A Battle for the Sea: Offshore Wind Crashes on the Galician Coast

Article by Maria Dios July 4, 2023

Plans for the expansion of offshore wind in Spain were met by protests from the fishing sector, environmentalists, and civil society. The biggest backlash has come from the North Atlantic marine region. Where the lack of dialogue has led to confrontation, can climate citizens' assemblies pave a way to just transition?

On the northern coast of Spain, Belén Teiga proudly steers her ship, the *Lighthouse Lady*. It is early morning, and the fisherwoman is sailing through the waters, fulfilling her inner child's vocation: to live out from the sea, as her predecessors had done for decades. She is from Malpica, a small fishing village on the Death Coast of Galicia, named due to the rugged cliffs and waters laced with strong currents that have sunk hundreds of ships and taken thousands of lives over centuries.

Despite the obstacles, fishing remains the main economic activity of its inhabitants. So it is for 35 years old Belén, who today sails showing a worried frown on her face. Where Belén has always fished, colossal wind turbines are set to rise. In spring this year, Spain mapped out the first delimitations for offshore wind farms and plans for Galicia are to hold the largest surface allocated for such projects. But the government's decision for this region, home to Spain's most extensive fishing fleet, has triggered a tsunami of protests along its coast.

"We have had some downsides but have always come out ahead, until today. Now, we are in a hole no one can escape because offshore wind energy farms will destroy the fishing grounds where we work. We are not against it, but we need a consensus," assures Belén when asked about the Marine Spatial Planning (MSP) for the North Atlantic region. This policy instrument positions Galicia as an international benchmark for offshore wind energy, giving the green light to promoters to exploit its coast.

The energy sector has been pushing for such regulation for years in the boom of renewables. Last February, the government finally passed a decree approving five MSPs, one per coast of the Spanish peninsula and its islands. Together, they set a target of 3 gigawatts (GW) of installed offshore capacity along 4948 square kilometres of the maritime area by 2030. By far, the North Atlantic Marine subdivision holds the most extensive area: 2688 square kilometers, 54 per cent of all the space reserved for offshore wind farms in Spain. Eight offshore wind farms are planned for the North Atlantic subdivision, which goes from Galicia's border with Portugal to Bask Country's border with France. Half of the wind farms will be on Galician waters, which will also host the largest wind farm. Precisely on one of Belén's shipping routes.

A territorial dilemma

Under the slogan "Our seas are not for sale," hundreds of Galicians marched in A Coruña, the region's biggest city, following the approval of the decree and accusing the government of forgetting the fishing sector. Three days later, another demonstration followed in Oviedo, the capital of the neighbouring region, Asturias. Along the 2429 kilometres of the Northern coast of Spain, there are more than 4500 vessels whose crews have raised their voices demanding a dialogue with the national administration

when it comes to giant turbines in the sea.

The controversy that arises from plans for offshore wind projects in the North of Spain is just the latest example a struggle across Europe as governments rush to approve plans for the ecological transition to reduce emissions and meet climate targets. Despite the consensus the renewable energy shift, civil society often opposes the infrastructures plans of European legislation such as RepowerEU, the EU Renewable Energy Directive as well as the EU offshore renewable energy strategy.

Among renewable technologies, wind turbines often face the strongest opposition from the general public and some environmental movements due to the land they take up. We have seen it in France, Sweden, Greece and but also in Spain, plans for <u>onshore wind farms</u> have sparked massive protests. But now the conflict over the territory has moved to the sea, and the most significant backlash in Spain has come from the Galician fishing sector, which accounts for 1.8 per cent of the region's GDP.

If Spain today ranks number one in the EU for fishing volume, it's thanks to the Galician fishing sector. The country is also the leading member state in fishery product exports, with 19.2 per cent of the EU total in 2018, and its largest fleet sails in Galicia. According to the Galician administration, the fishing sector creates 40,000 direct jobs in the region, which explains the popular of the sector. And as the MSP recognises that areas reserved for offshore wind projects interact with zones of fishing activity, the union of fisherfolk along the Northwest coast in opposition to the plan has come as no surprise. A year and a half ago, when the MSP was a draft, North Atlantic fishing associations and small fisherfolk joined forces to create the so-called Platform in Defence of Fishing and Marine Ecosystems.

