



## ICELAND: INVENTORY OF ESTIMATED BUDGETARY SUPPORT AND TAX EXPENDITURES FOR FOSSIL-FUELS

### Energy resources and market structure

Iceland is a mountainous island straddling the mid-Atlantic ridge. These geographic features have endowed it with an abundance of renewable energy. Currently, around 85% of its primary energy supply, and almost 100% of its electricity, is obtained from hydro-electric power or geothermal heat. The country produces no fossil fuels, and hence imports all its petroleum-derived transport fuels. Only a small amount of fossil fuels are used for industrial processes.

Iceland converted from oil to geothermal district heating during the period 1940 to 1975. Today, 94% of space heating comes from geothermal resources and most of the rest is provided by renewable electricity. The government continues to support the increased direct use of geothermal heat for district heating in small communities (some 130 of which operate outdoor swimming pools), through long-term, low-interest loans.

Private companies supply Iceland with petroleum products; state-owned companies dominate the rest of Iceland's energy economy. Landsvirkjun (the National Power Company), the largest electricity producer in Iceland, is owned by the Icelandic State (50%) and two of the country's largest municipalities, Reykjavík (45%) and Akureyri (5%). The company sells its production wholesale to local utilities and directly to power-intensive industries. It also owns and operates the national grid. Reykjavík Energy, which is municipally owned, provides hot water to half of Iceland's population, and also generates electricity using turbines powered by geothermal steam.

At 50 000 kWh a year, Iceland's per-capita electrical consumption is by far the highest in the world. More than 85% of this consumption is by industry, dominated by aluminium smelting. Less than one-fifth of Iceland's economically and environmentally viable potential for electrical production from renewable energy resources (estimated at over 50 TWh/year) is currently being harnessed, however. A major aim of the government is to displace fossil fuels used for transport with electrical energy, either directly (through, for example, battery-powered vehicles) or indirectly through the production of hydrogen. In 1998 the Icelandic Parliament set a specific target of converting the country's vehicle and fishing fleets to hydrogen produced from renewable energy by no later than 2050. (In 2011 the target date was moved forward, to 2020.) With this aim in mind, Icelandic New Energy (INE) was founded in 1999 to promote the use of hydrogen fuel in Iceland. The company is 51% owned by VistOrka—a consortium of investment funds, the Ministry of Industry and Commerce, Iceland's major energy companies, and the University of Iceland—with the remainder owned by Daimler, Norsk Hydro, and Shell Hydrogen.

### Prices, taxes and support mechanisms

With the exception of petroleum products, energy prices are set by government-owned utilities in Iceland. Electricity for general users is sold by licensed traders (of which there are currently seven), who are selected by the users and buy the energy from production companies, most on fixed agreement of 1 to 12 years duration from Landsvirkjun, or from their own production companies. Electricity contracts for power-intensive projects are concluded on a long-term basis (frequently of 20 years duration or more), and in many cases the price component of such contracts indexes the price of electricity to the price of the output of the business in question, e.g. the price of aluminium. These contracts are frequently structured on a "take-or-pay" basis, and a special tariff applies to the

fee for transmitting electricity to power-intensive industries. Energy prices for power-intensive industries are not publicly available but all power contracts with such industries are notified to the EFTA (European Free Trade Association) Surveillance Authority, which in 2010 concluded that the contracts were in line with the market investor principle and did not involve state aid.

The use of petroleum fuels in transport is taxed directly and indirectly through several taxes. Motor vehicles are charged an excise duty at the port of import. Starting in January 2010, the *ad valorem* excise duty levied on private cars is now based on a vehicle's CO<sub>2</sub> emissions, with rates ranging from 0% for vehicles emitting between 0 and 80 grams of CO<sub>2</sub> per km, to 65% for vehicles emitting 250 grams and more. Reduced rates are levied on vehicles intended for use as taxis and rental cars, and for cars that are capable of being partially fuelled with electricity or methane. Excise taxes are completely waived for most large buses, goods trucks and off-road vehicles; cars exclusively used for motor sport and for rescue operations; and cars exclusively fuelled with electricity or hydrogen. Owners of all vehicles, no matter how fuelled, also pay a semi-annual weight tax and disposal charge. The weight tax is ISK 6.83 for the first 1 000 kg of vehicle weight, ISK 9.21 for the next 2 000 kg and ISK 2 277 for each tonne above 3 000 kg. A disposal charge of ISK 350 is levied on each vehicle twice a year, payable for fifteen years from the date of the first registration of the vehicle in the country. Once the vehicle is delivered for scrap, a ISK 15 000 refund is paid to the owner. There is also a weight-distance tax on large vehicles.

All motor fuels used by road vehicles are subject to a general excise tax (ISK 24.46 per litre) and a supplementary road tax, which amounts to ISK 39.51 per litre for unleaded fuel and ISK 54.88 per litre for diesel, as well as the normal VAT (*virðisaukaskattur*) of 25.5%. Off-road uses and diesel used for space heating or in stationary engines are exempt from the road tax. Liquefied petroleum gas (LPG), as well as compressed natural gas and aviation fuel, receives a complete exemption from the excise tax. A carbon tax applicable to liquid fuels, electricity, and hot water was also enacted in 2009; current rates are ISK 5.75 per litre for diesel fuel, ISK 5 per litre for gasoline, ISK 4.10 per litre for aviation fuel and kerosene, and ISK 7.10 per kilogram for fuel oil.

A reduced rate of VAT applies to most foodstuffs and a number of other items, including hot water delivered by pipes, electricity, oil for space heating, and water for swimming pools. As of 1 March 2007, this lower rate was reduced to 7%.

## **Data documentation**

### ***General notes***

The fiscal year in Iceland coincides with the calendar year.

### ***Consumer Support Estimate***

#### ***Lower VAT Rate on Oil for Space Heating (no data available)***

A reduced rate of VAT (7%) applies to oil used for space heating and swimming pools in Iceland. Most sales of goods and services are, however, subject to the standard 25.5% rate.

No estimates are available for this scheme.

Sources: Ministry of Finance (2009).

## Sources

### *Policies or transfers*

Althingi, *Lagasafn*, Parliament of Iceland, Available at: [www.althingi.is/vefur/upplens.html](http://www.althingi.is/vefur/upplens.html).

Ministry of Finance (2006), *Taxes and duties on motor vehicles and fuel*, Government of Iceland, Available at: [eng.fjarmalaraduneyti.is/customs-and-taxes/nr/1764](http://eng.fjarmalaraduneyti.is/customs-and-taxes/nr/1764).

Ministry of Finance (2009), *Principal tax rates*, Government of Iceland, Available at: [eng.fjarmalaraduneyti.is/customs-and-taxes/principaltaxrates/nr/11977](http://eng.fjarmalaraduneyti.is/customs-and-taxes/principaltaxrates/nr/11977).