# Buying

### Self-awareness is the first step to becoming a good consumer

Five thousand francs is the average amount Swiss households spend every month on accommodation, food, transport and leisure activities. One might think that this makes us specialists in the art of buying. However, in reality we are not always aware of the true reasons behind our purchases. Below are some of our, for the most part subconscious, motives. Prospective "sustainable" consumers, take heed!

### "This

Security

"This purchase makes me feel secure; I feel reassured that I acquired this object, in case I might need it."

### Hedonism

"I decided to buy this just for myself; the only reason for this purchase was to give myself a treat."

### Power and seduction

"This purchase will increase my power over others and strengthen my social status."

**Spirituality** 

"Because I bought this

product or service my life

is more worthwhile and

has become meaningful."

### Need to conform

"This purchase will make me feel more secure, more fashionable; it will help me to look like my friends or colleagues."

### Freedom

"This purchase shows that I am a free spirit and an original; I alone, and nobody else, decided to spend this money."

### Looking for a challenge

"I love discovering new things, I want to be a pioneer, I want to master new technology."

### **Complex motives**

Most economists believe that consumers are free to buy what they want and that they make rational choices. However, our decisions are often based on incomplete or biased information. It would therefore be more accurate to say that our buying habits, however rational they may be, are also influenced by advertising, social and cultural norms and by deeply rooted, subconscious motives.

### The tricks of marketing

Marketing experts worked out a long time ago how to exploit, or even to generate, desires, dreams, fears and wants. In particular, they know that people who do not feel good about themselves are excellent potential consumers since they will be willing to acquire a good or service just to feel more secure or less frustrated, or for the simple pleasure of buying something. Sales, limited editions, discounts and bonus cards are merely ways of making consumers think they are saving money when in fact they are busy spending it. All these marketing strategies contribute to overconsumption, which is incompatible with sustainable development.

### The omnipresence of advertising

Advertising is everywhere: on radio, on television, in newspapers and magazines, on the Internet, at the cinema (often contained in scenes of the main film), in the street, in stadiums, at shops, in train stations, on buses, and on the clothes which transform many people into walking bill-boards. In the West, every person is subjected to an estimated 2,500 advertising messages a day. A study carried out in the Lausanne area showed that every year households receive an average of 27 kg printed "junk mail" advertising in their letterboxes.

### To find out more

#### www.edu.ge.ch/co/critic/welcome.html

A site for the Swiss public school system's *cycle d'orientation* devoted to media education and to helping young people develop a critical attitude towards information.

#### www.bvp.org

A French association working to promote responsible advertising.

#### www.youwatchit.net (also in English)

Aims to teach people of all ages how to read some of the more common advertising images.

### Recommended reading

D. Darpy and P. Volle, *Comportements du consommateur*, Dunod, 2003.

Naomi Klein, No Logo: Taking Aim at the Brand Bullies, Knopf Canada, 1999.

Viviane Mahler, Ados, comment on vous manipule, Albin Michel, 2004.

François Brune, *De l'idéologie, aujourd'hu*i, Parangon, 2004.

### **Decoding marketing messages**

The invasion of our lives by advertising and publicity has lead a number of associations (see under "To find out more") to denounce the strategies employed by marketing experts. Some of their most common criticisms relate to:

- the idealization of a lifestyle based on materialism, individualism and competition
- sexism and the systematic exploitation of sexual impulses
- the harmful effects on public health (alcoholism, smoking, obesity)
- the fact that people are encouraged to borrow beyond their means
- the encouragement of unsocial behaviour which is dangerous for humans and the environment
- visual pollution and degradation of the landscape.



### To buy sustainably ...

### Identify your motives

What need(s) is this purchase trying to meet? (see front of sheet)

### Get information about the product

Find out about: its price, quality, brand, properties and country of origin, the materials used to make it and the conditions under which it was manufactured, and its effects on human health and the environment.

### **Consider** alternatives

Can you find a better product elsewhere? Is there a substitute? Is there an alternative that is less harmful to the environment or human health? Has it been awarded a certified label?

It is often very tempting to choose the least expensive item. However, a higher price may be justified if the object of your desire is better made or more practical, consumes less energy or promotes employment in your region.

