

## GUIDE

### This is how we save energy

#### Lighting



- **Turn off the lights** every time you leave the room for at least ten minutes. Modern fluorescent lights stand up to be switched off and on.
- **Wipe regularly the dust from the lamps and lights.** Dust reduces the light capacity of the lamps.
- **Change light bulbs to fluorescent lights and energy saving lamps.** In that way you get lighting more economically.
- A twilight switch, movement sensor and a timer controls the economical use of lights.

#### Heating



- **Buy an accurate room temperature thermometer and place it in the room you use most.**
- **Let your janitor know if the room temperature is too high or low.** Suitable room temperature is +20 - +22°C.

- **Turn the radiator down** if the room temperature is too high.
- **If you get cold even though the temperature is +21 °C, put on more clothes.** Pullover and woolly socks are good winter clothing.
- **Close the doors of foyers, stairways and other cold areas behind you.**

### Airing



- **Close the windows** when you leave the room.
- **During heating season air the room quickly with draught.** Don't leave the window open for the whole day.

### Water



- **Let the janitor immediately know about a leaking tap or toilet seat.**
- **Turn off the shower while you soap.** The shower uses 24 liters of water in two minutes. A ten-minute shower takes 120 l of water.
- **Don't do the dishes under running water.**

## Computers and peripheral devices

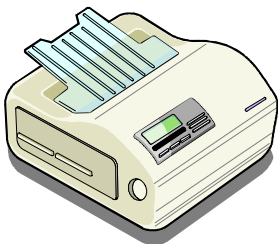


- **Use a laptop.** It consumes less electricity than a normal computer.
- **Make sure that the power saver system is installed** and you know how to use it.
- **Turn off the computer** when you don't use it.

### Screen

- **Turn off the screen from its own switch** during breaks.
- **Install the computer screen power saver.** While in use the screen takes 85 W current, the power saver drops the consumption to 5 W.  
When you switch off the screen, the consumption is zero.

### Printers



- **If your printer has a power saver system, turn it on.**
- **Turn off the printer** when it's not used.
- **Use preview** to avoid unnecessary printing.
- **Use e-mail.** It reduces printing, but **don't print the e-mails you've received.**

## Copy<sup>4</sup>



### **machines**

- **Think if your copy is necessary. Can it be done differently using less energy.**
- **Prefer two sided copies.**  
You'll spare the machine, color powder, electricity and paper.
- **Concentrate the copy work.** Electric consuming increases every time the machine heats up from a state of rest to active state.
- **When you're finished, switch the electricity saver on** (if it doesn't switch on by itself.) Get a timer for the machine, which turns it off automatically.
- **Turn off the machine at the end of the working day and for the weekend.**

### **Cooking**

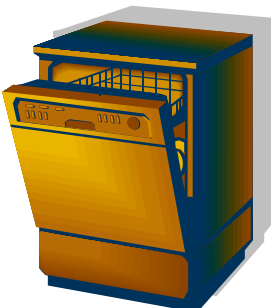


- **Use kettles that are the size of the stoves hotplates.**
- **Use thick bottomed pots, pans and kettles.**
- **Use a lid.**
- **Keep the hotplates and bottoms of the kettles clean.**
- **Don't keep the hood on if you don't need it.** Even if it isn't actually consuming that much energy, the heat will flow out through it.

- **Clean the grease filters on the hoods often enough.**
- Whenever it's possible **use only as little water as possible**, to barely cover the food when cooking.
- **Utilize pre-heat.** You can put many dishes in a cold oven, so that the pre-heating energy is also being utilized.
- **Utilize afterheat.** As soon as the food starts to boil, you should turn the power of the hot plate smaller. Food cooks under the lid with mild heat. For example, flake porridge cooks fast when you add the flakes in the boiling water, turn the plate off and let the porridge cook in the afterheat.

The oven should also be turned off early enough and let the food cook in the afterheat. Heating the oven consumes more energy than keeping the oven hot. Use the same oven with a friend if possible.

- **Use microwave.** Microwave is a fast and energy saving alternative to the normal oven especially when cooking or warming up food for only 1-2 persons. Smaller appliances like water- and coffee machines, miniature grills and toasters are economical and usually faster than the stove and oven.
- **Convection oven/combination oven is more economical than a conventional oven.** You don't have to preheat the convection oven. When using convection oven you choose 20-50 degrees lower temperature than when using a conventional oven. In convection oven/combination oven several baking plates can be baked at the same time.
- **Use induction plates if possible.**



**Dish washing**

- If you use a dishwasher, **you don't have to rinse the dishes before putting them into the dishwasher.** Clean the leftovers with a scraper or paper.

