REPORT

on a European strategy for offshore renewable energy
(2021/2012(INI))

Committee on Industry, Research and Energy

Rapporteur: Morten Petersen
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MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION

on a European strategy for offshore renewable energy
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The European Parliament,

– having regard to the Treaty on the Functioning of the European Union, and in particular to Article 194 thereof,


– having regard to its resolution of 6 February 2018 on accelerating clean energy innovation7,

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having regard to its resolution of 14 March 2019 entitled ‘Climate change – a European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy in accordance with the Paris Agreement’,

having regard to its resolution of 15 January 2020 on the European Green Deal,

having regard to its resolution of 10 July 2020 on a comprehensive European approach to energy storage,

having regard to its resolution of 25 November 2020 on a New Industrial Strategy for Europe,

having regard to its resolution of 19 May 2021 on a European Strategy for Hydrogen,

having regard to its resolution of 19 May 2021 on a European strategy for energy system integration,

having regard to its resolution of 7 July 2021 on the impact on the fishing sector of offshore windfarms and other renewable energy systems,

having regard to the Commission communication of 11 December 2019 on the European Green Deal (COM(2019)0640),

having regard to the Commission communication of 10 March 2020 entitled ‘A New Industrial Strategy for Europe’ (COM(2020)0102),

having regard to the Commission communication of 20 May 2020 entitled ‘EU Biodiversity Strategy for 2030: Bringing Nature back into our lives’ (COM(2020)0380) and its related resolution of 9 June 2021 of the same title,

having regard to the Commission communication of 8 July 2020 entitled ‘A hydrogen strategy for a climate-neutral Europe’ (COM(2020)0301),

having regard to the Commission communication of 8 July 2020 entitled ‘Powering a climate-neutral economy: An EU Strategy for Energy System Integration’ (COM(2020)0299),

having regard to the Commission communication of 17 September 2020 entitled ‘Stepping up Europe’s 2030 climate ambition – Investing in a climate-neutral future for the benefit of our people’ (COM(2020)0562),

having regard to the Commission report of 14 October 2020 entitled ‘2020 report on the State of the Energy Union pursuant to Regulation (EU) 2018/1999 on Governance of

the Energy Union and Climate Action’ (COM(2020)0950),

– having regard to the Commission communication of 19 November 2020 entitled ‘An EU Strategy to harness the potential of offshore renewable energy for a climate neutral future’ (COM(2020)0741),


– having regard to the agreement adopted at the 21st Conference of the Parties to the UN Framework Convention on Climate Change (COP21) in Paris on 12 December 2015 (the Paris Agreement),

– having regard to Rule 54 of its Rules of Procedure,

– having regard to the opinions of the Committee on Transport and Tourism and the Committee on Fisheries,

– having regard to the report of the Committee on Industry, Research and Energy (A9-0339/2021),

A. whereas the EU has ratified the Paris Agreement, as well as the European Green Deal and the recently adopted European Climate Law, which set an EU target of reducing greenhouse gas (GHG) emissions by at least 55 % by 2030 and achieving the climate neutrality target by 2050 at the latest, as well as complementary goals, in order to fight the effects of global climate change;

B. whereas the transition to a net-zero GHG, highly energy-efficient and highly renewables-based economy requires a rapid and clean energy transition that ensures sustainability, security of supply and affordability of energy, as well as the necessary energy infrastructure;

C. whereas the significant decrease in renewable offshore electricity prices has made it one of the most competitively priced sources of energy, with the global weighted average levelised cost of energy for offshore wind declining by 48 % between 2010 and 2020, from EUR 0.14 to EUR 0.071 kWh, and consequently a critical element in the green transition, paving the way for a modern, resource-efficient and competitive economy, and has become one of the most important pillars of the EU’s climate ambitions; whereas offshore renewable energy (ORE) has the ability to utilise massive energy sources to protect households from energy poverty;

D. whereas the EU strategy on offshore renewable energy should take into account the different geographical features of the EU’s sea basins, which make it challenging to develop a one-size-fits-all approach;
E. whereas the EU ORE production sector is a technological leader with significant potential to boost the EU economy by supporting the growth of clean energy production in Europe and around the world;

F. whereas the total amount available for EU research and development (R&D) programmes for offshore wind over the past 10 years was EUR 496 million; whereas public R&D investments in the wind energy value chain have already played a crucial role in allowing the sector to develop; whereas the investment needed to pursue the large-scale deployment of ORE by 2050 is estimated to be almost EUR 800 billion, around two thirds to fund the associated grid infrastructure and around a third for offshore power generation; whereas the NextGenerationEU recovery plan provides a unique opportunity to mobilise significant amounts of public capital in addition to private investment;

G. whereas the skills and qualifications of the workforce are key to the success of the offshore renewable energy strategy;

H. whereas EU ports play crucial role in ensuring offshore wind is cost-effective, and act as gateways to local development in coastal communities;

I. whereas the North Sea is currently the world’s leading region for deployed capacity in offshore wind; whereas other European sea basins such as the Atlantic, the Mediterranean, the Baltic Sea and the Black Sea are promising locations to scale up offshore wind production and deployment in the EU; whereas the Atlantic-neighbouring western EU Member States have high natural potential for both bottom-fixed and floating offshore wind energy; whereas the Mediterranean-neighbouring southern EU Member States have high potential for mostly floating offshore wind energy; whereas the Baltic-Sea-neighbouring EU Member States have high natural potential for bottom-fixed wind energy; whereas the Black-Sea-neighbouring eastern EU Member States have great potential for both bottom-fixed and floating offshore wind;

J. whereas additional research on the impact of different offshore renewable technologies and infrastructure on marine ecosystems, marine biodiversity and marine protected areas is needed;

K. whereas the transition towards a climate-neutral economy should be accompanied by restoration of nature, without compromising on the existing nature targets of the EU Biodiversity Strategy for 2030 or leaving anyone behind, as set out in the European Green Deal; whereas the energy transition should be fair and inclusive;

L. whereas ORE projects and their environmental impact assessments must follow the mitigation hierarchy approach; whereas when avoidance is impossible or very difficult, reduction measures should be adopted and effectively implemented during all phases, from site selection to exploitation and decommissioning; whereas these mitigation measures include those against underwater noise set out in environmental impact assessments;

M. whereas the feasibility of establishing an important project of common European interest for a large-scale floating windfarm and connecting electrolyser project should be assessed by the Commission;
N. whereas the possibility of benefitting from compatibility between sea space requirements to ensure ORE compliance with the EU Biodiversity Strategy for 2030 exists; whereas offshore windfarms can benefit marine biodiversity if designed and built sustainably; whereas a large expansion of offshore wind energy production requires an intelligent approach to ensure its coexistence with the activities that already take place in the affected areas, as well as to do the least possible harm to the environment; whereas noise pollution from the construction and operation of wind farms, and especially from maritime transport, has an impact on the marine ecosystem and should be addressed in environmental legislation; whereas the involvement of renewable energy developers at an early stage of the process will undoubtedly contribute to the successful allocation of sea space; whereas the allocation of space should be the result of joint maritime spatial planning and integrated coastal management that goes beyond national borders; whereas offshore wind turbine electricity yields surpass those of onshore turbines and are more likely to be accepted by those living nearby;

O. whereas any human activity, including renewable energy, should not be allowed in strictly protected areas of the EU designated as such in the framework of the EU Biodiversity Strategy for 2030;

P. whereas the strategy aims to provide a long-term framework that promotes sound coexistence between offshore infrastructure and other uses of the sea space, contributes to the protection of the environment and allows fishing communities to thrive;

