Guide to Health and Environment

HUMANITAS UNIVERSITY CARING FOR GREEN

Computers

Energy Usage

• A typical office computer that is on for 9 hours a day uses up to 175 kWh in a year.
• By setting the energy saving option, power usage drops by 37%, with a saving of about 49 kg of carbon dioxide (CO2) emitted into the atmosphere.
• A 14-inch monitor (color, CRT) can use 135 kWh in a year: if you switch off your PC when not in use, you can save over 65 kWh (estimate based on an average use of 4 hours per day).
• LCD (liquid crystal) monitors use 50% - 70% less energy on average than CRT displays.

What can we do?

• If you take a break, activate the standby function either from the keyboard or from the system settings.
• Turn off your monitor if you plan not to use your computer for a long time.
• If you disable any screensaver, the monitor signal will be deactivated, and you can achieve real energy savings.
• When you finish using your computer, unplug the device.

Health Tips

• Spending too many hours in front of backlit screens, with not enough breaks, can be very harmful for your eyes: remember to take a ten-minute break every hour and do some other activities away from the screen.
• When you have a break, don't spend the time in front of the screen.

In partnership with Politecnico di Milano

Guide to Health and Environment

HUMANITAS UNIVERSITY CARING FOR GREEN

Printers

Energy Usage

• An office printer can use as much as 63 kWh per year.
By disconnecting the printer outside office hours, usage can drop to 48 kWh, saving about 12 kg of CO2 and a quantity of particles comparable to PM emissions from a Euro 4 diesel engine, covering about 210 kms.

What can we do?

• Turn off the printer when you stop using it
• Choose low-resolution print settings whenever possible
• Print all documents in a single session
• Before printing a document, use the "Print Preview" option to check if the page layout is correct and the overall visual effect is the desired one
• Reduce page margins and font size.

In partnership with Politecnico di Milano

Guide to Health and Environment

HUMANITAS UNIVERSITY CARING FOR GREEN

Heating and air conditioning

Energy Usage

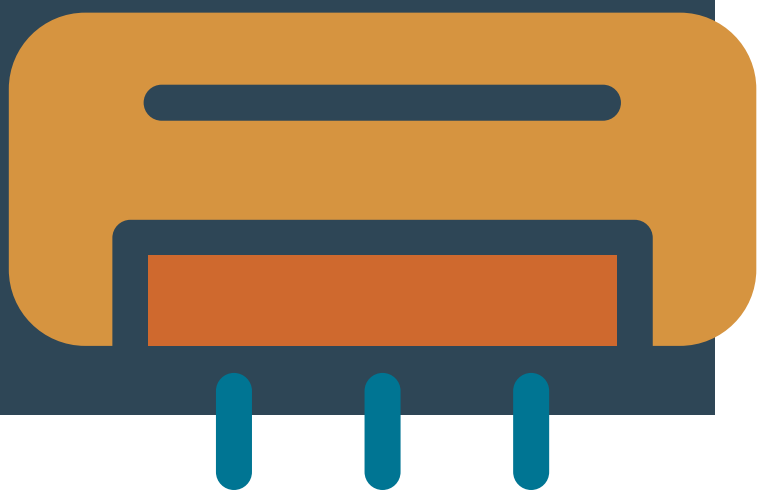
• It is estimated that in some offices the electricity usage for air conditioning amounts to about 25% of the total electricity used.
• The energy used for heating corresponds on average to 30% of a building's total energy usage.

What can we do?

• To save energy in the office, the temperature inside should change with the seasons, i.e., 18 °C-20 °C in winter, and never below 25 °C in summer. The difference between inside and outside temperatures should not exceed 7°C.
• The air conditioner should be turned off about half an hour before leaving. Remember to frequently open the windows to exchange air.

Health Tips

• As our thermal regulation mechanism involves several vital systems (cardiovascular, pulmonary, nervous, hormonal), it struggles to adapt with sudden and continuous temperature changes.
• This means that we should dress appropriately for the temperatures and keep the artificial temperature as close as possible to the natural temperature to avoid putting stress to our bodies.



In partnership with Politecnico di Milano

Guide to Health and Environment

HUMANITAS UNIVERSITY CARING FOR GREEN

Lighting

Energy Usage

• Lighting accounts for 17% of energy usage in office buildings.

What can we do?

• Make the most of natural light.
• Use energy-saving lamps, such as LED, for artificial light
• Avoid using very dark curtains as they block the sun rays from entering your room. Never place your computer right in front of a window.
• It is important to turn off the lights when they are not needed, especially if you are not using a room.

Health Tips

• Avoid straining your eyes by adjusting the brightness of your computer screen according to the natural light or use artificial light, if necessary.

In partnership with Politecnico di Milano

Guide to Health and Environment

HUMANITAS UNIVERSITY CARING FOR GREEN

Elevators

Energy Usage

• Using an elevator 3/4 times a day produces 0.6kg of CO2 (120kg of CO_2 per year).

What can we do?

• By reducing the use of the elevator, in just 6 months to we can achieve an average decrease in energy usage of between 25 and 30% per day.

