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## The sun at its sweetest

**SAVE:** When the heat is too much, we need cooling. Close the blinds, draw the curtains, ventilate from the shady side.

**INVEST:** Use the air-source heat pump for cooling.



An air-source heat pump uses on average one kilowatt of electricity during cooling periods of a few hours, making the cost about 10 cents per hour. In Finland, periods of extreme heat are usually short, so it's worth keeping the pump on throughout. Thanks to the inverter technology, the power consumption is not much higher than in periodic use, as the pump is capable of operating also at part capacity when the need for cooling is low. It is important to remember to keep the windows closed while the cooling is on.

**SAVE:** In late summer, the intensity of the evening sun is lower. Wrap up in a blanket and enjoy staying out on the balcony or terrace longer.

**INVEST:** An infra-red heater spins out the summer on the terrace. Remember to turn the heater off when you no longer need it.

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## 1 Nature is the summer's engine

**There is a wealth of energy in the summer. Nature acts like a wonderful engine, and saving energy is easy in summertime.**

The summer affords us choices and new possibilities, because in the summertime the 'nature engine' works the best for our benefit. In the summer, it's easy to save energy and to reduce our ecological footprints.

### Local and fresh

**SAVE:** The summer provides local and fresh. The travel costs are low. Local vegetables, fruit, berries and forest mushrooms are at their best. They leave a minimal ecological footprint.

**INVEST:** Meat dishes also belong in the summer. Meat production requires technology and therefore more energy. Food that has travelled to Finland by airplane or ship rings the changes, even though the travel costs mount up.

**SAVE:** In the heat of the summer it's nice to cook outdoors in the natural environment. The inside of the house stays cool.

**INVEST:** On a rainy day, the oven and stove heat up quickly and evenly. For desert, you might whizz up a milk shake from berries in a blender.

**SAVE:** A well, lake or rock crevice do service as summer fridges for drinks, except in scorching hot summers.

**INVEST:** The fridge works even in a heat wave. But do make sure your refrigeration equipment is energy-efficient.



Chilling a case of soft drinks in a fridge from 22 degrees to 5 degrees uses about 240 Wh of energy. The cooling output of modern fridges is about 100 W, so the fridge compressor grinds at full whack at this job for about 2.5 hours.

## 2 Eco-friendly district heating

Saving energy and caring for the environment rank number one in importance for house builders and renovators when comparing the various heating alternatives. In a district heating area the choice is easy: when district heating is selected to cover the heating requirements, the environmental impacts of heating are minimised. In terms of energy efficiency and environmental effects, district heating is eco-friendly.

Helsingin Energia is a pioneer in the production of eco-efficient district heating. The heat is produced by cogeneration in the same plant as electricity, in other words the thermal energy created in electricity production can be utilised as district heating. The share of heat produced by cogeneration out of all the heat produced by Helsingin Energia in 2008 was about 93%.

Since 2006, Helsingin Energia's carbon dioxide emissions have fallen by all of one third. Today, up to 60% of the district heating is produced by low-emission natural gas and only 35% by coal, 3% by waste water heat pumps, and 2% by oil.

Our work for the protection of the environment goes on. At the start of 2009, the Helsingin Energia district heating unit was awarded the ISO 14001 certificate. It means that we are committed to preventing environmental pollution and to the continuous development of our operation.

Helsingin Energia is also signed up to the Ministry of Employment and the Economy Energy Efficiency Agreement, under which energy companies undertake to voluntarily improve their energy consumption and to offer their customers services through which they in turn can improve the efficiency of their own energy use.

The primary resource coefficient, to be included in the building regulations in 2012, sets the coefficients for the various heating solutions. Thanks to Helsingin Energia's production structure and its fuel efficiency, the primary resource coefficient of district heating is extremely

low, and consequently the quantity of carbon dioxide emissions is small.

As a Helsingin Energia customer, you can heat your home energy-efficiently and protect the environment.

**Marko Riipinen**  
Director, Helsingin Energia,  
District Heating

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An infra-red heater uses about 1 kWh of electricity in an hour. The average price of a kilowatt hour being 10 cents, the cost of, for example, a three-hour stay on the terrace is 30 cents.

