GREEN TOOLBOX

International
Young Naturefriends

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This publication was jointly prepared by:

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SUSTAINABILITY is a combination and synergy of social justice, ecological health, and economic vitality. This publication responds to a growing interest in sustainable consumption, addresses urgent global matters, and conveys the necessity for action.

This publication is aimed at providing NGOs with the tools, information, and inspiration needed to introduce a wide variety of sustainable practices. Sustainability should be on the agenda for all us.

Most of all, organisations hold underutilized power to inspire individuals and communities by being empowering role models that help bring sustainability into reality.

In an increasingly globalized world it is essential to take into account the far-reaching impacts of our purchases, actions, and practices. We need to be aware of the complexity of links and interdependencies between social, economic, and ecological well-being. For example, working for social justice includes working for a clean environment; working for environmental justice includes working for gender equality. We believe that by recognizing these global interdependencies and the consequences of everything we do, as well as by striving to minimize the possible negative impacts of all our actions and practices, we will collectively create a just society.

This publication provides you with a balanced collection of facts, case studies, and practical tips.

We encourage you to pass this publication on to your colleagues, friends, and other organisations in order to circulate knowledge and minimize the environmental impact of each printed copy.

If you have any suggestions, make sure to contact us! We'd like to hear from you!

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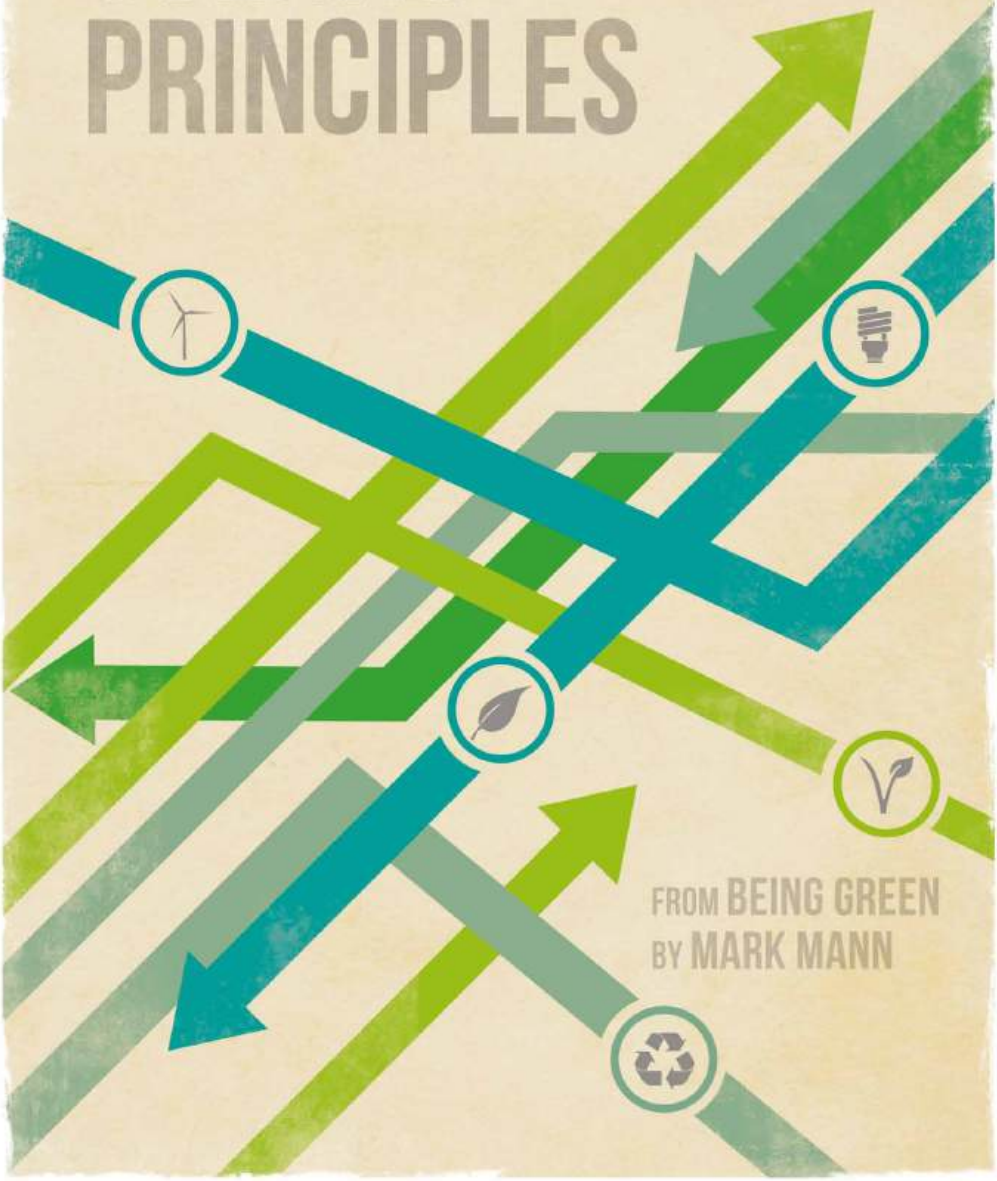
GREEN TOOLBOX

GUIDING PRINCIPLES



FROM BEING GREEN
BY MARK MANN

1 LIVE (DO/BE/WORK) WITH LESS:

Learn to refuse, reduce, reuse, recycle – in that order. Where you cannot do without, you can reuse things by repairing, adapting, swapping, borrowing, buying secondhand, etc.

2 REDUCE THE IMPACT:

Reduce the consumption of energy, water, chemicals and create less waste.

3 USE GREEN ALTERNATIVES:

Seek natural, reusable, renewable, locally-produced, organic, energy/water efficient, non-polluting items.

4 ENCOURAGE OTHERS:

Seek to educate yourself and encourage others to follow these principles.

WHAT DOES SUSTAINABILITY MEAN?

SAVING MONEY
A few things, like organic produce, might cost more. However buying less, reusing more, buying secondhand, and saving energy will leave you better off.

BEING HEALTHIER
Consuming fewer chemicals, eating more organic food and less animal products, walking, cycling, and getting more fresh air, all reduce the risk of heart and respiratory disease, diabetes, cancer, asthma, and allergies. The time spent in nature reduces stress, a major cause of illness in modern society.

CREATING NEW HABITS
It takes 21 days to create a habit. After that, you won't even notice the extra steps you are taking to be green.

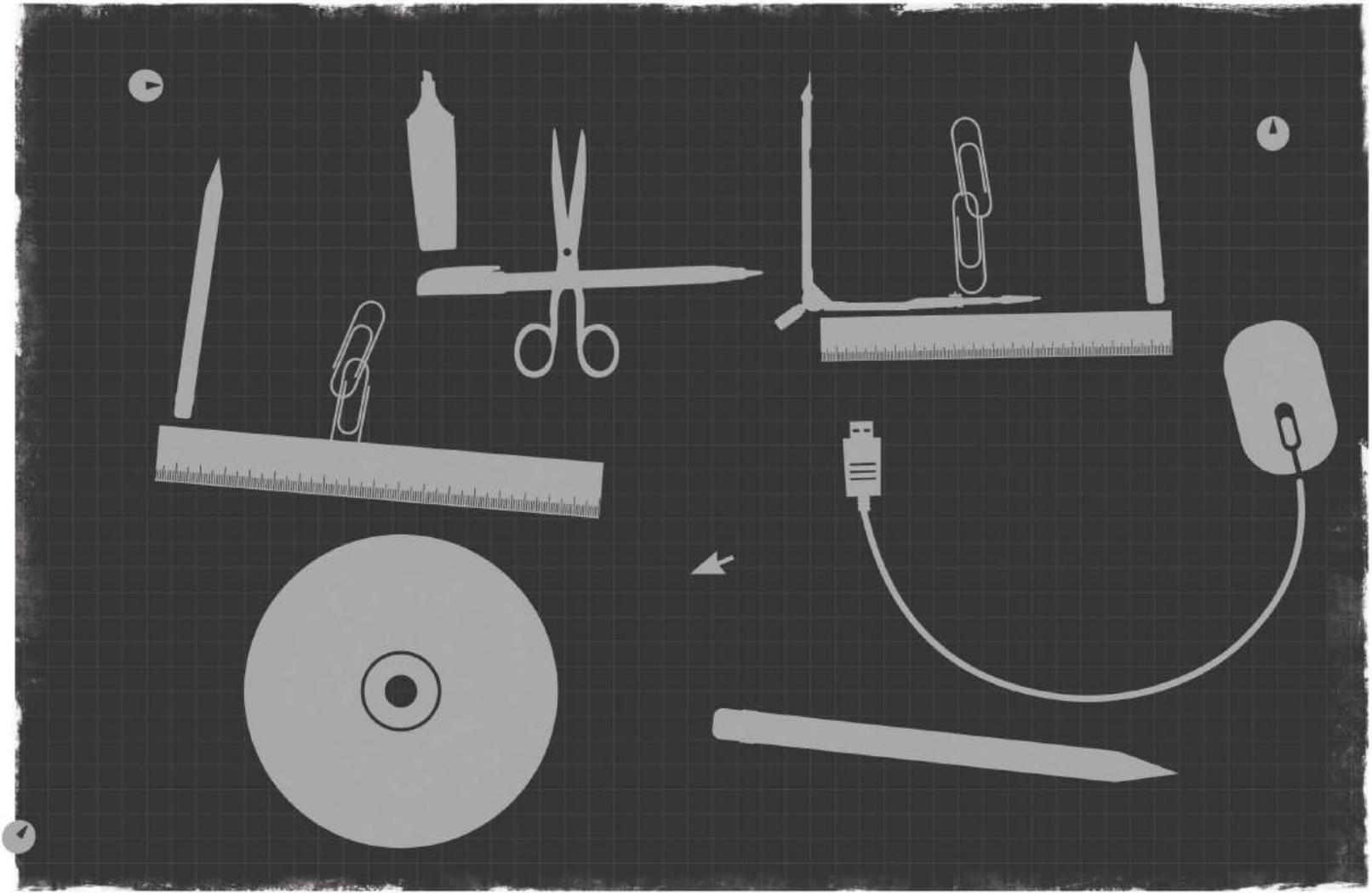
DOING WHAT YOU CAN
Even if you practice living more sustainably part-time, that's far better than doing nothing.

LEARNING TO LOVE NATURE
Until we start to value nature for itself, and not simply for how it affects us, we'll keep creating environmental problems.

BEING HAPPY WITH LESS
Far from being a sacrifice, this can be liberating; stepping off the consumer treadmill makes life simpler, cheaper, and less stressful.

FOCUSING ON what you can do and letting go of what you cannot: Global problems may seem overwhelming but the best place to start is by taking responsibility for your own actions.

OPPORTUNITIES
Intellectually, socially, even spiritually, practicing sustainability can open a whole new world.



HOW TO REDUCE YOUR PAPER FOOTPRINT AT WORK

SOME FACTS ABOUT PAPER

- **42%** of the industrial wood harvest is used to make paper.
- Forests store **50%** of the world's terrestrial carbon (in other words, they are extremely important "carbon sinks" that hold onto pollution that would otherwise be released into the atmosphere).
- **Half** of the world's forests have already been cleared or burned, and **80%** of what's left has been seriously degraded.
- Paper accounts for **25%** of landfill waste (and **one-third** of municipal landfill waste).
- Around the world we use roughly **1 million tonnes of paper every day** and our paper consumption is escalating.
  (Source: WWF)

The aim of environmentally responsible paper purchasing and use is to minimize waste, forest degradation, biodiversity loss, contributions to climate change, and water and air pollution. (*Source:* WWF Paper Guide). One of the best ways to do this is to use recycled paper. Every tonne of paper reused or recycled prevents emitting over a tonne of CO_2, keeps 3 cubic metres of waste out of a landfill, saves enough energy to light an average home for 6 months, and leaves 17 trees alive and busy absorbing CO_2. (Source: How to reduce your carbon footprint)

PAPER MADE WITH 100% RECYCLED CONTENT

- uses **44%** less energy
- produces **38%** less greenhouse gas emissions
- **41%** less particulate emissions
- **50%** less waste-water
- **49%** less solid waste
- **100%** less wood

Source: www.thedailygreen.com

Most paper is made from wood cellulose, but it also can be produced from kenaf, hemp, wheat straw, banana stalk, organic cotton, sugarcane, cork, even denim scraps and recycled currency.

The first creatures that produced paper were wasps. Unfortunately you can't beat their paper footprint even by purchasing only recycled paper and always recycling, unless you simply don't consume. However, you can reduce waste, and as a consequence, limit the amount of material that needs to be collected, transported, and processed for recycling. According to the *Minnesota Office of Environmental Assistance,* the average office worker uses 10,000 sheets of copy paper each year. It surely depends on the specific characteristics of the organisation, but the fact is that you can save loads of paper, money, and minimize your paper footprint by changing your habits and making sustainable choices.

SOME OF THEM ARE:

- Choose recycled paper, or if it is not available for some paper grades, select **FSC - certified paper**. There will always be a need for a certain amount of new fibres to come into the system, because recycled fibres get worn out after some time (after 4-5 times recycling). However, try to select paper with the highest post-consumer content.
- By **reducing** the amount of paper you consume, you avoid contributing to climate change. The paper industry is a very significant contributor to global emissions of carbon dioxide and other greenhouse gases. You can reduce the amount of paper consumed, without cutting down on the number of sheets used by simply switching to thinner and lighter paper. Changing from 80 to 70 grams per m^2 reduces your paper consumption by 14%, while moving from 100 to 80 grams per m^2 cuts consumption by 20%. (Source: WWF)
- **Buy some hemp paper** – paper made from hemp uses only a quarter of the land required to produce paper from timber, and the paper is of much higher quality.
- Use **unbleached** paper and thus reduce emissions of long-lasting, highly toxic and carcinogenic dioxins into paper mill wastewater. If unbleached paper is not an option for some reason, chose Total Chlorine Free (TCF) or Processed Chlorine Free (PCF) paper.
- Use **cloth towels** or cloth-roll dispensers in washrooms instead of paper towels. If necessary, buy tissue products that contain a high level of recycled content (including toilet paper).
- Set the default on your printer to **print and copy on both sides** or use paper that has already been used on one side. It can also be reused in plain paper fax machines since they only need one clean side. You can also utilize used paper for memo pads, telephone message slips and internal documents like drafts and meeting agendas.
- **Go electronic** instead of using hard copies. Use the phone and email, do presentations with overheads and presentation software, get e-subscriptions, use web resources, send and keep digital memos, contracts, invoices and records whenever possible. Desktop fax, electronic references (CD-ROM databases), electronic purchasing and direct deposit are good options, too.

If electronic versions won't do, route or circulate memos and report drafts instead of printing individual copies.

- Bring your laptop to **meetings** and use whiteboards or overhead projectors, rather than paper to avoid printing out presentation materials. Offer to provide copies on request, or circulate electronic documents.

- Reset default settings to **reduce font size** and to decrease margins to use 25% more text per page.

- Using the **size reduction feature,** two pages of a book or periodical can often be copied onto one standard sheet.

- **Pay bills online** or sign up for paperless billing. If all Americans received and paid their bills online, they would save 18.5 million trees each year.
- **Unsubscribe** from postal advertising, yellow pages and other unneeded subscriptions.
- Include a tag on all office email signatures NOT to print emails and attachments.

- Use the **'Print Selection' function,** to avoid printing pages you actually don't need.
- According to *Microsoft,* Times New Roman and Arial are some of the most efficient fonts, for they use significantly less space.
- **Reusing envelopes** is made easy if you apply (recycled paper and water-based glue) address labels. Don't forget to include a reminder to those on the receiving end. Use reusable inter- and intra-office envelopes.

- Use prepress technologies that eliminate or reduce hazardous materials, such as direct-to-plate printing.
- Buy paper that is produced by a company with a stated commitment to environmental stewardship.

- Get **online subscriptions to newspapers and magazines.** If you must have hard copies, get one for the whole office and share.

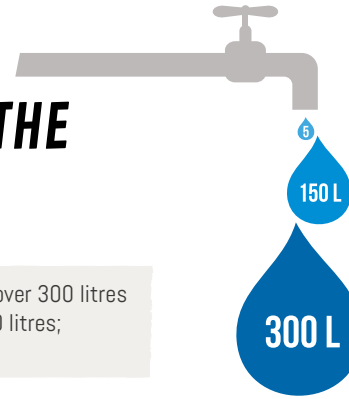
Photo: Joy De Vivre Design

IDEA!

Paper greeting cards may not be the most sustainable way to say "Thank you" or "Happy Birthday" unless... you choose these biodegradable, recycled paper envelopes, greeting cards and sheets that come induced with seeds and can be planted. You can later watch them grow into beautiful plants.

This may also be a great promotional idea for your organisation. If you want even bolder promotional ideas, it is possible to purchase... biodegradable shoes that can actually be planted in your backyard and will sprout into a patch of wildflowers!

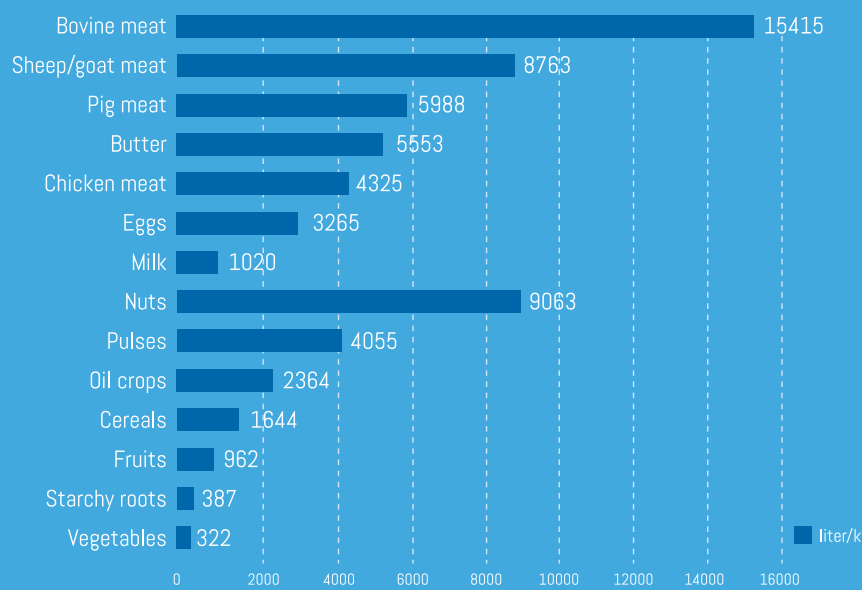
HOW TO REDUCE YOUR WATER FOOTPRINT AT THE WORKPLACE



An average American or Australian uses over 300 litres of water per day; a European, around 150 litres; and a Gambian less than 5 litres.

Less than 1% of the earth's water is potable fresh water, and 2% of the world's water is derived from glacial ice. The world population is growing. Drinking water is being polluted and wasted. The UN Water for Life Decade Report (2005-2015) warns that an estimated 34 billion people will live in "water-scarce" countries by 2025. The global demand for water could outstrip supply by 40% in 2030 (Source: Alex Prud'iomme, The Ripple Effect).

THE WATER FOOTPRINT OF SOME SELECTED FOOD PRODUCTS OF VEGETABLE AND ANIMAL ORIGIN



Data source: Mekonnen and Hoekstra (2010), www.waterfootprint.org

The diagram shows that actually one of the easiest ways to minimize your water footprint is to eat less meat and dairy. If it's a no-go for you, choose grass-fed, rather than grain-fed. According to the *National Geographic,* on a daily basis, a vegan indirectly consumes about 2,270 litres (600 gallons) of water less than a person who eats the average (American) diet.

Some of us would rather go vegan than quit drinking coffee in the office, but the fact that it takes about 208 litres (55 gallons) to produce a cup of coffee (with most of the water used to grow coffee beans) is sufficient food for thought. (Source: National Geographic) If coffee is your fuel, you can try to compensate this 'water footprint sin' by reducing your paper consumption; it takes 13 litres of water to produce a single sheet of virgin paper. (Source: imagineallthewater.eu)

SOME MORE TIPS TO TRIM YOUR UTILITY BILLS AND SAVE LOADS OF WATER IN THE:

BATHROOM

- Check all water-using appliances, equipment, and other devices for leaks. A running toilet can waste up to 750 litres per day. To detect leaks in the toilet, add food colouring to the tank water. If the coloured water appears in the bowl, the toilet is leaking. Toilet repair advice is available on *www.toiletology.com.*
- If your toilet was installed before 1992, you probably could benefit from installing a high efficiency toilet that uses 6 litres of water or less per flush. (Source: Energy Star)
- Never use your toilet as a waste basket.
- Install low-flow faucet aerators (and shower heads if necessary), smart devices that infuse the running water with air, which diminishes the use of water while dishwashing or cleaning your hands.
- When you are washing your hands, don't let the water run while you lather.

KITCHEN

- Use an energy efficient dishwasher (Source: Energy Star)
- Scrape or soak pots and pans, rather than rinsing dishes before putting them into the dishwasher and wash only full loads.
- If washing dishes by hand, fill one sink with wash water and the other with rinse water to avoid running water while rinsing.
- Wash fruits and vegetables in a bowl or basin.
- Keep a pitcher of water in the fridge instead of running the tap to have cool water at hand.
- You can also use the (uncontaminated) sink water to water plants instead of pouring it down the drain.
- Designate one glass for your drinking water each day or refill a water bottle. This will reduce the number of glasses you have to wash.

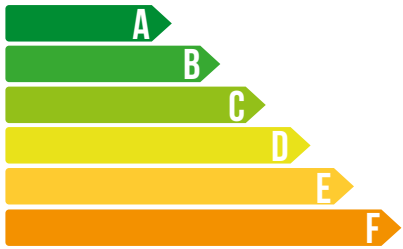
TRANSPORT (by National Geographic)

- Washing a car uses about 570 litres of water, so by washing less frequently, you can cut down on your water use.
- A (US) gallon (~3,8 litres) of gasoline takes nearly 13 gallons (49 litres) of water to produce. Combine your errands, car pool to work, or take public transportation to reduce both your energy and water use.
- A cross-country airplane trip (about 6,000 miles) could be worth more than 1,700 standard toilet flushes.

AND MORE..

- One of the best ways to conserve water is to buy recycled goods.
- The water required to create your laptop could wash nearly 70 loads of laundry in a standard machine, so be kind to it. (Source: National Geographic)
- It takes about 3 litres of water to produce 1 litre of bottled water, so eliminating the use of bottled water is a great step.

ENERGY SAVING TIPS



You have probably heard many energy saving tips from various sources and this is something easy that you can practice in your workplace. Lighting, heating and cooling are the best targets for energy savings at the workplace; they represent between 54-71% of total energy use in the office building, depending on your climate (Source: Suzuki Foundation). Electrical devices are the fourth best target for your savings, since even energy-efficient equipment can be used more efficiently. Cutting back on energy use will help you save money, too.

HVAC (HEATING, VENTILATION, AIR-CONDITIONING)

Using your HVAC equipment efficiently can save up to 30% of energy used, in addition to lowering costs. The easiest and most cost-effective way to do this is by optimizing energy systems.

Here are some tips to attain this goal:

- Even if you have energy-efficient HVAC equipment, learn how to use it as efficiently as possible. The fact that your devices are more efficient does not mean that you should be using it more intensively than you would normally.
- During cold weather heat your building to a maximum of 21°C when occupied and 16°C when unoccupied. Start heating only when people arrive and set back the temperature one hour before leaving the building.
- In the summer, cool the building only when it's occupied and to no lower than 24°C.
- At night, use outdoor air for cooling.
- Consider implementing a casual dress code for summer, to avoid the need for more cooling from the hot weather.
- Service HVAC systems regularly. Maintenance activities can save up to 30 % of fan energy and up to 10 % of space conditioning energy. (Source: BC Hydro)
- Take the time to learn about what your thermostat and HVAC system can do (optimal start/stop; free cooling, use of outdoor air, etc.).
- Closing blinds or curtains in the summertime helps you reduce the need for cooling. Harvard University Sustainability Office recommends keeping them closed at night during cold weather to reduce heat loss.
- Insulate the water heater.
- Use ceiling fans in rooms with high ceilings. It will help to push down the (warm) rising air.

