



UNDER EMBARGO UNTIL 9:00 CEST 1 JUNE 2021

Nearly half a million workers must be trained to safely meet expansion of global wind market over next five years

- New analysis from GWEC, GWO and RCG finds that 480,000 workers need to be trained to GWO standard to deliver onshore and offshore wind market forecasts safely from 2021-2025.
- Training is essential for jobs in construction, installation, operation and maintenance segments of the wind power value chain, and do not cover jobs in procurement, manufacturing (the most labour-intensive segment), transport.
- Global standardised training is key to ensuring the health and safety of the workforce and safeguarding the wind industry's sustainability and license to operate in the energy transition.

1 June 2021, Brussels/Copenhagen – A new report released today by the Global Wind Energy Council (GWEC) and Global Wind Organisation (GWO) in partnership with the Renewables Consulting Group (RCG) finds that the global wind industry will need to train upwards of 480,000 more people to GWO standards over the next five years to meet global wind power market demand in line with health and safety standards.

These workers will need to be trained to construct, install, operate and maintain the world's growing onshore and offshore wind fleet, and represents only a fraction of the job opportunities available in the growing wind industry.

Currently, the GWO training market, considered the global standard for wind workforce training, has the capacity to support the training needs of 150,000 workers by the end of 2021 and 200,000 by the end of 2022. But analysis in The Global Wind Workforce Outlook 2021-2025 finds that we will need at least 280,000 more trained workers to install the forecast 490 GW of new wind power capacity coming online over the next five years.

Of the 480,000 GWO trained workers required worldwide, 308,000 will be deployed to construct and maintain onshore wind projects and 172,000 are needed for offshore wind.

Over 70% of the new global workforce training demand will come from the 10 markets analysed in the report, including: Brazil, China, Japan, India, Mexico, Morocco, Saudi Arabia, South Africa, United States of America, and Vietnam. The markets analysed in the report were selected for regional diversity, as well as spanning the largest onshore wind markets globally, high-growth markets for onshore and offshore wind, and emerging wind markets.





Ben Backwell, CEO at GWEC said: "The wind industry needs to scale up at an unprecedented rate over the next decade to put the world on track to meet net zero. If ambition is scaled up to what it needs to be – three or four times current market forecasts – the workforce training requirements will be far higher than what was found in this report. To meet this challenge, we need to prepare now for the workforce of the future, and this means training hundreds of thousands of workers across the world to be part of one of the fastest-growing industries. But we need to ensure this workforce is trained to the highest global standards to ensure the health and safety of all."

Jakob Lau Holst, CEO at GWO said: "There is a lot of talk about how many GW's of wind power we will need to achieve net zero, but there isn't a lot of discussion about the workforce we will need to realise the ambitions on the ground. Hundreds of thousands of people across the world, even throughout the COVID-19 pandemic, work on the turbines that power our economies and protect our planet, and it is crucial that we keep these people safe. Having GWO safety training standards is one of the most efficient ways to make sure our workforce is staying safe and that we have the people we need to accelerate the global energy transition."

Ed Maxwell, Principal at the Renewables Consulting Group, said, "By combining historic training data, onshore and offshore installation capacity forecasts, key market insights and our in-depth understanding of health and safety in the global wind industry, we have been able to accurately model the future demand for GWO-trained personnel over the next five years - a critical period in the path to Net-Zero. The model – and the presented forecasts – will be regularly refined as more data becomes available and as the pace of capacity growth accelerates."

For already large wind markets like the US and China, scaling up training capacity can provide new job opportunities and increase productivity through the recognition of GWO standards. Emerging economies will need to develop their safety and technical training networks from the ground up to ensure alignment with global safety systems to ensure the long-term sustainability of the industry.

Overall, there is significant untapped potential for the training and industrial education supply chain in countries across the world, and organisations in scope to deliver the additional training capacity needed can develop GWO programmes now to meet this future demand."

The full report can be downloaded here.





AnnexGlobal summary of workforce outlook

Region	Onshore		Offshore	
	Installations (MW)	Training needs (# of people)	Installations (MW)	Training needs (# of people)
Europe, Middle East, Africa	92,500	60,057	34,300	44,412
Asia-Pacific (except China)	39,200	31,227	12,200	32,659
Americas (except USA)	26,800	15,660	-	-
China	194,500	149,356	34,500	70,099
USA	46,000	51,624	9,100	25,381
	399,000	307,924	90,100	172,281
Total (global)		Total = 480,205		

Notes to Editors:

- GWO training standards are courses that teach you to understand and reduce the risk associated with safety hazards in the wind turbines industry. More: https://www.globalwindsafety.org/trainingstandards/trainingstandards
- This report is based upon the outputs of a bespoke workforce forecasting model assessing the impact of a range of interdependent influences on workforce needs. The model uses GWO training delivered during the 2019-2020 reference period as a baseline and wind power market forecasts from live data in RCG's GRIP database and GWEC Market Intelligence.
- This forecast does not include the workforce needs for other segments of the
 wind project lifecycle, including in procurement, manufacturing (the most labourintensive segment) and transport. The wider workforce needs to deliver the
 onshore and offshore wind forecast up to 2025 are therefore larger than the
 training needs for construction, installation, operations and maintenance
 identified in this report.
- According to GWEC Market Intelligence, the entire wind power value chain could create over 3.3 million jobs from 2021-2025 based on current onshore and offshore wind forecasts. More: https://gwec.net/wind-can-power-over-3-3-million-jobs-over-the-next-five-years/





About Global Wind Energy Council

GWEC is a member-based organization that represents the entire wind energy sector. The members of GWEC represent over 1,500 companies, organizations and institutions in more than 80 countries, including manufacturers, developers, component suppliers, research institutes, national wind and renewables associations, electricity providers, finance and insurance companies. Find out more: https://gwec.net/.

About Global Wind Organisation

GWO is a non-profit organisation of wind turbine owners and wind turbine manufacturers, committed to the creation and adoption of standardized safety training and emergency procedures. Independent training providers deliver GWO-certified training to delegates worldwide. See our interactive map of training providers. Training records are uploaded and stored in the GWO WINDA database, allowing members to verify training records quickly and easily, helping employers avoid unnecessary spending on re-training. Find out more: https://www.globalwindsafety.org/.

About The Renewables Consulting Group

RCG is a specialized expert services firm supporting the global renewable energy sector. From strategy to implementation, the company serves businesses, governments, and non-profits around the world with technical and management consulting services for both mainstream and emerging renewable energy technologies. RCG works with the public sector, private equity and financial services firms, utilities and project developers, equipment manufacturers, and engineering and construction companies for on- and offshore wind, solar, and emerging technologies including wave and tidal and energy-storage projects. RCG is headquartered in London, and has offices in New York, Tokyo and elsewhere. For more information, visit our website at www.thinkrcg.com or connect with us on Twitter via @thinkrcg.

For more information, please contact:

GWEC Alyssa Pek alyssa.pek@gwec.net +32 490 56 81 39 GWO
Ralph Savage
rs@globalwindsafety.org
+45 25291905

RCG
Mark Del Franco
mark.delfranco@thinkrcg.com
+1 (475) 209-0943