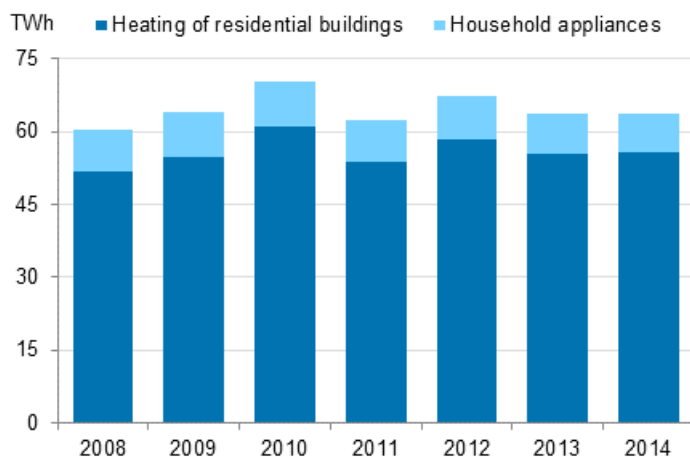


# Energy consumption in households 2014

## Energy consumption in households remained on level with the previous year in 2014

Energy consumption in households, that is, heating of residential buildings and household appliances amounted to 64 terawatt hours (TWh) in 2014. The consumption was on level with the previous year. As a result of a warm summer and cold January, the consumption of heating energy remained close to the 2013 level, growing by close on half a per cent. The energy consumption of household appliances went down by four per cent. The data are based on Statistics Finland's statistics on energy consumption in households.

### Energy consumption in households in 2008 to 2014

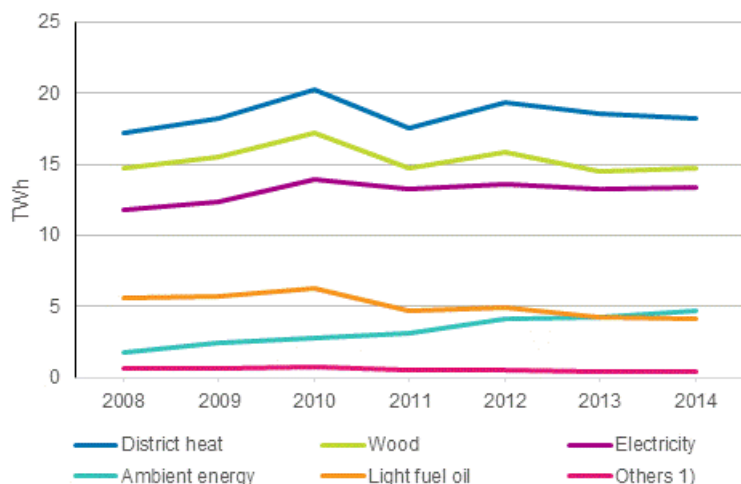


In 2014, electricity used on housing amounted to 21 terawatt hours (TWh). Electricity consumption went down by one per cent from 2013. Sixty-three per cent of electricity was used to heat indoor areas and domestic water and 37 per cent on household appliances. District heat and wood were the next most used for housing. Housing accounted, on average, for 20 per cent of the final energy consumption.

Heating of residential buildings consumed 56 terawatt hours (TWh) of energy in 2014. The most common energy source of heating was district heat, of which 18 TWh was consumed. The next most consumed sources were wood (15 TWh) and electricity (13 TWh). These three largest energy sources accounted for 83 per cent of the consumption of heating energy in residential buildings. Consumption comprises the

energy of the main heating system and that of other forms of supplementary heating, including devices associated with heating of domestic water and saunas.

### Energy sources for heating of residential buildings in 2008 to 2014



1) Includes natural gas, heavy fuel oil, peat and coal.

The use of heat pumps for heating of residential buildings continues to grow. Heat pumps utilise energy stored in the ground, water or air. The estimated energy extracted from the environment with ground heat pumps is 2.2 TWh and with air heat pumps 2.4 TWh. Air heat pumps have mainly replaced direct electrical heating, as well as heating use of oil and wood. This is most clearly visible as a decrease in the heating use of oil. Ambient energy is estimated to have surpassed light fuel oil in 2014, becoming the fourth most common source of heating energy. Described in more detail, ambient energy is the difference between the heat produced by heat pumps and the electricity they consume. In these statistics, the use of heat pump electricity is included in electricity consumption of heating. The cooling use of air heat pumps is currently included only in the electricity consumption of residential buildings.

Outdoor temperature has an effect on the annual need for heating energy. Heating degree day is used to follow changes in that. According to the Finnish Meteorological Institute, 2014 was the second warmest year in Finland's measuring history but January was colder than usual. The demand for heating energy remained on level with the warm previous year.

The energy consumption of household appliances, that is, cooking, lighting and other electrical equipment, was eight TWh in 2014. One per cent less energy was used on cooking and nine per cent less on lighting than in the year before. The switch to energy-efficient lamps has decreased the electricity need of lighting.

The consumption of other electrical equipment went down by three per cent. Other electrical equipment includes refrigeration equipment, washing machines, tumble dryers, televisions and computers with their accessories, and lifts. The lower consumption during use and standby use of televisions has lowered the consumption of electrical equipment.

