Executive summary

The global offshore wind sector witnessed significant activity in 2018, continuing its rapid expansion. Global installed capacity reached approximately 18GW and estimates suggest 4.7GW in capacity additions in 2019. The UK continues to lead the market in operational projects, with approximately 8GW operational. It is followed by Germany with 6.4GW and China with 3.6GW in operational assets.

As a region, Europe overall is still the global offshore wind leader, with approximately 16GW worth of projects operational and 3.2GW under construction. However, 2018 witnessed considerable activity in overseas markets as well, with both Taiwan and the US making headlines. Taiwan is expected to reach its target of 5.5GW by 2025 and the US will see development of up to 6GW between 2021 and 2027. Developments in these markets are expected to pick up in the early 2020s as the first large-scale projects are implemented, with opportunities for local supply chain development as well as exports by established European suppliers. By 2030, offshore wind is estimated to reach an installed capacity of more than 115GW globally, with the International Energy Agency seeing up to 200GW of developments by 2040.

The sector’s growth continues to be driven by individual governments’ policy commitments, technological innovation and improvements, and ongoing cost reductions throughout the supply chain. GE Renewable Energy announced production timelines for its 12MW Haliade X turbine in March 2018, while MHI Vestas continues to upgrade its V164 model with the launch of a 10MW unit in September 2018. Adapting to these technological developments has been a key topic of discussion for the supply chain, as installation contractors and ports consider upgrading their capacities and infrastructure.

Floating offshore wind (FOW) has caught the attention of developers as well as contractors in the oil and gas sector looking to diversify into the industry. While still at a nascent stage, a project pipeline is gaining visibility and the technology is maturing. Equinor is planning to establish an 88MW floating wind farm to power its Snorre and Gullfaks platforms by 2021. In the US, the developers of the 150MW Humboldt FOW project off the coast of California reached a milestone in submitting a lease application to the Bureau of Ocean Energy Management in September 2018.

This report provides an update to the 2017 Global Offshore Wind EIC Insight Report. It outlines changes and developments in policy in established and emerging markets and provides an overview of ongoing and future opportunities in the sector. While the previous report presented the development stages of an offshore wind project, this update will outline export and diversification opportunities for the supply chain.