Q. whereas a just transition of workers from the offshore oil and gas sector to the ORE sector should be endorsed by improving recognition of their skills and qualifications; whereas upholding the highest social and environmental standards is important;

R. whereas the uptake of ORE is dependent on the efforts of the public and private sectors; whereas publicly owned companies can play a role alongside private companies in the ORE sector; whereas the revision of State aid and public procurement rules should provide more flexibility in implementing the green transition, including ORE projects;

1. Believes that combating climate change with the take up of ORE is vital to achieving the Paris Agreement goals and upholding the EU’s commitment to achieve net-zero GHG emissions by 2050 at the latest, in line with the latest scientific evidence, as confirmed in the European Green Deal and the NextGenerationEU recovery plan; stresses that a net-zero emissions economy requires renewable energy to be deployed on an unprecedented scale; stresses that many Member States are lagging behind in deploying the necessary renewable energy and infrastructure; further stresses that all Member States should make considerable efforts to reach their full renewable energy potential; emphasises that the EU will not be able to live up to its climate commitments if no further actions are taken to accelerate the deployment of ORE;

2. Calls on the Commission to make ORE and other relevant energy technologies core components of the EU’s energy system by 2050;

3. Emphasises that energy savings, energy efficiency and renewable energy are among the key drivers for reaching a net-zero emissions economy; recalls the Union’s commitment to the energy efficiency first principle and underlines the importance of implementing this principle in all relevant legislation and initiatives;
4. Highlights that the energy production targets for ORE in all of the EU’s sea basins, as outlined in Commission communication COM(2020)0741, are at least 60 GW by 2030 and 340 GW by 2050; recalls that according to the Commission impact assessment accompanying communication COM(2020)056216, the installed capacity of offshore wind should be 70-79 GW to ensure a cost-competitive road to a 55 % reduction by 2030; calls on the Member States and the public and private sectors to exceed the 55 % reduction target by 2030; urges the Commission to revise public procurement and State aid rules to secure a cost-competitive transition supported by a well-functioning market pushing the uptake of offshore wind; notes that there are areas with largely untapped ORE potential, such as the Atlantic, the Mediterranean, the Baltic Sea and the Black Sea; stresses that the decision to find space for this additional ORE capacity by 2030 is of the utmost importance and should be considered a priority and identified in the EU before 2023/2024 to allow construction by 2030; highlights that the competitiveness of offshore wind energy and ocean energy as an energy source will continue to increase and prices will continue to fall further in step with continuous development and deployment; highlights that ORE is a viable source of energy and that a sustainable and reliable energy system needs to combine ORE with other energy technologies, storage opportunities and flexible energy consumption;

5. Believes that ORE needs to be sustainable across the entire value chain and have limited adverse impacts on the environment and on economic, social and territorial cohesion; recalls the promise of the European Green Deal that no-one should be left behind; underlines that the wellbeing of people should be at the heart of the green transition;

6. Notes the competitive advantage of EU companies and technologies in the ORE sector; calls on the Commission to ensure that the EU is maintaining technological leadership, retaining talent and providing affordable, safe and sustainable energy while taking into account potential impacts, including those related to climate change and impacts on the marine environment; stresses the importance of maintaining this competitive advantage; underlines the potential for significant growth of the sector and its contribution to the EU economy, including technology and systems exports; stresses the importance of supporting R&D investments and building on the innovative ORE technology industry system through cross-border collaboration and partnership under Horizon Europe in order to facilitate and support robust European value chains, which are crucial for the twin transitions, while ensuring the swift uptake of the innovations developed in this field; emphasises the importance of high-quality industrial workplaces in facilitating a just transition;

7. Underlines the need to maintain a clean, competitive and sustainable supply chain for ORE in the European Union; therefore stresses the need for suppliers to apply the highest quality health, safety and environmental standards according to European certification and standards determined in a dialogue process with all relevant stakeholders; further stresses the need to minimise transport costs in the supply chain; believes that public tenders should take these elements into consideration;

8. Highlights that the deployment of ORE is an ideal opportunity for outermost regions and islands to decarbonise their energy mix and dramatically decrease their dependency on fossil fuels;
on fossil fuel imports; calls for the ‘Clean Energy for EU Islands’ initiative to be stepped up with a strong focus on ORE; recalls that islands are particularly affected by sea level rise;

9. Calls on the Commission to conduct, as soon as possible, an impact assessment to clarify the economic and socio-economic impacts of ORE, with a special focus on existing jobs and jobs created by deploying 300-450 GW of capacity by 2050;

10. Calls for local competent authorities to assess initiatives that boost local economies, local sustainable jobs and economic activities through the uptake of ORE; calls for the identification of synergies between sectors that can best support the twin green and digital transitions and help to future-proof the economic recovery, along with the development of synergies with the actions enabling a sustainable blue economy;

**Infrastructure and grids**

*Investment in infrastructure*

11. Stresses the urgency of improving and expanding existing infrastructure, without prejudice to the EU’s Biodiversity Strategy for 2030 and EU nature legislation, to enable the increased use of renewables-based electricity; regrets that a number of Member States have not yet reached their target of 10% electric interconnection by 2020 and calls on the Commission and the Member States to ensure adequate infrastructure, such as transmission lines, to integrate and transport offshore electricity from ORE; recalls the EU 2030 electricity interconnection target of 15% by 2030, which is set out in Article 2 of Regulation (EU) 2018/1999 on the Governance of the Energy Union Climate Action; calls for the Commission to come up with a proposal that can speed up the deployment of the interconnection target; considers that the Union and its Member States should develop agreements on offshore energy infrastructure with neighbouring geographical regions;

12. Calls on the Commission and the Member States to ensure there is adequate infrastructure in the EU to ensure a cost-effective deployment of ORE;

13. Highlights the importance of ensuring a sustainable and responsible development of the ORE sector, taking into account the important role of maritime transport and seaports; stresses that the development of ORE should take into account the need for safe maritime access lanes and corridors, and anchorage areas for shipping, as well as the future development of maritime access lanes to ports; underlines the importance of modern, sustainable and innovative seaports for the assembly, manufacturing and servicing of ORE equipment, and the considerable investment needed to upgrade port infrastructure, including transport terminals, and vessels to provide these services; points out the role of seaports as onshore landing points for renewable offshore-generated energy and the associated logistics, and as renewable energy hubs for electric offshore grid connection and cross-border interconnectors;

14. Underlines that access to renewable offshore energy will also contribute to the greening of ports, including in terms of the onshore power supply for ships when at berth and their development as circular industry clusters; stresses that the Member States’ maritime spatial plans should be compatible with future trends, including new traffic
flows, new shipping routes and bigger vessels, and should ensure that offshore energy
infrastructure can coexist with maritime transport routes, the fishing industry, traffic
separation schemes, anchorage areas, naval access and activities, and port development;
strongly believes that the highest levels of safety for ships transiting near ORE
infrastructure need to be ensured, including sufficient coverage of vessel traffic services
and the provision of emergency support vessels in the area;

15. Welcomes the Commission’s proposal for a revision of the TEN-E Regulation to
achieve the objective of the European Green Deal and make the legislation fit for
1.5 °C, and also welcomes the attention it gives to the ORE sector’s needs and
priorities; stresses that the development of sustainable and efficient hybrid and radial
offshore wind assets for generation, interconnection and transmission requires forward-
looking public and private planning and investment; believes strongly that regulatory
frameworks should facilitate anticipatory investments; stresses the need to secure
coordination and alignment between onshore and offshore grid development plans,
including through the identification of landing points for offshore connections and
onshore grid uptakes; encourages the Member States to speed up the necessary grid
infrastructure to facilitate the green transition, for which electrification is crucial;
recognises that the huge investments made, which are often implemented
simultaneously, will require carefully and precise planning;

