



MILJØVERNDEPARTEMENTET

Ministry of the Environment

Norway: The NO_x tax scheme

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A package of policy instruments to reduce emissions of NO_x

- A tax on emissions of NO_x

and

- An agreement between the Norwegian State and 14 business organisations (2008-2010)
- A new agreement between the Norwegian State and 15 business organisations (2011-2017)



Why new NOx policy instruments?

- The NOx emission ceiling set by **Gothenburg** Protocol (156.000 tonnes)
- **ELVs** of the Protocol and EU legislation (the EEA Agreement) have been **implemented**
- 26 per cent of 2011 NOx emissions were from **ships and fishing vessels** (33 per cent in 1999)
- **IMO/Marpol** standards have been implemented
- Internationally agreed instruments **not sufficient** to comply with the NOx emission ceiling



The tax on emissions of NO_x

- Implemented 1 January 2007
- 2007: 15.00 NOK (~2€) per kg of NO_x emitted
- 2013: 17.01 NOK per kg of NO_x emitted
- Applies to about 55 per cent of total national emissions of NO_x



Liable to the NOx tax is energy production delivery from:

- In principle **all sectors**, but some **capacity limits**
- **Propulsion machinery** with a total installed capacity of more than 750 kW
 - about 1,500 ships in domestic shipping (of all flags)
 - about 250 fishing vessels
 - aircrafts and trains
- **Motors, boilers and turbines** with a total installed capacity of more than 10 MW, and
- **Flares** on offshore installations and facilities on land



In the case of ships and vessels tax applies to:

- Emissions from traffic within **Norwegian territorial waters** (includes cruise ships)
- Emissions from **domestic traffic** even if parts of the traffic takes place outside Norwegian waters
- In the case of Norwegian registered vessels, liability for tax applies in the case of emissions in **near waters** (applies to fishing vessels)



Exemption from the tax for emissions from:

- Ships in traffic between Norwegian and foreign ports, or aircrafts in traffic between Norwegian and foreign airfields
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- ----
- ***Emission sources encompassed by environmental agreements with the State concerning the implementation of measures to reduce NOx emissions in accordance with a predetermined environmental target***



Calculation of the tax

- On the basis of actual emissions of NO_x, calculated as NO₂-equivalents
- Three options:
 - 1) Emissions determined by **measurement** according to standard methods
 - 2) Emissions calculated on the basis of a **source-specific emission factor** and the quantity of energy consumed. The emission factor is determined by a competent authority.
 - 3) Emissions calculated on the basis of **standard emission factors** as set by the Regulations on Special Taxes



Do polluters pay the NOx tax?

- At the moment – just a few (< 10% of emissions liable to the tax)
- Why?

Exempted from the tax are:

- ***Emission sources encompassed by environmental agreements with the State concerning the implementation of measures to reduce NOx emissions in accordance with a predetermined environmental target***



The NOx Agreement 2008-2010 (of 14 May 2008)

- **Negotiated** between the Norwegian State (Ministry of the Environment) and 14 Business Organisations
- **Individual enterprises** affiliate themselves with the agreement and receive the rights and obligations that are set forth in the main agreement and in a Participant Agreement
- The agreement applies to emission **sources liable to the tax** on emissions of NOx and NOx emissions from **industrial processes**



Objectives, obligations and benefits

- The **overall objective** of the agreement was to reduce emissions from these sources to an annual maximum of 98,000 tonnes
- Obligation **to implementing abatement measures** reducing annual emissions by:
 - 2008: 2,000 tonnes
 - 2009: 4,000 tonnes
 - 2010: 12,000 tonnes of which 7,000 tonnes might be fully implemented during 2011
- Enterprises that have affiliated themselves with the agreement were granted **exempt from the NOx tax** for the years 2008, 2009 and 2010



The NOx Agreement 2011-2017 (of 14 December 2010)

- Based on the **same principles** as the first one
- **Exempt from the NOx tax** may be granted for the years 2011-2017
- **Reductions in annual emissions** by a total of 16,000 tonnes by implementing **abatement measures**:
 - 2011: 3,000 tonnes
 - 2012: 2,000 tonnes
 - 2013-14: 4,000 tonnes
 - 2015-16: 4,000 tonnes
 - 2017: 3,000 tonnes
- The **obligations** to reduce emissions **may be revised**



The Business Sector's NOx Fund

- Set up by the Business Organisations as their **means to fulfil the organisation's obligations** under the NOx agreements
- **Enterprises** that have affiliated themselves with the Environmental Agreement must also **affiliate themselves with the NOx Fund**
- Enterprises pay 4 NOK (11 NOK for the petroleum industry) per kg of NOx emitted to the Fund
- The Fund offers **financial support** to enterprises that implement NOx emission **abatement measures** and for **measurements** in order to define **source-specific emission factors**
- Annual **income** for the Fund: about **0.6 billion NOK** (~ 80 million €)



Control and sanctions

- **Reporting** obligations for the organisations and the enterprises
- **Control** by the Climate and Pollution Agency of the emission reduction effect of the single abatement measure being implemented, based on evaluation by DNV (Det Norske Veritas)
- **If lack of fulfilment** of the emission reduction obligation (less than 90 per cent) – all enterprises will **have to pay tax** for the relevant year
- If the Business Organisations fulfil e.g. 60 per cent of their obligation, the **enterprises must pay** 40 per cent of the ordinary NO_x tax rate for that year (or correspondingly 70/30 per cent)

