

D1.5 Green Management Principles

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1.Introduction

In the BIG4LIFE proposal, it was projected that its development should be an example of the application of the green principles that must guide society, in terms of a circular economy and respect for the environment, in all the daily activities that we carry out.

In section 4.3. of the BIG4LIFE project proposal, the purposes that must govern compliance with green principles during the project were established.

In addition, it was established that a specific task (T1.1) and a deliverable (D1.5) would be carried out with the concretization of these principles in the project phase.

4.3 Green management

According to the call requirements and the LIFE Programme aims (EU Programme for Environment and Climate Action), BIG4LIFE will contribute to the European Green Deal which aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use and protect, conserve and enhance the EU's natural capital, and protect the health and well-being of citizens from environment and climate related risks and impacts. It will specifically consider the environmental strategies: Biodiversity strategy for 2030, Chemicals strategy, Circular economy action plan, Zero pollution action plan, and the topics: Air, Chemicals, Circular Economy, Nature and Biodiversity, Noise, Urban environment, and Water.

Green Management (WP1) will consider the following principles:

- Commitment and accountability. Recognize the essential rights of all to healthy, clean, and safe environments and equal opportunities.
- Ethics and Decision Making: Support organizational ethics and decision making with respect for universal principles through the prevention of adverse impacts on society and environment.
- Principles and values. Conserve and enhance the natural resources by improving the ways in which technologies and resources are developed and used.
- Social and Ecological Equity. Consider human vulnerability in ecologically sensitive areas and centres of population.
- Economic prosperity. Balance the needs of stakeholders, including current needs and those of future generations.

Specific activities to consider could be:

All materials used for the establishment of the plantations will be aimed to be biodegradable.

- Most of meetings will be online to reduce our carbon footprint.
- All paper used for the in-person meetings will be 100% recycled.
- At least 50% of the food provided in the informative sessions and workshops will be organic.
- We will minimize travels and transports to the necessary ones and when needed, road transport vehicles will meet the operational energy use and environmental impacts decreed by the Directive 2009/33/EC on the promotion of clean and energy-efficient road transport vehicles.
- Any chemicals used during the project will use will have the EU Ecolabel.
- We will disseminate all our Green management principles in our social media and website to make our activities visible.
- All materials for BIG systems will be respectful with biodiversity and noharming. Also BIG4LIFE is based on xeriscaping techniques, meaning the use of the minimum resources as possible, especially regarding water and fertilizers supply, avoiding artificial pollutants and reducing the carbon

footprint to the maximum. As said, this also save energy as a result, while promoting job creation.

T.1.1 Technical, financial, and administrative coordination

Establishment of the Green Management, which will include the project **green management principles**. Green Management aims to considering the project entire lifecycle by ensuring a net positive environmental, social, and economic impact. In order to ensure the principles of Green Management will be followed, once approved (M4), a webinar will be held for all members of the consortium to inform them of its importance and the obligation of its observation and monitoring. A monitoring document will be designed aimed to monitor the progress during the project, for each of the three pillars (environmental, social, and economic), which will be updated every six months. At the end of the project, a report summarizing the quantified achievements of green project management will be written and a public version will be shared.

D1.5. Green management principles (Due Date, month 4)

Green Management principles aims to considering the project entire lifecycle by ensuring a net positive environmental, social, and economic impact. English language, presented to the EC in digital format and uploaded at project web space and publicly available.

This document specifies the details of the green principles that will be considered during the development of the BIG4LIFE project. The document is based on the green principles and good environmental practices that have been established at the University of Lleida, which are aligned with the current regulations of the Catalan and Spanish governments.

https://www.udl.cat/ca/organs/vicerectors/vinf/mediambient/bones-practiques/

2. General Green Principles

This section presents the green principles that will govern the development of the BIG4LIFE project. The set of green principles presented precisely defines the foundations of the BIG4LIFE project.

The implementation of efficient environmental services that contribute to protecting health, saving energy, fighting climate change, and improving the quality of air and water, in short, favouring environmental conditions and thus the quality of life of citizens is the objective of this project. Thus achieving improved health, more spaces close to nature and greater social cohesion; In short, spaces at the service of the city and citizens.

- 1. The efficient use and saving of water worldwide has become a crucial need to guarantee the sustainability of water resources, considering it as a finite and vulnerable resource, essential to sustain life, development and the environment. Taking into account that its management must be based on a participatory approach, involving users, planners and decision makers at all levels. The efficient use of water implies, among others, characterizing demand, analyzing consumption habits to undertake actions aimed at changes that optimize its use as well as the promotion of practices that promote the sustainability of ecosystems and the reduction of pollution.
- 2. The development of studies and economic and financial instruments that promote behavioral changes of the actors who use natural resources, to boost the generation of a supply of goods and services from the sustainable use of natural resources. Studies and functional instruments for the generation of economic opportunities to carry out productive processes with greater efficiency in the use of resources, lower impacts

on the environment and greater resilience in the face of a changing climate.

- 3. An environment with clean, safe and secure air, as well as open spaces for physical activity, are essential conditions for society and are also linked to other rights and parts of current international human rights law. Exposure to environmental pollutants, contaminated air or chemicals, as well as lack of access to spaces to practice physical activities outdoors, has a greater risk of contracting non-communicable diseases, as well as infectious diseases and delays in cognitive, socio-emotional and physical development. Know, promote and disseminate healthy environments so that people can be empowered by these spaces and integrate them into their lives in order to improve their health, that of their family and the community.
- 4. An economy can be considered green when it is low carbon, resource efficient (diverse and circular) and socially inclusive. To do this, it bases its development on key principles such as: well-being, so that all people can create and enjoy prosperity; justice, that is, that there is equity within and between generations; and planetary boundaries, as the economy must safeguard, restore and invest in nature by recognizing and valuing its importance.
- 5. The correct management and use of materials in the construction phase inspires sustainable construction by optimizing operations and efficiency in terms of maintenance and operation. Energy efficiency and resource conservation are the aspects that are incorporated into the designs to guarantee the overall efficiency of the materials. Green architectural design facilitates the use of renewable and reusable products that ensure high performance while reducing long-term maintenance costs. Ensure the quality of comfortable environments, natural temperature control, adequate ventilation and the use of products that do not emit toxic compounds.
- 6. The need to improve the quality of life of the entire population and to seek social cohesion, as well as to preserve natural capital and the quality of the environment for future generations, is a goal and a value that must at

all times inspire the public and private decisions of high relevance. Ethical aspects of the use of economic instruments for the purposes of preserving nature and convenience for said purposes are principles on which the BIG4LIFE project is based.



3.Best Practices Guide. General Operation

The aim of this guide is to give small tips to help minimize the environmental impact of using these spaces and, as a consequence, improve competitiveness and optimize resources.

By following this list of good practices, it is possible to reduce energy consumption, reduce water consumption, reduce the generation of waste and make it easier for them to be reused. In this way, it is also possible to minimize the environmental impact of atmospheric emissions, water discharges, etc.

The application of these good practices will allow a reduction in costs, since the rationalization of raw materials is encouraged, as well as good management. Therefore, it is intended to plan, inform and train all these people about the new measures adopted to improve the environment.

The guide is structured in two general sections; in the first, good practices are presented divided into the areas of action that have been considered most relevant, such as the efficient use of water, the efficient use of paper, energy efficiency, waste management and transportation. In the second general section, some environmental criteria that must be taken into account when purchasing material, products, etc.

