Energy prices and taxes

Energy end-use prices influence overall energy demand and the fuel mix, which in turn determine environmental pressures caused by energy activities. They also help internalise environmental costs. Though price elasticity varies considerably by end-use sector, historical and cross-country experience suggests that the overall price effect on energy demand is strong and that increases in energy prices have reduced energy use and hence its environmental impact.

Definitions

The indicators presented here relate to energy end-use prices and taxes for selected energy sources (light fuel oil, natural gas, electricity) and for industry and households.

When analysing energy end-use prices, consideration should be given to the various support measures that may provide a benefit or preference for a particular activity or product, either absolutely or relatively. Equally, when examining energy taxes, consideration should be given to the range of energy products taxed, tax base definitions, and tax rate levels and rebates.

Overview

Real energy end-use prices have increased in most OECD countries, mainly due to a rise in crude oil prices; they rebounded in 2010-11 after a temporary drop in 2008-09 due to the economic crisis and started to slowdown in 2013 and 2014.

Energy prices and taxes, whether for industry or households, vary widely among and within countries and between different types of energy, and do not always reflect relevant externalities. The tax component of the end-use price is generally higher for households than for industry.

Uneven price signals and low tax rates and exemptions on some fuels with significant environmental impacts, result in wide differences in the tax disincentives to emit carbon dioxide (CO_2), and underline the fragmentation in current efforts to mitigate climate change. And they suggest important opportunities for countries to reform their energy tax systems and achieve environmental goals more cost-effectively.

Additional information on taxation that is relevant from an environmental point of view can be found in the sections on *road fuel prices* and on *environmentally related taxation*.

Comparability

Information on energy prices and taxes is available from the IEA, but compilation has become a challenge. Deregulation of energy markets has led to an exponential increase in the number of market players and to more and more difficulties in collecting price data on an equivalent basis. Care should thus be taken when comparing end-use energy prices, and the way that energy use is taxed. In view of the large number of factors involved, direct comparisons may be misleading, but may be used as a starting point for analysing the differences observed.

For additional notes, see the Annex.

Sources

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Further information

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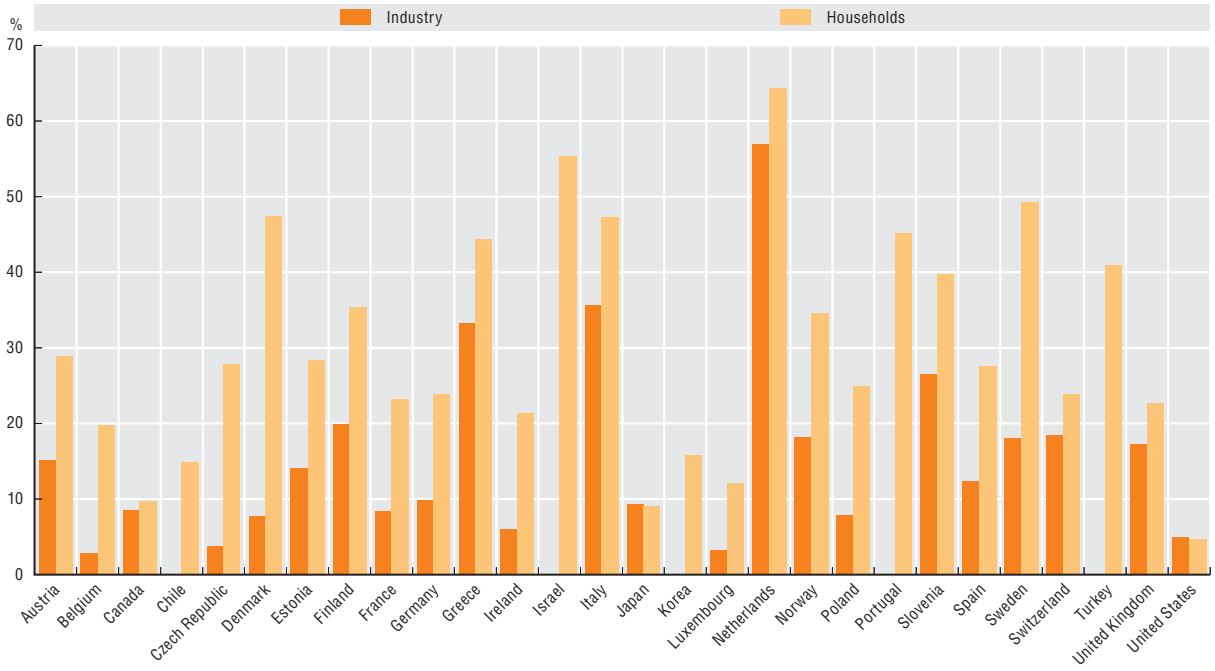
Figure 2.6. **Tax component of light fuel oil prices for industry and households, 2014 or latest available year**

