Longstanding partnership with China on green transition of the energy system

With an ambitious agenda for the transition of its energy sector China strives to secure access to sustainable and reliable energy services while keeping up with significant growth rates in demand for 30 years or more.

The Danish-Chinese offshore project has been dubbed “Quality Offshore”. It is based on a MoU from 2017 and an Implementing Agreement signed in June 2018.

For offshore wind, the 13th Five-Year-Plan (FYP) sets a target of 5 GW in 2020 but the total potential for offshore wind in China is estimated at 750 GW. Offshore wind developments started at moderate pace in China 8-9 years ago and have gained momentum over the last 3-5 years. China is expected to overshoot the 5 GW goal by the end of 2020.

In 2020 China will launch its 14th Five Year Plan, which will define the country’s 2025 goals for offshore wind. It is expected that China will aim for 20 GW or more installed capacity by 2025. (For comparison: Denmark has around 1.7 GW installed capacity at present). As subsidies will be limited in the period there will be an increased focus on bringing down prices for offshore wind energy as well as raising the quality and performance of projects.

Quality Offshore activities are concentrated on 3 tracks:

1. Regulatory framework experiences exchange
2. Certification of components and turbines for offshore wind
3. Demonstration plants

Key activities in 2019

Activities have been successfully conducted with a focus on sharing and transferring experiences based on the Chinese partner’s demands.

Two Steering Committee Meetings were held in May and October to review progress and forthcoming activities.

A study trip to Wind Europe in Copenhagen, including a tailor made session for Chinese stakeholders was organized. The study tour also gave room for Danish businesses and technologies to present solutions.

Several visits to provincial authorities and local developers with the aim of promoting demonstration projects have been organised in close cooperation with the Trade Council. This effort goes hand in hand with the fact that authority for offshore wind has been widely delegated to provincial governments.

An article was published in Chinese media in October 2019, see this link. The article was jointly authored by NDRC’s ERI and DEA.

In addition to the SSC partners, networks have been built and are continuously strengthened with the key stakeholders. DFC courses have proven invaluable in terms of creating knowledge and ownership for green solutions.

Main achievements and lessons learned in 2019

The Chinese authorities have announced that offshore wind subsidies will be removed in the next five year period. This has led to increased understanding of the fact that a long-term perspective is necessary. One participant in the DFC course has suggested to his superiors to do a pilot-tender inspired by Denmark.

There is increased interest in far-shore and deep-sea developments, and several stakeholders are supporting the idea of demonstration projects that could unlock this potential. The SSC-project and TC are working closely with Danish and Chinese companies to facilitate this project, leveraging the network created by the Danish Energy Agency.

Thus, there are many promising aspects to pursue from 2020 to 2021.