- **Wash only when the dishwasher is full** and fill the washer systematically.
- **Choose the right washing program.** When washing coffee cups use a short washing program. For dishes which have been waiting for cleaning two days, use a more thorough program with prewash. Drying program is not always necessary. The dishes will dry for themselves, if you open the door after washing. Open the door completely so that the hot steam doesn't harm the edge of the worktop.
- **Clean the litter strainers in the dishwasher regularly.** Wipe door gaskets and rims.
- **If the dishwasher is on but there will be pauses, use stand by (0 or curve.)**

### Cold storage



- **Watch the thermostats on the fridges and freezers.** A good temperature in a fridge is +8 degrees and in a freezer -18 degrees. Too low temperatures increase energy consumption. For example it is not good to forget on the power freezing for a long time.
- **Cooling the food.** Follow own-control instructions.
- **Hold your products in order.** Place food in fridges and freezers so that you can quickly find it after you have opened the door. More often used foods in front and less used in the back. Keeping the door open warms up the appliance and eats energy.
- **Don't let the frost accumulate.** Packages that are open as well as uncovered and warm products will evaporate humidity, which increases

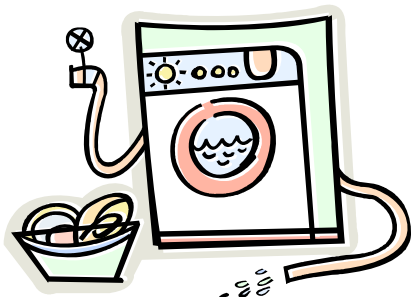
consumption of electricity. Close the packages and use cling film or a lid on the dishes. Cool down a hot kettle in a coldwater sink. Pack products carefully and cool them in the fridge before freezing. By doing this you can reduce the frost in the freezer.

- **Utilize the coldness of the frozen product.** Thaw the frozen product, meant for the next day, by placing it in the fridge where it will release coldness in the fridge while thawing.
- **Vacuum clean the back of the fridge and freezer once a year.** The dust that has accumulated around the pipes increases the energy consumption. Vacuum also the condenser and compressor.
- **Defrost the freezer regularly.** A thick frost layer in a freezer increases energy consumption. It's recommended to defrost the freezer 1-2 times a year or when the frost layer is more than 1 cm thick. Defrosting is practical when there is minus degrees outside and the frozen products can be placed outside or on the balcony

while the freezer is defrosting. Another good defrosting time is before berry freezing season starts and the freezer is almost empty.

- **Place the fridge and freezer correctly.** They should be placed in a way that there's no heater, stove, dishwasher or any other heat producing machine next to them and there's no direct sunshine. There should be enough space around the fridge/freezer according to the manual. If you block the ventilation grill, the electricity consumption will increase by 160% according to the measurement by TTS (research, development and training institute).

## Clothing maintenance




- **Wash only full loads.** A half empty load takes the same amount of energy as a full load of laundry.
- **Choose the right program.** Heating the water takes the most electricity when doing laundry. That's why the temperature is lower and

washing time is longer in energy saving programs. Follow the washing instructions on clothes.

- **Avoid unnecessary prewash.** Only extremely dirty laundry needs a program that includes prewash.
- **Prefer spinning.** Removing water of the clothes by spinning is more economical than using a drying cabinet or a tumble dryer. A good spin speed is 800 -1000 rpm. Tumble drying takes less electricity and time if the spin speed is higher.
- **Avoid unnecessary use of a tumble dryer or a drying cabinet.** You can use the drying cabinet for hanging up laundry without turning it on, if there is no rush getting the laundry dry. When hanging the laundry on the clothesline or clothes horse, straighten the clothes as well as possible to minimize the need of ironing and mangling.
- **Drying outdoors is the most energy economical way of drying laundry.**
- **Buy an energy saving washing machine and tumble dryer.**  
It always pays off to compare the energy classes of the appliances, it will eventually lower you electricity bills.
- **Clean the fluff strainer of the washing machine regularly** and wipe the gaskets.
- **Remove the precipitate.** The precipitate that builds up in the washing machine should be removed a couple of times a year. Put 100grams of lemon acid (from the pharmacy) into the detergent compartment and wash the empty machine in 90 degrees on white wash program.

## Traffic

-  **Use your own car only when you can't get to your destination on foot, by bike or by public transport.**



- **Think about car pools when driving to work or to your hobbies.**
- **Walk on school premises.** You will get a refreshing breeze during the working day.
- **Learn how to drive economically.** You can save 12-15 % on fuel. Driving schools and the Automobile and Touring club of Finland organize courses in economic driving. You can also learn the tricks from guides and hint lists.
- **Avoid starting your car when it's cold.** Use an engine warmer when the temperature drops below +5°C.
- **Plan your day in the morning.** Run many errands during the same trip.
- **Take off unnecessary load.** The roof-rack and cargo box increase the fuel consumption by 1 liter per hundred kilometers.

## **Sources**

Motiva

Helsingin Energia

Varsinais-Suomen Energia Oy