other hand it also underlines the importance of **learning and information sharing**, including industry-research-policy collaborations to increase the process of sharing costs and information and risk-taking[33]. The basis of a 'green' industrial policy that can really drive change must be continued and institutionalised dialogue between government (from the EU to national governments), the private sector and civil society that spans sectors, technologies and value chains.

This dual ambition is reflected in a number of concrete policy actions in the Strategy and the Industrial Plan. To 'make this change happen' they foresee:

- **a simplified regulatory environment:** the complex regulatory and permitting environment is underlined as a main challenge to the EU's ability to innovate and develop new key net-zero technologies. Simplifying the regulatory environment is one of the four pillars of the Industrial Plan, implemented through two key pieces of legislation: the Critical Raw Materials Act and the Net Zero Industry Act. The latter in particular supports the creation of a regulatory framework suited for developing, scaling up and deploying key technologies for the green transition.

32 European Commission (2023) A Green Deal Industrial Plan for the Net-Zero Age, COM(2023) 62 final https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023DC0062

33 Tagliapietra, S., Trasi, C. & Veugelers, R. (2023) Europe's green industrial policy in Tagliapietra, S., & Veugelers, R. (2023) Sparking Europe's New Industrial Revolution, Bruegel (p.168)

Spotlight: The Net-Zero Industry Act for a predictable, coherent and simplified regulatory environment[34]

The Net-Zero Industry Act (NZIA)[35] is the Commission's proposal aimed at boosting industrial manufacturing of key net-zero technologies in the EU while tackling barriers to scaling up production. It introduces a simplified regulatory framework to accelerate the development and deployment of technologies crucial for supporting the EU's green transition, achieving climate neutrality, and enhancing strategic independence and competitiveness. The Act sets a target for the EU's annual net-zero technology manufacturing to meet at least 40% of the annual deployment needs by 2030. Focusing on **commercially available technologies with high potential for rapid scale-up**, such as solar photovoltaic, solar thermal, onshore and offshore wind, and sustainable biogas and biomethane, the Act aims to stimulate investment in these strategic net-zero technologies. The Regulation was adopted on 27 May 2024[36].

The NZIA creates more favourable conditions for investment in key green technologies by:

- **streamlining administrative requirements and facilitating permitting:** The proposed regulation aims to simplify administrative procedures and speed up permitting for renewable energy projects. It sets specific timelines for the permit-granting process, with a maximum period of 12 months for projects producing less than 1 GW annually and 18 months for those producing over 1 GW. This shorter timeframe applies to net-zero strategic projects[37]. Additionally, the regulation suggests granting priority status to such projects and ensuring they receive expedited treatment in the permit-granting process. Each member state is required to designate a national competent authority responsible for facilitating and coordinating permits for net-zero technology manufacturing projects.

- **ensuring access to information:** under the regulation, each member state must make available online the permit-granting process, financing and investment services, funding possibilities at Union or Member State level and business support services

- facilitating **access to markets in public procurement procedures and auctions, as the regulation foresees that the sustainability and resilience contribution shall be given a weight between 15% and 30% of the award criteria in auctions**

- schemes supporting **private demand by consumers** are also foreseen, including the provision of additional compensation for purchasers to promote the purchase of net- zero technology final products with a high sustainability and resilience contribution

- supporting innovation through regulatory **sandboxes**, to development and testing net-zero technologies, in a controlled real-world environment for a limited time before they are placed on the market. The draft regulation foresees priority access to regulatory sandboxes for SMEs, who should be informed about the possibility to participate through awareness raising activities and dedicate channels for communication and guidance.

34 European Commission (n.d.) Net-Zero Industry Act (Info Page with an overview of the Act) https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/green-deal-industrial-plan/net-zero-industry-act_en

35 European Commission (2023) Net-Zero Industry Act, COM(2023) 161 https://single-market-economy.ec.europa.eu/publications/net-zero-industry-act_en

36 European Commission (2024, May 27) Net-Zero Industry Act makes the EU the home of clean tech manufacturing and green jobs, https://ec.europa.eu/commission/presscorner/detail/en/ip_24_2309

37 As per Art.10 of the draft regulation, net-zero strategic projects are to be understood as 1) projects that contribute to the EU's technological and industrial resilience by increasing the manufacturing capacity of a component or part in the net-zero technology value chain for which there is a high dependency on imports from a single third country; 2) projects that have a positive impact on the EU's net-zero industry supply chain or downstream sectors, contributing to competitiveness and quality job creation.