16. Underlines the importance of jointly defining and agreeing to cooperate on the amount of
offshore renewable generation to be deployed within each sea basin by Member States in
2030, 2040 and 2050, in terms of ensuring investment security and the achievement of
climate and energy goals;

17. Recognises the potential for ORE in all European sea basins and calls on the Commission
and the Member States to further advance the key technologies that will harness this
energy;

18. Welcomes the Commission’s commitment with regard to the strategy to facilitate
dialogue on the environmental, economic and social sustainability of ORE and to promote
a ‘community of practice’ where all stakeholders, including industry, NGOs, fishers and
scientists, can exchange views, share experience and work on joint projects at an early
stage;

19. Notes the potential advantages of combining offshore production facilities and
transmission assets in the tender process; invites the Commission and the Member
States to analyse the potential and possible challenges of this full-scope tendering
approach and assess its applicability to different set-ups; stresses that this analysis has to
take into account the possible challenges as regards ensuring incentives and optimal
planning of offshore and onshore transmission grids;

20. Recalls that electricity production from ORE also creates an opportunity for renewable
hydrogen production as outlined in Commission communications COM(2020)0741,
COM(2020)0299 and COM(2020)0301;

21. Notes the inherent complementarity between different renewable energy technologies,
in terms of shared infrastructure, supply chain synergies and more reliable aggregate
power production;
22. Underlines the need for investment in infrastructure to support the expansion of the ORE sector, notably investment in ports to accommodate larger turbines and components, cater for operations and maintenance (including training facilities), and build decommissioning and manufacturing centres for bottom-fixed and floating offshore wind; highlights the fact that ORE will become critical for the security of the energy supply and that necessary measures must be taken in order to secure infrastructure against cyberattacks;

Member State collaboration

23. Stresses that Member State collaboration is vital in order to maximise effective use of offshore energy resources, taking into account the specificities of each area; highlights the importance of the North Seas Energy Cooperation and the need to include the UK again; notes that the current legal framework should be improved in order to facilitate such collaboration to a sufficient extent; strongly believes that failure to enhance collaboration between Member States and inter-connected non-EU countries will inhibit the roll-out of offshore energy; urges the Commission and the Member States to take the necessary action without any further delay; encourages the Member States to immediately coordinate and put forward plans for offshore development;

24. Stresses that regional cooperation between Member States and neighbouring states at sea-basin level should be fostered through joint planning, by removing regulatory barriers, and also by creating regional marine spatial usage maps that are accessible to all stakeholders and regularly revised via a common monitoring framework;

25. Welcomes the Commission’s intention to coordinate with Member States to support the deployment of at least 100 MW of wave and tidal energy by 2025 and at least 1 GW by 2030;

26. Welcomes the Commission’s proposal for a regulation on guidelines for trans-European energy infrastructure and repealing Regulation (EU) No 347/2013 and supports the creation of a unique point of contact per priority offshore grid corridor, which should facilitate coordination between Member States and the permit process for ORE projects of common interest;

District heating and cooling

27. Notes that electricity and direct heating and cooling produced using ORE can contribute to the greening of any end uses of electricity, such as heat pumps, leading to a decrease in and eventually an elimination of GHG emissions; highlights the potential to incorporate ORE in district heating through clean electricity and heat pumps;

28. Calls on the Commission to analyse best practices from mature district heating and cooling markets for the benefit of emerging markets; stresses that the Member States have the ability to build capacity to store heating and cooling and thereby encourage the uptake of major fluctuating ORE; stresses that a lack of data and disconnection with building renovation strategies at the municipality level is holding back further integration of renewable energy sources in district heating and cooling markets;

29. Highlights the role of national and local authorities in strategic planning for heating and
cooling and supporting district energy operators by de-risking investments and facilitating access to direct funding from the public sector;

**Research and development**

30. Strongly believes that the EU and the Member States should support research into and the development of multipurpose interconnectors (MPIs); stresses the need to create a long-term framework for MPIs that can efficiently integrate the offshore and onshore markets; calls on the Commission to assist manufacturers of different equipment in developing a common standard that can ensure compatibility and interoperability among interconnectors; highlights that new technologies, such as MPIs, need to be designed, tested, demonstrated and de-risked in order to speed up market entry; calls for suitable framework conditions to be created in order to ensure fast development of these technologies;

31. Urges the Commission, the Member States and the private sector to increase investment in research and development into circular and nature-inclusive ORE design, as well as technology for recycling and dismantling ORE stations;

32. Underlines that the EU ORE sector relies on imported raw materials and components for production and that the supply chain of these materials should be protected; reiterates the need for suppliers to apply the highest quality, health, safety and environmental standards according to European certification and standards;

33. Strongly believes that the EU and the Member States should support research into and the development of floating offshore wind, tidal, wave and current stations, which can be adapted to the different seabed conditions in Europe; also underlines, in this respect, the need to support research into and the development, scaling-up and commercialisation of the decarbonisation of the entire ORE value chain, of technologies using renewable energy sources such as offshore wind power to decarbonise other sectors, and of sector coupling;

34. Highlights the need to exploit ORE in deep waters; highlights that floating technology enables access to higher and more constant wind speeds, which can also minimise the turbine’s environmental impact and reduce the pressure associated with coastal planning; calls on the Commission and the Member States to promote research, development, monitoring and innovation relating to technologies such as floating platforms; stresses that it is an outstanding opportunity for the EU to become a global leader in ORE technologies that will be key for decarbonisation;

35. Considers it essential to have key segments of renewable energy value chains within Europe in order to achieve the EU’s climate goals and bring significant economic benefits to residents; calls for adequate measures to support the role of local European content in the renewable energy strategy supply chain and legislation;

36. Welcomes the fact that the Commission and the European Investment Bank are committed to working with other financial institutions to support strategic and higher risk investments in offshore energy through InvestEU, while ensuring the EU remains a technological leader;
37. Calls on the Commission and the Member States, in the context of the European Green Deal, to make enhanced use of Union funds to support the development of ORE in outermost territories and islands in order to efficiently reduce their dependency on fossil fuels;

38. Highlights that the expansion of ORE will require a large highly specialised and qualified workforce and calls on the Commission and the Member States to take the necessary steps to pre-empt a shortage of skilled workers by ensuring attractive working conditions, taking into account health and safety; supports the Commission’s ambition to support competent national and regional authorities in creating and delivering ORE-specific education and training programmes and the need to develop a skills pool in the ORE field; calls on the Commission to include the ORE field in its next European skills agenda in order to help individuals, multinational enterprises and small and medium-sized enterprises to develop the necessary skills for the ORE sector; underlines the importance of female employment in the highly technical environment of the offshore sector;

39. Believes that throughout the full project cycle, it is crucial to design, develop and deploy renewable offshore energy in a circular and renewable way; especially stresses that the substantial amount of metals and minerals needed to support the growth of renewable technologies need to be responsibly and circularly sourced;

40. Highlights the significant opportunity to develop offshore renewable hydrogen that can contribute to the wider development of the renewable hydrogen market; invites the Commission to assess how ORE sources could pave the way for the development of renewable hydrogen production;

41. Highlights the importance of private and public investment in the ORE sector for the large-scale deployment of ORE technologies; reiterates its call on the Commission to tailor Horizon Europe to the development, scaling-up and commercialisation of breakthrough technologies and innovations in the Union so as to bridge the gap between innovation and market deployment, by providing risk financing for early-stage technology and demonstration projects and developing early value chains in order to support the development of research infrastructure, also with the aim of reducing the existing gaps between Member States;

