

**LEGAL PROPOSALS TOWARDS A JUST ENERGY TRANSITION:
THE CASE OF OFFSHORE WIND FARMS IN SPAIN WITHIN THE
EUROPEAN CONTEXT¹**

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1. INTRODUCTION

1.1 The Context of Offshore Wind Energy in Spain

Within marine renewable energies (MRE), offshore wind farms (OWF) have undergone a strong expansion in recent years, reaching 55,678 MW of installed power worldwide, and 27,814 MW at the European level³.

In Spain, however, despite the presentation of numerous offshore wind farm projects since the beginning of the 21st century, various technical, socioeconomic, and regulatory factors have slowed down the development of these initiatives. Indeed, the depth of Spanish marine waters, added to the initial state of the art (where floating installations were not yet considered an economically viable alternative)⁴, the suspension and elimination of premium systems (feed-in tariff and feed-in premium) for renewable energies as a result of the continuous modifications of their remuneration regime (which discouraged potential

³ IRENA (2021). Statistics Time Series. Trends in Renewable Energy. Available at: <https://irena.org/Statistics/View-Data-by-Topic/Capacity-and-Generation/Statistics-Time-Series>.

⁴ A. COLMENAR-SANTOS, J. PERERA-PEREZ, D. BORGE-DIEZ, D., C. DEPALACIO-RODRÍGUEZ, *Offshore wind energy: A review of the current status, challenges and future development in Spain*, in *Renew Sustain Energy Rev*, 64, 2016, 1–18. <https://doi.org/10.1016/j.rser.2016.05.087>

investors)⁵, the configuration of a long and complex licensing procedure⁶, and strong local opposition (mainly from coastal municipalities, local associations, and fishermen's associations)⁷, hindered the development of these technologies.

However, at present, some of these aspects have been overcome with the development of floating wind energy, which allows operation in deeper waters and farther from the coast, and the increase in the competitiveness of said technologies. Likewise, the Spanish government currently seems to be strongly boosting the future development of these technologies. In this sense, as indicated in the *Roadmap on Offshore Wind: The Law on Climate Change and Energy Transition* and the *Integrated National Integrated Energy and*

⁵ J. SERRANO, R. LACAL-ARÁNTGUIL, *A review of regulatory framework for wind energy in European Union countries: Current state and expected developments*, in *Renew Sustain Energy Rev.*, 56, 2016, 588-602.

⁶ C. LE LIÈVRE, A.M. O'HAGAN, *Legal and Institutional Review of National Consenting Systems*, Deliverable 2.2. RICORE Project. European Union. 2015; and, A. VÁZQUEZ, S. ASTARIZ, G. IGLESIAS, *A strategic policy framework for promoting the marine energy sector in Spain*, in *J. Renew. Sustain. Energy*, 7, 2015, 061702. <https://doi.org/10.1063/1.4938405>. It should be clarified that Spain is a decentralized state where the Estate and the Autonomous Regions have different powers (see articles 148 and 149 of the Spanish Constitution of 1978). Unlike the case of onshore wind farms of less than 50 MW of installed capacity, where the Autonomous Regions have the power to authorize the devices that are to be located in their respective territory, the power to authorize the installation of electricity generation facilities that are to be located in the sea (regardless their installed capacity), such as the case of MRE (and, in particular, OWF) belongs to the state (as well as the power of authorizing onshore wind farms of more than 50 MW of installed capacity). See article 3.13 of the Law 24/2013, of December 26, on the Electricity Sector. Currently the administrative procedure for the authorization of MRE and OWF projects in the territorial sea is regulated by Royal Decree 1028/2007 (and complemented by Royal Decree 1955/2000).

⁷ M.I. GONZÁLEZ, B. ESTÉVEZ, *Participación, comunicación y negociación en conflictos ambientales: energía eólica marina en el mar de tráfalgar*, *ARBOR ciencia pensamiento y cultura*, CL XXXI 715 Septiembre-Octubre, 2005, 377-392 ISSN: 0210-1963; J. SANZ, *La energía eólica marina en el marco de la ordenación de los espacios marinos*, in J.F. ALENZA (Ed.), *La regulación de las energías renovables ante el cambio climático*, Thomson Reuters Aranzadi, Cizur Menor, Navarra, 2014, 387-425; O. TODT, M.I. GONZÁLEZ, B. ESTÉVEZ, *Conflict in the sea of Trafalgar: offshore wind energy and its context*, *Wind Energy*, 14, 2010, 699-706, see: <https://doi.org/10.1002/we.446>.

Climate Plan, it is expected to reach between 1 and 3 GW of offshore wind energy installed capacity by 2030.

Currently, Royal Decree 150/2023, of February 28 -in accordance with Royal Decree 363/2017, which transposes Directive 2014/89/EU- approves Spanish Marine Spatial Plans (hereinafter MSPs). These plans establish a space-time distribution of the main present and potential uses and activities to be developed in the marine environment. Specifically, 5 MSPs have been prepared for the Spanish Government, one for each marine demarcation (North Atlantic, South Atlantic, Levantino-Balear, Canaria, and Estrecho-Alborán). In these MSPs, in accordance with different technical, socioeconomic, and biodiversity protection and navigation safety criteria, numerous areas have been identified for the future installation of offshore wind farms, which have been catalogued as "Zones of High Potential for the Development of Commercial Offshore Wind Power" (ZAPER)⁸, aimed at favouring the future development of offshore wind farms within them. In these areas, a greater number of interactions with other activities have been found, so it is not surprising that during the processing of specific projects, more requirements will be raised in order to guarantee compatibility with such uses⁹.

⁸ Numerous ZAPERS have been selected (in the Canarian demarcation, in Estrecho-Alborán, in Levante-Balearic, and in the North Atlantic), identifying their interactions with some Priority Use Zones, or High Potential Zones, or with other uses that must be taken into account in detail when the projects are processed, in particular with the protection of biodiversity and with aerial easements (mainly in the Canary Islands demarcation), as well as with fishing activity, with aerial and submarine military exercises (especially in the North Atlantic demarcation).

⁹ A detailed analysis of the influence of international and EU legal frameworks on the protection and management of the marine environment in the face of the expansion of marine renewable energies can be seen in C. SORIA-RODRÍGUEZ, *The international regulation for the protection of the environment in the development of marine renewable energies in the EU*, in *Review of European, Comparative & International Environmental Law (RECIEL)*, 30, 1, 2021, 46-60; and ID., *The European environmental regulation of marine renewable energies*, in *Review of European, Comparative & International Environmental Law (RECIEL)*, 29, 1, 2020, 95-106.

Having already approved the MSPs, the promoters will be able to submit their applications, which will be processed in accordance with the licensing process, which is currently regulated by RD 1028/2007 (a modification of which is expected in the near future, with a view to adapt it to the development of floating wind technology and the new reality of MSPs).

The process of preparing these MSPs has not been peaceful and has caused suspicion in and opposition from several local coastal entities and sectors of activities traditionally linked to the sea, such as fishermen's associations. In the same vein, a sector of the legal literature has also been critical of the MSP¹⁰, which criticizes the excessive importance that the MSP of the North Atlantic marine demarcation gives to offshore wind energy at the expense of the detriment of other traditional uses such as fishing and aquaculture.

1.2 Offshore Wind Farms and Conflicts with Coastal Communities and Traditional and Local Stakeholders

As noted by scientific literature, in many cases, local communities and stakeholders perceive the development of offshore wind energy in the vicinity of their coasts as a threat to their interests and livelihoods, and hence they strongly oppose such installations. This phenomenon, called “Not in My Backyard”, can result in lengthy litigation and the stagnation, cancellation, and delays in the processing of these projects¹¹. Various examples of this can be found on the international scene, such as in the case of the UK, where conflicts

¹⁰ E.g., M. GARCÍA, *La eólica marina ante la ordenación del espacio marino: as cousas polos seus pasos*, in *Actualidad Jurídica Ambiental*, 121, 2022, 43-53.

¹¹ X. RECIO-BLANCO, *Finding the adequate legal framework for the deployment of Ocean Renewable Energy through area-based management*, 2015, available from: https://works.bepress.com/xiao_recio-blanco/.

with fishermen have been detected over the use of sea space¹², and in general, with other uses in the maritime spatial planning¹³; or, in the case of the USA, where clashes with tourism and with coastal recreational uses can be seen¹⁴. In particular, the case of the Cape Wind Project in Nantucket Sound off Cape Cod (Massachusetts) stands out, where local residents were concerned about the landscape impact of the project, as well as the possible reduction in tourism and the value of their properties. Also, a local native tribe was concerned that the offshore wind farm project might affect their ancient traditions over an area considered sacred by them. In addition, environmental and conservation associations expressed their concern that some threatened species could be affected by such devices¹⁵.

In the case of Spain, this phenomenon of strong local opposition from coastal municipalities, local conservation associations, and traditional fishermen has been gestating since the first offshore wind farm projects were presented at the beginning of the 21st century.

¹² P. TODD, *Marine renewable energy and public rights*, *Mar. Policy*, 36, 2012, 667-672. DOI: 10.1016/j.marpol.2011.10.020.

¹³ D. TOKE, *The UK offshore wind power programme: A sea-change in UK energy policy?*, in *Energy Policy*, 2, 39, 2011, 526-534.

