

Life Connection

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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.

Life Connection promotes young people's social inclusion and well-being by involving young people with fewer opportunities (unemployed young people, young people belonging to disadvantaged social strata or coming from rural isolated areas) and by introducing them to the universe of active citizenship and democratic participation. At the same time LC tackles the issue of youth unemployment by helping the participants to develop basic and transversal skills, such as entrepreneurship, digital skills and multilingualism, through innovative learner-centered pedaLogical approaches and certification methods based on learning outcomes.

The aim is to promote a new model of society in which environment is conceived and experienced as part of the community universe and not as a external element that needs to be dominated.

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.

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.

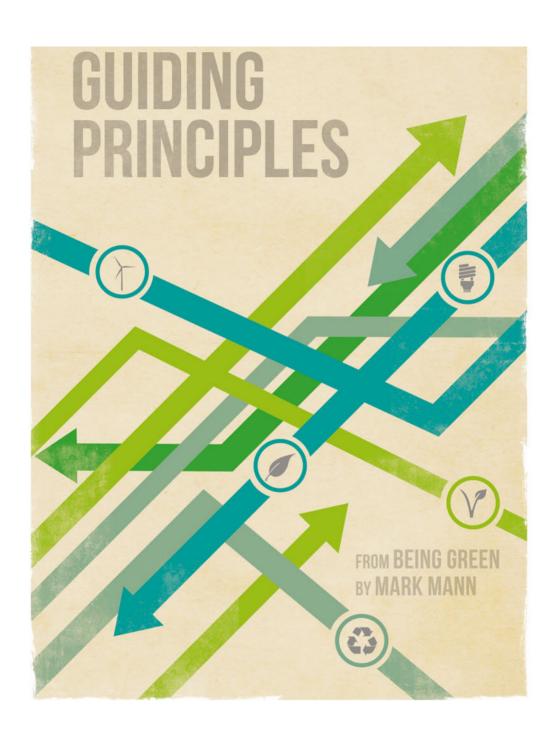
If you have any suggestions, make sure to contact us! We'd like to hear from you!





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#### 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.



**REDUCE THE IMPACT:**Reduce the consumption of energy, water, chemicals and create less waste.





#### **USF GREEN ALTERNATIVES:**

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





#### **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.

#### BFING HFAITHIFR

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 parttime, that's far better than doing nothing.

#### I FARNING 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.

#### BFING 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  $\mathrm{CO}_2$ , 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  $\mathrm{CO}_2$ . (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 m² reduces your paper consumption by 14%, while moving from 100 to 80 grams per m² 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 <u>electronic versions</u> 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.

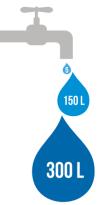


- Using the size reduction feature, two pages of a book or periodical can often be copied onto one standard sheet
- Use the 'Print Selection' function, to avoid printing pages you actually don't need.
- According to *Microsoft*, Times New Roman and **Arial** are some of the most efficient fonts, for 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.
- Get online subscriptions to newspapers and magazines. If you must have hard copies, get one for the whole office and share

- 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 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.



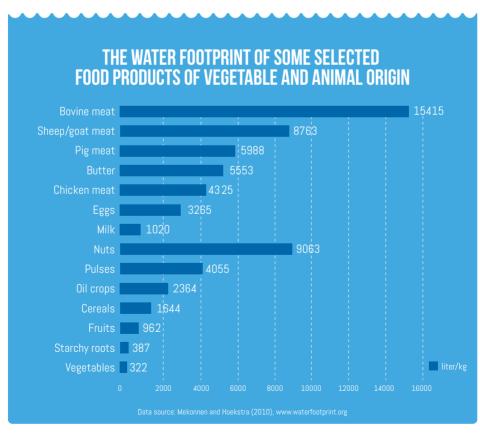
## HOW TO REDUCE YOUR WATER FOOTPRINT





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 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: imaginealIthewater.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.



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 mainte-

nance). (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.

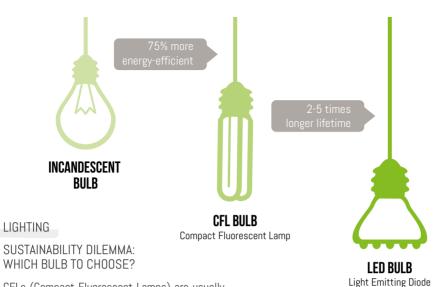
- → Boil a full kettle of water and put it in the thermos to avoid the constant reheating of water each time you make your hot beverage.
- → Take the stairs instead of the elevator.

