

# The GREEN TIPS

## 9.1 Energy

Conserving energy means reductions in the use of power, heat, fuel and warm water. Energy can be conserved in various ways, for example, by making energy usage more efficient, trimming unnecessary consumption and minimizing power and heat loss. In addition, conserving energy is beneficial both financially and environmentally.

### Lighting

- Turn off the lights, if you are the last one to leave the room, especially for the night.
- Use natural light by opening the window blinds and directing the light so that it doesn't bother working.
- Only use artificial light when it is necessary.
- Report lamps that have burned out to the property maintenance.

### Computers and monitors

- It is recommended to shut down the computer, monitor and any other appliance that is not in use for the next 15 minutes or longer.
- Enable the automatic power-saving functions on your computer. This can reduce the power consumption of the display by 50-80%. Turn the display off completely if you're absent for a long period of time. (Screen saver = 85 W, power-saving "sleep" mode = 0-2 W, power off = 0 W)
- Activate the power-saving functions also on the computers found in meeting rooms, class-rooms and group work rooms.

Energy production is responsible for 80% of all carbon dioxide emissions. Carbon dioxide CO<sub>2</sub> has a crucial role in global warming and thus climate change. The carbon dioxide emissions produced by power and energy consumption can be assessed with the Climate Calculator at [www.ilmastolaskuri.fi/en](http://www.ilmastolaskuri.fi/en).

### Other appliances

- Shut down the video projector after each class/meeting and always when it is not in use.
- Cluster copy and printing tasks to give the printing machine a chance to enable its automatic power-saving mode.
- Detach your phone charger and other appliances from the power sockets when they are not in use.
- Turn off the coffee maker after the brewing is complete.
- The use of a water boiler is preferred when heating water.
- Start the dishwasher only when it is full.
- Report broken appliances to the property maintenance, helpdesk or facility service personnel.
- Use stairs instead of elevators, especially when moving only one floor up or down.

### Heating

- Adjust the temperature of the work space to a suitable degree. Lowering the temperature with just one degree can have a substantial affect on power consumption.
- Do not place furniture or curtains in front of a radiator.
- Report temperature anomalies to the property maintenance.
- Ventilate rooms with a cross-draught, do not keep the window open the whole time. If the windows are constantly open, the air conditioning system does not operate correctly.

## 9.2 Water

Clean water has never been scarce in Finland, so limiting water consumption hasn't always been an important issue. However, water consumption deserves attention. Especially avoiding unneccessary use of heated and purified water can ease the strain put on the environment. Keeping the water running for no reason should be avoided at all times.

- Do not keep the water running! If there's no cold water, fill a water jug and place it in the refrigerator. Report taste and temperature anomalies to the property maintenance.
- Adjust the faucet appropriately, a small flow of water is usually sufficient.
- Wash and rinse dishes in the sink, not under running water.
- Start the dishwasher only when it is full. Economic or quick wash programs should be sufficient for coffee cups, plates and spoons.
- Report leaking faucets and toilet seats to the property maintenance as soon as possible.
- Do not waste water. Turn off the shower for the duration of applying shampoo or soap.
- Only use the toilet for its proper purpose. Trash does not belong in the toilet and can cause various problems and expenses.

The average amount of water consumption in Finland is about 90-270 litres of water per resident. The average daily consumption rate is 155 litres of which showering uses up 60 litres, the toilet 40 litres, the kitchen 35 litres and washing clothes 20 litres. For example a five minute shower consumes an average of 60 litres of water depending on the type of water fixtures in use. There-fore water consumption does deserve a fair amount of attention. Information about water consumption and many other topics can be found at the Motiva website ([www.motiva.fi](http://www.motiva.fi)).



## 9.3 Paper

The everyday life of the university consumes a large quantity of paper, whether for teaching, research or administrative purposes. Anyone can take part in reducing paper consumption by evaluating what type of content needs to be displayed on paper and in what form.

### Tulostaminen

- Print and copy only when it is justified.
- If possible, print in black-and-white and to both sides of the paper, for example, when printing drafts for proofreading.
- Try to fit several pages onto one sheet of paper.
- Using a smaller text size enables a larger amount of content per page.
- Utilise the preview function and avoid unnecessary prints.
- Can the participants of a meeting, class or some other occasion share the same copy with each other?
- Utilise redundant or incorrect prints in other ways such as scrap paper.



### How can I and my organisation help to reduce the ecological foot print of paper manufacturing?

- Reduce excessive paper consumption
- Recycle all paper waste
- Switch to a paper grade that is manufactured from recovered fibre
- Switch to a paper grade that is manufactured from sustainably produced fibre
- Buy paper from producers that have committed themselves to conserve the environment and provide transparency in their actions.