Skills are also crucial under the NZIA, in particular with the creation of **Net-Zero Industry Academies, developed by member states' education providers to train and upskill workers needed for key net-zero technology value chains such as photovoltaic and solar thermal technologies. The EU sets an ambitious target of training 100,000** individuals over a three-year period within each of the Academies.

- increased **financing**[38] through the **InvestEU Fund, the Recovery and Resilience Facility** for **REPowerEU**, and the Innovation Fund which will help unlock private investment where it is needed. The Green Deal Investment Plan is the overarching framework for investment. The Plan will mobilise at least €1 trillion to support sustainable investments over the next decade through the EU budget and associated instruments, in particular InvestEU[39].

Table 1. Funding opportunities for net-zero and green energy innovative projects

InvestEU Fund[40]	**The InvestEU Fund**[41] supports public and private investments for net-zero tech and innovation across the EU through the European Investment Bank, the European Industrial Fund, the European Bank for Reconstruction and Development and 14 other implementing partners. This includes funding for research and development activities aimed at improving the efficiency, reliability, and cost-effectiveness of renewable energy technologies. The Fund is part of and complementary to the Green Deal Investment Plan **provides access to finance**, including for project development, construction and operation; **supports through technical assistance; and involves a risk-sharing mechanism** to encourage private sector participation and attract additional funding. At least 30% of the InvestEU Programme will support financing for investments for the green transition. The InvestEU Fund provides support to final recipients that are 'deemed economically viable according to internationally accepted standards'. Project promoters should apply directly to implementing partners for financing possibilities. SMEs and social or micro-enterprises should apply to local commercial or public banks whose financial products are covered by the EU guarantee in their country or region[42]. In July 2023, the European Investment Bank approved its second REPowerEU package and announced its ambition to double its lending contributing to the Green Deal Industrial Plan and the NZIA, to mobilise around EUR 150 billion cumulatively in 5 years. This plan will be partially underpinned by the InvestEU guarantee mechanism[43].

38 more on access to finance is available at this link: https://single-market-economy.ec.europa.eu/access-finance_en
39 European Commission (2020) The European Green Deal Investment Plan and Just Transition Mechanism explained, https://ec.europa.eu/commission/presscorner/detail/en/qanda_20_24
40 European Commission (n.d.) InvestEU: Financing Europe's future https://investeu.europa.eu/index_en
41 The InvesEU Fund is aimed inter alia at "energy, in particular renewable energy, energy efficiency and building renovation projects focused on energy savings and the integration of buildings into a connected energy source, storage, digital and transport system, improving energy infrastructure interconnection levels"
42 Read more on how to access financing at the link: https://investeu.europa.eu/investeu-programme/investeu-fund/how-get-financing_en & https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/finance-and-green-deal_en
43 European Investment Bank (n.d.) REPowerEU and the EIB https://www.eib.org/en/projects/topics/energy-natural-resources/energy/repowereu

Innovation Fund[44]	The Innovation Fund is the EU **fund for climate policy**, focusing on highly innovative technologies and flagship projects for decarbonisation. It supports risk-sharing with project promoters and spotlights innovative projects, aiming for a varied pipeline across eligible countries and sectors. It covers all EU countries, Norway, Liechtenstein and Iceland. The projects need to be sufficiently mature in terms of planning, business model and financial and legal structure. Innovative renewable energy generation technologies are included amongst the technologies that can benefit for funding under the Innovation Fund. The fund awards grants through calls for proposals and through competitive bidding procedures (auctions). There will be regular calls for project proposals until 2030 and applications can be made through a submission of proposals when there is an open call for projects on the EU Funding & Tenders Portal.[45] The Innovation Fund supports up to 60% (in case of regular grants) and up to 100% (in case of competitive bidding) of the relevant costs.
Recovery and Resilience Facility[46]	At the end of 2022, the EU agreed to additional funding to the Recovery and Resilience Facility (RRF) to implement the REPowerEU initiative: Additional 20 billion EU in grants were allocated to Member States through the Innovation Fund to support the green transition and EU net-zero industry projects.
Strategic Technologies for Europe Platform[47]	The Strategic Technologies for Europe Platform (STEP) was established by the EU to support European industry and boost investment in critical technologies. It will direct funding from 11 EU programs (including InvestEU, the Innovation Fund and the Recovery and Resilience Fund) to three key areas, including clean and resource-efficient technologies. It supports skill development projects essential to advance these technologies. The focus of STEP is on projects in **the development and manufacturing stages** which either bring an innovative, cutting-edge element with significant economic potential to the Single Market or help reduce or prevent strategic dependencies for the EU.[48] A number of green energy technologies, including solar technologies, onshore wind and offshore renewable energy technologies are covered by the Platform[49]. It is possible to apply for funding by identifying a relevant call for proposal.

