Sweden

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, eight partner economies (Argentina, Brazil, the People’s Republic of China, Colombia, India, 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

Sweden has minimal fossil-energy resources and relies on imported oil and natural gas. At the same time, the country possesses important supplies of renewable energy, mainly in the form of biomass and hydropower. Non-fossil energy sources, including nuclear power, contribute two-thirds of supply, the highest share of any OECD country after Iceland, making electricity generation nearly CO₂-free. Energy intensity — measured as the amount of energy consumed per unit of GDP — is relatively high due to the presence of a large energy-intensive industry sector, the country’s climate, and its sparse population.

The Swedish oil market, although fully open to competition, is dominated by the Saudi-owned company, Preem, which owns two of the country’s five refineries, with its refining capacity capable of processing around 90% of the country’s crude oil supplies in 2018. By comparison, the natural gas market is characterised by a small number of companies covering both the wholesale and retail market with the country’s gas supply entirely imported from Denmark through a single pipeline, the Baltic Gas Interconnector. The private company Swedegas AB is the Transmission System Operator (TSO) which owns and operates the transmission grid and the Skallen gas storage facility, the only existing gas storage facility in Sweden. Nonetheless, the most significant storage facilities for the country’s natural gas supply lies overseas, at the Stenlille storage facility near Copenhagen in Denmark.

Sweden takes a free-market approach to energy policy, which puts an emphasis on competition in ensuring efficient energy supply within a policy framework that aims to encourage renewable-energy sources. The country also participates in the first cross-border electricity market in Europe, the Nord Pool. Vattenfall (state-owned), Fortum (majority-owned by the Finnish State), and Uniper (47% owned by Fortum), three companies which also own the nuclear power plants in Sweden, generate most of the power in Sweden while Vattenfall Eldistribution AB (state-owned), Ellevio AB and E.ON Energidistribution AB account for most of the distribution assets and retail sales. Following liberalisation in the 1990s, more than half of electricity consumers have switched suppliers, a rate well above the average for the rest of the European Union.

Owing to its temperate climate, district heating forms a significant part of the energy market in Sweden. The sector has experienced a vigorous shift towards low-carbon fuels in the last decade. Figures in 2018 indicate that biofuels and wastes accounted for 63% of the total district heating production in the country.
**Energy prices and taxes**

All energy prices are freely determined by the market in Sweden, except for electricity and gas network tariffs, which are regulated ex-ante by the Energy Markets Inspectorate (EI). Those controls set the maximum amount of revenue that energy-network owners can collect through charges they levy on users of their networks. The tariffs for gas are subject to ex-ante approval of rate-setting methodology in order to ensure the tariffs are objective and non-discriminatory.

Energy products maybe subject to energy, CO₂ and sulphur taxes. Rates of tax vary by fuel and according to whether the fuel is used for heating or in transport; whether by manufacturing industry, energy industry or households; and, in the case of electricity, for what purpose the electricity is used and whether the use occurs in the northern parts of the country. Specific cases of tax reliefs exist. There is also a levy on pollutive NOₓ emissions.

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

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

Users of tax expenditure estimates should bear in mind that the Inventory records tax expenditures as estimates of revenue that is foregone due to a particular feature of the tax system that reduces or postpones tax relative to a jurisdiction’s benchmark tax system, to the benefit of fossil fuels. Hence, (i) tax expenditure estimates could increase either because of greater concessions, relative to the benchmark tax treatment, or because of a raise in the benchmark itself; (ii) international comparison of tax expenditures could be misleading, due to country-specific benchmark tax treatments.

**Recent developments and trends in support**

The Swedish government has put substantial effort into phasing out fossil-fuel support throughout the last decade. The most significant support measure is the reduced energy tax rate in motor vehicles using diesel as fuel. However, it is worthy to note that while diesel-run motor vehicles benefit from reduced energy tax rates, higher vehicle tax rates apply specifically for diesel cars in Sweden. With changes in CO₂ tax rates for automotive diesel and gasoline (the benchmark rate against which preferential diesel rates are evaluated) taking effect in July 2018 and January 2019, revenue foregone estimates for 2019 and 2020 point towards increasing amounts.

**Examples of measures**

<table>
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<tr>
<th>Reduced Energy-Tax Rate on Diesel for the Mining Industry (2010-)</th>
<th>Since 2010, the mining industry has been granted an 84% energy-tax reduction on diesel used for fuelling stationary machinery. In 2013, the Swedish parliament decided to increase the reduction rate to 86%. From 2016, the reduction rate is set to 89%.</th>
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<tr>
<td>Energy Tax Exemption for Domestic Shipping</td>
<td>Fuel used in commercial domestic shipping is exempted from the energy tax. The benchmark against which this tax expenditure is calculated is the energy-tax rate on gasoline in environmental class 1. Fuel used in ships for private purposes is taxed.</td>
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