### Nature is the summer's engine

**SAVE:** Let nature do the job. Clean washing has the best scent when it's been out in fresh air. In sunny and windy weather, the laundry dries quickly outdoors.

**INVEST:** In wet weather, drying the washing is easier using a tumble dryer.



You save about 23 euros if you dry the washing outdoors in the summer months instead of using the tumble dryer.

If the family laundry takes five machinefuls a week, that makes 20 loads a month. If the tumble dryer uses 4 kilowatt hours, the total for the summer months makes 240 kilowatt hours.



**SAVE:** Let the summer rain water the garden. Collect rainwater in water butts for the drier days. The garden should not be watered until the evening.

**INVEST:** Tap water and a sprinkler are an easy alternative, if the rain is slow in coming.

### Space for customising outdoors

**SAVE:** The summer increases everyone's living space. When living moves outside, it's easy to take the chores along.

**INVEST:** If you need more living space, buy a bigger home in summer. The prices are lower. However, the additional space means increased costs at other times of the year.

**SAVE:** Customise old garden furniture to look like new, fix your bike, use old items to make decorations for the garden or a present for a friend.

**INVEST:** Now is the time to support the national economy, buy new and use services. There is time for shopping in the summer.

### Be your own machine

**SAVE:** Scrub your rugs using muscle power and bulk up your biceps pushing the lawnmower.

**INVEST:** A pressure washer makes lighter work of stains than a scrubbing brush, and a motor mower cuts more evenly.

**SAVE:** Give your car a summer break. Walk or cycle. Drive to the cabin less often and stay longer.

**INVEST:** Tour Finland to see the summer and its events. If you have a bike on the car roof, you can get to the narrowest tracks!

### 3 Electricity distribution tariffs will rise as of 1 July 2009

Electricity distribution tariffs in Helsinki will rise as of 1 July 2009 by an average of approx. 9%. The change in distribution tariff for typical customer groups will vary between 4-11%, depending on the distribution product and volume of electricity used. The rise is due to increased network operating costs and the significant investments in the next few years. The increased

costs have resulted particularly from the increases in the grid fee and the rises in the costs of supplying electricity to cover losses of energy, and labour and material costs.

The changes in electricity distribution tariffs include an increase of EUR 0.60 per month on the general distribution basic charge, and an increase of 0.25 cents per kilowatt hour on the energy-

based distribution charge. In time-of-day distribution, a typical standing charge for a customer with electric heating will rise by EUR 2.2 per month, and the night-time energy unit charge will rise by 0.14 cents per kilowatt hour.

Business customers and those with Controlled Night-time Load will be notified about the price increase separately by letter.

The price increase is based on subsection 13.3 of the Terms of Electricity Supply and subsection 13.2 of the Terms of Network Service. Helen Network Ltd last increased distribution tariffs on 1 July 2008.

In Helsinki \*) the power network system operator is Helen Network Ltd. The company is owned by Helsingin Energia / the City of Helsinki.

	Resident in apartment block	Electric-heating customer
Annual consumption kWh/a	2,000	18,000
Increase in distribution costs EUR/mth	1.0	3.7
Increase in distribution costs %	10	6
Distribution costs after the increase EUR/mth	10.90	66.25

#### Electricity distribution tariffs for households in Helsinki as of 1 July 2009

	Distribution of electricity	Electricity tax (tax class I)	Total price
<b>General electricity</b>			
Basic charge €/mth	3.60		3.60
Energy unit charge c/kWh	3.31	1.07726	4.39
<b>Time-of-day electricity</b>			
Basic charge €/mth Main fuse max. 80 A	13.20		13.20
Daytime energy unit charge c/kWh	3.42	1.07726	4.50
Night-time energy unit charge c/kWh	2.01	1.07726	3.09
<b>Basic charge €/mth, if the main fuse is 100 A or larger</b>			
100–125 A	51.24		51.24
160–200 A	114.68		114.68
over 200 A	175.68		175.68

Helsingin Energia's sale prices of electricity will not change now.