44 European Commission (n.d.) What is the Innovation Fund? (Info Page) https://climate.ec.europa.eu/eu-action/eu-funding-climate-action/innovation-fund/what-innovation-fund_en

45 EU Funding & Tenders Portal: with opportunities under the Innovation Fund https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/programmes/innovfund

46 European Commission (n.d.) REPowerEU: Affordable, Secure and Sustainable energy for Europe (Info Page) https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/repowereu-affordable-secure-and-sustainable-energy-europe_en

47 European Commission (n.d.) Strategic Technologies for Europe Platform (Info Page): https://strategic-technologies.europa.eu/index_en

48

49 For more information consult: https://strategic-technologies.europa.eu/about/targeted-investment-areas_en?prefLang=it

- support to innovation research to help the industry develop technologies, in particular the European Partnerships under the Horizon Europe Programme. The aim of these partnership with EU and associated countries, the private sectors and other stakeholders is to boost investments in research and innovation and overcome climate and sustainability challenges. Work programmes for research are developed based on proposals by stakeholders, reviewed by the Commission, and are implemented over the period 2021-2030.In 2021 the Commission adopted a decision on the approval and signature of memoranda of understanding for 11 co-programmes partnerships related to the Green Deal goals[50]. Climate, energy and mobility is one of the clusters for research under both the Horizon Europe's Strategic Plan 2021-2024 [51] and the 2025-2027 Strategic Plan[52].

- increase dialogue and coordination amongst stakeholders in green energy: The Industrial Plan promotes dialogue among all actors through platforms such as the Clean Energy Industrial Forum[53], which identify new actions and initiatives for key sectors and develop recommendations on how to make EU clean energy industries more competitive. Additionally, an SME Strategy for a Sustainable and Digital Europe[54] aims to enhance dialogue between SMEs and established industrial firms, fostering novel work forms. The Net-Zero Industrial Act establishes a Net-Zero Europe Platform[55] for the Commission and EU countries to discuss and exchange information, gather stakeholder input, and advise on financing for net-zero strategic projects.

- actions targeted at a specific energy sector such as the EU Strategy on Offshore Renewable Energy[56] (2020) which proposes concrete ways to support the long-term sustainable development of the offshore wind and ocean energy sector. The concrete actions are elaborated in an European Wind Power Action Plan[57] (2023) and a Commission Communication on Delivering on the EU offshore energy ambitions[58] (2023). It also sets concrete targets for installed capacity (60 GW of offshore wind by 2030, increasing to 300 GW by 2050 and 40 GW of ocean energy across all the Union's sea basins by 2050)

50 European Commission (2021, June 14) Commission and industry invest €22 billion in new European Partnerships to deliver solutions to major societal challenges, https://ec.europa.eu/commission/presscorner/detail/en/IP_21_2943 .
Also, see a full list of the existing partnerships under climate, energy and mobility here: https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/european-partnerships-horizon-europe/climate-energy-and-mobility_en
51 European Commission (2021) Horizon Europe strategic plan 2021-2024 https://data.europa.eu/doi/10.2777/083753
52 European Commission (2024) Horizon Europe strategic plan 2025-2027, https://data.europa.eu/doi/10.2777/092911
53 European Commission (n.d.) Clean Energy Industrial Forum (Info Page): https://energy.ec.europa.eu/topics/renewable-energy/clean-energy-industrial-forum_en
54 You can find more information on this page: https://single-market-economy.ec.europa.eu/smes/sme-strategy_en
Additionally, the full Strategy is available at the following link: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0103
55 European Commission (n.d.) Net-Zero Industry Act (Info Page with an overview of the Act)https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/green-deal-industrial-plan/net-zero-industry-act_en
56 European Commission (2020) An EU Strategy to Harness the Potential of Offshore Renewable Energy for a Climate Neutral Future, COM(2020) 174 final https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2020:741:FIN&qid=1605792629666
57 European Commission (2023) European Wind Power Action Plan, COM(2023) 669 final https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023DC0669&qid=1702455143415
58 European Commission (2023) Delivering on the EU Offshore Renewable Energy Ambitions, COM(2023) 668 final https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023DC0668&qid=1702455230867

Spotlight: The European Wind Energy Action Plan

Wind energy is a central pillar in the European electricity system, providing 16% of the energy consumed by Europeans in 2022[59]. Nonetheless, according to EU reports, it is still underutilised due to slow and complex permitting, the designs of national tenders (which privilege price criteria) and pressure from international competitors such as China. The Action Plan supports green energy businesses producing wind energy by addressing these issues under six key pillars. In particular,

- **accelerating the deployment through increased predictability and faster permitting:** The Commission will launch a dedicated online tool to support Member States in the permitting process. Additionally, they will create a *dedicated forum* on permitting to regularly exchange best practices and identify remaining obstacles.