¹⁴ A. BATES, J. FIRESTONE, *A comparative assessment of proposed offshore wind power demonstration projects in the United States*, in *Energy Res. Soc. Sci.*, 10, 2015, 192-205, see.: <https://doi.org/10.1016/j.erss.2015.07.007>; J. FIRESTONE, W. KEMPTON, M.B. LILLEY, K. SAMOTESKUL, *Public acceptance of offshore wind power: does perceived fairness of process matter?*, in *J. Environ. Plan. Manag.*, 55, 10, 2012, 1387-1402, doi: 10.1080/09640568.2012.688658; G. PARSONS, J. FIRESTONE, I. YAN, J. TOUSSAINT, *The effect of offshore wind power projects on recreational beach use on the east coast of the United States: Evidence from contingent-behavior data*, in *Energy Policy*, 144, 2020, 111659. <https://doi.org/10.1016/j.enpol.2020.111659>; T. SMYTHE, D. BIDWELL, A. MOORE, H. SMITH, J. MCCANN, *Beyond the beach: Tradeoffs in tourism and recreation at the first offshore wind farm in the United States*, in *Energy Res. Soc. Sci.*, 70, 2020; 101726, see: <https://doi.org/10.1016/j.erss.2020.101726>.

¹⁵ C. LOVE, *Case Study: Cape Wind Project*, *National Geographic*, 2014, available from: <https://www.nationalgeographic.org/news/case-study-cape-wind-project/>.

Thus, for example, in the province of Cádiz, in front of Cape Trafalgar (on the coasts of the fishing municipalities of Conil de la Frontera and Barbate, where various developers requested permits to install more than 500 offshore wind turbines in an area of 20 square metres), coastal communities were opposed to these projects, concerned about the interference of offshore wind farms in local economic and cultural traditions (such as artisanal fishing and, in particular, trap fishing) and the impact on tourism as a result of the visual impact derived from wind turbines¹⁶. Additionally, in Galicia, there was a strong opposition – mainly by fishermen's guilds – towards the proposal to install 45 offshore wind turbines in the vicinity of the Malpica and Carnota Lira coasts¹⁷. Likewise, the defence committee of the Rías Altas – an environmental group – has shown its opposition to the installation of such projects in Galician Estuaries through the allegations it presented against the Draft of Royal Decree 363/2017, by which it transposes Directive 2014/89/EU and regulates the maritime spatial planning¹⁸. Similarly, the Galician Federation of Fishermen's

¹⁶ M.I. GONZÁLEZ, B. ESTÉVEZ, *Participación, comunicación y negociación en conflictos ambientales: energía eólica marina en el mar de trafalgar*, *ARBOR ciencia pensamiento y cultura*, CL XXXI 715 Septiembre-Octubre, 2005, pp. 377–392, ISSN: 0210-1963; J. SANZ, *La energía eólica marina en el marco de la ordenación de los espacios marinos*, in J.F. ALENZA (Ed.), *La regulación de las energías renovables ante el cambio climático*, Thomson Reuters Aranzadi, Cizur Menor, Navarra, 2014, pp. 387–425; O. TODT, M.I. GONZÁLEZ, B. ESTÉVEZ, *Conflict in the sea of Trafalgar: offshore wind energy and its context*, in *Wind Energy*, 14, 2010, 699–706. <https://doi.org/10.1002/we.446>.

¹⁷ see: Faro de Vigo. Las cofradías de pescadores rechazan los parques eólicos marinos en Galicia. Available at: <https://www.farodevigo.es/economia/2280/cofradias-pescadores-rechazan-parques-eolicos-marinos-galicia/4097.html>

¹⁸ Spanish Government. Memoria del Análisis de Impacto Normativo (MAIN) del proyecto del Real Decreto 363/2017. Available at: <https://transparencia.gob.es/servicios-buscador/contenido/normavigente.htm?id=NormaEV24D2-20171401&lang=en&fcAct=2022-01-25T01:58:49.964Z> (last Accessed on: 19.07.2022).

Guilds has recently expressed its rejection of the installation of the San Cibrao and San Brandán offshore wind farms, proposed by Iberdrola for A Mariña and Ortegal¹⁹.

1.3. The Connection of This Phenomenon with Energy Justice and, in particular, Distributive Justice

In this scenario, energy justice – considered by legal literature as one of the basic principles of energy law²⁰ – comes into play²¹. In this context, as McCauley *et al* point out²², the energy transition is going to generate new sensations of injustice around the processes of community engagement and involvement.

¹⁹ See: La Voz de Galicia, *Los parques marinos que se plantean para A Mariña y Ortegal invaden varios caladeros de pesca*. Available at: <https://www.lavozdeg Galicia.es/noticia/somosmar/2021/06/23/parque-marinos-plantan-marina-ortegal-invaden-varios-caladeros-pesca/00031624476059608121649.htm>. Among their different arguments, they cite the recent Report of the European Parliament Fisheries Committee (Rapporteur: Peter van Dalen) of 01.06.2021: Effects of offshore wind farms and other renewable energy systems in the fisheries sector (2019/2158(INI)).

²⁰ R.J. HEFFRON, A. RONNE, A. BRADBROOK, J.P. TOMAIN, K. TALUS, *A treatise for energy law*, in *J. World Energy Law Bus.*, 11, 1, 2018, 34-48. <https://doi.org/10.1093/jwelb/jwx039>.

²¹ Indeed, as stated in the preamble to the Paris Agreement (2015), reached at COP 21, and recently emphasized by the Glasgow Climate Pact (2021), reached at COP 26, “*collaboration across sectors and all parts of society*” is essential to deliver effective climate action and a *just transition*. It includes specific actions to bring more coherence and focus to work on ocean and land as well as *encouraging local, regional, national and cross-sectoral partnerships*.

²² D. MCCAULEY, R. HEFFRON, *Just Transition: Integrating climate, energy and environmental justice*, in *Energy Policy*, 119, 2018, 1-7. DOI: 10.1016/j.enpol.2018.04.014.

As del Guayo indicates²³, "distributive justice" is included within "energy justice", consisting of an equitable distribution of the burdens and benefits of energy activities. In the same vein, as highlighted by Jenkins *et al*²⁴, distributive justice is related to the distribution of costs, risks, and benefits among the different actors. In this sense, in relation to the generation of energy, both the location of the production facilities and the re-distribution of obtained benefits are important factors to be considered:

On the one hand, the coastal municipalities in whose vicinity the offshore wind farms are located are exposed to a greater number of social and economic impacts²⁵. Likewise, Diaz points out that such devices can affect different strategic areas of special local socio-economic importance, such as tourism and fishing²⁶. Indeed, the location of production facilities may arise (distributive) justice concerns among nearby communities²⁷. In this sense, the global energy system is inherently unequal in relation to the places where such technologies are located and who can access their outputs, coinciding in many cases with their location in the vicinity of socially disadvantaged areas²⁸.

²³ I. DEL GUAYO CASTELLA, *Concepto, contenidos y principios del derecho de la energía*, in *Revista de Administración Pública*, 212, 2020, 309-346. doi: <https://doi.org/10.18042/cepc/rap.212.12>.

²⁴ K. JENKINS *et al.*, *Energy justice: A conceptual review*, in *Energy Res. Soc. Sci.*, 11, 2016, 174-182. <https://doi.org/10.1016/j.erss.2015.10.004>.

²⁵ B. BLESÁ, *Nuevas tecnologías que contribuyen a mitigar el cambio climático: las instalaciones sostenibles en el mar territorial*, in *Revista Aranzadi de derecho Ambiental*, 2010, 339-356.

²⁶ V. DIAZ, *Los retos de la energía eólica marina en España: el papel de las C.C.A.A. y la ordenación de los espacios marinos ante la Directiva 2014/89/UE*, in *Actualidad Jurídica Ambiental*, 56, 2016, 8-28.

²⁷ K. JENKINS *et al.*, *Energy justice: A conceptual review*, cit., 174-182. <https://doi.org/10.1016/j.erss.2015.10.004>.

²⁸ D. MCCAULEY, V. RAMASAR, R. HEFFRON, B. SOVACOOOL, D. MEBRATU, L. MUNDACA, *Energy justice in the transition to low carbon energy systems: Exploring key themes in interdisciplinary research*, in *Appl. Energy*, 2019, 233-234: 916-92, <https://doi.org/10.1016/j.apenergy.2018.10.005>; B. SOVACOOOL, R. HEFFRON, D. MCCAULEY, A.

On the other hand, the redistribution of benefits can increase feelings of justice and fairness²⁹. The energy transition carried out in Germany (*Energiewende*) based on the replacement of large-scale fossil fuels and nuclear sources in the hands of a few large companies by decentralizing renewable energy production facilities can be seen as an example aimed at addressing distributive injustices in terms of benefits³⁰. In this sense, as Kerr *et al* point out³¹, tangible positive effects such as local job opportunities or community payments could drive public attitudes. In the same vein, as highlighted by the European Economic and Social Committee³² and Directive 2018/2001 (recitals 63 and 70), the development of renewable energy community projects can represent an economic opportunity for citizens, SMEs, local communities, and NGOs, helping to create jobs and local growth.

For all these reasons, the main objective of this research article is to identify and analyse, from a legal point of view, the main existing legal mechanisms aimed at guaranteeing the reception of community benefits (Section 2) and the financial participation in the implementation of such devices –in line with distributive justice– (Section 3) of local coastal communities and stakeholders affected by the planning, authorization, and

GOLDTHAU, *Energy decisions reframed as justice and ethical concerns*, in *Nat Energy*, 1, 2016, 16024, <https://doi.org/10.1038/nenergy.2016.24>.

²⁹ K. JENKINS *et al.*, *Energy justice: A conceptual review*, cit., 174-182. <https://doi.org/10.1016/j.erss.2015.10.004>.

³⁰ K. JENKINS *et al.*, *Energy justice: A conceptual review*, cit., 174-182. <https://doi.org/10.1016/j.erss.2015.10.004>.

³¹ S. KERR, L. WATTS, J. COLTON, F. CONWAY, A. HILL, K. JOHNSON, S. JUDE, A. KANNEN, S. MACDOUGALL, C. MCLACHLAN, T. POTTS, J. VERGUNST, *Establishing an agenda for social studies research in marine renewable energy*, in *Energy Policy*, 67, 2014, 694-702, available from: <https://doi.org/10.1016/j.enpol.2013.11.063>.

