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Delegations will find in the Annex the Council Conclusions on Fostering European Cooperation in Offshore and Other Renewable Energies, approved by written procedure by the Council of the European Union on 11 December 2020.

Council conclusions on

Fostering European Cooperation in Offshore and Other Renewable Energies

THE COUNCIL OF THE EUROPEAN UNION

1. RECALLING

- 1.1. that the European Council in its conclusions of 12 December 2019 (EUCO 29/19) endorsed the objective of achieving a climate-neutral European Union by 2050, in line with the objectives of the Paris Agreement;
- 1.2. that the TTE (Energy) Council in its conclusions on the Future of Energy Systems of 25 June 2019 (10592/19) identified the roll-out of renewable energies and their grid integration as well as the development of cross-border electricity interconnections as key elements of the future energy system, and identified offshore electricity grids and hubs as one of the energy infrastructure priorities;
- 1.3. that the TTE (Energy) Council in its conclusions on the response to the COVID-19 pandemic in the EU energy sector – road to recovery of 25 June 2020 (9133/20) noted that the energy sector will require investments in particular in renewable energies, electrification and cross-border interconnections, and highlighted that a strategic approach on offshore renewable energy could stimulate investments in the sector;
- 1.4. that Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action and Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources of 11 December 2018 encourage Member States to consider the voluntary opening of their support schemes to cross-border participation based on cooperation agreements in order to supplement their national efforts;

- 1.5. that the Commission Communication COM(2018) 773 ‘A Clean Planet for all: A European long-term strategic vision for a prosperous, modern, competitive and climate neutral economy’, and in particular its in-depth analysis in support of the Communication, identify substantial EU-wide potential for increasing offshore wind capacity of 240 to 450 GW by 2050 alongside other renewable energy technologies, in order to achieve the objective of climate neutrality;
- 1.6. that the Commission Communication COM(2019) 640 ‘The European Green Deal’ states that renewable energy sources will play a key role for the European clean energy transition and that increasing offshore renewable energy production will be an important measure in this regard, building on regional cooperation between Member States, and highlights ways to tap into the potential of offshore renewable energy, including floating wind and solar, wave, and tidal energy, notably by managing the Union’s maritime space more sustainably;
- 1.7. that the Commission Communication COM(2020) 562 on stepping up Europe’s 2030 climate ambition highlights the fundamental role renewable energy plays in delivering the European Green Deal and in achieving climate neutrality by 2050, and that renewables will need to be deployed at a larger scale to contribute to the higher climate ambition and to promote the Union’s industrial leadership on renewable technologies;
- 1.8. that the Commission Communication COM(2020) 299 ‘Powering a climate-neutral economy: An EU Strategy for Energy System Integration’ recognises the role of renewable energies including offshore wind for increased electrification and indicates that the Offshore Renewable Strategy and follow-up regulatory and financing actions will ensure the cost-effective planning and deployment of offshore renewable energy and strengthen the EU’s industrial leadership in offshore renewable energy technologies;
- 1.9. that in its Communication COM(2020) 741 ‘An EU Strategy to harness the potential of offshore renewable energy for a climate-neutral future’, the Commission estimates that an installed capacity of 300 GW of offshore wind and around 40 GW of ocean energy by 2050 will be needed to build an integrated, greener and climate-neutral energy system for 2050 and also highlights the significant potential of other offshore renewable technologies that are at different stages of maturity.

- 1.10. that the Horizon 2020 European Green Deal Call of September 2020 will support offshore renewable energy pilot applications and demonstration projects including ocean energy, (floating) offshore wind and offshore solar energy;
- 1.11. the work with regard to regional cooperation on renewable energies, in particular offshore renewable energy, and the strengthening of the electricity grid undertaken by
- the North Seas Energy Cooperation and referred to in its Joint Statement of 6 July 2020 on the framework of the North Seas Energy Cooperation,
 - the Baltic Energy Market Interconnection Plan (BEMIP) and referred to notably in the Baltic Sea Offshore Wind Joint Declaration of Intent of 30 September 2020¹,
 - the High Level Group on Interconnections for South-West Europe and
 - Central and South Eastern Europe energy connectivity (CESEC);
- 1.12. the ‘Memorandum of Split’ of June 2020 that sets the objective of establishing a long-term framework for cooperation to advance the energy transition and decarbonisation of islands, with full respect for the specificities of each island;
- 1.13. that these Council conclusions focus on offshore and other renewable energies as one of the key pillars of the broader picture of decarbonisation, while recognising that also other decarbonisation efforts are needed;