Percentage of total price

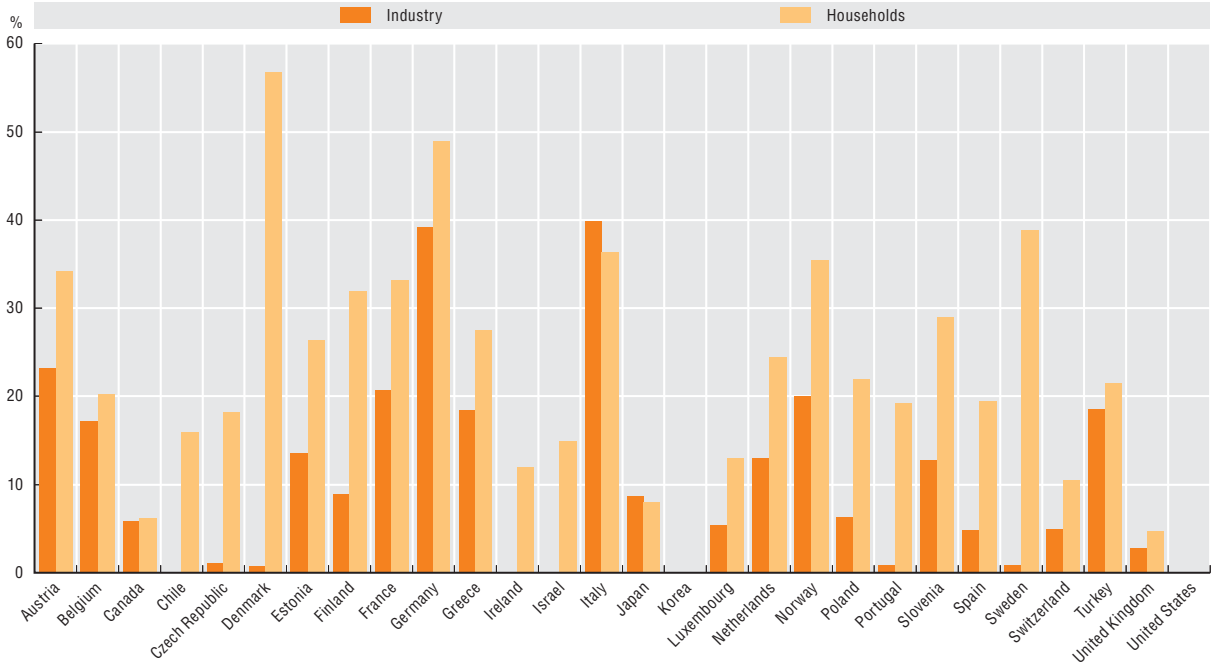


Source: IEA (2015), *IEA Energy Prices and Taxes Statistics* (database).

StatLink http://dx.doi.org/10.1787/888933262076

Figure 2.7. **Tax component of electricity prices for industry and households, 2014 or latest available year**

