Denmark

The OECD Inventory of Support Measures for Fossil Fuels identifies, documents and estimates direct budgetary support and tax expenditures supporting the production or consumption of fossil fuels in OECD countries and eight partner economies (Argentina, Brazil, the People’s Republic of China, Colombia, Indonesia, the Russian Federation, and South Africa) and EU Eastern Partnership (EaP) countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine).

Energy resources and market structure

Denmark has considerable oil and gas resources in the North Sea, which have been exploited since the early 1970s. After the UK, it is the second-largest producer of oil in the EU (with Norway being non-EU). The country became a net exporter of oil and gas in 1997, and remained so until the end of 2018. In terms of electricity production, there has been significant fuel switching from oil to coal in the 1980s-90s and then to natural gas and renewables in the 2000s. The country imports all of the coal it uses for electricity production, mainly from Colombia, Russia, and South Africa.

Despite continued investment in new production wells, ageing oil fields were accompanied by an average decrease in oil production of 10% a year since 2005. The decrease in production has exceeded this average in the period 2017-18, where production fell by -16%. Natural gas production has also been steadily decreasing, and also recorded a significant -15% decrease for 2017-18. Oil and gas exploration rights are granted by the Ministry for Climate and Energy and cover all non-licensed areas. The state usually holds a 20% share of each concession.

Previously dominated by two players in the electricity sector, and only one player in the gas sector (Danish Oil and Natural Gas Group), the Danish electricity and gas transmission assets are now merged into one entity, Energinet.dk. Third parties can access the pipelines, but must negotiate the terms and tariffs for access with the company. Both markets are fully liberalised. Because Denmark participates in a common electricity market with other Nordic countries, Nordpool, fluctuations in wholesale electricity prices depend on market conditions in all member countries. At the retail level, all customers can purchase electricity and gas in the open market and choose any suppliers.

Energy prices and taxes

Although ex-tax electricity prices reflect costs, end-user prices are among the highest in the OECD area because of high taxation rates. Retail prices consist of four different elements: production, transmission and distribution elements, and the Public Service Obligation (PSO), an additional tax to support renewable energy scheduled to be phased out in 2022. Denmark has the highest share of taxes in electricity prices for households –61% in 2018– while taxes levied on industrial users are considerably lower. The same holds for ex-tax gas prices, where the percentage of taxes for households amounted to 52% in 2018.
In Denmark, energy duty commonly refers to the combined tax rate of the energy tax, carbon dioxide tax, sulphur tax and nitrogen-oxide tax. Energy products – including electricity, natural gas, coal and motor fuels – are also excisable.

Total support for fossil fuels in Denmark by fuel type (left) and support indicator (right)

Note: CSE=Consumer Support Estimate; PSE=Producer Support Estimate; GSSE=General Services Support Estimate.

Recent developments and trends in support

Due to a lack of data, the above data until 2014 represent only two support measures, targeted at household consumers. One of them is the Reduced Energy Duty for Combined Heat and Power Generation. Customers of district heating pay a reduced energy duty for heat delivered from combined heat and power plants. The aim of this concession is to provide heat and electricity with less energy than producing heat and electricity separately. However, the Ministry of Taxation has ceased to consider such measure a tax expenditure with revenue foregone estimates absent since 2015. The other is the Reduced Energy Duty for Diesel Fuel which in 2017 has seen significant declines, from DNK 5.7 billion in 2014 to DNK 1.4 billion in 2019 (net effect), forming the bulk of the significant declines monitored above. There has also been increasing support given to programs such as “Fossil Fuel Subsidy-Swap” encouraging the switch from ‘brown’ fossil fuels subsidies to ‘green’ support for programmes in energy efficiency and renewable energy.

Examples of measures

| Reduced Energy Duty for Diesel Fuel | The excise duty levied on diesel used as motor fuel in Denmark is lower than the excise duty applied to gasoline. The Danish Government considers this differential tax rate to be a tax expenditure. The corresponding estimates take into account the compensatory fee or countervailing charge for certain diesel vehicles, applicable since 1931. |

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