# Shopping – where and how Infosheet n°2

### Breaking old habits

Making your purchases in accordance with the principles of sustainable development means not only choosing products and services with care, but also thinking about where you buy. Your choice of outlet and the way in which you get there have consequences, such as an increase in car traffic or the disappearance of local stores, to which few people give any thought.



### Only by car

When hypermarkets, fun parks and multiplex cinemas are situated on the edge of town and not well connected by public transport they generate an ever-growing amount of traffic. Access roads and vast parking lots often take up a huge amount of space.

### Buying directly from the producer

In Geneva it is possible to buy directly from producers. If possible, make the trip to a farmer when there is also another reason for heading out into the countryside, so as to ensure that your endeavour is as environmentally friendly as possible.

#### www.terre-avenir.ch

### A more dynamic neighbourhood

Going shopping in your neighbourhood is good for your health and for the earth because you are going on foot. Although prices are sometimes higher, this is made up for by the fact that transport is free and you can save time and get to know people around you better. Neighbourhood shops are essential for the elderly and anyone whose mobility is impaired.

### **Specialty stores**

Fair trade shops, health food stores and similar outlets encourage sustainable consumption.

### Recycling

Take advantage of a shopping trip to take recyclable items to the recycling containers.

h Y d

### Everything under one roof

If you go to a shopping centre, getting there on foot or by bicycle or public transport will lessen some of the centre's negative impacts on the neighbourhood. The fact that many stores are situated under one roof can help avoid unnecessary shopping trips.

### At the market

Farmers' markets are social events. However, some stalls only engage in retail selling of products purchased wholesale, which are not necessarily grown or made locally. Look for stands selling fresh, seasonal produce grown in the region.

### Home shopping

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Many things can be bought on the Internet or by mail-order, especially directly from small producers. This way of shopping is becoming increasingly popular and some times makes it possible to take advantage of centralized transport arrangements. The benefits and disadvantages of home shopping should be assessed on a case-by-case basis (see overleaf).

### Half of all shopping trips involve car travel



In Geneva, 20% of all journeys are made in order to go shopping. Half of these involve the use of the car, which contributes to air pollution and global warming (emission of  $CO_2$ , a greenhouse gas) and increases noise pollution.

### More traffic, fewer shops

The trend towards supermarkets and shopping centres is contributing to the disappearance of small neighbourhood stores. Despite an increase in the population, the number of retailers in Switzerland decreased by almost 10% between 1985 and 2001. As neighbourhood shops disappear, we have to travel further to do our shopping and this in turn increases car traffic volumes. Local jobs are lost and the people living in the different parts of town become increasingly removed from each other as they stop meeting spontaneously in local shops and in the street.

### Big retailers: the pros and cons

Big retailers also have advantages. Their prices are lower, owing to fewer middlemen and the ability to buy vast quantities. In the fruit and vegetable section, for example, produce is usually fresh, of high quality and, in many cases, meets the standards of various certified labels. Some shopping centers built next to neighbourhoods consisting of high-rise apartment buildings serve as "village squares" and host shows, exhibits and other events.



### Plastic bags: stop the waste

Plastic bags generally end their (short) life in the refuse bin, and from there move to a waste incineration plant. So why not aim to do without them and arrive at the shop with everything you need to take your purchases home with you, for example cloth or paper bags, baskets or shopping trolleys.



### To find out more

### www.tpg.ch

The site of Transports public genevois, the Geneva public transport company, showing all bus routes and timetables.

#### Les saveurs de la Ferme

Promotes Geneva wine and produce and sells locally produced food.

Cours de Rive 20, tel. 022 786 20 40

### www.mdm.ch

Magasins du Monde, handcrafts and some fair-trade food items.

There are three stores in Geneva: bd Carl-Vogt 7; rue de Villereuse 2; rue des Grottes 9.

### www.miam-miam.ch

Direct sale of organic produce from French-speaking Switzerland.

### www.cocagne.ch

A cooperative garden and a good way of getting involved in growing your own food.