3.1. Efficient use of water

- Close the taps well after use, while soaping your hands and when water is not essential.
- Alert the person responsible for maintenance if a malfunction of the facilities is observed (water loss, etc.).

• If you have one, use the double-flush toilet system correctly and avoid using it as a wastebasket or ashtray, just throw toilet paper in it.

3.2. Efficient use of paper

- Reuse copied or single-sided printed paper for printing drafts, internal copies, notepads, etc.
- Pass the proofreader and review the document before printing it.
- Keep reports and documents only in electronic format and make only strictly necessary prints or copies. This is especially important for emails: print only the ones you need.
- Prioritize the use of e-mail and the intranet, as well as the work and review of documents online.
- Reduce the size of the image, as long as it reduces the consumption of paper and spent ink.
- Choose the smallest possible font and font size.
- Print/photocopy the documents double-sided if the printer/copier allows it and with more than one page per sheet when the font size allows it.
- Photocopy and print on recycled paper whenever possible.
- Use the photocopier-scanner to distribute copies of a document.
- Avoid color printing.
- Take notes on both sides or using papers used on one side.
- Ask copy shops for two-sided copies and with recycled and/or chlorinefree paper.

3.3. Energy efficiency

Efficient use of lighting and air conditioning equipment

- Work with natural light whenever possible. Use the lights when really necessary.
- Take care to turn off the lights in the library, classrooms, toilets, etc.
- Make sure that the doors and windows are tightly closed when the heating or air conditioning is working.

- Have curtains in the summer to reach a good temperature.
- Lower the blinds in winter and close the doors well when leaving the room to avoid heat loss during the night.

Efficient use of office equipment and other electrical devices

- Turn off the computer when long interruptions are expected, and avoid leaving them on standby, as the device continues to consume.
- Program the automatic shutdown of the computer monitor.
- Avoid using animated screensavers (screen savers), as they consume a lot of energy.
- Use standby mode for short periods of inactivity.
- Use the lift responsibly, only when necessary.
- Use removable memory or virtual space instead of CD or DVD.

3.4. Waste management

- Apply the code of conduct of the three R's: reduce, reuse and recycle.
- Separate the waste and condition containers to deposit the waste depending on its origin and management possibilities.
- Reuse all possible material (paper, envelopes, folders, etc.).
- Save for reuse paper used on one side only and that does not contain confidential information.
- Use clean paper on both sides.
- Deposit the used paper in the recycling containers without crumpling.
- Deposit the toners and cartridges in the corresponding container enabled for this use.
- Separate and properly deposit the different fractions (glass, plastic, paper, waste, organic, etc.)
- Deposit the batteries in the corresponding containers intended for this waste.
- Deposit used CDs and floppy disks in the appropriate container for them.
- Use recyclable or ecological products when possible.

- Make the most of markers, pencils and pens and keep them closed when not in use to prevent them from drying out.
- Use glass glasses and plates, which can be cleaned and reused many times. In the event that single-use items are to be used, such as glasses, plates or cutlery, which are recyclable.
- Use natural fabrics for napkins and towels.
- Try to use returnable packaging, especially for drinks.
- Reduce the number of containers and packaging and limit the use of cans.
- If it has been installed, use the "without glass" option of the vending machines.
- Replace aluminum foil and other plastic coverings with containers that can be reused such as lunch boxes.
- Always carry a canteen on you.

3.5. Transport

- Promote the use of bicycles to go to work in intermediate distances. For shorter distances, the best means of transport is to walk.
- Opt for the use of public transport whenever possible.
- Try, as far as possible, to share the car.
- Plan visits and trips to group trips. In this way, the use of different vehicles can also be reduced.

3.6. Environmentalization of shopping

Purchases and contracting are a key element to achieve good internal environmental management. In this sense, purchases and contracting makes it possible to establish the conditions that must be met by future suppliers, products, or contracts in order to minimize their environmental impact.

3.7. Paper

 Choose paper that has one of the environmental certifications such as the Blue Angel, the White Swan, the EU Ecolabel or others with the same criteria.

- Choose recycled and unbleached paper. In the case of bleached paper, it should be free of chlorine.
- Prioritize the purchase of light weight sheets as long as they are suitable for work and for the office copiers and printers.

3.8. Writing, archive and office supplies

- Buy long-lasting, repairable and rechargeable equipment whenever possible.
- Buy products made with recycled or easily recyclable materials.
- Buy water-based glues, adhesive sticks and liquid correctors that do not contain organic solvents and that are refillable.
- Replace the liquid text marker with the dry fluorescent pen.
- Buy recycled plastic markers and pens and pencils.
- Buy corrective tapes that are rechargeable and/or with a plastic casing.

4. Best Practices Guide. Administrative tasks

In offices, each of the people, when carrying out their work, generates paper waste, consumes energy through office automation, lighting and air conditioning equipment, uses sanitary water and uses inks, solvents or other dangerous substances (always in small amounts). These impacts are not significant if we evaluate them one by one, but the fact that a large part of the working population is involved means that we have to address the issue of reducing the environmental impact of these activities.

This manual is about addressing and structuring a plan to improve environmental management within the offices. The guide is structured in two general sections: in the first, good practices are presented, divided into the areas of action that have been considered most relevant within administrative tasks, such as the efficient use of water, paper, energy efficiency and waste management; in the second general section, there is the environmentalization of purchases and some environmental criteria are indicated that must be taken into account when making purchases of material, machines and office equipment.

4.1. Efficient use of water

- Close the taps well after use, while soaping your hands and when water is not essential.
- Alert the person responsible for maintenance if a malfunction of the facilities is observed (water loss, etc.).
- If you have one, use the double-flush toilet system correctly and avoid using it as a wastebasket or ashtray; just throw toilet paper in it.

4.2. Efficient use of paper

- Save reports and documents only in electronic format.
- Make the strictly necessary prints or copies.
- Pass the proofreader and review the document before printing it.
- Prioritize the use of e-mail and the intranet, as well as the work and review of documents online.
- Reuse copied or single-sided printed paper for printing drafts, internal copies, notepads, etc.
- Avoid printing in color, prioritize printing in economy mode and in black and white.
- Choose the smallest possible font and font size.
- Photocopy and print on recycled paper whenever possible.

4.3. Energy efficiency

Efficient use of lighting and air conditioning equipment

- Work with natural light whenever possible. Use the lights when really necessary.
- Distribute the furniture in the best possible way to favor the passage of sunlight and the heat provided by the climate devices.
- Take care to turn off the lights when you leave a space and turn off the lights in spaces where no one is.
- Ventilate the office for 5-10 minutes' maximum if the cleaning staff has not already done so.
- Turn off devices and equipment that are not in use.
- Use air conditioning devices only when necessary and avoid turning on these devices in areas that are not frequented.
- Turn on the heating or air conditioning when you start working and turn them off before leaving the office.
- Make sure that the doors and windows are tightly closed when the heating or air conditioning is working; if you detect bad closures, notify the maintenance staff.

- Regulate the temperature of the facilities according to the time of year (in winter, around 20°C and, in summer, around 25°C).
- Have curtains in the summer to reach a good temperature.
- Ventilate the offices at noon in the winter and early in the morning in the summer.
- Lower the blinds on the windows in winter and close the doors well when leaving the office to avoid heat loss during the night.
- Avoid constantly switching fluorescent lights on and off.
- Use rechargeable batteries whenever possible.