42. Highlights that improved ORE skills and sector-specific knowledge are assets that can be exported to non-EU countries and can thus support the EU’s export of services and contribute to mitigating climate change at global level;

**Permits and maritime spatial plans**

**Streamlining the issuing of permits**

43. Stresses that meeting the 2030 and 2050 targets requires speeding up the deployment of ORE; highlights the need for a more sustainable management of maritime space and coasts to unlock the potential of ORE; strongly believes that a proper maritime spatial planning process needs to be accompanied by a solid approach to public participation so that the views of all stakeholders and coastal communities are taken into consideration; notes that the huge interest in ORE will attract an increasingly large number of permit
applications; calls on the Member States to urgently simplify the relevant procedures and coordinate their efforts; encourages the Member States to embrace the single points of contact;

44. Notes the current lengthy process for launching ORE projects and the urgent need to speed it up in order to reach the 2030 and 2050 goals; notes that streamlining the Member States’ procedures and technical standards will facilitate more rapid deployment; calls on the Member States to set up a transparent process and consider introducing time limits for issuing permits, including necessary environmental assessments and studies as well as stakeholder consultations, and to introduce time limits for authorisation when fully complete dossiers have been provided, with a deadline for a decision; stresses the importance of shortening procedures where necessary and taking measures to ensure deadlines are met;

45. Underlines the importance and potential of pre-approved licencing for offshore development sites as well as the placement of connection and transmission lines in order to remove the uncertainty surrounding projects and reduce delivery times;

46. Considers it of paramount importance to build a broad public consensus around ORE projects through the involvement of local actors to increase public acceptance of offshore wind and the large infrastructure it requires; calls for the transparent and meaningful involvement of coastal communities in projects, including those situated in the most peripheral regions and islands, as well as other stakeholders; stresses the importance of increasing the general public’s trust in the ability of renewable energy to achieve energy independence and secure energy supplies; encourages the Commission and the Member States to develop one-stop shops with streamlined information on financing possibilities for demonstration projects for breakthrough ORE technologies;

Aligning maritime spatial plans and national energy and climate plans

47. Notes that the total space required to ensure the offshore wind capacity for the northern seas meets the 2050 goals is expected to be 2.8 %; strongly believes that involving ORE developers early on in the process will contribute to the successful allocation of sea space; stresses that space allocation should be the result of joint maritime spatial planning and integrated coastal management that goes beyond national borders; calls for a transparent process and for regional maritime spatial plans to be accessible in order to facilitate an early and inclusive approach for all stakeholders;

48. Draws attention to the recommendations of the Horizon-2020-funded project on multi-use in European seas, which is exploring the opportunities for multi-use in European seas across five EU sea basins; recalls its guidance that sustainable development of the ocean can no longer rely on single-sector management, but requires a more holistic, integrated approach, and that the multi-use is not limited to sharing the ‘same’ maritime space, but should encompass joint use of infrastructure and other assets and joint activities;

49. Underlines the urgency of ensuring sufficient space for the development of ORE, and considers that multi-use needs should be proactively facilitated and incentivised through public regulatory bodies and respective support programmes, going well beyond mere spatial planning solutions; notes that when developing their maritime spatial plans, the
Member States were asked to seek not only best available data and broad public participation, but also opportunities for co-location of maritime activities;

50. Notes that pursuant to Regulation (EU) 2018/1999, the Member States were required to submit their national energy and climate plans (NECPs) by 31 December 2019 and are required to submit a progress report every two years; notes that pursuant to Directive (EU) 2014/89, the Member States were required to draw up maritime spatial plans by 31 March 2021; deplores the fact that not all Member States have submitted their maritime spatial plans yet and urges the Commission to take action; notes the risk of incompatibility of the NECPs and maritime spatial plans as regards space allocation; stresses that urgent alignment of the Maritime Spatial Planning Directive and NECP Regulation, as well as other relevant EU legislation, is needed; urges the Member States to immediately coordinate and lay out plans for 2030 and post-2030 offshore development;

51. Welcomes, in this regard, the strategy’s aim of providing a long-term framework that promotes sound coexistence between offshore infrastructure and other uses of sea space and contributes to the protection of the environment;

52. Calls on the Commission and the Member States to adopt a full and holistic life-cycle approach when planning and deploying the 300 GW to 450 GW of ORE capacity by 2050;

53. Calls on the Commission to conduct an analysis of the impacts of the decommissioning of offshore installations and to adopt, if necessary, an EU strategy on sustainable decommissioning of offshore infrastructure in order to minimise environmental, safety and economic impacts; highlights that such a strategy should include the dismantling of the existing infrastructure and cover future decommissioning activities; stresses that a future EU-wide legal framework will only be necessary if the analysis shows that the current legal framework and instruments in the EU Member States have significant shortcomings; urges the Commission to set up a simple monitoring framework that can secure transparent and efficient reporting of the progress of the deployment of ORE showing whether Member States are on track to reach the 2030 and 2050 GW targets; believes that the Commission should report to Parliament, in line with the reporting requirements under the Renewable Energy Directive, on whether the deployment of ORE is on track;

54. Calls for an EU-wide landfill ban on decommissioned wind turbine blades by 2025 in order to ensure circularity, minimise the negative environmental impacts on soil and oceans and increase the level of soil protection;

Market design

55. Stresses that the uptake of ORE is dependent on the adequate implementation of well-designed market rules and a stable regulatory framework given the long duration of such investments; highlights that the cost of offshore wind has fallen dramatically during the last two decades, and, as a result, calls on the Commission and the Member States to ensure the best possible framework conditions for market-driven offshore wind development; stresses that without a phase-out of fossil fuels and fossil fuel subsidies as soon as possible and a considerable increase in offshore wind energy production,
meeting renewable energy goals and limiting global warming to less than 1.5 °C by the end of the century would be impossible;

56. Calls for the assessment of the distribution of costs and benefits between the generation and transmission of ORE to be sustainable and socio-economically viable, ensuring the right incentives and a stable regulatory framework for developers; stresses that uncertainty regarding the distribution of costs and benefits is deterring companies from launching ORE projects; invites the Commission to expedite the publishing of EU guidance on sharing the costs and benefits of offshore hybrid projects;

57. Stresses that existing EU funding instruments, such as the Connecting Europe Facility, can support the mobilisation of the required funding to promote cross-border renewable energy solutions and joint projects in the EU; notes that the Connecting Europe Facility can be used to identify potential offshore development sites and fund the necessary studies and construction works for projects between two or more EU Member States;

58. Calls on the Commission to encourage the Members States, where relevant, to include ORE projects in their national recovery and resilience plans and other national programmes financed through EU funds;

59. Calls for a revision of the existing regulatory framework governing EU electricity markets in order to facilitate the uptake of ORE and eliminate artificial trade barriers, fixed prices, subsidies and other market-distorting mechanisms that prevent the further successful integration of ORE; calls on the Commission and the Member States to carefully analyse the option of creating dedicated offshore bidding zones and existing bidding zones and their suitability for integrating the growing capacity for ORE; invites the Commission to identify existing regulatory mechanisms that successfully promote the integration of ORE in a well-functioning energy market, as part of a future-proof model including the facilitation of hybrid projects and new forms of collaboration; calls on the Commission to examine better development conditions in hybrid projects in order to ensure better and faster implementation of ORE hybrid projects and more flexible terms to enhance innovation, including new asset categories, in particular for offshore wind farms connected to interconnectors for two or more markets; recognises that tariffs should accommodate the risks of being an industrial first mover investing in the deployment of a new technology;