With respect to the consumption of heating energy in residential buildings, the statistics on energy consumption in households are based on Statistics Finland's calculation model where various sources were utilised. The energy consumption data of household appliances in terms of electricity consumption are based on the calculations of Adato Energia Oy.

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# Appendix tables

## Energy consumption in households 2010-2014, GWh

	2010	2011	2012	2013	2014
<b>Heating of residential buildings</b>	<b>61 167</b>	<b>53 874</b>	<b>58 480</b>	<b>55 370</b>	<b>55 576</b>
Residential buildings proper, total	58 233	51 258	55 677	52 733	52 909
- Detached houses	34 987	30 991	33 572	31 548	32 083
- Terraced houses	6 054	5 344	5 807	5 569	5 508
- Blocks of flats	17 192	14 923	16 298	15 616	15 318
Free-time residential buildings	2 934	2 616	2 803	2 637	2 667
<b>Household appliances<sup>1)</sup></b>	<b>9 087</b>	<b>8 315</b>	<b>8 850</b>	<b>8 389</b>	<b>8 043</b>
- Lighting	2 702	2 482	2 349	2 115	1 919
- Cooking	826	799	714	697	689
- Other electrical equipment	5 559	5 034	5 787	5 577	5 435
<b>Housing, total</b>	<b>70 254</b>	<b>62 189</b>	<b>67 330</b>	<b>63 759</b>	<b>63 619</b>
Of heating of residential buildings					
- Heating of saunas	2 880	2 871	2 894	2 902	2 919
- Heating of domestic water	9 522	9 584	9 658	9 727	9 784

1) Apart from electricity consumption, consumption of household appliances includes use of natural gas and liquid gas in cooking.

## Energy consumption in households by energy source in 2014, GWh

	Wood	Peat	Coal	Heavy fuel oil	Light fuel oil	Natural gas <sup>1)</sup>	Ambient energy <sup>2)</sup>	District heat	Electricity <sup>3)</sup>	Total
<b>Housing, total</b>	<b>14 723</b>	<b>46</b>	<b>3</b>	<b>85</b>	<b>4 130</b>	<b>435</b>	<b>4 652</b>	<b>18 190</b>	<b>21 356</b>	<b>63 619</b>
<b>Heating of residential buildings</b>	<b>14 723</b>	<b>46</b>	<b>3</b>	<b>85</b>	<b>4 130</b>	<b>323</b>	<b>4 652</b>	<b>18 190</b>	<b>13 424</b>	<b>55 576</b>
Residential buildings proper, total	13 022	45	3	85	4 078	322	4 510	18 188	12 656	52 909
- Detached houses	12 785	40	3	-	3 271	95	4 051	2 102	9 736	32 083
- Terraced houses	148	1	-	-	221	75	415	2 874	1 774	5 508
- Blocks of flats	89	4	-	85	586	152	44	13 212	1 146	15 318
Free-time residential buildings	1 701	1	0	-	52	1	142	2	768	2 667
<b>Household appliances</b>	-	-	-	-	-	<b>112</b>	-	-	<b>7 932</b>	<b>8 043</b>
- Lighting	-	-	-	-	-	-	-	-	1 919	1 919
- Cooking	-	-	-	-	-	112	-	-	578	689
- Other electrical equipment	-	-	-	-	-	-	-	-	5 435	5 435
Of heating of residential buildings										
- Heating of saunas	1 800	-	-	-	-	-	-	-	1 119	2 919
- Heating of domestic water	469	15	1	24	801	68	681	5 161	2 565	9 784

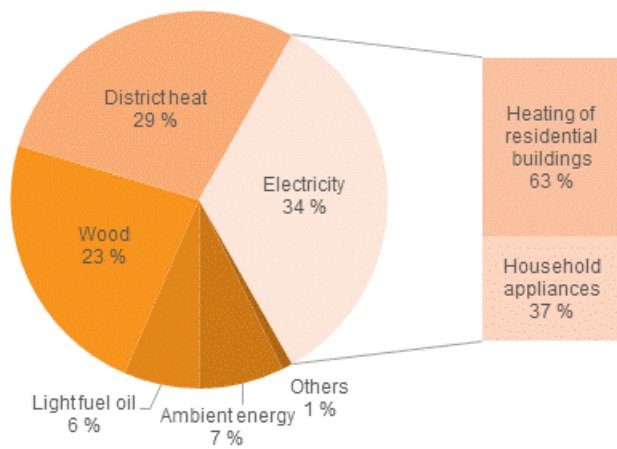
1) Includes liquid gas.

2) Ambient energy refers to energy extracted with heat pumps from the environment (ground, air or water) for space heating. Electricity spent by heat pumps in heating and cooling use is included in electricity consumption of heating.

3) Electrical heating of residential buildings includes direct electrical heating, electric storage heating, additional heating and floor heating by electricity, electricity used by heat pumps, heating of domestic water by electricity, electric sauna stoves and electricity consumed by heating systems and heat distribution equipment.

# Appendix figures

## Energy consumption in households by energy source in 2014



Used energy sources 64 TWh. The group Others contains the following energy sources: natural gas and liquid gas 0.7 %, peat 0.1 %, heavy fuel oil 0.1 % and coal 0.005 % of energy consumption in households.

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Source: Energy consumption in households 2014, Statistics Finland