Efficient use of office equipment and other electrical devices

- Switch off the equipment at the end of the working day or when long interruptions are foreseen, such as at breakfast time, during meetings, etc.
- Switch off electrical appliances properly and avoid leaving them on standby as the appliance continues to consume.
- Program the computer monitor to turn off automatically in case of inactivity.
- Avoid using animated screensavers (screen savers), as they consume more energy.
- Use the computer's standby mode for short periods of inactivity.
- Accumulate the documents that need to be printed or photocopied to save the continuous cooling and heating of the photocopier/printer.
- Activate the ink or toner saving option, if the equipment allows it.
- Activate the saving function of copiers that have this option.
- Turn on electronic devices at the time of use.
- Use removable memory instead of CD or DVD

4.4. Waste management

- Apply the code of conduct of the three R's: reduce, reuse and recycle.
- Reuse all office materials possible (paper, envelopes, folders, etc.).
- Save for reuse paper used on one side only and that does not contain confidential information.
- Use clean paper on both sides.

- Deposit the used paper in the recycling containers without crumpling.
- Fold cardboard boxes to reduce their volume before throwing them in the paper bin. In the event that they are of large volume and collapse the container, they will be left properly folded next to the containers.
- If you do not know the point of deposit of a certain waste, let the person in charge of the environment know.
- Deposit the toners and cartridges in the corresponding container enabled for this use.
- Deposit the containers and packaging generated (plastics, cans, polystyrene) in the corresponding container.
- Deposit the waste (the fractions without any other way of management) in the individual bins or in the containers.
- Deposit the batteries in the corresponding containers intended for this waste.
- Deposit the waste in its corresponding place.
- Hand over scrap such as, for example, unused keys, to Common Services.
- Deposit the glass that is generated in the containers enabled for this waste.
- Deposit used CDs and floppy disks in the appropriate container for them.
- Hand over small electronic and electrical devices such as calculators to the maintenance service or to the Administrator.
- Avoid mixing hazardous waste with general trash (toners, ink cartridges, batteries, etc.).
- Use recyclable or ecological products when possible.
- Reuse ring folders by replacing old labels with new ones.
- Share materials whenever possible and avoid unnecessary purchases.
- Make the most of markers, pencils and pens and keep them closed when not in use to prevent them from drying out.

4.5. Transport

• Promote the use of bicycles to go to work in intermediate distances. For shorter distances, the best means of transport is to walk.

- Opt for the use of public transport whenever possible.
- Try, as far as possible, to share the car.
- Plan visits and trips to group trips. In this way, the use of different vehicles can also be reduced.

4.6. Environmental shopping

The environmentalization of purchases and contracting is a key element to achieve good internal environmental management. In this sense, the environmentalization of purchases and contracting makes it possible to establish the conditions that must be met by future suppliers, products or contracts in order to minimize their environmental impact.

Environmental criteria for the purchase of office equipment

4.7. Paper

- Choose paper that has one of the environmental certifications such as the Blue Angel, the White Swan, the EU Ecolabel or others with the same criteria.
- Choose recycled and unbleached paper. In the case of bleached paper, it should be free of chlorine.
- Prioritize the purchase of light weight sheets as long as they are suitable for work and for the office copiers and printers.

4.8. Writing, filing and office consumables

- Buy long-lasting, repairable and rechargeable equipment whenever possible.
- Buy products made with recycled or easily recyclable materials.
- Buy archival material or single-material products or with easily separable modules, which allow for efficient and appropriate recycling.
- Buy sorting and filing material made of recycled cardboard or plastics that are easily recyclable.
- Purchase cardboard or plastic binding covers that have better recyclability.

- Buy water-based glues, adhesive sticks and liquid correctors that do not contain organic solvents and that are refillable.
- Replace the liquid text marker with the dry fluorescent pen.
- Buy recycled plastic markers and pens and refillable pencils.
- Buy cellulose acetate adhesive tapes.
- Buy corrective tapes that are rechargeable and/or with a plastic casing.

Environmental criteria for the purchase of office machines and beverages

4.9. Office machines

- Choose office machines with environmental certifications such as Blue Angel, Energy Star or similar.
- Take into account the consumption of energy, materials, etc. when purchasing office machines.
- Buy equipment from companies that facilitate their recycling or reuse.
- Purchase products made with recycled materials or that are easily recyclable.
- Buy photocopiers and printers that have energy saving systems.
- Acquire photocopiers and printers that support the use of recycled paper, and that allow two-sided copies and reductions to be made.
- Avoid thermal paper for faxing and use plain paper.
- Prioritize the purchase of solar calculators over conventional ones.

4.10. Beverage machines

- Prioritize the purchase of water sources as an alternative to cold drink machines, as it allows to reduce the amount of packaging generated.
- Purchase machines for refreshing drinks in glass that have automated return.
- Use individual and reusable cups to dispense with the single-use cup.
- Prioritize the purchase of ecological and fair trade products.



5. Best Practices Guide. Maintenance staff

When actions are initiated to minimize the waste generated in various facilities and reduce energy and water consumption, the possibility of changing products for others that are made with more innovative and environmentally friendly materials is generally considered. Good maintenance in all areas allows a simple and low-cost way to reduce the environmental impact of human activities and obtain surprising results in the short term.

Therefore, this guide is focused on the workers dedicated to the maintenance of the university's facilities with the aim of implementing a series of good practices in order to make small changes both in the organization and in the attitude and, thus improving the environmental efficiency of buildings.

The guide is structured in two general sections; in the first, good practices are presented divided into the areas of action that have been considered most relevant within the maintenance tasks, such as the efficient use of water, paper, energy efficiency and the management of waste. In the second general section, purchases and some environmental criteria are indicated that must be taken into account when making purchases of material, machines or office equipment.

5.1. Efficient use of water

Saving water in personal use

• Close the taps well after use, while soaping your hands and when water is not essential.

- If you have one, use the double-flush toilet system correctly and avoid using it as a wastebasket or ashtray, just throw toilet paper in it. Guide to good practices for general operation.
- Do not pour paints, solvents or other toxic products into the sink.

Maintenance and installation of water saving systems

- Carry out inspections of the plumbing installations and control their consumption in order to detect possible leaks and repair them as soon as possible, if they are located.
- Insulate the hot water pipes to reduce the volume of cold water poured directly into the sanitation network.
- Install faucets with timers or presence detection systems to prevent them from being left open, as well as aerators and/or flow reduction systems.
- Reduce the volume of WC cisterns, by introducing a bottle full of water or sand, or by placing a stopper.
- Place two-stroke, low-consumption or limited-capacity cistern unloading devices.
- Install single-lever faucets in the event that one has to be changed with a timer.

5.2. Efficient use of paper

- Reuse the paper used as a draft or to take notes.
- Save reports and documents only in electronic format whenever possible (avoid paper copies).
- Make the strictly necessary prints or copies.
- Photocopy and print on recycled and double-sided paper whenever possible.

5.3. Energy efficiency

Saving energy in personal use

• Work with natural light whenever possible. Use the lights when really necessary.

- Take care to turn off the lights when you leave a space and turn off the lights in spaces where no one is.
- Turn off devices that are not in use.
- Use air conditioning devices only when necessary and avoid turning on these devices in areas that are not frequented.
- Turn on the heating or air conditioning when you start working and turn them off before leaving the office.
- Make sure that the doors and windows are tightly closed when the heating or air conditioning is working.
- Set the temperature of the facilities according to the time of year (in winter, around 20°C and, in summer, around 25°C).
- Have curtains in the summer to reach a good temperature.
- In winter, lower the blinds and close the doors well when leaving the office to avoid heat loss during the night.