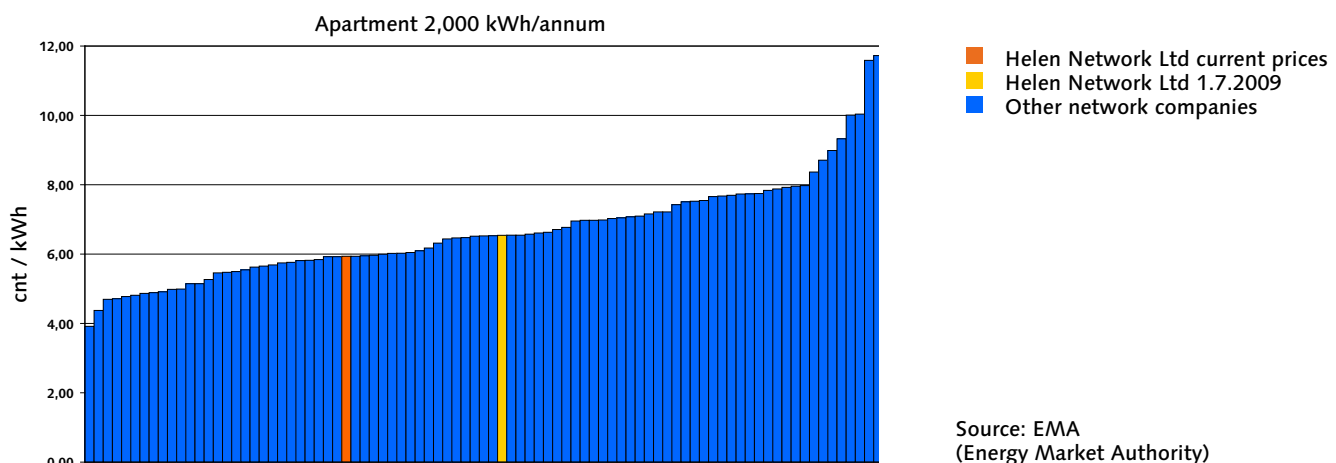
The prices include value added tax at 22%. The electricity distribution tariffs are valid in Helsinki \*)

The size of the main fuse for new general distribution customers may not exceed 3 \* 63 A, if the customer's annual consumption exceeds 5000 kWh.

The daytime electricity tariff will be valid on weekdays, from Monday to Friday, 7 a.m.-8 p.m. The night-time electricity tariff will be valid at other times, as well as on the eve of May 1st, Midsummer's Eve, Christmas Eve and New Year's Eve. The basic charge of time-of-day distribution is determined according to the main fuse in the place of electricity use. The size of the main fuse for new time-of-day distribution contracts may not exceed 3 x 80 A.

\*) Excluding the areas annexed to Helsinki on 1 January 2009

#### Electricity distribution tariff excluding tax



Source: EMA (Energy Market Authority)

## 4 Look after your appliance

Jaana Kalikowski

### You can prolong the life of your appliance by looking after it well.

Dirt and dust are an appliance's worst enemies. It is most important to keep your appliance clean. Make sure you keep the instructions in a safe place. They contain advice and directions both for its use and malfunction situations.

A fridge and freezer should be positioned as far away from heat sources as possible. Refrigeration equipment should have sufficient air space around them: at least 6–12 centimetres above. The condenser and compressor collect a lot of dust. The dust should be hoovered off them at the back of the appliance at least once a year, similarly its top and underneath.

"Poor air circulation and dust impair output and increase energy consumption", says **Riku Murtoaro** from Huoltopalvelu Oy Murtoaro.

**Jukka Berghäll** from Huoltoliike Berghäll Oy advises checking the fridge melt-water drainage hole while the appliance is pulled out for hoovering.

"You can pour a cup of water into the channel to flush it out. If the drain hole is blocked, the water runs to the bottom of the cabinet."

A clean fridge and freezer stays in good condition considerably better than a messy one.

"If dirt and crumbs are allowed to get encrusted on the door seals, they will weaken", Murtoaro points out.

The freezer should be defrosted at least once a year or when the accumulation of ice is a centimetre thick. At the same time, clean the cabinet interior and check the freezer contents.

### Air your washing machine

Always leave the washer door open after a wash. The moisture evaporates and the drum is aired at the same time. This also prevents musty smells from forming.

The machine itself should be cleaned from time to time. Most detergents contain clay-like zeolite which builds up in the machine.