³² European Economic and Social Committee, *Cambiar el futuro de la energía: la sociedad civil como agente principal de la generación de energía renovable. Estudio del CESE sobre el papel de la sociedad civil en la aplicación de la Directiva sobre las fuentes de energía renovables de la UE, Informe Final*, 2015.

installation of offshore wind farms in Spain, highlighting their strengths and weaknesses and identifying good practices in line with the legal research agenda for ocean energy proposed by Wright *et al*³³, and the legal research agenda on community energy proposed by Savaresi³⁴. In this sense, regulatory developments and practices implemented in other countries (such as Denmark, Germany, or the United Kingdom) are identified in relation to renewable energy located both on land and at sea, as well as in several Spanish Autonomous Regions regarding onshore wind farms. This justifies the fact that, adopting a comparative approach in the following phases of this research work³⁵, some of these examples taken from other countries and some Spanish Autonomous Regions are studied parallelly in order to extract and propose new ideas to be implemented by Spanish law.

This analysis is conducted under the lens of energy justice³⁶, and, in particular, distributive justice³⁷. In this sense, this research studies the different possibilities that coastal communities and local stakeholders have to obtain community benefits aimed at compensating them for the impacts suffered due to these facilities, as well as the existing

³³ G. WRIGHT, A.M. O'HAGAN, J. DE GROOT, Y. LEROY, N. SOININEN, R. SALCIDO, M.A. CASTELOS, S. JUDE, J. ROCHETTE, S. KERR, *Establishing a legal research agenda for ocean energy*, in *Mar. Policy*, 63, 2016, 126-134. <https://doi.org/10.1016/j.marpol.2015.09.030>

³⁴ A. SAVARESI, *The Rise of Community Energy from Grassroots to Mainstream: The Role of Law and Policy*, in *J. Environ. Law*, 31(3), 2019, 487-510, <https://doi.org/10.1093/jel/eqz006>.

³⁵ G.M. MORÁN, *El derecho comparado como disciplina jurídica: la importancia de la investigación y la docencia del derecho comparado y la utilidad del método comparado en el ámbito jurídico*, in *Anuario da Facultade de Dereito da Universidade da Coruña*, 2002, 501– 530.

³⁶ L. MUNDACA, H. BUSCH, S. SCHWER, *'Successful' low-carbon energy transitions at the community level? An energy justice perspective*, in *Appl. Energy*, 218, 2018, 292-303, doi:10.1016/j.apenergy.2018.02.146.

³⁷ B.K. SOVACOOOL, M.H. DWORKIN, *Energy justice: Conceptual insights and practical applications*, in *Appl. Energy*, 142, 2015, 435-444, doi: 10.1016/j.apenergy.2015.01.002.

legal mechanisms aimed at favouring and encouraging the financial participation of such communities in offshore wind energy projects.

4. THE USE OF *COMMUNITY BENEFITS* TO COMPENSATE COASTAL COMMUNITIES AND LOCAL STAKEHOLDERS FOR THE IMPACTS DERIVED FROM THE OFFSHORE WIND FARM PROJECTS.

Generally, community benefits are more frequent and stronger regarding *onshore* renewable energy projects than in the case of MREs. In the latter case, payments are normally at the developer's discretion and usually consist of voluntary corporate social responsibility –mainly gifts aimed at contributing to good social or environmental causes – rather than strong benefit arrangements. This is because unlike what happens with *onshore* wind farms, where there are normally owners of land that are expropriated, or with which the developers negotiate a contract of purchase, surface right, or lease, in the case of *offshore* wind farms, such devices are located in a public domain space, over which private property is excluded.

As noted by Kerr and Weir³⁸, this situation may result from the fact that local coastal communities have less influence than those local communities that collectively hold land ownership (since the sea is a resource centralized by the State). One possible solution to this power imbalance between marine renewable energy developers and local coastal communities can be the adoption of institutional solutions through the approval of legal

³⁸ S. KERR, S. WEIR, *Community benefits schemes: Fair shares or token gestures?*, in G. WRIGHT, S. KERR, S. JOHNSON (eds.), *Ocean Energy: Governance Challenges for Wave and Tidal Stream Technologies*, Ed. 1, New York, NY: Routledge, 2018, ISBN: 978-1-315-61858-6, pp. 191-204.

norms that impose on marine renewable energy developers the obligation of making benefit payments to the coastal communities³⁹.

However, some countries have decided to financially compensate the nearby local communities and stakeholders affected by the negative externalities derived from marine renewable energy projects, such as noise or visual impact⁴⁰. Although these compensations usually consist of a sum of money (in the form of one-time payments, community funds, scholarships, etc.); they can also consist of non-monetary benefits, such as social or educational programs or developments for local tourism⁴¹.

On the other hand, the payment of these benefits can be made voluntarily by the promoters (for example, in England, Scotland, Wales, and the Netherlands)⁴², or it can be

³⁹ S. KERR, S. WEIR, *Community benefits schemes: Fair shares or token gestures?*, in G. WRIGHT, S. KERR, S. JOHNSON (eds.), *Ocean Energy: Governance Challenges for Wave and Tidal Stream Technologies*, cit., pp. 191-204.

⁴⁰ One example is the case of *community benefits* implemented in the UK for Offshore Wind Projects, which includes the establishment of Annual Community Funds, One-off Community Payments, Bursaries or Education Schemes, and One-off In-Kind Payments. See: S. KERR, S. WEIR, *Community benefits schemes: Fair shares or token gestures?*, in G. WRIGHT, S. KERR, S. JOHNSON (eds.), *Ocean Energy: Governance Challenges for Wave and Tidal Stream Technologies*, cit., pp. 191-204; S. KERR, J. COLTON, K. JOHNSON, G. WRIGHT, *Rights and ownership in sea country: implications of marine renewable energy for indigenous and local communities*, in *Mar. Policy*, 52, 2015, 108-115. DOI: 10.1016/j.marpol.2014.11.002.

⁴¹ I. HERRERA, *Distributive justice, community benefits and renewable energy: the case of offshore wind projects*, in R. FLEMING, K. HUHTA, L. REINS (eds.), *Sustainable Energy Democracy and the Law*, Brill Publishers, Leida, 2020.

⁴² In this sense, as Kerr *et al* show in relation to the community benefit schemes financed by the promoters of offshore wind farms for the benefit of local coastal communities in the UK, these include donations to “good causes”, such as wildlife conservation projects, schools, visitor centres, boardwalks, community centres, lifeboats, and student scholarship systems. These payments are generally very different, both quantitatively and qualitatively, from those related to onshore wind power. S. KERR, S. WEIR, *Community benefits schemes: Fair shares or token gestures?*, in

legally configured to be mandatory (as in Denmark). As Herrera points out⁴³, it will be precisely in this second case where the legislator will have to address several questions when setting specific criteria for the determination and delimitation of the beneficiaries of such compensations: Who should be the “beneficiaries”? One or several coastal municipalities?⁴⁴ Should other stakeholders or users of the sea affected by the facilities, such as fishermen (as it has been recognized in Norway), also be included in the beneficiaries? Should a maximum limit or radius be set between offshore wind farms and the municipalities when considering them included among the beneficiaries of these compensations?⁴⁵ A clear example of the difficulty in addressing these issues are the complaints that have been made in Portugal by several groups of fishermen who have felt discriminated against by being excluded from the compensatory payments made by the developer for the installation of an offshore wind farm

G. WRIGHT, S. KERR, J. JOHNSON (eds.), *Ocean Energy: Governance Challenges for Wave and Tidal Stream Technologies*, cit., pp. 191-204.

⁴³ I. HERRERA, *Distributive justice, community benefits and renewable energy: the case of offshore wind projects*, in R. FLEMING, K. HUHTA, L. REINS (eds.), *Sustainable Energy Democracy and the Law*, cit.

⁴⁴ This problem when identifying the beneficiaries of these compensations is increased by the difficulties in defining what is meant by a "community", due to the geographical scope of potential impacts [60].

⁴⁵ This has been a solution developed in Denmark through the "Green Subsidy Payments" system that affected communities can request through the corresponding competent administrative body (which will be in charge of recognizing them as such following the aforementioned proximity criteria). See Promotion of the Renewable Energy Act (Denmark). This criterion of greater geographical proximity is based precisely on the greater impact on the sound and visual impacts of these populations (which can normally extend up to a distance of 20 km). See: I. HERRERA, *Distributive justice, community benefits and renewable energy: the case of offshore wind projects*, in R. FLEMING, K. HUHTA, L. REINS (eds.), *Sustainable Energy Democracy and the Law*, cit.

in the area where they used to fish⁴⁶. Likewise, doubts may also arise when establishing who should be in charge of compensating: the government or the promoter of this new sea use?

In Spain, in relation to onshore wind farms, we find regulations in some Autonomous Communities⁴⁷ such as Castilla-La Mancha (through Law 9/2011) and Galicia (through Law 8/2009) that have established the creation of various funds which, along with other purposes, are mainly targeted at actions for the benefit of local entities affected by negative externalities (visual and/or acoustic impact) derived from such devices.

These funds are fed through the establishment of a fee (called "canon eólico") that the promoters of wind farms must pay⁴⁸, that is, an "environmental tax" through which the number of wind turbines located in a wind farm is taxed in a progressive way⁴⁹.

⁴⁶See: O MINHO, *Pescadores de Caminha e Viana vão exigir ao Governo compensação por parque eólico*, available at: <https://ominho.pt/pescadores-de-caminha-e-viana-va-exigir-ao-governo-compensacao-por-parque-eolico/>.

