

# ENVIRONMENTAL MANAGEMENT

Exploration, production, generation and distribution of energy all impact the environment. These impacts can be reduced but not fully prevented. In DONG Energy we are committed to minimise our resource consumption and environmental impacts.

## PROGRAMME

DONG Energy used to be one of the most coal intensive energy companies in Europe. Today, we are a global leader in renewable energy. Still, CO<sub>2</sub> emissions account for a significant part of our impact on the environment. We work strategically to reduce our CO<sub>2</sub> emissions and are committed to minimise the resource consumption and environmental impacts related to our activities. We focus on:

- Compliance with all applicable environmental requirements that we are subject to.
- Address environmental impacts from our activities such as emissions to air, waste and use of energy.
- Ensuring preparedness and response to incidents by identifying potential emergency situations and accidents that can have an impact on the environment and how to respond to them.

## GOVERNANCE

DONG Energy's commitment to minimising resource consumption and environmental impacts is formalised in our Policy for Quality, Health, Safety and Environment (QHSE).

The Policy and our Corporate Standard for Environmental Management set the fundamental requirements that must be followed by each of our business units. The business units are responsible for developing, implementing and maintaining adequate procedures that ensure compliance with the corporate policy and standard.

Our corporate department, Group QHSE, audit the business units on behalf of Group Management who has the ultimate responsibility for QHSE in DONG Energy.

### DONG Energy QHSE Policy:

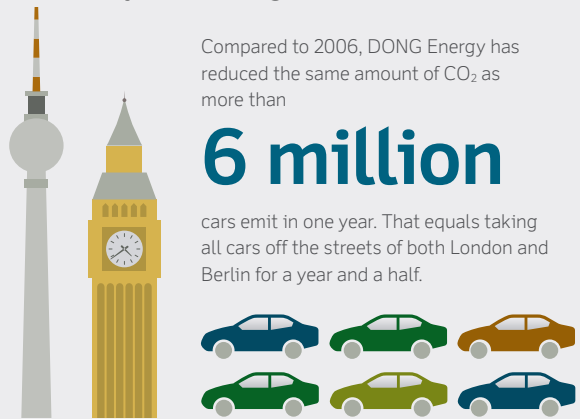
[www.dongenergy.com/qhsepolicy](http://www.dongenergy.com/qhsepolicy)

## Reduced CO<sub>2</sub> emissions from our electricity and heat generation in 2014

Compared to 2006, DONG Energy has reduced the same amount of CO<sub>2</sub> as more than

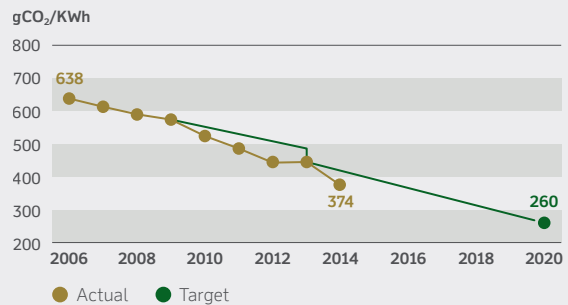
# 6 million

cars emit in one year. That equals taking all cars off the streets of both London and Berlin for a year and a half.



## REDUCING CO<sub>2</sub> EMISSIONS

DONG Energy's target is to reduce CO<sub>2</sub> emissions from our heat and power generation by 60% in 2020 compared to 2006. In 2014, we had reduced emissions by 41%.



## LEGAL COMPLIANCE

DONG Energy explore, produce, develop, construct and operate energy infrastructure in North-western Europe where environmental impacts from activities are carefully regulated and monitored by the authorities. DONG Energy complies with all applicable legal requirements and other environmental requirements that we are subjected to.

## Environmental Impact Assessments

As part of our compliance activities, we always conduct thorough Environmental Impact Assessments (EIA) prior to all new construction activities. Through these, we identify potential environmental and social risks – from project planning and construction to operations and decommissioning. The assessments help us ensure that our activities comply with national legislation as well as EU directives such as the Habitats and Birds Directives.

## Decommissioning and Rehabilitation

When the infrastructure reaches its technical lifetime it has to be decommissioned. DONG Energy's sites are all located in North-western Europe where closure and rehabilitation are comprehensively described by regulation. DONG Energy only expects to have one decommissioning activity in the near future, within our Exploration & Production (E&P) business unit. Consequently, E&P has initiated the project "Environment in the abandonment process" which will describe and plan the abandonment process of production platforms with focus on environmental issues and stakeholder management.

## CERTIFICATIONS

DONG Energy has certified environmental management systems in parts of the company: Our power stations, distribution, drilling and production platforms and Danish wind activities are all certified in accordance with the ISO 14001 standard. Wind activities outside Denmark follow the same management systems but are not certified accordingly. In addition, all power stations and our Danish exploration and production activities are certified in accordance with ISO 9001.

