

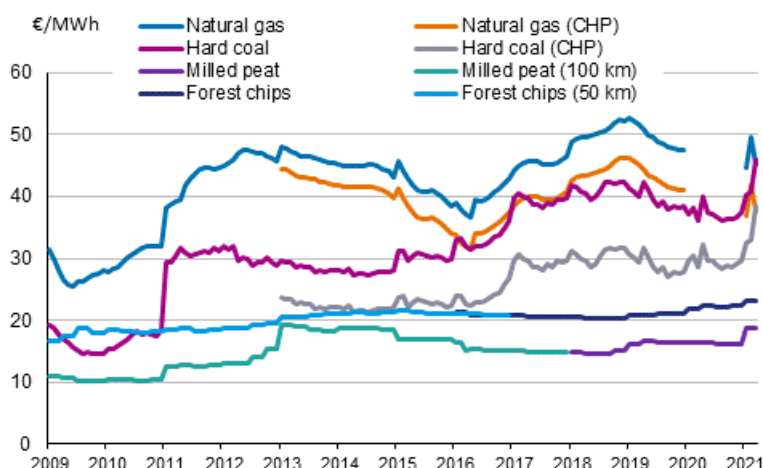
Energy prices

2021, 1st quarter

Energy prices rose in the first quarter

The rise in energy prices that started at the end of last year continued in the first quarter. The rise was affected by higher prices of imported fuels and larger demand for heating fuels and tax increases. Prices on the Nordic electricity exchange returned from the drop in 2020.

Fuel prices in heat production



The prices of oil products imported to Finland rose in the first quarter. In spring 2020, the world market price of crude oil fell sharply as the corona pandemic reduced demand and no agreement was reached on the adjustment of production. When the agreement was reached the prices rose rapidly and stabilised for the summer. The prices started to rise again in late autumn 2020. In March 2021, the import price of crude oil was at its highest since February 2019.

The rise in import prices of oil has been reflected in rising consumer prices of liquid fuels. The consumer price of motor gasoline was eight per cent higher and that of diesel oil five per cent higher in March than one year earlier. These were also affected by the tax increases that took effect in August last year. The price of light fuel oil went up by seven per cent in the corresponding period.

The import price of hard coal continued to grow in the first quarter. In March the rise was particularly big and the tax-free price was over double that of the previous year. The excise duty on hard coal was raised at the turn of the year and the price including excise duty correspondingly rose by 27 per cent.

As a result of the deregulation of the Finnish gas market, sufficiently certain data were not available on the development of the price of natural gas in 2020. The first price data of the data collection started by Statistics Finland are published in connection with this release.

Among domestic fuels, the rise in the price of forest chippings continued in the first quarter. Compared with the first quarter of the year before, the price was five per cent higher. Due to the delay in collecting prices of energy peat, prices for the first quarter were not yet available at the time of writing the release.

The customer prices of district heat were good one per cent higher in January than in the corresponding period last year.

Prices rose clearly on the Nordic electricity market in the first quarter. The rise is explained by the exceptionally low prices in 2020, from which prices came back close to the average for recent years. The system price of the Nordic electricity exchange derived from the sell and buy bids on the exchange was nearly four times higher in March and the area price for Finland nearly double compared with the price of last year's March.

The rise in electricity market prices was also visible in the one to three per cent rise in consumer prices of electricity in the first quarter depending on the customer group. Correspondingly, prices fell for enterprise customers in the smallest consumption groups but rose clearly for the largest customers. Household customers' electricity prices are based on the obligation to deliver prices published by the Energy Authority, while the prices of enterprise and corporate customers are based on Statistics Finland's price inquiry on electrical energy. The obligation to deliver price reacts slowly to changes in electricity prices on the Nordic electricity exchange.