ELECTRICAL EQUIPMENT

COMPUTER

- **Don't use a screen saver.** It doesn't let the monitor dim and thus keeps on wasting energy. Screen savers are not necessary on modern monitors.
- **The brightest setting** on a monitor can consume **twice the amount of power** used by the dimmest setting, so it makes sense to turn it down a bit.
- **Reduce junk email** to save energy. A study produced by ICF International and commissioned by software developer McAfee Inc. found that in 2008 the energy wasted worldwide by sending junk email (33 billion kilowatt-hours) is equal to the amount of electricity used in 24 million American households.
- **Reduce your computing costs** significantly by considering having as many as 11 people share one computer using multi-user CPU computing systems. These systems are sometimes known as virtual desktops as they use virtualization software to optimize the efficient utilization of a single computer's CPU to multi task and enable several users at one time." (Source: BCHydro)

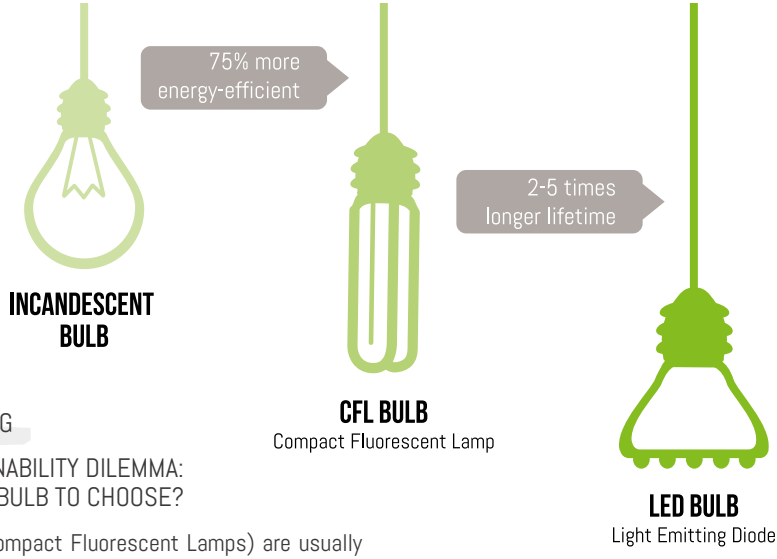
OTHER ELECTRICAL DEVICES

- A popular myth holds that leaving lights, computers, and other appliances on uses less energy than turning them off and also makes them last longer. In reality, the small surge of power created when some devices are turned on is vastly smaller than the energy used by running the device when it is not needed. (Source: Energy Star)
- Fight phantom power or so called *'energy vampires.'* Plug all your electronics into one power strip and turn the strip off until needed. There are also programmable smart power strips available, which can turn equipment on and off based on a timer.
- Install timers or software that turn off printers and photocopiers at a certain time.
- Unplug cell phone chargers, adapters etc., for they keep on sucking energy even if not in use.
- You can analyse the use of energy of the office equipment yourself, using a a power measuring device.
- Sharing one printer between many users can save 30-40% or even up to 60% of costs (lower costs for hardware, consumables (paper, ink, and toner), electricity, and maintenance). (Source: Energy Star) It's easy to do by connecting a central printer (that can print double-sided, if possible) to the office computer network, thus avoiding energy consumption by idle printers.
- Boil a full kettle of water and put it in the thermos to avoid the constant reheating of water each time you make your hot beverage.
- Take the stairs instead of the elevator.

CLIMATE SAVERS COMPUTING INITIATIVE RECOMMENDS THE FOLLOWING POWER MANAGEMENT SETTINGS:

- *Monitor/display sleep:*
  Turn off after 15 minutes or less
- *Turn off hard drives/hard disk sleep:*
  15 minutes or less
- *System standby/sleep:*
  After 30 minutes or less

Shorter periods might save even more, depending on the pattern of your computer use.



LIGHTING

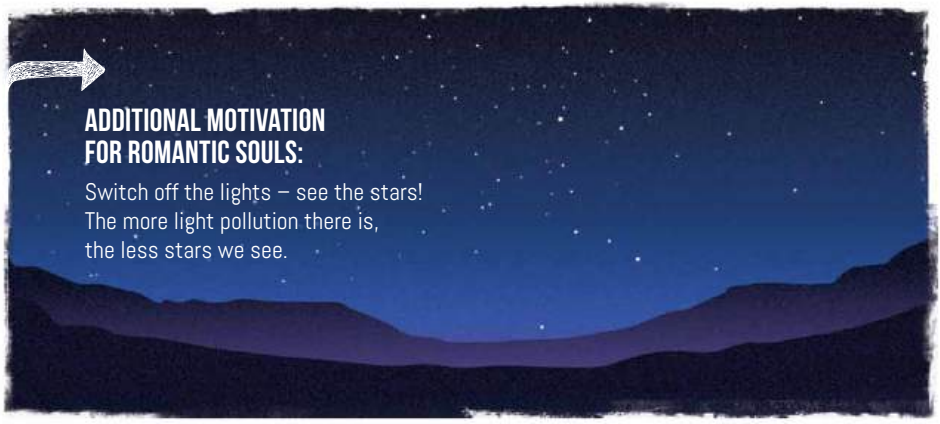
SUSTAINABILITY DILEMMA: WHICH BULB TO CHOOSE?

CFLs (Compact Fluorescent Lamps) are usually **up to 75% more energy-efficient** than incandescent bulbs, LEDs (Light Emitting Diodes) – even more. The lifetime of CFLs is up to 6 years, which is about 2-5 times less than of the LEDs. It means the by choosing LEDs you make purchases at rarer intervals and **produce less toxic waste.** It's really good news for both your organisation's budget and environment (except when the bulbs land in landfills).

However, some studies warn of the potential health hazards (even cancer) of both CFLs and LEDs. Scientists are already working on alternatives that are friendlier to human health. This dilemma shows how difficult sustainable choices can be and how many things should be taken into account.

FURTHER TIPS...

- turn lights off when not needed
- install occupancy sensors and dimmers
- install task lamps and desk lamps
- painting walls and ceilings in light colours will help to reflect light
- use timers or photocells outdoors
- If you come to a decision to make your lighting as energy-efficient as possible, you might want to consult a professional lighting designer.



GREEN OFFICE BUILDINGS AND ALTERNATIVES

GREEN BUILDING is the practice of creating structures and using processes that are environmentally responsible and resource-efficient through a building's life-cycle: from finding the site to design, construction, operation, maintenance, renovation and deconstruction.

Green buildings are designed to reduce the overall impact of the built environment on human health and the natural environment by:

- **Efficiently using** energy, water, and other resources
- **Protecting** occupant health and improving employee productivity
- **Reducing** waste, pollution and environmental degradation. (Source: US EPA)

CHOOSING A NEW GREEN BUILDING

If you decide on a new green office building and choosing one is your only problem, professional consultation or certifications for green buildings could help you make your decision. Some of the European certificates are *DGNB/CEPHEUS* (Germany), *PromisE* (Finland), *HQE* (France), *Protocollo Itaca / Green Building Council Italia* (Italy), *BREEAM* (United Kingdom and Netherlands), *Minergie* (Switzerland), *VERDE* (Spain), *SBToolCZ* (Czech Republic). The peak of it all is a so-called zero-energy or zero-carbon building with, as the name indicates, offers zero net energy consumption and zero carbon emissions annually.

On the other hand, the price of such energy efficient buildings is quite high. However, several studies have found, that the buildings do pay off in the long term due to the more efficient use of utilities, leading to decreased energy bills. Certified buildings can also be rented or sold for higher prices.

RETROFITTING YOUR PRESENT OFFICE BUILDING

If you want your office building to be as energy-efficient as possible, find out information about energy audit companies (accredited, if possible) in your country. They inspect the energy input situation in your building, determine where the building is losing energy, estimate the potential for energy saving and recommend some sustainable solutions.

- If you are ready to jump in head first in making your building more sustainable but lack the financial resources for professional energy audit, maybe the 'Do-It-Yourself Guide to **Sealing and Insulating** With Energy Star' and some other DIY guides would be an option for you. You can use an infrared camera to detect roofing and heat loss, even moisture.
- Choose **sustainable insulation materials** with a high percentage of recycled materials that don't contain harmful substances. Examples of sustainable insulation materials are: denim (natural cotton fibre, recycled from the scraps left over from the production of clothing), hemp, wood fibre, etc.
- Install **high-performance windows and doors.** If you notice moisture entering your house, it is high time to replace your windows, otherwise it can lead to mold growth and serious health problems. When selecting your new windows, remember that vinyl windows emit VOCs (Volatile Organic Compounds) and the amount of energy used to manufacture them is much higher than required to produce wooden windows. Sun-reflecting windows are also available.
- Choose **energy-saving roof shingles** (higher solar reflectance and thermal emittance). *Energy Star* certificated shingles reflect 25% (installed on a steep-sloped roof) to 65% or more (low-sloped roof) solar radiation. You can also install **solar shingles** and produce energy for your office needs. A cheaper way to minimize heat absorption is to put **a light colour on the roof** or **plant vegetation.** Insulating your roof will make you like your utilities bill more.
- **Planting trees** to provide shade and wind protection for the building is perhaps the most beautiful way to save the climate and money on heating and air conditioning.

Office sharing is another option to minimize your footprint and costs, while optimizing the use of space and resources. You can find shared offices all around the world or offer your free workspaces and conference rooms for rent. Both the environment and your organisation's wallet will enjoy this. You can reduce your footprint, support sustainable initiatives and do a favour to employees' health by choosing to rent rooms in a 'green office building.'

THE HUB

At least 4,000 hardworking and fun-loving people from 5 continents enjoy a special sort of office sharing called *The HUB.* It offers you meeting rooms, workspace, professional infrastructure, business support and a chance to socialize and collaborate with other individuals, organisations and companies working on different projects. There are 25+ open hubs to date all over the world and 50+ in the making.

Read more on *www.the-hub.net,* if you like.

When choosing an office, make sure that it has **access to public transit** and that the office building is **handicap-friendly.**

Last but not least, you might want to set up a **community garden** on adjacent land, in containers on a deck, or even on the roof of the building. To be practical, you should plant only vegetables, spices and greens that could be handpicked, don't require cooking (tomatoes, peppers, small melons, radishes etc.) and can be eaten right after harvesting. Independent School Management CEO Roxanne Higgins says that their garden is seen as an extension of her company's wellness programme. It is also an inexpensive team-building method. Many well-known companies have provided space and support for employees interested in gardening.

INDOOR AIR

WHAT'S ALL THE FUSS ABOUT INDOOR POLLUTION?

We usually think about air pollution as an outdoor phenomenon, but the fact is that indoor air can be 2-5 times more polluted than outdoor air. Since most of us spend up to 90% of our time indoors, this can seriously threaten our health and well-being. There are some unpleasant short-term health hazards that result from indoor air pollution, like eye, nose and skin irritation, headaches, dizziness, fatigue and allergy-like symptoms. This is called *Sick Building Syndrome* and according to some studies, up to one-third of new and renovated buildings can cause this syndrome. (Source: Suzuki Foundation)

In most cases, the symptoms will be relieved soon after affected employees leave the building or the particular room. However, some pollutants can have lingering effects or cause diseases that show up much later, such as respiratory diseases or cancer. Also on the list are asthma, hypersensitivity pneumonitis, and humidifier fever. Don't worry, it doesn't mean your life and health is in great danger just because you spend much time working and living indoors. Some people may never experience any symptoms while sensitive people may be seriously affected.

The good news is nothing new. Actually, if you detect the pollutants and employ some bright ideas to get rid of them or minimize exposure, you can improve the quality of your indoor air.

POLLUTANTS

Poor ventilation, high humidity and people who smoke indoors have something in common. They can seriously increase the concentration of certain dangerous indoor air pollutants:

RADON

According to *World Health Organization,* this odourless radioactive gas is the second biggest cause of lung cancer in many countries, after cigarette smoke (between 3% and 14% of all lung cancers). Radon can seep into offices through cracks in floors, walls or foundations. It is usually found in igneous rock and soil, but it can also be in your water, especially well-water. Testing is the only way to know if the building has elevated radon levels.

SOLID OR LIQUID PARTICLES (DUST, DIRT ETC.) may be drawn into the building from outside and can also be produced by activities that occur in the building, like sanding wood or drywall, printing, copying, operating equipment, and smoking.

CARBON MONOXIDE
An odourless gas, which may cause flu-like symptoms and at certain concentration even death in 1-3 min. Source: unvented gas heaters; leaking chimneys or furnaces; gas stoves, and can also be drawn from underground parking garages through stairwells and elevator shafts into office spaces.

SECONDHAND TOBACCO SMOKE
Even if you don't smoke, you are at danger of inhaling secondhand smoke, a carcinogen.

VOLATILE ORGANIC COMPOUNDS (VOC)
From products used in the building (office equipment, paints, paint strippers, and other solvents; wood preservatives, aerosol sprays, cleansers and disinfectants, air fresheners, dry-cleaned clothing, vinyl windows frames etc.) VOCs (volatile organic compounds) are emitted as gases from different solid and liquid substances, and may have various short- and long-term health effects.

NITROGEN DIOXIDE
The primary sources indoors are kerosene heaters, unvented gas stoves and heaters, environmental tobacco smoke. May cause eye, nose, and throat irritation.

BIOLOGICAL CONTAMINANTS
include bacteria, mould, mildew, viruses, dust mites (especially in high-humidity buildings, in case of water-damage).

HAZARDOUS MATERIALS may have been used to construct the building, such as: asbestos (ceiling and floor tiles, acoustic and thermo insulation), formaldehyde (particleboard, fiberboard, plywood, carpeting and glues) and lead (old paints, household dust, drinking water, lead-glazed pottery etc.)

WHAT YOU CAN DO

The US Environmental Protect Agency (US EPA) recommends three basic strategies to improve indoor air quality:

IMPROVED VENTILATION

Proper ventilation is very important for controlling humidity, contaminants and odours in the building. However, the adequate delivery and quality of building air depends on cautious maintenance of HVAC equipment. Regular checking and replacing filters is essential to ensure the proper functioning of HVAC systems and the intensified proliferation of mold and different microorganisms. Make sure all vents or return air grilles are unblocked, to ensure proper airflow.

You can also improve the ventilation system by installing a fan controlled by the outdoor temperature.

AIR CLEANERS

Air cleaners are portable electrical devices that remove fine particles from indoor air. Various air purifier filters are available, which target different types of air pollution. Two general types are

mechanical air filters and electronic air cleaners. They are classified by the method employed to remove particles of various sizes from the air. If you choose to buy an air purifier, be aware that ion and ozone generators are both being sold as air cleaners. They produce ozone, which is a strong lung irritant. According to *Energy Star,* a standard room air purifier can potentially use as much energy as a new refrigerator, while *Energy Star* certified air cleaners are up to 40% more energy-efficient.

SOURCE CONTROL

According to the US EPA, the most effective way to improve air quality is to eliminate pollution sources. This is usually also the most cost-effective solution, because increasing ventilation can also increase energy costs.

- There are some sources you can eliminate by yourself easily, but please don't ever attempt to dispose of materials containing **asbestos** or **lead,** which are really hazardous. **Professionals** should decide if the substance should (could) be removed, sealed or enclosed.
- You can also install carbon monoxide and carbon dioxide **detectors.** The first one is one of the most dangerous indoor pollutants, the second one lets you know when you're running short of fresh air in the office.
- **Secondhand tobacco smoke** also consists of one of the most dangerous pollutants at your workplace, but eliminating the source is definitely not a good idea. Designated smoking rooms with proper ventilation or forbidding smoking indoors is a good way to show respect to non-smoking colleagues.
- Look for products (also furniture, flooring) which are marked **'low -VOCs', 'no-VOCs',** have received the **'Indoor Air Certificate'** by Greenguard or have been approved by other trusted eco-labels. Conventional paints emit hazardous VOCs even months after application. Office equipment such as copiers and printers, correction fluids, graphics and craft materials including glues and adhesives, permanent markers, and photographic solutions can also emit serious amounts of VOC's, so 'proper ventilation' could be one of your mottos at your workplace.
- Another tip - **secondhand furniture** emits less VOCs than new ones!
- Bring plants to your office. Many houseplants remove harmful elements such as trichloroethylene, benzene, and formaldehyde from the air, which are typical trapped pollutants in tightly sealed energy-efficient buildings and can result in *Sick Building Syndrome.* There are lists of air filtering plants, which focus on removal of certain chemicals. However, don't underestimate the other plants in your office, for all of them are pretty good at producing oxygen and absorbing carbon dioxide.
- If you get really serious about indoor air quality, you might be interested in a so-called **Scent-Free Policy** for the workplace, which is common in Canada. There are many scent producing products like perfumes, aftershave products, lotions, powders, hair sprays, air fresheners, deodorants etc. Fragrances indoors can cause symptoms like headaches, dizziness, insomnia, depression, upper respiratory symptoms, shortness of breath, difficulty with concentration, skin irritation etc. A 'no panic,' 'deodorant free office' doesn't mean you will have to accept the natural odour that deodorant used to neutralize before. There are plenty of scent-free alternatives.

Poor ventilation coupled with chemicals from conventional cleaning products can increase Sick Building Syndrome. According to the US EPA, 'alkylphenol ethoxylates, a common surfactant ingredient in cleaners, have been shown in laboratory studies to function as an "endocrine disrupter," causing adverse reproductive effects of the types seen in wildlife exposed to polluted waters'.

Everybody in the office is potentially exposed to the volatile components of cleaning products, not only the janitors. However, with eco-labelled green cleaning products you are on the safe side.

You can also use reusable sponges, cloths or rags instead of paper towels and disposable wipes. Try microfiber cloths, which trap and absorb dust and dirt when moistened, thereby avoiding the need for extra cleaning products.

If you prefer money saving **DIY solutions,** *www.thedailygreen.com* has some advice for you.

FOR PORCELAIN AND TILE

Baking Soda and Water: Dust surfaces with baking soda, then scrub with a moist sponge or cloth. If you have tougher grime, sprinkle on some salt, and work up some elbow grease.

Lemon Juice or Vinegar: Got stains, mildew or grease streaks? Spray or douse with lemon juice or vinegar. Let it sit for a few minutes, then scrub with a stiff brush.

Disinfectant: Instead of bleach, make your own disinfectant by mixing 2 cups of water, 3 tablespoons of liquid soap and 20 to 30 drops of tea tree oil.

FOR KITCHENS COUNTERS

Baking Soda and Water: Freshen up counters by sprinkling them with baking soda, then scrubbing with a damp cloth or sponge. If you have stains, knead the baking soda and water into a paste and let it set for a while before you remove. This method also works great for stainless steel sinks, cutting boards, containers, refrigerators, oven tops and more.

Salt and Water: If you need a tougher abrasive, sprinkle on salt and scrub with a wet cloth or sponge.

Natural Disinfectant: To get rid of germs mix 2 cups of water, 3 tablespoons of liquid soap and 20 to 30 drops of tea tree oil. Spray or rub on countertops and other kitchen surfaces.

FOR WINDOWS AND MIRRORS

White Vinegar, Water and Newspaper: Mix 2 tablespoons of white vinegar with 4 L of water, and pour into a used spray bottle. If you're out of vinegar or don't like its smell, you can substitute undiluted lemon juice or club soda. Spray on the surface, then scrub with newspaper rather than paper towels (they cause streaking and are unnecessary use of paper). An even better solution is purchasing a special microfiber cloth, which requires no detergents and cleans most surfaces with just the use of water.

FOR WOOD FLOORINGS

Vinegar: Whip up a solution of 1/4 cup white vinegar and 1 litre of warm water. Put the solution into a recycled spray bottle and spray it onto a cotton rag or towel until slightly damp. Then mop your floors, scrubbing away any grime.

FOR CARPETS AND RUGS

Beat Those Rugs: Take any removable rugs outside and beat the dust and hair out with a broom.

Soda bicarbonate: You've probably heard the folk wisdom thatclub soda works well on carpet stains, but you have to attack the mess right away. Lift off any solids, then liberally pour on soda bicarbonate. Stop the stain from spreading with a piece of old cloth. The soda's carbonation brings the spill to the surface, and the salts in the soda prevent the stain from sinking in.

Cornmeal: For big spills, dump cornmeal on the mess, wait 5 to 15 minutes, and vacuum it up.

Spot Cleaner: Make your own by mixing: 1/4 cup liquid soap or detergent in a blender, with 1/3 cup water. Mix until foamy. Spray on and then rinse with vinegar.

To Deodorize: Sprinkle baking soda or corn starch on the carpet or rug, using about 1 cup per medium-sized room. Vacuum after 30 minutes.

FOR CLOGGED DRAINS

Baking Soda and Boiling Water: Pour 1/2 cup of baking soda into the problem drain, followed by 2 cups of boiling water. If that isn't doing it for you, chase the baking soda with a 1/2 cup of vinegar and cover it tightly, allowing the vigorous fizzing of the chemical reaction to break up the gunk. Then flush that with about 4 litres of boiling water.

CLEANING PRODUCTS

DISHWASHING

Choose ecological washing liquids for your office; they are not harmful to your health and they prevent pollution by toxic chemicals, which damage aquatic life and make water expensive to treat.

Remember that even if you use such ecological washing liquid, it does not mean you should not use it carefully; follow the instructions on the bottle and only use the necessary amount to do your dishes.

PURCHASING

Before you go shopping for office supplies, take a minute to consider your needs and possibilities:

1 DON'T BUY WHAT YOU DON'T NEED: if you don't purchase whatever item you crave, you save materials used for production, as well as energy consumed in the process. It is a great way to prevent waste: you can't throw away what you don't purchase. Instead of relying on the market to fulfill your needs, you can borrow, rent or share. Borrow what you need from a library, or adapt something you've already got. For instance, you could share one printer or coffee machine between several offices. Remember to take a look in your storage room; maybe you already have what you need (or what can be adapted) there. If you must buy it, then...

2 AVOID DISPOSABLE PRODUCTS: invest in long-lasting quality instead.

3 THINK LOCAL: shop locally to reduce your travel, and buy locally-produced goods to reduce freight transport.

4 MINIMIZE THE IMPACT ON THE ENVIRONMENT by buying green products; this way you also help the green retailers grow.

5 BUY RECYCLED PRODUCTS to complete the recycling loop.

6 BUY SECOND-HAND: from charity shops, local classifieds, car-boot/jumble sales, online auctions, police auctions.

7 TRY TO AVOID SUPERMARKETS: they use their buying power to drive down prices, forcing suppliers to use cheaper but environmentally-harmful methods. They also put local stores out of business, making it harder to shop locally. If you do use them, write to them or talk to store managers about reducing packing, stocking organic lines, etc.

8 REDUCE PACKAGING: avoid over packaged items; use reusable bags instead of plastic bags; shop in stores that let you refill or bring your own containers; buy bulk sizes; buy products in packaging you know you can recycle.

9 SHOP ONLINE: a delivery or mail-order involves less transport than if every customer were to drive to a shop.

10 GET IT FOR FREE: Look on *freecycle.org* or in the dumpsters; you will be amazed about what you can find.

(Source: Being Green)

IF 'TO BUY' IS THE ANSWER...

To cut a long story short, here are some **Green Purchasing Guidelines** (Centers for Disease Control and Prevention). When you shop, look out for products:

- with bio-based content
- that cause less harm to environment
- which are energy and water efficient
- with minimal life cycle costs
- that carry minimal risk of toxic/hazardous chemicals
- with a long product life
- with 30% or greater post-consumer recycled content (paper products)

Paying attention to eco-labels is a smart way to make sustainable shopping easier. You can find the most popular eco-labels listed in the appendix.

You can find all the EU *Ecolabel* certified products on the *Ecolabel* online catalog: *http://ec.europa.eu/ecat*

OFFICE SUPPLIES

For those of you who think that this chapter is splitting hairs, you should know that office supplies make more than 10% of all landfill waste (*http://www.bchydro.com*). If that proportion of waste was non-toxic and sustainably produced, there would be an enormous environmental impact. Some pre- or post-consumer recycled supplies like pens and paper are nothing new to most 'office people', while some other are pretty revolutionary. You can use:

- **soy or vegetable based ink** (low-VOC) for your printer.
- **staple-less staplers.** Instead of using staples, this staple cuts and tucks sheets of paper to join them together (up to 4-5 sheets), thereby reducing the amount of metal waste.

- **refillable highlighters, pens and printer toners** and many other similar supplies. Commit to only using refillable pens. Stop purchasing the disposable ones!
- **bio products.** You can buy eco-friendly flip-chart markers or glue sticks.
- **digital data transfer.** Instead of sending CDs, DVDs, USBs, with data, you can now transfer even large files online using one of many free services.

OFFICE EQUIPMENT

One of the nice things about choosing energy-efficient office equipment is that it usually saves up to 20-30% on air-conditioning costs, as well as reducing greenhouse gas emissions. However, the use of inefficient office equipment as an additional heat source in cold weather will cost you much more than using a proper heating system and energy-efficient office equipment.

GENERAL ENVIRONMENTAL ATTRIBUTES TO LOOK FOR

- Reduced or non-toxic components
- Recycled-content
- Designed for recycling
- Reduced use of materials
- Energy efficient
- Extended product life, upgradeable
- Reduced packaging
- Recyclable packaging
- Environmentally sound return and recycling options

Source: US EPA

- If you consider buying a new computer, because you are not satisfied with the performance of the old one, you can solve the problem by **cleaning the system, removing old programmes or re-installing.** You can also try different disk imaging programmes or search for professional help to 'tune-up' the office equipment (including HVAC), to avoid purchasing new devices.

- If you have old computers that take up lots of energy, it makes sense to replace them with **energy-efficient laptops,** especially if you don't forget to recycle. By operating an energy-efficient laptop efficiently, you can reduce your energy use by 98 - 99%. Laptops support telecommuting and can also be purchased in solar-powered versions.

  If you already have energy-efficient computers that work, buying new even more energy-efficient ones is not a very sustainable decision, since the embodied emissions required to produce new devices could be much higher than the emissions saved. It also produces e-waste.
- Specify an 80 PLUS power supply when ordering computers (the power supply is at least 80% efficient or greater at various load thresholds and is power-factor corrected).
- Even the most energy-efficient fax modems and electronic fax devices can lead to significant energy use if they require the computer or printer to be constantly switched on.
- Many laser printers have a long lasting print drum and require only toner refills, which will reduce the negative impact on your budget and the environment.
- Choosing a printer that can print double-sided will ease your day a bit, but you surely don't have to try to get rid of your old one, if you don't mind turning pages.
- Ensure the printer, fax machine or photocopier have toner, ink and energy saving modes.
- The easiest way to choose the proper energy-efficient electronic device is to search in the *Energy Star* database for Europe.
  http://www.eu-energystar.org
- Choose **ergonomic devices** to avoid injuries, which can result from sitting for prolonged periods of time or using computer equipment incorrectly. For instance, carpal tunnel syndrome is an injury that you can get by typing on computer keyboards or holding a mouse at a bad angle. You can also do your backbone a big favour by choosing an ergonomic office chair and table.