### Signing an agreement directly with the producer

One possibility for anyone wishing to promote local agriculture and buy fresh seasonal produce at reasonable prices is to participate in a scheme called L'Affaire Tourne-Rêve, as part of which buyers enter into a direct agreement with a producer in Geneva. Customers agree to pay a fixed sum of money for the farming of a given surface area of agricultural land and in return receive a range of local produce, depending on the actual harvest. Products include sunflower and canola oil, spelt (a grain), lentils, potatoes, apples, apple juice and honev.

For more information contact: AgriGenève Rue des Sablières 15 1217 Meyrin Tel: 022 939 03 10 www.terre-avenir.ch

# Fruit & Vegetables

### Infosheet n°3

### Choose fresh, local and seasonal produce

Fruit and vegetables are the basis of a balanced diet. To reconcile health with sustainability, pay attention to the provenance, production methods and environmental impact of the packaging and transport of the fruit and vegetables you buy. Wherever possible, choose produce with a label that quarantees that it is both eco-friendly and produced under decent working conditions.

### Local produce

Choosing regional and seasonal fruit and vegetables, that is to say, produce cultivated during its natural growing season, supports local jobs and limits pollution due to artificial heating and transport. Grown out of doors and picked when ripe, fruit and vegetables taste better and are more nutritious. Labelling must clearly mention the provenance.

### Fairly traded products from exotic places

When buying fair-trade produce (bearing labels such as Claro, Max Havelaar, TerrEspoir, etc.), you know the small farmers who grew the fruit and vegetables were given a fair price for their goods and were spared the effects of price fluctuations on the global market.

### Out-of-season produce

Asparagus on offer in local shops in the middle of winter has certainly been flown in. Bear in mind that air transport significantly contributes to global warming and noise pollution.

Excess packaging



ly packaged. Multiple layers of wrapping greatly contribute to the huge quantities of waste we generate. It is therefore preferable to choose produce that is sold in crates or to bring your own shopping basket or bag.

Some fruit and vegetables only travel well when very careful-

### Biodiversity

A number of local varieties are on the brink of extinction. To generate a demand for these varieties and to continue to be able to enjoy a wide range of flavours, look out for them in supermarkets and farmer's markets. More often than not they have been grown in an ecofriendly way. www.psrara.org

### Organic produce

Organically grown fruit and vegetables contain fewer pesticide residues and nitrates. Conversely, they contain more health-promoting elements like polyphenols.



To find out more about labels see Appendix A "Labels" or go to www.wwf.ch/label

### Fruit & Vegetables

### An asset to your health

Fruit and vegetables should be the cornerstones of our diet. Doctors recommend we eat five portions of fruit and vegetables a day (one portion is about a handful, or 120g), in order to help reduce the risk of developing cardio-vascular diseases, infections and cancer.

### Local produce first

Grown where they are eaten, locally produced fruit and vegetables are picked when they are ripe, and full of flavour and vitamins. Conversely, fruit and vegetables that have to travel long distances are picked long before they are ripe to withstand long journeys by ship or truck. If they have travelled by air, the negative impact on the climate is even greater.

### **Biodiversity at risk**

The need to offer fruit and vegetables that keep easily encourages farmers to grow a limited number of varieties: this practice adversely affects biodiversity. Yield, appearance and ability to withstand travel are the key criteria; flavour and the environmental considerations are frequently ignored or take second place.

### Food self-sufficiency

Food self-sufficiency is the capacity to produce enough food to meet the needs of the population. A community that maintains a wide range of crops also keeps its options open in terms of food choice. Agricultural self-sufficiency also promotes local jobs, influences the future of the landscape, and ensures better control over the quality and traceability of food because local produce is easier to monitor all along the production line.

### Compost

Fruit and vegetable peelings do not belong in the ordinary household waste. Organic refuse does not burn easily since 90% of it is water. It is best put into a compost bin (collection sites are available in many parts of Geneva) so as to be composted and used to improve soil fertility and reduce peat extraction.