⁴⁷ It should be recalled, as noted in the footnote nº 2 that Spain is an autonomous State, divided into 17 Autonomous Communities. The Spanish State has exclusive powers over different matters (recognized in article 149 of the Spanish Constitution), while the Autonomous Communities have several powers recognized in article 148 of the Spanish Constitution (developed and specified in their respective Statutes of Autonomy). In relation to the powers in terms of terrestrial energy production (such as *onshore* wind farms), the Autonomous Communities have powers to regulate and authorize the installation of such devices in their respective territories provided that their installed capacity does not exceed 50 MW. Otherwise (or, in the case of devices located in the sea, that is: *offshore*), the competence to authorize and regulate the installation of such devices is in hands of the State.

⁴⁸A detailed study on these regulations in relation to such fees can be found in T.A. GÓMEZ, *Cánones eólicos en España: su regulación jurídica y conformidad al derecho español*, Papeles de Discusión IELAT, nº 4, Universidad de Alcalá, 2012. ISSN 2254-1551.

⁴⁹ Environmental taxation constitutes a technique aimed at reflecting the social costs derived from environmental deterioration in prices, falling on those who "pollute", in line with the "polluter pays" principle. Thus, these are taxes that has an extra-fiscal nature, whose admissibility has been recognized by the Constitutional Court and by the Spanish General Taxation Law (art. 2), admitting the possibility that they are oriented to the "achievement of economic, social or political that the Spanish Constitution considers worthy of public protection" (Constitutional

This fee ("canon eólico") system has been criticized by a sector of the legal literature (e.g., Lozano)⁵⁰ for understanding that what a tax on installations of production of renewable energy really does is discourage the protection of the environment with respect to the fight against climate change, instead constituting a tax for collection purposes rather than "ecological". On the other hand, other scholars understand that the non-innocuous nature of wind turbines on other elements of the environment such as fauna (particularly birds and bats), or their landscape impact, justify the development of these fiscal measures to alleviate such negative environmental impacts⁵¹. In general terms, we can say that, despite the controversial character that these fees have had⁵², the Courts (particularly the Court of Justice of the European Union, the Spanish Supreme Court, and the High Courts of Justice of Galicia

Court Judgment 37/1987 of March 26 and Constitutional Court Judgment 186/1993 of June 7). In this sense, the High Court of Justice of the Autonomous Community of Castilla la Mancha, in its Judgment of November 20, 2018 (Contentious-Administrative Chamber) has indicated that "Public Administrations in their respective sphere of competence (...) will promote the use of fiscal measures and other economic incentives to carry out private nature conservation initiatives, and to discourage those activities which have a negative impact on the conservation of biodiversity and the sustainable use of natural heritage", which includes, on the one hand, the regulation of tax benefits and, on the other hand, the creation of environmental tax figures (that is, extra-fiscal taxes). In relation to this issue, see: M. PASCUAL, *Sentencia del Tribunal Superior de Justicia de Castilla la Mancha de 20 de noviembre de 2018 (Sala de lo Contencioso-Administrativo, Sección 2, Ponente: Ricardo Estévez Goytre)*, in *Actualidad Jurídica Ambiental*, 89, 2019, 95-102.

⁵⁰ B. LOZANO, *A propósito del despropósito del canon eólico: una llamada de atención sobre la necesidad de mejorar la ordenación y el control de los tributos ambientales*, in *Revista Aranzadi de Derecho Ambiental*, 2017, 203-228.

⁵¹ M. PASCUAL, *Sentencia del Tribunal Superior de Justicia de Castilla la Mancha de 20 de noviembre de 2018 (Sala de lo Contencioso-Administrativo, Sección 2, Ponente: Ricardo Estévez Goytre)*, cit., 95-102.

⁵² In the claims and appeals presented before the courts against such fee, claimants alleged that it contradicted the EU and national objectives aimed at promoting and fostering the use of renewable energies and overlapped with other taxes (such as the tax on economic activities), producing double taxation and compromising the Principle of Economic Capacity.

and Castilla la Mancha) have supported the conformity of such "canon eólico" with the current legal system⁵³.

On the other hand, in relation to offshore wind farms, the payment of compensation or "community benefits" by the developers to the local coastal communities and affected stakeholders is not legally foreseen. It is true that the Law of Coasts (art 84) regulates one type of fees ("fees for use and occupation of the maritime public terrestrial-domain") by means of which the occupation and use of the Terrestrial Maritime Public Domain (granted through concessions) is taxed, and the amount collected is destined, in general, to the protection and improvement of these coastal and marine spaces⁵⁴. In particular, article 84.3.1.d contemplates the "occupation of works and installations in the territorial sea" destined for "the investigation or exploitation of mining and energy resources" (within which, offshore wind farms can be considered) as a "taxable event", setting the amount of 0.006 m euros per square metre of occupied surface as fee. However, unlike the aforementioned "canon eólico", in which the "active subject" (that is, the subject in whose favour the tax is accrued) is the Autonomous Community, in the "fees for use and occupation of the maritime public terrestrial-domain" the active subject is the State⁵⁵, which, although, dedicates the tax

⁵³ See: Judgment of the Court of Justice of the European Union (First Chamber), of September 20, 2017, cases C-215/16, C-216/16, C-220/16 and C-221/16, by which resolves the preliminary ruling raised in relation to the interpretation of Directive 2009/28/EC, on the promotion of the use of energy from renewable sources; Judgments of the Spanish Supreme Court of January 30, 2018, March 8, 2016 of March 23, 2018 and November 27, 2015; Judgments of the High Court of Justice of Galicia 193/20141, 152/2014, 1151/2014 and 1142/2014 of February 12, 2014; and Judgment of the High Court of Justice of Castilla la Mancha 518/2018 of November 20, 2018.

⁵⁴ L.M. ALONSO, H. TAVEIRA, *Tributos, aguas e infraestructuras*, Atelier Libros, Barcelona, 2012, ISBN: 9788492788934. According to Buxadé, what is taxed with this fee is not an economic activity per se, but different types of use of the public domain based on its intensity and the potential profitability of such use for the concession holder. J. BUXADÉ, *Fiscalidad y Utilización del DPM-T: en Particular, Cánones, Tasas y Precios Públicos*, in E. SÁNCHEZ, *El Derecho de Costas en España*, 1ª Ed. La Ley, Madrid, 2010, pp. 821-858. ISBN: 978-84-8126-527-9.

⁵⁵ As indicated in Article 84.1 of the Spanish Coastal Law.

revenue obtained to the protection and improvement of such spaces in general, it is not obliged to distribute them specifically with greater intensity for the benefit of those coastal municipalities that suffer more closely the negative impacts derived from offshore wind farms.

This does not prevent that, on a voluntary basis, the promoters and/or the competent authorities decide to negotiate the payment of community benefits to coastal municipalities and stakeholders.

3. THE POSSIBILITIES OF FINANCIAL PARTICIPATION OF COASTAL COMMUNITIES IN THE OFFSHORE WIND FARM PROJECTS AND THE CONSTITUTION OF RENEWABLE ENERGY COMMUNITIES.

In some countries, such as Germany or the UK, the possibility for local citizens or coastal municipalities to financially participate in offshore wind farms is voluntary (e.g., through voluntary shareholding options)⁵⁶.

An example of this is the Westermeerwind Offshore Farm (which allowed local residents to buy shares or bonds of the wind farm), or the EnBW Baltic 1 project (in which 19 German municipalities are co-owners, together with EnBW)⁵⁷, as well as the Butendiek offshore wind farm in Germany⁵⁸. In this sense, Germany has developed mechanisms aimed

⁵⁶ I. HERRERA, *Distributive justice, community benefits and renewable energy: the case of offshore wind projects*, in R. FLEMING, K. HUHTA, L. REINS (eds.), *Sustainable Energy Democracy and the Law*, cit.

⁵⁷ I. HERRERA, *Distributive justice, community benefits and renewable energy: the case of offshore wind projects*, in R. FLEMING, K. HUHTA, L. REINS (eds.), *Sustainable Energy Democracy and the Law*, cit.

⁵⁸ J. MARKARD, R. PETERSEN, *The offshore trend: Structural changes in the wind Power sector*, in *Energy Policy*, 37(9), 2009, 3545–3556. See: <https://doi.org/10.1016/j.enpol.2009.04.015>. It is convenient to distinguish, following

at encouraging local residents to invest in renewable energy projects, such as the establishment of financial incentives (such as FITs and FIPs) which have been decisive in encouraging this type of project promoted by local residents⁵⁹, the development of tax deduction systems, and project financing from tax credits⁶⁰. Likewise, it also highlights the important role of the "low-cost loans" that the KfW (German state development bank) offered to a large part of the projects promoted by local energy communities⁶¹.

In the case of the UK, a "community electricity right" was introduced in 2015 whereby individuals residing in a community (or groups co-connected with it) could buy a stake in new commercial offshore wind energy projects adjacent to the community

SAVARESI, different types of situations: those cases in which the local community takes the initiative and establishes a partnership with the commercial promoter (proactive shared ownership); and those other cases in which community members are simply offered the possibility of buying quotas in a project led by the commercial promoter (reactive shared ownership). A. SAVARESI, *The Rise of Community Energy from Grassroots to Mainstream: The Role of Law and Policy*, in *J. Environ. Law*, 31, 3, 2019, 487-510. <https://doi.org/10.1093/jel/eqz006>.

⁵⁹ C. ROMERO-RUBIO, *Barreras y oportunidades para el desarrollo de comunidades energéticas sostenibles en España. Estudio comparativo con Estados Unidos y Alemania*, Tesis Doctoral, 2015. Available at: <https://riuma.uma.es/xmlui/handle/10630/13331>; and C. ROMERO-RUBIO, JR DE ANDRÉS-DÍAZ, *Sustainable energy communities: a study contrasting Spain and Germany*, in *Energy Policy*, 85, 2015, 397-409. DOI: 10.1016/j.enpol.2015.06.012. As Jenkins *et al* point out by way of an example, the FITs used by Germany during the *Energiewende* were designed precisely to attract a wide range of contributors to such energy transition phenomenon, from citizens to small businesses beyond the "big four": K. JENKINS *et al.*, *Energy justice: A conceptual review*, in *Energy Res. Soc. Sci.*, 11, 2016, 174-182. <https://doi.org/10.1016/j.erss.2015.10.004>.