Percentage of total price

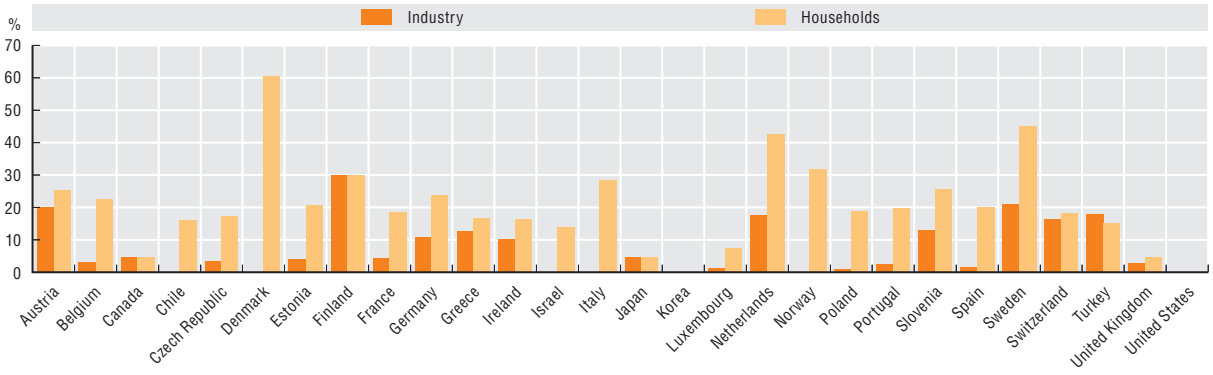


Source: IEA (2015), *IEA Energy Prices and Taxes Statistics* (database).

StatLink http://dx.doi.org/10.1787/888933262080

Figure 2.8. **Tax component of natural gas prices for industry and households, 2014 or latest available year**

Percentage of total price



Source: IEA (2015), *IEA Energy Prices and Taxes Statistics* (database).

StatLink http://dx.doi.org/10.1787/888933262093

Table 2.2. **Selected energy prices for industry and households, 2014 or latest available year**

