

Position Paper: Towards a Pact for skills in the ORE

The challenge

Offshore Renewable Energy (ORE) constitutes a clean and inexhaustible source of energy, capable of reducing greenhouse gas emissions and creating less damage to the environment, in comparison to traditional fossil-based energy. For the purpose of the Pact for Skills, the main forms of offshore renewable energy systems are categorized into two main groups, according to the maturity of the technology employed¹: Fixed Offshore Wind is the most mature sub-sector, whilst Floating Offshore Wind and Ocean energy have different degrees of readiness: Wave, Floating Offshore Wind and Tidal are progressing fast, of which the latter is closer to commercial exploitation, and Offshore Solar is under development.

The EU has already set specific and ambitious targets for increasing offshore renewable energy production until 2050², which will require a long-term plan through maritime spatial planning, and the scale-up of the whole value chain to deliver a six-fold increase in the installations rate³. The aging of the current workforce in shipbuilding, which is contributing to the fabrication of ORE devices, is adding pressure and urgency to the efforts to ensure replacement and avoid a loss of skills.

The demand for offshore structures, equipment, and zero-emission specialised vessels required for the wide variety of ORE applications represents a great opportunity for the industrial value chains, clusters and ecosystems.

Success in fulfilling these targets will largely depend on the availability of financial support for emerging technologies and a growing and well-qualified labour force, prepared to underpin the industrial growth through the uptake of new technologies and innovations. Thus, human capital investment is expected to have a leveraging effect on industrial performance.

The Renewable energy sector is demonstrating resilience⁴ to the present crisis, providing jobs with a lower risk of coronavirus-related exposure⁵. ORE holds the potential to **offer a major diversification opportunity for several EU companies and to absorb workers from sectors**

¹ This categorisation and terms used to describe the technologies employed to extract energy from the oceans follow the lexis employed by the European Commission, Directorate-General for Maritime Affairs and Fisheries in [the EU Blue Economy Report 2020](#). 2020.

² The EU Strategy to harness the potential of offshore renewable energy for a climate neutral future. [COM/2020/741 final](#) targets to upscale the present capacity to reach 300 GW of offshore wind and 40 GW of ocean energy by 2050. This could represent an increase of more than ten-fold the present occupations.

³ To deliver the 2030 and the EU 2050 targets, the EU needs to sustain an installation rate of over 11 GW/year from 2026 onwards (from 2 GW/year today).

⁴ Despite the pandemic, 2020 was a record year for offshore wind financing in Europe with €26.3bn raised for the financing of new offshore wind farms, including €2.1bn in offshore transmission infrastructure. Europe installed a total 2.9 G of offshore wind power in 2020 in line with pre-covid forecast, a sign of the sector resilience. Offshore wind in Europe statistics 2020 (WindEurope, 2020)

⁵ COV19R score by occupation group, EU-27 and UK. Pouliakas, K; Branka, J (2020). EU jobs at highest risk of Covid-19 social distancing: Is the pandemic exacerbating the labour market divide? Luxembourg: Publications Office of the European Union. Cedefop working paper; No 1. <http://data.europa.eu/doi/10.2801/968483>

suffering higher impacts from this crisis, in particular from the maritime ones^{6,7}. Despite this, COVID-19 is slowing down the supply chain⁸, hampering worker's mobility, and has even lead some companies to close. This systemic impact and the ongoing uncertainty are a supplementary hindrance to the incentivization of investment in skills within the sector.

The UK is the European country with the largest offshore wind energy installed capacity (45%)⁹, and also has one of the most prominent targets for floating wind by the end of the decade¹⁰. Despite not having reached agreement on all aspects of their future energy relationship, the UK and the EU envisage ongoing close cooperation in offshore renewables¹¹.

The vision

By 2030 the ORE sector has access to a large mass of workers adequately trained and skilled for tackling challenges from sustainability, new technologies and innovation, to growth prospects, offering attractive jobs and fair working conditions, with all stakeholders in the sector engaged to maximise the prosperity derived from skills' investments.

The ambition

Underpinning the success of the offshore renewable energy strategy with the stimulation of a dedicated training offer, to promote re-skilling and up-skilling of the workforce, availability of training itineraries which intersect with other sectors, suitable preparation for new staff and measures for attracting talent, and a clear contribution to promoting strong labour standards.

Ensuring health and safety skills for sea operations and maintenance at sea will be of uttermost importance, as well as reinforcing the specialization of managerial positions, the continuous update of engineering and digital skills and the strengthening of transversal capacities for design, manufacturing and operation occupations. Taking a more multi-disciplinary and integrated approach to building skills will enable more suitability and flexibility of the workforce and ultimately better job security, contributing to promote the combination of multiple uses of ocean devices and a more integrated use of the space.

⁶ CETMAR (2020). MATES Report on the consultation process to the industry 2020: Questionnaires, Semi-structured interviews and Focus Groups. Results of the MATES project (www.projectmates.eu) "An important degree of relevance of the skills coming from shipbuilding to the ORE operation and maintenance activities was recognised."