### Recipe: cardoon with marrow

Choose a large and freshly cut épineux de Plainpalais cardoon (400g per person). Peel off the outer skin and remove the thorns from the ribs, wash and cut them into 2-inch-long pieces (some producers offer ready to cook cardoons as preparing them is a laborious task). Blanch them for 10 minutes in 2 parts water to 1 part milk and the juice of half a lemon and then strain. Arrange thin slices of marrow in an oven-proof dish, add the cardoons and moisten with beef stock to cover the vegetables; season with salt and pepper and sprinkle with chopped parsley. Bake at 200° for an hour or more.

### Gourmet treats from the Geneva area

Local market gardeners cultivate more than 200 hectares of land (including 48 hectares under polytunnels and greenhouses) and offer more than a hundred different vegetables, including the famous cardon épineux genevois, or cardoon, which belongs to the artichoke family, but is cooked like chard (see the recipe below). The food label Genève Région – Terre Avenir indicates that food was grown in the area around Geneva, by agricultural workers enjoying decent conditions of work.

### While on the subject of fuel...

A locally grown **cucumber** bought in summer (at the height of its natural growing season) and cultivated in an open field requires all of 0.3 litres of fuel along the entire production and transport line, while a cucumber bought in February and grown in a hothouse some 1,000 km away from where it is bought requires 1.1 litres of fuel.



**One kilogram of** local **strawberries** bought in May, June or July (the natural growing season) requires 0.2 litres of fuel. Grown overseas and flown in to be sold in our stores in March, the same quantity of strawberries necessitates 4.9 litres of fuel (25 times more

### than the local ones).

### To find out more

#### www.terre-avenir.ch

The site of the Geneva agricultural community.

#### www.wwf.ch

Look under Consommation/alimentation to find out which fruit and vegetables are in season.

#### www.legumes.ch All there is to know about vegetables.

#### Books

Genève terre à terre - Guide de la campagne genevoise, AgriGenève and DIAE; to obtain a copy call tel. 022 884 91 50 Festins et délices genevois, Les Fumets du terroir genevois, Jean Lamotte, Slatkine, 2001.



Cardoons were brought to the Geneva area in 1685 by Protestants fleeing persecution. They grew them in Plainpalais. Traditionally the long white ribs are eaten in November and December and are often on Escalade, Christmas and New Year party menus. The cardon épineux genevois is the first Swiss vegetable to have obtained an AOC or appellation d'origine contrôlée (guarantee of origin).

Source: Union des maraîchers de Genève; recipe by the chef Laurent Garrigues, published on the website www.opage.ch (also in English).



# Meat & Fish

### Pay attention to the labels

Annual meat consumption in Switzerland is about 50 kg per person. In the interests of sustainability, and for the sake of a healthier lifestyle, it is preferable to eat less, but better quality, meat. When buying fish, bear in mind that many species are threatened by overfishing.

### Choosing a chicken

Shorter distances between the producer and the consumer and very high standards of chicken farming are two excellent reasons for choosing local chickens.

### Meat from afar

Most of the beef and pork consumed in Switzerland is produced locally. However, lamb often comes from another continent and is transported thousands of miles. Look for the country of origin on the product label.

### Recycling

Tin cans and jar lids can be recycled in the same containers as aluminium.



### Fishing methods

Flatfish are captured using trawls (nets) that scrape the ocean floor, killing many other species along the way. A catch of one kilo of fish results in the destruction of about six kilos of other species.

### Respect for animals

Food labels guarantee that farmed animals had access to the outdoors.

### Types of feed

Depending on the type of feed used, farmraised salmon and trout may contain drug residues in quantities sometimes exceeding maximum legal concentrations.

### What kind of shrimp

Most shrimp sold in Switzerland comes from shrimp farms set up in coastal areas particularly rich in biodiversity. These farms often cause destruction and pollution. This is not the case with organically raised shrimp or shrimp caught in the North Atlantic.

### Labels

Meat can carry many different labels — see Appendix A "Labels" or go to www.wwf.ch/label.



