

Area of Biz Excellence...

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DENMARK – A WORLD LEADER WITHIN BIOFUEL ACTIVITIES

Looking to locate in an internationally competitive cluster?

Looking for world class R&D capabilities and access to a highly trained, and one of the world's most innovative, talent pools?

Looking for strategic partnerships with internationally competitive players plus a world leading test market and development infrastructure?

...then have a look at Denmark

Denmark has impressive competencies when it comes to clean technologies and solutions.

Turning biomass into energy and biofuel is a focus area of Danish companies and R&D. Most activities are focusing on utilization of solid biomass to heat and power and to 2nd generation bio fuel, research and development. In Denmark, biomass represents about 70 percent of the consumption of renewable energy. Within biofuel, Danish activities have focused on research and development within 2nd and 3rd generation biofuel, and the country is home to the world leading enzymes developers and manufactures. Denmark has a unique starting point for achieving a leading position with new commercial technology for biological conversion of biomass to liquid fuel. The Government's aim is that biofuels represent 5.75 percent in 2010 and 10 percent in 2020 of fuel used in transport. This corresponds to the EU's target.

Top 5 reasons for placing biofuel activities in Denmark

- Denmark has a long tradition for R&D and manufacturing within bioenergy.
- Denmark has the largest concentration of R&D within 2nd generation biofuel world wide.
- There is a good network community in the bioenergy area with close connection between companies, universities, research institutes and consulting companies.
- Strong funding and government support for energy technology development and demonstration.
- The number of companies involved in biofuels in Denmark are expanding rapidly.

Denmark has impressive competencies when it comes to energy technologies and overall energy solutions, and the country serves as an industry hub and live testing ground for the energy technologies of the 21st century. Denmark is in the vanguard when it comes to development of the latest and most efficient energy technologies. In addition, Denmark has a lot of valuable experience in applying these technologies in practice.

Companies, universities and networks in Denmark are generally very open towards collaborations and engaging in strategic collaborations with foreign companies, universities and the like. An example of this is the Northern Jutland Power Plant, which is developed by SCF Technologies together with the University of Aalborg, and is owned by the energy company Vattenfall.

Business solutions for Biofuel in Denmark includes

- R&D
- Pilot facilities
- Demonstration plants including Test market / demonstration projects (strategic partnerships with internationally competitive players plus a world leading test market and development infrastructure)
- Production facilities
- Headquarters

Among the companies working with 2nd generation biofuel development are Biogasol and Dong/Inbicon focusing on the production of cellulose ethanol by fermentation. SCF technologies works on the chemical conversion of biomass to biofuel and REnescience is a project with several participants. Its aim is to establish an integrated energy system based on gasification of liquefied biomass and household waste. The project is physically located at Amager waste incineration plant and will treat 100 kg/hour to either synthesis gas or biofuel. (www.amfor.dk). Also Aarhus University, DTU and Novozymes are currently working on a project for the development of enzymes for Biodiesel production.

Company highlights

Novozymes Novozymes is the world's leading supplier of enzymes for the production of 1st generation bioethanol for fuel. Novozymes is furthermore leading the way in the development of enzymes and processes for the production of 2nd generation bioethanol.

Inbicon Inbicon A/S is a company developing technology for producing ethanol, fuel and animal feed of non-tree based biomass. Inbicon aims to be the world leader in the development of sustainable biomass refineries distinguished by their pre-treatment technologies and energy-integration systems.

SCF Technologies SCF Technologies A/S is a green-tech company which develops and commercializes technologies based on high pressures and temperatures used to refine products, enhance processes and produce intelligent materials.

Whether your company considers to relocate, consolidate, set up new production facilities, is on the lookout for new innovation partners or other strategic business solutions in Europe, Invest in Denmark is a good place to begin. We provide customised information and services free of charge and in full confidentiality.

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