¹ https://ec.europa.eu/energy/sites/ener/files/signature_version_baltic_sea_offshore_wind.pdf

2. EMPHASISING THAT

- 2.1. the deployment of all renewable energy technologies plays an indispensable role in achieving the EU energy and climate targets, and substantially contributes to achieving a climate-neutral European Union by 2050;
- 2.2. offshore renewable energy, including bottom-fixed and floating offshore wind and solar, the energy of waves, currents and tides, the differential of thermal and saline gradients, seawater heating and cooling, geothermal energy, marine biomass (algae) as well as the potential conversion of existing oil and gas platforms to renewable energy platforms can help harnessing the renewable energy potential from all European seas and oceans, drawing on a pan-European supply chain; whereas bottom-fixed offshore wind is a maturing technology for shallow waters in some Member States, floating offshore wind is a promising emerging technology to deploy renewable energy in areas with deeper sea beds. All these technologies contribute to creating business opportunities for European industries;
- 2.3. in addition to national renewable energy deployment, enhanced regional cooperation and cross-border projects among Member States can contribute to further integrating the internal energy market and further enhancing the EU-wide deployment of renewable energy and improved electricity transmission infrastructure. Furthermore, it has the potential to provide net benefits in particular to the participating Member States through a more cost-efficient achievement of national and Union renewable energy targets if challenges and barriers to such cooperation are overcome;
- 2.4. such cooperation can be achieved by different forms of voluntary cross-border opening of national renewable energy support schemes, for example joint tenders and joint support schemes, including for land-locked countries. Cross-border projects can be facilitated by the new Union Renewable Energy Financing Mechanism in line with the provisions of the Governance Regulation;

- 2.5. cross-border cooperation, including joint and hybrid projects, is a voluntary option in addition to national deployment of renewable energies undertaken to achieve the EU 2030 targets for renewable energy deployment and greenhouse gas emission reduction as indicated in the National Energy and Climate Plans, and needed for a revised 2030 ambition; planned national support volumes can be further increased with the Recovery and Resilience Facility allocation;
- 2.6. accelerated deployment of renewables, as well as increased investment in research and innovation (R&I), and upscaling of the value chain both nationally and in regional cooperation projects, can help create a strong and competitive European domestic market for emerging offshore renewable energy technologies, which could help Europe to expand and maintain its global leadership in these technologies at an industrial scale;
- 2.7. cross-border cooperation on offshore renewable energy can play an important role with regard to these areas; in particular, those projects that are financed by more than one Member State and projects that connect to more than one Member State (joint and hybrid projects) could unleash the potential for large-scale renewable energy deployment and economies of scale by reducing system costs and space requirements, and facilitating market and grid integration of offshore renewable energy as well as electricity trade;
- 2.8. taking into account the efficiency-first principle, renewable energy deployment can play a major role in sector integration, inter alia by facilitating the integration of renewable generation into the energy system directly via the electricity grid or by contributing to renewable hydrogen generation, in particular through tapping additional offshore renewable energy sites via cross-border cooperation;
- 2.9. using existing technologies and developing innovative solutions for energy storage, including the conversion of renewable electricity into hydrogen, may contribute to further integrating offshore and other renewable energy into the European energy system, inter alia by supporting grid stability and flexibility, and improving the business case for renewable electricity production;

- 2.10. reforms enhancing investments in renewable energy generation capacities will contribute to the economic recovery from the COVID-19 pandemic by fostering innovation, European value chains, industrial growth, the development of a green economy and employment across the Union, as well as the competitiveness of EU industries; regional cooperation among Member States will be an important factor in ensuring that these benefits are widely shared;
- 2.11. the European Green Deal and the Climate Target Plan provide a unique opportunity for an integrated approach to policies and measures, including national renewable energy deployment and enhanced regional cooperation between Member States and between regions on renewable energies, an appropriate regulatory framework and state aid rules, adequate financial support, industrial and growth aspects, social cohesion and employment dimensions, as well as R&I;
- 2.12. international cooperation plays an increasing role in offshore renewable energy deployment and can be facilitated, inter alia, by the International Energy Agency (IEA) providing in-depth analysis on the technical potential and economic opportunities as well as by the International Renewable Energy Agency (IRENA) and its Offshore Renewables Collaborative Framework by bringing countries together to identify areas for international collaboration and accelerate the uptake of offshore renewable energy;