60. Underlines the need for a market design that is fully compatible with ORE, including the need to ensure an optimal ORE bidding zone configuration; believes that ORE infrastructure at transmission level should be regulated based on unbundling rules with a clearly defined separation of roles and responsibilities in terms of systems responsibility, third-party access and transparent tariffs and conditions, thus contributing to the single market and the energy union;

61. Recognises that the clean energy transition requires the sustainability and the carbon footprint of the entire value chain to be taken into consideration when exploiting ORE and other energy technologies; stresses that offshore tender processes should include sustainability criteria;

62. Recognises that renewable hydrogen will play a key role in the EU’s path to carbon neutrality by 2050; stresses that ORE, due to sheer project scale and high capacity, will
play an essential role in the acceleration of renewable hydrogen production; believes that support for research and development is required so as to incentivise the industry to take up renewable hydrogen in the market via large commercial projects, thus creating a real sustainable demand in hard-to-abate sectors;

63. Instructs its President to forward this resolution to the Council and the Commission.
EXPLANATORY STATEMENT

EU can only fulfill its climate objectives and deliver on our promises to the European citizens through the integration of offshore renewable energy in our energy systems in a much larger scale and at a much faster pace than we have done so far. The Rapporteur considers that offshore renewable energy is a critical element in the European green transition. By building up offshore renewable energy capacities beyond 60GW in 2030 we have the opportunity to secure a clean, cheap and stable source of energy as the foundation for the green transition.

The EU needs to deliver on a very ambitious set of revisions and initiatives as part of the Green Deal package. In order to succeed in rolling out the required capacity, the supply of offshore renewables can and should be integrated in all relevant EU legislation. Upwards revision of the targets in the Renewable Energy Directive and the associated governance structure and statistical transfers is needed.

The plan for EU’s green transition presents several challenges where offshore renewable energy can deliver the solution. EU’s electrification efforts and hydrogen strategy requires abundant cheap clean electricity. Decarbonizing heavy transports and aviation requires power-to-x, which is also dependent on the supply of cheap renewable electricity. With the help of heat pumps, renewables offer the prospect of decarbonization for district heating. Offshore renewable energy is the critical element in the shift away from fossil fuels, thereby the facilitation of our joint obligations respecting the Paris Climate Agreement.

However, today’s rate of offshore renewable installments in EU is expected at just above 2 GW per year. We must four-double the speed of installing, if we are to achieve at least 300 GW by 2050. Achieving such a tremendous task is obviously not easy. While we have made important progress in the right direction, it is certain that what has brought us where we are today will not bring us to where we need to be in 2030. The Rapporteur considers that we need to take action rapidly and immediately. If we do not step up our efforts, we will not deliver. A sense of urgency must be underlined, in the way we build out offshore renewable energy, but also in all other decisions affecting our green transition.

European companies are world leaders in offshore renewable energy and the sector holds much promise in the creation of jobs, growth and exports. This strength has to be maintained and developed further in the light of rising global needs for clean energy. Ensuring European leadership in the renewable industry and supply chains has promising industrial policy perspectives. Further efforts in R&D, test centers and exchanges of best practices within EU should be at the core of an assertive, European clean energy industrial policy.

Market conditions

The EU must ensure a stable market-based framework providing regulatory certainty and clarity for investors. Developers, private investors, pensions funds and financial institutions need clarity, consistency and predictability also in relation to regulatory challenges in the distribution of income between developers and transmission system operators. Differing practices across EU are a hindrance to the rollout of offshore renewables, which is why further streamlining and harmonization of procedures and processes is needed. The future electricity market design has to cater for and take into account future offshore developments including hybrid projects and the impacts on the overall EU electricity markets should be thoroughly assessed.
Infrastructure

Massive investments in offshore grids but also onshore are needed. A magnitude of 530bn EURO of investments is foreseen in the European Commission’s draft strategy in order to update and modernize the European grid infrastructure\textsuperscript{17}. These are investments in an unprecedented scale, which has to be taken into account in the relevant legislative acts and financial tools. The Rapporteur strongly believes that the revision of the TEN-E regulation should take this into account and at the same time facilitate the much needed sector coupling, integrating offshore renewables into the production and development of green hydrogen, power-to-x, storage and district heating. The Ten-Year-Network-Development-Plans should be revised accordingly. The cross-border integration of offshore renewables in district heating carries much promise for the abatement of fossil fuels in the heating sector.

Permitting

Today, practices of permitting of offshore wind farms varies from Member State to Member State and create unnecessary red tape instead of simplification of processes. With the current procedures, we already see that some projects initiated in the next two years can expect a completion date past 2030. Given the already lengthy overall process of deploying offshore renewable projects, failure to shorten the unnecessarily long permitting process will result in missing our targets.

Member States submit their plans for Maritime Spatial Planning without necessarily coordinating with their own national energy and climate plans. A streamlining of these processes is a bare minimum if offshore renewables are to be deployed with the needed speed, and a revision of the Maritime Spatial Plan Directive should be considered along those lines. The development and generation of clean renewable energy must have priority. If not, our climate objectives will not be fulfilled. Generating clean renewable energy is of such priority that a renewed approach must consider turning the burden of proof and the precautionary principle on its head, favoring the deployment of offshore renewables, even at the expense of permitting and licenses. Bulk permitting and fast-track procedures must be considered and come into play as well as considering the introduction of a time-limited fixed-period backstop in applications and permits, so developers can go ahead without waiting for permits and varying practices across Member States. An EU-wide Regulation on permitting could be considered, simplifying environmental impact assessment and harmonizing national approaches. EU-designated offshore areas could facilitate easy access and permitting.

The EU has less than 10 years to build out an offshore energy system comparable in size with today’s installed capacity of Belgium, Luxembourg and the Netherlands combined. By 2050, it should be the size of the combined installed capacity of Germany, Sweden and Norway today. This is the common challenge we face and there is no time to waste. With each passing moment of status quo, the difficulty of succeeding becomes ever greater.

\textsuperscript{17} European Commission. 19 November 2020. An EU Strategy to harness the potential of offshore renewable energy for a climate neutral future (COM(2020) 741).
ANNEX: LIST OF ENTITIES OR PERSONS
FROM WHOM THE RAPPORTEUR HAS RECEIVED INPUT

The following list is drawn up on a purely voluntary basis under the exclusive responsibility of the rapporteur. The rapporteur has received input from the following entities or persons in the preparation of the report, until the adoption thereof in committee:

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30.6.2021

OPINION OF THE COMMITTEE ON TRANSPORT AND TOURISM

for the Committee on Industry, Research and Energy

on a European strategy for offshore renewable energy
(2021/2012(INI))

Rapporteur for opinion: Marian-Jean Marinescu

SUGGESTIONS

The Committee on Transport and Tourism calls on the Committee on Industry, Research and Energy, as the committee responsible, to incorporate the following suggestions into its motion for a resolution:

– having regard to the Commission communication of 11 December 2019 entitled ‘The European Green Deal’ (COM(2019)0640) and the corresponding European Parliament resolution of 15 January 2020¹,

– having regard to the agreement adopted at the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21) in Paris on 12 December 2015 (the Paris Agreement),

– having regard to its resolution of 28 November 2019 on the climate and environment emergency²,

– having regard to the Commission communication of 20 May 2020 entitled ‘EU Biodiversity Strategy for 2030: Bringing nature back into our lives’ (COM(2020)0380),

– having regard to the Commission communication of 19 November 2020 entitled ‘An EU Strategy to harness the potential of offshore renewable energy for a climate neutral future’ (COM(2020)0741),