## ADDRESSING ENVIRONMENTAL ASPECTS

DONG Energy strives to minimise our most significant environmental risks and impacts. A variety of environmental focus areas and targets exist across the company as our business units have different environmental impacts and therefore different environmental priorities. The most significant environmental impacts and our responses are elaborated below.

### CO<sub>2</sub> emissions

The energy sector accounts for 25% of the EU's greenhouse gas emissions. DONG Energy has reduced its CO<sub>2</sub> emissions progressively compared to 2006, but it still accounts for a

significant part of our environmental impact. We have a target to reduce CO<sub>2</sub> emissions from electricity and heat generation by 60% per kWh generated from 2006 to 2020. In 2014, emissions were reduced by 41%. This is achieved by increasing generation from offshore wind turbines and replacing coal and gas by sustainable biomass at Danish CHP power stations.

### Sustainability of biomass

DONG Energy is converting a number of its Danish CHP power stations from coal to biomass. In order to ensure significant CO<sub>2</sub> reductions and preserve forests' ecosystems, the biomass we source has to be sustainable. In 2014, DONG Energy therefore developed a Programme for Sustainable Biomass Sourcing ([www.dongenergy.com/sustainability2014-biomass](http://www.dongenergy.com/sustainability2014-biomass)) which define sustainability requirements that our suppliers have to meet. We will implement a certification system under the programme and independent third-party auditors will monitor and certify our suppliers.

### Reducing NO<sub>x</sub> and SO<sub>2</sub>

Power stations emit NO<sub>x</sub> and SO<sub>2</sub>, which can result in acid rain that damages forests and lakes and cause harmful smog.

DONG Energy's targets of reducing NO<sub>x</sub> and SO<sub>2</sub> emissions per kWh generated by 90% and 99%, respectively, in 2020 compared to 1990 have been met. The targets are therefore discontinued. DONG Energy will however continue its efforts to reduce NO<sub>x</sub> and SO<sub>2</sub> emissions further. In 2014, efforts involved renovating some of the power stations, as well as optimising the coal mix.

### Energy efficiency

Energy efficiency has an important role to play in minimizing climate change. In total, DONG Energy's business units have set targets that will lead us to save more than 100 GWh of energy in our administration buildings and facilities before 2020, compared to 2010. In addition, we advise our customers such as companies, local authorities and public institutions on how to save energy and reduce CO<sub>2</sub> emissions.

### Waste

Waste can be a valuable resource. DONG Energy has set the target of increasing recycling from administration to 70% in 2020. In 2014, 52% of waste from administration was recycled. In addition, 45% of waste from DONG Energy's facilities were recycled and 2% of all waste was disposed to landfills.

### Water

Power stations depend on large amounts of water for cooling. If power stations are located in areas with water scarcity, this can be problematic. DONG Energy's power stations are all located near the sea, giving us the opportunity to use saltwater, instead of fresh water, for cooling. Therefore, our water use is relatively low compared to thermal power stations using

## A RISK BASED APPROACH

Risk management is an integral part of our environmental management system. We aim to minimise and mitigate risks from our activities throughout the life cycle of our operations.

cooling towers. Furthermore, we have optimised water usage at our power stations by using a minimum amount of high-quality water.

### Oil to sea

In oil and gas production, the production of water is an unavoidable part of operations. Although the produced water is separated from the oil and gas, it will contain residual hydrocarbons and production chemicals. The produced water is cleaned and either reinjected in the reservoir or discharged to sea. We have invested in and implemented technology to minimize our discharge to the marine environment.

### Biodiversity

Building and operating energy infrastructure can affect the local environment, including the biodiversity. In DONG Energy, biodiversity is an integral part of our EIAs and ongoing monitoring and is treated according to all legislation.

## DEALING WITH ENVIRONMENTAL INCIDENTS

Environmental incidents can potentially have severe impacts on the environment.

In DONG Energy, we define an environmental incident as an unintended incident that has a negative impact on the environment. All incidents are registered and all relevant data is recorded. The incidents are assessed based on their volume, dispersion and severity and are classified in five categories according to their significance, from C1 (lowest) to C5 (highest). C4 and C5 incidents are considered the most significant.

All incidents are investigated in accordance with their classification and corrective and preventive actions are implemented and tracked.

Learnings from incidents are communicated both within DONG Energy and externally when they have potential value for other organisations.

In 2014, 7 environmental incidents were classified as C4 and none as C5. The seven environmental incidents took the form of one leak into the sea, four spillages on the ground, and two discharges to the air. A vessel was damaged and leaked about 7 tonnes of fuel oil into the sea. The four instances of soil contamination comprised spillages of up to five hundred litres of oil; all four spillages have been cleared up completely through the removal of the contaminated soil. The two discharges to the air were due to leaky gaskets, which resulted in the discharge of approximately 2 tonnes of natural gas.