- **improving auction design to support renewables deployment and investments:** The Action Plan foresees the launch of a dialogue with member states and stakeholders to improve, simplify and provide consistency in the design of renewable auctions that ideally should lead to legally binding provisions in the Net-Zero Industry Act.

- **facilitating access to finance:** financial support for manufacturing in wind energy technologies is available under a number of funds such as the Innovation Fund. In 2023, wind energy production and pilot products were eligible and at equal merit were given priority. Investment for technologies at the development stage is also available under the Strategic Technologies for Europe Platform (see also: Table 1. Funding opportunities for net-zero and green energy innovative projects).

The vast majority of EU countries and leading industry representatives signed a European Wind Charter[60], with a voluntary commitment to support the development of Europe's wind sector and concrete pledges on wind energy deployment volumes.

Finally, Regulation (EU) 2022/869 calls for Member States to conclude non-binding agreements to cooperate on goals of offshore renewable energy generation for sea basins, in order to introduce a coordinate comprehensive approach and enhance the offshore renewable potential of each sea basin[61]

59 European Commission (2023) European Wind Power Action Plan, COM(2023) 669 final https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023DC0669&qid=1702455143415

60 European Commission (2023) European Wind Charter, https://energy.ec.europa.eu/news/new-wind-charter-and-national-wind-pledges-underline-ambition-wind-power-europe-2023-12-19_en

61 Regulation (EU) 2022/869 of the European Parliament and of the Council of 30 May 2022 on guidelines for trans-European energy infrastructure, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2022.152.01.0045.01.ENG&toc=OJ%3AL%3A2022%3A152%3ATOC

3. Conclusion

As this report has highlighted, in the past years the EU has set forth an ambitious plan to support the twin green and digital transitions. Streamlining and simplifying permitting, supporting the financing of green energy technologies, upskilling workers and supporting innovation through the sharing of expertise (forums for dialogue and joint research) are amongst the main objectives of the different policies, action plans and frameworks presented. But where does this place the EU globally?

The number of policies put forward by the EU must be understood against a shifting geopolitical context. In 2022, the United States announced its Inflation Reduction Act (IRA), which provides 430 billion dollars in incentives for green industries and manufacturing that operate in the US, aiming to shift private investment towards clean energy, transportation and industry via tax subsidies. In part as a response, in 2023 the EU adopted the Green Deal Industrial Plan, and the linked Net-Zero Industry Act. Additionally, the proposed Critical Raw Materials Act can be seen as a reaction to China's continued dominance in the green energy sector. China's increased cooperation with the Gulf Cooperation Council including on clean energy, could raise further questions about the EU's geopolitical place in the green energy transition and its ability to attract green energy businesses[62].

62 https://www.weforum.org/agenda/2024/04/3-key-sectors-poised-for-explosive-growth-as-china-gcc-cooperation-deepens/

To some observers, the EU's efforts seem reactionary against the current geopolitical background, and fears were also raised that certain policies such as the Net-Zero Industry Act could actually limit competitiveness and investments[63]. Nonetheless, studies show the value of current European policies. For instance, compared to the IRA, EU subsidies in renewable energy production remain larger[64]. Qualitatively, the main difference between the two is that while IRA subsidies focus on the mass deployment of green technologies, while EU support privileges innovation and new technologies. Very valuable is the fact that throughout the EU's proposals there is a continued focus on skills development and job development in the sector of net-zero technologies, making the green transition also a socially fair one.

Certainly, many studies conclude that despite improvement, the complexity and fragmentation of subsidies, as well as the lengthy application procedures needed to access support programmes remain a significant challenge in the EU, especially for small and medium-sizes enterprises to receive funding. The relative novelty of many of the policies introduced, as well as their non-binding nature (most are Action Plans which require extensive policymaking at European level or recommend member states action) raises still questions about their effectiveness to support the ambitious plans for green energy production within EU borders. Nonetheless, the current framework in the EU can be seen as a step in the right direction to support the potential of the EU's green energy transition, boosting the EU's strategic energetic independence and capitalising on its rich history of innovation in green energy technologies.