The **MSC (Marine Stewardship Council)** label for **ocean fish** indicates that fish was caught using fishing methods that will preserve fish stocks for the future. www.msc.org (in English) The **Dolphin Safe** label appearing on most canned tuna shows that the fishing method used to catch the tuna avoids the accidental capture of dolphins in nets. However, it does not guarantee that the tuna is fished in a way ensuring the survival of the species. www.eii.org (in English)



### Meat & Fish

### Vary your sources of protein

Animal protein is necessary, but too much meat can be bad for you because it contains saturated fats that can lead to cardiovascular disease. In Switzerland a lot more



meat and fish is consumed than is necessary to cover protein and iron requirements. By alternating red and white meat, fish, eggs, cheese and vegetable protein, for example from soybeans, chickpeas or lentils, you can vary your source of pro-

tein without running the risk of depriving your body of an essential nutrient.

### Eating less meat

For adults the recommended daily intake of meat is 100g three to four times a week (no more than 100 g a day). Preference should be given to cereal grains (wheat, corn, rice and quinoa), legumes (lentils, soy, chick peas, beans) and, naturally, fresh fruit and vegetables, if possible grown in an eco-friendly manner.

### Meat and the environment

The excessive consumption of meat also has repercussions on the environment. If you are concerned about global warming remember that a meal rich in meat and prepared with imported ingredients "emits" up to nine times more carbon dioxide than a vegetarian meal that uses local products. In addition, it takes five times more water to produce beef protein than soy protein.

### Swiss meat and meat labels

The industrial production of meat requires huge quantities of vegetable protein. Ninety-five% of soybeans grown worldwide are eaten by animals, not humans. In this respect, Swiss agriculture is exemplary. Most of the animals have regular access to the outdoors and 60% cover at least half of their dietary needs by grazing, as required under the Swiss SRPA programme. The labels Bio Suisse, whose emblem is a plant bud, and ip-Suisse (look for the ladybug), guarantee that the cattle's basic feed rations are composed essentially of fodder produced on the farm raising the livestock.

### To find out more

### www.wwf.ch/fr/

Go to Nos thèmes: mers et côtes Indicates which species are recommended and which should be avoided.

#### www.fourchetteverte.ch

A guide to restaurants in French-speaking Switzerland offering healthy, environment-friendly food.

#### www.terre-avenir.ch and www.lessaveursdelaferme.ch A site on which to contact local producers directly.

### www.poisson-lacustre.ch

Association of professional fishermen in French-speaking Switzerland.

Addresses of fishermen, and recipes.

### www.greenpeace.ch

Go to Diversité biologique/Surpêche/Quel poisson dans votre assiette?



### Fish are becoming scarce

The total world consumption of fish has quadrupled since 1950, a trend which shows no sign of stopping. As a result, fish stocks are no longer able to replenish themselves naturally: at present 90% of populations of large fish (such as tuna, hake and swordfish) are overexploited. Nutritionists recommend that we regularly eat fish rich in omega-3 fatty acids, which are good for the heart, the arteries and the brain. However, preference should be given to species not subject to overfishing, such as organically farmed salmon, mackerel and herring, and fish should be eaten only once or twice a week, if possible prepared in the oven rather than fried.

### Perche fillets from distant shores

Swiss lakes produce only ten per cent of the total quantity of *perche* fillets consumed in Switzerland: usually the fillets served in restaurants are imported from Canada or Eastern Europe. If you want to sample fish from Lake Geneva, choose *omble chevalier* or *féra*. The latter is also delicious smoked.



(250 g per person) Cut into large steaks, without removing the scales. Put directly on the grill – when the fish is cooked the skin and scales peel off easily, without any loss of flavour. Garnish with a mixture of celery leaves, flat-leaf parsley and fresh marjoram heated briefly in walnut oil. Serve with mashed potatoes.

From L'auberge d'Anthy via Perroy, by Clause Dubouloz. (Lettre du Léman, January 1999) www.cipel.org (also in English)

# **Beverages**

• Look at the ingredients, the container, and the method of production Your choice of beverage has an impact on your health: just think about the nutritional imbalances tied to the popularity of soft drinks. However, your drinks also have consequences for the environment and for the working conditions of others. Therefore, before quenching your thirst, think about the origin of the different products on offer, their ingredients, and how they are packaged – and remember that the cheapest and most environment-friendly drink is tap water.

### Packaging

The packaging of almost all beverages is recyclable, except for cartons (milk and fruit juice). Plastic PET bottles are more eco-friendly than aluminium cans.