INTERIOR

If you get to furnish your office, look for items made with non-toxic materials to benefit both your health and the environment. Eco-labels like *Blue Angel, EU Ecolabel, Nordic Swan* and *Green Guard* should guide your decision making. Yet remember that carbon emissions during transport can make even certified products less eco-friendly.

FURNITURE

Furniture can be a major source of VOCs and other hazardous chemicals. Choosing eco- labelled is not just a fine gesture towards nature, but can help you avoid associated health-risks. (You can read more about these in the "Indoor Air" chapter). This is why eco-design has already become a trend.

If the slightly higher costs of eco-furniture might do inordinate damage on your organisation's wallet, choose secondhand. Buying used is a very good alternative because you will emit less VOCs, reduce waste as well as negative environmental impacts.

If eco-certified and secondhand furniture for some reason is not an option for you, the following tips will help you to avoid **VOC**s.

- ask your furniture retailer for low-VOC or VOC-free furniture
- avoid furniture with a sharp chemical odor. It is often emitted by VOCs, although not all of them have an aroma
- avoid vinyl wall coverings and upholstery, plywood, pressed wood products. Another reason to avoid vinyl and petrochemical materials is the fact that it takes 500 or more years to biodegrade.

Health risks depend on the toxicity of the chemical, how much of the chemical is in the air and how long you breathe it, but also individual factors like age, health condition and even gender. (Source: NYC Department of Health)

Many people refuse to buy leather furniture out of environmental concerns and compassion to animals. Even if the ethical aspects of leather production don't bother you that much, your body would perhaps prefer some other natural materials, since leather can emit VOCs after the use of chemicals in the tanning process. The impact of livestock on air pollution during the production process also has a huge environmental impact.

CAN YOU IMAGINE ENJOYING YOURSELF ON THIS CHAIR DURING A BREAK?

If so, you may also relish the feeling of ocean. The eco-designer and former surfer Carlos Motta uses washed up wood that he finds on the Sao Paulo beach.

ENVIRONMENTAL CODES FOR TRACKING PURCHASES

EE	**Energy Efficient**	*A product that uses less energy* (either electricity or fossil fuel) to accomplish its task relative to a comparable product by the same manufacturer.
LT	**Less Toxic**	*A product containing a smaller amount of toxic substances* relative to a comparable product or a product reformulated to be less toxic.
PB	**Plant-Based**	*A product derived from renewable resources,* including fibre crops (such as kenaf); chemical extracts from oilseeds, nuts, fruits and vegetables (such as corn and soybeans); agricultural residues (such as wheat straw and corn stover); and wood waste generated from processing and manufacturing operations. These products stand in contrast to those made from fossil fuels (such as petroleum) and other less renewable resources (such as virgin timber).
RB	**Rebuilt**	*A product refurbished* to a level less than total remanufacture. The warranty is by the rebuilder, and may be different from the same product when new or remanufactured. Also called reconditioned or refurbished.
RC	**Recycled Content**	*A product containing materials recovered or diverted* from the solid waste stream after consumer use ("post-consumer").
RK	**Reduced Packaging**	*A product presented for use with less packaging* or alternative methods of packaging or shipping.
EM	**Remanufactured**	*A product restored to its original condition* by extensive rebuilding, usually given an equal or better warranty than a new product.
RE	**Repair**	*A product that has had a defect corrected* and can again serve its original function. Repairing is a less comprehensive process than either remanufacturing or rebuilding.
US	**Used**	*A product used or owned before without* further maintenance.
WC	**Water Conserving**	*A product that requires less water* to operate or to manufacture than a comparable product, or a different version of the same product from the same manufacturer.
MU	**Multiple Codes**	*A product that has several significant environmentally responsible characteristics,* and could be classified under several codes, but where no single code predominates.
TO	**Other**	*A product having environmentally responsible characteristics* that does not fit into any of the categories listed above.

Source: IPCC, *http://www6.montgomerycountymd.gov*

PUBLICATIONS

AND MERCHANDISE

PUBLICATIONS

NO MORE DUSTY PILES OF LEAFLETS!

Producing and distributing printed materials has been and still is the most frequently used method of disseminating viewpoints and information. Even though we live in a digital era, non-profit organisations still print thousands and thousands of publications. Posters, postcards, books, brochures, manuals, stickers... you name it, it's all there, probably also on your bookshelf. Colourful or not, in all shapes and sizes, they all are meant to communicate a particular message, and once it's done, they have served their purpose. But what happens next?

The problem with many publications is that they have a very short lifespan. Think about it: what happens with all those leaflets that are given out in the streets? What happens with daily newspapers once they are read? What happens with commercial postcards once they are received? Most likely they end up in the garbage bin very soon. In the best case they are recycled, in the worst case they go to a landfill. It's unbelievable how much paper, ink, and labour is wasted just to disseminate printed advertisements that no one will ever read! Of course, there are also durable publications. Books are a good example of that, though they are not the most used publication format among non-profit organisations. Why? It is more expensive to make one, it needs more time and energy, and it reaches less people.

So, what does it mean to make a sustainable publication? There are many components to take into account, and there is not one right answer. Each publication serves a different target audience and purpose. Ideally, a sustainable publication is made:

- by taking into account the specifics of the target audience;
- by harming the environment in the least possible way;
- with the idea that it will be used more than once and won't be thrown out right away or end up in a bookshelf for years.

We would advise you to keep in mind a couple of guiding principles, and for everything you do: think before you create something and try to search for different options before making a decision.

A MOMENT BEFORE: 'WHYS' AND 'WHATS'

Before even producing a publication, there are a couple of questions you might consider. They might help you choose the format of your publication, shape its content and materials. It's worth remembering that even though the publication itself might seem like only a medium for getting your message across, it is also part of the message itself, and that can either play for or against you. It's like packaging: the outside layer helps you to get an idea of what's inside. The same works for publications, so think twice and think smart!

WHY DO YOU NEED THIS PUBLICATION?

Or, even before that: do we need this publication at all? There are cases when publications are made "just because we have to," without even thinking about how they are going to be used afterwards. So what is the purpose of making this printed thing? Is it to educate the public, appeal to donors, attract new members, promote events, or report to funders? Is the publication you are about to make the best way to reach this target? Think about it already when you are drafting your project proposal. Many organisations include printed publications as a means to disseminate the results of their project; but is it really the most effective tool?

WHAT IS YOUR MESSAGE?

So, what exactly do you want to say? Is it a short statement, is it a longer story, is it an announcement that something is happening somewhere? For some printed publications – e.g. postcards, posters, brochures – the more visible references to a particular event you include, the less chances there are that many people will want to use the publication more than once. For example, if you make a postcard stating "Anna's Awesome Conference, May 2012" on the front, it will be used for a shorter period of time and by less people than a postcard with an interesting picture on the front and information about the conference on the back.

WHO IS OUR TARGET AUDIENCE?

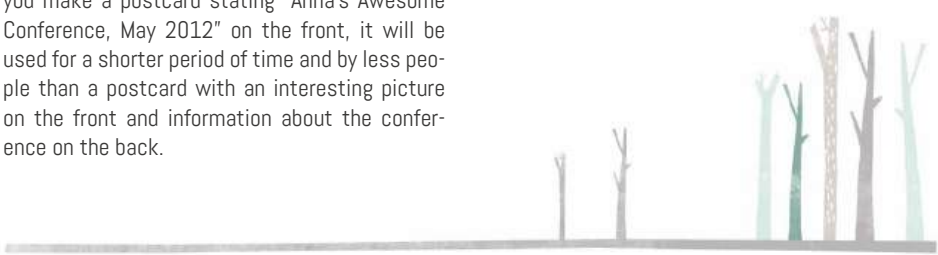
Who do you want to reach, and who is going to use it? The answer to this question will help you make a user-friendly publication that serves its purpose. For example, youngsters might like postcards and stickers, while middle age people might be fonder of classic brochures. Before making a publication, it's not a bad idea to do a small survey, asking your target audience what they might find most helpful, and then making exactly that.

Do they like grey-coloured brochures with the written history of an organisation? Do they keep leaflets about a particular event? How often do they read printed annual reports? Think about the format, colours, contents that are the most useful and pleasing to the eye, and you will get an idea about what is going to be suitable and helpful for others.

CAN WE DO THIS DIGITALLY INSTEAD OF PRINTING?

Many printed materials can be replaced by digital versions, but should they be? What serves your purpose and the needs of the target audience the best? If you decide on a digital version, how are you going to make sure people know about your publication and can easily find it online?

There are many advantages with both options, and each case is different. If the publication will be interesting only for a small group of people, maybe it's smarter to publish it online (for example, annual reports or results of a particular project). If you predict that the publication will have many users who will use it more than just once (for example, a handbook on project management or the *Green Toolbox*), it's worth con-

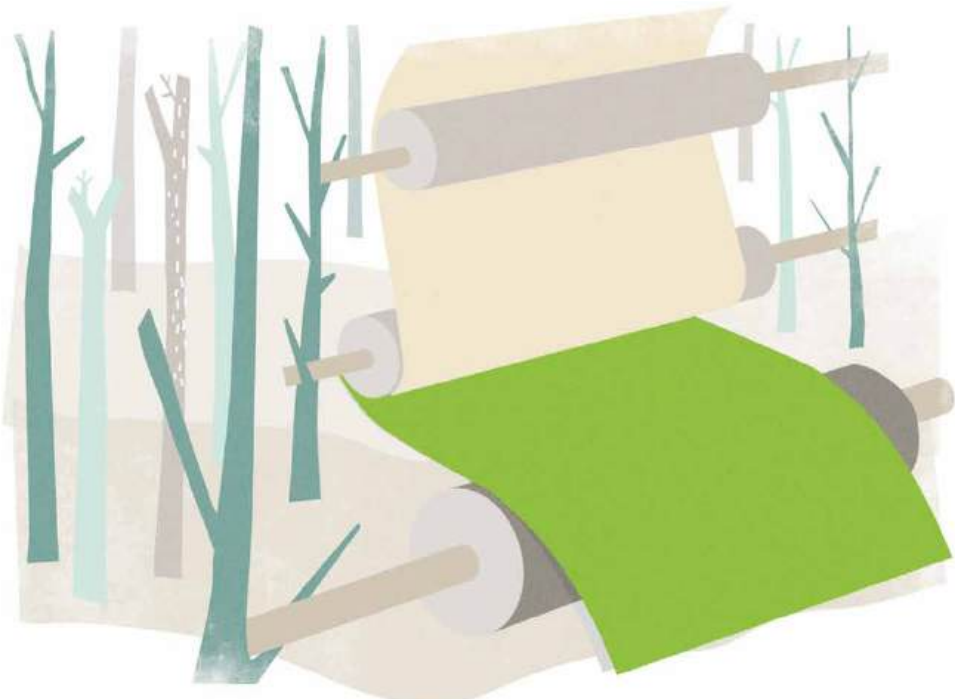


sidering printing it. In any case, it is not that difficult to make both versions, so everyone can find what suits them best.

Also, if you think about using CDs, DVDs, and USB flashes as means of distributing information, think about the amount and purpose of information vs. the resources invested in making those items and how many times they are going to be used. A USB flash can be a nice project souvenir and used many times, while a CD with a couple of pictures and documents most likely will be thrown out once the information is put on a computer. Better still, there are many services that allow for quick and easy sending of large amounts of data over the internet; using these, you don't need a physical carrier to share the information.

CAN WE MAKE THIS PUBLICATION ACCESSIBLE FOR THE VISUALLY AND HEARING IMPAIRED?

Is it possible to make a publication in a way that also reaches those with hearing and visual disabilities? Can you make an audio version of your book? Can you put subtitles on your movie? It might mean some extra costs, but will be more inclusive and will help you spread information among wider audiences.



LET'S PRINT THIS BABY!

When you know what you want to say, who will read it and how exactly you want to convey your message, this is the moment to think about the next steps. Here is a list of things that should be taken into account, in order to minimize the impact on the environment. If you follow these steps, you can truly make a good example of a sustainable publication.

LAYOUT AND DESIGN

In order to make a sustainable publication, you have to think about layout and design: how the information will be 'placed' on the paper, what colours and shapes will be used, how much space will be dedicated for pictures, etc. These facets will all determine the final result. Talk to your designer before making a publication and

tell him about your ideas for a sustainable publication. Ask him if he could do a little research on what it means to create a sustainable publication, and then go through the results together.

A couple of tips and tricks in order to make a sustainable design:

- **Think of how you use space.** Don't waste paper for nothing, so avoid large empty spaces or pages with just one or two words on them.
- **Choose a format and size that is the most appropriate;** think of how it will be used by target audience (is it easy to read and use, is the font big enough, etc.).
- **Limiting ink coverage and unnecessary areas of solid colour** can reduce the amount of ink used.

PAPER

The paper industry has an enormous impact on the environment; each year around 4 billion trees are cut down for paper (for more facts and figures on the paper industry checkout the "Paper" chapter of the *Green Toolbox*). If possible, try to avoid virgin pulp paper, look for internationally recognized certificates (FSC, SFI and others), and try to use locally-made paper. Recycled paper is a good option for many printed materials. You can choose from lots of different types, colours and structures of paper, and nowadays it is available and used by many printing companies. Choose paper with maximized Post-Consumer Waste (PCW) content.

WHAT IS FSC?

FSC stands for the "Forest Stewardship Council" and it works to improve forest management worldwide. Through certification it creates an incentive for forest owners and managers to follow the best social and environmental practices.

Look more on *www.fsc.org*

If the message is short, use ink stamps and used paper and cardboard. Make an interesting image, put it on a rubber stamp, get some used cardboard boxes, unneeded notepad covers, out-dated postcards and make as many items as you need! That's also a good way to personalize your books, training manuals, and conference materials. Instead of printing your message on a publication or making stickers, just mark it with your personalized stamp!

See the example of the *homo ecos* stamp!

You will not always get all these components together, but try to aim for the best possible option. That also means that you might have to talk to your printing company. Inform them about the benefits of sustainable printing and encourage them to switch to more sustainable materials and techniques. These days many printing companies should be familiar with the sustainable printing concept, and may have more than one option for you to choose from.

INK

You might be surprised by how many types of different inks there are out there! Try to use vegetable-based or soy inks instead of petroleum-based ones. These alternatives are both low in VOCs (volatile organic compounds) and competitively priced. When using *Pantone*

colours, an industry standard, avoid colours (mostly metallic and warm reds) that contain barium, copper, and zinc, which can cause health problems in humans. Not all soy inks are created equal, however. Ecoprint's Telschow advises using those with less than 2% VOCs.

You can also reduce the amount of inks you use by going with one or two-colour designs.

AMOUNTS

Usually printing more is cheaper per item, but do you really need that much? Calculating precise amounts can save your money, leave more trees in the forest, and the leftover items won't end up sitting in your storage room.

If it happens that you have printed too much, try to think of creative ways to reuse leftovers! For example, posters can be turned into flipcharts; postcard into note paper and so on. And, if it comes to the worst: make sure you recycle everything!

ADDITIONAL ISSUES

There are other things to think about in the publication making process! Here are some tips, and you are encouraged to do more research:

- **Avoid making lacquered and laminated publications.** It is very hard to recycle them since plastic cannot be separated from paper. Also, avoid using bindings, adhesives or foil stamps for the same reason.
- **Try waterless printing,** which eliminates the dampening systems used in conventional printing. Digital printing, which avoids the film and chemicals in traditional printing processes, is another good alternative.
- **Choose a green printing company,** if possible, and research their work and practices before starting a project.
- **Be creative with your publications.** There are many ideas out there on how to make a publication on your own, or how to use what you already have instead of printing brand new materials! Make a DIY book from scrap paper, posters from old boxes, and postcards from used postcards!

CHECK-LIST

Here is a wonderful checklist that *"Design can Change"* has already made to help you make sure that what you are about to make is going to be as sustainable as possible! We could not have done it better.

http://www.designcanchange.org

CASE STUDY

The book, "Cradle to Cradle: Remaking the Way We Make Things," is an interesting example of replacing paper with another material. In addition to describing the hopeful, nature-inspired design principles that are making industry both prosperous and sustainable, the book itself is a physical symbol of the changes to come. It is printed on synthetic 'paper,' made from plastic resins and inorganic fillers, designed to look and feel like top quality paper while also being waterproof and rugged. And the book can be easily recycled in localities with systems to collect polypropylene, like that in yogurt containers. This 'treeless' book points the way toward the day when synthetic books, like many other products, could be used, recycled, and used again without losing any material quality, in cradle to cradle cycles.

More on
http://www.mcdonough.com
http://www.ted.com

MERCHANDISE & GIFTS

ASSESS THE NEED

When producing gadgets and merchandise, it is a good idea to ask oneself questions regarding the needs and desires of the target group you are addressing with your products: will teenage girls really wear these bulky t-shirts? Or, are middle-aged women truly keen on baseball caps? There is not enough room in this publication to list all possible combinations of such questions, just as there may not be enough room in your closet to store all the promotional t-shirts you have received during different activities and you hardly ever wear. Try to think about these when ordering the next bulk order of promotional gadgets for your organisation. In this section there are some tips, which can help you choose the most useful and coolest gadgets to promote your organisation or project.

MAKE ATTRACTIVE, USEFUL, LASTING PRODUCTS

TALK TO YOUR TARGET GROUP

Ask them what gadgets they would like to use, get ideas on designs, colours, and messages from the future users.

MAKE IT ATTRACTIVE

If you produce t-shirts, bags, or cups, a good idea is to find a designer. It does not need to be a professional; there are many artistically talented people, probably also in your organisation, who will be happy to submit ideas for designs in exchange for seeing their ideas proudly displayed on your products.

LET YOUR GADGET SPEAK FOR ITSELF

Choose gadgets and merchandise that promote certain behaviours, which are in accordance with the values of your organisation. For example you can produce stainless steel water bottles, to encourage reducing plastic use, or a solar–powered phone charger to raise awareness and promote the use of renewable energy.

MAKE PRODUCTS THAT SATISFY, RATHER THAN GENERATE A NEED AND WILL OFTEN BE USED

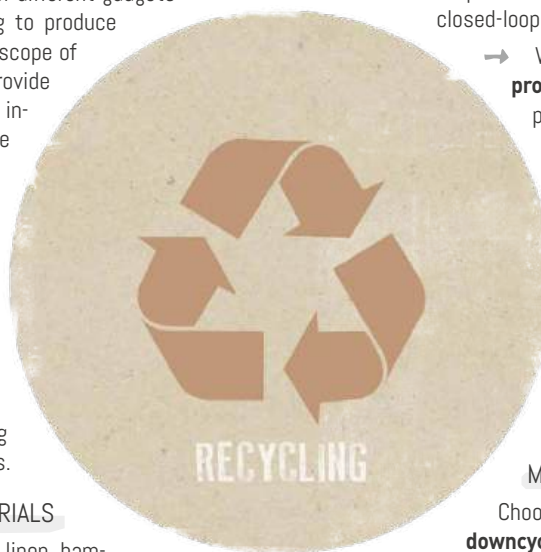
Issuing your own line of portable thermo-flasks or re-usable shopping bags probably makes more sense than producing yoyo toys. This way, you will also ensure that the logo of your organisation and your message are more visible and have greater reach.

MAKE PRODUCTS TO LAST

Avoid following temporary fashions and choose products that are not likely to be tossed after one or two seasons. Use durable, high-quality materials that will not fall apart quickly.

MATERIALS /ALUMINIUM, PLASTIC V. STEEL, ETC./, RECYCLED MATERIALS

When deciding on producing merchandise, one of the key decisions that will be in your hands is which materials shall be used. Of course, there is an endless amount of different gadgets you might be willing to produce and it is beyond the scope of this publication to provide you with exhaustive information about the production processes for all of them. However, below are some tips that are aimed to give you an idea of what kind of qualities and information you should look for when researching appropriate materials.



RENEWABLE MATERIALS

Wood, cotton, hemp, linen, bamboo, and soy are all renewable resources that can be quickly and naturally replenished, and unless they are heavily chemically treated, they are also biodegradable. However, not all renewable materials are equally sustainably produced so there are some other things to keep in mind when you choose what to produce from:

- **Cotton** is often farmed unsustainably, with disastrous effects on the environment and human rights abuses. The alternative is buying organic cotton and other natural textiles. For a detailed comparison of organic and non-organic cotton, please see the *"What difference can a t-shirt make?"* box below.
- **Bamboo** sounds like a great alternative to cotton: it can grow as much as 1 meter in one day, doesn't rely on chemical fertilizer, and requires much less water. It also purifies the air, generates oxygen, and prevents soil erosion. However, bamboo is often turned into fabric using toxic chemicals that lead to soil and water contamination. When purchasing bamboo fabric, ask your provider for textile produced mechanically or using closed-loop chemical processes.

- When ordering **wooden products,** look for companies accredited by the *Forest Stewardship Council* or the *Pan-European Forest Certification Council* to ensure that the wood is sourced from sustainably managed forests.

RECYCLABLE MATERIALS

Choose **recyclable** over **downcyclable** materials. Some materials like **steel** retain their structural integrity when they go through the recycling process, which means they are pretty much interchangeable with newly sourced products. For example, piles of office staples can be melted and used to produce a car, or old soda cans can be transformed into airplane parts. The original raw material can be reused forever.

On the other hand, although we are all continuously urged to recycle **plastic,** this material is subject to a process called **downcycling:** every time it goes through the 'recycling' process, it is converted into products of lesser quality and reduced functionality. For example, a computer keyboard can be re-made into a plastic cup, which can be re-melted into a substance for reinforcing floors, which will eventually become waste.

REUSED MATERIALS

It is recently quite fashionable to produce new items from old ones, without subjecting them to the recycling process. More and more companies and organisations produce such 'trashy' items and the examples are endless: messenger bags from old car tyres; wallets from cassette tapes; smartphone covers from cereal boxes; shopping bags from industrial tea-sacks... This is a great way to give new life to old materials and cut down the sourcing and production of new stuff from raw materials. Look out for gadget manufacturers that have such 'upcycled' items in their catalogues. With some creativity and a little work you could probably even produce your own gadgets, having extra fun while doing so. Try googling different upcycling ideas; you'll see that the possibilities of reusing old stuff are almost infinite!

MATERIALS SAFE FOR YOUR HEALTH

Apart from the environmental impact, another thing to consider is the effect of the chosen material on human health, so that you don't issue gadgets that could harm the potential recipients! You should be extra careful when producing gadgets that are used for food and drinks, such as thermos flasks or water bottles.

BISPHENOL A (BPA)

Bisphenol A (BPA) is an organic compound, found in plastic and metal packaging. When leaked into food and water and consumed by humans, it can cause developmental problems, cancers, cardiovascular disease, and many other health hazards. Both plastic and aluminium reusable water bottles may contain BPA and when tested, many of these products were found to be leaking BPA, causing a potential health hazard to consumers. Even if the products are advertised as BPA-free, they are quite likely to contain other leaking chemicals.

Stainless steel bottles and containers were found to be the safest for handling food. Plastic and aluminium are lighter and cheaper; however, surely you will agree it is worth it to invest a bit more and distribute products that are both sustainable and healthy.

WHERE DID IT COME FROM?

SWEATSHOPS

If you have already established which material you want to use, another thing you should find out about it is... who made it. Any factory with inhumane and dangerous working conditions is called a **sweatshop.** Laws regulating minimum wage and overtime, child labour, industrial homework, occupational safety and health and worker's compensation are violated each day in thousands of factories all over the world. Sweatshop workers receive minimal wages that leave them in a poverty trap, with no escape or hope for a better future. At the same time, it is estimated that doubling the pay of non-supervisory workers in a clothing factory in Mexico would make the $100 jacket produced there just $1.80 more expensive; surely it is a fair price to pay for respecting the basic rights of thousands of workers.

What can you do to respond to the problem of unfair working conditions worldwide?

Ask questions to the manufacturer of your products. *Green America* (a non-profit consumer organisation), has compiled a list of some questions that they should be able to answer if they are concerned with fair working conditions:

- Does your store know how the workers who made this product were treated?
- Do you have a list of all the factories around the world that make your products? Does it include the wages and working conditions in each factory? Can you provide me with a copy of it?
- Does your store guarantee that the workers who made this product were paid a living wage, enough to support their families?
- Does your store have a code of conduct that protects human rights and forbids child labour and unsafe conditions in all the factories that make the products you sell? How do they enforce these rules? Are your factories monitored by independent, third party sources? (Source: Green America)

- Check out the labels. Avoid buying products coming from countries with a poor human rights record.
- Look for companies that clearly present the origin of their products and assure fair wages and working conditions. Most companies with fair labour treatment policies will happily brag about their ethical practices.
- Buy local products where it is easier to track origins and working conditions.
- Look for products with the *Fairtrade* label (you can find out more about fair trade certification in the "Food" section of this manual)

TRANSPORT AND PACKAGING

Another factor worth checking out is how far away the goods are produced and what is their transportation history.

- When it comes to cutting down on energy used for transporting goods it is always best to use local products.
- If you are purchasing something produced far away from your home country, look for companies that don't air-freight their products on long distances but use ships instead.
- Ask the company you are working with to minimize the packaging of the products you ordered.
- Reuse the boxes that the products are shipped and transported in.