63 See for instance the reaction to the first proposal of the NZIA published by Bruegel on 09 March 2023: https://www.bruegel.org/first-glance/eu-net-zero-industry-act-and-risk-reviving-past-failures

64 Scheinert, C. (June 2023) EU's response to the US Inflation Reduction Act (IRA), EP Think Tank, https://www.europarl.europa.eu/RegData/etudes/IDAN/2023/740087/IPOL_IDA(2023)740087_EN.pdf

4. How B&K Agency Can Help

B&K Agency is at the forefront of the industrial sector's green transformation, providing strategic guidance and comprehensive services to facilitate the shift towards renewable energy sources.

Our expertise could assist you in ensuring a smooth transition towards green initiatives.

We focus on helping our clients develop strategic frameworks that align with EU policies, such as the Fit for 55 Package, the Renewable Energy Directive, and the Net-Zero Industry Act. These plans are vital for facilitating a seamless shift away from fossil fuels and towards achieving robust climate targets.

We also offer strategic advisory services to help clients understand and mitigate the impact of the EU's Green Deal. We provide solutions that protect business interests while considering environmental objectives, We can help understand and reduce the impact of the EU's Green Deal with our strategic advisory services. Our solutions could help protect business interests and consider environmental goals, helping companies influence policy developments effectively.

Our partnership enables energy providers to enhance competitiveness, comply with evolving regulations, and achieve sustainable growth.

By partnering with B&K Agency, businesses can confidently face the complexities of the green transition, ensuring compliance, competitiveness, and growth in the evolving energy landscape.

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Annex 1. Outline of main policies discussed and effects for green energy companies

		Energy sector targeted/ interested	*General description of action*	*Focus*	*Nature of the policy, including main actors involved*
Fit for 55	**Revised Renewable Energy Directive (RED III)**	renewable energy, especially renewable electricity	-specific provisions for granting administrative permits for renewable energy plants, -including targets in National Energy and Climate Plans	-simplifying and fast-tracking permit-granting procedures	legally binding for member states, including a target to increase the share of renewable energy to 42.5% of the EU's overall energy consumption by 2030 (mostly directed to member states)
	Emergency Regulation on Permitting	renewable energy	-renewable energy plant planning, construction as overriding public interest projects -maximum permit-granting period of three months	simplifying and shortening permit-granting procedures	legally binding for member states until 2025 until the entry into force of the Regulation on the Promotion of Renewable Energies within the EU (mostly directed to member states)
REPowerEU	**REPowerEU**	renewable energy, with a focus on solar energy, biomethane and offshore renewable energy (including wind energy)	-accelerating permitting through a Recommendation on permitting -fostering national reforms and investments, including through Recovery and Resilience Plans -financing though Important Projects of Common European Interest (IPCEI), InvestEU and the Innovation Fund	accelerating permit-granting procedures -increasing investment and financing in green energy technologies	not legally binding, overall framework which includes proposals for further legally binding policies (recommendations for EU institutions and policymakers, member states but important role for other stakeholders such as industry including green energy businesses)

	EU Solar Strategy	solar energy, in particular photovoltaics (PV) technologies	- goal of 320 GW of newly installed PV manufacturing capacity by 2025 and almost 600 GW by 2030 -shortening permit-granting procedures for PV, through the European Solar Rooftop Initiative and the revised Performance of Buildings Directive -creation of investment opportunities and policy input through EU Solar PV Industry Alliance -European Solar Charter	shortening permit-granting procedures -increasing investment in solar PV technologies	not legally binding, includes further action (recommendations for EU institutions and policymakers, member states but important role for other stakeholders such as industry including green energy businesses)
	Biomethane Action Plan	biomethane	-creation of biogas and biomethane partnerships -launch of Biomethane Industrial Partnership for national biomethane production strategies	increased production of sustainable biomethane	not legally binding, includes further action for member states and private industry cooperation (recommendations for EU institutions and policymakers, member states but important role for other stakeholders such as industry including green energy businesses)