Maintenance and installation of energy saving systems

- Carry out audits of the system in order to measure the consumption in the different installations and to know if the artificial lighting is more or less necessary.
- Periodically clean the filters of the air conditioning equipment.
- Clean lighting equipment and mechanisms as well as air conditioning or other devices, to improve their operation.
- Place insulation to prevent the loss of heat or cold (glass windows with air chamber, double-glazed windows, joint joints of doors, windows, thermal insulation on the ceiling, walls, floor, etc.).
- Effectively isolate, in kitchens, the cold areas from the hot ones.
- Install equipment and energy-saving mechanisms, such as fluorescent lamps with electronic reactance or reflectors, presence detectors, etc.
- Avoid placing fluorescent tubes in rooms where the lights are switched on and off very frequently.
- Install switches at different points in the rooms to turn the lights on and off.

- Placing stickers or posters in strategic places that recall some practical recommendations with specific messages.
- Place equipment for permanent use in areas that receive air renewal.
- Use rechargeable batteries whenever possible.
- Paint the walls in light colors to obtain more brightness.
- Illuminate the rooms according to the type of activity carried out there.
- Install timed switches or presence detectors that ensure the disconnection of the lighting after a certain time (for example, in the toilets).
- Install the air conditioning in shaded areas of the rooms and placing the grilles so that the air can diffuse throughout the room, without directly affecting the occupants.
- Install thermostats to regulate the temperature.
- Minimize the use of electric heaters.
- Replace incandescent lamps with more efficient compact fluorescent or halogen lamps.

5.4. Waste management

- Apply the code of conduct of the three R's: reduce, reuse and recycle.
- Involve all staff, suppliers and users in the correct management of waste and the selective separation of waste.
- Make an inventory containing the type of waste that is generated, the quantities and frequency with which it is produced and its final destination.
- Separate the waste and condition containers to deposit the waste depending on its origin and management possibilities.
- Strictly respect the appropriate process for each product.
- Protect warehouses from inclement weather to prevent product deterioration.
- Correctly separate the oils used in the machines for their correct management.
- Separate exhausted or damaged fluorescent tubes. Fluorescent and discharge bulbs and low-consumption bulbs must be deposited in a container intended for this use and the agreed company must be

contacted to come collect it. The documents that the management company prepares when making the collection must be sent to the campus administrator.

- Fold cardboard boxes to reduce their volume before throwing them in the paper bin. In the event that they are of large volume and collapse the container, they will be left properly folded next to the containers.
- Deposit the containers and packaging (plastics, cans, polystyrene) generated in the corresponding container.
- Deposit the waste (the fractions with no other way of management) in the bins or in the specific container.
- Deposit the batteries in the corresponding containers intended for this use.
- Store scrap metal.
- Deposit the glass that can be generated in the containers enabled for this waste.
- Contact the Administrator when you have electronic equipment out of use or landline or mobile telephone devices in disuse.
- Take the small electrical/electronic devices of no use to the cage or warehouse intended for this purpose.
- Avoid mixing hazardous waste with general trash.
- Have waste collection points that allow the separation of the different fractions in the warehouses. Ask APAT if you need more.

5.5. Transport

- Promote the use of bicycles to go to work in intermediate distances. For shorter distances, the best means of transport is to walk.
- Opt for the use of public transport whenever possible.
- Try, as far as possible, to share the car.
- Plan visits and trips to group trips. In this way, the use of different vehicles can also be reduced.

5.6. Environmental shopping

- Purchases and contracting is a key element to achieve good internal environmental management. In this sense, purchases and contracting makes it possible to establish the conditions that must be met by future suppliers, products or contracts in order to minimize the environmental impact.
- Purchase products that do not have negative effects on the environment: low energy consumption, low noise level, no ozone production, no organic solvents, etc.
- Purchase long-lasting products that do not become harmful waste at the end of their useful life.
- Avoid buying products that contain polluting materials.
- Buy compact fluorescent or halogen lamps and replace incandescent lamps.
- Purchase products made with recycled materials or that are easily recyclable.
- Purchase energy efficient devices.
- Avoid buying thermal insulation such as foams or others that contain gases harmful to the ozone layer, using materials such as fiberglass or perlite, among others.Purchase air conditioning equipment with thermostat.

6. Best Practices Guide. Gardening

Gardening is a very common practice in our society and requires large amounts of water. Water is a scarce commodity to which we must all be able to access. That is why it must be used rationally in all its areas.

The lack of water in this sector means great limitations in the production or growth of plants. On the other hand, an excess of this increases the risk of plants suffering from diseases. This is why there is a need to introduce new criteria for efficient use when designing gardens, in order to reduce water needs and, consequently, costs. In gardening, however, not only water is consumed, but also energy and other resources that we must not waste. This guide is therefore aimed at all workers in the gardening sector, not only to reduce water consumption, but to make gardening an environmentally friendly activity, minimizing the environmental impact and achieving the waste prevention.

The guide is structured in two general sections; in the first, good practices are presented divided into the areas of action that have been considered most relevant in gardening tasks, such as the efficient use of water, energy efficiency, the introduction of species, phytosanitary, soil management and waste management. In the second general section, purchases and some environmental criteria are indicated that must be taken into account when making purchases of material, machines and products.

6.1. Efficient use of water

- Close the taps well after use, while soaping your hands and when water is not essential.
- Alert the person responsible for maintenance if a malfunction of the facilities is observed (water loss, etc.).

- If you have one, use the double-flush toilet system correctly and avoid using it as a wastebasket or ashtray, just throw toilet paper in it.
- Do not pour paints, solvents or other toxic products into the sink.
- Water in the early morning during the winter to avoid freezing at night. The rest of the year, do it early in the morning or in the evening, this way the excessive evaporation of the water will be avoided.
- Choose species with low water consumption and group them according to their consumption.
- Avoid large areas of lawn due to their high water consumption.
- Use and reuse water, for example by collecting rainwater in a cistern, using ground water or waste water for irrigation.
- Apply the mulching technique, which consists of spreading a layer of organic matter on the ground around the plants. It can be made with peat, compost, leaf humus, composted and straw-rich manure, dry grass clippings or straw. This technique, among many other benefits, will help us reduce water loss.
- Apply xerogardening techniques, which consist of choosing plants with low water consumption or plants adapted and resistant to drought.
- Eliminate weeds, as they compete for the nutrients and water contained in the soil.
- Do not fertilize excessively, as this causes growth and, therefore, the need for water increases.
- Leave taller plants to offer shade and protection from the wind to the smaller ones.
- Install sensors and programmers to increase the efficiency of irrigation systems.
- Use the irrigation system appropriate to the conditions of the land:
 - ✓ Sprinkling
 - ✓ Micro sprinkling
 - ✓ Localized irrigation
 - ✓ Hoses and sprinklers for small spaces and occasional irrigation.
 - \checkmark Drop by drop.

- Periodically check the correct operation of the irrigation system to avoid losses.
- Install water meters to control consumption and possible losses.

6.2. Energy efficiency

- Install solar lanterns and beacons that are powered by solar energy.
- Install switches with timers and/or presence detectors in passage areas.
- Use fluorescent and low-consumption light bulbs, so consumption is reduced to a fifth.
- Use rechargeable batteries.
- Use machinery with low energy consumption and carry out good maintenance.
- Install mills to charge batteries in closed energy circuits or to make water flow from springs.
- Switch off the machinery at the end of the working day or when long interruptions are expected.