WHAT DIFFERENCE CAN A T-SHIRT MAKE?

"REGULAR" T-SHIRT

- **Conventional cotton farming leads to the contamination of water and the environment.**

- The process of producing cotton is very water intensive: it takes as much as 11,000 litres of water to produce 1kg of cotton. Many cotton plantations **are located in water scarce areas,** depriving the local population of this basic resource. One of the most dramatic examples is the area around the Aral Sea in Central Asia, which, as a result of extensive cotton farming, has dried down to 15% of its original size. This has led to the **destruction of ecosystems, the degradation and salinization of soil,** and the collapse of traditional employment in fishing.

  - Only 2.5% of the world's farmed land is used to produce cotton, but more than a quarter of the world's pesticides are poured onto these crops making them the most polluting in the planet.

- Many dyeing plants in India and China don't have water waste cleaning facilities and the contaminated water goes straight to the local population's source of potable water.

- 400 million cotton farmers in the developing world live in conditions of abject **poverty** due to the high costs and detrimental **health impacts** of the pesticides used to grow cotton; up to **100,000 people die every year** of accidental pesticide poisoning; up to 1 million people a year suffer from acute long-term poisoning and 200,000 farmers commit suicide each year as a result of their desperate living conditions.

- Textile production is often linked with the dramatic abuse of **human rights.** Labourers receive wages well below the living wage and in many areas unpaid **child labour** is commonplace.

CASE STUDY

EarthPositive is a company that strives to produce 'climate neutral apparel.' They produce various textiles that can then be turned into promotional materials. See how their production process is different than the production of 'regular' cotton.

EARTHPOSITIVE T-SHIRT

- Made from **100% organic cotton,** grown with traditional methods in India on a certified and controlled eco-farm.
- It is grown in an area that has 95% of its **water supplied by monsoon rains.** This reduces the need for large-scale irrigation projects normally associated with conventional cotton farming, which deprive local villages of scarce water resources by draining lakes and rivers.
- The eco-farm where this cotton is grown **fights pests in a natural way** rather than using toxic pesticides.
- The cotton is processed into textile and then clothes **locally** rather than being transported all over the world for different stages of production.
- The production plant primarily uses **wind power;** the dyeing process is mostly powered by **solar energy;** the warehouses in London, from where the t-shirts are dispatched are carbon neutral and **fully powered by renewable energy.**
- Ready t-shirts are **not flown** to Europe and North America when they are finally sold, but they are shipped by sea.
- The **human rights** of growers and manufacturers are ensured and looked after by a variety of external certifying organisations. **Children are not employed** in the process of producing *EarthPositive* t-shirts.

DISSEMINATION

Once your publication or merchandise item is done, you will have to think about how to get them out there (hopefully they weren't made just to be stored in the attic). So how can you make sure you disseminate your production as sustainably as possible?

2 QUESTIONS TO ANSWER:

#1 TO WHOM ARE WE GOING TO GIVE OUR PUBLICATIONS AND MERCHANDISE?

You might want to give your publications and merchandise to your target audience, partners, staff and volunteers, supporters or members. Do they need these things? Will they use them? Will they make the most out of them? Even if you have done everything you could to make the publication or merchandise as relevant as possible, there still might be some people who will just not be interested in having it. And that's ok! Try to find out how many items the person will need. For example, it's not worth giving 100 postcards to someone who will not be able to distribute all of them. Also, think before you give away large amounts of small gadgets for free. People might take it just because it's free! Remind your target audiences to take only as many items as they will be able to use, not more.

#2 HOW ARE WE GOING TO GET THE THINGS TO THE PLACE WHERE THEY NEED TO BE?

Once it is clear to whom you have to give your items, and how much, the next thing you need to find out is: how do you deliver to them? What means of transport are you going to use? Is it worth driving that distance just to deliver a box of printed materials? Maybe you can put it on a bus that already goes there, or wait until you have to go to that place for another reason?

THINGS TO KEEP IN MIND:

1. If you have made something,
MAKE SURE IT REACHES THE TARGET AUDIENCE!
Too often printed materials and merchandise items end up in the storage room just because once they are done, there are other more important things coming up. Consequently, they are forgotten.

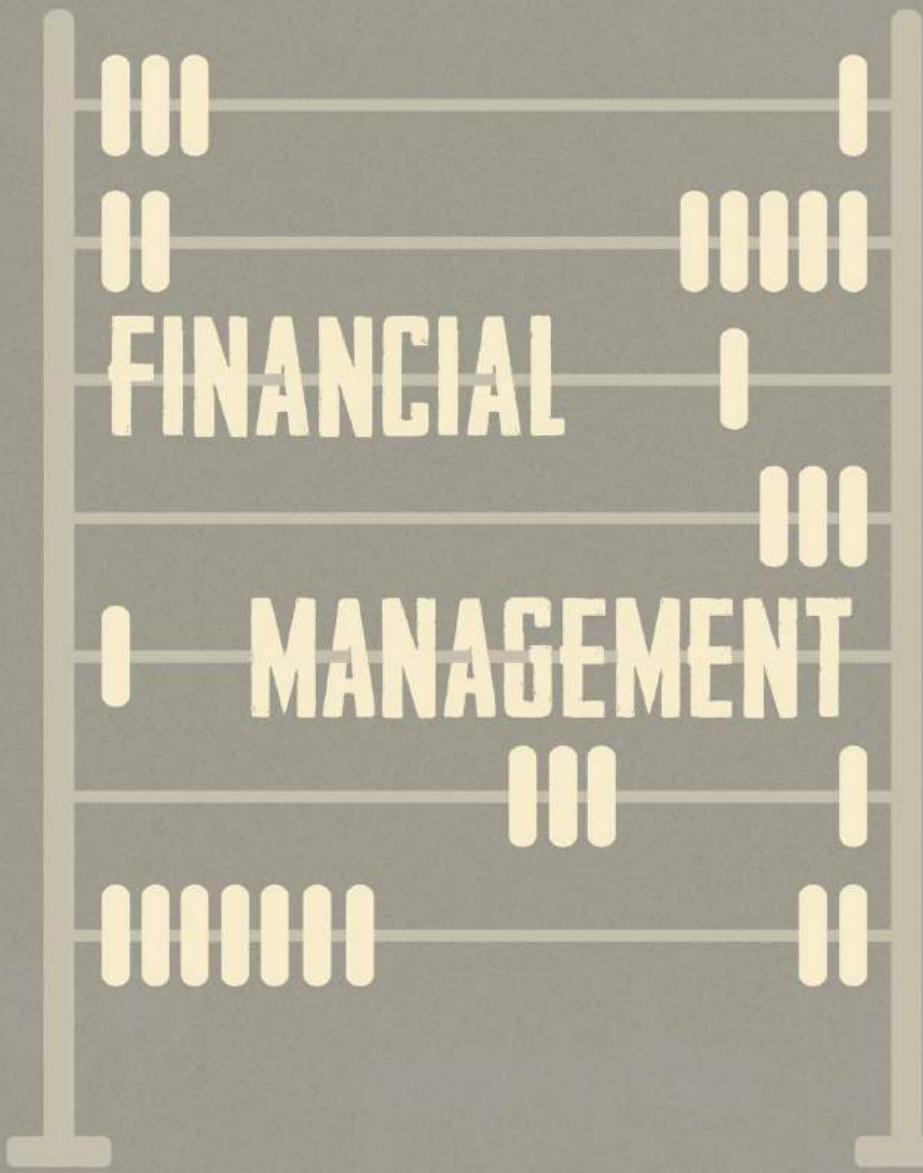
2. **AVOID USING AIR TRANSPORT** for delivery.

3. **AVOID DELIVERING ONE PIECE AT A TIME.**
Make the dissemination process as effective as possible, combining trips or cooperating with someone who already goes to the place you need.

4. **MAKE YOUR PUBLICATIONS AND MERCHANDISE ITEMS ACCESSIBLE,** but don't give them away just because you want to get rid of them! Before giving your publications and merchandise items away, make sure the person needs them and will use them.

5. **MAKE YOUR PUBLICATION AVAILABLE ONLINE,** give the printed version to libraries, schools, and other public spaces where people can get familiar with it on the spot, without having to take their own copy.

FINANCIAL MANAGEMENT



While money is a key resource for your organisation, it is vital consider where is it coming from. By accepting a donation you also show acknowledgement and approval of the donor's business. Being associated with problematic donors can be avoided by adopting ethical policies clearly stating whose funds are unacceptable.

- The usual culprits most NGOs would want to avoid are donors involved in environmental degradation, child labour, animal cruelty, etc.
- Many organisations, depending on their goals and objectives, might want to avoid accepting funds from certain industries, such as those involved in: oil-processing, gambling, or the production of energy, pharmaceuticals, tobacco, alcohol, etc.
- Even carefully chosen donors can become unacceptable over time, mostly as a result of ownership changes, or expansion into new environmentally unfriendly or socially unjust spheres of activity.
- Remember that ethics in funding goes both ways; your donor will also be interested in what you do, how you use the funding and your ethical policies.

ETHICAL BANKING

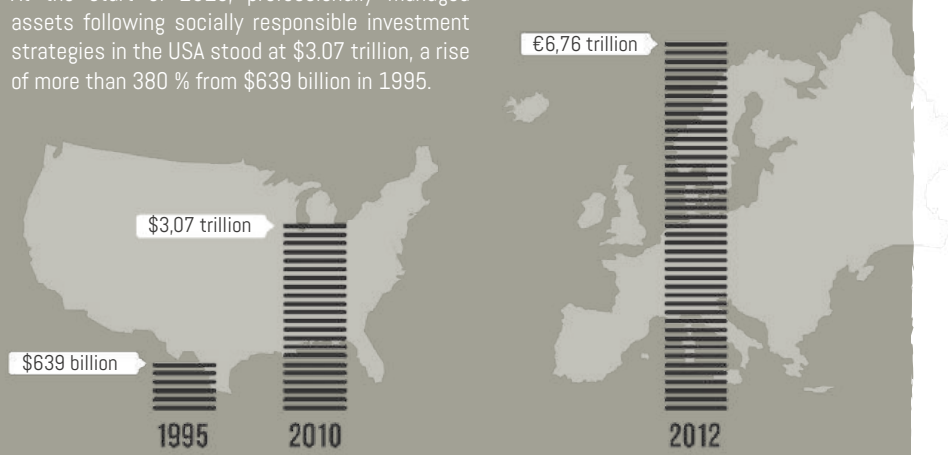
Have you ever thought of what happens with the money you deposit in a bank? Well, it gets invested by bankers, and is thus supporting other actors in the economy. Ethical banking means considering these investments from a 'good vs. evil' point of view, not only in terms of their profitability. While you can't directly influence a bank's investment portfolio, you can include ethical aspects in choosing your bank.

- The pioneers of ethical banking are associated in organisations such as *The Global Alliance for Banking on Values,* which can help you with your choice.
- It is possible that banks without an official ethics stamp have some corporate social responsibility projects, environmentally and ethically responsible investments, involvement in fair trade, etc. If they do, they are most certainly mentioning it on their website. Just have a look and check, or ask your local branch manager.
- If you are an international organisation, you might be able to open a bank account even outside of your country of registration if no suitable bank operates there.
- Transparency is a must for any ethical bank. If it is difficult to obtain information about ethics in your current bank's operations, that means that the bank probably has nothing to be proud of. Show them your opinion by leaving. If enough people do, banks involved in unethical practices will go out of business.

SOCIALLY RESPONSIBLE INVESTMENTS

At the start of 2010, professionally managed assets following socially responsible investment strategies in the USA stood at $3.07 trillion, a rise of more than 380 % from $639 billion in 1995.

The socially responsible investments in Europe in 2012 amounted to €6.76 trillion in total.



NO-MONEY ECONOMY

Being short on money, you can try one of the following alternatives to buying things you need:

NOT BUYING AT ALL:

Before you buy, ask yourself again if your purchase is really needed. Think about using your creativity instead of your money to fulfil your needs. You can buy less, reuse, find a free alternative product, or change your working method to eliminate the need for a new product.

BARTER:

Chances are your office is full of things you don't need and use anymore, yet they are still perfectly functional. Just look around, make a list, attach photos and offer it to your partner organisation or neighbouring offices. Ask them to make a similar list and see if you can find things to exchange. Furthermore, you can try one of the many online services facilitating barter trade.

BARTERING SERVICES:

Similar to goods, you can exchange services and employee time with other organisations. Do you have a colleague who is a great photographer, foreign language speaker or facilitator? List their skills and try to trade their time for IT support, or teambuilding training. Moreover, you can also join an online time bank to trade this way with more partners.

BORROWING, SHARING, AND HIRING:

Many of the items you rely on to do your work might not be needed constantly on a daily basis. A beamer, professional photo camera, a car, etc., may only be needed for certain occasions, making it more economical to rent them when needed, or buy them jointly with another organisation and agree on a sharing scheme.

COMPLEMENTARY CURRENCIES:

This is not strictly an exchange without money, but complementary currencies are being introduced in many areas to promote local trading and business relationships, cut carbon, encourage community development, and support the use of underused resources. You can look for your local complementary currency in this database:

http://www.complementarycurrency.org

ALTERNATIVE FUNDING

CROWDFUNDING

This is a way of raising small amounts of money from a large number of people, usually via the internet. While mostly known as a source for start-up companies, there are crowdfunding platforms exclusively aimed at non-profit organisations and individual charity projects. The biggest advantages are the simplicity of posting to attract funds and donating to projects online, as well as the large network of people reached.

CHALLENGE FUNDRAISING

An interesting twist to crowdfunding, which adds a challenge or programme for you or your friends in addition to the project for which you are raising funds. This not only increases the visibility of your projects, but makes it more fun! For example, you can grow a moustache, live on 1 EUR per day, or announce you will run a marathon and add blog posts about how you are doing. You can also ask friends to make donations instead of giving you birthday presents.

You can start by taking a look at the following platforms and drawing inspiration from existing successful challenges. A quick tip: you don't necessarily need to be working on the project you raise money for; your challenge can support any cause you like and consider worthwhile. This makes challenge fundraising a great way of giving, even if you may be tight on money yourself.

SOCIAL ENTREPRENEURSHIP

Even if you are a non-profit charity organisation, this does not prevent you from actually doing business and making profits, which are subsequently used for your organisation's cause, rather than distributed amongst the shareholders. For example, you can manufacture and sell goods, import and resell locally unavailable products, or provide services. Besides the earnings, your enterprise can help support your organisation's goals, such as by displaying logos and slogans, providing information, or serving a charitable purpose by themselves (clothes, products made of recycled materials, products made by disadvantaged people, educational materials, etc.).

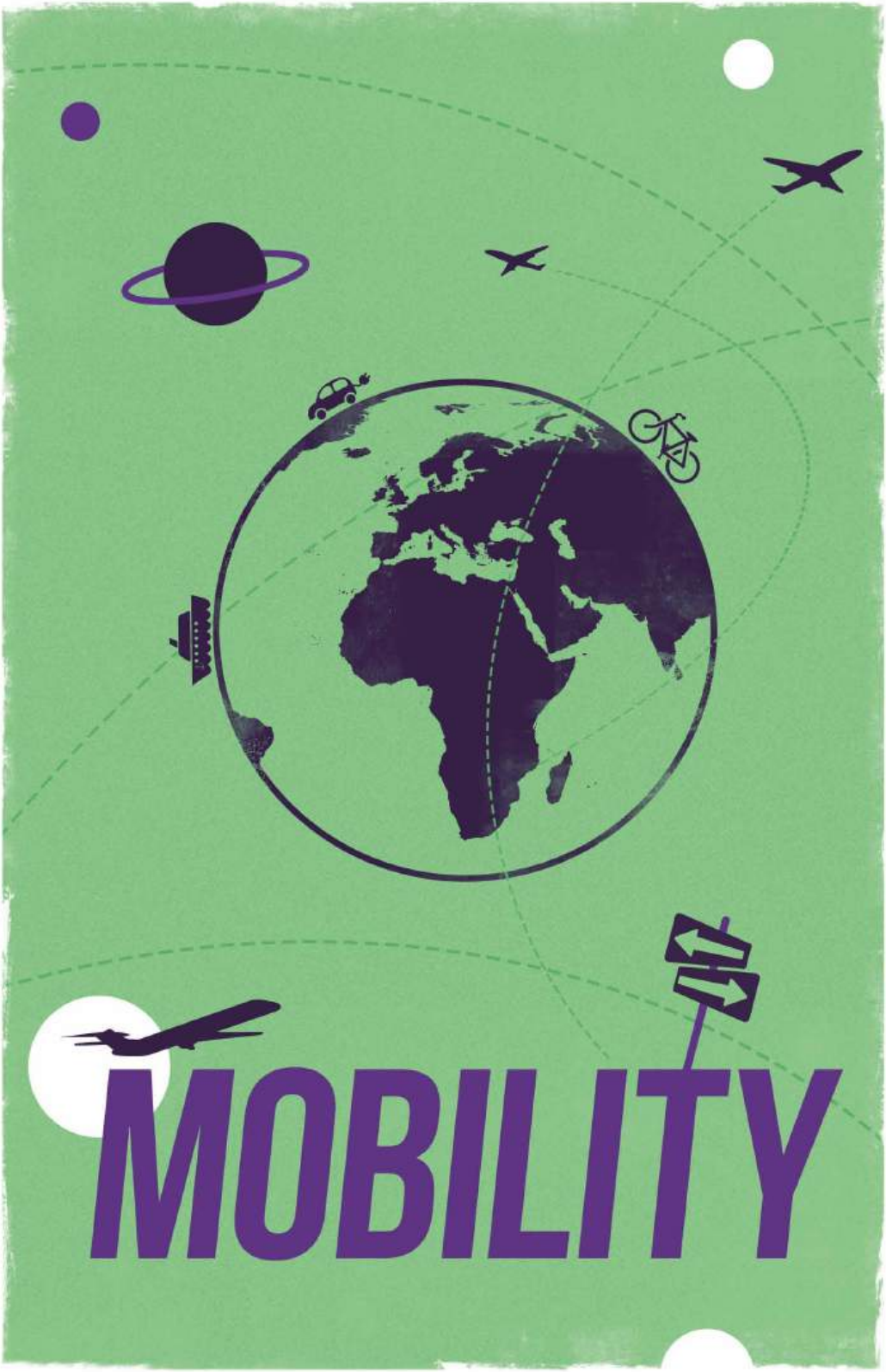
FAIR PAYMENT POLICIES IN YOUR ORGANIZATION

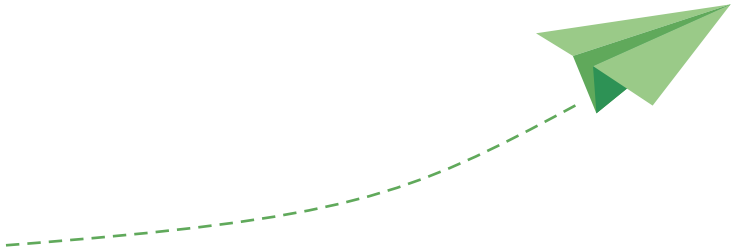
Make sure that the activities of your organization are accessible to all, no matter what their financial background is. To guarantee this, you can introduce a sliding scale participation fee (fees calculated based on the income of participant) and a solidarity fund to help finance the participation and travel expenses of those who can't afford them.

Check out some of the websites that connect volunteers with NGOs for challenge fundraising:

www.justgiving.com
www.buzzbnk.org
www.globalgiving.org
www.thebiggive.org.uk

JustGiving
buzzbnk
globalgiving
theBigGive


MOBILITY



Mobility is the hallmark of the 21st century. At this very moment there are around 12,000 civil aircraft vehicles in the sky. We travel both for work and leisure purposes. From an environmental perspective, mobility entails an increased impact on nature. It contributes to greenhouse gas emissions, and noise and light pollution. Moreover, travelling often involves increased production of waste, such as when we grab pre-packaged sandwiches or bottled water from food stalls on the way. These influences can be greatly reduced by wise decisions and a little effort.

TRAVEL POLICIES

Your organisation may have some kind of travel policy. It might say that you are allowed to take second-class trains only or you should confirm the prices of your tickets with a finance department. How about the green issues there? Those could be easily introduced for the benefit of the environment and the image of your organisation. Once introduced, you need to make sure that those regulations are easily available and observed. There are several important issues to think about while drafting regulations on green travel:

- Encourage using public transport whenever possible.
- Ensure that you avoid flying as much as possible. Planes, even though fast and comfortable, are the largest polluters: aviation contributes to approximately 3% of CO_2 emissions globally. 45% of air travel in Europe is of a distance of 500km or less. Make it explicit, that within a certain distance (let's say below 1,000 km) you do not accept taking a plane if there are alternative ways of travelling.
- Make the people who are the most eco-friendly travellers proud of their effort. At the event you can acknowledge the efforts of those who were travelling the longest way and produced the least CO_2. Maybe someone was even hitchhiking or cycling to your event?
- If somebody chooses to arrive by car, rather than public transport, encourage car-pooling and try to persuade larger groups of participants to travel together with an energy-efficient car. Make sure they know about each other early enough, so they can organise themselves.
- Somebody needs to cross the whole of Europe to attend an event? An *InterRail* ticket can be helpful. Even if the distance is larger than the threshold to be eligible for a flight, encourage people to take the train. An extra night on the way or food allowance will be tempting!
- If all the ground possibilities are out of question and a flight is a must, offset the emissions (see below).

BE EXPLICIT IN YOUR TRAVEL POLICIES

International Young Naturefriends has a fairly specific policy concerning mobility. In general you are not allowed to fly to an event unless it would be unsafe to use any other means of transportation, the time of travel would be inadequate to the time of activity duration or the ground transportation is markedly more expensive. If ground transportation is deemed impractical and the participants have to fly, one more condition needs to be fulfilled: the participant must contribute to 50% of the carbon offset (the organization contributes to offsetting the remaining 50%). See more info below.

Finally, it needs to be underlined that some of the meetings do not have to take place in person. Consider taking advantage of online meetings that produce barely any emissions. Apart from that, if you have annual meetings of members, funders, or staff, try to make the schedule as large as possible. In addition, divide participants into subgroups so that during one gathering you are able to deal with more issues.

COMMUTING

Another set of issues is related to commuting to work, which is an important source of negative environmental impacts. Here the situation is a bit different than in the case of travelling to events and meetings. Usually nobody would go to work by plane. This however does not mean that their annual greenhouse gas emissions per year are lower than the emissions for those who fly a couple of times a year. Commuting would normally mean that the trip (even if short) is repeated every weekday over the whole year. Therefore it is important to minimize your impact as much as possible.

COMING TO TRAINING COURSE BY BIKE

In the IYNF guide on how to arrange travel to an event that took place in Glucksburg, Germany you can read:

"Whoever reaches the venue by bike will have lifetime satisfaction, meaningful contribution to saving the planet and will get a special hand-drawn diploma by the Networking Coordinator."

It is hard to guess which incentive was the strongest, but indeed there was one participant who rode a bike for 300 kilometres and arrived to the venue safely and satisfied.

QUICK FACTS ON COMMUTING

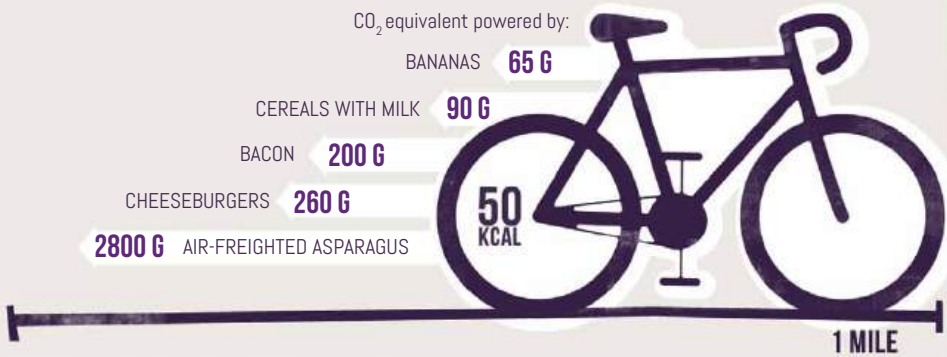
Americans spend more than **100 HOURS** commuting to work **EACH YEAR,** according to the US *Census Bureau*

In the UK, commuters waste **4.6 MILLION HOURS A DAY** commuting

In 2000, 15% of the workers who travel **45 MINUTES OR MORE** accounted for 41% of the aggregate time spent commuting

CYCLING A MILE...

You might have not thought about this, but actually it is important to observe the source of the calories you need to burn to pedal. While cycling, we are nothing else than engines and if your energy is coming from a CO_2 heavy diet you might 'emit' as much gasses as two people driving a car. The list below shows how much CO_2 has been used to produce an equivalent of 50 calories: this is approximately how much we burn to cycle a mile.

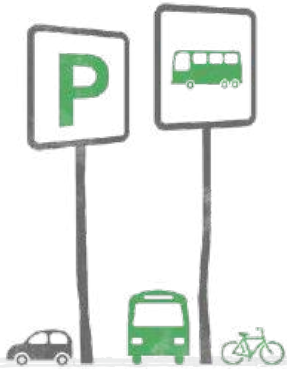


The most 'green' way of getting from one place to another is walking or biking, of course. Practically any distance below 2 kilometres is walkable as long as there is a safe way to get to the place you need to reach. Health experts recommend walking 10,000 steps a day.