3. GIVEN THE GEOGRAPHIC DIFFERENCES WITHIN THE UNION AND THE DIFFERING TECHNOLOGICAL MATURITY OF RENEWABLE ENERGIES, ACKNOWLEDGING THAT

- 3.1. the cost of renewable energy deployment in particular in less mature markets and for less mature technologies (including offshore technologies such as floating wind and floating photovoltaic and offshore wind in arctic conditions) and the necessary associated technologies need to be reduced further;
- 3.2. R&I and demonstration support for the EU's less mature offshore renewable energy technologies, as well as supply chain development, are key for improving their competitiveness and ability to drive global innovation;

- 3.3. balancing the deployment of offshore renewable energy technologies with other objectives in the maritime space is a challenge and that multi-use-concepts for different objectives and co-use of different technologies can contribute to addressing spatial trade-offs and providing environmental benefits;
- 3.4. the large-scale deployment of offshore renewable energies, particularly offshore wind, requires offshore and onshore grid development for which a particularly high level of public acceptance and political support by Member States is needed, while recognising the crucial efforts by transmission system operators in this respect; in addition, safe and secure grid operation requires adequate balancing capacity, e.g by demand side response solutions or storage;
- 3.5. many coastal communities and islands are facing challenges in the fight against climate change, with regard to their large renewable energy potential, their environmental and socio-economic particularities such as marine biodiversity and marine and coastal tourism, and the role of islands as well as coastal communities in implementing pilot projects for less mature offshore renewable energies; islands and coastal communities have a special role in spearheading decarbonisation by becoming laboratories for pilot projects for various offshore renewable energy technologies, in order to increase diversification of renewable sources and technologies while contributing to the security of supply in isolated systems;

4. WITH A VIEW TO CROSS-BORDER-COOPERATION NOTING THAT

- 4.1. substantial barriers and challenges exist to cross-border renewable energy cooperation projects, which cannot be overcome by bilateral and multilateral intergovernmental agreements (IGAs) between Member States on specific projects alone;
- 4.2. barriers and challenges to cross-border renewable projects include, for instance:
 - higher transaction costs due to substantial political, technical and legal coordination efforts and uncertainties including for the first projects,

- the challenge of ensuring a balanced allocation of costs and benefits across participating Member States;
 - limited funding and financing at national and in particular at Union level to cover financing gaps of national and cross-border projects; in particular, with regard to cross-border projects, to cover the additional financing gaps arising, inter alia, from a potentially imbalanced allocation of costs and benefits;
 - related to the categorisation of cross-border transmission lines within hybrid offshore energy projects (combining generation, transmission and trade) as interconnectors under the EU electricity market rules, the challenge to prevent significant curtailment of electricity from offshore renewable energy generation within such hybrid projects and to ensure its effective grid and market integration while ensuring a fair sharing of costs and benefits;
 - the lack of alignment of technical standards (e.g. on lights and markings on wind turbines or interoperability and voltage levels of transmission equipment);
 - other challenges arising from defence-related activities and other uses of the maritime space;
- 4.3. the alignment between maritime spatial planning and offshore grid planning and coordination among Member States could be enhanced in order to enable an efficient use of the maritime space and facilitate the deployment of national and cross-border offshore renewable energy projects;
- 4.4. offshore grid planning is often not sufficiently interlinked with onshore grid connections and internal grid reinforcements;

5. TAKING INTO ACCOUNT

- 5.1. Member States' freedom to determine their energy mix in accordance with Article 194 TFEU, national competences for the development of their national electricity grids including interconnections, and national responsibilities for the enforcement and regulatory oversight of electricity market rules on their territory;

5.2. Member States' right to design their national support schemes for electricity from renewable sources in accordance with Article 4 of Directive (EU) 2018/2001 and without prejudice to Articles 107 and 108 TFEU, and their right to decide on the extent to which they support electricity from renewable sources which is produced in another Member State in accordance with Article 5 of Directive (EU) 2018/2001;