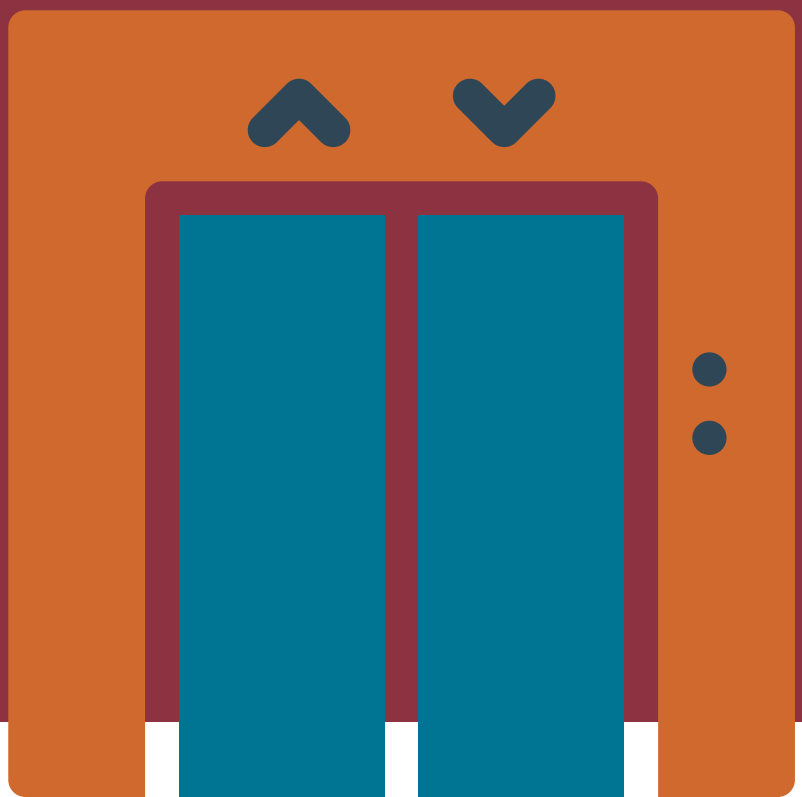
Health Tips

Using the stairs is good for your health:

• you can burn an average of 28 calories with 10 flights of stairs.

• you can decrease the risk of a heart attack with 7 minutes of stairs a day.

• you can strengthen your leg muscles and buttocks, and help blood circulation.



In partnership with Politecnico di Milano

Guide to Health and Environment

HUMANITAS UNIVERSITY CARING FOR GREEN

Plastics

Energy Usage

• In 2018, 359 million tons of plastic were produced.
• Municipal waste (including bottles and single-use hot beverage cups) makes up 2.5 billion tons of plastic waste produced each year in the European Union.

What can we do?

• Choose reusable bottles and refill them at automatic water dispensers and reduce the environmental impact.
• Use the correct containers to throw away hot drink disposable cups and facilitate the waste disposal process.

Health Tips

• Reusable bottles help to meet the recommended daily water intake by the Ministry of Health, which is about 2 liters of water a day.
• Remember to clean your reusable water bottles at least once a day and prevent the spread of bacteria.

In partnership with Politecnico di Milano

Guide to Health and Environment

HUMANITAS UNIVERSITY CARING FOR GREEN

Paper

Energy Usage

• To produce one ton of:
- virgin cellulose paper: 15 trees - 440,000 liters of water
- 7,600 KWh of electricity are needed
- recycled paper 1,800 liters of water - 2,700 KWh of electricity and no trees needed

• Two trees per year are needed to meet the needs of a family of four.

What can we do?

• Print as little as possible
• Choose double-sided printing
• Separate paper from other waste products
• Increase the use of recycled paper
• Choose reusable materials, such as cloth napkins
• Reuse sheets of paper multiple times

Health Tips

• The United States Environmental Protection Agency (EPA) estimates that recycling paper reduces water pollution by 35% and air pollution by 74%, thus helping us live in a healthier environment.

In partnership with Politecnico di Milano

Guide to Health and Environment

HUMANITAS UNIVERSITY CARING FOR GREEN

Water

Usage

• The average Italian household uses about 200 cubic meters of drinking water per year. 6-10 liters of water flow from a tap left open per minute. 50 people who are careful about water usage can save over 1 million litres of water per year. A dripping tap can waste up to 90 litres of water per day.

What can we do?

• Avoid wasting water in the bathroom: do not use too much water for your personal hygiene, turn off the tap when you soap your hands or brush your teeth, and do not leave taps open or dripping.
• Avoid wasting water when flushing the toilet.
• Promptly report any malfunctioning of taps, drains, external pipes, etc.

Health Tips

• An adult should generally drink 2 liters of water per day.
• Water accounts for about 60% of body weight and is involved in almost all biological processes:
- It helps and accelerates metabolism;
- It expels toxins and purifies;
- It tones up muscles
- It is good for your eyes and your skin;
- It regulates blood pressure;
- It improves your mood.

In partnership with Politecnico di Milano