If you do not have a bike and do not want to buy one, a good idea is to use shared city bikes that are becoming increasingly popular. Usually you do not pay for using them for the first 20-30 minutes. This should be enough if your workplace is not more than 5 kilometres from your home. Apart from obvious environmental benefits, remember that walking or biking helps you save money on your gym fees. After all, it is nothing other than physical training and a real world workout!

If you live further away from your workplace or circumstances do not permit you to walk or bike, then the second best choice is public transportation. It sometimes might be even faster than taking your own car and definitely cheaper. To make your public mobility experience seamless, make sure that you are armed with public transportation schedules, perhaps a smart-phone application, and be aware of the closest bus/train/metro stops in the area of your workplace. A bus can carry the occupants of as many as 50 cars. If you think that you are still not ready for a full immersion into public transportation, try to drive to the closest park-and-ride facility where you can leave your car and access the public transportation system.

Can you imagine a commute that does not cost a carbon unit? This is the case when you telecommute, which basically means that you work from home. For some people it might be dreadful to think that you stay at home at your computer for the whole day, but sometimes it provides you with an opportunity to take a break from the office routine. You might want to talk to your boss about working from home. However, do not try it if you are a babysitter or a waiter. This will not work for sure!



PARK-AND-RIDE FACILITIES

A good practice is shown by several European cities where Park-and-Ride facilities are provided. These incentive parking lots encourage those who commute by cars to use public transportation once they are approaching the city. Usually the parking lots are linked with the furthest metro station or with a larger public transportation interchange. The facilities are often used as well by car-pooling users. A modification of park-and-ride is bike-and-ride, which is very popular in the Netherlands, for example.

Working from home (part of the time) has plenty of benefits like saving fuel, reducing carbon emissions and air pollution. In addition, it potentially leads to a decrease in the amount of space needed, thereby additionally reducing the amount of space to heat and cool.

For instance, some parents have to spend more time commuting to and from work than they get to spend with their children. Even if you don't have children, you definitely know some better ways to spend your time than going to work. You might think that working from home sounds good, but wouldn't your employer object? Not quite right. For instance, *Sun Mycrosystems* has recognized the benefit of working from home for the company: 55% of their employees spend at least part of their time working from home, resulting in an estimated 29,000 ton reduction in carbon emissions.
(Source: Environmental Defense Fund ad in BusinessWeek)

Some companies and organizations like the *Clean Air Campaign* offer special telecommuting programs and teleworking resources, including questionnaires for employers and employees to determine their potential for teleworking. Telepresence, the high-definition videoconferencing systems developed by companies like *Hewlett-Packard* and *Cisco Systems,* enable **virtual face-to-face meetings** with natural audio and no delays. *Cisco* estimates that the use of *Cisco Telepresence* has saved nearly $80 million in travel costs, with a corresponding increase in productivity, faster decision making and improved quality of life for employees.
(Source: Environmental Defense Fund ad in BusinessWeek)

Do you have days when you really do not feel like waking up early in the morning to be at work at 7 or 8? This is a good excuse to try to persuade people to stay in bed a bit longer and contribute to mitigating emissions from transportation by starting work later! Yes, this easy-to-make shift cuts emissions as you do not have to travel in peak hours. Sometimes it makes the public transportation cheaper (in London for example) and for sure entails less time in traffic jams.

FUNDING FOR GREENING

In the UK, the government is taking a step torward green commuting. Incentives are being made to help reduce high congestion and ambitious emission reduction targets. A good example is offered by *Sustainable Routes*. For the companies that employ more than 250 people, a grant up to £ 1,000 can be obtained for cutting commuting emissions. This might be reached by either offering flexible working hours, encouraging remote working, LPG conversion or creating bicycle facilities (storage, showers for bikers).

See more:
http://www.sustainableroutes.co.uk

WHAT ARE CARBON OFFSETS?

Emissions produced by your flight are calculated based on distance and sometimes also by the type of the aircraft. The given emissions are shown in kilograms and later the amount of money is calculated to neutralise the gasses released. The money collected by offset providers is earmarked for promoting renewable energies, enhancing energy efficiency, avoiding deforestation, supporting reforestation, and other causes.

Working on projects might mean that often you work extra, after your standard office hours.

How about switching to the four-day week and staying at work longer but having a three-day weekend instead? This would mean that one day you do not commute at all so your impact is cut by 20% just by changing your schedule a bit. It is worth trying as you might be one of those people who can successfully work for ten hours and still be as effective as during an eight-hour work day.

Under some circumstances switching to walking, biking or using public transportation can be difficult. Telecommuting is not for everybody either, but if you have to use a car, there is still some good news for you: you can lower your mobility carbon footprint and what is more, save considerable amount of money by following some simple tips:

- Maintain a constant driving speed; this means less petrol is used.
- Remember to have your car checked regularly.
- Make sure that the pressure in tires is correct. If not, this might cost you up to 3-5% of the petrol used.
- How often do you have a look into your trunk? There might be some things that you do not need. Assuming that your car weights around 1,500kg any additional 100kg costs you on average additional 0.5 litres of petrol per 100km.

CASE STUDY

OBLIGATORY OFFSETS

IYNF and *Naturefriends International* have a compulsory offsetting policy. After having given a close look into many providers, IYNF chose *Atmosfair* because the projects that are supported with the generated funds take into consideration the whole sustainability matrix. The company uses the climate contributions on renewable energy and energy-saving projects in developing countries that address local needs and provide local employment. *Atmosfair* supports investors who are willing to change their conventional fossil fuel energy projects into solar or wind projects that create the same amount of energy but are free of CO_2 emissions. Offsetting also has a high educational value, as airplane passengers have to go to the website, calculate and see the environmental and monetary price of their flight.

atmosfair

You can see more on:
www.atmosfair.de

- You can spare fuel if you turn off air conditioning. Maybe it is not yet that hot and just opening the window would help?

FOOD

VEGETARIAN

You go out for lunch, you bring snacks to share with colleagues in your office, you organize catering for your events. Looking at the way much of the food is produced nowadays, it is essential to choose what you eat wisely. The information below will help you make more balanced choices that take into account your well-being and personal preferences as well as environmental and social sustainability.

You can easily earn "sustainability points" by avoiding purchasing animal products:

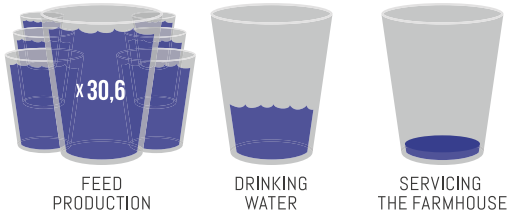
YOU SAVE RESOURCES

By not ordering meat for your activities, you save resources needed for farming food such as land, water and energy. Animals are fed large amounts of food that is turned into comparatively little meat and dairy: a cow that will end up being turned into 200 kg of steak will eat 7200 kg of roughage and 1300 kg of grains (that could be perfectly well consumed by humans) in her lifetime. Much of the calories consumed by this cow will be wasted in the form of heat before ending up on your plate. Our planet is simply not designed to sustain an ever growing population of 7 billion eager to consume meat every day.

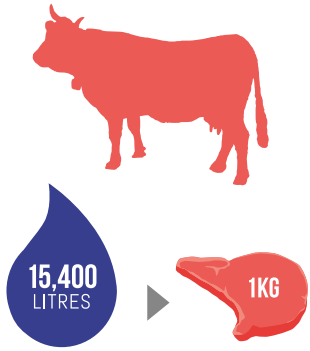
YOU REDUCE THE CARBON FOOTPRINT OF YOUR ACTIVITY AND PREVENT DEGRADATION OF THE ENVIRONMENT

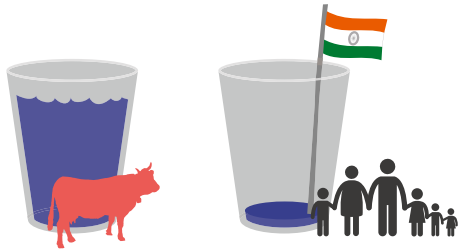
If you consider the entire commodity chain, a UN report from 2006 has revealed, that *livestock are one of the most significant contributors to today's most serious environmental problems,* being responsible for 18% of world's greenhouse gas emissions, a bigger share than all transport combined. Lamb and beef production is especially intensive in greenhouse gases emission as these animals constantly generate methane through their digestive process. Methane (CH_4) is a greenhouse gas 25 times more potent than carbon dioxide (CO_2).

Moreover, the manure from factory farms pollutes rivers, lakes and ultimately your own drinking water. If that wasn't enough, intensive breeding as it occurs in much of the developed world, leads to deforestation, land degradation and contamination of the natural resources.

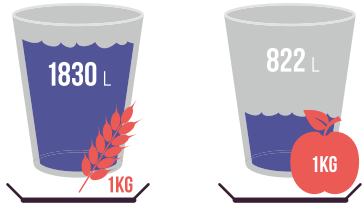


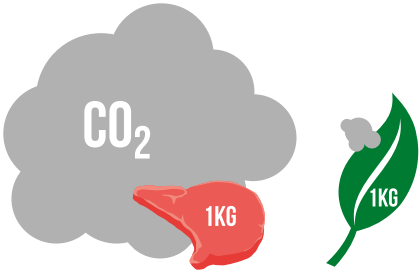
The production of a lifetime worth of cow's feed requires using **3,060,000** litres of water. Additionally, the cow will drink **24,000** litres of water in her lifetime and further **7,000** will be used for servicing the farmhouse and slaughtering processes.





The water used in **ONE DAY** by a livestock animal is **TEN TIMES MORE** than what and Indian family would use – if they had enough water available.





Producing 1 kg of beef emits **13 TIMES AS MUCH CO_2** as producing 1 kg of plant protein (beans, lentils, soya).

A study by the Chicago University has shown that while gaining the same number of calories, a mixed diet (with the average American caloric content) produces the equivalent of **1485 KG OF CO_2 MORE** in **EMISSIONS PER YEAR** than a diet based on food from **PLANT SOURCES.** In CO_2 footprint terms, this is equivalent to taking **TWO RETURN FLIGHTS** between London and Madrid.

Another study concluded that if **EVERYONE IN THE UK** went **VEGETARIAN OR VEGAN** it would have the same environmental benefit as taking half of all cars in Britain off the road – that's more than **15 MILLION CARS!**

YOU MAKE A STAND AGAINST CRUELTY AND INHUMANE WORKING CONDITIONS

To increase efficiency, modern factory farms put animals in abusive conditions, providing them too little space, depriving them of movement and exercise, and the ability to form relationships as they are meant to. In many cases the animals live without daylight. The cruel conditions often lead to developments of serious diseases and the animals are fed antibiotics to fight the unhygienic conditions and enormous amount of bacteria in the farm. They are fed with growth hormones, to gain more kilograms of meat from each animal. The working conditions of factory farms employees are also far from humane: the workers are exposed to toxic chemicals, health-affecting noise and dust, and are often mutilated due to unobserved health and safety procedures.

By choosing vegetarian food for your organisation's activity, you take an active stand against such practices, voting against them in a very efficient way: with your money.

YOU CARE FOR HEALTH OF YOUR COLLEAGUES AND GUESTS

If the arguments above are not convincing enough, think of your own health. Much of the meat available in supermarkets these days contains antibiotics, added hormones, food additives, flavour enhancers, chemicals prolonging the shelf-life and salt-water solutions. These form a pile of chemicals you voluntarily introduce to your body every time you order a steak or an omelette. It is confirmed by many reliable institutes and research studies that a well-planned vegetarian or vegan diet is suitable for people of all ages and levels of activity, including athletes.

DRINK GREEN

There is a high chance that large amounts of tea and coffee are consumed both in your office and during your activities. If you normally drink the coffee or tea with milk, then you should know that milk accounts for two-thirds of the carbon footprint of your beverage. It means that if you took your coffee black it would only have 30 % of the environmental impact of the milky beverage. More strikingly, a large latte from a chain coffee house requires 16 times more CO_2 to be emitted than a cup of black coffee.

A quick and almost effortless way to reduce the environmental impact of your drinks is to provide organic soya or other plant-based milk or creamer for your office and activities, instead of regular milk.

VEGETARIAN BY DEFAULT

We still live in a world where meat dishes are served more commonly than meatless ones, and being vegetarian is treated as a "special need" or "preference." What are the best ways to promote a more sustainable diet in your activities?

- when you prepare an activity, ask your participants: *"Do you require meat?"* rather than *"Do you require vegetarian catering?"*
- introduce a policy in your organisation to make all your activities vegetarian by default.
- when choosing a venue or catering company, make sure that they know how to prepare nutritious and tasty vegetarian meals. If the participants are served pasta with potatoes and ketchup, they will hardly be encouraged to explore the benefits of a vegetarian diet.
- explain to the participants of the activity the reasons behind your decision not to serve meat. You can do this in the info sheet you send out before a seminar or as a small session during your activity.

LOCAL AND SEASONAL: SUPPORT THE SHORT SUPPLY CHAIN!

Chances are that you live in a country with a moderate climate and below zero temperatures in the winter. Yet, if you visit your local supermarket in the middle of January, the shelves will be filled with colourful summer fruit. It seems great to be provided with such a wide choice, all year round, however, here are some good reasons to buy more local and seasonal food:

- **To cut down the amount of transport** (which contributes to greenhouse gas emissions) required to bring food, cross-border, to our plates.
- **To enjoy freshness and flavour:** much of the "long-distance" fruit and vegetables are mass-produced, which often results in the loss of taste and nutritional quality. Many are harvested before they are ripe and stored for long periods, often with added chemicals, to artificially prolong their life.
- **To reward local farmers with fair prices** for locally grown, seasonal produce, rather than paying for the costs of transporting, refrigerating and packaging associated with long-distance food. The long-distance food can often be cheaper due to the existing subsidies framework.
- **To support food culture:** in the increasingly globalised world we often forget about the wonderful diversity of local cuisines, integral to our culture and landscape.

WHAT CAN YOU DO, TO ENSURE MORE LOCAL FOOD FOR YOUR ACTIVITIES AND OFFICE?

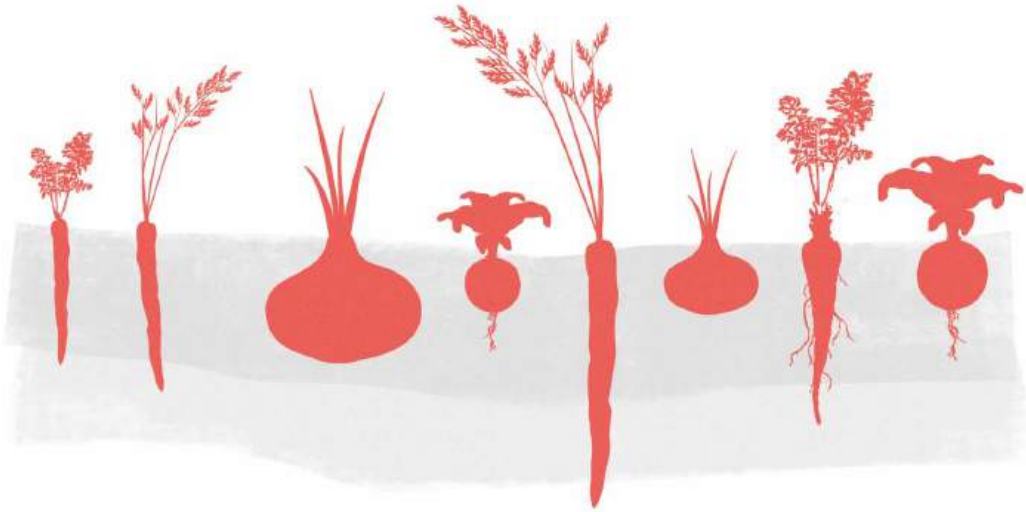
- find a venue which provides catering based on local produce. Even if it is not their common practice, you can also ask that they provide such products for your activity.
- if you organize your own catering for an event, check out which food is in season.
- reach out to the local farmers. Buy fresh and seasonal produce in a farmer's market or inquire about a box scheme which guarantees delivery of local produce to your doorstep.
- bake a delicious "100% local" cake and distribute it in your office building. Make sure that your guests understand the importance of supporting local produce before they get a piece!
- during a longer activity, explain your food choices to the participants. Many people are used to a wide variety of foods all year-round and it is essential to explain why you are feeding them mostly with beetroot and apples rather than tomatoes and bananas in Germany in December.

We live in a globalized world and trade plays an important role, also for the economies of developing countries. We do not urge you to never buy food from abroad, but to switch to more local produce, especially if local alternatives are easily available, and the given produce is native to your country. When buying from abroad, look out for products that were shipped by sea rather than air-freighted and look out for fair trade and organic labels (see below).

ORGANIC

The way our food is produced has changed dramatically during 20th century. Research and the development of technology has promoted the heavy use of pesticides and chemical fertilizers, the practice of monoculture and the introduction of genetically modified organisms (GMO). Although the supporters of GMO claim that this invention has helped to feed the rapidly increasing world population, they do not mention the dramatic negative impact it has had on the environment and human health. It is unequal food distribution and food waste, not lack of food, that are behind the hunger issues in the world.

The so-called *Green Revolution* has led to a decrease in agricultural and wild biodiversity. Heavy use of pesticides is directly related to cancer incidence in humans. The use of chemical inputs and the practice of monoculture has resulted in enormous environmental degradation,



soil erosion, water scarcity, vulnerability to pests, and even incidents of violent conflict in many communities in the world.

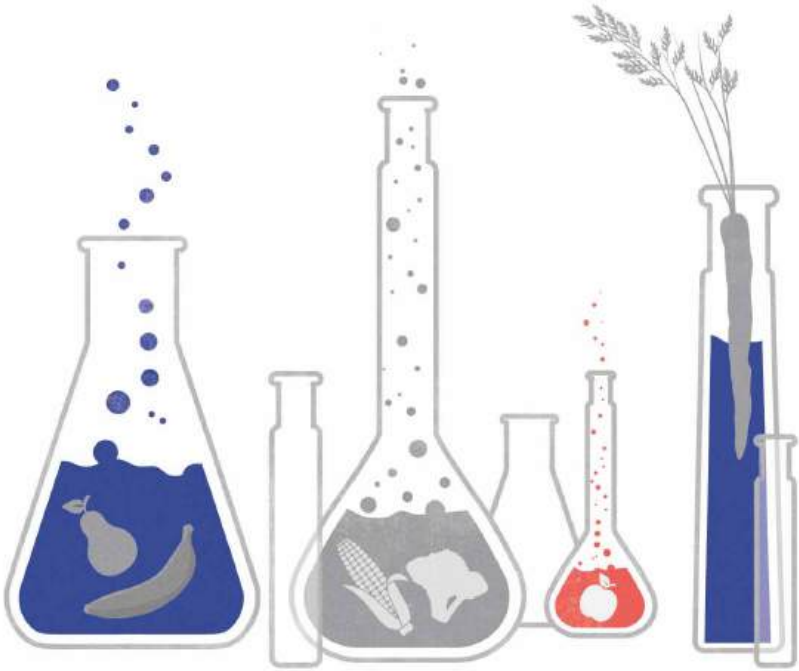
A viable alternative to such intensive agriculture is **organic farming.** Here are some benefits of organic production of food:

- It has lower levels of pesticide residue than conventional fruits and vegetables. Organic food can be more nutritious than conventionally produced food.
- It works with nature rather than against it by promoting biodiversity and healthy soil; conventional farming leads to soil degradation and can even result in desertification.
- Organic farming respects welfare of agricultural workers and farm animals.

WHAT CAN YOU DO TO SUPPORT ORGANIC FARMING?

- In shops look for food with this symbol: it is the official EU certification of "bio" and "organic" products.
- Use the services of restaurants and venues that provide organic food.
- **Slow food** is an international movement founded to promote local and traditional food products, traditional agricultural and food preparation skills, celebrate local cuisines and tastes, preserving heirloom varieties, and educate citizens about the drawbacks of commercial agribusiness, risks of monocultures and health risks of fast foods as well as lobbying against the use of pesticides and genetically modified crops. Go to *http://slowfood.com* to find your local organisation and enquire about their activities.

It is often costly and requires lots of effort and paperwork from the farmers to have their food certified as organic. However, it does not mean that uncertified food is necessarily not organic or unfairly traded. One hundred years ago all of our food was organically farmed and many small farmers still do not use chemical pesticides. Look out for small producers in your community; you might be allowed to visit their farm and see for yourself how the food is produced and be ensured that it is grown naturally.



GENETICALLY MODIFIED FOOD

A few large companies have monopolized the GM crop business. GM foods have uncertain health effects, and reliable long-term studies on humans have not been carried out; however, scientific studies have concluded that GMOs caused organ disruption in animals. GM crops have disastrous effects on the environment and biodiversity. However, the most striking are the facts regarding the monopolisation of the seed market and the disastrous effects on lives of farmers all around the world.

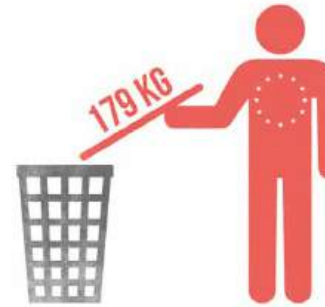
The biggest GM corporation in the world, *Monsanto* (voted "world's most evil corporation" in 2011 by readers of Natural News magazine), owns patents on the genes of nearly 90% of America's soy and corn products, and when these seeds eventually blow onto neighbouring smaller farms, Monsanto can sue them for a violation of their intellectual property rights.

Even more dramatic are the stories of suicides of Indian farmers known as "GM genocide." Hundreds of thousands of Indian farmers borrowed money to buy GM seeds after having been promised incomparably vaster crops resistant to pests. The crops have however failed repeatedly and by 2008, 125,000 Indian farmers are reported to have committed suicide after becoming indebted from buying GM seeds.

Fortunately, GMO labelling is mandatory in the European Union. You can find out more about GM food and Monsanto's practices by watching a documentary *"The world according to Monsanto"* that is available for free on *YouTube*.

MINIMIZE FOOD WASTE.
BUY WHAT YOU CAN EAT AND RECYCLE FOOD

More than half of the food grown worldwide is wasted rather than eaten. On average 179 kg of food per person is wasted each year in the European Union.



MAKE SURE TO MINIMIZE FOOD WASTE DURING YOUR ACTIVITIES:

- **Buy only what you will eat.** If you are cooking for larger group during your activity, it is easy to overestimate the amount of food needed. Plan your shopping carefully. You can use tools such as quantity calculator on *reise-proviant.info* website (in German) to buy the right amount for the size of your group.
- Rather than serving ready portions, **let the participants serve themselves** as on average, people eat 92% of the food they serve themselves. Kindly remind participants not to leave food on their plates.
- If the venue is cooking for you, **ask them to recycle food,** whenever possible. If there is a big quantity of rice left from lunch, why wouldn't they put into a soup, the next day?
- If you invite guests of your meeting to a restaurant and the portions are too big, do not hesitate to ask for the leftovers to be **packed for take-away.**
- **Give some chance to the ugly carrot:** much of fruit and vegetables are not sold because they are not shaped perfectly – a bent carrot, slightly bruised apple, a not-curved enough banana… by choosing irregularly shaped, "worse-looking" produce, that still has the same taste and nourishing qualities, we save them from being wasted.
- **Store food carefully,** to keep it from getting spoiled. Refrigerate it when needed, avoid exposing it to light and high temperatures.
- **Value all food.** Even if you throw away something that has relatively cheap price in the store, you can cause much higher costs to environment and society by throwing it away.
- **Apple skins or bread crumbs are all perfectly edible** – you can minimize food waste by eating the most of the produce you buy. Compost the uneaten remains in your composting device.
- Make sure that the food you order for an activity is simply… **tasty** – this will definitely minimize the amount of it staying un-eaten.
- If you have a big amount of food left over after an activity – that won't last till your next event – you can always **organize a soup-kitchen event** and prepare it for the ones who need it the most.

WATER

You would probably be shocked to see somebody trying to sell bottled air. It's a resource abundantly available all around us for free and anyone trying to put a label on it and charge for its consumption would be immediately declared insane. Yet somehow many of us don't see anything strange in buying bottled water. Tap water is safe to drink in most European countries. The price of a litre of tap water is around 2,500 times less than the price of bottled water and the water sold in plastic bottles is often simply... filtered tap water. Where it is potable, the tap water is under close supervision of the authorities: EU countries have agreed to conform to strict regulations regarding the quality of tap water and in consequence it was shown to be as safe and healthy – if not safer – as the water sold in bottles.

Apart from the ridiculous price margin put on something available practically for free in every house and office, there are other reasons why you should not buy bottled water:

- making plastic bottles requires the extraction of oil and the production process uses vast quantities of energy.
- bottled water needs to be transported to the store and from there to your office or event which further adds up to greenhouse gas emissions. Water in a glass bottle is much heavier than water in plastic bottles, so it requires even more energy to be transported.
- as soon as you drink the water, the plastic bottle becomes waste. Unless it is recycled, it can either rot in the landfill for hundreds of years or be burned in the incinerator releasing toxic chemicals into the atmosphere.
- money needed to deal with all the waste and pollution created by consuming bottled water diverts attention and investment from a very important issue: providing access to safe drinking water for all. Clean water should be considered a basic human right, rather than a commodity that corporations can profit on.

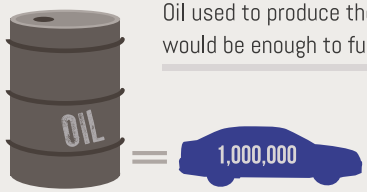
QUIT THE BOTTLES!