Read more from the WWF Guide to Buying Paper ([http://wwf.panda.org/how\\_you\\_can\\_help/live\\_green/fsc/save\\_paper/paper\\_toolbox/the\\_wwf\\_guide\\_to\\_buying\\_paper/](http://wwf.panda.org/how_you_can_help/live_green/fsc/save_paper/paper_toolbox/the_wwf_guide_to_buying_paper/))



Items eligible for paper recycling: newsprint, brochures, envelopes and other paper mail, copy paper (also coloured), notebooks, drawing paper, books (without covers) and phone books.



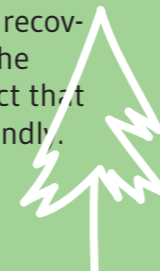
Aim at preventing waste production as your priority. Make recycling secondary whether treating waste "as is" or as a material. Waste sorting is not rocket science. Anyone who is willing, can do it. The question remains: Are you?

### Digital materials/archives

- Utilise a digital environment as efficiently as possible - it is not necessary to print or copy everything.
- Utilise digital signatures.
- Switch to digital communication.
- Send meeting and seminar invitations and other information in a digital form. This type of an eco-friendly message is proven to be received positively and it can improve the university's reputation as an environmentally conscious entity.
- Favour digital materials and only use paper under special circumstances. Save to-be-printed Power Point shows as a pdf-file that allows multiple pages on one sheet and dismisses any unnecessary images and colours.
- Request course assignments to be returned digitally. Resort to paper only under special circumstances, and even then demand double-sided prints.
- Enable digital exams.
- Encourage students to use a laptop computer for reviewing lecture material and for making notes.
- Pursue paper-free meetings and inform the participants of this practice. Bring your laptop to the meetings.
- Favour video projectors and whiteboard over flip charts.
- Favour digital books and articles.
- Borrow course literature from the library instead of buying or copying. If the books run out, prefer scanning instead of copying.
- Switch newspaper or paper magazines to digital subscriptions.

### Printing (press)

- Choose paper that is manufactured from recovered fibre when ordering products from the printing press. Otherwise choose a product that has been certified as environmentally friendly.



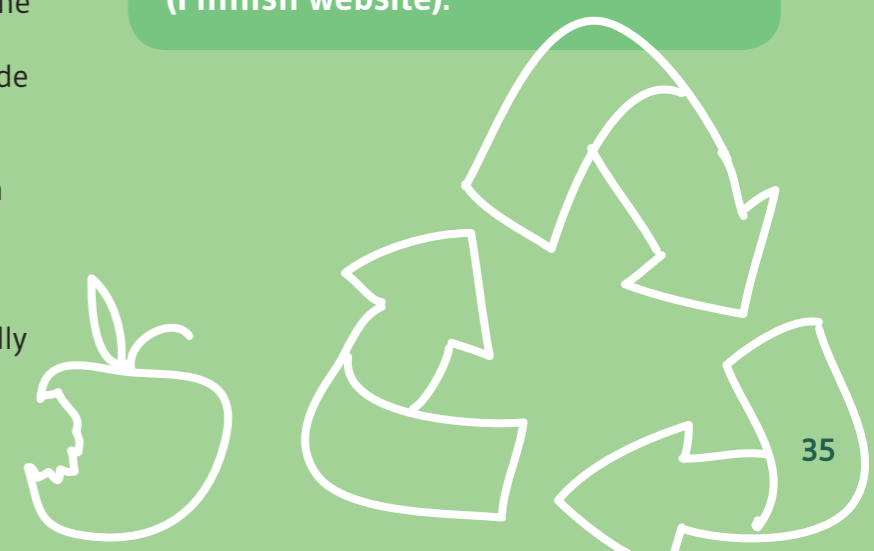
## 9.4 Waste and recycling

In terms of quantity, paper waste is the most produced waste type at the university. Other waste types include energy waste, biowaste, cardboard, obsolete and broken appliances and furniture, and hazardous waste.

- Are you sure there are enough facility sorting possibilities? Are there sufficient instruction near the sorting point?
  - **Break room:** biowaste, energy waste, cardboard metal, glass
  - **Office:** energy waste, recyclable paper, paper to be destroyed
  - **Classrooms:** energy waste
  - **Lobbies/corridors:** biowaste, energy waste, cardboard
  - **Special facilities:** Appropriate to the waste types produced
- Concentrate the disposal of biowaste to break rooms, in order to reduce plastic bag usage in the Office.
- Are there sufficient waste disposal instructions and sorting possibilities in the work environments that produce various sorts of waste such as hazardous waste? Make sure that everyone that uses the facility knows how to correctly handle and recycle all the waste that is produced.
- In case of doubt, resort to the waste guide available on the intranet. If the matter involves hazardous waste, contact the appointed trustees who will guide you in managing such waste.
- Collect batteries etc. and recycle them.
- Drink coffee or tea from a reusable cup.
- Use the same coffee or tea cup repeatedly and resort to the dishwasher only when necessary.