6.3. Introduction of species

The choice of plants for the garden is decisive, since depending on the species chosen, more or less maintenance will be needed and therefore the consumption of water, energy, phytosanitary products and fertilizers in general will vary. Therefore, it is highly recommended, when choosing plants, to take into account aspects such as climatology, solar radiation and the type of soil, among others.

The native plants are the best adapted to the area and, therefore, will be the ones that require the least maintenance and will help us save resources. Native plants help maintain genetic diversity, are more resistant to pests and require less water and energy consumption. Thus, native plants are a bet for the preservation of species and contribute to the maintenance and enhancement of landscape scenes. Below is a list of tips to consider when introducing new plant species to garden areas:

• Introduce native plants into the garden whenever possible, they adapt better to the environment and therefore their life is longer.

- Make a good design of the garden or redesign it by doing a good planning, a study of the land and grouping the plants according to their characteristics.
- Reproduce traditional crops from seeds or grafts.
- Respect wild areas.
- Use plants with lower water requirements and resistant to drought such as xerophytic species.
- Use plants resistant to salinity.

6.4. Phytosanitary

- Prioritize the biological control of pests, only in the event that the pest persists will resort to phytosanitary.
- Pay close attention to the safety data sheet of each product and follow the recommendations, indications and doses.
- Choose organic and biodegradable fertilizers.
- Fumigation with infusions of horsetail, nettle, onion, dandelion, chamomile, valerian, etc.
- Choose sprayers without aerosols.
- Store and label correctly all containers containing phytosanitary products. In addition, once empty, the containers must be separated and delivered to the corresponding manager.
- Do not dump, throw or abandon hazardous waste in an uncontrolled manner.
- Do not abuse fertilizers, as this causes a very tender shoot and creates plants prone to suffer from aphids or mites.
- Remember that the maximum storage time of phytosanitary products cannot exceed six months.
- Consult the list of products recommended by the Catalan Council of Ecological Agricultural Production.

6.5. Soil management

- Studying some edaphic characteristics of the site such as pH, acidity, amount of organic matter, nutrients, depth and drainage, will serve to choose the species that best adapt to it.
- Analyze the soil, ensuring that it has an ideal structure for plant growth. In a sandy structure, there is a lot of water loss through percolation; on the other hand, in a more clayey structure, the water is more retained.
- Conserve the natural structure of the soil and choose plants that adapt to it without having to change it.
- Respect the original relief paying attention to hydrographic circulation.
- Avoid soil compaction with the use of machinery.
- Use fertilizers of biological origin such as compost or animal excrement. Use slow-release fertilizers, better than highly soluble ones.
- Remember that excessively plowed land erodes more easily.
- Use mulching, as it enriches the soil with decomposition, activating and feeding the microorganisms, soil moisture is better retained, the temperature around the roots is maintained and protects them, it reduces the erosive action of the wind and prevents the emergence of weeds and the exhaustion of the soil with undesirable species, since they do not receive solar radiation.
- Adding water-retaining agents, hydro retainers, hydrogels or also called superabsorbent to the soil, will serve to increase the water-retaining capacity of the soil and to space out the irrigation frequencies.

6.6. Waste management

A large amount of waste is produced in the gardening sector. These receive specific treatment according to their classification: urban, organic or hazardous waste.

In order to manage waste properly and properly separate it for recycling and/or recovery, the following measures will be taken into account:

• Apply the code of conduct of the three R's: reduce, reuse and recycle.

- Separate the remains of pruning and cuttings for the production of organic compost.
- Find out about the collection of organic matter that is carried out in the area.
- Prepare the compost in the own facilities and use the kitchen scraps that are generated.
- Contract, as specified in the legislation, the collection of containers that have contained dangerous substances to an authorized manager.
- Avoid the use of chemical products that are very harmful to the environment.
- Avoid oil and fuel spills.
- Reuse pots and other gardening tools.

6.7. Transport

- Promote the use of bicycles to go to work in intermediate distances. For shorter distances, the best means of transport is to walk.
- Opt for the use of public transport whenever possible.
- Try, as far as possible, to share the car.
- Plan visits and trips to group trips. In this way, the use of different vehicles can also be reduced.

6.8. Environmentalization shopping

Purchases and contracting is a key element to achieve good internal environmental management. In this sense, purchases and contracting makes it possible to establish the conditions that must be met by future suppliers, products or contracts in order to minimize the environmental impact.

6.9. **Products**, materials and plants

 Know the meaning of "ecological" symbols or brands such as the ecolabels of AENOR Medi Ambient, Ángel Blau, FSC (Forest Management Council) Certification, Environmental Quality Guarantee Badges, European Union Ecolabel, Organic Agriculture, etc.

- Choose, whenever possible, organic materials and products with certifications that guarantee adequate environmental management (materials extracted with minimal negative impact, wood from sustainable farms, etc.).
- Find local suppliers.

6.10. Machinery

- Always try to acquire equipment and machinery that have the least negative effects on the environment (with mineral lubricating oils, with cooling fluids that do not destroy the ozone layer, with low energy and water consumption, less waste, etc.).
- Take into account the energy efficiency of the machinery.



7. Best Practices Guide. Hygiene and cleaning

The aim of this guide is to give small tips to help minimize the environmental impact of an activity of this nature and, as a consequence, improve competitiveness and optimize the use of resources. By following this list of good practices, it is possible to reduce the generation of waste and make it easier for them to be reused, as well as to reduce the consumption of energy and water. Finally, the environmental impact of atmospheric emissions and water discharges is minimized.

Therefore, the application of these good practices will allow a reduction in costs, since the rationalization of raw materials is encouraged, as well as their management. So, what is intended is to plan and report on the new measures adopted to improve the environment.

7.1. Efficient use of water

- Close the taps well after use, while soaping your hands and when water is not essential.
- Alert the person responsible for maintenance if a malfunction of the facilities is observed (water loss, etc.).
- If you have one, use the double-flush toilet system correctly and avoid using it as a wastebasket or ashtray, just throw toilet paper in it.
- Apply dry cleaning as much as possible before doing a wet process.
- Dose the cleaning products according to the manufacturer's instructions.
- Do not throw solvents or concentrates dangerous for the environment down the sink.
- Use squeegees instead of hoses to clean paved common areas.

- Make sure that the amount of water used for cleaning (toilets, dining rooms, kitchens, etc.) is adequate.
- Install pressure limiters and diffusers in toilets and showers to ensure an adequate level of washing, but with less water.
- Reduce the volume of WC cisterns, by introducing a bottle full of water or sand, or by placing a stopper.
- Use cleaning products with certifications of being an ecological product.
- Use the necessary detergent to clean, it will lead to less foam formation

7.2. Energy efficiency

- Concentrate the entire cleaning crew in one section of the building to keep the rest of the lights off. When a point is finished, turn off the lights and move on to the next point (for example, working by plants).
- Clean with cold water whenever possible.
- Work with natural light whenever possible. Use the lights when really necessary.
- Take care to turn off the lights when you leave a space and turn off the lights in spaces where no one is.
- Use efficient devices with low energy consumption.
- Ventilate the facilities between 5-10 minutes' maximum.
- Make sure that the doors and windows are tightly closed when the heating or air conditioning is working.
- Use air conditioning devices only when necessary and avoid turning on these devices in areas that are not frequented.
- In winter, lower the blinds and close the doors well when leaving the building to avoid heat loss during the night.
- Avoid constantly switching fluorescent lights on and off.