Contents

Tables

Appendix tables

Appendix table 1. Energy taxes, precautionary stock fees and oil pollution fees	4
Appendix table 2. Energy prices in heat production in March 2021.....	6
Appendix table 3. Consumer prices of heating energy in March 2021.....	6

Figures

Appendix figures

Appendix figure 1. Import prices of oil	7
Appendix figure 2. Consumer prices of principal oil products	7
Appendix figure 3. Fuel prices in heat production.....	8
Appendix figure 4. Fuel prices in electricity production	8
Appendix figure 5. Price of electricity by type of consumer.....	8
Appendix figure 6. Average monthly spot prices at the Nord Pool Spot power exchange	9

Appendix tables

Appendix table 1. Energy taxes, precautionary stock fees and oil pollution fees

Date	Fuels ¹⁾								Electricity					
	Motor-gasoline, unleaded ²⁾	Diesel fuel ³⁾	Light fuel oil ¹²⁾	Liquefied petroleum gas	Heavy fuel oil	Hard coal ¹¹⁾	Natural gas	Peat	Consumption		Production			
									Electricity, I ⁴⁾	Electricity, II ⁵⁾	Nuclear power	Hydro power	Imports	
c/l			c/kg		€/t	€/MWh		c/kWh						
Excise taxes ¹⁰⁾														
1.1.1990	21,53	16,82	0,34	-	0,34	2,69	0,17	0,34	-	-	-	-	-	-
1.1.1991	26,57	17,49	0,35	-	0,35	2,83	0,18	0,35	-	-	-	-	-	-
1.1.1992	28,26	17,49	0,35	-	0,35	2,83	0,18	0,35	-	-	-	-	-	-
1.8.1992	31,62	17,49	0,35	-	0,35	2,83	0,18	0,35	-	-	-	-	-	-
1.1.1993	39,52	19,17	1,41	-	1,12	5,61	0,35	0,70	0,25	0,25	0,10	-	0,10	-
1.7.1993	39,52	16,65	1,41	-	1,12	5,61	0,35	0,70	0,25	0,25	0,10	-	0,10	-
1.1.1994	40,05	17,29	2,05	-	1,98	11,30	1,09	0,35	-	-	0,35	0,03	0,22	-
1.1.1995	45,12	27,50	3,02	-	3,12	19,53	0,94	0,59	-	-	0,40	0,07	0,37	-
1.1.1996	51,85	27,50	3,02	-	3,12	19,53	0,94	0,59	-	-	0,40	0,07	0,37	-
1.1.1997	51,85	27,50	4,88	-	3,72	28,42	1,19	0,71	0,40	0,40	-	-	-	-
1.4.1997	51,85	27,50	4,88	-	3,72	28,42	1,19	0,71	0,56	0,24	-	-	-	-
1.1.1998	55,22	30,02	5,50	-	4,34	33,40	1,40	0,82	0,56	0,34	-	-	-	-
1.9.1998	55,22	30,02	6,37	-	5,40	41,37	1,73	1,51	0,69	0,42	-	-	-	-
1.1.2003	58,08	31,59	6,71	-	5,68	43,52	1,82	1,59	0,73	0,44	-	-	-	-
1.7.2005	58,08	31,59	6,71	-	5,68	43,52	1,82	-	0,73	0,44	-	-	-	-
1.1.2007	58,08	31,59	6,71	-	5,68	43,52	1,82	-	0,73	0,22	-	-	-	-
1.1.2008	62,02	36,05	8,35	-	6,42	49,32	2,016	-	0,87	0,25	-	-	-	-
1.1.2011	62,02	36,05	15,70	-	18,51	126,91	8,94	1,90	1,69	0,69	-	-	-	-
1.1.2012	64,36	46,60	15,70	-	18,51	126,91	8,940	1,90	1,69	0,69	-	-	-	-
1.1.2013	64,36	46,60	15,99	-	18,93	131,53	11,38	4,90	1,69	0,69	-	-	-	-
1.1.2014	66,61	49,31	15,99	-	18,93	131,53	11,38	4,90	1,89	0,69	-	-	-	-
1.1.2015	67,45	50,26	18,39	-	21,84	153,24	15,36	3,40	2,24	0,69	-	-	-	-
1.1.2016	67,45	50,26	21,05	24,82	25,08	177,36	17,34	3,40	2,24	0,69	-	-	-	-
1.3.2016	67,45	50,26	21,05	24,82	25,08	177,36	17,34	1,90	2,24	0,69	-	-	-	-
1.1.2017	69,57	52,67	22,52	26,54	26,83	189,84	18,53	1,90	2,24	0,69	-	-	-	-
1.1.2018	69,57	52,67	24,04	28,32	28,64	202,69	19,78	1,90	2,24	0,69	-	-	-	-
1.1.2019	69,57	52,67	24,53	27,90	27,23	200,58	20,57	3,00	2,24	0,69	-	-	-	-
1.8.2020	75,28	59,13	24,53	27,90	27,23	200,58	20,57	3,00	2,24	0,69	-	-	-	-
1.1.2021	75,28	59,13	27,23	31,38	30,26	219,26	23,27	5,70	2,24	0,05	-	-	-	-
Energy content tax⁸⁾														
1.1.2011	50,36	-	7,70	-	8,79	54,54	3,00	-	-	-	-	-	-	-
1.1.2012	50,36	30,70	7,70	-	8,79	54,54	3,00	-	-	-	-	-	-	-
1.1.2013	50,36	30,70	6,65	-	7,59	47,10	4,45	-	-	-	-	-	-	-
1.1.2015	51,20	31,65	6,65	-	7,59	47,10	6,65	-	-	-	-	-	-	-
1.1.2016	51,20	31,65	6,65	8,50	7,59	47,10	6,65	-	-	-	-	-	-	-
1.1.2017	52,19	32,77	7,05	9,01	8,05	49,93	7,05	-	-	-	-	-	-	-
1.1.2018	52,19	32,77	7,50	9,58	8,56	53,13	7,50	-	-	-	-	-	-	-
1.1.2019	52,19	32,77	7,63	9,81	8,56	52,77	7,63	-	-	-	-	-	-	-
1.8.2020	53,79	34,57	7,63	9,81	8,56	52,77	7,63	-	-	-	-	-	-	-