⁷ Ocean Energy Europe, 2030 Ocean Energy Vision: Industry analysis of future deployments, costs and supply chains; https://www.oceanenergy-europe.eu/wp-content/uploads/2020/10/OEE_2030_Ocean_Energy_Vision.pdf

⁸ WindEurope, [COVID-19 Impact on value chain](#).

⁹ CETMAR (2020). MATES project baseline for an Offshore Renewable Energy Skill Pact. Results of the MATES project (www.projectmates.eu). *Source for the percentages: Wind Europe 2019, IRENA 2019, Directorate-General for Maritime Affairs and Fisheries 2019 and own calculations.*

¹⁰ The UK Minister increased the Sector Deal target to 40 GW by 2030, including 1 GW of floating wind. The Sector Deal proposes other actions including a target to have at least 33% women in the wind industry sector by then. <https://www.gov.uk/government/news/new-plans-to-make-uk-world-leader-in-green-energy>

¹¹ UK-EU Trade and Cooperation Agreement (TCA), which terminates in June 2026, envisages sharing best practices in offshore renewables and, where appropriate, facilitating the development of specific projects. To this end, a specific forum will be developed for cooperation on offshore grid development and the large renewable energy potential of the North Sea region (ENER 23).

Engaging all relevant stakeholders, namely from the industry, ports, trade unions, education and training providers, but also research and public administrations in establishing a shared vision and action plan, and ensuring continuous adaptation to the changing needs and scenarios will be critical.

Optimising the efforts and maximizing value-generation through the use of existing resources and initiatives for bridging the skills' gaps in the ORE¹² will be key. The partnership under the Pact for Skills in the ORE sector will broaden the outcomes from previous initiatives building on them through inclusiveness and openness for all stakeholders, to jointly cooperate under one common European umbrella.

The proposal

- Partners have agreed on 29 Lines of action¹³, and will promote collaborative actions to mobilise new investments to develop them. A first group of actions will be activated in the early stages, but the implementation of the pact will be consolidated to the extent that the enabling conditions act as drivers for the performance of the actions.
- The overall strategy will be complemented with a Sea-Basin approach, to adapt the actions to the different capacity needs in different geographic areas. At least five Sea Basins will be approached in the first five years.
- Partners engage to underpin the skilling process for the new jobs expected in the sector, estimated to account for a range between 20,000 and 54,000 new workers in the following five years¹⁴, and contribute to improve up-skilling opportunities in the field of the actual ORE workforce¹⁵. The Pact will be implemented with a bottom-up approach adapting to the different needs of Europe's sea basins.
- The governance of the partnership is stated in the following ToR¹⁶. Once the Pact is launched, in March 2021, a working group will be created to define the partnership's governance and various other aspects on how it will operate.

¹² In particular, [MATES Blueprint project](#) will provide a [baseline strategy](#), to be enriched with the outcomes of the [USWE project](#), the [EU Pact for sustainable Industry](#), [WindHarmony](#), and the projects willing to join forces in the pact.

¹³ [Lines of action](#) <http://intranet.projectmates.eu/index.php/s/5FMBFFC6MRoS6AW>

¹⁴ According to WindEurope forecasts ([Wind energy and economic recovery in Europe](#) Wind Europe, 2020), the offshore wind sector will support between 52,000 and 131,000 new jobs by 2030 (68,000 direct and 64,000 indirect in the lowest prospective, and 104,000 direct and 97,000 indirect in the highest scenario). Considering that 13,000 are expected to be based in UK, this implies a cumulative difference of 39,000 to 108,000 jobs in the EU for the period 2020 – 2030, representing an increase of 4,000 to 10,800 jobs per year as an average; with this numbers, a range of 20.000 to 54,000 new jobs will be generated in the sector in the coming five years.

¹⁵ Estimated at 79,600 jobs: 77,356 jobs supported by offshore wind ([Wind energy and economic recovery in Europe](#) Wind Europe, 2020) and 2,250 jobs supported by the ocean energy (European Commission y Directorate-General for Maritime Affairs and Fisheries. [The EU Blue Economy Report 2019](#)).

¹⁶ Terms of Reference - <http://intranet.projectmates.eu/index.php/s/ScQLdsmA5zjXGtM>

The engagement and the Key Performance Indicators (KPI)

The partnership will ensure sustainable and systematic sectoral cooperation based on the engagement of all stakeholders involved. A first proposal of targets for the first five years of activity is included in the Partnerships' ToR.

During the first period (2021), the partnership efforts will be mainly addressed to increase the number of relevant stakeholders supporting the pact in each Sea basin, to analyse the specific needs in each area, and stimulate public-private investments to launch the actions. The ORE skilling challenges and bottlenecks will be discussed in multi-stakeholders debates to promote collaborative solutions and to the extent that it is feasible, consensus approaches.

A first list of KPIs is included in the document [ToR](#).

Supported by

Industry



Trade Unions



Educational and Training Organisations



Research Organisations



Administrations

Other organisations



ANNEXES TO THE PRESENT DOCUMENT

- [Terms of Reference](#) stating the governance of the Partnership.
- [Proposed lines of action](#) to launch the pact for skills at the ore sector.
- [Letter of Intent](#) to integrate the Partnership launching the Pact for skills in the ORE