Call the relevant department in your municipality and ask if the water on tap is drinkable. If it is not, express your concern. Encourage your colleagues and other local organisations to lobby for construction of safe municipal water systems.

- **stop buying bottled water.** Cancel the subscription on water dispenser cartridges. Instead, supply your office with plain jugs or jugs with carbon filters.
- **ask the venue where** you organize an activity or a restaurant where you host guests to provide tap water during meals.
- during an organized event you can **supply participants with re-usable water bottles,** to promote drinking tap water. You can also add such bottles to your line of promotional merchandise.

BUYING FAIR TRADE

- Go to *http://www.fairtrade.net* to find your local fair trade organisation and find out where you can buy fair products.
- Commit to buying fair trade tea, coffee and chocolate for your office and activities.
- Enquire with your local store, venue that hosts your activity, restaurant where you go for lunch if they offer fair trade products or if they track the working conditions of the farms where they source their products.
- Similarly as with organic food, if the food is not labelled as fair trade it does not necessarily mean that it is not produced and traded fairly, it may just not be certified.



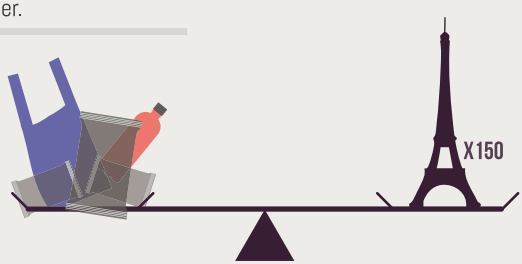
Oil used to produce the annual supply of plastic bottles in the US alone would be enough to fuel **1 MILLION CARS FOR A YEAR.**

According to different statistics, **BETWEEN 50 AND 80%** of plastic PET bottles used in EU in 2011 were **NOT RECYCLED.**

According to UN's Millennium Development Goals, **USD 10 BILLION** should be spent each year to decrease the proportion of people without sustainable access to drinking water by 50% by 2015. To compare, **USD 100 BILLION** is spent annually worldwide **ON BOTTLED WATER.**

Nearly **25%** of all bottled water crosses country borders to reach its consumer.

Bottled water globally generates **1.5 MILLION TONS** of plastic waste each year. That's the weight of **150 EIFFEL TOWERS.**



FAIR TRADE

Fair trade is a certification which ensures that growers from developing countries are paid a guaranteed minimum price for their product, workers on their plantations receive fair wages, health and safety standards are complied with, and that there is no forced or child labour.

It was designed to counterbalance the fact that food producers in developed countries often receive high government subsidies, which allow them to sell their products more cheaply in the international markets. Producers in the developing countries often face higher tariffs for what they export, while they are forced to lower duties on their imports, which makes it difficult for them to sell their products in international markets. At the same time, their domestic markets are flooded with cheap goods from foreign producers, stifling the domestic economy and preventing development.

Fair trade producers additionally commit to respecting a balance between environmental protection and business results and receive premiums for investing in social and environmental projects that benefit the wider community.

You can expect to find fair trade signs on products that tend to be imported from poorer countries such as tea, coffee, chocolate, tropical fruit (including bananas) and juice.

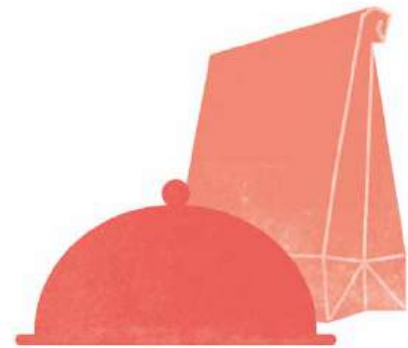
EATING OUT (CHOOSING RESTAURANT)

Whether you are out for an office lunch or you look for a food outlet to feed the participants of your event, use the money you are spending to support responsible and sustainable businesses. Here are some things to look out for when you are choosing a restaurant:

- Look for a place which is open to all and welcomes customers with various dietary requirements, including vegetarians, vegans, and food allergy sufferers.
- Support restaurants that source their food sustainably and base their menus on local and organic produce.
- Check out the restaurant's environmental credentials: are they using biological cleaning products, diminishing waste and recycling?
- Find places that go a step further and support local community projects.

CASE STUDY SICILY CAFÉ

There is a restaurant in Prague that works actively on diminishing its environmental impact. The menus are planned with seasons in mind, the food is primarily sourced from local farmers, and seasonal and organic products are promoted. Vegan and vegetarian options are available each day on the menu. The energy used in the café is fully sourced from renewable resources. The cleaning products used are environmentally friendly. The workers attempt to minimize waste production and recycle carefully. Take-away meals are packed in re-usable boxes, for which deposits are charged to encourage customers to bring them back or re-use them. Most beverage bottles are refundable, and no bottles are plastic. Tap water is served for free to accompany meals. The café is completely smoke-free (which is still rare in the Czech Republic) and parents with children are welcome as there is a special game corner for children.



SERVING AND PACKAGING

Some food, like bananas, comes in natural, 100% bio-degradable packaging, straight from the tree. However, there are many other food products, which some believe should be wrapped in layers of foil, paper and plastic before it can be safely sold to customers. Here are some tips on how to cut down on your 'around-the-food' generation of waste:

DURING LUNCHTIME

- if you bring your own lunch from home, equip yourself with reusable lunchboxes rather than using disposable bags and wrapping paper.
- if you order food for take-away, come with your own lunchbox. Some food outlets also offer re-usable boxes for delivery.
- if ordering take-away that will be delivered to your office, encourage your colleagues to order in the same place to reduce the amount of packaging and transport. Ask the restaurant not to include napkins, coupons or plastic cutlery.
- if you find food in a place where you get lunch unnecessary packaged (sandwiches wrapped in plastic foil to be then put in a cardboard box and finally served in a plastic bag with a disposable spoon and two paper napkins) or served with a plastic plate and cutlery, express your discontent (in a friendly manner!) and leave a note for the manager.

IN THE COFFEE BREAK

- buy coffee, tea and snacks for your office in bulk, to minimize packaging.
- rather than buying pre-packaged tea in tea bags, visit your local tea-house and buy weighted loose tea. It's not only more environmentally friendly but it's also tastier and is likely to contain less artificial additives.
- provide cloth napkins instead of paper napkins.
- if there is a coffee-machine that uses plastic cups by default in your office building, talk to the building manager and ask him to change the system to one where re-usable mugs can be used.
- if you are a fan of those fancy take-away coffee beverages, make sure you visit your favourite chain cafeteria with your own portable coffee mug.

DURING AN ACTIVITY

- don't serve meals and snacks with disposable plates and cutlery; always use reusable dishes.
- during some events, such as concerts or festivals, it's not practical to provide glasses or mugs that are expensive and can easily break. However, you can still use re-usable hard plastic mugs and charge a deposit on them, which will encourage your guests to return the dishes. You can get inspired by the *Czech Football Association* that introduced re-usable plastic mugs to their stadiums to avoid plastic waste and promote sustainable behaviour among football fans.
- if you buy food for activities, choose large packages (you are likely to save money this way, too), and avoid buying unnecessary packaged items.
- buy fresh food and vegetables rather than frozen or canned food: food in cans was originally designed for use during wartime and there is no need to utilize them in our comparably peaceful times.
- some packaging is hard to avoid, so choose the "lesser evil" whenever you can. Look for easily recyclable materials, choose paper and glass before plastic and styrofoam.
- make sure that all packaging waste produced during your activity is properly separated and deposited into appropriate recycling bins. Compost food leftovers whenever possible.

GET A THOUSAND SMALL FRIENDS... TO RECYCLE YOUR WASTE

Composting leftover food in your office or during an activity can be easier than you think. You can buy a worm compost bin in many gardening and DIY stores. Then just mix all of your organic waste: lunch leftovers, fruit peels, and coffee grounds and see it turned into a fertilizer for your garden or house or office plants. Find out more about vermicomposters in the "Waste" section.

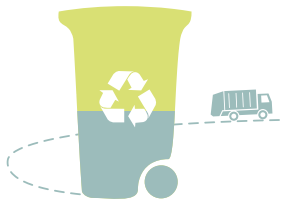
AND ON A FINAL NOTE... EAT HEALTHY!

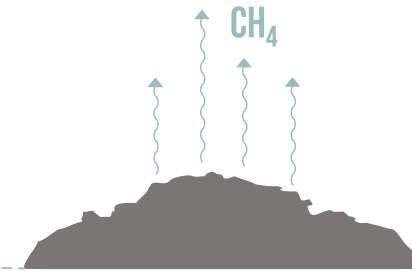
As a leader or project manager in an NGO you spend your days fighting for a more just, fair, equal world for all. You and your colleagues will be able to work more effectively and bring more change if you fuel your body and your brain with a healthy, balanced diet. Similarly, if you organize an activity, and you want your participants to feel well and be able to contribute and learn at the peak of their capacity, you should ensure their well-being by providing them with nutritious, well-balanced meals, thereby promoting a healthy lifestyle. Swap junk food and snacks high in saturated fat and refined sugar for fruits and vegetables and look for food that is not highly processed. Look out for other advice from doctors and nutritionists.

WASTE
MANAGEMENT

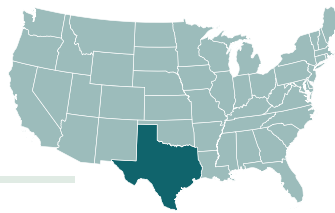
DID YOU KNOW THAT...?

Only **10%** of waste is **NOT RECYCLABLE**





45% of the waste in **EUROPE** is sent to **LANDFILLS,** rather than recycled or re-used. Landfills are the largest human-created source of methane emissions and thus are significant contributors to climate change. **METHANE** is a **25 TIMES MORE POTENT** greenhouse gas than CO_2. (Source: Eurostat)



EVERY YEAR Americans use enough plastic wrap to cover Texas.

EVERY YEAR we fill enough garbage trucks to form a line that could stretch from the earth, halfway to the moon.

EVERY SUNDAY, more than 500,000 trees are used to produce the **88% OF NEWSPAPERS** that are **NEVER RECYCLED.**
http://www.green-networld.com

These facts may come from completely different areas of our daily life, but they all have one thing in common: they call for an active reduction of waste!

CLEAN OUR FUTURE – RECYCLE!

recycle |rē ˈsīkəl|
verb [trans.]
convert (waste) into reusable material:
• return (material) to a previous stage in a cyclic process.

Recycling is probably the most well-known way to effectively manage waste. The implementation of recycling programmes, however, varies not only from country to country, but also from city to city. Therefore, the first step is to get in touch with the local authorities to figure out how recycling works in your community. The most common components of trash separation are: **paper, glass, plastic, aluminium, organic and "the rest" bin.** Make sure to separate properly: not all plastics can go into the same recycling bin; wash the remains of food from pots and cans; separate plastic and paper parts of the same packaging; in your office or activity, inform everyone about available recycling facilities. With children (and why not with adults) you can play some great games that educate and explain why waste separation is so important. Always act as a good example and inspire others!

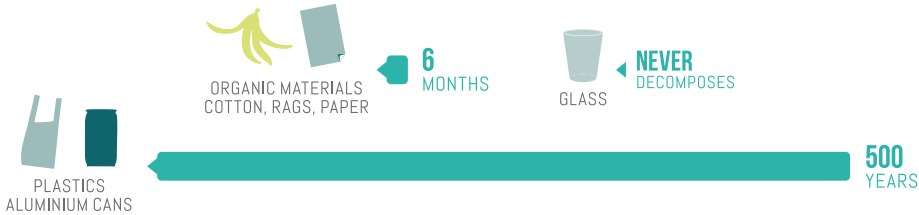
For more information about recycling, visit
http://www.recyclenow.com

RE-USING MATERIALS

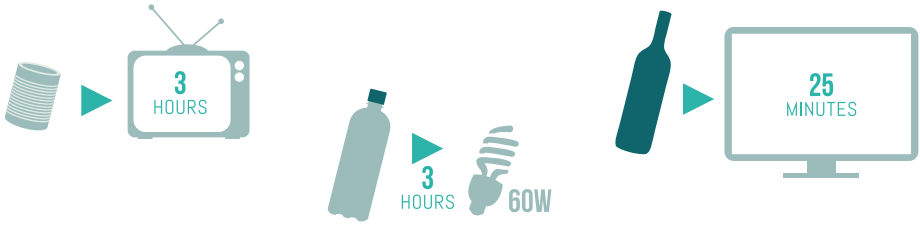
This is the eco-friendly trend of transforming waste into new objects. It is even greener than recycling because it does not need the energy and resources to collect, sort and process unneeded elements. Furthermore, it is a great way to reduce your energy consumption and the depletion of raw materials. The concept of "upcycling" became very hip in 1990s, yet probably your parents and grandparents thought it is obvious to reuse and remake various items to prolong their lifespan or find new uses for them.

WHAT'S SO SPECIAL ABOUT "UPCYCLING"?

- Most of the time the only energy being used is your own
- It saves money which you can spend on something else
- Through buying less you help to minimize the need for the production of new goods and the generation of waste
- It is simply so much fun!
- You can consider having an upcycling workshop to promote the idea, or even produce some of your merchandise this way. There are plenty of websites, which give you endless tips on this topic. Google it, transform it!



▲ DECAY TIMES OF DIFFERENT MATERIALS
▼ THE AMOUNT OF ENERGY SAVED BY RECYCLING...



COMPOSTING

Nearly 30% of our refuse consists of garden trimmings and food waste. This is a huge amount that we could save from landfills by having compost at home, at work or composting facilities available during the events we organize.

In short, the process of composting simply requires collecting organic matters and waiting for it to break into humus (do not confuse it with hummus!). As a result, compost can be used as a fertilizer and a soil amendment for your pot plants and gardening.

If you ask New Yorkers, they would recommend vermicomposting, which they practice even on balconies. The earthworms are fed an all-organic diet and the vermicompost is thus generated. The worms are also effective at removing lead, zinc, cadmium, copper and manganese.

(Source: International Journal of Environment and Waste Management).

However, if you have something against worms or New Yorkers, you can inform yourself about more traditional ways to recycle organic waste.

DO YOU KNOW MATER-BI®?

Mater-Bi is an Italian invention of biodegradable and compostable bioplastics made out of vegetable components such as corn starch and biodegradable polymers. It can be processed and used like conventional plastics. So far examples include: applications in agriculture (mulching, bindings), catering (plates, cutlery, glasses, trays), packaging (fresh fruits and vegetables, cereals, bakery products), accessories and toys. One critical point, however, is that many people put this material in conventional plastic trash, which then disturbs the recycling process. Thus, clearer information on how to use *Mater-Bi* is needed.

http://materbi.co.uk

MUNDO-B BRUSSELS

Have you ever wondered if it is possible to run an office (building) that is completely sustainable?
The "Brussels Sustainable House," also called *Mundo-B,* is a project initiated by some NGO's, who worked together to ecologically renovate a building in order to set up their offices in a sustainable environment. Nowadays, it turned into a colourful house with many shared spaces, an organic cafeteria and an educational garden that also has its own composting facilities. Many facilities like printers, scanners, kitchens, etc. are shared in order to use as little resources as possible.
rue d'Edimbourg n°18-26 à 1050 Ixelles

www.mundo-b.org

E-WASTE

E-waste is one of the fastest growing types of waste, and hence the need to manage it and to recycle the various components is becoming more and more urgent. Every day electric equipment is being used and product lifetimes are becoming increasingly shorter. Already in 1990, the European Union banned electronics from landfills and, under the WEEE directive, continues to demand improved ways of e-waste separation and recycling, and a decrease in dumping in developing countries.

Europeans increasingly send their old equipment to developing countries to be reused. However, Greenpeace reports that electronics' traders are buying usable and obsolete machines in bulk and sending them to developing countries falsely labelled as 'secondhand,' but treated as waste in the developing countries. In this manner they are legally able to dump e-waste.

E-waste disposal is especially problematic as humans and the environment are exposed to hazardous chemicals during the process of dismantling electronic products. E-waste contains approximately 1,000 chemicals, including mercury, lead oxide, cadmium, and polyvinyl chloride, which are especially hazardous to human health.

Also the valuable and finite resources used in electronic equipment, such as gold, silver, copper and rare materials, should be dealt with more thoughtfully.

We, as consumers, are responsible and need to care about the 'after-life' of our products.

WHAT CAN YOU DO?

- **BUY QUALITY.** When choosing new products, invest in quality and products with a long lifespan, a guarantee and repair-services in your area.
- **INVEST IN GREEN ELECTRONICS.** Inform yourself about the environmental policies and practices of companies before making a purchase.
- **TAKE CARE.** Handle your equipment with care. Read the instructions wisely to know your product and ensure its long duration.
- **STAY LOYAL.** Use equipment that served you already for a long time and don't replace it only because a new version came out.
- **REUSE & REPAIR.** Before throwing electronics away, make sure there really is no possibility to repair or use parts of your broken equipment. Many fragments can be used for other products, given to charity or used in any other creative way. If you are replacing your computer, make sure the old one finds a new user.
- **RECYCLE.** Most small electronics can be returned to the seller. For bigger ones, find out about the e-waste recycling station, which is closest to your home.

STOP SHOPPING, START SWAPPING

One of the key ways to reduce your own usage of resources and the amount of waste is to look for alternatives to the commercial way of shopping.

SWAP SHOP EVENTS

You can organize a *Swap Shop event* in your office.

It works like this: everybody brings some clothes, books, decorations, etc., and on the spot they can be exchanged. The Czech organisation *DUHA* (Member of IYNF) regularly organizes swap-book fairs; they not only encourage the participants to bring their own books, but also get unneeded books from libraries and bookstores, so all participants leave with more than they initially came with!

FREETABLE

Set up a table in your office building where people can display their unwanted items for others to take.

CHARITIES & DONATION

Donate your old belongings that are still in good shape. In every city there are several donation stations and associations that collect pre-loved items. However, be critical with the purpose of the associations and make sure that your products really reach the destination and are not sold on the way.

FREE SHOPS

In a rising number of cities you can find so-called 'free shops,' which offer second hand products that have been donated for free. You can come and donate anytime and pick up a limited number of products per day.

MOVIE-TIP:

The Story of Stuff:

www.storyofstuff.org

More information about green electronics can be found at

www.greenergadgets.org
www.eu-energystar.org

FREECYCLING

... is an initiative about giving and getting things for free in your local community. It is a non-profit network made up of more than 5 000 groups and more than 9 million individual members. It is all about recycling, exchanging, reusing and cleaning up the planet by avoiding to throw away things, that others could still need.

To find your own local group, visit:

http://www.freecycle.org

VENUE

People have different needs and expectations when it comes to accommodation and venues for seminars, camps, training courses or celebratory events for your organization. How can you fulfil those needs and expectations, and also find a venue that is practicing sustainability in its management?

ACCESSIBILITY

It might be truly nice to organise a conference, seminar or gathering on an isolated island somewhere in northern Finland, but try to imagine how cumbersome it will be to reach that place. Of course, there is a need for alternative meeting places and not all events can be organised in the countries located centrally, but some "geographical thinking" could be truly helpful.

- If most of the participants will be coming from a certain region (e.g. the topic is particularly related to some countries), find a venue that is located closer to them. This will increase the number of participants travelling by land.
- If you are on a shoe-string budget you will probably avoid big cities. Still, choose a venue that is reachable by public transport.
- If there is no public transport, you might have to pick up the participants yourself from the nearest station. In this case, try to pick up more than one participant at a time to avoid unnecessary driving.
- Take into consideration that there might be participants with reduced mobility. To make an event inclusive, look for a venue that will be able to cater to their needs.
- An intensive week of activities can be tiresome. In this case the best venues are those located in green areas that make it easy to find some peaceful place to relax. Look for places outside of the city centres, scout for venues or places owned by youth organisations. This way you support the work of other organisations driven by doing good.

FOOD

Once the place has been chosen, you need to imagine that there will be different dietary needs that the restaurant/canteen must fulfil. Take into consideration not only vegetarians and vegans but think of people who may be gluten intolerant or have food allergies. There are venues that might look just perfect; they match all the criteria apart from the food needs. A solution might be to provide the kitchen with recipes. Sometimes, the venues just don't know know what to cook and if you do not help them out, your vegetarians/vegans might end up eating pasta with ketchup the whole time.

Once the special dietary needs have been taken care of, it is time to think about the menu. Look for guidelines to sustainable food choices in the "Food" chapter.

During the day you will probably have a tea/coffee break. Venues usually offer some sweet bits together with hot drinks. It is worth asking if fruit could be served, instead of these. Do not forget to make sure that sugar will be served in a jar, not in separate paper sachets.

It is also important to stress that substantial savings can be made through a wise use of glasses. It might sound trivial, but writing a name on them and using one over a couple of days drastically reduces the use of water and energy to wash them. Providing participants with glasses/mugs and large containers of hot and cold drinks also means that they would not use plastic bottles or cans.

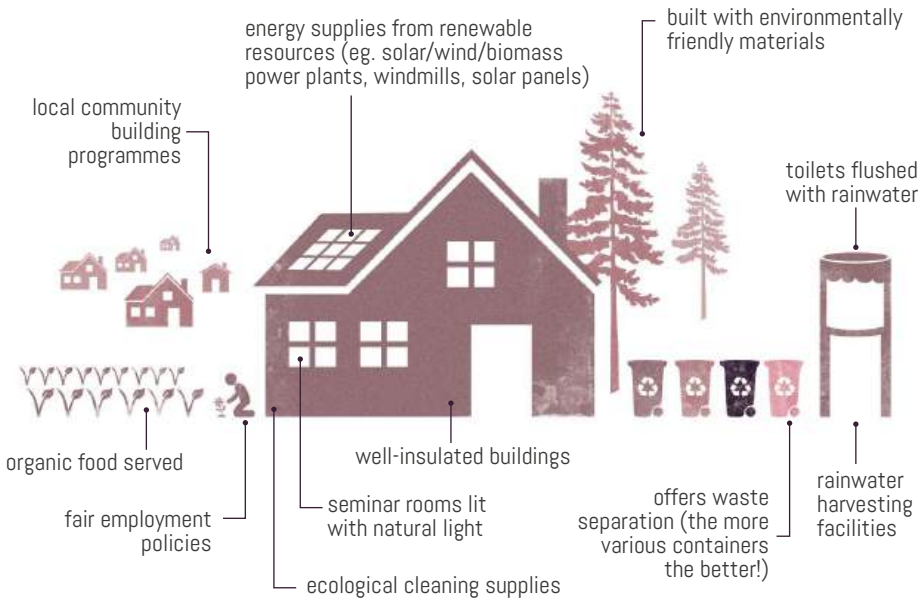
STAY WITH AN NGO

While thinking of choosing a sustainable venue, one more important thing comes into question. Who is managing the place, and consequently who will benefit from your stay. If you choose to stay with an NGO-managed place, you will help them to finance their operations. One of the examples might be the houses owned by the Naturefriends movement. Not only are they using energy from renewable sources but they also give great attention to untreated sewage discharge. While staying in NF houses, guests can be sure that the buildings were planned according to the regional needs and with locally sourced materials. What is more, the management pays attention to the well-being of the employees. Finally the houses promote 'soft tourism,' an idea that encourages visitors to get to know the area's cultural and natural features. This can be a perfect opportunity for community building.

For more see:

http://www.friendsofnaturehouses.net

WHAT ARE SOME OF THE ASSETS THAT SHOULD DRAW YOUR ATTENTION?



MAKING A CHANGE

Participating in an event, where sustainability principles are applied might be a thought-provoking and habit-changing opportunity for many participants, as they have a unique chance to practice a sustainable lifestyle. This needs to be facilitated, though. A good idea is to provide the participants with information provided either during the event or via e-mail beforehand, guiding them through the peculiarities of a sustainable lifestyle. Make sure that they understand the following:

- you do not need to have your towel or sheets changed every day; keep it on a hanger, leave a note for the cleaning service or hang the do-not-disturb sign on the door.
- make sure that when you leave the room you turn off or unplug, all electrical appliances (lights, TV, laptop, phone charger...).
- your room does not need to be heated or cooled while you are out, so consider switching the radiators and air conditioner off.
- sharing a room with other people not only cuts the costs but also provides better energy efficiency, and opportunity to both make new friends and cut emissions together.
- a shower does not need to take 30 minutes. Try to be as quick as possible to save water and energy required to heat it.
- if you use bar soap or shampoo and don't finish it, take it home.
- sometimes food might be served as a buffet. Use this chance to make participants aware of food waste (read more in the „Food" section of this manual).

As you can see, there are many things to consider when it comes to choosing and using a green venue. It would be a good idea to appoint a person from the organising team who would be responsible for taking care of sustainability issues before and during the event.

A CONFERENCE ON A FARM?

If your budget is a bit larger than usual, you might want to consider the *Sheepdrove Eco Conference Centre* as a venue. Located on a farm, this centre caters for up to 170 people but also offers smaller facilities for around 30-40 people. What makes it special? The conference rooms enjoy natural daylight and ventilation, the buildings are made of renewable materials and the venue has its own mineral water. What is more, their seasonal catering is based on the organic farm just outside the venue. An extra for design lovers: the multi-coloured sinks in the bathrooms are made from recycled CD cases.