Date	Fuels ¹⁾								Electricity						
	Motor-gasoline, unleaded ²⁾			Diesel fuel ³⁾	Light fuel oil ¹²⁾	Liquefied petroleum gas	Heavy fuel oil	Hard coal ¹¹⁾	Natural gas	Peat	Consumption		Production		
	c/l			c/kg		€/t	€/MWh			c/kWh	Electricity, I ⁴⁾	Electricity, II ⁵⁾	Nuclear power	Hydro power	Imports
1.1.2021	53,79	34,57	10,33	13,29	11,59	71,45	10,33	-	-	-	-	-	-	-	-
Carbon dioxide tax ⁹⁾															
1.1.2011	11,66	-	8,00	-	9,72	72,37	5,94	-	-	-	-	-	-	-	-
1.1.2012	14,00	15,90	8,00	-	9,72	72,37	5,94	-	-	-	-	-	-	-	-
1.1.2013	14,00	15,90	9,34	-	11,34	84,43	6,93	-	-	-	-	-	-	-	-
1.1.2014	16,25	18,61	9,34	-	11,34	84,43	6,93	-	-	-	-	-	-	-	-
1.1.2015	16,25	18,61	11,74	-	14,25	106,14	8,71	-	-	-	-	-	-	-	-
1.1.2016	16,25	18,61	14,40	16,32	17,49	130,26	10,69	-	-	-	-	-	-	-	-
1.1.2017	17,38	19,90	15,47	17,53	18,78	139,91	11,48	-	-	-	-	-	-	-	-
1.1.2018	17,38	19,90	16,54	18,74	20,08	149,56	12,28	-	-	-	-	-	-	-	-
1.1.2019	17,38	19,90	16,90	18,09	18,67	147,81	12,94	-	-	-	-	-	-	-	-
1.8.2020	21,49	24,56	16,90	18,09	18,67	147,81	12,94	-	-	-	-	-	-	-	-
Energy tax ⁷⁾															
1.1.2011	-	-	-	-	-	-	-	1,90	1,69	0,69	-	-	-	-	-
1.1.2013	-	-	-	-	-	-	-	4,90	1,69	0,69	-	-	-	-	-
1.1.2014	-	-	-	-	-	-	-	4,90	1,89	0,69	-	-	-	-	-
1.1.2015	-	-	-	-	-	-	-	3,40	2,24	0,69	-	-	-	-	-
1.1.2016	-	-	-	-	-	-	-	3,40	2,24	0,69	-	-	-	-	-
1.3.2016	-	-	-	-	-	-	-	1,90	2,24	0,69	-	-	-	-	-
1.1.2019	-	-	-	-	-	-	-	3,00	2,24	0,69	-	-	-	-	-
1.1.2021	-	-	-	-	-	-	-	3,00	2,24	0,05	-	-	-	-	-
Strategic stockpile fees															
1.7.1984	0,72	0,39	0,39	-	0,32	1,48	-	-	-	-	-	-	-	-	-
1.1.1997	0,68	0,35	0,35	-	0,28	1,18	0,084	-	0,013	0,013	-	-	-	-	-
1.1.2016	0,68	0,35	0,35	0,11	0,28	1,18	0,084	-	0,013	0,013	-	-	-	-	-
Oil pollution fees ⁶⁾															
1.1.1990	0,28	0,031	0,031	-	0,037	-	-	-	-	-	-	-	-	-	-
1.1.2005	0,038	0,042	0,042	-	0,050	-	-	-	-	-	-	-	-	-	-
1.1.2010	0,113	0,126	0,126	-	0,150	-	-	-	-	-	-	-	-	-	-
1.3.2020	0,000	0,000	0,000	-	0,000	-	-	-	-	-	-	-	-	-	-