6. WITH REGARD TO EUROPEAN COOPERATION IN RENEWABLE ENERGIES IN GENERAL, IDENTIFIES THE NEED FOR

- 6.1. further integration of the internal energy market, also with a view to contributing to the EU's climate and energy targets, including by internal and cross-border infrastructure development and enhanced interconnectivity among Member States, inter alia through the policy on trans-European energy networks, projects of common interest and the implementation of relevant EU legislation, in order to support the integration of growing volumes of renewable energy into the European electricity market and to facilitate cross-border trade and cooperation;
- 6.2. a reduction of transaction costs for concluding bilateral and multilateral IGAs between Member States on cross-border renewable energy projects by providing a menu of options for relevant cooperation models with respect to the voluntary opening of national support schemes including the option of establishing a joint support scheme as well as a 'blueprint' that encompasses key elements of such agreements, in order to support Member States, including land-locked countries, in the cooperation process;
- 6.3. coordination between cost-benefit analysis (CBA) and cross-border cost allocation (CBCA) for cross-border renewable energy projects, including joint and hybrid offshore renewable energy projects, in order to take into account all relevant costs and benefits. These may include inter alia benefits from renewable energy target amounts, costs for renewable energy support, market integration, grid (inter)connection and grid reinforcement and integration;

- 6.4. an improved and more effective use of existing Union funds in order to facilitate the realisation of cross-border renewable energy projects as well as national renewable energy deployment by means of key Union instruments such as the new Union Renewable Energy Financing Mechanism, other Union instruments such as InvestEU and financing schemes for innovative projects of the European Investment Bank, and the Connecting Europe Facility (CEF) 2021-2027, targeted at cross-border renewable energy projects with its dedicated new funding line; in particular, swift operability and sufficient liquidity, from existing sources, of the enabling function of the Union Renewable Energy Financing Mechanism to support renewable energy projects and enhance regional cooperation by covering financing gaps in joint projects that arise, inter alia, from an imbalanced allocation of costs and benefits between Member States;
- 6.5. a revised state aid framework for the support of renewable energy which is consistent with the directives and regulations of the ‘Clean Energy Package’ and the European Green Deal and which facilitates the achievement of the climate and energy targets for 2030 in light of the EU Climate Target Plan and the objective of a climate-neutral European Union by 2050 and thus is supportive of the deployment of renewable energy ensures investors certainty and public acceptance of the necessary support, and enables the promotion of R&I and large-scale demonstration of emerging and innovative technologies;
- 6.6. investments in R&I at Union and national level, based on an EU-wide agenda for R&I as developed in the European Strategic Energy Technology Plan (SET Plan) to be updated in order to reflect the ambition of the European Green Deal and the role of renewable energy in it, through the Green Deal Call of Horizon 2020 and the upcoming Horizon Europe work programmes for 2021 and 2022;
- 6.7 support for the decarbonisation process in disadvantaged, isolated or insular peripheral electricity systems such as islands or outermost regions, including isolated coastal areas, which will benefit from the deployment of the different offshore technologies via the design of targeted support that takes into account their specific situation.

7. WITH REGARD TO OFFSHORE RENEWABLE ENERGY PROJECTS IN PARTICULAR, IDENTIFIES THE NEED FOR

- 7.1. a comprehensive approach that enables national and cross-border deployment of offshore renewable energy projects and offshore technology value chains to be conducive to a long-term vision, harmonising technological, socio-economic and environmental factors with the Union's climate ambition, in particular by instruments that support all offshore renewable energies and cover the Union's diverse geography including all sea regions;
- 7.2. building on existing fora and exploring options for enhanced coordination among Member States on maritime spatial planning in different European sea basins and the relevant Atlantic areas to enable an efficient and sustainable use of the maritime space, without prejudice to national responsibilities; a holistic and comprehensive approach to the use and management of the maritime space, taking into account national maritime spatial plans and encouraging options for multi-use, in particular to ensure environmental protection of the marine ecosystem and public acceptance, and to facilitate co-existence of different uses of the maritime space in order to ensure consistency with other relevant Union policies such as the EU Biodiversity Strategy for 2030 and the Common Fisheries Policy;
- 7.3. intensifying research to increase knowledge of the marine environment and bird migration and enhancing cooperation among Member States on these topics by exchanging data, best practices and experiences;
- 7.4. exploring options for a better coordination between maritime spatial plans and offshore grid planning at European, regional and national level, including the onshore connection of offshore renewable energies, without prejudice to national responsibilities and rights, to facilitate the large-scale deployment of renewable energy across the Union;