¹ Texts adopted, P9_TA(2020)0005.
sources3,


– having regard to the political agreement between Parliament and the Council of 11 March 2021 on the Connecting Europe facility 2021-2027,

– having regard to the Commission communication of 8 July 2020 entitled ‘A hydrogen strategy for a climate-neutral Europe’ (COM(2020)0301) and the corresponding European Parliament resolution of 19 May 20215,

– having regard to Directive 2014/94/EU of the European Parliament and of the Council of 22 October 2014 on the deployment of alternative fuels infrastructure6, which is soon to be reviewed,

– having regard to the Commission communication of 9 December 2020 entitled ‘Sustainable and Smart Mobility Strategy – putting European transport on track for the future’ (COM(2020)0789),

– having regard to the competence of the European Parliament’s Committee on Transport and Tourism in the area of maritime programming and an integrated maritime policy,

1. Welcomes the Commission’s ambition to reach 340 GW of offshore renewable energy capacity by 2050 as a key element for the successful decarbonisation of the transport and tourism sectors; stresses that, as the EU-27’s offshore renewable energy capacity currently stands at just above 12 GW, the building of offshore renewable energy sites must be drastically accelerated and the necessary space identified as soon as possible to enable construction to reach that goal on time; considers the massive expansion of affordable offshore renewable energy generation, storage and distribution, and its full connection and integration into the energy grid, to represent an indispensable precondition for the widespread uptake of electric mobility and clean renewable transport fuels, such as hydrogen and ammonia in particular; stresses, therefore, the need for an overall European legal framework and EU investment plan, guaranteeing certainty to all stakeholders and further increasing the competitiveness, and, where necessary, technological maturity of the sector, fully in line with the EU Hydrogen Strategy and the expected sharp increase in demand for hydrogen from the transport sector in particular; calls, in particular, on the Member States to swiftly and massively step up and facilitate public and private market-driven investments in offshore renewable energy and to seize, in particular, the opportunity provided by the Recovery and Resilience Facility (RRF) in this regard;

2. Underlines the importance of this massive expansion of offshore renewable energy in achieving the goals of the Paris Agreement and upholding the EU’s commitment to the net-zero greenhouse gas emissions target by 2050 at the latest, in line with the latest

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5 Texts adopted, P9_TA(2021)0241.
scientific evidence, as confirmed in the European Green Deal and the recovery plan; emphasises that energy savings, energy efficiency and renewable energy are among the key means to achieving a net-zero emissions economy and should be implemented in any energy supply and demand plan; highlights, therefore, the need for the more sustainable management of maritime space and coasts in order to unlock the potential of offshore renewables;

3. Underlines the importance of modern, sustainable and innovative seaports for the assembly, manufacturing and servicing of offshore renewable energy equipment, and the considerable investment necessary to upgrade port infrastructure, including transport terminals, and vessels to provide these services; points out the role of seaports as onshore landing points for renewable offshore-generated energy and the associated logistics, and as renewable energy hubs for electric offshore grid-connection and cross-border interconnectors, as well as for electrolysis and the import, production, storage transport and distribution of hydrogen, ammonia and other clean alternative fuels; points out the need to facilitate access to financial instruments, in particular under the RRF and the Connecting Europe Facility (CEF2), so as to ease the adaptation of port infrastructure to these new requirements and to strengthen the synergies between the TEN-T and TEN-E networks; underlines that access to renewable offshore energy will also contribute to the greening of ports, including in terms of the onshore power supply for ships when at berth and their development as circular industry clusters;

4. Underlines the opportunities that offshore renewable energy can offer to coastal regions, both by increasing the energy-related sustainability of tourist stays, and by balancing seasonal economic effects, providing stable and predictable jobs and growth in local renewable offshore industries and small and medium-sized enterprises (SMEs) all year round; highlights the related opportunities for the socio-economic development of these regions and for the creation of local offshore circular-energy communities; underlines the need for structured dialogue, involving local authorities, and for a just transition to offshore renewable energies, including adequate training to prepare the workforce for new challenges;

5. Underlines that most outermost regions and islands are still highly dependent on fossil fuel imports in spite of having opportunities and often particular geographic potential for renewables; recalls that islands are particularly affected by rising sea levels; calls on the Commission and the Member States, in close cooperation with local and regional authorities, to pay special attention to the development of offshore renewable energy pilot projects as well as commercial-scale projects in these territories, focusing in particular on their transport needs and tourism industries; recalls the tremendous natural potential for offshore wind energy and good natural potential for wave and tidal energy in the Atlantic and its outermost regions; calls for the ‘Clean Energy for EU Islands’ initiative to be stepped up, with a strong focus on offshore renewables;

6. Recalls that the need for further offshore renewable energy development applies to all of Europe’s sea basins and that areas with widely untapped offshore renewable potential, such as the Mediterranean, Baltic and Black Seas, require special attention, including through the funding of research and development into innovative technologies, such as floating offshore wind, solar, wave and tidal energy and offshore green hydrogen production, for the necessary technological adaptations to be piloted in
the short term and then scaled up, while front runners, such as the North Sea, must continue to develop and to defend their leading global position for the benefit of Europe as a whole; considers that the European Union must do everything in its power to retain its position as a leader in wind energy;

7. Emphasises that research and investment into effective storage technologies for offshore wind energy need to be sped up, in order to solve the problem of weather dependency and increase the security of supply of the power grid in the light of the massive increase in electricity production required to achieve the climate transition;

8. Welcomes the Commission’s proposal to draw up frameworks for the deployment of offshore renewable energy and for grid planning by sea basin, involving different EU countries and allowing for synergies with existing or planned interconnectors and the connection of national offshore grids; calls on the Commission to facilitate the development of comprehensive impact assessments by sea basin to evaluate and identify the location of appropriate marine areas, the impact on marine biodiversity, the environment and tourism activity, the cost and production capacity of equipment, and the cost of grid infrastructure;

9. Underlines that although investors should bear the market risk, in markets where the adoption of offshore renewables is at an early stage, such as the Mediterranean, high risk and low revenues can be compensated through support schemes, such as the RRF and upcoming CEF2, to ensure that investments in offshore renewable energy projects take place in the short/medium term and that these projects are scaled up in the medium/long term; recalls the importance of coherent and coordinated efforts in national and EU investment strategies to ensure cooperation between public and private sectors facilitating the manufacturing, installation and commercialisation of innovative technologies;

10. Highlights the importance of the North Seas Energy Cooperation (NSEC) for joint maritime spatial planning and integrated coastal management that goes beyond national borders, and stresses the need to include the UK once more; calls on the Commission and the Member States to broaden research, development and innovation efforts with regard to floating windfarms and the transport challenges associated with their construction and maintenance and to assess the feasibility of establishing an Important Project of Common European Interest (IPCEI) in the event of a large-scale project;

11. Considers that the Union and its Member States should develop geostrategic agreements on offshore energy infrastructure with neighbouring geographical regions, especially the Western Balkans, and the Southern and Eastern Mediterranean Basins;

12. Stresses that combating climate change, including via the take-up of offshore energy, is vital in order to limit the devastating effects of global warming on marine aquatic ecosystems, rising water temperatures, ocean acidification, changes in water flow, fish habitat loss, and the productivity of marine and freshwater species; underlines that the drastically increasing needs for offshore renewable energy in the transport and tourism sectors can be met while fully complying with the goals of the EU Biodiversity Strategy, as, for example, the required scale-up of the offshore wind industry in order to meet the 2030 climate target is estimated to require less than 3 % of European maritime
space; recognises offshore wind power’s potentially harmful effects on the marine environment; emphasises, nevertheless, that if designed and built sensibly, offshore windfarms can also benefit marine biodiversity after construction; recalls, therefore, that a strong expansion of offshore wind energy production requires an intelligent approach to ensure its coexistence with the activities that already take place in the affected areas and that the least possible harm is done to the environment;