1) Fuels in electricity production tax-exempt since 1 January 1997.

2) Reformulated, since 1 January 1993, also sulphur-free since 1 September 2004. Fossil fuel.

3) Sulphur-free, sulphur content < 50 ppm since 1 July 1993, sulphur content < 10 ppm since 1 September 2004. Fossil fuel.

4) Tax class I: others

5) Tax class II: industry and professional greenhouses

6) Collection of oil pollution fees is discontinued until the capital of the oil protection fund falls below 5 million euro.

7) Energy tax included in excise taxes.

8) Energy content tax included in excise taxes.

9) Carbon dioxide tax included in excise taxes.

10) Excise taxes contain energy content tax, carbon dioxide tax, and energy tax.

11) Excise taxes for hard coal is in the heat production. In CHP use excise tax is lower.

12) Fossil fuel. Sulphur-free.

Appendix table 2. Energy prices in heat production in March 2021

Energy source ³⁾	Price €/MWh ¹⁾	Annual change-%
Hard coal (VAT 0%) ²⁾	46.0	27.3
Natural gas (VAT 0%)	45.2	.
Forest chips (VAT 0%) ⁴⁾	23.1	5.3
Milled peat (VAT 0%)	18.8	15.1

1) Inclusive of excise duties.

2) The coal price is preliminary.

3) Sources: Energy Authority, Finnish Customs, FOEX Indexes Ltd, The Bioenergy Association of Finland, Statistics Finland.

4) Price of forest chippings and milled peat, average for 1st quarter.

Appendix table 3. Consumer prices of heating energy in March 2021

Energy source ²⁾	Price €/MWh ¹⁾	Annual change-%
Light fuel (VAT 24%)	95.9	24.7
Household electricity, L2 (VAT 24%)	142.5	3.0
Wood pellet (VAT 24%) ⁴⁾¹⁾	58.8	0.7
District heat, terraced house / low-rise block of flats (VAT 24%) ¹⁾	83.59	1.3

1) The prices do not take into account energy conversion losses.