7.3. Waste management

- Apply the code of conduct of the three R's: reduce, reuse and recycle.
- Use cleaning products in minimum quantities recommended by the manufacturer in order to avoid water pollution.

- Alert the person responsible for the environment if a malfunction of waste management is observed (lack of containers, poor separation, lack of signage, etc.).
- Periodically update the inventory of ecological or priority products.
- Make a correct separation of the waste generated and then manage it correctly:

• Selective collection (SR) of paper: Place paper containers in the different departments to facilitate the selective collection of paper. These will have to be placed near photocopiers or other unique points producing significant paper waste. Identification color for the paper RS: blue.

• Selective collection of light packaging: Place containers for the collection of light packaging in the different departments. Identification color for the RS of light packaging: yellow. The containers that go in this container are all those plastic, metal or tetra brick containers that are identified with the green dot. Do not throw full packaging containers, or packaging with toxic or dangerous products, or small electrical appliances. Therefore, the containers are:

- ✓ Plastic containers and tetra bricks
- ✓ Bottles and plastic bottles
- ✓ Metal cans and lids
- ✓ Paper, trays or aluminum terrines
- ✓ Empty spray containers that are not toxic
- Selective collection of glass: Place containers for the collection of glass in the different departments. Identification color for the glass RS: green. The waste collected by this section is glass containers. Flat glass from windows, mirrors, jugs, plates, glasses, glass tables, etc. is not thrown away.
- Waste collection: Place containers for waste collection in the different departments. Identification color for waste collection: black: Offer as an improvement the placement of containers for the collection of other materials such as toners, batteries or others.

- **Recycling points:** Apart from those that are located in important production points of a specific fraction (eg: paper boxes next to photocopiers), the selective collection containers for light packaging, glass and waste they will be grouped in a point that will be identified as a recycling point.
- Properly manage the rest of the products and their packaging, and take them to a rubbish dump.
- Have the safety data sheets of the products and know the symbols of danger and toxicity.

7.4. Transport

- Promote the use of bicycles to go to work in intermediate distances. For shorter distances, the best means of transport is to walk.
- Opt for the use of public transport whenever possible.
- Try, as far as possible, to share the car.
- Plan visits and trips to group trips. In this way, the use of different vehicles can also be reduced.

7.5. Environmental shopping

The environmentalization of purchases and contracting is a key element to achieve good internal environmental management. In this sense, the environmentalization of purchases and contracting makes it possible to establish the conditions that must be met by future suppliers, products or contracts in order to minimize the environmental impact.

- Prioritize the purchase of recycled hygiene products.
- Prioritize the use of biodegradable products, with an ecological label, with large and returnable packaging, in bulk, concentrates, etc.
- Use detergents free of phosphates and chlorine.
- Prioritize the purchase of natural products with a minimum of chemical additives.

- Avoid the purchase of bleached or colored toilet paper, prioritize the purchase of recycled paper toilet paper with an environmental quality guarantee badge.
- Buy products with containers that can be refilled and with dispensers.
- Use automatic dispensers to avoid product waste.
- Replace cleaning with paper for cloths made of natural fabrics.
- Avoid the purchase and use of aerosols and prioritize the use of sprayers as they are more environmentally friendly.

8. Best Practices Guide. Meals and events

At parties, concerts or other events, it is customary to generate large amounts of waste, and to consume more resources and energy, among other harmful environmental effects. It is important to consider the environmental impacts when organizing any party or public event.

This guide is aimed at all those people in charge of organizing mass meals and parties and aims to give small tips to help minimize the environmental impact of an activity of this nature. As a result, it is achieved that the parties are more sustainable and profitable, since resources are more optimized.

The guide is structured in two general sections; in the first, good practices are presented, divided into the areas of action that have been considered most relevant within the organization of these events, such as the efficient use of water, energy efficiency, restoration, timetables and noise, the dissemination and signaling of posters, waste management and transport. In the second general section, purchases, and some environmental criteria are indicated that must be taken into account when making purchases of material, products, etc.

8.1. Location and conditions of the space

Choice of space

- Choose the location of the space based on the estimated number of attendees who will attend the event, so that their needs can be met.
- Take into account the orientation of the space and the acoustics to try to disturb the neighbors as little as possible.

Decorative elements

• Reject excessive decoration.

- Use decorative elements made with recycled and durable materials that can be reused in future events.
- Use indigenous plants with low water requirements.

Diffusion and signaling

- Inform the attendees that they will participate in a sustainable party.
- Exposing on the posters where the party is announced that it is an Ecoparty, a more sustainable party, a party without waste, etc.
- Send email invitations to those guests with an email address, thus avoiding the use of paper.
- Use recycled material to edit posters, leaflets, brochures, etc.
- Take advantage of internal and local media (internet, newsletters, TV, radio, newspapers...) to publicize the sustainable festival.
- Avoid the use of unnecessary paper and designs that involve a large consumption of material.
- Avoid cardboard, plastic, glue, pushpins or adhesive tapes.
- Make sure that the banners destined for the outside are made of recycled and recyclable PVC.
- Hire suppliers and distributors of broadcasting elements, signage and banners that follow good practices.

Hours and noise

- Limit the volume of the music.
- Establish the maximum acceptable volume for music groups.
- Plan the location of the stages and the orientation of the loudspeakers, so that the residents of the street or the square are as least harmed as possible.

Efficient use of water

 Minimize water consumption in toilets, showers and WCs by means of cistern volume reducers, flow limiters, timers and push buttons in showers and toilets.

- Close the taps well after use, while soaping your hands and when water is not essential.
- Alert the person responsible for maintenance if a malfunction of the facilities is observed (water loss, etc.).
- If you have one, use the double-flush toilet system correctly and avoid using it as a wastebasket or ashtray, just throw toilet paper in it.

8.2. Energy efficiency

- Regulate the temperature of the facilities according to the time of year (in winter, around 20°C and, in summer, around 25°C), depending on the number of people and of the times when the room is used.
- Make sure that the doors and windows are tightly closed when the heating or air conditioning is working.
- Use natural light whenever possible. Use the lights when really necessary.
- Distribute the furniture in the best possible way to favor the passage of sunlight and the heat provided by the climate devices.
- Take care to turn off the lights when you leave a space and turn off the lights in spaces where no one is.
- Switch off the equipment at the end of the day, when long interruptions are foreseen or when not in use.
- Avoid constantly turning fluorescent lights on and off, if there are any.
- Illuminate the stalls with low consumption bulbs, exterior lighting and toilets.
- Study the possibility of using solar cookers.

8.3. Catering

Drinks

- Reduce the consumption of single-use glasses and use glass or plastic glasses that can be cleaned and reused many times.
- Use returnable and large-volume containers.
- Use compostable cups made from bioplastics.
- Use water sources at room temperature.

- Avoid unnecessary packaging and wrapping.
- Prioritize beverages of close geographic origin, from fair trade and/or organic agriculture.

Refreshments and meals

- Purchase food from the local market, fresh and in season.
- Purchase organically produced food with the relevant certification.
- Purchase fair trade food.

