

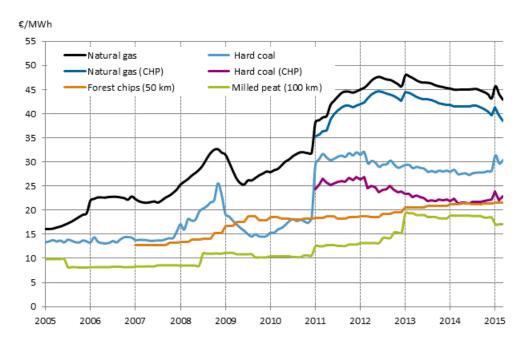
# **Energy prices**

2015, 1st quarter

## Prices of oil and electricity went down in the first quarter

According to Statistics Finland's data, consumer prices of liquid fuels fell clearly in the first quarter of the year, which was a consequence of the fallen world market price of crude oil. The price of electricity was also falling in the Nordic electricity exchange. This was visible in lower prices of electricity for enterprise and corporate customers. Changes in tax rates raised the price of coal but decreased the price of milled peat in heat production.

#### **Fuel Prices in Heat Production**



The plunge of the world market price of crude oil that started in summer 2014 appears to have halted at the turn of the year. The plunge has had an evident effect on the price of oil products imported to Finland as well. The consumer prices of liquid fuels have been clearly lower in the first quarter than one year earlier. The prices of motor gasoline and diesel oil dropped by 13 to 14 per cent. The price of light fuel oil went down by 15 per cent.

The price of hard coal used in heat production went up in the first quarter by nine per cent year-on-year, owning to tax increases. The fallen world market price of crude oil has also had an effect on the price of natural gas. Despite tax increases, the price of natural gas in heat production fell by two per cent. The tax on peat decreased at the turn of the year, which contributed to the drop of ten per cent in the price of milled peat. The price of forest chips, in turn, went up by two per cent. At the beginning of the year, the price of light fuel oil was, on average, two per cent higher than one year previously. The price of wood pellets used by consumers decreased by around four per cent.

Nordic water reserves were at average levels in the first quarter of the year. The system price of the Nordic electricity exchange derived from the sell and buy bids on the exchange was approximately seven per cent lower than one year earlier. Due to electricity transmission restrictions, the Finnish area price remained almost 14 per cent higher than the system price but was still, on average, eight per cent lower than last year. The prices of electricity for household customers remained on level with the year before, despite increases in electricity taxes. The prices for enterprise and corporate customers fell by around three to five per cent for the smallest consumers and by five to eight per cent for the biggest consumers.

## 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 2015	5
Appendix table 3. Prices of heating energy in March 2015	5
Figures	
Appendix figures	
Appendix figure 1. Import prices of oil	6
Appendix figure 2. Consumer prices of principal oil products	6
Appendix figure 3. Fuel prices in heat production	7
Appendix figure 4. Fuel prices in electricity production	7
Appendix figure 5. Price of electricity by type of consumer, c/kWh	8
Appendix figure 6. Average monthly spotprices at the Nord Pool Spot power exchange	8