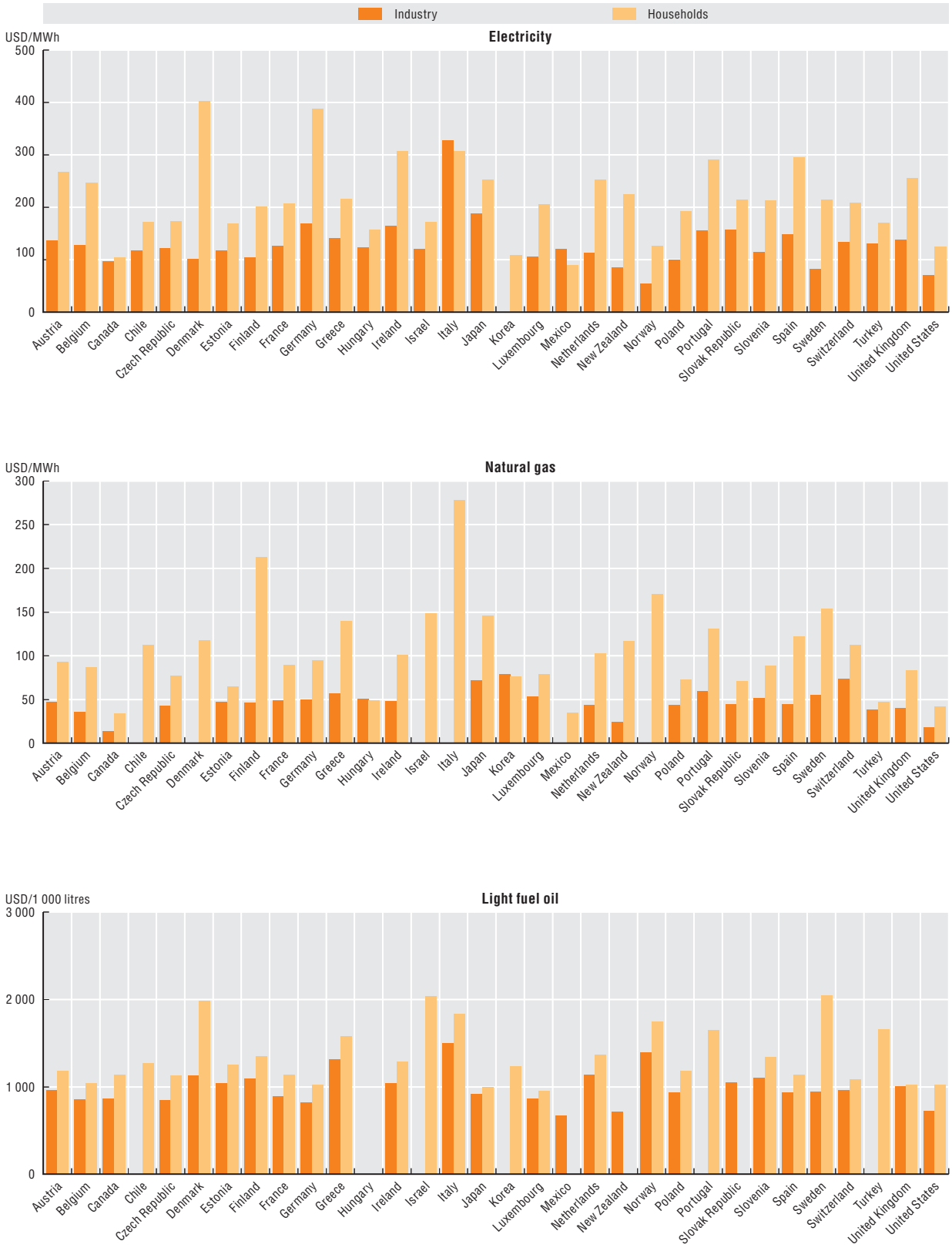
	Industry						Households					
	Light fuel oil		Natural gas		Electricity		Light fuel oil		Natural gas		Electricity	
	Price	Tax	Price	Tax	Price	Tax	Price	Tax	Price	Tax	Price	Tax
	USD/1 000 litres	% of price	USD/MWh	% of price	USD/MWh	% of price	USD/1 000 litres	% of price	USD/MWh	% of price	USD/MWh	% of price
Australia	..	..	..	..	..	..	..	..	..	..	..	..
Austria	961	15	47	20	137	23	1 183	29	93	25	267	34
Belgium	856	3	36	3	128	17	1 036	20	87	22	247	20
Canada	862	9	14	5	96	6	1 135	10	34	5	104	6
Chile	..	..	..	..	118	0	1 273	15	112	16	172	16
Czech Republic	845	4	43	3	123	1	1 126	28	77	17	174	18
Denmark	1 131	8	..	..	102	1	1 987	47	118	61	403	57
Estonia	1 044	14	47	4	118	14	1 252	28	64	21	169	26
Finland	1 091	20	46	30	105	9	1 352	35	213	30	201	32
France	890	8	49	4	126	21	1 143	23	89	18	207	33
Germany	821	10	50	11	169	39	1 021	24	95	24	388	49
Greece	1 315	33	57	13	142	18	1 577	44	140	17	216	28
Hungary	..	..	51	2	123	8	..	..	49	21	158	21
Iceland	..	..	..	..	..	..	..	..	..	..	..	..
Ireland	1 040	6	48	10	165	0	1 290	21	101	16	307	12
Israel	..	..	..	..	121	0	2 039	55	149	14	171	15
Italy	1 500	36	..	..	328	40	1 830	47	279	28	307	36
Japan	915	9	72	5	188	9	994	9	146	5	253	8
Korea	..	..	79	..	..	..	1 234	16	76	..	110	..
Luxembourg	865	3	54	1	107	5	952	12	79	7	207	13
Mexico	668	0	..	..	121	0	..	..	35	14	90	14
Netherlands	1 133	57	43	18	113	13	1 371	64	103	43	252	24
New Zealand	710	0	24	6	84	0	..	..	117	14	225	13
Norway	1 396	18	..	..	55	20	1 745	35	171	32	127	35
Poland	930	8	44	1	100	6	1 185	25	73	19	192	22
Portugal	..	..	60	2	156	1	1 654	45	131	20	292	19
Slovak Republic	1 049	0	44	4	157	0	..	..	71	17	214	17
Slovenia	1 099	26	52	13	115	13	1 341	40	89	26	213	29
Spain	940	12	44	2	149	5	1 137	28	122	20	295	19
Sweden	943	18	55	21	82	1	2 047	49	154	45	214	39
Switzerland	965	18	74	16	134	5	1 082	24	113	18	209	11
Turkey	..	..	39	18	131	19	1 661	41	47	15	170	22
United Kingdom	1 006	17	40	3	139	3	1 025	23	83	5	256	5
United States	718	5	18	..	70	..	1 025	5	41	..	125	..
OECD	**859**	**..**	**30**	**..**	**123**	**..**	**1 116**	**..**	**64**	**..**	**167**	**..**

Note: See the Annex for country notes.

Source: IEA (2015), *IEA Energy Prices and Taxes Statistics* (database).

StatLink http://dx.doi.org/10.1787/888933262380

Figure 2.9. **Selected energy prices for industry and households, 2014 or latest available year**



Source: IEA (2015), *IEA Energy Prices and Taxes Statistics* (database).

StatLink http://dx.doi.org/10.1787/888933262106