"Most washing today is done at 30–40 degrees. People also tend to use far too much detergent. You should measure out the correct amounts and also wash at 60 and even 90 degrees, as this also cleans the machine. The machine can also be cleaned with citric acid, available from the pharmacy. About a decilitre of citric acid in the detergent compartment

and a run through at a minimum 60-degree wash cycle once a year is sufficient", says Murtoaro. Dried detergent should be cleaned off the detergent compartment and the well around it.

Underwired bras should be slipped into a wash bag, as in a worst-case scenario the wire can travel right into the machine bearings. Berghäll reminds us to check the fluff collector in the washing machine. All kinds of buttons and coins end up there, and they can damage the drainage pump of the washer.

The washing machine must also be correctly installed. "The machine must be well-balanced. The transport braces must be removed before use. The instructions tell you how", Murtoaho says.

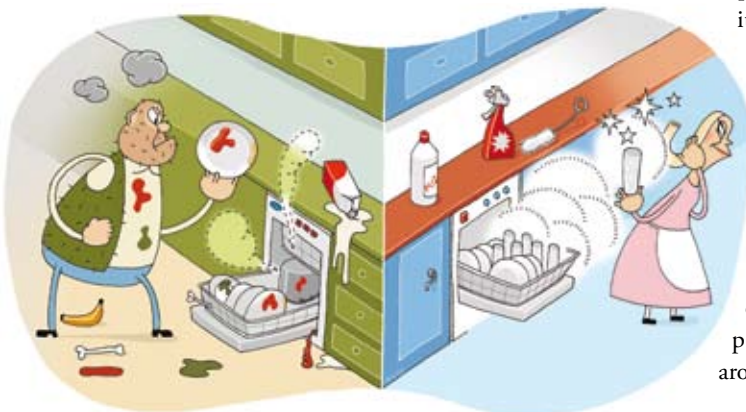
The tumble dryer should be positioned in a cool and airy spot where it will dry the washing more quickly than in a small, hot space. The fluff filter must be emptied after every drying, to prevent overloading the motor and slowing the drying process. The moisture condenser should also be cleaned from time to time. The water container is emptied after each use.

### Not a waste disposal unit

What to do when your dishes come out of the dishwasher dull or even dirty? The filter and rotor blades collect food scraps and dirt. They are easily removed and cleaned with a brush. Food scraps should be scraped off plates before placing in the dishwasher.

"The door seals and outer edges should be wiped clean. Washing with citric acid once a year also cleans the dishwasher: a couple of tablespoons in the detergent holder and a 65-degree wash cycle", Murtoaro advises.

You will find a guide to using and caring for household electrical and heating appliances at [www.energianeuvoja.fi](http://www.energianeuvoja.fi).



## ● AT YOUR SERVICE Service numbers and price info

### Helsingin Energia

Telephone (09) 6171  
Sähkötalo, Kampinkuja 2,  
FI-00090 Helen  
[www.helen.fi](http://www.helen.fi)

### Customer service, 3rd floor

Mon–Fri 8.30–16  
June 18–August 16: Mon–Fri 8–15  
Telephone service Mon–Fri 8–18  
Telephone service July 1–August 18:  
Mon 8–18, Tue–Fri 8–16  
Domestic customers 010 802 802  
Business customers 010 802 803  
Electricity meter readings 010 802 804

### Fault reports

Breakdowns in electricity supply  
08001 80808  
Breakdowns in district heating supply  
08001 60602  
Faults in outdoor lighting 08001 73173  
Telephone calls received by Helsingin  
Energyn customer service are recorded.  
Call charges for numbers beginning with  
010:  
• from landlines: 8.21 c/call + 5.9 c/min.  
• from mobile phones, all operators:  
8.21 c/call + 16.9 c/min.  
The prices include VAT at 22%.  
Our free e-services are available on our  
website: [www.helen.fi](http://www.helen.fi)

### Advisory services

Energy Advisory Centre (09) 617 2726  
Advice on how to choose and use domestic  
appliances. You can also borrow energy,  
moisture, structural, surface temperature  
and light meters from us:  
[energiakeskus@helen.fi](mailto:energiakeskus@helen.fi)  
Advice on electricity use and energy saving  
(09) 617 4010

### District heating

New connections to district heat  
(09) 617 2961  
Advisory service on heat use  
(09) 617 2969  
Billing and consumption enquiries  
(09) 617 2856

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