For more see:

http://conferences.sheepdrove.com

THE HEROES FROM ARTEFACT

Artefact is a non-profit organisation dedicated to the application and dissemination of economically viable, ecologically and socially appropriate technologies for regionally and internationally sound and sustainable development. It offers infrastructure that diminishes the venue's environmental impact. Not only do they teach but they also provide an eco-friendly venue in Germany that caters for up to 50 people. The venue generates its own energy from renewable resources: a combination of wind, solar, water and biomass energy. The energy generated is actually more than the venue uses and the surplus is sold to the local municipality. The toilets are flushed with rainwater and grey water is recycled. Finally, the owners source local and seasonal food as much as possible.

ACTIVITIES

Sustainability is not something only for "green radicals" or "particularly devoted people." It is for everyone, and the more integrated it is in everything we do, the sooner the world will become a better place to live in. Sustainability is about integrity: when your words and deeds match your thoughts. In projects and organisations, it means that your activities and the way you carry them out match your values.

EVERYTHING YOU DO

How can you make sure that sustainability is embedded in all your activities, from meetings you hold to the games you play with the kids in your summer camps? There are the guiding principles in the beginning of this book, and some specific tips in each thematic section, but here are some additional tips you might find useful when planning and running project activities such as workshops, sessions, games etc.

WHAT RESOURCES DO YOU NEED FOR THE PROPOSED ACTIVITY, AND IN WHAT QUANTITY? ARE THEY BEING USED WISELY?

Think if you can use what you already have instead of buying new materials, and if you can borrow equipment. If buying, make sure you buy the right quantities of materials for the amount of people that will attend the activity. Avoid disposable products and choose ones that can be reused instead. Avoid unnecessary waste of materials, like writing only few words per flipchart and then throwing it away.

MAKE SURE THE ACTIVITY SUITS THE GROUP'S NEEDS AND HAS A POINT

It might seem obvious, but there are times when it is easy to slip into running an activity just because you have to, or just because it is in the program, without thinking about how the group will benefit from it. Think about the added value the activity will have; otherwise, you risk wasting your time, energy, and resources.

DON'T REINVENT THE WHEEL

Use what's already out there. Creativity is a good thing, but it should be used wisely. Being creative takes a lot of time and energy, and sometimes we simply try to invent what has actually been there all along. There are so many resources out there already on how to design activities, how to plan events, how to cover different topics. By using them, you will save your own personal resources and will be able to use them for something else.

MORE THAN JUST THEORY: 10 IDEAS

So even if your project or event is not directly related to sustainability issues, you can include an activity or two that tackles one of the topics mentioned in this book. Since sustainability is about integrated approach, we encourage you to give one of these ideas a shot.

1 ECOLOGICAL FOOTPRINT

The ecological footprint measures human demand on the Earth's ecosystems, such as the demand for natural capital vs. the planet's ecological capacity to regenerate. To put it simply: if everyone would live like we do, how many planet Earths we would need? The world average right now is 1,5 planet Earths, but we don't have that many; we have just one. During your project, you can introduce everyone to the concept of an ecological footprint, calculate it together, discuss the results and try to find solutions. There are many online ecological footprint calculators available. The methods might be different, but the idea stays the same.

You can use the following tests:

http://www.footprintnetwork.org
http://footprint.wwf.org.uk
http://www.ecologicalfootprint.com

2 KNOWLEDGE STATIONS

Knowledge stations can be a good way for people to share what they already know and are doing regarding sustainability. Ask each person to think of one thing regarding sustainability they would want to share. It doesn't have to be big or complicated, it can be as simple as: "10 good things about biking to work"; "How I became a vegetarian." In each session 5 people from the group share their stories, and the others become an audience. Arrange the room to make "knowledge stations," so each person who shares something has a corner or a place, and others go from station to station, listening to what they have to say. Repeat the session again the next day with the next 5 people, and so on, until everyone has shared something. *Voila.* You will be surprised how many inspiring things you will find out using this method.

3 BIKE TRIP

Usually during projects and longer events there are some excursions or field visits planned. So why not give one of these trips some added value, by putting the whole group on bikes? That way you will give people a chance to exercise and also demonstrate a practical example of sustainable mobility. Usually it involves some additional planning (check out if it's possible to rent bikes), but it's so worth it! Positive emotions are guaranteed, as are stories to tell afterwards.

4 CREATIVE RECYCLING WORKSHOP

We encourage inclusion of creative workshops in your project where people can learn how to make new things out of old ones. Use old clothes, paper, magazines, milk cartons, wood – whatever you find, and together make something new out of it. If you can, ask some local artist or designer to help you, or ask your project participants to come to the event with an idea or craft project.

Some online resources that might help you (but there are hundreds more out there):

http://craftgawker.com
http://www.pinterest.com
(using keywords: *upcycling; DIY; recycling*)
http://www.upcyclethat.com

5 FOOD WORKSHOP

Eating and food are inevitably present in any kind of projects or events, so why not make a sustainability workshop regarding that? The food section of this book might give you some more ideas. You can exchange vegetarian recipes or make new ones, you can analyse where your breakfast comes from and how far it has travelled. You can take a look at how much packaging your food items have and think of ways you could reduce that or you can stir a discussion about food waste.

CASE STUDY

FASHION DOTALK (LATVIA)

doTalk is a method created in Latvia with the main goal of sharing and creating ideas in order to solve particular problems. It is a good alternative to traditional brainstorming because, instead of just putting ideas together, this method focuses on planning implementation, sharing resources and making action plans. One of the successful thematic *doTalks* focuses on fashion, and the main idea is that people come to the event with some old clothes they don't like anymore, and together think of new fashionable clothes they can make out of them. All the clothes brought together become one big group resource. First each participant creates their own idea, and afterwards they give suggestions and feedback to each other, and at the end they, together with fashion designer and tailor, make their ideas come to life. It is dynamic, creative and fun, and gives an idea on how sustainability can be integrated into the fashion industry.

More on *doTalk* here:

http://idejutalka.lv

Think outside *'the press release concept'* by informing the local community about your activities in creative ways and using the locals to find out about community needs that can be addressed by your event. Consider holding open workshops where members of the local community are welcome to attend. Planting trees, doing a clean-up, running a workshop for local school kids, planning a home-grown vegetarian meal for families, organizing a public swap-party (read more on that in the "Waste" chapter of this manual). Whatever it is, make sure you follow sustainability principles and enjoy the show yourself.

6 A GOOD DEED FOR YOUR COMMUNITY

7 EXPERT LECTURE ON SUSTAINABILITY

Sometimes, depending on the group, time and resources, it's a good idea to invite someone from the "outside" to share their knowledge and experience on sustainability topics. It can be a university professor, an NGO professional,an environmental activist, a decision maker, an entrepreneur, or simply an interesting and inspiring person who has something to say on this matter. Take a look around and see who you have among your friends, family, acquaintances, organisation partners, etc. Don't be afraid to ask; you might be surprised about how willing people are to share their story. You can take time to research inspiring local places that are connected to the topic of your event. You will be amazed to discover that so many people are doing things to better the planet.

8 MOVIE OR TED TALKS ON SUSTAINABILITY TOPICS

People spend so much time on *YouTube* these days, so why not make the most out of it? Choose a good movie that talks about sustainability issues for a movie night, watch TED talks in the beginning of the day, make an 'inspiring video' night where each person has to contribute one video. If you want to take it a step further, you can have a discussion afterwards, highlighting the best moments, or talking about how ideas shown in the videos can be implemented in daily lives.

Good video resources:

http://www.ted.com
http://www.truththeory.org
http://www.homethemovie.org
http://www.storyofstuff.com

9 PHOTO-COMPETITION ABOUT SUSTAINABLE PRACTICES IN COMMUNITY

Make a competition where people have to take pictures with their phones, or cameras, of as many sustainable solutions and ideas in the community as they can find. Give them an hour or so, to run wherever they want, either on their own or in teams, and then put all the pictures on a computer, show a slideshow, compare and discuss results, and give a little prize to the winner. This is a good activity because people will have to think actively, scan the surroundings, judge what they see, and at the end they will be able to learn from each other.

10 1 DAY EXPERIMENT

During your project or longer event, you can try and do a *"1 day experiment"* and see what comes out of it. It can be *"1 day vegan," "1 day without waste," "1 day only walking,"* or maybe as brave as *"1 day without electricity."* It will give the group a chance to try out different things without making a serious commitment. Yes, it can be uncomfortable, but it won't be painful or damaging. Everybody can survive 1 day of almost anything. Introduce it as an experiment and learning experience, encourage the group to step out of their comfort zones, but make sure you discuss it before and listen to the opinions of the group. In the introductory part you can talk about similar experiments, like

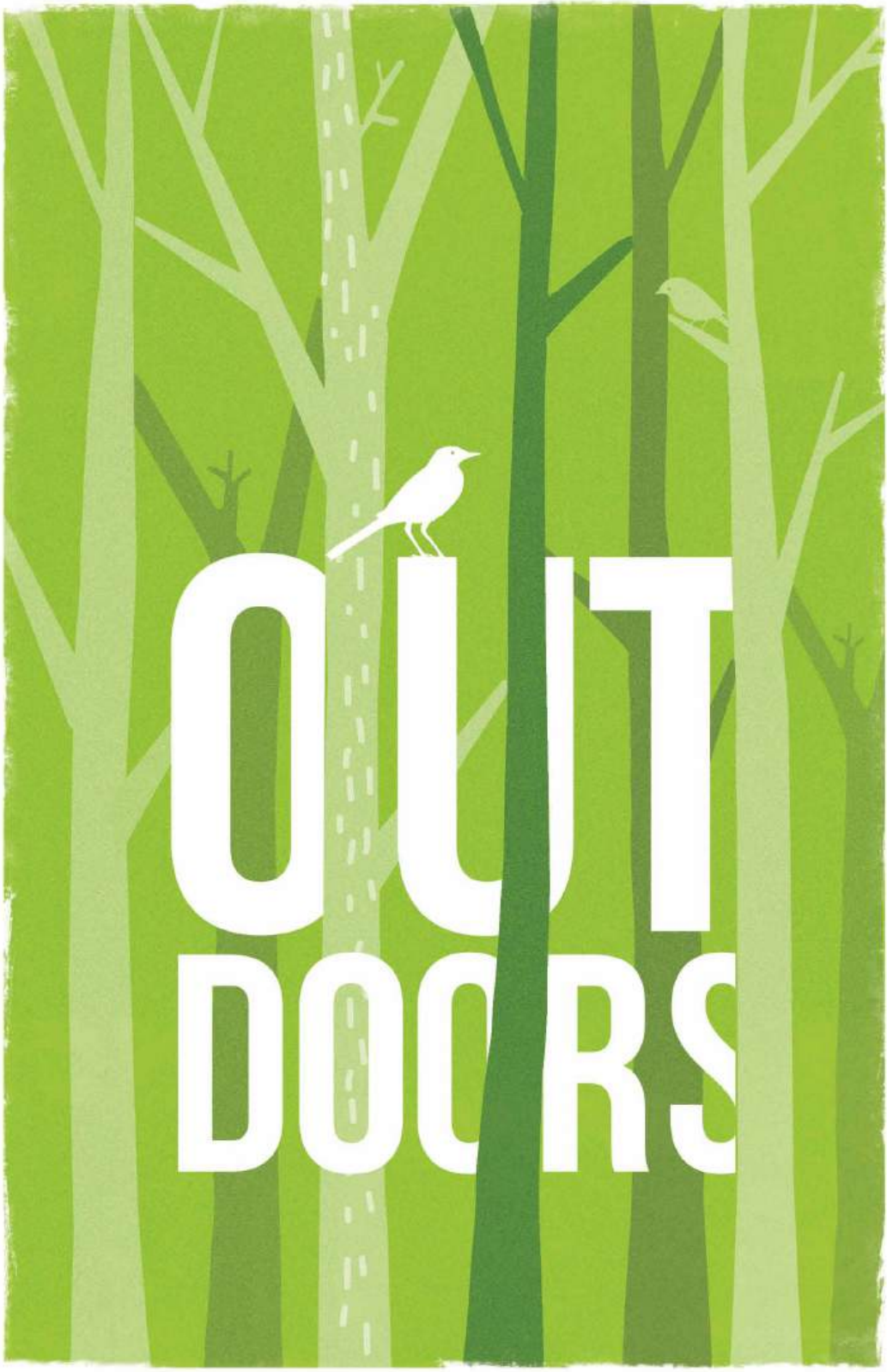
http://noimpactproject.org.

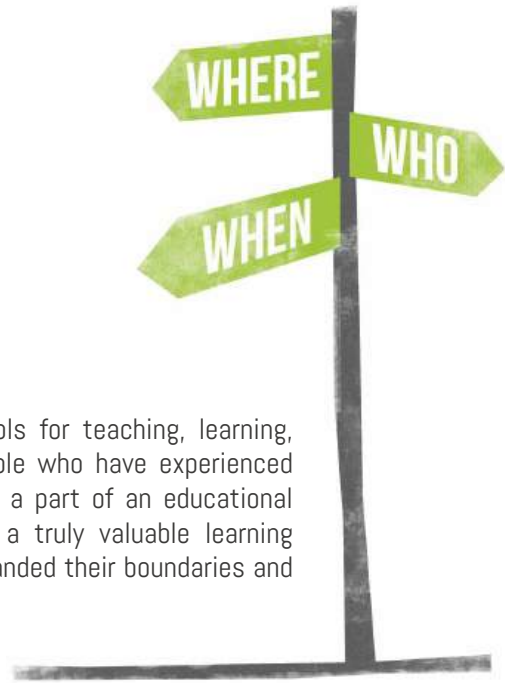
Here are some questions that can help you include sustainability in your activities:

- What resources are we using and how are we using them in our activities? Are we showing a good example? Can we do better?
- Is there time and space to talk about any kind of sustainability topics?
- What topics and methods could be relevant to our project and group?
- Do we want to ask someone to cover these topics, or do we have enough knowledge and resources to do it ourselves?

These resources might be useful for other activities:

http://www.worldmapper.org
http://www.gapminder.org
http://www.wagggsworld.org
http://www.ifm-sei.org
http://www.esdtoolkit.org


OUT
DOORS



Outdoor activities are great tools for teaching, learning, growing, and playing. Most people who have experienced open-air adventure activities as a part of an educational program say that it has been a truly valuable learning experience where they have expanded their boundaries and taken up new challenges.

But the activity doesn't necessarily have to be educational; many outside activities, such as hiking, boat trips, and outdoor sports, are just for fun. The number of participants may vary from a couple of people having a brief workshop in the forest, to thousands of people spending 3 days at an outdoor music festival. Surely, the impacts of these events will be different, but the question remains: how to make sure that they are carried out in the best possible way with the least impact on the environment?

The social aspect of outdoor activities is very important too, because people tend to be out of their comfort zone while outside, surrounded by nature.

When you plan outdoor activities, there are a few things to take into consideration:

TIMING

When are you going to have the activity? It's worth taking a look at the weather forecast; if the weather is too rough, being outdoors can be unpleasant and even dangerous. Also, there are times when you have to be extra cautious in certain areas because of the nesting period of birds, for example. If you know that the place you are about to go to is famous for birds, be especially careful between April and June. There are other reasons for double-checking the timing too; consider wildfire season, mosquitoes, etc.

LOCATION

Where do you want to have your outdoor activity? Is it going to be in a forest, meadow, swamp, mountainous area, or by the sea? Make sure the place where you are having your event is suitable for what you want to do there. It is good to do a little research before. If there is a nature reserve, there might be some restrictions on what you can or cannot do. You also have to be extra careful with what you do and in what condition you leave the place when you depart.

PROTECTED PLANET

Protected Planet is a Google-map based project that allows you to search for all of the protected areas in the world. It is a project carried out by the World Database on Protected Areas (WDPA), and is constantly updated with new information, pictures and locations.

http://protectedplanet.net

GROUP SIZE

How many people are going to go with you? Is it just you and a couple of others, or is it a bigger group? The impact you leave on the environment is proportional to the amount of people. Just imagine the difference of having 5 people in your backyard for 2 hours, and having 100 people in your backyard for 2 days! It is better to have smaller groups, and, if the event lasts for more than 3 days, not to stay in the same place. If you plan to have many people (and this especially goes for music festivals), make sure you do everything you can before to reduce the impact, so there is less mess to clean up afterwards.

"LEAVE NO TRACE" PRINCIPLES

Leave No Trace principles are designed to assist outdoor enthusiasts with their decisions about how to reduce their impact when they hike, camp, picnic, snowshoe, run, bike, paddle, ride horses, ski or climb. These principles are meant to educate all those who enjoy the outdoors, about the nature of their recreational impacts as well as techniques to prevent and minimize such impacts.

PLAN AHEAD AND PREPARE

Poorly prepared people, when presented with unexpected situations, often resort to high-impact solutions that degrade the environment or put themselves at risk. Groups can sometimes underestimate the time needed to reach their intended destination, resulting in campsites being set up in unsuitable locations. Failure to plan meals or bring proper equipment can also lead to improperly built campfires as well as excessive amounts of trash being generated.

TRAVEL AND CAMP ON DURABLE SURFACES

Damage to land occurs when surface vegetation or communities of organisms are trampled. The resulting barren area leads to unusable trails and campsites, as well as soil erosion.

- In high-use areas, it's better to concentrate human activity, which makes further damage unlikely.
- In areas that are not very frequented, people are encouraged to spread out. Taking different paths when hiking off-trail will avoid creating new trails that cause erosion. Dispersing tents and equipment, and moving the camp daily will avoid creating permanent camp sites.

DISPOSE OF WASTE PROPERLY

Trash and litter are human-induced impacts which can greatly detract from the natural beauty of an area. Always take all the trash and litter you produce with you. Backcountry users create body waste and wastewater, which also require proper disposal:

- **Wastewater:** Avoiding soap and pouring dishwater far away from natural water sources will prevent contamination. Do not use soap directly in lakes and rivers, even if it is labelled as "organic." It will not biodegrade completely, and some substances will stay in the water.
- **Human waste:** Proper human waste disposal prevents the spread of disease and speeds up decomposition. Cat holes, 6 to 8 inches deep and 200 feet away from water, are often the easiest and most practical way to dispose of faeces.
- There are areas where all waste must be packed out. These tend to be at high elevations where cold temperatures prevent decay.

LEAVE WHAT YOU FIND

Leaving rocks, plants, archaeological artefacts and other objects as found will allow others a sense of discovery. Similarly, *Leave No Trace* principles urge people to minimize site alterations, such as digging tent trenches, hammering nails into trees, permanently clearing an area of rocks or twigs.

MINIMIZE CAMPFIRE IMPACTS

It's recommended to use lightweight camp stoves, instead of fires, because the natural qualities of many areas have been degraded by the overuse of fires and the increasing demand for firewood. If a campfire is constructed, use an existing fire ring in a well-placed campsite or use a fire pan or mound fire. True *Leave-No-Trace* fires show no evidence of having ever been constructed.

RESPECT WILDLIFE

If too many people approach or interfere with wildlife, it can be disruptive to animal populations.

BE CONSIDERATE OF OTHER VISITORS

Following hiking etiquette and keeping quiet allows visitors to go through the wilderness with minimal impact on other users.

You will find more on *www.lnt.org*

WHAT TO TAKE WITH YOU?

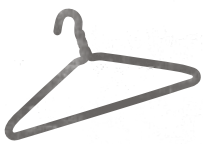
When going on an outdoor trip, there are some things you will need to take with you. Even here there are sustainable and not so sustainable choices.

EQUIPMENT

What is your equipment made of, and who made it? Materials matter, as well as the companies who make them; some of them have a good reputation of sustainable practices, and some not. Also, think twice before buying a piece of equipment that you know you are not going to use very often; maybe it is wiser (and cheaper!) to buy or rent it?

Regarding sustainable equipment, from snowboards to canoes, there are so many new, inspiring examples out there.

Check out more on:
http://greenoutdoorgear.wordpress.com



CLOTHING

They say that *„there is no such thing as bad weather, only bad clothing!"* Well, it might be true, and clothing can be bad in many ways: it might not suit your needs, it can be made of the wrong materials, it can be made by unsustainable companies, or it might just be of bad quality. The same goes for equipment: think before you buy. If you are going to wear a particular item only once in two years, maybe it's better to borrow or buy secondhand. And, when you are done using something you have, or have found a better option, pass it on to another great outdoors lover!

It's worth knowing the material your clothing is made of, and then decide if it will serve the purpose or not. There are synthetic materials and organic ones, and they all have different characteristics and purposes.

Here are some of the most common materials used in outdoor clothing:

- **Cotton:** Depending on where you live, cotton clothing can kill you. Cotton is hydrophilic, meaning it is not good at wicking wetness away from the skin, and can become damp just by being exposed to humidity. Once wet, cotton feels cold and can lose up to 90% of its insulating properties. Wet cotton can wick heat from your body 25 times faster than when it's dry. For warm weather though, cotton is perfect: it's light and dries quickly, and lets your skin breathe well.
- **Polypropylene:** This material doesn't absorb water – it is a hydrophobic. This makes it a great base layer, since it wicks moisture away from your body. The bad news is that polypropylene melts, so a spark from the campfire may melt holes in your clothing.
- **Wool:** Organic materials such as wool absorb moisture, but stay warmer than many other fabrics. Wool is also inherently flame retardant, and lets your skin breathe well.

CASE STUDY

RECYCLE OUTDOOR GEAR

Recycle Outdoor Gear (ROG) is a free of charge online service dedicated to helping everyone find a solution to the endless amounts of gently-used and unwanted outdoor clothing & equipment taking up space in cupboards, lofts and garages. *Recycle Outdoor Gear* (ROG) wants to help increase awareness and understanding of the recycling initiatives offered by charities that give your pre-loved outdoor clothing and equipment a second life.

www.recycleoutdoorgear.com

FLEECE DILEMMA

A polyester sweater may seem cosy and innocent on a winter day, but its disintegrating fibres could be bad news for marine environments.

Nearly 2,000 polyester fibres can float away, unseen, from a single fleece sweater in one wash cycle, a new study reports. That synthetic lint likely makes its way through sewage treatment systems and into oceans around the world. The consequences of this widespread pollution are still unclear, but environmental scientists say that the microscopic plastic fibres have the potential to harm marine life. Filter-feeding mussels will consume tiny plastic particles, which then enter the animals' bloodstreams and even their cells. Eventually, the plastic fibres could end up on our dinner plates.

You should consider putting away your fleeces and focus on sustainably produced fibres whenever possible.

FOOD AND WATER

If you are wondering what kind of food to take and cook outdoors, take a look at the food section of this book. It will give you an idea of what is sustainable food and what isn't. Of course, there are some specifics when it comes to keeping and cooking food outdoors, but generally the same principles apply: go local, go vegetarian, avoid lots of packaging. There are many edible things in the wilderness too, but be careful: make sure you know exactly what it is and how it should be prepared before eating it. Eating the wrong plant or mushroom can end with a severe poisoning or even death.

When you are doing something outdoors, remember to drink enough water. When we are moving actively, our body loses water much faster. Do some research on whether it is safe to drink water from the available natural water reservoirs beforehand. If it isn't, plan where and how you are going to get water ahead of time.

Here is a simple method used to purify water:

http://greenliving.nationalgeographic.com/use-solar-power-purify-water-3062.html

Read more about cooking outdoors, recipes and tips:

http://www.lovetheoutdoors.com

COMPENSATING FOR THE IMPACT

Even though we might do our best in order to ensure that our event is as sustainable as possible, inevitably there will be an impact on the local environment and community. If it is a large event, it is not only nature that gets affected; it is also people who are disturbed by noise, light, cars and strangers. It would be a good idea to think about giving back to the community, both to show your good will and to do some practical work wherever it is needed! Here are some ideas on what it could be, but don't stop here; find out what the local community needs, and invest in that!

PLANT TREES

Go to the local municipality or private forest owners, and find out if there is a spot where you and your friends could plant trees! Check if you can do it together with the local school and other local people. That will be a good way to connect with the community, share your stories, and find out theirs. Who knows, maybe you will gain some new friends and help for your next event!

DO A CLEAN-UP

Organized clean-ups usually happen in the spring and/or autumn. Find out if there is one you can join! It will definitely make an impression if on any given Saturday, 20 strangers come and clean up a long forgotten park or collect trash on the local beach!

Find out about the world clean up movement *"Let's Do It!"* and see if your country is part of it:

http://www.letsdoitworld.org

HELP TO MAINTAIN THE TERRITORY

There are many needs in many places, and the only way to find them out is to talk to the local community. Maybe they need new benches in the local park, a fence for the schoolyard, or help with installing a new playground for kids. Find out and become part of the effort!

If there is a way to sum up everything in this chapter, it is this: while outdoors and in nature, we are guests, so let's act that way! Being a good guest means respecting and honouring your host, avoiding mess and trouble, and knowing just the right time to leave. And, if you are a good guest, you are always welcomed back the next time.

