

CTCN Advisory Board Meeting Site Tour

Date: 31 August 2017

Time: 15:15 – 18:45*

Venue: Avedøre Power Station

Hammerholmen 50, Hvidovre, Denmark

The Climate Technology Centre and Network (CTCN) promotes the accelerated transfer of environmentally sound technologies for low carbon and climate resilient development at the request of developing countries.

Description:

This event will feature topics that are of interest to the CTCN. The site visit will focus on the technology of combined heat and power as well as biomass as a fuel source. Both elements are key as one increases efficiency of the power generation cycle and the other is a renewable energy technology that will help lead to a low carbon society. It is noted that the CTCN has received a request for technical assistance related to combined heat and power technologies. The site visit will provide an opportunity to better understand the operations of a combined heat and power generation facility and approaches that can be used to make the technology more climate friendly through the use of biomass.

Avedøre Power Station, DONG Energy:

DONG Energy produces electricity and district heating primarily through its nine central power stations. All their power stations are constantly being developed, maintained and modernized so they produce power and heat as efficiently as possible and with the least amount of environmental impact, while also ensuring cost-effective operation.

The multi-fuel Avedøre Power Station on the outskirts of Copenhagen has a total production capacity of 797MW electricity and 932MJ/s heating. The Avedøre Power Station is able to run 100 percent on sustainable biomass and expects to produce district heating based on biomass for approximately 215,000 Copenhagen households as well as electricity corresponding to the annual consumption of more than 600,000 households.

Avedøre Power Station consists of two power station units: Avedøre 1 and Avedøre 2. From 2015 to 2016, Avedøre 1 was converted making it able to use wood pellets instead of coal. By using combined heat and power generation, the unit is capable of utilising up to 89 % of the fuel's energy content.

Avedøre 2, from 2001, is a multi-fuel system, which utilises natural gas, oil, straw and wood pellets and can reach fuel efficiencies of up to 89 %. The unit consists of a steam turbine system, a gas turbine system and a straw-fired biomass system. The biomass system has a capacity of 45 MW and takes 25 tonnes of straw per hour.

Registration: Sign up for the site visit is required and may be done on 29 August at the registration desk for the 10th Advisory Board meeting.

Participants: Limited to a maximum of 30 participants

Special Requirements: All power plant tour participants must wear long legged trousers and closed, flat shoes

Agenda:

Time*	Description
13:45	Registered tour participants meet outside entrance to UN City
13:45 – 14:30	Travel to Avedøre Power Station (Transportation by bus provided)
14:30 – 16:30	Guided tour of the Avedøre Power Station
16:30 – 17:15	Return travel to UN City

* Times are approximate and are dependent on the progress of the 10th Advisory Board meeting of the CTCN