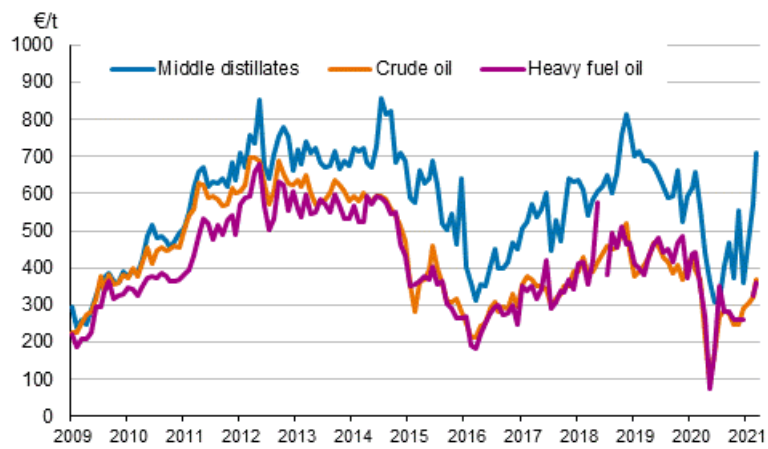
2) Sources: Finnish Energy, Energy Authority, Statistics Finland

3) The price of district heat is from January 2021.

4) Wood pellet price: Producer price indices 2021 March, appendix table 25.