⁶⁰ J. MARKARD, R. PETERSEN, *The offshore trend: Structural changes in the wind Power sector*, in *Energy Policy* 37, 9, 2009, 3545–3556. <https://doi.org/10.1016/j.enpol.2009.04.015>.

⁶¹ IRENA, *Innovation landscape brief: Community-ownership models*, International Renewable Energy Agency, Abu Dhabi, 2020. ISBN 978-92-9260-176-8; C. NOLDEN, *Governing community energy—Feed-in tariffs and the development of community wind energy schemes in the United Kingdom and Germany*, in *Energy Policy*, 63, 2013, 543-552. DOI: 10.1016/j.enpol.2013.08.050.

(Infrastructure Act, 2015)⁶². Likewise, in countries such as the UK, where local authorities have limited powers in terms of energy governance, the role of “intermediaries” established by national and subnational governments has been key in helping communities in their interactions with both authorities and corporate actors, also in terms of knowledge transfer, promoting, coordinating and offering technical and even professional assistance⁶³. In the case of Wales, it is worth emphasizing the technical advice and information and help provided by Renew Wales, and, in the case of Scotland, it should be highlighted the elaboration by the government of assistance documents aimed at helping the develop of this type of project, such as the online toolkits and guidance documents⁶⁴. In the case of Ireland, in order to guarantee that a certain number of community renewable energy projects are successful, a concrete category in the auctions specifically for such projects has been established, which, in addition, benefit from the Renewable Electricity Support Scheme (consisting of a premium over the market price for 15 years)⁶⁵.

In other countries, such as Denmark, a legally regulated compulsory system was established. This has been in force between 2008 and 2020, and through which developers were compelled to offer at least 20% of those projects to residents and local companies that

⁶² A. SAVARESI, *The Rise of Community Energy from Grassroots to Mainstream: The Role of Law and Policy*, cit., 487, <https://doi.org/10.1093/jel/eqz006>.

⁶³ A. SAVARESI, *The Rise of Community Energy from Grassroots to Mainstream: The Role of Law and Policy*, cit., 487, <https://doi.org/10.1093/jel/eqz006>

⁶⁴ IRENA, *Innovation landscape brief: Community-ownership models*, cit., ISBN 978-92-9260-176-8.

⁶⁵ I. GALLEGO, *Comunidades de Energía y Transición Energética*, Aranzadi, Pamplona (España), 2022. ISBN: 9788413916514. In this regard, the Irish proposal to establish a new Renewable Electricity Support Scheme aimed at specifically supporting projects promoted by renewable energy communities that meet certain prequalification criteria is worth highlighting. See: IRENA, *Innovation landscape brief: Community-ownership models*, cit., ISBN 978-92-9260-176-8.

want to financially participate in them⁶⁶. Likewise, a higher feed-in tariff was offered for those projects that are composed at least 30% from community ownership⁶⁷. In addition, to help the development of offshore wind farms by local communities, Denmark issued guarantees aimed at financing preliminary investigations and applications for licenses for the installation of such devices, provided that these projects were promoted by a group of at least 10 local residents⁶⁸. Likewise, the implementation of “pilot projects” of community ownership of offshore wind farms (owned by local associations) stand out, as is the case of Samsø and Middelgrunden⁶⁹:

In relation to the Middelgrunden offshore wind farm, this project has been paradigmatic as it is the largest community-owned wind project in the world (formed by 20 turbines of 2 MW capacity each, near the port of Copenhagen)⁷⁰. It is 50% owned by the Copenhagen utility (which, in turn, is owned by the municipality of Copenhagen) and 50% owned by the cooperative formed for that purpose (“wind energy cooperative

⁶⁶ S. KERR, S. WEIR, *Community benefits schemes: Fair shares or token gestures?*, cit., 191-204; Danish Energy Agency, *Danish Experiences from Offshore Wind Development*, 2017. [Online]. Available from: https://ens.dk/sites/ens.dk/files/Globalcooperation/offshore_wind_development_0.pdf.

⁶⁷ Danish Energy Agency, *Danish Experiences from Offshore Wind Development*, cit. Available from: https://ens.dk/sites/ens.dk/files/Globalcooperation/offshore_wind_development_0.pdf.

⁶⁸ I. HERRERA, *Distributive justice, community benefits and renewable energy: the case of offshore wind projects*, in R. FLEMING, K. HUHTA, L. REINS (eds.), *Sustainable Energy Democracy and the Law*, cit. Likewise, the role of Denmark local banks in helping the financing of such community projects can be highlighted. See: J. ROBERTS, F. BODMAN, R. RYBSKI, *Community Power: Model Legal Frameworks for Citizen-owned Renewable Energy*, ClientEarth, London, 2014.

⁶⁹ Danish Energy Agency, *Danish Experiences from Offshore Wind Development*, cit. Available from: https://ens.dk/sites/ens.dk/files/Globalcooperation/offshore_wind_development_0.pdf

⁷⁰ IRENA, *Innovation landscape brief: Community-ownership models*, cit., ISBN 978-92-9260-176-8.

Middelgrundens Vindmoellelaug I/S” Middlegrunden co-operative”)71. At this point, the important work of "the Copenhagen Environment and Energy Office" stands out: first, creating a base group made up of citizens of the Copenhagen area interested in the project, and, later, establishing the aforementioned cooperative (which is hosted by such office, with the consultant EMU serving as secretary for the cooperative)72

In relation to the Samsø offshore wind farm, the backbone of the project has been the planning (e.g., the Renewable Energy Island Master Plan), communication (boosted by the adoption of clear guidelines regarding local participation and the existence of specific platforms for information exchange) and local ownership processes73. Likewise, the technological and technical support of the Danish government through "subsidies" and "tax incentives" in order to ensure the financial viability of such type of projects can be highlighted, thus providing economic incentives for local actors to start working on them, as well as the provision of technical assistance to such promoters that integrate local communities74.

71 H.C. SOERENSEN, J.H. LARSEN, F.A. OLSEN, J. SVENSON, S.R. HANSEN, *Middelgrunden 40 MW offshore wind farm, a prestudy for the Danish offshore 750 MW wind program*, in *The proceedings of the International Offshore and Polar Engineering (ISOPE 2000)*, Conference Seattle 2000, pp. 484-491

72 H.C. SOERENSEN, J.H. LARSEN, F.A. OLSEN, J. SVENSON, S.R. HANSEN, *Middelgrunden 40 MW offshore wind farm, a prestudy for the Danish offshore 750 MW wind program*, in *The proceedings of the International Offshore and Polar Engineering (ISOPE 2000)*, cit., 484-491.

73 L. MUNDACA, H. BUSCH, S. SCHWER, 'Successful' low-carbon energy transitions at the community level? *An energy justice perspective*, cit, 292-303. doi:101016/japenergy201802146; Danish Energy Agency, *Danish Experiences from Offshore Wind Development*, cit. Available from: https://ens.dk/sites/ens.dk/files/Globalcooperation/offshore_wind_development_0.pdf.

74 K. SPERLING, *How does a pioneer community energy project succeed in practice? The case of the Samsø Renewable Energy Island*, in *Renew Sustain Energy Rev*, 71, 2017, 884-897. DOI: 10.1016/j.rser.2016.12.116

Within the framework of the European Union, EU Law seems to be committed to encourage the development of these projects that generate renewable energy at a decentralized level⁷⁵. Thus, the EU Directive 2018/2001, on the promotion of the use of energy from renewable sources (Art. 22) provides for the constitution of "renewable energy communities" (REC) by the Member States, while the EU Directive 2019 /944, on common rules for the internal market for electricity (Art. 16)⁷⁶, contemplates the constitution of "Citizen Energy Communities" (CCE). The fundamental difference between the two definitions lies in the more restrictive nature of the RECs, compared to the CCEs, as the first ones only are linked to renewable energy sources. Likewise, as Gallego and Lowitzsch *et al* point out⁷⁷, another difference lies in the fact that it is only in the case of the RECs that the States are obliged, in accordance with EU law, to develop a legal framework that encourages and facilitates their development (not in the case of the CCE).

Unlike other countries such as Greece, which, following the provisions of EU Law, have developed a regulatory framework for local energy communities⁷⁸, in Spain, although various instruments of a political or strategic nature exist, such as those prepared by the IDAE

⁷⁵ A detailed analysis of the implications of current EU legal framework in the role of community ownership in the energy transition in Europe can be seen in J. ROBERTS, *Power to the people? Implications of the Clean Energy Package for the role of community ownership in Europe's energy transition*, in *Review of European, Comparative & International Environmental Law (RECIEL)*, 29, 2020, 232–244.

⁷⁶ It should be noted that, at first, another term was used in the draft of this Directive: "Local energy communities".

⁷⁷ I. GALLEGO, *Comunidades de Energía y Transición Energética*, cit. ISBN: 9788413916514. Available at: [guia_para-desarrollo-instrumentos-fomento_comunidades_energeticas_locales_20032019.pdf](#); J. LOWITZSCH, C.E. HOICKA, F. J. VAN TULDER, *Renewable energy communities under the 2019 European Clean Energy Package – Governance model for the energy clusters of the future?*, In *Renew Sustain Energy Rev.*, 122, 2020, 109489. DOI: 10.1016/j.rser.2019.109489

⁷⁸ G. FAJARDO, M. FRANTZESKAKI, *Las comunidades energéticas en Grecia*, in *Revista de Estudios Cooperativos*, 2021; 137: 1-15. <https://dx.doi.org/10.5209/REVE.71866>

on aid and incentives for energy communities⁷⁹, or the (post-COVID-19 crisis) Recovery, Transformation and Resilience Plan⁸⁰, no regulatory framework on renewable energy communities has yet been developed.

