## Renewables boom unleashes war over talent for green jobs



Clean energy giants are finding a shortage of workers with the skills needed to support their ambitious growth plans.

The renewables jobs market is heating up and candidates with the right abilities are becoming harder to find, according to Miguel Stilwell, chief executive officer at Portuguese cleanenergy firm EDP Renovaveis SA. The company is one of the world's top installers of green power and plans to hire 1,300 employees over the next two years.

"There's a war over talent globally," Stilwell said in an interview on May 28. "The renewable sector, given the massive amount of growth that is expected, doesn't have enough people."

As countries funnel billions of dollars into developing renewable power, policymakers are banking on the sector to create new jobs that are crucial for the post-pandemic economic recovery. Solar generation capacity is expected to triple by the end of the decade, while wind capacity is expected to more than double over the same period, according to clean energy research group BloombergNEF.

Green supermajors such as NextEra Energy Inc, Iberdrola SA, Enel SpA and EDP are leading the race to electrify the global economy. But some large oil companies are starting to get into the sector too, with BP Plc announcing last month it's looking to fill 100 offshore-wind jobs in the U.K. and the U.S., a figure that could double by the end of the year.

Engineering skills such as energy assessment, project management and project design are in high demand, EDP's Stilwell said. Good business developers who understand clean energy technologies are also a scarce resource. Other roles, such as managing mergers and acquisitions, or back office tasks, can easily be hired from other industries.

"We're having to bring in people from other sectors, whether it's oil and gas or other parts of the energy industry, or recruiting directly from universities," Stilwell said. "There's a lot of competition out there."

Engineering and chemistry graduates working on a masters degrees in renewables at the Universitat Politecnica de Catalunya in Barcelona are often hired while they're still in school, or right after they finish, according to Professor Jordi Llorca. The university has partnerships with other colleges in Europe and students often get hired to work in other countries like the U.K. or Denmark, said Llorca, who is also the director of an engineering research center at the university.

"We need to be fast to adapt the contents of our programs on the energy transition and renewable energies to make sure our graduates are competitive in the market," Llorca said. "We're constantly looking at the contracts and agreements we have with different industries to see what's needed."

The university launched a masters in hydrogen energy last year after professors realized very few people have the skills in mechanics and chemistry that the fast-growing sector will need very soon. "There's always a moment of vacuum whenever a new technology comes in, but we're able to put together new programs in just a few months."

Offshore wind farms are another growth area. The projects involve erecting and maintaining wind turbines the size of skyscrapers miles out to sea. A single turn of one of the massive blades could power a house for two days. The industry was pioneered in Europe, but is now rapidly expanding to Asia and the east coast of the U.S.

Those new markets don't have people with experience. That means that developers are often sending British and European employees to lead the way, according to Clint Harrison, director at renewable energy-focused recruitment firm Taylor Hopkinson. But as business takes off there's pressure to hire locally.

The limits of a well-trained workforce could end up being a bottleneck in an industry that is key to slashing emissions.

"There's a sense of urgency," Harrison said. "The market is growing very, very quickly and we need to ensure we have the right people across various projects and regions to ensure projects move forward and aren't delayed."

In the U.K. alone, around 200,000 skilled workers will be needed in the offshore energy sector by 2030, up from 160,000 today, according to a recent report by the Robert Gordon University in Aberdeen. About half the jobs are expected to be filled by people transferring from the oil and gas sector and about 90% of current workers in the fossil-fuel sector can be retrained for renewables, said author Paul de Leeuw.

"Demand for courses on renewable energy and the energy transition is ramping up rapidly and at the same time we see demand for oil courses declining," he said. "It's a societal and industry shift mirroring in the education system."

## BLUE ECONOMY IN THE MEDITERRANEAN



ATHENS, Greece: Mediterranean countries should be among the biggest winners in the transition from fossil fuels to renewables, an energy expert told a key policy conference on Wednesday.

"Here in the Mediterranean region, the post-carbon era actually holds enormous opportunities in terms of the Blue Economy," industry veteran Roudi Baroudi told the virtual All Things Energy Forum. He added that while conventional wind and solar would "have a key role to play," the proximity of the sea offered a whole other dimension.

"There are other promising energy technologies too, including rain, wave, and tidal power, as well as undersea geothermal," said Baroudi, who has advised governments, multilateral institutions, and major international companies on energy policy. "Some of the most promising replacements for fossil fuels are waiting out at sea, if only we have the wisdom and the foresight to develop them."

The very proximity of a large sea like the Mediterranean gives its coastal states key advantages over landlocked counterparts, he explained, because they have many more options for low- or no-carbon power generation. The 40-year veteran of the regional energy scene predicted that with strong leadership, regional countries could use this potential to fully electrify all of their populated areas.

"That kind of access [to electricity] is a key requirement for the kind of economic growth that would lift millions of people — even tens of millions — out of poverty," he stated. "It also would reduce the flow of African migrants bound for Europe by generating new economic opportunities for them at home."

Baroudi cautioned, however, that significant hurdles remained if the region was to realize its full potential for offshore energy production, mainly because about half of the Mediterranean's maritime boundaries remain undefined.

As with the prospects for offshore natural gas, he explained, investors avoid such unsettled borders because contested ownership of an area and/or resource poses too great a risk. For this reason, he said, and because pressure is building for a moratorium on developing new oil and gas fields, regional countries needed to embrace diplomacy and hammer out treaties that define their respective Exclusive Economic Zones. Since gas is expected to remain a key transition fuel for at least a couple of decades, he explained, regional countries could also earn billions in revenues from offshore deposits — but some still need EEZ deals to get started.

"No need is more pressing, especially since the dialogue and compromises required would not only open up gas development, but also lay the groundwork for closer cooperation in other fields — which is exactly what the Blue Economy demands in order to realize its full potential," said Baroudi, who currently serves as CEO of Energy and Environment Holding, an independent consultancy in Doha.

"As a bonus, a calmer, friendlier Mediterranean would also allow the sharing of responsibilities and the pooling of resources and data, which would significantly improve outcomes in everything from immigration, weather forecasting, and search and rescue to tsunami warning systems and protecting communication cables," he said. "Then we could just see the whole Euro-Med region become one of Good Neighbors, a place of mutual goals, settled grievances, and even geostrategic cooperation. Dare I say it, ladies and gentlemen, the Mediterranean could be fully at peace in our lifetimes."

The event, whose speakers included noted academics and senior business and energy leaders, as well as key government ministers, on Wednesday.

Roudi Baroudi has more than 40 years of experience in the energy business and has helped design policy for major international oil companies, sovereign governments, and multilateral institutions. He currently serves as CEO of Energy and Environment Holding an independent consultancy based in Doha, Qatar.