Fishing associations from other corners of the country soon joined them as Spain's roadmap for offshore wind energy was being shaped without listening to their worries. The platform's goal was "to form a single interlocutor with the government" and ensure fisherfolk's voices counted during the decision-making process behind Spain's green transition projects. "At that time, there was a draft of the MSP, and some offshore wind promoters were setting up clusters. It was a lobbying tool from renewables and energy companies that seek to influence governments and to sell offshore wind as the world's salvation, with the message to bet on offshore wind projects at any cost," recalls Torcuato Teixeiro, the platform spokesperson.

Iberdrola and Ferrovial, some of the most influential companies based in Spain, are two of the firms behind proposed wind farm projects. Nine projects have been submitted to the Ecological Transition Ministry, led by socialist Teresa Ribera. However, the Platform in Defence of Fishing and Marine Ecosystems has submitted allegations for each project and will bring the MSP to the Spanish Supreme Court as they affirm the Minister has not listened to their concerns. "We are not against the ecological transition, the need for renewables or offshore wind farms. But the Ministry cannot just sell this as a climate emergency or blame the Russian invasion of Ukraine."

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For the Platform in Defence of Fishing and Marine Ecosystems, there are two main problems behind Spain's roadmap for offshore wind energy. First, the lack of collaboration from the government to find an agreement with the fisheries sector about the location of the wind turbines. Second, Spain's race for green technology could undermine the biodiversity of one of the richest corners of the Iberian Peninsula. Fishing associations and certain environmental organisations have found common ground in their shared concerns about the potential impacts of offshore wind farms on seabirds and marine ecosystems. Above climate targets or economic interests, installing wind turbines off Galicia's coast should not collide with the precautionary principle. A concern that divides scientists and ecologists.

Biodiversity loss vs climate urgency

The North Atlantic Marine subdivision is home to 5685 marine species, accumulating in its waters 51 per cent of all marine species recorded in Spain. But the sea area off the northwest of the Iberian Peninsula is also important migratory corridor and wintering area for thousands of seabirds. Likewise, great numbers of land and waterbirds also overfly Galician seas, often at night, migrating between western Iberia, northern Europe, Greenland, and Canada. Will these ecosystems be at risk by installing wind turbines reaching up to 230 metres into the sky? Are the climate urgency and plans for decabornisation leaving the biodiversity crisis behind? These are questions raised by NGOs such as the Association for Ecological Defence of Galicia and SEO Birds Life, who find the MSPs ambiguous in relation to biodiversity. And the Spanish National Research Council (CSIC) might hold the answer.

In June 2022, while an extreme heatwave suffocated Spain and Europe, nine scientists from the Institute of Marine Sciences of the CSIC published a study that unravelled the ecological impacts of large-scale offshore wind farms in the Mediterranean Sea. While the paper recognises the need for alternative energy systems like offshore wind power to move towards the Green Deal objectives, it is a reminder of an increasingly clear fact. "Biodiversity loss and climate change are interconnected issues that must be tackled in unison," warns the paper's abstract. Even though the scientists who wrote the study witnessed the extreme weather events linked to climate change, they called for precaution in the face of large-scale offshore wind farms driven by climate urgency, citing their potential environmental risks for Spain's coastline.

Physicist Antonio Turiel is one of the authors of the CSIC study. Together with his colleagues, they read over 150 scientific papers on the impacts of offshore wind farms to assess the consequences a large-scale project for Roses Bay in Catalonia could have on Mediterranean biodiversity. Similarities across Spain's coastline make Turiel affirm the CSIC study recommendations should shed light on the Marine Spatial Planning for the North Atlantic region too. "Risks are quite similar for both areas, especially if we are talking about large-scale wind farms," as is the case.

Whether for Galicia or Catalonia, the experience of the North Sea often serves as an example of the little impact wind turbines have on marine biodiversity. However, as the scientific paper highlights, a huge difference with the Spanish coastline makes the comparison irrelevant. "The North Sea has a wide continental shelf. Its seabed is muddy, and there is not much life. So you can build an offshore wind farm far from the coast and anchor the aerogenerators to the seabed." But Spain's coast is the opposite. "Spanish seabed is full of life, so if you install wind turbines, they could have several consequences" on biodiversity.