# Appendix tables

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

Date	Fuels 1)					Electricity						
						Consumption Production						
	Motor- gasoline, unleaded <sup>2)</sup>	Diesel fuel <sup>3)</sup>	Light fuel oil <sup>12)</sup>	Heavy fuel oil	<sup>11)</sup> Hard coal	Natural gas	Peat	Electricity, I <sup>4)</sup>	Electricity, II <sup>5)</sup>	Nuclear power	Hydro power	Imports
	c/l		'	c/kg	€/t	€/MWh	€/MWh	c/kWh		1		
Excise ta	axes <sup>10)</sup>					1						
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	66,61	49,31	15,99	18,93	153,24	15,36	3,40	2,24	0,69	-	-	-
Energy o	ontent tax <sup>8)</sup>				I							
1.1.2011	50,36		7,70	8,79	54,54	3,00	_	-	-	_	_	_
1.1.2012	50,36			8,79	54,54	3,00	_	-	-	_	_	-
1.1.2013	50,36			7,59	47,10	4,45	-	_	_	_	-	_
1.1.2015	50,36			7,59	47,10		-	-	-	_	_	_
Carbon	Lioxide tax <sup>9)</sup>											
1.1.2011	11,66		8,00	9,72	72,37	5,94	_	_	_	_	_	_
1.1.2011	14,00		8,00	9,72	72,37	5,94			_	_	_	
1.1.2013	14,00		9,34	11,34	84,43	6,93	_	_	_	_	_	_
1.1.2013	16,25	18,61	9,34	11,34	84,43	6,93	_	_	_	_	_	
1.1.2015	16,25		9,34	11,34		8,71	_	_	_	_	_	_
Energy t		. 5,51	5,51	,• 1	,	3,, 1						
1.1.2011	a.						1 00	1 60	0.60			
1.1.2011	_	_	-	-	_	_	1,90	1,69	0,69		-	-
1.1.2013	_	_	_	_	_	_	4,90 4,90	1,69 1,89	0,69 0,69		-	-
	_	_	-	-	_	_					-	_
1.1.2015	-	_	_	_	_	_	3,40	2,24	0,69	_	_	-

Date	Fuels 1)					Electricity						
								Consumption		Production		
	Motor- gasoline, unleaded <sup>2)</sup>	fuel <sup>3)</sup>	Light fuel oil <sup>12)</sup>	Heavy fuel oil	<sup>11)</sup> Hard coal	Natural gas	Peat	Electricity, I <sup>4)</sup>	Electricity, II <sup>5)</sup>	Nuclear power	Hydro power	Imports
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	_	-	-
Oil pollution fees <sup>6)</sup>												
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	-	-	-	-	-	-	-	-

<sup>1)</sup> Fuels in electricity production tax-exempt since 1 January 1997

### Appendix table 2. Energy prices in heat production in March 2015

Energy source	<sup>1)</sup> Price €/MWh	Annual change-%
<sup>2)</sup> Hard coal (VAT 0%)	30.31	10.6
Natural gas (VAT 0%)	42.90	-4.6
Forest chips (VAT 0%)	21.55	1.8
Milled peat (VAT 0%)	17.00	-9.6

<sup>1)</sup> Inclusive of excise duties.

#### Appendix table 3. Prices of heating energy in March 2015

Energy source	<sup>1)</sup> Price €/MWh	Annual change-%
Light fuel (VAT 24%)	92.1	-9.8
Household electricity, K2 (VAT 24%)	121.0	1.0
Wood pellet (VAT 24%)	58	-3.5
District heat, terraced house / low-rise block of flats (VAT 24%)	77.67	2.2

<sup>1)</sup> The price of wood pellet is from February and district heat January 2015

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

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

<sup>4)</sup> Tax class I: others

<sup>5)</sup> Tax class II: industry and professional greenhouses

<sup>6)</sup> Fee for imported oil and oil products: 1,50 €/t

<sup>7)</sup> Energy tax included in excise taxes

<sup>8)</sup> Energy content tax included in excise taxes

<sup>9)</sup> Carbon dioxide tax included in excise taxes

<sup>10)</sup> Excise taxes contain energy content tax,, carbon dioxide tax, and energy tax

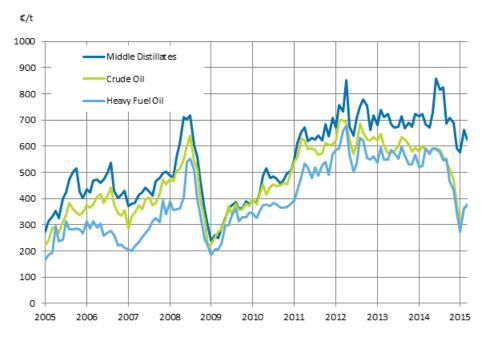
<sup>11)</sup> Excise taxes for hard coal is in the heat production. In CHP use excise tax is lower.