- Pack your snacks/lunch in reusable containers and avoid disposable packages such as plastic bags.
- Submit the newsprints and books that you don't need anymore (at the office or home) to the trade point, and let others enjoy them too.
- Recycle usable material. Be stingy.
- Cardboard boxes can be reused for shipments and storing. Recycle unused cardboard.
- Decrease biowaste by taking a portion of food that is suitable for you. Do not throw inappropriate trash such as candy wrappers into the biowaste bin.

Avoid buying plastic bags. In 2016 an agreement was made to reduce plastic bag consumption, based on the EU packaging waste directive that aims to decrease the usage of lightweight plastic carrier bags and to prevent plastic pollution. Finnish consumers are reasonable users of plastic bags, but consumption can always be reduced even more, with voluntary efforts. Read more at [kassi-info.fi](http://kassi-info.fi) (Finnish website).





## 9.5 Travelling and transportation

Traffic is one factor that affects climate change, since fuel combustion releases carbon dioxide (the most notable greenhouse gas) into the air. Road traffic and especially personal vehicles are responsible for most of the pollution produced by traffic. It isn't always necessary to travel by car, instead maybe it's possible to walk to your destination.

- Gain some discreet exercise and go to work by bike. If you think that the locker room, shower or storage facilities are inadequate, notify the Green Office team of the issue.
- Participate in a milerun or another exercise event and try to encourage others to come along.
- Try to utilise car pool or public transportation possibilities.
- If you do drive, review instructions for economic driving. [www.motiva.fi/en/transport](http://www.motiva.fi/en/transport)
- It is not required to travel to every meeting. Utilise available video conference rooms or use Lync/Skype applications on your own computer.
- When travelling to a large event, encourage participants to prefer train transportation to flying or public transportation in general. Attach public transportation timetables and route instructions to the invitation/announcement.
- Can lectures be organised in a virtual learning environment?
- Can visiting lecturers give their presentations through a video connection?
- Arrange and offer accommodation for visiting researchers, lecturers and other guests, in order to reduce back and forth travelling.



### The hierarchy of transportation:


1. The best case scenario doesn't involve any travelling, or just walking and cycling.
2. The next best method is to use a train, a tram car or the subway.
3. The third best alternative is car pooling or bus transportation.
4. A personal vehicle should be used only when necessary.
5. The worst option is air transportation.

More information can be found on the website for The Finnish Association for Nature Conservation (Finnish).

## 9.6 Facilities

Maximising facility use efficiency is an environmentally friendly gesture that benefits the attempt to reduce energy consumption. This does not mean crowding every square foot available, but to assess the utilisation degree of each facility and finding methods to improve it.

- Improving facility use efficiency is the best way to conserve the environment and expenses. Evaluate your working methods and office attendance - do you need your own office or could you share a space with another person?
- Meeting and group work rooms should be put into common use.



Keeping the work environment in good order makes it easier, faster and more comfortable to work. Unused space attracts accumulation of redundant paper and unnecessary stuff. It is your own responsibility to maintain order around your work station.





## 9.7 Procurements

Procurements are essential in improving material efficiency and reducing the strain on the environment. The choosing of raw materials, appliances, products, services and forms of energy are considered procurements.

- Only acquire what you truly need.
- Abide to the procurement guidelines' environmental instructions when carrying out your own orders.
- Can additional procurements be avoided by sharing existing equipment?
- Appropriate use and regular maintenance prolong the life of equipment.
- Can the chemicals that are used for teaching or research purposes be replaced by more eco-friendly alternatives?
- Take into account the eco-friendliness (environmental certifications) or energy efficiency of equipment and appliances when ordering procurements. Also evaluate maintenance possibilities and spare part availability.
- Create and manage an inventory of available materials and only order new additions when necessary.

### Catering

- Favor organic, vegetarian and local food.
- Oversee that the tableware used in meetings/events are reusable, and that sugar, milk or any other products are not individually packaged.



Energy Star is a voluntary international standard for energy efficiency. The IT equipment qualified to carry the Energy Star logo must have a power management system that features an automatic power-saving mode. More information at [www.energystar.gov](http://www.energystar.gov)