"More and more studies show that wind turbines greatly impact bird deaths. Seen from a long distance, wind turbines seem to move slowly, but they go at a very high speed. Impacting with a blade destroys them." Besides the risk for seabirds, the noise from the turbines also impacts some marine species as "it

could disorientate cetaceans, such as whales and dolphins." But offshore wind farms could threaten sea life at a more fundamental level. "These machines will catch the wind," so this resource will decrease its effect on the sea, and waters will be less mixed. "Therefore, fewer nutrients will come to the surface, and all marine life will suffer. Fewer algae, fewer fish, and less to eat."

Another significant issue pointed out in the CSIC study is the impact linked to the chains tightening wind turbines to the bottom of the sea. Unlike the North Sea region, Spain has a narrow continental shelf, which makes anchoring the aerogenerators directly to the seabed impossible. That is why advanced technology is contemplated in the MSP of the North Atlantic region. Offshore wind farms must be built in floating structures clutched by chains to the seabed. "These chains will move, eroding the bottom of the ocean," and the habitat of thousands of species "could be destroyed." Not to mention the consequences related to the installation of the wind farms or even accidents, "which are difficult to measure", and the risk of fish being electrocuted. "These are all potential risks. It doesn't mean they all will happen. Still, everyone should be aware of offshore wind energy's consequences".

Despite the CSIC's calls for precautions when drafting plans for such projects, the scientist substantiates the study recommendations were not considered for the MSPs. "The Marine Spacial Plannings will for sure end up in court," affirms Turiel. "Behind plans such as the MSP, Turiel sees improvisation and urgency to mitigate the effects of climate change. "There is an avalanche of renewable projects", and plans are being drafted "in a rushed and overwhelming" manner. "Big companies are behind these projects, so, logically, these projects make the population suspicious. I understand them", affirms the scientist, who agrees with the fishing sector on the need for further analysis of the MSPs.

The CSIC scientist Antonio Turiel, also known for his work communicating challenges of our society and books such as *The Autumn of Civilisation*, has a strong position on the biodiversity dilemma vis-à-vis climate change, which he believes to be false. "Officials often say that doing nothing is worse for biodiversity loss, as climate change is the worse threat. But it is a wrong affirmation when talking about marine biodiversity and a false dilemma. No one is saying to do nothing", states Turiel, who also shows concerns about Spain's capacity to use wind energy as a substitute for fossil fuels. "People believe installing wind farms will automatically reduce CO2 emissions. On the contrary, over the last 15 years, electric consumption has decreased in Europe. So those betting on wind farm energy will not know how to make the most of it."

Despite technical obstacles, the EU is determined to achieve 2050 climate targets with the electrification of Europe, particularly in the domestic heating and transport sector, a goal for which the European Commission has planned offshore wind energy production capacity in the EU to play a crucial role. As set in the EU Strategy on Offshore Renewable Energy, it should increase from 12 GW to at least 60 GW by 2030. Thus, on the opposite side of the debate on climate urgency vs biodiversity conservation, one can also find voices in the tailwind of windmills in the sea. Eneko Aierbe, a coordinator of the Marine Environment subdivision at Ecologists in Action, is one of them. "We are saddened and concerned that the debate on offshore wind energy has been reduced to where to install the wind turbines. We believe that offshore wind should be a broader tool that, combined with other EU directives, should ensure the protection of the marine environment," comments Eneko.

In the NGO he represents, a grassroots confederation of ecological groups from all corners of Spain, they welcome the Marine Spatial Planning for the North Atlantic subdivision as offshore wind farms will kick off from a better place than onshore across Galician territory. More than 4000 wind turbines dot the green land of this windy corner of Spain. There are 187 wind farms with a total installed capacity of 3,851 MW, and additional 300 new farms are awaiting approval. "At least in offshore wind energy, we

start with planning, which didn't happen on land. It is a positive step that planning was done before implementation," reassures Eneko. From their perspective, the environmental conflict can be overcome if the effect of large-scale offshore wind farms is "tested and studied with precaution" before overextending them along the coast "to avoid making the mistakes that have been made with onshore wind power".

Questioned about the alliances fishing associations have forged with some environmental organisations in the North of Spain against the MSP, the ecologist admits being surprised by the narrative used. As projected wind farms will be between 14 to 20 km away from coastal fishing, which is the most sustainable and artisanal fishing area, he believes the main obstacle will be for trawlers. "They have severe impacts on the marine environment, so we are surprised by the discourse they use to protect diversity when it is more than proven that industrial and trawler fishing is the most severe threat to biodiversity," Eneko points out about the conflict of interest. "Of course, the best solution (for conservation) would be to not impact on the environment. But the impact that there will certainly be is the impact of climate change. The effect it has on the sea with rising temperatures and acidification processes also impacts biodiversity," weighs Eneko.