<sup>12)</sup> Fossil fuel. Sulfur free

<sup>2)</sup> The price is preliminary.

## Appendix figures

### Appendix figure 1. Import prices of oil



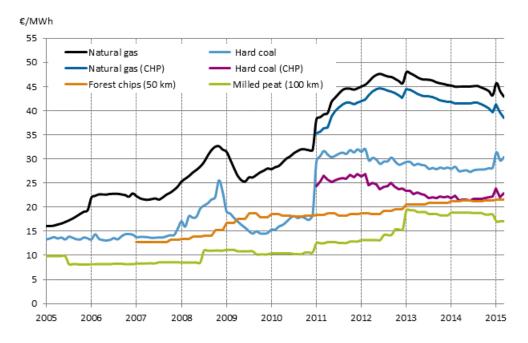
Source: Finnish Customs/Foreign Trade Statistics

### Appendix figure 2. Consumer prices of principal oil products



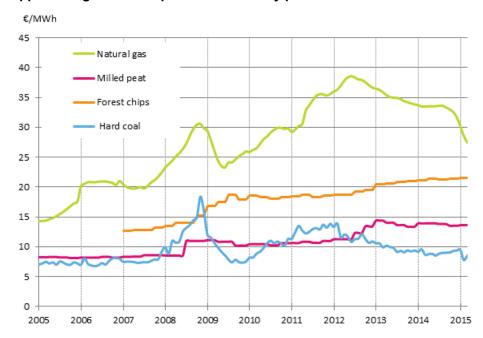
Source: Finnish Petroleum and Biofuels Association

#### Appendix figure 3. Fuel prices in heat production



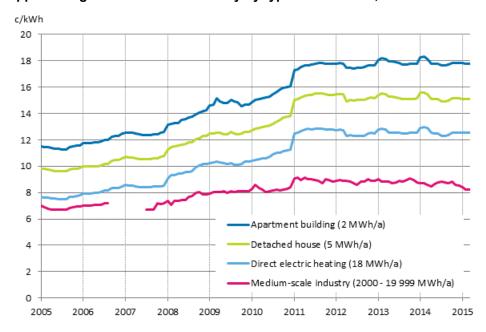
The prices include excise duties (VAT 0%). The carbon dioxide tax on natural gas and hard coal used in combined heat and power production was halved from the beginning of 2011. Sources: Finnish Customs/Foreign Trade Statistics, Energy Authority/Gasum Oy, The Bioenergy Association of Finland/Association of Finnish Peat Industries, Finnish Petroleum and Biofuels Association

#### Appendix figure 4. Fuel prices in electricity production



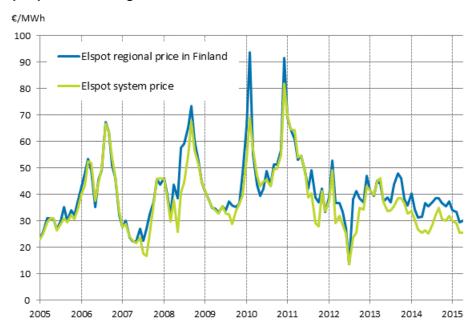
The fuels of electricity production are exclusive of tax. Sources: Finnish Customs/Foreign Trade Statistics, Energy Authority/Gasum Oy,The Bioenergy Association of Finland/ Association of Finnish Peat Industries, Finnish Petroleum and Biofuels Association

### Appendix figure 5. Price of electricity by type of consumer, c/kWh



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

# Appendix figure 6. Average monthly spotprices at the Nord Pool Spot power exchange



Source: Nord Pool Spot



Energy 2015

## Inquiries

Ville Maljanen 029 551 2691 Deputy director in charge: Mari Ylä-Jarkko

energia@stat.fi www.stat.fi

Source: Statistics Finland, Energy prices