European Industrial Strategy		renewable energy with a focus on solar energy, biomethane and offshore renewable energy (including wind energy)	-simplifying the regulatory environment -increase financing for net-zero and green energy technologies -support innovation research to help develop technologies, including through European Partnerships -increase coordination and dialogue amongst stakeholders through Clean Energy Industrial Forum	-increasing investment and financing in green energy technologies -research and dialogue for innovation	not legally binding, includes a number of further action-plans to guide action by member states (recommendations for EU institutions and policymakers, member states but important role for other stakeholders such as industry including green energy businesses)
	European Wind Energy Action Plan	wind energy	-accelerating the deployment of wind energy technologies through increased predictability and faster permitting -improving auction design to support renewables deployment and investments -facilitating access to finance through the Innovation Fund and the Strategic Technologies for Europe Platform -European Wind Charter	simplifying and fast-tracking permit-granting procedures for wind energy technologies -increasing investment and facilitating access to financing for wind energy	not legally binding, framework for further action for member states but refers to other legally binding Directives (recommendations for EU institutions and policymakers, member states but important role for other stakeholders such as industry including green energy businesses)

Green Deal Industrial Plan for the Net-Zero Age		renewable energy	- simplifying the regulatory environment -increase financing for net-zero and green energy technologies -support innovation research to help develop technologies -increase coordination and dialogue amongst stakeholders	-increasing investment and financing in green energy technologies -research and dialogue for innovation -upskilling and re-skilling of workers	not legally binding, framework for future action but includes reference to further legally binding policies (see below Net-Zero Industry Act) (recommendations for EU institutions and policymakers, member states but important role for other stakeholders such as industry including green energy businesses)
	Net Zero Industry Act	renewable energy with a focus on net-zero technologies	-streamlining administrative requirements and facilitating permitting -ensuring access to information on permit-granting process -facilitate access to markets in public procurement procedures and auctions -develop schemes supporting private demands of net-zero technologies -supporting innovation through regulatory sandboxes -creation of Net-Zero Industry Academies	-simplify regulatory framework suited for developing, scaling up and deploying key technologies for the green transition -upskilling and re-skilling of workers	legally binding for member states, including (mostly directed to member states)

Annex 2. References and Additional Resources

General Resources and EU Policy Documents:

Below you can find a complete list with references on the policies covered by the report, including resources for further information. The resources are organised per topic, following the structure of the report: Under each heading, official EU documents are highlighted in bold, and a number of resources - including web pages and reports - are mentioned. You can also find links to websites of existing partnerships and alliances (such as the Solar Photovoltaic Alliance or the Biomethane Industrial Partnership) and to portals with funding opportunities.

A list with further resources (info pages) on the initiatives, policies and action plans covered by the report. The official EU policy documents are included for reference and highlighted in bold.

• Green Deal:

- European Commission (n.d.) The European Green Deal: Striving to be the first climate-neutral continent https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en
- European Commission (n.d.) Industry and the Green Deal, https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/industry-and-green-deal_en
- European Commission (n.d.) Energy and the Green Deal, https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/energy-and-green-deal_en
- European Commission (n.d.) Delivering the European Green Deal (Info Page with overview of policies) https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/delivering-european-green-deal_en
- European Commission (n.d.) InvestEU: Contribution to the Green Deal and the Just Transition Scheme (Info Page) https://investeu.europa.eu/contribution-green-deal-and-just-transition-scheme_en

• Fit for 55:

- Council of the EU (n.d.) Fit for 55 (Info Page) https://www.consilium.europa.eu/en/policies/green-deal/fit-for-55/
- Council of the EU (2022, June 27) Fit for 55: Council agrees on higher targets for renewables and energy efficiency, https://www.consilium.europa.eu/en/press/press-releases/2022/06/27/fit-for-55-council-agrees-on-higher-targets-for-renewables-and-energy-efficiency/

Renewable Energy Directive:

- **Directive (EU) 2023/2413 of the European Parliament and of the Council of 18 October 2023 amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652** https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32023L2413&qid=1699364355105
- 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.) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2018.328.01.0082.01.ENG&toc=OJ:L:2018:328:TOC
- European Commission (n.d.) Renewable Energy Directive (Info Page) https://energy.ec.europa.eu/topics/renewable-energy/renewable-energy-directive-targets-and-rules/renewable-energy-directive_en
- Council of the EU (2023, October 7) Renewable Energy: Council adopts new rules, https://www.consilium.europa.eu/en/press/press-releases/2023/10/09/renewable-energy-council-adopts-new-rules/
- European Commission (n.d.) National Energy and Climate Plans: EU countries' 10-year national energy and climate plans for 2021-2030 https://commission.europa.eu/energy-climate-change-environment/implementation-eu-countries/energy-and-climate-governance-and-reporting/national-energy-and-climate-plans_en
- Emergency Regulation on Permitting:
- European Commission (2023, November 28) Commission prolongs energy emergency measures by 12 months https://energy.ec.europa.eu/news/commission-prolongs-energy-emergency-measures-12-months-2023-11-28_en#:~:text=The%20emergency%20measures%20on%20permitting,energy%20into%20the%20electricity%20system.