Only Royal Decree-Law 23/2020, of June 23, which approves measures in the field of energy and in other areas for economic reactivation, through the modification of several articles of Law 24/2013, of June 26 December, of the electricity sector refers to the "Renewable Energy Communities" (REC) and defines them as: *"legal entities based on open and voluntary participation, autonomous and effectively controlled by partners or members that are located in the vicinity of the renewable energy projects that are owned and developed by such legal entities, whose partners or members are natural persons, SMEs or local authorities, including municipalities and whose primary purpose is to provide environmental, economic or social benefits to their partners or members or to the local areas where they operate, rather than financial gain"*.

Two basic characteristics or requirements related both by their *members* and by the *objective* such energy communities must pursue emerge from the legal concept⁸¹:

⁷⁹ Available at: IDAE, *Energy Communities. Within the framework of the Recovery, Transformation and Resilience Plan*, 2022. Available at: <https://www.idae.es/ayudas-y-financiacion/comunidades-energeticas>

⁸⁰ Available at: Spanish Government. *Recovery, Transformation and Resilience Plan*, 2020. Available at: <https://planderecuperacion.gob.es/> and <https://www.miteco.gob.es/es/ministerio/recuperacion-transformacion-resiliencia/contenido/>

⁸¹ Among the activities that can be developed in pursuit of this purpose, the generation of energy stands out. In this sense, it should be specified that, although, in many cases, when talking about renewable energy communities, self-consumption and other aspects other than production (such as trading) are thought of, this research work is focused on the field of the "production". It is simply convenient to cite, in relation to self-consumption, Royal Decree 244/2019, of April 5, which regulates the administrative, technical and economic conditions of self-consumption of electricity.

- a) “They must be integrated by natural persons, SMEs or local authorities, including municipalities”. As we can see, these are members who, in general, are located in the vicinity of the project⁸². Likewise, as can be seen, the participation of both natural persons and private legal entities is not excluded.
- b) And “its primary purpose must be to provide environmental, economic or social benefits to its partners or members or to the local areas where they operate, instead of financial gains”⁸³. This suggests that in general, renewable energy communities must not be for profit.

In relation to the first requirement, regarding the composition of the RECs, some authors such as González⁸⁴, defend the idea that the nature of the renewable energy communities must materialize in a mixed public-private legal regime, with a preponderance and influence of public administrations and institutions. That is, these authors support the idea that the law determines the presence of local entities as mandatory within these RECs. However, other scholars such as Gallego call for the adoption of RECs based on private forms

⁸² That is, following the distinction established by Savaresi between communities "of place" and communities of "interest", the definition set by the Spanish law (in line with that set in the EU Directive 2018/2001) opts for the first typology, which gives special importance to the geographical proximity of the members with the project. See: A. SAVARESI, *The Rise of Community Energy from Grassroots to Mainstream: The Role of Law and Policy*, <https://doi.org/10.1093/jel/eqz006>

⁸³ Following the conceptualization of energy communities developed by Walker and Devine-Wright, although the legal definition of the EU Directive 2018/2001 and Spanish law (as the first element demonstrates) seems to focus on the perspective of the “ process” (that is, who owns and manages the renewable energy project), we also find in this second element of the definition a reference to the “outcome” (that is: who benefits from the project: "its partners or members or the areas locations where they operate"). G. WALKER, P. DEVINE-WRIGHT, *Community renewable energy: What should it mean?.*, in *Energy Policy* , 36, 2, 200, cit., 497-500. <https://doi.org/10.1016/j.enpol.2007.10.019>.

⁸⁴ I. GONZÁLEZ, *Las «Comunidades energéticas locales» un nuevo desafío para las entidades locales*, in *Revista Vasca de Administración Pública*, 117, 2020, 147-193.

(that is, private legal entities), understanding that a possible demand for integration of local entities within such energy communities could hinder the implementation of private initiatives⁸⁵.

One problem that we find associated with the possibility of coastal municipalities becoming part of a renewable energy community aimed at promoting the installation of an offshore wind farm lies in the limited powers local governments have over the space where such devices are going to be installed. In this sense, the sea and the seabed form part of the maritime-terrestrial public domain, whose ownership belongs to the State, without prejudice to the fact that the Autonomous Communities and, to a lesser extent, the coastal municipalities may develop some powers over several of these zones. However, the municipal powers over the maritime-terrestrial public domain only reach the "terrestrial part" of it (that is, up to the maritime-terrestrial zone). The "marine part" is considered to be outside the territory of the municipality (that is, outside the "municipal area") and, therefore, local authorities cannot exercise powers over it. This makes it difficult for coastal municipalities to implement and integrate legal entities (such as consortiums or local public companies) aimed at developing offshore wind farms, as these facilities are located in the sea, that is: outside the municipal territory over which the local authorities deploy their powers⁸⁶.

⁸⁵ I. GALLEGO, *Comunidades de Energía y Transición Energética*, cit. ISBN: 9788413916514. Available at: [guia_para-desarrollo-instrumentos-fomento_comunidades_energeticas_locales_20032019.pdf](#)

⁸⁶ However, in the case of onshore wind farms the situation is different. This is because since these facilities are located "within the municipal term" it may be developed by entities made up of municipalities. In this sense, although the Spanish legal framework (the Law 7/1985 of 2 April, Regulator of Local Regime Bases: LRBRL) does not expressly attribute powers in energy matters to the municipalities, the doctrine (e.g., Mora) understands that this power is implicitly derived from the existing municipal powers in matters of environmental protection and urban planning. However, the reform of the LRBRL operated in 2013 imposed strict public expenditure limitations to municipalities, which can also constitute a stumbling block to the financial participation of local councils within the energy communities. See: M. MORA, *Energías renovables y eficiencia energética en el ámbito local: dispositivos*

Another factor is that residents of the coastal municipalities or local SMEs, of their own initiative, decide to set up (without involving public local entities or councils) a private entity aimed at promoting an offshore wind farm (such as, for example, a cooperative or a trading company). Within the existing legal instruments in the current regulations that could serve them – with certain limitations – as a basis when it comes to constituting various forms of renewable energy communities, the following stand out⁸⁷:

1) Cooperatives: some authors, such as Falcón-Pérez⁸⁸, propose to bet on this formula, as has been done in other countries, such as Denmark, Germany, or Greece, where Law 4513/2018 of January 22, which regulates Greek energy communities, defines them as civil cooperatives⁸⁹. In fact, in Spain there are already several renewable energy cooperatives, such as “Som Energía” and “Enercoop”, which are dedicated to both production and trading. Among the advantages of cooperatives, we can highlight their open, voluntary, autonomous and democratic nature (each member has the right to one vote, regardless of the amount of their financial contribution), which brings them closer to the legal definition of REC.

de intervención al alcance de los entes locales, in *Revista Catalana de Dret Ambiental*, 3, 1, 2012, 1-25. 10.17345/1237.

⁸⁷ Some authors, such as González advocate the convenience of establishing a specific regime (that is, developing a specifically created legal form in national law) for RECs, while other authors (e.g. Gallego) defend the idea of using the legal forms already existing in the Spanish legal system (with the necessary minor adaptations) to constitute them, as in the case of Greece, where an already existing specific (in this case, cooperative) form is established for energy communities. See: González, I. Las «Comunidades energéticas locales» un nuevo desafío para las entidades locales. *Revista Vasca de Administración Pública* 2020; 117: 147-193; and, I. GALLEGO, *Comunidades de Energía y Transición Energética*, cit., ISBN: 9788413916514.

⁸⁸ CE FALCÓN-PÉREZ, *Las cooperativas energéticas verdes como alternativa al sector eléctrico español: una oportunidad de cambio*, in *Actualidad Jurídica Ambiental*, 104, 2020, 50-108.

⁸⁹ G. FAJARDO, M. FRANTZESKAKI, *Las comunidades energéticas en Grecia*, in *Revista de Estudios Cooperativos*, 137, 2021, 1-15. <https://dx.doi.org/10.5209/REVE.71866>

2) It can also be implemented the use of limited liability companies (“SRL.”) or limited partnerships (“S. Com.”). A formula similar to the latter is used in Germany through the “GmbH & Co. KG”⁹⁰, through which both general partners and limited partners are established.

3) On the other hand, the Economic Interest Groupings (AIE) can be used, which are a type of special commercial companies that are constituted and created through the union of several companies or entrepreneurs. They are companies with legal personality, commercial and, at the same time, non-profit character, which are governed by Law 12/1991, of April 29 and, additionally, by the rules of the general partnership that are compatible with their specific nature. The purpose of the AIA is to facilitate the development or improve the results of the activity of its partners. Its object is limited exclusively to an auxiliary economic activity and not a substitute for that developed by its partners (who are subsidiary, personally and jointly and severally liable to each other for the AIE debts).

In relation to the future framework that has to be developed in Spain through which the EU Directive 2018/2001 will be transposed, it is convenient that it helps to overcome several technical-economical barriers faced by community renewable energy projects, and, in particular, offshore wind farms that are community-owned.⁹¹

In this sense, the Spanish legal framework should develop specific financial mechanisms aimed at supporting economically such community projects. As noted Romero-

⁹⁰ This is the abbreviation of *Gesellschaft mit beschränkter Haftung & Compagnie Kommanditgesellschaft*, which means “limited liability company and limited partnership”. C. ROMERO-RUBIO, *Barreras y oportunidades para el desarrollo de comunidades energéticas sostenibles en España. Estudio comparativo con Estados Unidos y Alemania*, cit. Available at: <https://riuma.uma.es/xmlui/handle/10630/13331>.