Dishes and towels

- Avoid single-use crockery.
- Try to use plates made of durable material: ceramic, earthenware, glass or similar.
- Use cutlery made of reusable materials and ensure that the cups are ceramic or similar.
- Preferably use cloth towels, in order to be able to wash them for the following uses. If they were made of paper, ensure that they come from recycled paper and are small in size.
- Avoid single-use packaging and unnecessary wrapping.
- Avoid buying plastic bottles (especially small ones), brics, cans, etc.
- Always and when possible, use edible supports to serve the meal such as sandwich, toast, etc.
- If using single-use crockery, that it is compostable.

8.4. Waste management

- Establish a green pool (space where the information and material necessary for the execution of environmental actions is offered).
- Apply the code of conduct of the three R's: reduce, reuse and recycle.
- Inform attendees of the environmental measures adopted, making them also participate in the party.
- Use reusable crockery, glasses and cutlery.
- Minimize waste by using recyclable, ecological and durable products.

- Serve meals on edible supports whenever possible (slices of bread, shortbread, empanadas, pita bread...).
- Find out about the possibilities of recycling the different materials in the municipality where the party is held.
- Characterize the type and amount of waste that will be generated throughout the party depending on the activities to be carried out and the resources used.
- Hire a company or agree on the transfer with the city council of the number of reinforced recycling and waste containers that are needed.
- Reserve the necessary spaces to place the specific containers for each type of waste.
- Collect food scraps and compostable crockery together in special containers.
- Calculate the number of attendees at the meals and order the necessary amount of food to avoid an excess of residual food.
- Agree with a charitable association to donate the food that has not been served on the day of the party.
- Reinforce container collection and road cleaning services.

8.5. Transport

- Choose a space that has good communication with public transport and encourage its use among attendees, providing information on all the means of public transport available to access it.
- Try, as far as possible, for those coming from the same place to share cars, providing the necessary information.
- Prioritize access to public transport or collective private transport (buses) to promote sustainable mobility.
- Facilitate mobility on foot or by bicycle, placing, in case there are none, temporary parking spaces.

8.6. Environmentalization of shopping

Purchases and contracting is a key element to achieve good internal environmental management. In this sense, purchases and contracting make it possible to establish the conditions that must be met by future suppliers, products or contracts in order to minimize the environmental impact.

- Prioritize products with Certification from the Catalan Council for Ecological Agricultural Production (CCPAE), generic EU label, Slow food, etc.
- Use materials that are durable and allow the assembly of the stall in future editions.
- Prioritize the purchase of regional, ecological and fair trade products.
- Buy products in bulk, since products bought in small quantities multiply the number of wrappers and containers. Avoid single doses.
- Purchase food from the local market, fresh and in season.
- Prioritize the purchase of beverages of close geographic origin.
- Prioritize the purchase of products made with recycled material.

9. Best Practices Guide. Conferences, seminars and workshops

This is a collection of good environmental practices that must be considered when organizing any event. The guide aims to provide the necessary information to hold conferences with the least possible environmental impact, courses, seminars and other events where a large amount of waste is generated and other environmental impacts such as energy consumption.

The guide is structured in two general sections; in the first, good practices are presented, divided into the areas of action that have been considered most relevant within the tasks of organizing conferences, such as the location and conditions of the space, dissemination and signage, efficient use of water, paper, energy efficiency, material delivery, catering, waste management and transport. In the second general section, purchases, and some environmental criteria are indicated that must be taken into account when making purchases of material, products, etc.

9.1. Location and conditions of the space

Choice of venue

- Choose the location of the space based on the estimated number of attendees who will attend the event, so that their needs can be met.
- Take into account the orientation of the building and the acoustics.
- Prioritize the use of natural light in interior rooms, with windows or skylights.

• Take into account that the room has blinds and double-glazed windows to maintain the ambient temperature.

Decorative elements

- Reject excessive decoration.
- Use decorative elements made with recycled materials that can be reused in future events.
- Use indigenous plants with low water requirements.
- Try to reach an agreement with the gardening manager in the area in order to replant the plants used during the day.

9.2. Diffusion and signalling

Signs, posters and banners

- Decorate the space with recycled materials.
- Avoid the use of unnecessary paper and designs that involve a large consumption of material.
- Avoid cardboard, plastic, glues (pins or adhesive tapes).
- Make sure that the banners destined for the outside are made of recycled and recyclable PVC.
- Suppliers and distributors of broadcasting elements, signage and banners that follow good practices.
- Send email invitations to those guests with an email address, thus avoiding the use of paper.
- Use recycled material to edit posters, leaflets, brochures, etc.

Dissemination means

- Use recycled paper envelopes.
- Ensure that the material of the envelope window is recycled, without plastics, glues and waxes.
- Prioritize the use of landlines over mobile phones.

- Prioritize the use of email, as it is the most economical way to get the desired information to more people.
- Do not print the mail if it is not absolutely necessary.

9.3. Efficient use of water

- Minimize water consumption in toilets, showers and WCs by means of cistern volume reducers, flow limiters, timers and push buttons in showers and toilets.
- Close the taps well after use, while soaping your hands and when water is not essential.
- Alert the person responsible for maintenance if a malfunction of the facilities is observed (water loss, etc.).
- If you have one, use the double-flush toilet system correctly and avoid using it as a wastebasket or ashtray, just throw toilet paper in it.

9.4. Efficient use of paper

- Minimize the use of paper, printing only when necessary and trying to make the strictly necessary photocopies.
- Maximize paper consumption by printing double-sided and two pages per sheet.
- Print/photocopy on recycled paper whenever possible.
- Acquire the approved paper through the Management of Centralized Purchases.
- Regarding the binding of the documentation:
- If there are few documents, fold the leaves and do without staples.
- If there are a lot of documents, offer attendees the possibility to purchase folders or bags.
- Avoid misleading names.
- Paper that includes only the phrase 100% recyclable, as it only tells us that it can be recycled, not that it comes from recycled paper.

• Ecological paper. This designation does not really carry specific information about the origin of the fibers with which it is made and, therefore, does not guarantee the environmental quality of the paper.

9.5. Energy efficiency

Regulate the temperature of the facilities according to the time of year (in winter, around 20°C and, in summer, around 25°C), depending on the number of people and of the times when the room is used.

- Make sure that the doors and windows are tightly closed when the heating or air conditioning is working.
- Use natural light whenever possible. Use the lights when really necessary.
- Distribute the furniture in the best possible way to favor the passage of sunlight and the heat provided by the climate devices.
- Take care to turn off the lights when you leave a space and turn off the lights in spaces where no one is.
- Ventilate the room between 5-10 minutes' maximum.
- Switch off the equipment at the end of the day, when long interruptions are foreseen or when not in use.
- Avoid constantly turning fluorescent lights on and off, if there are any.

9.6. Delivery of material

At conferences, seminars or conferences, it is quite common to hand out material to attendees at the end of the event. These materials can be very diverse, such as cards, folders, bags, pencils, pens, etc. The products distributed should share some general environmental criteria such as being useful, not becoming waste at the end of the day and being composed of environmentally friendly materials.

Identification cards

• Anticipate the number of attendees.

- Use identification cards of recycled and returnable material to be used for other days. It is recommended that they are light weight and DIN size to avoid waste paper generation.
- Use recycled cardboard from paper fibers obtained partially or entirely from post-consumer paper fibers. If you opt for virgin cardboard cards, make sure they come from sustainably managed forests.
- Avoid bleaching the cards and, if you can't, make sure they are TCF (Total Chlorine Free) or ECF (Elemental Chlorine Free) certified.
- Do without covers or use only those that come from recycled and recyclable materials.
- Use clotheslines as a fastening element.
- Place different trays for the collection of the cards in order to separate the different materials that make up the card (cardboard, cover and fasteners).
- Try to avoid products with mixed materials that prevent their subsequent recycling.
- Ensure that they have eco-labels such as the Environmental Quality Guarantee Badge, Flower of the European Union, Blue Angel, Nordic Swan, etc.