13. Recalls the importance of the proper application of Directive 2014/89/EU of 23 July 2014 establishing a framework for maritime spatial planning; emphasises that planning must provide for a long-term vision that reconciles offshore renewable energy with other activities, such as fisheries, in such a way that everyone is part of the sustainable development of European maritime space, taking into account the protection of biodiversity and other marine resources; considers that, with regard to the critical role of maritime transport and seaports, the development of offshore renewable energy should take into account the need for safe maritime access lanes and corridors, navigation channels and anchoring areas around ports; stresses, therefore, the need to consult at an early stage with the port managing bodies and relevant stakeholders and to prioritise bilateral and multilateral maritime spatial planning cooperation between Member States to guarantee the safety and continued operation of shipping; calls on the Commission to develop guidelines for the safety of sailing in offshore wind parks and construction vessels in cooperation with the European Maritime Safety Agency; notes with concern that several Member States had not established their maritime spatial plans by the 31 March 2021 deadline established in Directive 2014/89/EU, and encourages the Commission to check their alignment with the national energy and climate plans, especially their provisions on the development of offshore energy.
INFORMATION ON ADOPTION IN COMMITTEE ASKED FOR OPINION

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| Result of final vote | +: 41  
|                     | -: 3     0: 3 |
| Members present for the final vote | Magdalena Adamowicz, Andris Ameriks, José Ramón Bauzá Díaz,  
|                                  | Izaskun Bilbao Barandica, Paolo Borchia, Marco Campomenosi, Ciarán Cuffe, Johan Danielsson, Karima Delli, Gheorghe Falcă, Giuseppe Ferrandino, Mario Furore, Søren Gade, Isabel García Muñoz, Jens Gieseke, Elsi Katainen, Kateřina Konečná, Elena Kountoura, Julie Lechanteux, Benoît Lutgen, Elżbieta Katarzyna Łukacijewska, Marian-Jean Marinescu, Tilly Metz, Cláudia Monteiro de Aguiar, Caroline Nagtegaal, Jan-Christoph Oetjen, Philippe Olivier, Rovana Plumb, Tomasz Piotr Poręba, Dominique Riquet, Dorien Rookmaker, Massimiliano Salini, Sven Schulze, Barbara Thaler, István Ujhelyi, Marianne Vind, Henna Virkkunen, Petar Vitanov, Elissavet Vozemberg-Vrionidi, Roberts Zīle, Kosma Złotowski |
| Substitutes present for the final vote | Pablo Arias Echeverría, Angel Dzhambazki, Maria Grapini, Roman Haider, Jutta Paulus, Kathleen Van Brempt |
## FINAL VOTE BY ROLL CALL IN COMMITTEE ASKED FOR OPINION

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**Key to symbols:**
- **+**: in favour
- **-**: against
- **0**: abstention
OPINION OF THE COMMITTEE ON FISHERIES

for the Committee on Industry, Research and Energy

on a European strategy for offshore renewable energy
(2021/2012(INI))

Rapporteur for opinion: Catherine Chabaud

SUGGESTIONS

The Committee on Fisheries calls on the Committee on Industry, Research and Energy, as the committee responsible, to incorporate the following suggestions into its motion for a resolution:


– having regard to the Commission communication of 11 December 2019 entitled ‘The European Green Deal’ (COM(2019)0640),

– having regard to the Commission communication of 20 May 2020 entitled ‘EU Biodiversity Strategy for 2030: Bringing nature back into our lives’ (COM(2020)0380),

– having regard to the Commission recommendations of May 2020 for positive interactions between offshore wind farms and fisheries,

– having regard to the Commission’s 2020 Blue Economy Report of 11 June 2020,

– having regard to the Commission communication of 8 July 2020 entitled ‘A hydrogen strategy for a climate-neutral Europe’ (COM(2020)0301),

– having regard to the Commission communication of 17 September 2020 entitled ‘Stepping up Europe’s 2030 climate ambition - Investing in a climate neutral future for the benefit of our people’ (COM(2020)0562),

– having regard to the Commission communication of 19 November 2020 on an EU Strategy to harness the potential of offshore renewable energy for a climate neutral future (COM(2020)0741),


– having regard to the EU Hydrogen Strategy’s objective of achieving 40 GW of renewables-linked electrolysis capacity by 2030,

– having regard to the United Nations Framework Convention on Climate Change (UNFCCC), to the Kyoto Protocol thereto and to the Paris Agreement,

– having regard to the United Nations Convention on Biological Diversity (CBD),

– having regard to the Global Assessment Report on Biodiversity and Ecosystem Services published by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) on 31 May 2019,

– having regard to the special report of the Intergovernmental Panel on Climate Change (IPCC) entitled ‘Global Warming of 1.5°C’, its fifth assessment report (AR5) and the synthesis report thereon, its special report on climate change and land, and its special report on the ocean and cryosphere in a changing climate,

– having regard to the study of November 2020 requested by the Committee on Fisheries on the impact of the use of offshore wind and other marine renewables on European fisheries,

– having regard to its resolution of 16 January 2018 on international ocean governance: an agenda for the future of our oceans in the context of the 2030 Sustainable Development Goals⁵,

– having regard to its resolution of 28 November 2019 on the climate and environment emergency⁶,

– having regard to its resolution of 15 January 2020 on the European Green Deal⁷,

– having regard to its resolution on the impact on the fishing sector of offshore windfarms

and other renewable energy systems (2019/2158(INI)),

1. Recalls the EU’s objective of achieving climate neutrality by 2050 at the latest; highlights the agreement reached between the European Parliament and the Council on the European Climate Law, which sets a 2030 target for emission reductions of at least 55% compared with 1990, while at the same time ensuring that actual reductions will reach at least close to 57%, with the objective of delivering the EU’s fair share to implementing the Paris Agreement, in particular its goal of pursuing efforts to limit the global temperature increase to 1.5 °C above pre-industrial levels; stresses the importance of the clean energy transition, which will minimise imports of fossil fuels, generate jobs, develop communities, and raise the living standards of all EU citizens, contributing to the post-COVID-19 recovery;

2. Underlines that renewable energy is key for decarbonisation, and that its deployment must be considered for all European sea basins in a coordinated manner taking into account all three pillars of sustainability; take note of the Commission’s ambition to reach 340 GW of offshore renewable energy capacity by 2050; notes in this regard the right of the Member States to decide on the structure of their energy mix in accordance with Article 194(2) of the Treaty on the Functioning of the European Union (TFEU);

3. Recalls that offshore renewable energy has a social, economic and spatial impact on fisheries and aquaculture, as well as on ecosystems and biodiversity, for example due to the relocation of fishing areas, underwater noise pollution or risks of collisions; calls therefore for the establishment of networks, mandatory dialogue and effective and continuous cooperation with fishers, aquaculture producers and their organisations, at an early stage, to ensure fair and proper coexistence of activities through effective participation, especially on areas for installations and grid infrastructure, and security zones, with feedback from experience and the exchange of best practices, in order to guarantee acceptance;

4. Emphasises the need for a proper economic, socio-economic and socio-cultural impact assessment and for local ecosystems and specificities to be taken into account before the implementation of a project, with an integrated management approach via marine spatial planning; suggests creating transparent guidelines on how to alleviate the potential for conflict, including through mitigation measures and different forms of compensation, and creating a level playing field between fisheries and offshore renewable energies; welcomes in this regard the Commission’s initiative and urges the Commission to conduct further analysis on the interactions between offshore renewable energy and other sea activities;

