



努尔·白克力赴丹麦访问

Administrator Nur Bekri, China's National Energy Administration meets with the Danish Minister for Energy, Utilities and Climate, Lars Christian Lilleholt in Denmark in September 2017 to discuss offshore cooperation.



# STRATEGIC SECTOR COOPERATION IN QUALITY OFFSHORE WIND ENERGY

The National Energy Administration of China and the Danish Energy Agency has established a cooperation aiming to cooperate on developing the offshore wind sector in China

## BACKGROUND

China has demonstrated a great commitment to transition towards a low carbon economy through an increased use of renewable energy. In their engagement to transition to a greener, more sustainable energy system, they have set ambitious targets for a wide array of renewable energy technologies including offshore wind energy. The recognition that offshore wind is significantly more complex than onshore, has encouraged China to actively seek inspiration from the Danish offshore wind successes. The administrator of National Energy Administration (NEA) Nur Bekri visited Denmark in September 2017 where the two governments agreed to establish a Danish Offshore Wind Cooperation ("Quality Offshore").

## THE DANISH "BEST IN CLASS" FRAMEWORK

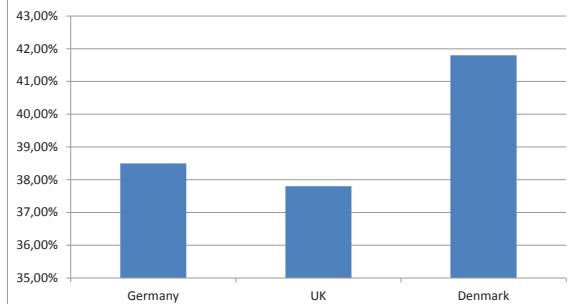
Denmark is the cradle of offshore wind and home to world recognized leading companies within offshore wind. Experience accumulated over more than 30 years of offshore wind developments, has provided Denmark with a vast experience on establishing offshore wind in a cost-efficient manner. First of all, the basis has been comprehensive planning by the authorities and a framework where dialogue with the industry is encouraged to reduce risks faced by the developers.

Secondly a range of testing and certification facilities hosted

by universities and industries have been established to ensure that solutions used are capable of withstanding the harsh conditions offshore. This goes hand in hand with a healthy R&D cooperation between universities and industry.

Finally, over time Danish developers and Danish wind industry have optimised approaches and technologies used when establishing offshore wind power and have contributed to the fact that cost of offshore wind power has recently been reduced beyond what the industry targeted just a few years ago.

## Life capacity factors, offshore wind



Capacity factors result mostly from design decisions!

Source: Energynumbers.info.  
Disclaimer: numbers not audited.

# SINO-DANISH OFFSHORE WIND COOPERATION ("QUALITY OFFSHORE")



## POTENTIALS

Denmark has a first mover status within the offshore wind, with the world's most complete supply chain for offshore wind. Engaging in development of China's offshore industry, through sharing of best practice, will be instrumental for the objectives of this project. The aim is that Denmark and Danish experiences over time can contribute to reducing the cost of establishing offshore wind power in China. Objectives include a constructive policy exchange with NEA and provincial DRCs, showing clear pathways for China setting ambitious offshore wind targets for the future.

## THE PROJECT

The Sino-Danish Offshore Wind Cooperation ("Quality Offshore") project has an initial 12 months duration (2018). The main objective of the Strategic Sector Cooperation (SSC) project is to assist Chinese government agencies and other relevant stakeholders in developing relevant strategies, policies and solutions to improve their roll-out of offshore wind energy and to achieve the government's long-term objectives for the technology.

The project design puts focus on three parallel tracks:

1. Regulatory track
2. Test and certification track
3. Best practice demonstration track

In addition, it aims to create more transparent rules and processes around allocation of sites, subsidies, grid connections etc.

## OUTCOMES

This project will provide methodologies to manage processes and risks in a complex development cycle through policy exchange, policy practice awareness,

analysis, and dissemination of Danish experiences, enabling China to establish state of the art, cost-efficient offshore wind.

## CHINA'S OFFSHORE WIND ENERGY

- 5 GW target for operating offshore wind capacity by 2020
- 10 GW target for capacity under construction by 2020
- Current operating capacity approx. 2.8 GW
- Total technical potential for offshore wind in China approx. 200 GW (below 25 m water depth) and 500 GW (below 50 m water depth)

## FOR FURTHER INFORMATION, PLEASE CONTACT:

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