





AMERICAN-DANISH ENERGY COOPERATION





DENMARK COOPERATES WITH THE U.S. TO SUPPORT SUCCESFUL OFFSHORE WIND POWER INITIATIVES AND INCREASE ENERGY EFFICIENCY IN INDUSTRY AND BUILDINGS

Denmark cooperates with several US federal and state authorities on offshore wind power and energy efficiency incentives to support state climate ambitions and the market for sustainable energy efficient solutions.

The United States is the second largest emitter of greenhouse gas in the world. Thus, it plays a key role in the global green transition. Many US states are active in pursuing ambitious emission reduction targets. The Danish Energy Agency cooperates with several American authorities and states on their green transition on both offshore wind power and energy efficiency under the Energy Governance Partnership, EGP. The aim of the EGP is to inspire partner authorities with experiences from the Danish regulatory and policy framework as well as professional expertise from the Danish Energy Agency to expand or accelerate the energy markets and the deployment of green energy technologies to reduce GHG emissions.

By building trustful relations with our US partners, we share experiences from the Danish regulatory and policy framework within offshore wind and energy efficiency and at the same time learn from them.

Sharing best practice on offshore wind

American states on the East Coast have pledged to build over 30 gigawatts of offshore wind by 2035. Denmark is partnering with states and the federal administration to accelerate the development of offshore wind. Since 2017, Denmark has been working closely together with the Bureau of Ocean Energy Management. Since then, collaboration has extended to states, including formal collaboration with New York, New Jersey and California.

The current Danish model for tendering offshore wind farms is the result of many years of experience in planning and completing large-scale wind farm tenders. Den¬mark's main contribution lies within the design of regula¬tory framework, streamlining crucial processes to attract investors and ensure a cost-effective fast expansion. Den¬mark has decades of experience within offshore wind and shares a comprehensive set of successful approaches. One example is the One-Stop-Shop, which is a procedure for permits, where the Danish Energy Agency acts as single point of contact in all government aspects.

Energy Governance partnership on energy efficiency in industry and buildings

The state of California has set ambitious climate targets, e.g. double statewide energy efficiency savings in electricity and natural gas end uses by 2030 and become carbon neutral by 2045. The Danish Energy Agency supports California in reaching their targets specifically within







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energy efficiency in industry through a close cooperation with the California Energy Commission.

Energy efficiency and decarbonizing the industrial sector

The primary driver in the cooperation is decarbonizing the industrial sector, since it is responsible for 24 percent of California's total GHG emissions. This can be done, for instance, through fuel switching from natural gas to (green) electricity, reuse of heat that is otherwise wasted and increasing the energy efficiency.

Achieving a high degree of energy efficiency in the Californian industry requires efforts from both the industries and the authorities. On one side, a deep knowledge and continuous monitoring of energy use in the production facilities are required to identify cost efficient energy saving measures. On the other side, strong support frameworks and incentives are needed to promote investments into new technologies and retrofit solutions.

Based on the Danish experiences with reducing energy consumption in industry, The Danish Energy Agency cooperates with the California Energy Commission to exchange ideas about new types of support schemes and funding programs. This can be done by supporting a more holistic approach to energy audits and energy mapping in order to increase the reuse of heat in the industrial processes. By reusing heat that would otherwise be supplied by natural gas combustion it is possible to achieve significant GHG emission reductions.

The Danish Energy Agency also organizes workshops, study- and virtual tours for energy professionals, organizations and state agencies to inspire with the Danish approach to energy mapping, energy management and policies in industries.

Energy efficiency in buildings

Residential and commercial buildings are responsible for roughly 25 percent of California's GHG emissions. Therefore, energy use in buildings is another important area for California in order to reach their climate ambitions. California has strict energy requirements in the building code and local authorities, cities and counties can even set requirements that go beyond the code. Consequently, the primary focus of the cooperation with California on energy use in buildings is on retrofitting and energy renovation of existing buildings. The Danish Energy Agency works closely with the California Energy Commission on the exchange of information on renovation on both residential and nonresidential buildings and replacement of gas-boilers with heat pumps.

FACTS

- The Danish Government Partnership program with US states was initiated in 2017 and is financed by the Danish Finance Act and as part of the Energy Agreement in 2018
- The program focuses on cooperation on offshore wind power framework and energy efficiency in industry and buildings but also facilitates knowledge exchanges within CCS, green hydrogen and power-to-x.
- Close cooperation partners are the American Bureau of Ocean Energy Management (BOEM), New York State Energy Research and Development Authority (NYSERDA), California Energy Commission (CEC) and New Jersey Bureau of Public Utilities (NJBPU). Moreover, collaboration takes place with national state organizations such as the National Association of State Energy Officers, the Clean Energy States Alliance and the National Governors Association.