⁹¹ Indeed, the legal-regulatory system of a country is key when it comes to encouraging the development of locally owned offshore wind farms and energy cooperatives. See: J. MARKARD, R. PETERSEN, *The offshore trend: Structural changes in the wind Power sector*, 3545–3556. <https://doi.org/10.1016/j.enpol.2009.04.015>.

Rubio and de Andrés-Díaz and Capellán-Pérez *et al*⁹², the regulatory reforms conducted between 2012 and 2014, which involved the suspension and elimination of support, the special regime and the system of premiums (FITs and FIPs) for renewable energies were a hostile regulatory and economic context for renewable community energy projects. In this sense, the establishment of economic aids (through specific auctions) aimed particularly at supporting projects promoted by local energy communities, as has been widely carried out in countries such as Germany and Denmark, could be of great help for their expansion⁹³. State policy currently seems to be heading in this direction. In this sense, in 2021, the Spanish Government announced 100 million euros in aid to promote energy communities that will be distributed in 3 programs: CE-Aprende, CE-Planifica, and CE-Implementa. The first 2 programs will be aimed at helping interested individuals and organizations to set up energy communities (fundamentally through technical and legal assistance) and the third, once the energy communities have been set up, will be aimed at subsidizing renewable energy projects⁹⁴. This third phase or program will be held under a competitive bidding regime where the levels of social participation that the initiative has incorporated, its social benefits or the generation of employment will be included among the criteria for selecting the projects that benefit from the subsidy. In relation to this CE-Implementa program, the government (the Ministry for the Ecological Transition and the Demographic Challenge) has launched two

⁹² C. ROMERO-RUBIO, JR DE ANDRÉS-DÍAZ, *Sustainable energy communities: a study contrasting Spain and Germany*, cit., 397-409. DOI: 10.1016/j.enpol.2015.06.012; and I I. CAPELLÁN-PÉREZ, A. CELADOR, J. TERES-ZUBIAGA, *Renewable Energy Cooperatives as an instrument towards the energy transition in Spain*, cit., 1215-229. 10.1016/j.enpol.2018.08.064.

⁹³ M.M. SOKOŁOWSKI, *Renewable and citizens energy communities in the European Union: how (not) to regulate community energy in national laws and policies*, in *J. Energy Nat. Resour. Law*, 38, 3, 2020, 289-304. <https://doi.org/10.1080/02646811.2020.1759247> .

⁹⁴ Ministry for the Ecological Transition and Demographic Challenge. Press release. Recovery Plan 09/16/2021. Available at: https://www.miteco.gob.es/es/prensa/210916npcomunidadesenergeticas_tcm30-530797.pdf

calls for aid (of 40 million euros) for pilot projects of energy communities⁹⁵. However, marine renewable energies and, in particular, offshore wind energy, are not considered within such call for aids at the moment.

On the other hand, given that the development of offshore wind farms requires a high initial investment, in many cases it is necessary to apply to a bank for a loan. In this connection, the possibility of offering "loans with preferential conditions" for renewable energy communities becomes important in order to promote such community projects⁹⁶. In this sense, as Gallego and IDAE propose⁹⁷, soft credit lines (that is, loans with very favourable conditions for the borrower) can be used by public financial institutions such as the Instituto de Crédito Oficial (ICO)⁹⁸, following a similar example of the KfW in Germany. In a similar sense, Capellán-Pérez *et al* propose collaboration with "ethical banking" in order to complement the financing of these projects⁹⁹. Similarly, non-repayable grants are a notable

⁹⁵ In the area of electrical renewable energy, actions associated with biomass, biogas, onshore wind power, hydraulic power, and photovoltaic solar power will be eligible. See: IDAE Noticias, *El Gobierno abre dos convocatorias para proyectos piloto de comunidades energéticas*. Available at: <https://www.idae.es/noticias/el-gobierno-abre-dos-convocatorias-para-proyectos-piloto-de-comunidades-energeticas>

⁹⁶ It could also be helpful to start with pilot or demonstration projects, and even experimental areas, as has been the case of Samsø (in Denmark). See: IDAE, *Guía para el Desarrollo de Instrumentos de Fomento de Comunidades Energéticas Locales*, 2019. Available at: [guia_para-desarrollo-instrumentos-fomento_comunidades_energeticas_locales_20032019.pdf](#)

⁹⁷ I. GALLEGO, *Comunidades de Energía y Transición Energética*, cit. ISBN: 9788413916514. Available at: [guia_para-desarrollo-instrumentos-fomento_comunidades_energeticas_locales_20032019.pdf](#)

⁹⁸ It is a public bank (with the legal nature of a credit institution) attached to the Ministry of Economic Affairs and Digital Transformation. It is dedicated to promoting economic activities that contribute to the growth and development of the country, as well as to improve the distribution of national wealth.

⁹⁹ I. CAPELLÁN-PÉREZ, A. CELADOR, J. TERES-ZUBIAGA, *Renewable Energy Cooperatives as an instrument towards the energy transition in Spain*, in *Energy Policy*, 123, 2018; 215-229. 10.1016/j.enpol.2018.08.064.

option. The establishment of exemptions and reductions in fees and taxes (a system widely used in countries such as the US to promote the development of renewable energies) can also help renewable energy communities in order to face the high costs of initial investment¹⁰⁰.

Another obstacle faced by local energy communities is the difficulty to meet the necessary requirements of technical and economic capacity required by the legal framework to obtain authorization for the installation of such devices¹⁰¹. In this sense, the role of technical advisory bodies and economic development measures to support these communities, as took place in Denmark with Samsø, could help overcome this issue¹⁰². In the same vein, Gallego proposes the creation of a “single window” aimed at providing legal, technical, and administrative guidance and advice to all citizens which are interested in

¹⁰⁰ C. ROMERO-RUBIO, *Barreras y oportunidades para el desarrollo de comunidades energéticas sostenibles en España. Estudio comparativo con Estados Unidos y Alemania*, cit. Available at: <https://riuma.uma.es/xmlui/handle/10630/13331>. It is true that some forms of legal entities, such as cooperatives, already enjoy some tax advantages (such as tax benefits in tax on economic activities or reduced tax rates in corporate tax (see Law 20/1990, of December 19, on the tax regime of cooperatives). See: Falcón-Pérez, CE. Las cooperativas energéticas verdes como alternativa al sector eléctrico español: una oportunidad de cambio. *Actualidad Jurídica Ambiental* 2020; 104: 50-108.

¹⁰¹ I. HERAS-SAZARBITORIA, L. SÁEZ, E. ALLUR, J. MORANDEIRA, *The emergence of renewable energy cooperatives in Spain: A review*, in *Renew Sustain Energy Rev*, 94, 2018, 1036-1043. DOI: 10.1016/j.rser.2018.06.049. In this sense, see art 16.a) of Royal Decree 1028/2007, which establishes the administrative procedure for the authorization of marine renewable energy projects in the territorial sea, and art 53.4.d) of the Law 24/2013, of December 26, of the Electricity Sector. The reason of such requirements is the need of ensuring that the developer has the necessary technical and economic capacity to carry out the project adequately in practice, thus guaranteeing its proper implementation.

¹⁰² M.A. HELDEWEG, S. SAINTIER, *Renewable energy communities as ‘socio-legal institutions’: A normative frame for energy decentralization?*, in *Renew Sustain Energy Rev*, 119, 2020, 109518. <https://doi.org/10.1016/j.rser.2019.109518>. We will have to wait to see how the three programs planned in Spain to facilitate the development of renewable community energy projects will be developed and how the necessary legal-technical assistance will be implemented.

constituting a REC and promote such type of projects and helping them to process all the necessary steps of the procedures¹⁰³. Moreover, the establishment of “intermediaries” aimed at offering technical and even professional assistance to these energy communities can also be considered. Likewise, as highlighted IDAE¹⁰⁴, It could also be helpful to start with pilot projects, demonstration projects and even experimental areas, as has been precisely the case of Samsø (in Denmark).

Another way of promoting the financial participation of local residents in offshore wind projects could be to establish a system similar to the one that has been utilized in Denmark for the last few years, by setting regulations that require that renewable energy promoters offer a minimum percentage of shares of the projects to the local communities so that they have the opportunity to financially participate in the ownership of the projects. This system, as pointed out by Roberts *et al*¹⁰⁵, has the potential to ensure that such communities achieve benefits from the production of renewable energy while being actively involved in the energy transition. It is true that in some regions of Spain a similar system is already applied, although only at the regional level (in the Balearic Islands) and only in the case of onshore renewable energies that have not less than 5 MW of installed capacity. In these cases, the Balearic Law 10/2019 of February 22 on climate change and energy transition (art. 50) generally requires that at least 20% of the ownership of such projects is offered to those

¹⁰³ I. GALLEGO, *Comunidades de Energía y Transición Energética*, cit. ISBN: 9788413916514.

¹⁰⁴ IDAE, *Guía para el Desarrollo de Instrumentos de Fomento de Comunidades Energéticas Locales*, 2019. Available at: [guía_para-desarrollo-instrumentos-fomento_comunidades_energeticas_locales_20032019.pdf](#).

¹⁰⁵ J. ROBERTS, F. BODMAN, R. RYBSKI, *Community Power: Model Legal Frameworks for Citizen-owned Renewable Energy*, ClientEarth, London, 2014.

public or private individuals or legal entities located in the municipality where the installation is to be located or in the adjacent municipalities¹⁰⁶.