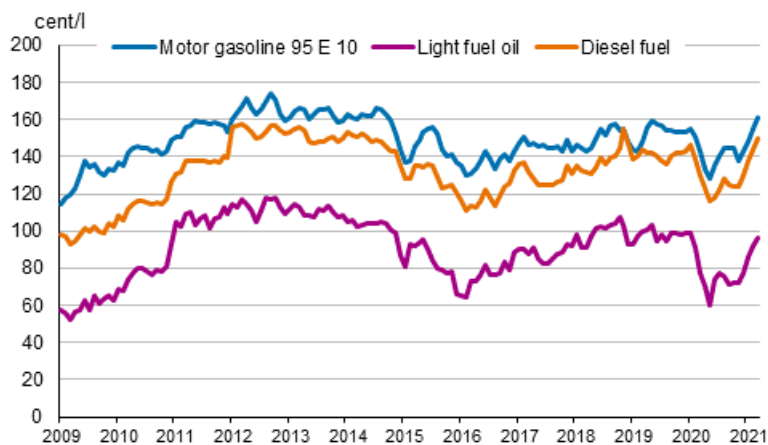
Appendix figures

Appendix figure 1. Import prices of oil



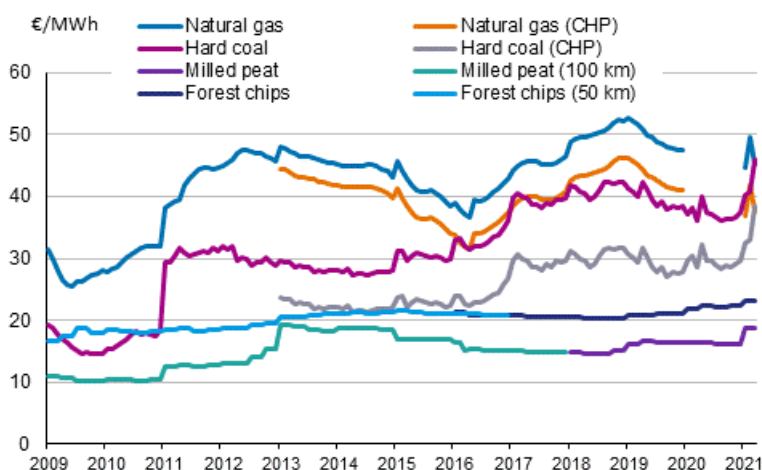
Source: Finnish Customs

Appendix figure 2. Consumer prices of principal oil products



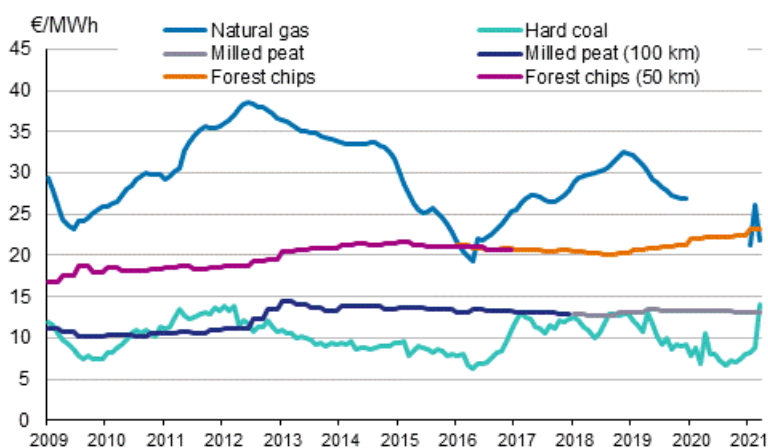
Sources: Finnish Petroleum and Biofuels Association (-11/2018), Statistics Finland (12/2018-).

Appendix figure 3. Fuel prices in heat production



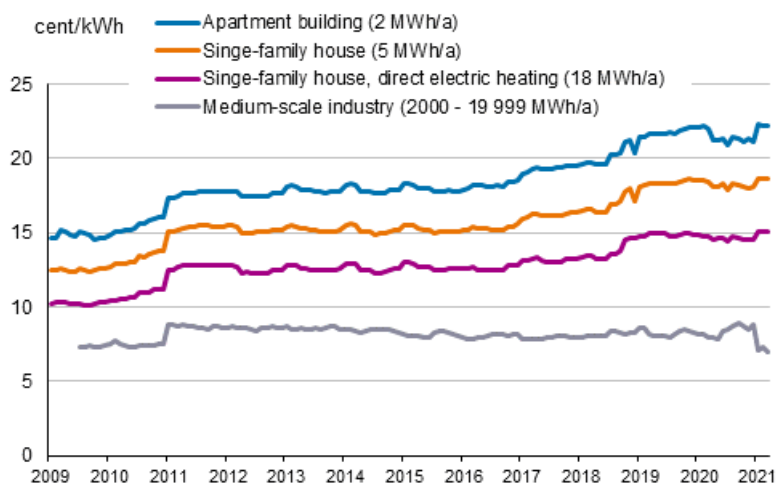
The prices include excise duties (VAT 0%). The energy content tax on natural gas and hard coal used in combined heat and power production has been reduced by € 7,63 per MWh from the beginning of 2019. Sources: Finnish Customs, Energy Authority, The Bioenergy Association of Finland, Statistics Finland, FOEX Indexes Ltd..

Appendix figure 4. Fuel prices in electricity production



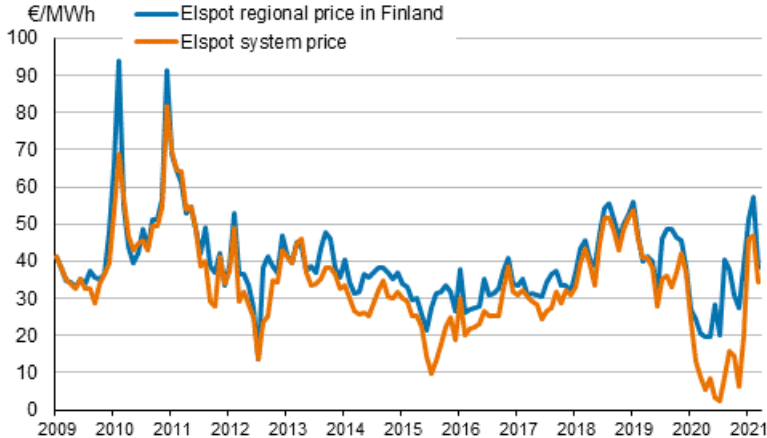
The fuels of electricity production are exclusive of tax. Sources: Finnish Customs, Energy Authority, The Bioenergy Association of Finland, Statistics Finland, FOEX Indexes Ltd..

Appendix figure 5. Price of electricity by type of consumer



The prices include electrical energy, transmission fee and taxes. Sources: Energy Authority, Statistics Finland.

Appendix figure 6. Average monthly spot prices at the Nord Pool Spot power exchange



Source: Nord Pool Spot

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Source: Statistics Finland, Energy prices