REPowerEU:

- **European Commission (2022) REPowerEU Plan, COM(2022) 230 final** https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2022%3A230%3AFIN&qid=1653033742483
- **European Commission (2022) REPowerEU: Joint European Action for more affordable, secure and sustainable energy, COM(2022) 108 final** https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2022%3A108%3AFIN
- **European Commission (2022) Commission Recommendation of 18.05.2022 on speeding up permit-granting procedures for renewable energy projects and facilitating Power Purchase Agreements, C(2022) 3219 final** https://energy.ec.europa.eu/document/download/98a9b587-4491-480c-be75-af72f1a6cad6_en?filename=C_2022_3219_1_EN_ACT_part1_v6.pdf
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- European Commission (2022) Commission Staff Working Document, implementing the REPowerEU Action Plan: Investment needs, hydrogen accelerator and achieving the bio-methane targets, SWD(2022) 230 final, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52022SC0230&from=E
- European Commission (n.d.) REPowerEU: Affordable, Secure and Sustainable energy for Europe (Info Page) https://single-market-economy.ec.europa.eu/publications/net-zero-industry-act_en
- European Investment Bank (n.d.) REPowerEU and the EIB https://www.eib.org/en/projects/topics/energy-natural-resources/energy/repowereu
- European Commission (n.d.) InvestEU and REPowerEU (Info Page) https://investeu.europa.eu/investeu-and-repowereu_en
- **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** https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2018.328.01.0001.01.ENG&toc=OJ:L:2018:328:TOC
- European Commission (n.d.) Approved integrated Important Projects of Common European Interest (IPCEI) https://competition-policy.ec.europa.eu/state-aid/ipcei/approved-ipceis_en
- **Biomethane Industrial Partnership:** https://bip-europe.eu

Solar Energy Strategy:

- **European Commission (2022) EU Solar Energy Strategy, COM(2022) 221 final** https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2022%3A221%3AFIN&qid=1653034500503
- European Commission (n.d.) Solar Energy https://energy.ec.europa.eu/topics/renewable-energy/solar-energy_en
- European Commission (n.d.) Energy Performance of Buildings Directive (Info Page), https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficient-buildings/energy-performance-buildings-directive_en
- European Commission (n.d.) European Solar Photovoltaic Industry Alliance, https://single-market-economy.ec.europa.eu/industry/strategy/industrial-alliances/european-solar-photovoltaic-industry-alliance_en
- European Commission (2024) European Solar Charter https://energy.ec.europa.eu/topics/renewable-energy/solar-energy/european-solar-charter_en
- **European Solar PV Industry Alliance:** https://solaralliance.eu

• European Industrial Strategy and Green Deal Industrial Plan:

- European Commission (2020) A New Industrial Strategy for Europe, COM(2020) 102 final https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0102
- European Commission (2021) Updating the 2020 New Industrial Strategy: Building a stronger Single Market for Europe's recovery, COM(2021)350 final https://commission.europa.eu/document/download/9ab0244c-6ca3-4b11-bef9-422c7eb34f39_en?filename=communication-industrial-strategy-update-2020_en.pdf
- European Commission (n.d.) European Industrial Strategy (Info Page) https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-industrial-strategy_en
- Council of the EU (November 16, 2020) A recovery advancing the transition towards a more dynamic, resilient and competitive European industry, Council conclusions https://www.consilium.europa.eu/en/press/press-releases/2020/11/16/towards-a-more-dynamic-resilient-and-competitive-european-industry-council-adopts-conclusions/
- European Commission (2023) A Green Deal Industrial Plan for the Net-Zero Age, COM(2023) 62 final https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023DC0062
- European Commission (n.d.) The Green Deal Industrial Plan: Putting Europe's net-zero industry in the lead (Info Page) https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/green-deal-industrial-plan_en
- European Commission (2020) The European Green Deal Investment Plan and Just Transition Mechanism explained, https://ec.europa.eu/commission/presscorner/detail/en/qanda_20_24
- European Commission (n.d.) InvestEU and European Green Deal Industrial Plan (Info Page) https://investeu.europa.eu/investeu-and-european-green-deal-industrial-plan_en

European Partnerships in climate, energy and mobility:

- European Commission (n.d.) European Partnerships in climate, energy and mobility, https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/european-partnerships-horizon-europe/climate-energy-and-mobility_en
- European Commission (2021, June 14) Commission and industry invest €22 billion in new European Partnerships to deliver solutions to major societal challenges, https://ec.europa.eu/commission/presscorner/detail/en/IP_21_2943
- European Commission (2021) Horizon Europe strategic plan 2021-2024 https://data.europa.eu/doi/10.2777/083753
- European Commission (2024) Horizon Europe strategic plan 2025-2027, https://data.europa.eu/doi/10.2777/092911

SME Strategy:

- **European Commission (2020) An SME Strategy for a sustainable and digital**

Europe COM(2020) 103 final https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0103
- European Commission (n.d.) SME Strategy (Info Page with an overview of all the initiatives): https://single-market-economy.ec.europa.eu/smes/sme-strategy_en

Clean Energy Industrial Forum:

- European Commission (n.d.) Clean Energy Industrial Forum (Info Page): https://energy.ec.europa.eu/topics/renewable-energy/clean-energy-industrial-forum_en

Net-Zero Industry Act:

- **European Commission (2023) Net-Zero Industry Act, COM(2023) 161** https://single-market-economy.ec.europa.eu/publications/net-zero-industry-act_en
- European Commission (2024, May 27) Net-Zero Industry Act makes the EU the home of clean tech manufacturing and green jobs, https://ec.europa.eu/commission/presscorner/detail/en/ip_24_2309
- European Commission (n.d.) Net-Zero Industry Act (Info Page with an overview of the Act) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023DC0062

Offshore Renewable Energy Strategy:

- **European Commission (2020) An EU Strategy to Harness the Potential of Offshore Renewable Energy for a Climate Neutral Future, COM(2020) 174 final** https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2020:741:FIN&qid=1605792629666
- **European Commission (2023) European Wind Power Action Plan, COM(2023) 669 final** https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023DC0669&qid=1702455143415
- **European Commission (2023) Delivering on the EU Offshore Renewable Energy Ambitions, COM(2023) 668 final** https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023DC0668&qid=1702455230867
- Regulation (EU) 2022/869 of the European Parliament and of the Council of 30 May 2022 on guidelines for trans-European energy infrastructure, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2022.152.01.0045.01.ENG&toc=OJ%3AL%3A2022%3A152%3ATOC
- European Commission (n.d.) Offshore Renewable Energy (Info Page with an overview of actions) https://energy.ec.europa.eu/topics/renewable-energy/offshore-renewable-energy_en
- European Commission (2023) European Wind Charter, https://energy.ec.europa.eu/news/new-wind-charter-and-national-wind-pledges-underline-ambition-wind-power-europe-2023-12-19_en

• Funding for net-zero and green energy technologies:

- European Commission (n.d.) InvestEU: Financing Europe's future (Info Page) https://investeu.europa.eu/index_en
- European Commission (n.d.) What is the Innovation Fund? (Info Page) https://climate.ec.europa.eu/eu-action/eu-funding-climate-action/innovation-fund/what-innovation-fund_en
- European Commission (n.d.) Innovation Fund: Developing innovative net-zero technologies for climate neutrality (Info Page) https://climate.ec.europa.eu/eu-action/eu-funding-climate-action/innovation-fund_en
- Council of the EU (2024, February 7) Strategic Technologies for Europe Platform: Provisional agreement to boost investments in critical technologies, https://www.consilium.europa.eu/en/press/press-releases/2024/02/07/strategic-technologies-for-europe-platform-provisional-agreement-to-boost-investments-in-critical-technologies/
- European Commission (n.d.) Strategic Technologies for Europe Platform (Info Page): https://strategic-technologies.europa.eu/index_en
- European Commission (n.d.) Strategic Technologies for Europe Platform, Targeted investment areas: https://strategic-technologies.europa.eu/about/targeted-investment-areas_en?prefLang=it
- European Commission (n.d.) Trans-European Networks for Energy (Info Page) https://energy.ec.europa.eu/topics/infrastructure/trans-european-networks-energy_en

Further Analysis:

- Tagliapietra, S., & Veugelers, R. (2023) *Sparking Europe's New Industrial Revolution*, Bruegel
- Poitiers, N. et al. (2023) The EU Net Zero Industry Act and the Risk of Reviving Past Failures, Bruegel
- https://www.bruegel.org/first-glance/eu-net-zero-industry-act-and-risk-reviving-past-failures
- Scheinert, C. (June 2023) EU's response to the US Inflation Reduction Act (IRA), EP Think Tank
- https://www.europarl.europa.eu/RegData/etudes/IDAN/2023/740087/IPOL_IDA(2023)740087_EN.pdf

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