

CLIMATE DECLARATION FOR ELECTRICITY FROM WIND POWER

Functional unit: 1 kWh net electricity

The climate declaration shows the emissions of greenhouse gases, expressed as CO₂-equivalents. It is based on verified results from a lifecycle assessment (LCA) performed as basis for an EPD® (Environmental Product Declaration), in accordance with ISO 14025.

Product

Vattenfall AB owns wind farms in Denmark, Germany, Poland, Sweden, and UK, in the Netherlands and in Belgium. Installed wind power capacity in Denmark, Germany, Poland, Sweden, and in the UK is 615 MW of which more than 60 % is offshore. Annual electricity generation in wind farms amounts to 0,55 TWh onshore and to 0,92 TWh offshore, i.e. 1,47 TWh in total. It is not possible to adapt generation to demand, and complementary generation of electricity is required to keep the power network balance.

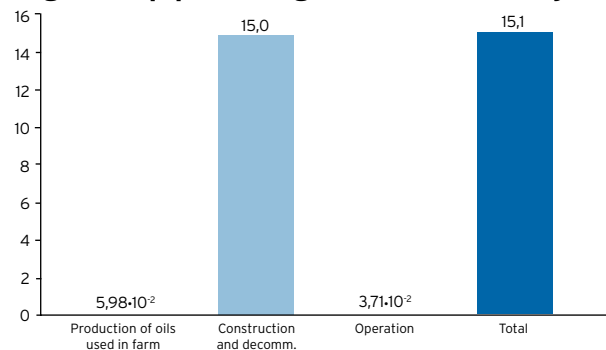
Company

Vattenfall AB is the fifth largest electricity generator and the largest heat producer in Europe. Vattenfall Wind Power has a certified management system in the Nordic region including quality, environment, and health and safety (based on ISO 9001:2008, ISO 14001:2004, and OHSAS 18001:2008). Operation of the wind farms in other countries is outsourced to companies certified according to ISO 14001 and OHSAS 18001.

Climate declaration

The life cycle stages construction/operation/dismantling of the wind farms have been inventoried. The calculations are based on a representative selection of Vattenfall's wind farms regarding wind conditions, capacity, configuration, technology, supplier, and geographic location (biotope). According to the LCA results the total emission of greenhouse gases is 15,1 g CO₂-equivalents per generated kWh.

g CO₂-eq. per kWh generated electricity



Other environmental information

The complete certified declaration also contains information on calculation methods, greenhouse gas emissions due to distribution of electricity, and LCA results for other emissions, resource use and waste as well as descriptions of environmental risks and impacts on biodiversity in accordance with the EPD® system requirements.

Contact details

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LINK TO MORE INFORMATION: www.environdec.com/REG/183		EPD PROGRAMME: THE INTERNATIONAL EPD® SYSTEM, www.environdec.com
EPD-REGISTRATION NO: S-P-00183	PCR CPC17 2007:08	PCR REVIEW CONDUCTED BY: IEC TECHNICAL COMMITTEE
INDEPENDENT VERIFICATION OF THE DECLARATION AND DATA, ACCORDING TO ISO 14025, HAS BEEN PERFORMED WITHIN VATTENFALL'S CERTIFIED EPD MANAGEMENT PROCESS. THIRD PARTY VERIFICATION OF VATTENFALL'S EPD MANAGEMENT PROCESS HAS BEEN CONDUCTED BY THE ACCREDITED CERTIFICATION BODY: BUREAU VERITAS CERTIFICATION (ACCREDITED BY SWEDAC)		
CLIMATE DECLARATIONS FROM DIFFERENT PROGRAMMES ARE NOT COMPARABLE		
READ MORE ABOUT CLIMATE DECLARATIONS AT www.climatedec.com		VALIDITY: 2013-02-01