In short, and pending a regulatory development by which the EU Directive 2018/2001 will be transposed, it seems that Spain is beginning to bet on renewable energy communities, but is focusing on onshore wind power and solar projects, without considering the potential development of community offshore wind energy by coastal local communities. This is probably due not only to the magnitude and high investment needed to implement such marine renewable energy projects but also to the difficulties that municipalities and public local entities have in being able to integrate an energy community that develops projects located on the sea. This is because the municipalities do not have powers over the territorial sea or the EEZ or their seabed and subsoil. This does not prevent that may exist private initiatives in which citizens, associations, organizations, and SMEs decide to create and constitute a local energy community (for example, through the form of a cooperative) aimed at implementing this type of marine renewable energy projects. In this case, it will be necessary to wait for the mechanisms of economic, financial, and legal technical assistance incentives that the future Spanish Legal Framework will have to develop in order to transpose the EU Directive.

4. THE “JUST TRANSITION AGREEMENTS” AND THEIR PROJECTION IN THE OFFSHORE WIND FARM SECTOR

As indicated in Law 7/2021, of May 20, on climate change and energy transition, Spain must facilitate a just energy transition before 2050 through which the challenges posed by the ecological transition and of decarbonization. In this sense, Title VI of the Law 7/2021 provides for a set of measures, which include the approval every 5 years by the Government

¹⁰⁶ I. GALLEGO, *Comunidades de Energía y Transición Energética*, cit. ISBN: 9788413916514. Available at: [guia_para-desarrollo-instrumentos-fomento_comunidades_energeticas_locales_20032019.pdf](#) ISBN: 9788413916514.

of a Just Transition strategy (art. 27), through which the groups, sectors, companies and territories potentially vulnerable to the decarbonization process will be identified and the opportunities for creating economic activity and employment linked to the energy transition will be analysed, proposing policies aimed at it.

Moreover, within the framework of such Strategy, it is foreseen the elaboration of "Just Transition Agreements" (art 28), which will mainly be signed between the State and the Local Entities of geographical areas vulnerable to the energy transition. Likewise, these agreements are open to the participation of companies, organizations from the business sectors, trade unions, universities, educational centres, associations, and non-governmental environmental organizations and other interested or affected entities¹⁰⁷.

The main objective of these agreements is to promote economic activity and its modernization, as well as the employability of vulnerable workers and groups at risk of exclusion in the energy transition. In this sense, they will contain Commitments of the participating parties, including the companies benefiting from support measures for the transition; as well as the different measures adopted (tax and financial incentives, support for R+D+i, digitization, entrepreneurship, employment, social protection, and training activities). The practical implementation of these Agreements will be facilitated by the work

¹⁰⁷ It also highlights the adoption of agreements between trade unions and private sector companies in the field of marine renewable energy in order to improve the training and hiring of construction workers in these new sectors linked to the energy transition. In this sense see: NABTU. North America's Building Trades Unions (NABTU) And Ørsted Sign Landmark MOU for U.S. Offshore Wind Workforce Transition. Available at: https://nabtu.org/press_releases/nabtu-orsted-sign-landmark-mou/. In the same vein, and in connection with the energy communities, Capellán-Pérez *et al* highlight the usefulness of collaboration within the Renewable Energy Communities with unions in order to promote the creation of employment in their field of action. See: I. CAPELLÁN-PÉREZ, A. CELADOR, J. TERES-ZUBIAGA, *Renewable Energy Cooperatives as an instrument towards the energy transition in Spain*, cit., 1215-229. 10.1016/j.enpol.2018.08.064.

of the “Just Transition Institute” (an independent body attached to the Government), which will oversee providing technical, legal, and financial assistance.

Likewise, it should be noted that there is a strong connection between the policies aimed at achieving just energy transition (in particular, those measures focused on promoting Renewable Energy communities) and the Recovery, Transformation and Resilience Plan of October 2020, post-COVID-19¹⁰⁸. In this sense, within the third political lever of such plan (“Fair and Inclusive Energy Transformation”), the component 7 of the Plan consists of the “Deployment and integration of renewable energies”, for which it is foreseen, among other measures, the development of local energy communities, as well as promoting innovation and technological development of renewable energies, in particular, the promotion of offshore wind energy.

Regarding marine renewable energies, the Roadmap for the development of Offshore Wind and Ocean Energies in Spain (2021) points out that such clean energy sources can help to achieve the objectives of the Just Transition Strategy by creating jobs and revitalizing traditional (naval, metal, raw materials and energy) industries in coastal regions (in particular, see measure 2.6 of the Roadmap). In this sense, as Heffron *et al* point out¹⁰⁹, it is convenient to guide the measures and policies adopted at the regional and national level in terms of Just Transition towards investment in renewable technologies, in decarbonization initiatives or in areas of future renewable potential, such as, for example, the growing offshore wind potential that exist in many zones.

¹⁰⁸ Spanish Government. Recovery, Transformation and Resilience Plan, 2020. Available at: <https://planderecuperacion.gob.es/> and <https://www.miteco.gob.es/es/ministerio/recuperacion-transformacion-resiliencia/contenido/>.

¹⁰⁹ D. HEFFRON, D. MCCAULEY, “The Just transition” threat to our Energy and Climate 2030 targets, in *Energy Policy*, 2022; 165, 112949. <https://doi.org/10.1016/j.enpol.2022.112949>

Thus, for example, in the Just Transition Agreement of As Pontes (Galicia) ¹¹⁰, which address the processes of closing thermal power plants in the zone, it is proposed (as an alternative to such energy sources) to bet on offshore wind energy taking advantage of the existing wind potential in the area, as well as the available capacity to access to the electric transport network and the development of the wind energy industry. In particular, the agreement highlights the possibility of harnessing the powerful existing industry in the municipalities of Ferrol and Fene, dedicated mainly to the naval construction of military and civil ships as well as the fabrication of offshore wind facilities for both national and international clients.

5. CONCLUSIONS

On the one hand, in order to achieve an equitable distribution of the burdens and benefits derived from the installation of offshore wind farms, together with the idea of promoting renewable energy communities, payments by promoters or by the administration to the affected coastal communities and local stakeholders stand out. The system of collecting "canones eólicos" (fees) with the aim of feeding a fund aimed at compensating local entities that most closely suffer the impacts of (onshore) wind farms has been used by various Autonomous Regions. However, the use of such fees has been partly controversial, and it is difficult to implement a similar system at state level for (offshore) wind farms located in the marine environment. This is without prejudice to the fact that, either voluntarily (by the initiative of the promoters), or compulsorily (by the provision of institutions or

¹¹⁰ *Just Transition Agreement of As Pontes. Urgent Action Plan for coal districts and power plants in closure 2019-2021. Characterization and diagnosis*, November 2021, Convenio de Transición Justa de As Pontes Plan de Acción Urgente para comarcas de carbón y centrales en cierre 2019-2021 Caracterización y diagnóstico. Noviembre 2021. Available at: https://www.transicionjusta.gob.es/Convenios_transicion_justa/common/Galicia/CaracterizacionDiagnostico_CTJ_AsPontes_PuertoFerrol_10_01_22.pdf.

administrations), the payment of community benefits could be decided for the benefit of the local coastal communities and stakeholders affected by such devices. These community benefits may consist of both the payment of a sum of money (single or periodic), as well as non-monetary benefits of a social or ecological nature (for example, aimed at boosting tourism in the area or aimed at the education of its inhabitants), as has been conducted in other countries such as the UK, Germany, Denmark, the Netherlands, or Norway.

On the other hand, despite the difficulties that local coastal administrations (municipalities) have in participating financially in marine renewable energy community projects, mainly due to the lack of local competences over the part of the maritime-terrestrial public domain permanently covered by water (added to the limitations derived of the Principle of Budgetary Stability required by the LBRL), there is the possibility that citizens, SMEs, coastal stakeholders, municipal cooperatives and private associative or foundational organizations decide to set up a renewable energy community to support an offshore wind energy project. Nevertheless, these citizens and local stakeholders will need external support of a technical, economic, and financial nature to be able to undertake their investments and obtain the pertinent authorizations (like in the case of the community-led offshore wind farm in Samsø in Denmark). This support could be reinforced by its concretion through regulations, as in the case of Denmark. These measures could consist of the establishment of specific support mechanisms, such as a higher feed-in-tariff payment for those projects promoted by local renewable energy communities (following the Danish model), the offer of loans with preferential conditions (following the German example), the introduction of tax reductions or exemptions, the development of toolkits and the provision of technical, legal and economic assistance, and guidance through the role of agencies or intermediaries (such as in the UK case), and the implementation of pilot, demonstration or experimental projects (following the example of Samsø or Middelgrunden community-owned offshore wind farms).

Finally, the use of the "Just Transition Agreements" contemplated by the "Just Transition Strategy" and the Law 7/2021, with the assistance of the "Just Transition Institute", and, in connection to the implementation of the Recovery, Transformation and Resilience Plan, can help to boost the investment of offshore wind farms, using this new sector as an

opportunity to form and employ local workers who previously were dedicated to fossil fuel industries, which will progressively disappear as a result of the decarbonization and energy transition processes. Furthermore, these Just Transition Agreements can serve to bring together and improve coordination between the different state and local administrations, civil society, associations, NGOs, companies and trade unions.

Abstract. *The Spanish government has recently set the goal of installing between 1-3 GW of offshore wind farms by 2030. However, there have been strong protests from coastal communities, who identify the environmental and socio-economic risks posed by such devices. This paper explores the regulation of offshore wind farms in Spain under the lens of energy justice. In particular, it analyses the possibilities of using normative mechanisms in order to implement socio-economic benefits and financial participation of these communities on the development of such devices with the aim of pursuing distributive justice. To this end, examples in comparative law (the UK, Denmark and Germany) will be considered. The article concludes with the need of implementing measures aimed at establishing community benefits and assisting the development of community-owned offshore wind farms through the constitution of coastal renewable energy communities in line with Directive 2018/2001 EU using existing legal instruments, such as the creation of cooperatives. Likewise, the use of the just transition agreements may help to employ those local workers in the offshore wind sector who were previously engaged in the fossil fuel industries, which will progressively disappear because of the decarbonization process.*