AVIATION AND CLIMATE

MARCH 2017

AVINOR

CO_2 EMISSIONS FROM AVIATION

5%

The collective greenhouse gas emission from Norway in 2015 was 53.2 million tonnes of CO_2 equivalents. The emissions from all aviation fuel sold in Norway amounted to 2.8 million tonnes, which corresponds to about 5 per cent of Norwegian emissions.

1,28
millioner tonn

Greenhouse gas emissions from all domestic aviation constituted 1.28 million tonnes, or 2.4 per cent of total emissions.

1,56
millioner tonn

Greenhouse gas emissions from international air traffic (from Norwegian airports to the first destination abroad) totalled 1.56 million tonnes.

The total CO_2emissions from aviation globally amounted to 781 million tonnes in 2015. This is about 2 per cent of global greenhouse gas emissions (source: IATA)

In addition, there is the impact caused by the fact that some emissions occur at high altitudes, which increases the environmental impact somewhat. CICERO estimates an additional factor of 0.8–2.5, with a model mean of 1.8.

In 2016, Avinor's own greenhouse gas emissions from airport operations were about 17,200 tonnes of CO_2 equivalents. This is a reduction of approximately 20 per cent compared to 2012. The emissions are reduced due to a general reduction of greenhouse gas emissions from electric power, measures for increased efficiency and the phasing in of biofuel and electric cars.

BIOFUEL AND ELECTRIC AIRCRAFT

50%

Since 2009, it has been possible to mix in up to 50 per cent biofuel with the jet fuel.

#1

In January of 2016, Oslo Airport became the first international airport worldwide to offer certified biofuel to all airlines refuelling there

It was also a world first in mixing jet biofuel into the central fuel reservoir at an airport and then distributing it together with the fossil fuel.

30%

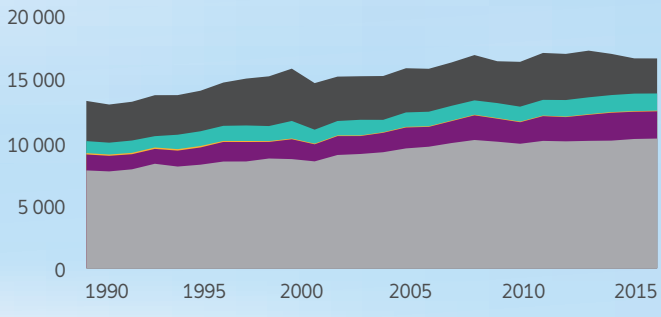
Avinor's goal: By 2030, 30 per cent of all aviation fuel sold in Norway should be sustainable biofuel.

Jet biofuel can be produced in Norway. Waste from the lumber industry is the most likely short-term raw material. Algae may be a long-term future possibility.

One- and two-seater electric aircraft are currently being manufactured. Developments in battery technology means that hybrid and fully electrical commercial aviation are now realistic conceptions for the future.

EMISSIONS OF GREENHOUSE GAS FROM TRANSPORT IN NORWAY BY SOURCE

Million tonnes of CO_2 equivalents



Source: Statistics Norway

EMISSIONS OF GREENHOUSE GAS FROM NORWEGIAN AVIATION 1990–2015

Tonnes of of CO_2 equivalents