## CLIMATE SAVERS COMPUTING INITIATIVE RECOMMENDS THE FOLLOWING POWER MANAGEMENT SETTINGS:

- ↑ 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.



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.





#### 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 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 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 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.

#### **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.

## **CLEANING PRODUCTS**

#### 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...

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

#### THINK LOCAL:

shop locally to reduce your travel, and buy locallyproduced goods to reduce freight transport.

#### MINIMIZE THE IMPACT ON THE **ENVIRONMENT**

by buying green products; this way you also help the green retailers grow.

#### RIIY RECYCLED **PRODUCTS**

to complete the recycling loop.



#### BUY SECOND-HAND:

from charity shops, local classifieds. car-boot/jumble sales, online auctions, police auctions.

#### 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.



Before you go shopping for office



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.



#### SHOP ONLINE:

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

#### **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 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 doublesided 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.



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

# PUBLI CATIN

ON



# 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 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.



(h) Look more on www.fsc.org



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



#### **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 vovo 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 vou 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.

- Cotton is often farmed unsustainably, with disastrous effects on the environment and human rights abuses. The alternative is buving 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 and preoxygen, vents 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

#### 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:

#### RECYCLABLE

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.

#### RELISED 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

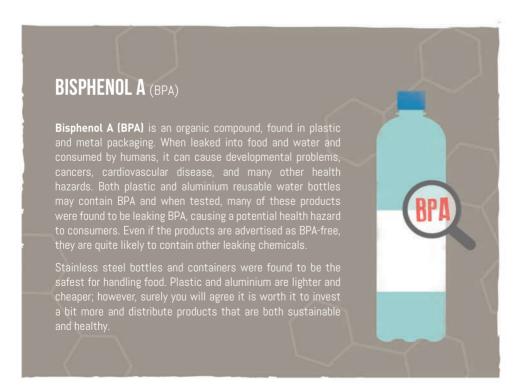
UPCYCLING

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 dif-

ferent 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.







## 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.

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.

using toxic pesticides.

#### **CASE STUDY**

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 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.



## 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<sub>2</sub> 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 ecofriendly 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<sub>2</sub>. 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 guestion 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

#### 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."

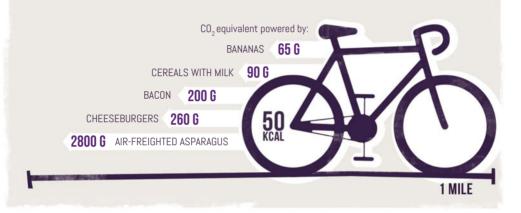
It is hard to guess which incentive was the strongest, but indeed there was one participant who rode a bike for 300 kilometres and arrived to the venue safely and satisfied.

every weekday over the whole year. Therefore it is important to minimize your impact as much as possible.



#### 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  $\mathrm{CO}_2$  heavy diet you might 'emit' as much gasses as two people driving a car. The list below shows how much  $\mathrm{CO}_2$  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 bikeand-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.