A deliberate transition for all

From the European Green Deal to local policymaking, the urgency and complexity behind climate policies usually make energy transition plans seem to belong to the technical realm. Nevertheless, as the protests along Galicia's coastline rejecting offshore wind farms clearly shows, responses to climate change have many social and political consequences. There is no perfect climate solution, so legitimacy for these long-lasting decisions is essential to ensuring a just transition for all. In this context, deliberative democracy becomes a tool that can help us achieve that. By engaging a diverse and random selection of citizens in deliberative and inclusive discussions, citizens' assemblies facilitate a more informed and collective decision-making process, leading to climate and energy policies that weigh multiple perspectives in their design. In the context of large-scale offshore wind farms, a climate citizen assembly would address all levels of an environmental conflict that have divided Galician society.

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"Deliberative democracy theory says democracy cannot be reduced to issuing preferences, whether in elections or a referendum. What has to be done, in practical terms, is what citizens' assemblies do: consider diverse, balanced and factual information. And then, deliberate to reach an agreement, issuing recommendations of what people think is the right path for society to move forward on a given topic." These are the words of Yago Bermejo when asked about his field of study. He has worked on participatory democracy for the last 10 years and founded Deliberativa in 2019. Since then, Yago has worked with administrations at all levels, from regional governments to the Conference for the Future of Europe. Regarding Galicia's current dilemma, Yago has no doubts about the best way out of the offshore wind energy debate. "Deliberative democracy can contribute precisely with balanced and consensual political decisions," remarks Yago on the controversy surrounding renewables. But how?

If there is a sector that is in favour of putting in place climate solutions, exemplifies Yago, and also an

industry that could benefit from it, "these two actors will constitute a single group of interest." On the opposite side, there will be those "worried about the impact over the territory, which normally is the problem behind renewables," such as the fishing sector. The citizen assembly, randomly selected from the population, "will be used as a consensus tool between both groups." First, a documentation phase will be set up to give citizens factual information. "Then, they will process the documentation and deliberate on what will be fair and what not," explains Yago. "In the end, it is a question of values, and you put citizens, which are protected from specific interests, at the centre."

In the Galician context, deliberation will navigate several levels of conflict. The urgency to address climate change by transitioning to renewable energy sources versus concerns over the conservation of marine biodiversity. The implementation of large-scale and non-tested new technology versus the precautionary principle on infrastructure with potential environmental impacts. A final level, which has taken the MSP to court, is the economic impact of fishing versus the profit of energy companies. Balanced recommendations written for a representation of citizens will be the outcome of the process, and its success will depend on the central government. "As this is an innovative tool, there is no binding legislation behind citizens' assemblies. It will be a political compromise for those in charge," explains Yago.

But so far, the response from the Ministry for Ecological Transition does not seem to point in a deliberative direction. Consultation on the draft was limited to accepting questions and amendments via the transparency portal – a mandatory step in Spanish law which does not require accepting citizens' requests. According to the *Platform in Defence of Fishing and Marine Ecosystems*, three meetings with representatives of the Ministry were held, forced by the sector and labelled as useless by them, as the government came with no information on what the platform asked. The ministry did not respond to the Green European Journal's request for comment.

More broadly, everyday citizens were left behind. Something that doesn't surprise Yago. "Citizens' assemblies are something new that has recently come to Spain, actually with climate citizens' assemblies." Despite its short history in the country, Yago Bermejo is convinced that a citizens' assembly could avoid the lack of agreement between the stakeholders while legitimising the offshore wind policies in the eyes of civil society. "Knowing that there are everyday people deliberating about the issue and that their recommendations have taken into account all points of view is an appropriate way of resolving conflicts. Because you put the citizenry at the centre as the mechanism of agreement", ends Yago. Unfortunately, for the time being, the conflict will be decided in court.



María Dios is a journalist specialising in EU affairs, climate policy and energy transition. She has a broad radio and podcast production career at national and international levels. María was awarded by Alexander von Humboldt-Stiftung for her journalistic work on a science communications project addressing geopolitical developments, growing conflicts and dwindling resources. She has also experience in digital news and communications in Spain and Brussels, where she is based.

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