Pencils and pens

- Minimize the consumption of pencils and pens, giving them only to attendees who wish or making them returnable at the exit of the event.
- Reuse the pens that are distributed.
- Purchase only pens with casings made from recycled and recyclable materials, and reusable.
- Prioritize the acquisition of pencils or pencils that have a casing made with recycled and recyclable or biodegradable material. In the case of the wooden pencil, give priority to those that assure us that they come from sustainably managed forests.
- Avoid paints, varnishes, lacquers or other surface treatments of pencils.
- Avoid products derived from petroleum (plastics).

- Avoid mixed materials that make it difficult to treat when they become waste.
- Ecolabels: Nordic Swan, FSC Seal (Forest Stewardship Council), Program for the Endorsement of Forest Certification schemes, etc.

Folders or bags

- Minimize the distribution of folders or bags (doing away with them whenever possible).
- Try to acquire folders that have been manufactured from recycled cardboard and that do not contain mixed materials in order to facilitate their treatment when they become waste.
- Make sure that the bags that are delivered to distribute the material have been made from recycled paper or biodegradable material.
- Try not to distribute the bags and folders directly, but make them available to attendees who want them.
- Make sure they have eco-labels: Environmental Quality Guarantee Badge, Blue Angel, etc.

Digital support

- Prioritize computer equipment with energy efficiency certification.
- Post a brief summary of each of the presentations on the website.
- Leave the presentation posted on the web so that the attendees have access to the information without having to print these documents once the day has ended.
- Distribute rewritable CDs (CD-RW, «compact disc rewritable»).
- Favor the delivery of CDs with paper covers to other covers made of other materials.
- Distribution of electronic pen documentation.

9.7. Catering

Drinks

- Reduce the consumption of single-use glasses and use glass or plastic glasses that can be cleaned and reused many times.
- Use returnable and large-volume containers.
- Use compostable cups made from bioplastics.
- Favor drinks of close geographical origin.
- Use water sources at room temperature.
- Favor drinks from fair trade and/or organic agriculture.
- Avoid unnecessary packaging and wrapping.

Refreshments and meals

- Purchase food from the local market, fresh and in season.
- Purchase organically produced food with the relevant certification.
- If the meals are taken in a restaurant, make sure they are as close as possible to the venue to avoid travel.
- Purchase fair trade food.

Dishes and towels

- Avoid single-use crockery.
- The dishes should be made of a durable material: ceramic, earthenware, glass or similar.
- Ensure that the cups are ceramic or similar and the cutlery is made of reusable materials.
- Use stolen towels in order to be able to wash them for the following uses.
 If they were made of paper, ensure that they come from recycled paper and are small in size.
- Avoid single-use packaging and unnecessary wrapping.
- Avoid buying plastic bottles (especially small ones), bricks, cans, etc.

9.8. Waste management

- Apply the code of conduct of the three R's: reduce, reuse and recycle.
- Separate the waste and condition containers to deposit the waste depending on its origin and management possibilities.
- Minimize waste by using recyclable, ecological and durable products.
- Reuse used paper on one side only and that does not contain confidential information (without lamination, without staples or clips).
- Deposit all the clean paper used on both sides (without plasticizing, staples or clips) in the containers intended for recycling paper.
- Fold cardboard boxes to reduce their volume before throwing them in the paper bin. If they are large and collapse the container, they will be left properly folded next to the containers.
- Deposit the containers and packaging (plastics, cans, polystyrene) generated in the corresponding container.
- Deposit the waste (the fractions with no other way of management) in the individual bins or in the containers intended for that purpose.
- Deposit the glass that can be generated in the containers enabled for this waste.
- Make the most of markers, pencils and pens and keep them closed when not in use to prevent them from drying out.

9.9. Transport

- Choose a space that has good communication with public transport and encourage its use among attendees, providing information on all the means of public transport available to access it.
- Try, as far as possible, for those coming from the same place to share cars, providing the necessary information.
- Prioritize access to public transport or collective private transport (buses) to promote sustainable mobility.

• Facilitate mobility on foot or by bicycle, placing, in case there are none, temporary parking spaces.

9.10. Environmental shopping

Purchases and contracting is a key element to achieve good internal environmental management. In this sense, purchases and contracting make it possible to establish the conditions that must be met by future suppliers, products or contracts in order to minimize the environmental impact.

- Prioritize products with Certification from the Catalan Council for Ecological Agricultural Production (CCPAE), generic EU label, Slow food, etc.
- Prioritize the purchase of regional, ecological and fair trade products.
- Buy products in bulk, since products bought in small quantities multiply the number of wrappers and containers. Avoid single doses.
- Purchase food from the local market, fresh and in season.
- Prioritize drinks of geographically close origin.
- Prioritize the purchase of products made with recycled material.
- Use reusable crockery, glasses and cutlery.
- Make purchases through Centralized Purchase Management. The products and services that are there are the result of the careful choice between producers, between products, in addition, the transport of the material is facilitated by being a set, the cost of the product is cheaper and it is possible to have spare parts because the whole community has the same article.
- Choose paper that has one of the environmental certifications such as the Blue Angel, the White Swan, the EU Ecolabel or others with the same criteria.
- Choose recycled and unbleached paper whenever possible. If it is bleached paper, make it chlorine-free.
- Prioritize the purchase of light weight sheets as long as they are suitable for work and for the office copiers and printers.

10. Decalogue poster

A poster will be prepared with a decalogue of good practices, on which the logo of the BIG4LIFE project and the LIFE program will be visibly displayed, in English, Catalan and Spanish, which will be used in the seminars, workshops, congresses and meetings that be organized in the context of the project.

The decalogue will be:

- 1. Turn off the lights when you leave the meeting spaces and offices.
- 2. Turn off the computer screen and do not leave the devices in the "standby" function. You must turn them off completely.
- 3. If possible, turn off the air conditioning devices (heating and air conditioning) when you leave the space or office for a period of more than eight hours.
- 4. If possible, control the ambient temperature: 20 degrees in winter and 25 degrees in summer is enough to be comfortable. Ventilate the spaces and help regulate the temperature with passive strategies, i.e. using blinds and windows.
- 5. Leave each waste in your bin or container, facilitates selective collection (paper, plastic, batteries, organic, etc.) and find out where to deposit special waste.
- 6. Consider the printer's options to print on both sides of the sheet, several pages on the same sheet and to print with economical quality. Use the unwritten face of printed paper for notes or drafts.
- 7. If not necessary, do not print.
- 8. When buying office supplies and consumables, avoid products that are overpackaged or wrapped in plastic, buy easily recyclable, i.e. made from

a single material (e.g. wooden pencils, cardboard folders), and avoid products with toxic components.

- 9. Use reused and reusable consumables (e.g. toners), rechargeable (e.g. batteries, markers, pens), recycled and recyclable (e.g. paper) and energy efficient.
- 10. In the toilet, dry your hands preferably with paper and try not to use electric wipers.

And get healthy:

Take the stairs instead of taking the elevator and try walking or cycling. And, if you must use other vehicles, prioritize public transport or a shared vehicle.

These phrases will be accompanied by illustrative images in order to make their interpretation easier.