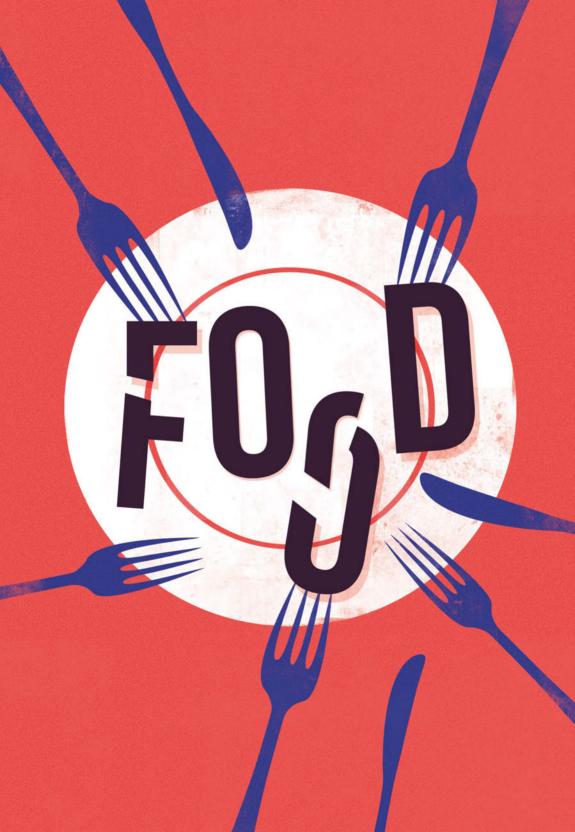
#### **FUNDING FOR GREENING**

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



#### **VEGETARIAN**

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,

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.

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.





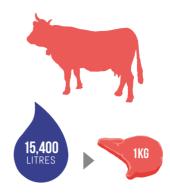


WATER



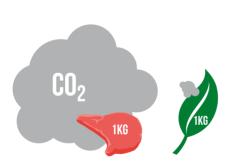
SERVICING THE FARMHOUSE

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 CO2 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 CO2 MORE in EMISSIONS PER YEAR than a diet based on food from **PLANT SOURCES**. In CO<sub>2</sub> 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.



#### 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  $\mathrm{CO}_2$  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.

## YOU CARE FOR HEALTH OF YOUR COLL FAGUES 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.



#### **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 longdistance 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.

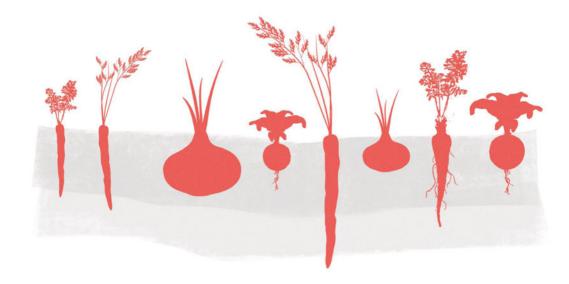
- → bake a delicious "100% local" cake and distribute it in your office building. Make sure that your guests understand the importance of supporting local produce before they get a piece!
- during a longer activity, explain your food choices to the participants. Many people are used to a wide variety of foods all yearround 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 international move-Slow Food® founded tη ment 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

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.

about their activities.



#### 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 reiseproviant.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-awav.
- → 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



- → 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

→ 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 vour next event - vou 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 <u>not</u> 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.

#### **OUIT 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 carhon 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 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.

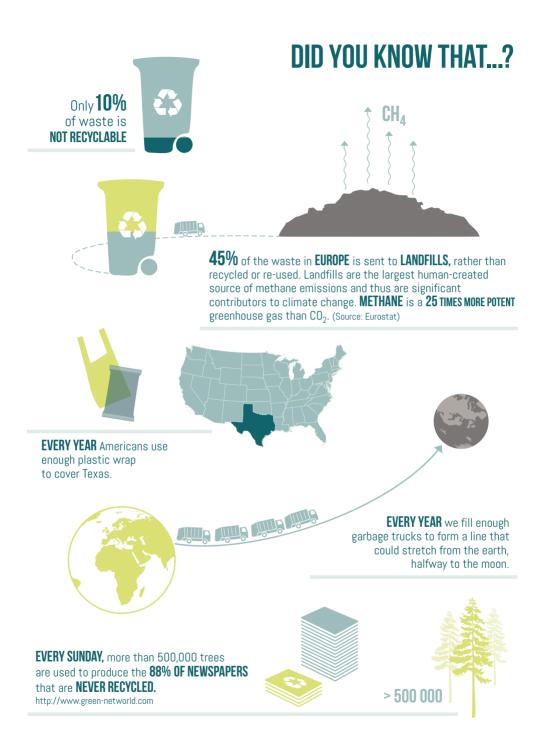
Bottled water globally generates **1.5 MILLION TONS** of plastic waste each year.
That's the weight of **150 EIFFEL TOWERS.** 











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'sīkəl| 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!



#### F-WASTF

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.