5. Highlights the need to avoid negative long-term impacts caused by offshore renewable energy devices on the marine environment, ecosystems, fish stocks and biodiversity, including international migration of birds and consequently on fisheries as a whole over their life cycle, from construction through operation and decommissioning, especially impacts on sea and air currents, wave generation, tidal amplitudes, bedload sediment transport, infrasonic noise from rotating blades, which could drive fish and marine mammals away, electromagnetic fields from underwater cables and underwater noise from pile driving; underlines therefore the importance of detailed studies to assess such impacts of existing offshore renewable energy devices;
6. Welcomes the Commission’s commitment in the strategy to facilitate dialogue on the environmental, economic and social sustainability of offshore renewable energy and to promote a 'community of practice' where all stakeholders, including industry, NGOs, fishers and scientists, can exchange views, share experience and work on joint projects at an early stage;

7. Calls on the Member States and the Commission to facilitate community energy production schemes that allow coastal communities and cooperatives, including fishers, to generate their own electricity and reinvest profits back into the community;

8. Points out that small-scale fishers will be particularly affected by changes such as the spatial distribution and availability of commercially fished marine species, closure of fishing grounds for safety reasons or imposed changes on fishing activities or methods as they may not have the capacity to move to fishing grounds further afield or to change fishing method, particularly if offshore wind farms are located in territorial waters (extending 12 nautical miles from the coast);

9. Emphasises that the precautionary principle, in accordance with Article 191(2) of the TFEU, should apply if decisions have to be taken before the required knowledge or information is available;

10. Emphasises that the deployment of offshore renewable energy should be done through a co-benefits approach, based on a thorough assessment ensuring benefits for fishers and local communities; points out that with such an approach each activity benefits from the other, including, for example, benefits for marine biodiversity and fish stocks preservation through reef effect and reserve effect, for marine knowledge through data collection with sensors installed on infrastructures, and for local job creation, including ports development and modernisation, especially fishing ports, meaning the whole community benefits, from citizens, fishers and local communities, to industries and scientists; considers, in this respect, that the positive impact of infrastructures should be promoted, and stresses that achieving co-location options, which is of utmost importance in achieving a win-win situation for both sustainable fisheries and the offshore energy sector, must be prioritised;

11. Calls on the Commission and the Member States to continuously improve the involvement all stakeholders, including fishers, and to improve cross-border cooperation, including with the United Kingdom, in maritime spatial planning when developing, revising and implementing the plans of Member States; stresses in this regard the need to find solutions to common problems, to integrate electricity grid connection and to learn from best practices; stresses that proper spatial planning is crucial to avoid an increase in spatial conflicts in European waters, something that has been suggested by spatial overlap analysis; calls on Member States, in this regard, to take into account the need to ensure that negative effects of offshore renewable energy systems on the environment and on socioeconomic and territorial cohesion are avoided, especially in regions dependent on fisheries; therefore encourages placing them away from fishing grounds;

12. Calls on all Member States to apply an ecosystem-based approach to maritime spatial planning as referred to in Article 1(3) of Directive 2008/56/EC and Article 5(1) of
Directive 2014/89/EU with the aim of ensuring that the collective pressure of all activities is kept within levels compatible with the achievement of good environmental status while contributing to the sustainable use of marine goods and services; welcomes, in this regard, the strategy’s aim of providing a long-term framework that promotes sound coexistence between offshore installations and other uses of the sea space, contributes to the protection of the environment and allows for thriving fishing communities;

13. Urges Member States to designate specific historical and traditional fishing grounds to local fishers as areas that are to remain free of offshore renewables;

14. Underlines that offshore renewable energy could be deployed in marine protected areas, with management committees which consist of relevant stakeholders, including economic sectors such as fisheries, as well as scientists, NGOs, local communities and public administrations and that facilitate cooperation and dialogue, if in line with conservation objectives in accordance with applicable EU nature legislation and guidelines, in order to reduce the impact on fisheries;

15. Recalls that offshore wind energy is one of the most advanced technologies, but other technologies with less impact on fisheries and aquaculture are also promising and are sometimes already available, even if not yet put to large-scale use, such as thermal energy, wave energy, tidal energy, biofuels from algae, etc., and can be more appropriate in some territories where fishing takes place;

16. Encourages the Commission and the Member States to adopt an ambitious approach to the development of floating offshore windfarms, which have the potential for development in deep water areas, expanding the viable zone for wind energy development while reducing visibility from the shore and the impact during construction;

17. Highlights in this regard the potential of renewable hydrogen, in combination with renewable energy systems, as reflected in the EU Hydrogen Strategy’s objective of achieving 40 GW of renewables-linked electrolysis capacity by 2030;

18. Calls for additional support for research and development in order to accelerate the deployment of different offshore renewable energy technologies, and encourages further monitoring of the impact on the environment, scientific analyses and data exchange as new policies, findings and technologies are constantly being developed;

19. Underlines that the energy mixes of outermost regions and islands are highly dependent on fossil fuel imports, despite having opportunities for renewables; calls on the Commission and Member States, when implementing the European Green Deal, to pay special attention and dedicate specific funding to the development of offshore renewable energy in these territories in order to minimise dependency on fossil fuels; calls for the specific characteristics of islands to be taken into account when drawing up projects that can be financed;

20. Calls on the Commission and Member States to facilitate training and education in offshore renewables for coastal communities, outermost regions and EU islands as a priority, in order to ensure a just transition for those communities and sectors most
affected by climate change;

21. Emphasises that a long-term and all-encompassing vision is necessary to assess the impact of offshore renewable energy on other activities, such as fishing, local communities and ecosystems; calls for a circular economy and life cycle approach for these projects; considers it essential for assessments to this end to be carried out on infrastructures prior to the execution of projects, in order to foster eco-design through specific materials and designs of the infrastructures which can enhance the development of local biodiversity, and to have plans for the end of the project, such as through using recycling methods or maintaining infrastructure as artificial reef, ensuring that all long-term sustainable impacts must be considered and adhere to the principles of a circular economy;

22. Calls on the Commission to carry out the necessary impact assessments and keep Parliament constantly informed.
INFORMATION ON ADOPTION IN COMMITTEE ASKED FOR OPINION

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0: 2 |
| Members present for the final vote | Clara Aguilera, Pietro Bartolo, François-Xavier Bellamy, Izaskun Bilbao Barandica, Isabel Carvalhais, Maria da Graça Carvalho, Rosanna Conte, Rosa D’Amato, Giuseppe Ferrandino, João Ferreira, Søren Gade, Francisco Guerreiro, Niclas Herbst, France Jamet, Pierre Karleskind, Predrag Fred Matić, Francisco José Millán Mon, Grace O’Sullivan, Manuel Pizarro, Caroline Roose, Bert-Jan Ruissen, Annie Schreijer-Pierik, Peter van Dalen, Emma Wiesner, Theodoros Zagorakis |
| Substitutes present for the final vote | Manuel Bompard, Raffaele Stancanelli, Annalisa Tardino |
### FINAL VOTE BY ROLL CALL IN COMMITTEE ASKED FOR OPINION

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Key to symbols:
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## INFORMATION ON ADOPTION IN COMMITTEE RESPONSIBLE

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| **Substitutes present for the final vote** | Cornelia Ernst, Jutta Paulus, Ernő Schaller-Baross, Jordi Solé |
## FINAL VOTE BY ROLL CALL IN COMMITTEE RESPONSIBLE

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