

Photo: Danish Energy Agency

New energy partnership between California and Denmark to go greener together

Cooperation on energy efficiency and offshore wind will support America's Golden State in attaining its ambitious green targets and could pave the way for export of Danish technology.

There are 5.449 miles between California and Copenhagen, but the Golden State and Denmark are close to each other in terms of green ambitions and climate targets. Bringing California and Denmark even closer, Director General of the Danish Energy Agency, Kristoffer Böttzauw, was in San Francisco to sign a cooperation agreement on energy efficiency and promote Danish experiences and solutions as keynote speaker at the Pacific Rim Offshore Wind conference.

Californian interest in Danish experiences with energy efficiency

On 2 October, the Chair of the California Energy Commission, David Hochschild, and the Director General of the Danish Energy Agency, Kristoffer Böttzauw, signed a cooperation agreement on energy efficiency marking the official kick off of new activities that will deepen the partnership between California and Denmark. Activities will initially center on energy optimization in the food industry, but cooperation will also focus on energy efficient solutions within other industrial sectors, buildings and housing as well as digital data-driven approaches to develop and promote energy efficiency across consumption areas.

"Denmark's expertise in energy efficiency and renewable energy is accumulated through 40 years' experience with green transitioning in the Danish energy sector. Through knowledge sharing at government and expert level, Denmark can inspire California to increase the energy efficiency, especially in industrial processes", Director General Kristoffer Böttzauw proclaimed.

The California Energy Commission (CEC) strives to create a cleaner, safer, more affordable, and more resilient energy system for California. Yearly, CEC spends 200 million USD supporting projects and research in relation to energy efficiency in buildings, industry, food production, agriculture, and water management. Denmark operates with a holistic approach to its energy system

and Danish experience with energy optimization across sectors inspired Californian authorities during the Nordic Clean Energy Week in Copenhagen last year. As a result, state authorities have specifically requested Danish collaboration in the efforts to create a more energy efficient industry and reduce emissions. Heavy industry is responsible for roughly 20 % of California's greenhouse gas emissions.

A new fairytale of export of Danish offshore wind technologies

In 2018 California and Denmark signed a cooperation agreement on offshore wind. On the world map Denmark is a tiny North European nation of 5.8 million, but in the field of offshore wind, Denmark is a giant. Attending the Pacific Rim Offshore Wind conference from 30 September to 2 October, Director General Kristoffer Böttzauw presented a keynote highlighting Danish experiences, know-how and solutions to a wide audience before meeting with an array of strategic partners. This could mark the early beginning of a new fairytale of export of Danish offshore wind technologies to the American west coast.

"Offshore wind technology was born in Denmark, and with more than 30 years unique experience in building wind farms the cooperation between California's Energy Commission and the Danish Energy Agency could help realize the potential for offshore wind in California and pave the way for Danish export of green technology", according to Director General Kristoffer Böttzauw.

On the east coast, Denmark is already known as a world leader in the industry. Ørsted and Copenhagen Infrastructure Partners, two Danish companies on the forefront of offshore wind, are involved in projects across Massachusetts, New York, New Jersey and multiple other states. In combination these projects will deliver 3.7 GW to states along the east coast with a value of approximately 15 billion USD.

Danish presence at Pacific Rim Offshore Wind is based on the conviction, that Danish producers and their Danish suppliers could also export wind turbines and technology to offshore wind projects along the west coast, where California, Oregon and Washington focus on green energy. There is an increasing interest in offshore wind but the water depth off the coast of the Pacific Ocean and preservation of marine environment complicate the development of offshore wind farms in California. However, technology

development could provide solutions to building wind turbines on floating foundations, which could turn out to be an important contributor in California's ambitious goal of attaining 100 % green electricity by 2045.

The increasing focus on green energy among states on the west coast has prompted the Danish Ministry for Climate, Energy and Utilities and the Danish Energy Agency to post an energy attaché at the Danish General Consulate and Danish Innovation Center in Silicon Valley with the objective to intensify and expand energy cooperation with state authorities.

Facts about the potential of offshore wind

- The United States is the second largest emitter of greenhouse gasses in the world but numerous American states are planning and implementing ambitious projects with green technology, which will support the global climate targets.
- On the east coast alone, states have pledged to build more than 20 GW offshore wind by 2035. This would supply approximately 12.5 million American residences with green power 4 times that of Denmark.
- Within the next 5 years, the US will expand its offshore wind capacity from practically nothing to 3 times the capacity of Denmark's current capacity of almost 1.7 GW.
- California is one of the US leaders when it comes to onshore wind and is looking to expand its wind capacity by building offshore wind farms.

Facts about Denmark's international bilateral energy cooperation

- Denmark has more than 40 years of experience in transforming and greening its energy system - going from black to green. The experience that Denmark has acquired through the years now serves as inspiration to countries around the world.
- In 2017, more than 43% of Danish electricity consumption was based on wind, while security of supply remains the most reliable in the world.
- Through the Danish Energy Agency, Denmark has energy cooperation with 15 countries; South Korea, Vietnam, China, Indonesia, India, Turkey, Ukraine, Egypt, Ethiopia, South Africa, Mexico, USA, UK, Germany and the Netherlands. Together, we are reimagining energy systems with Danish experience, expertise and innovation.

For additional information

Energy attaché, Bo Riisgaard Pedersen, <u>borped@um.dk</u>, phone +1 650 283 3500

Contacts

Ture Falbe-Hansen Head of Press (+45) 2513 7846 <u>tfh@ens.dk</u>