#### 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.





### **FREECYCLING**

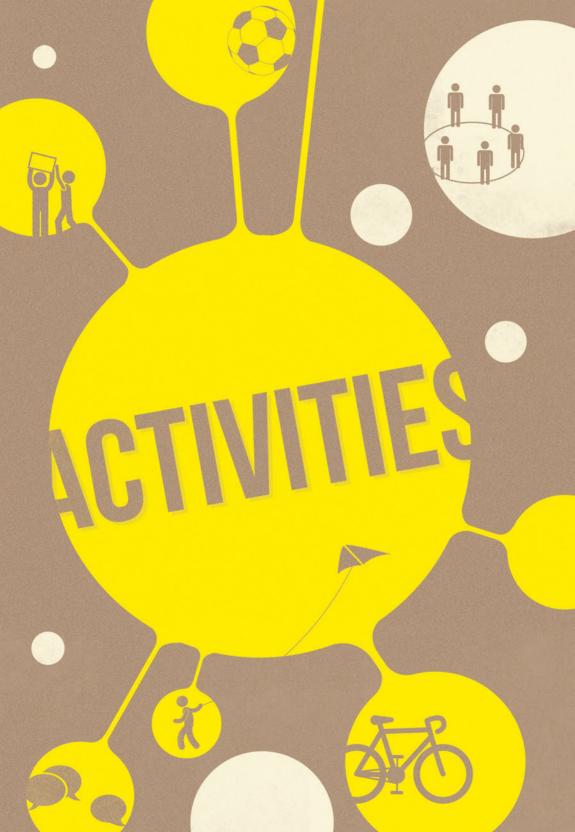
... is an initiative about giving and getting things for free in your local community. It is a non-profit network made up of more than 5 000 groups and more than 9 million individual members. It is all about recycling, exchanging, reusing and cleaning up the planet by avoiding to throw away things, that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



To find your own local group, visit:



http://www.freecycle.org



#### MORE THAN HIST 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.



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:



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



TRIP

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.

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.

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):



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

http://www.upcvclethat.com





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.



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.



A GOOD DEED

**EXPERT LECTURE ON** SIISTAINARII ITV

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.



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:



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



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.





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:



<sup>lh</sup>ı http://www.worldmapper.org http://www.gapminder.org http://www.wagggsworld.org http://www.ifm-sei.org http://www.esdtoolkit.org

## 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.

	RATEGY		Was produced with renewable energy
	Best serves the client's needs Employs an effective message Fulfills the objectives		(Green e-certification) Is FSC-certified Was processed chlorine free (PCF)
	Serves multiple purposes Doesn't require subsequent or parallel efforts to support it		<b>CKAGING</b> Eliminates adhesives by using an alternative
	Has limited environmental impact throughout its lifecycle		binding or tabs  Avoids labels by printing directly on the packaging surface
	ECUTION		Does not require secondary and tertiary
	Will unlikely benefit from additional strategy Uses the most appropriate format Maximizes space on the press sheet Uses of recycled materials		containers Minimizes the gauge of the materials Is robust, reducing the amount of protective materials
	Is easy to recycle Considered paperless options Uses as few materials as possible Raises awareness by displaying environmental		Is refillable Nest and stack well for efficient transport Does not contain toxic substances such as PVC
	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		Are not specialty metallic or fluorescent inks
	additional ink	POS	ST PRESS
	Combines many components for maximum efficiency		Avoids solvent-based adhesives in the binding and labels
	DDUCTION  Is on target with our print quantities  Uses local vendors and sourcing local materials		Limits use of staples Avoids foilstamping, thermography, and lamination
	Minimizes transport and shipping	DIS	TRIBUTION
	Uses vendors that use renewable energy		Has mailing lists that are up to date
	NTER		Accurately targets our audience Avoids shipping by air
	Can proof on screen  Doesn't require film; it can go from digital to plate		Avoid simpling by all Avoid use of labels by printing addresses directly on the piece
	Utilizes an environmental management system Manages its waste responsibly Has environmental certification		<b>D-OF-USEFUL LIFE</b> Can be recycled  Can be reused
PAF	PER		Minimizes the de-inking process
	Is smaller and lighter		Is biodegradable
	Contains post consumer waste fibre (PCW) Is recycled Uses tree-free fibres such as kenaf, hemp, and bamboo	the sus	how did you do? Can anything be done about unchecked boxes? For more information on stainable graphic design, visit: ww.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

#### FII 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

#### **GRFFN 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

#### RI IIF ANGFI

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



#### **FMAS**

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.



Life Connection