- 7.5. integrated national offshore and onshore grid planning as well as better coordination among Member States, in particular regarding long-term offshore grid planning, and, where necessary as approved by the relevant Member State, including internal grid reinforcements, which are essential for cost-efficient deployment of offshore renewable energy, taking into account different circumstances in Member States; in this context, also improve regional coordination between infrastructure planning of various energy carriers to facilitate the transportation of renewable hydrogen from offshore renewable electricity sources;
- 7.6. a more thorough understanding and a deeper analysis of the challenges with regard to transmission lines within hybrid projects in general, and in particular with regard to the multiple implications of a categorisation of these cross-border transmission lines as interconnectors under the current EU electricity market rules and of possible concepts for market arrangements;
- 7.7. on this basis, a solution regarding electricity market arrangements at Union level that enables the swift realisation of joint and hybrid offshore energy projects and ensures an efficient utilisation of grid and market resources and the effective grid and market integration of offshore renewable electricity; in this context, also distributional effects on costs and benefits of market actors and Member States, repercussions on national renewable energy support schemes and legal uncertainties need to be addressed in order to enable efficient investment in offshore renewable energy; any solution should ensure the secure and cost-effective operation of the electricity system;
- 7.8. enhanced R&I across the Union and coordination thereon among Member States for offshore renewable energies, including less mature technologies such as floating offshore wind as well as offshore wind in arctic conditions, floating solar, and the energy of waves, currents and tides, in order to reduce the costs of technologies and support their deployment, as well as demonstration of key grid technologies needed for an integrated offshore renewable energy system;

- 7.9. exploring options for a better alignment between the technical standards and specifications of components included in offshore wind energy generation and transmission (fixed or floating) to facilitate the scale-up of an enlarged pan-European supply chain. Such alignment could also encompass components in other ocean energy technologies, namely tidal and wave, to the extent possible, contributing to a reduction of costs in these sectors;
8. **WELCOMES THE COMMISSION'S OFFSHORE RENEWABLE ENERGY STRATEGY** as an important basis for discussions with Member States and further work at Union level in order to tap the technological and physical potential of offshore renewable energies, which will be crucial in order to achieve Europe's energy and climate targets for 2030 and become climate neutral by 2050.
9. **CALLS ON THE COMMISSION** to ensure swift follow-up to these conclusions and the EU Offshore Renewable Energy Strategy, in view of the additional efforts needed to achieve the objective of climate neutrality, by preparing, in close cooperation with the Member States a proposal for an 'enabling framework' at Union level for cross-border and other relevant national renewable energy projects, addressing the needs identified under paragraphs 6 and 7, consisting of, inter alia:
- 9.1. guidance on concluding bilateral and multilateral IGAs between Member States on cross-border renewable energy projects, including a blueprint for such agreements, guidance for relevant cooperation models with respect to the voluntary opening of national support schemes including joint tenders and joint support schemes, and guidance on CBA and CBCA, as well as coordination between them, for cross-border projects;
- 9.2. an overview of relevant EU financing instruments together with a proposal for an improved and more effective use of existing Union funds by key Union instruments in order to facilitate the realisation of cross-border and national renewable energy projects by operationalising the funding of the relevant instruments at Union level, in particular the enabling function of the Union Renewable Energy Financing Mechanism, building on the European Recovery Plan;

- 9.3. guidance on how coordination among Member States in maritime spatial planning and offshore grid planning could be improved and enhanced, including on onshore grid development and the connection of offshore renewable energies, as well as on technical standards;
- 9.4. as regards hybrid offshore energy projects, a more thorough and in-depth analysis of the implications and concepts as outlined in 7.6., inter alia to be included in an impact assessment relating to only the relevant provisions of EU legislation, and how only those provisions could be adapted for such hybrid projects, in a stable legal investment framework, ensuring both the functioning of the internal market and the conditions for electricity generation and integration with a view to facilitating the investments necessary for achieving the EU's climate and energy targets; an assessment how a swift realisation of hybrid projects and sufficient flexibility for testing different and innovative options could be facilitated in the meantime and a proposal, based on this analysis and on the experiences with hybrid projects, for a long-term solution in line with the elements outlined in 7.7.;
- 9.5. support for R&I in renewable energy generation and grid technologies as well as grid integration technologies, including storage, in the Horizon Europe work programmes for 2021 and 2022 including tailored calls that take into account the technological and geographic specificities of all Member States, and intensified scientific research on the cumulative impact on the marine environment and on bird migration and circularity by design and an update of the SET Plan to reflect the importance of renewable energy, in particular offshore, to facilitate an enhanced cooperation and exchange among Member States on these topics;
- 9.6 to facilitate the creation of a European Offshore Renewable Energy Forum that will bring together Member States, regulatory authorities and relevant stakeholders with the purpose of fostering regional cooperation and the exchange of best practices in the area of offshore renewable energies.
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