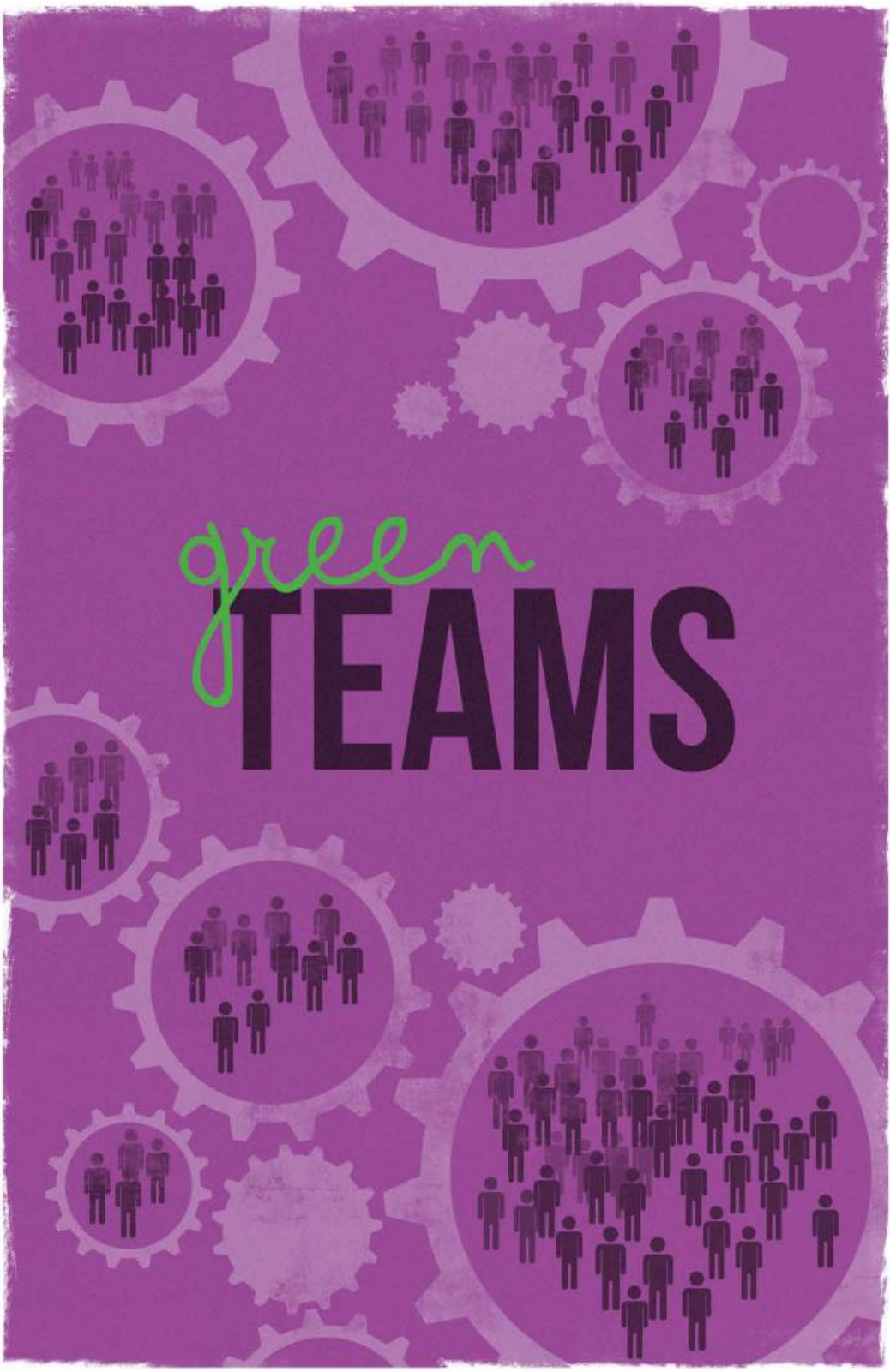
CASE STUDY

GIVE&GET OPEN AIR FESTIVAL

Give&Get Open Air Festival in Latvia is an educational event which hopes to entertain as well as inspire people in a natural outdoor context.. One of goals of *Give&Get* is to awake people to a sense that everyone has the opportunity to create and change whatever they want around them. The main event of the project is a 3-day festival in a park, where everyone who wants can take part in workshops, concerts, happenings, classes and performances. Everyone who comes is a participant and co-creator at the same time. Nature and environmental awareness are taken into account and promoted throughout the festival: only vegetarian food is served (there are no leftovers!), waste is recycled, and trash is cleaned up.

Throughout the year, both before and after the festival, organizers spend several weekends on the festival spot, volunteering for the local community and preparing the place for the hundreds of people to come. Trees are planted old grass and bushes are removed and the park is cleaned up, making it look as if the festival had never even taken place.

http://www.giveandget.lv



green TEAMS

Whether you are a team member or a team manager, dealing with employees or volunteers, there are some ways of making the workplace and teamwork more sustainable in terms of wellness, efficiency and enjoyment.

By creating spaces for meditation, mid-day naps, or yoga in workplaces, and changing the general style of management, many organisations and companies are acknowledging the importance of employee well-being and its impact on business success.

Working in an office often means being on someone else's schedule, dealing with all sorts of personalities and stressful situations, as well as sitting a lot in front of the computer. All of this can eventually shatter your nerves. There are ways to reduce the unhealthy characteristics of work and transform the workplace into a place of learning, laughter, and joyful teamwork.

You don't have to be a team leader or manager to bring more mindfulness into your work. You can inspire your co-workers and encourage the manager to introduce practices and a style of management that takes into account the well-being of all.

There are many factors, which make people happy team members. Some of them are:

- Friendly, supportive colleagues.
- Enjoyable, interesting work
- Good manager/coordinator
- Varied work
- Clarity of tasks and assignments
- Good planning and time management
- Belief that the work will make a meaningful contribution
- Transparency
- Good work/life balance

HERE ARE SOME TIPS FOR MINDFUL WORK:

(by Karen Maezen Miller)

1 BE ON TIME.

Self-discipline is the foundation of all success and the essence of self-respect. The habit of tardiness (and face it, it's a habit) is like deficit spending. It bankrupts your future and turns inconvenienced co-workers into your creditors. Set an alarm and become the master of your destiny.

2 CARE.

Many people think work is a distraction from life. They think it is a detour, hindrance or necessary evil. If you think this way, think again. When you are working, work is your life. Care for it as you care for yourself. Long ago, a Zen master taught, *"If you find one thing wearisome, you will find everything wearisome."*

3 MAKE A LIST.

Start each day with a list of things to do. Lists ease anxiety because they de-clutter your mind and help allay the fundamental fear of a multi-tasker: forgetting.

4 FORGET THE LIST.

Don't let the list prevent you from adapting to the flow of real events as they occur. Adaptation is innovation and innovation is genius. Prove yourself when and where it matters most. The unforeseen problem that walks in the door is your opportunity knocking.

5 FOCUS ATTENTIVELY TO THE TASK AT HAND.

What appears in front of you is the only thing there is. Respond appropriately as things arise, and crises will not overtake you. Big problems result from small oversights.

6 AVOID GOSSIP.

7 SMILE AND LAUGH.

It's contagious and reduces your waistline.

8 GIVE CREDIT.

No amount of money is enough. Be generous with your praise, courtesy and thanks. They will always be returned.

9 TAKE THE REST OF THE DAY OFF.

Do your work, and then set it down. When you are at work, work without guilt or distraction. When you are at home, remember why you call it home.

10 DO IT ALL OVER AGAIN.

Rise and shine. Take every chance to do it differently. Your illustrious future unfolds in the work you have before you right now.

Create a working space where people feel at ease, where their minds can think freely and bodies feel optimal. Create a space where people are willing to spend their time, 5 days a week, working for 8 hours and more.

- Fill your office with **air cleaning plants** that are local to your living area.
- Bring in as much **natural light** as possible by opening your blinds or using full-spectrum light bulbs that simulate sunlight.
- Improve **indoor air quality** (See the "Office" chapter for this)
- **Be pet-friendly.** Pets that are allowed to be together with their owner in the workplace prove to reduce stress, creating a more friendly and productive workplace for all. Make sure that there are no allergy sufferers though!
- Keep your office **clean and organized.** Chaotic and dirty work spaces may distract some team members.
- Make sure that the **office equipment** does not contribute to the severe deterioration of people's backs, eyes or does not create unnecessary tension in their bodies.
- Place **inspiring pictures and messages** on bulletin boards or art on the wall.
- **Hold a meeting** to explore the wildest ideas for office transformation.

HUMAN RESOURCES MANAGEMENT PRACTICES

What motivates people most is not constant pay raises, but appreciation, trust and working with responsible, respectful and collaborative colleagues.

Create an organisational system that will provide you with certainty, productivity and calmness throughout the workweek. These practices cultivate awareness and presence and reduce stress, all of which are essential for individual and collective growth and development.

Offer a fair payment and employment package.

Keep your mission central in the minds and hearts of your colleagues. Cultivate an understanding of what your organisation and work is standing for. People will show more commitment and be happy to do their work if they are sure that their work contributes to a noteworthy cause.

Make meetings enjoyable. Surely, by now you have attended many meetings that you would consider a *"waste of your precious time and resources"*. Create office meetings that give space for team members to be not only informed but also educated and inspired. Create an atmosphere in which people feel comfortable expressing their feelings, giving gratitude to others, and sharing ideas. Integrate some TED videos in your office meetings or bring in some organic chocolate chip cookies. Open the discussion on things that are essential for your team.

Express gratitude towards your team members; you will notice how the atmosphere changes and people brighten up when their work efforts are recognized.

Try **HAPPINESS COACHING** for your team. It is a (special) type of training that lets your team members develop positive thinking, the ability to shift their attention and make an effort to seek solutions, rather than focus on the problems. Here are some tips from happiness coaches:

- Express gratitude to your co-workers every day, thanking them for something they have done.
- Do something for somebody without expecting anything in return; random act of kindness towards your colleague might work.
- Write in a journal about things for which you are thankful. Look for traits you admire in other people and compliment them. Meditate daily to clear your mind.
- Exercise to keep your body healthy and your mind stable.
- Focus on what you can control, instead of concentrating on the things you cannot change.
- Don't immediately label events good or bad, but remain open to potentially positive outcomes of even the most seemingly negative events.

Offer mentoring and coaching. Frequent evaluation or check-in sessions will provide the possibility for team members to develop personally and professionally, evaluate their own progress and plan their future learning. It is a space to listen to their personal concerns and assist in resolving possible interpersonal conflicts.

Set aside a time to be spent together without work purposes. Create a tradition of cooking/going out for lunches together. Attend a samba drumming circle, sweat lodge, or a high ropes course together. Organize staff retreats where people can spend time with each other informally, give feedback, and generate ideas.

Take care of each other. Perhaps showing concern for your colleagues' current troubles would serve more good than your present efforts to save children in Africa. You will find that being kind to your colleagues is as important as being kind to your participants, clients, and distant stakeholders.

CASE STUDY

YEE
(YOUTH AND ENVIRONMENT EUROPE)

Every day YEE staff members alternate in preparing food for the whole team. They believe that this way of dining together is a more sustainable practice. It saves money, is healthier and more creative, and supports team spirit. This activity has become a very relaxing break during their daily workday. It takes approximately one hour for one person to prepare the lunch. Then they eat together for half an hour, relax and enjoy the food.

You can read their blog:

http://officecuisine.wordpress.com

GIFTS AND APPRECIATION

Show your appreciation for your team with gift items that encourage their green consumer behaviour or present services that lift their spirits, such as a stress relieving massage or a gift certificate for dinner in an organic restaurant.

If you want to give flowers, remember that flower production has become one of the planet's most pesticide and poison-intensive agricultural activities. Many flowers are brought via plane from warmer continents or grown using artificial heat and are doused with chemicals, which are toxic to humans and deplete the ozone layer. Protect growers, the environment and your colleague's nostrils by purchasing organic, fair trade flowers or growing your own.

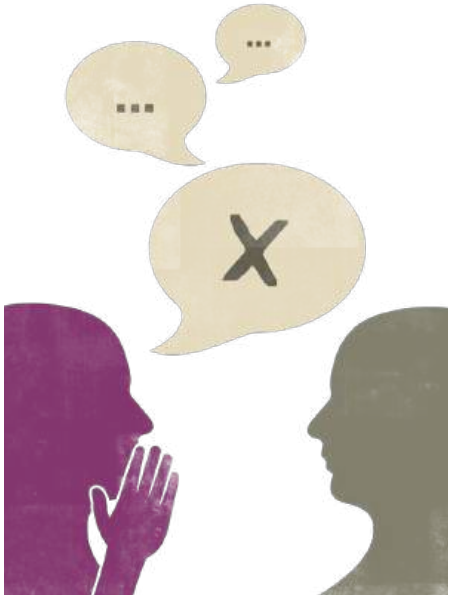
Those candles you usually put on a birthday cake are usually petroleum-based. Once lit, they emit toxins such as acetone, benzene, lead and mercury into the air. Choose beeswax and organic soy candles, they are toxin free and provide a healthier atmosphere.

- **Promote healthy behaviour** among your team members. Introduce yoga and stretching classes in your office or planned activity. Provide your team members with a personal benefit fund that entitles them to use certain amount of money for the gym, therapeutic massages, etc. Encourage the use of real world workouts, such as: taking the stairs (saves much energy used for the elevator), organizing and cleaning up the office, taking a break in the fresh air and doing some partner stretches to freshen the mind and body and reconnect with each other.
- **Allow occasional telecommuting** (see the "Mobility" chapter for more details). This way you will not only save on office costs, but you will also give your team members the possibility to choose the working space where they feel most comfortable (and can work in their pyjamas). Instant messaging, video conferencing, and other innovative workflow tools make effective telecommuting a reality. The benefits are astounding: no rush to get out the door, no commute headaches, better coffee/tea, a casual dress-code, better decor, no thermostat wars, and less office noise and gossip. It might be that team members are better off writing an inspiring project while sitting in the park under that big oak tree, rather than endlessly staring at the computer in the office.
- **Set flexible working hours.** Providing space for employees to be working on their own time, when they feel more inspired and capable, can greatly benefit the organisation and projects they are working on. You can also offer some people the possibility to work a consolidated workweek, such as four ten-hour days instead of five eight-hour days.

A study of 200 people carried out by the University of Bristol found that employees who exercised before work or at lunchtime improved their time and workload management. Exercise also boosted their motivation and their ability to deal with stress. The study also reported that workers who exercised felt their interpersonal performance was better; they took fewer breaks and found it easier to finish work on time. Sadly, the study didn't find a direct link between cycling and getting a promotion.

This cuts the energy and time spent on commuting by 20% and gives them some lovely three-day weekends.

- **Set a flexible workload.** Offer people the possibility to work on a full-time, 2/3 time and 1/2 time basis, thereby allowing them to combine family life, studies, and work.
- **Encourage green commuting** by offering compensation for public transportation monthly tickets, installing bike racks close to your working space and providing shower facilities to freshen up after a long bike ride. You will notice the extra bright minds and good moods people will bring with them in the morning after having had a workout.
- **Create a workplace, where you are free to make mistakes,** recognizing them as learning opportunities. There are many examples from history in which great projects have been born out of initial failures. And all that failure signifies is that we did not accomplish what we said we would, within the designated timeframe.
- **Treat the conflict as an opportunity** to grow, strengthen teamwork, and learn how to support each other. Try to keep conflicts small and resolvable by checking in with people about small misunderstandings, and discovering, appreciating, and learning from diverse perspectives and approaches.



- **Introduce a 'no gossip' policy** and keep your workplace drama-free. Most drama is rooted in the human need to feel connected, validated, acknowledged, and appreciated. When we examine situations and people from the outside, we create a story of what is happening through our own limited perception of the world. If you cannot resist making stories, why not make ones that are positive and beautiful rather than judgmental and confining. Changing your perception may change your life.

PRACTICE CLEARING!

"A clearing is something that each employee at *Cafe Gratitude* has the option (and is encouraged) to do before he or she begins each shift. The actual clearing itself is a 5-10 minute opportunity for an individual to check in with him or her, get centred, clear out any unwanted energy and set a beautiful intention for the day. Employees tend to do this in pairs of two and they lead each other through the clearing by listening to one another and providing support simply by holding space for the other person to be heard. When you have a room for your team members and their concerns without needing to change or fix them, they in turn are able to have room for customers and whatever challenges they might present. This practice does not take much time, because people can share without telling the whole story. The practice is about acknowledging what is occupying their thoughts, not recreating entire experience from their perspective.

We consider the clearing practice to be the most valuable of all our practices and the best use of our time and money, as well as a great investment in the quality of our employees' lives and the quality of service provided to our customers. Imagine being able to relate to whatever challenges you might face with your customers and clients without ever considering them to be "wrong". This experience in itself is completely transformational and at the core of our model of sacred commerce."

See more in the book "Sacred commerce"!

- **Be flexible with your set aims and agenda.** The success of many companies and organisations is defined by their ability to adapt to rapid changes that are happening in the world. If you have a 3-year plan that is not necessarily responding to the needs of your team and target group, change it. The change does not designate a lack of commitment. It shows your ability to do your work with the present people, for the present target group, and in the present moment in the best way you can.
- **Don't take yourself too seriously.** Look at the big picture. Would you worry about this issue in 5-10 years' time? If not, is it really worth it to worry about it now, wasting your precious time?
- One of the mood killers in NGOs is the constant worry about the scarcity of financial resources. Yet such an attitude encourages your team **to work out of fear,** rather than out of belief that what they do is important. If you lead your team with the belief that everything is possible and that the process. is as important as the result, then you will spur creativity and commitment, as people will work with their hearts and best efforts.
- **Cooperate, don't compete,** with other NGOs doing similar and different things. There is no need to divide the 'market' for doing good. It is important to recognize that if we join our efforts, skills and talents, we will be able to face the challenges that trouble the world and bring about positive solutions, coming from diverse perspectives but all committed to the common good. By supporting each other you make the force to bring about change in the world more powerful.

"LABORA EST ORA"

"Let work be your prayer"

/St.Benedict/

APPENDIX

CLEANING UP BROKEN BULBS

1. BEFORE CLEANUP

- Have people and pets leave the room.
- Air out the room for 5-10 minutes by opening a window or door to the outdoor environment.
- Shut off the central forced air heating/air-conditioning (H&AC) system, if you have one.
- Collect materials needed to clean up broken bulbs (stiff paper or cardboard, sticky tape, damp paper towels or disposable wet wipes (for hard surfaces), a glass jar with a metal lid or a sealable plastic bag)

2. DURING CLEANUP

- DO NOT VACUUM! It could spread mercury-containing powder or mercury vapor.
- Be thorough in collecting broken glass and visible powder.
- Place cleanup materials in a sealable container.

3. AFTER CLEANUP

- Promptly place all bulb debris and cleanup materials outdoors in a trash container or protected area until materials can be disposed of properly. Avoid leaving any bulb fragments or cleanup materials indoors.
- For several hours, continue to air out the room where the bulb was broken and leave the H&AC system shut off.

When LED lamps break, *Oladele Ogunseitan* recommends residents to sweep them up with a special broom while wearing gloves and a mask.

Source: US EPA

7 EASY STEPS TO START YOUR OWN COMPOST:

1. FIND THE RIGHT SPOT

The best spot for your compost bin is a sunny place on pure soil. In case you need to put it, for instance, on concrete, put a layer of newspaper or existing compost under it.

2. ADD THE RIGHT ELEMENTS

Use any kind of box for collecting the compostable waste, including: vegetable and fruit peels, coffee, tea-bags, paper and carton, egg shells, fruit stones. It is disputed whether meat and cooked food is compostable.

3. FILL IT UP

Use a 50/50 mix of kitchen and garden waste to get the perfect mix for your compost.

4. WAIT AND ENJOY

Now it is the task of nature to work. Wait for 6 – 12 months, until your compost is ready. In the meantime, add new ingredients on the top.

5. READY, STEADY, GO

Your compost is ready once it looks like a crumbling, dark material that smells like earth.

6. REMOVING THE COMPOST

Open or raise the bin carefully and take out the compost with a garden fork.

7. USE IT

It will never look perfect and don't worry if you still see some leftovers; that is totally normal. Keep in mind these four tips for using the compost:

- The best time of year is spring or fall
- Fill a few centimeters into a new bed
- Add less than 1cm on top of the soil each year after that
- Use 1/3 compost in your potting mix

Source: http://www.recyclenow.com

SUSTAINABLE DESIGN CHECKLIST

Keep your projects green by using this handy checklist to audit your decisions throughout the design process. The goal is to get as many checkmarks as possible.

STRATEGY

- ☐ Best serves the client's needs
- ☐ Employs an effective message
- ☐ Fulfills the objectives
- ☐ Serves multiple purposes
- ☐ Doesn't require subsequent or parallel efforts to support it
- ☐ Has limited environmental impact throughout its lifecycle

EXECUTION

- ☐ Will unlikely benefit from additional strategy
- ☐ Uses the most appropriate format
- ☐ Maximizes space on the press sheet
- ☐ Uses of recycled materials
- ☐ Is easy to recycle
- ☐ Considered paperless options
- ☐ Uses as few materials as possible
- ☐ Raises awareness by displaying environmental specs
- ☐ Limits ink coverage and areas of solid colour
- ☐ Maximizes shelf life
- ☐ Can be proofed on screen
- ☐ Uses die-cuts or embossing rather than an additional ink
- ☐ Combines many components for maximum efficiency

PRODUCTION

- ☐ Is on target with our print quantities
- ☐ Uses local vendors and sourcing local materials
- ☐ Minimizes transport and shipping
- ☐ Uses vendors that use renewable energy

PRINTER

- ☐ Can proof on screen
- ☐ Doesn't require film; it can go from digital to plate
- ☐ Utilizes an environmental management system
- ☐ Manages its waste responsibly
- ☐ Has environmental certification

PAPER

- ☐ Is smaller and lighter
- ☐ Contains post consumer waste fibre (PCW)
- ☐ Is recycled
- ☐ Uses tree-free fibres such as kenaf, hemp, and bamboo
- ☐ Was produced with renewable energy (Green e-certification)
- ☐ Is FSC-certified
- ☐ Was processed chlorine free (PCF)

PACKAGING

- ☐ Eliminates adhesives by using an alternative binding or tabs
- ☐ Avoids labels by printing directly on the packaging surface
- ☐ Does not require secondary and tertiary containers
- ☐ Minimizes the gauge of the materials
- ☐ Is robust, reducing the amount of protective materials
- ☐ Is refillable
- ☐ Nest and stack well for efficient transport
- ☐ Does not contain toxic substances such as PVC

INKS

- ☐ Are not specialty metallic or fluorescent inks
- ☐ Are vegetable or soy-based inks
- ☐ Do not require a protective surface coating

POST PRESS

- ☐ Avoids solvent-based adhesives in the bindings and labels
- ☐ Limits use of staples
- ☐ Avoids foilstamping, thermography, and lamination

DISTRIBUTION

- ☐ Has mailing lists that are up to date
- ☐ Accurately targets our audience
- ☐ Avoids shipping by air
- ☐ Avoid use of labels by printing addresses directly on the piece

END-OF-USEFUL LIFE

- ☐ Can be recycled
- ☐ Can be reused
- ☐ Minimizes the de-inking process
- ☐ Is biodegradable

So, how did you do? Can anything be done about the unchecked boxes? For more information on sustainable graphic design, visit: *www.designcanchange.org*

ECOLABELS

EU ECOLABEL

The EU Ecolabel supports the recognition of products and services that have a low environmental impact throughout their life cycle, from the extraction of the raw material to its manufacture, usage and removal. The EU Ecolabel is a voluntary label promoting environmental excellence.

http://ec.europa.eu/environment/ecolabel

EU ORGANIC FARMING

This label offers consumers certainty about the origins and quality of the food and drinks they buy. All products labelled with this logo come from organic farms that comply with the EU Organic farming regulation. Since July 2012 all organic pre-packed food in the EU must have this logo.

http://ec.europa.eu/agriculture/organic

GREEN DOT

The green dot can be seen on products whose producers contribute to a recycling programme of similar commodities in the country of production. Nowadays the network PRO EUROPE is coordinating and helping 35 national producer responsibility systems.

http://pro-e.org

CSR TOURISM CERTIFIED

The non-profit-organisation Tourcert awards this label to sustainable tourism enterprises. It is the primary certification system for corporate social responsibility in the field of tourism and covers environmental, social and economic issues.

Tip: You can also download a label guide on sustainable tourism that was created by *Naturefriends International* in 2012.

http://tourcert.org; www.nfi.at

ENERGY STAR

The Energy Star labels energy efficient office equipment and gives the consumer assistance in choosing the best product. On the website mentioned below you can find a database of labelled products and more information about the label.

http://www.eu-energystar.org

BLUE ANGEL

The oldest ecolabel in the world is the German "Blue Angel." It was created in 1978 and awards products and services with environmentally friendly behaviour. Today, it is known in many countries and has a good reputation.

http://www.blauer-engel.de

EMAS

The EU Eco-Management and Audit Scheme (EMAS) is a management tool for companies and other organisations to evaluate, report and improve their environmental performance. The scheme has been available for participation by companies since 1995.

ISO 14001:2004 – ENVIRONMENTAL MANAGEMENT

The ISO 14000 family addresses various aspects of environmental management. It provides practical tools for companies and organisations looking to identify and control their environmental impact and constantly improve their environmental performance. ISO 14001:2004 and ISO 14004:2004 focus on environmental management systems. The other standards in the family focus on specific environmental aspects such as life cycle analysis, communication and auditing.

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ORGANISATIONS

INTERNATIONAL YOUNG NATUREFRIENDS (IYNF)

is an international organisation bringing together Young Naturefriends and their organisations from across Europe. It was established in 1975 and currently has 19 member organisations. With more than 120,000 young members organised in over a thousand local groups, it is one of the major European youth organisations.

"HOMO ECOS:"

is an environmental organisation with a mission to create a social movement that supports environmentally friendly ideas and puts them into practice through everyday actions and long-term decisions.

WORLD STUDENT CHRISTIAN FEDERATION OF EUROPE

is part of a global federation of grassroots Student Christian Movements. They are committed to dialogue, ecumenism, social justice and peace.