### "Fair trade" beverages

More than 50 coffee blends and a dozen types of tea that guarantee fair compensation for growers are available in Switzerland. If you want to give the local economy a boost, you could also choose herbal teas as an alternative to imported tea.

### Bottle vs. tap

The tap water throughout Geneva is of high quality and contains a good balance of minerals. It is the most eco-friendly beverage, requiring neither transport nor packaging. The manufacture of one plastic PET bottle requires more water than the container will hold.

### Sugars and stimulants

One liter of soda or ice tea can contain up to 24 cubes of sugar. These drinks sometimes contain stimulants (caffeine, theine) that can disturb sleep and the ability to concentrate, especially in child-ren: one glass could be equivalent to a cup of coffee.



### Wine from the Antipodes

Choosing a wine produced in the region in which you live and carrying a label (Bio Suisse, Vinatura, Genève Région) helps the local economy and the environment. A bottle of wine imported from Australia requires 170 ml of fuel to travel half-way across the planet to Switzerland.

### Cocoa that is good for all children

Fairly traded cocoa is produced without child labour and does not contribute to the destruction of tropical rainforests.

### Antioxidants

Most orange juice is imported from overseas in concentrate form and reconstituted before being packaged in cartons or bottles. This process is energy-intensive (200 ml of fuel for one liter of juice) and uses a lot of water. While rich in vitamin C, orange juice contains three times fewer antioxidants (which have health benefits) than apple juice.

### Sugar, bubbles, and poor nutrition

Worldwide, sugary fizzy drinks (sodas) are the third most popular beverage after tea and milk. Sold in grocery stores, but also available from food stands, bakeries and automatic vending machines set up in public places, these drinks account for a major share of the calories in our diet. Young people in particular consume



them in large quantities, which contributes to the nutritional imbalances in their diets decried by nutritionists. According to a Swiss study, 34% of children aged 6-12 are over-weight and 10 to 16% are obese and hence at increased risk of diabetes and cardiovascular disease. A large glass (300 ml) of soda or ice tea contains the equivalent of seven cubes of sugar. This sugar, together with carbonic acid, promotes tooth decay. "Light" or sugar-free sodas are not as bad for you, but their artificial sweeteners do nothing to lessen the craving for sweets. The popularity of these sodas comes at the expense of traditional drinks: in Switzerland, for example, the consumption of apple, pear and grape juice is decreasing.

### A cheer for tap water

If you care about your health, water is the best drink. Adults



should drink two liters per day. In Switzerland, the tap water everywhere is of excellent quality. In some municipalities (accounting for 38% of Swiss households) it is even delivered to homes directly from a spring or the ground-water table, without undergoing any purification treatment. Nevertheless, the Swiss are still large consum-

ers of bottled water – more than 90 liters per person per year. Drinking bottled water has an impact on the environment. It requires a great deal of energy (1000 times more than tap water) and a lot of raw materials to produce bottles and labels, which then travel great distances. It also generates trash that sooner or later will harm the environment, even if bottle recycling (glass and PET) reduces this impact. Finally, bottled water is generally sold in six-packs (six to nine kilos total weight), which is to many a justification for using a car to transport it, even for short distances.

### Using a jug to dechlorinate tap water

Most households in Geneva get their tap water from the lake, which is carefully purified and well-balanced in minerals. However, to avoid bacterial contamination during transport, chlorine is added, which some people think gives it an unpleasant taste. It's easy to dechlorinate tap water by placing it in the refrigerator in a bottle (even a closed one) overnight, or by putting it in a water jug a few hours before a meal.



### To find out more

#### www.sge-ssn.ch

Swiss nutrition society.

www.sig-ge.ch

Everything about the water supply in Geneva.

#### www.suissebalance.ch

A website run by the Swiss Office of Public Health (OFSP) to promote healthy eating habits and physical exercise.

www.cieau.com A French site on everything to do with household water

### www.terre-avenir.ch

Information about wine and fruit juice from the Geneva region.

#### www.biovin.ch

Swiss association for organic viticulture.

www.vinatura.ch

supplies.

Eco-friendly and "integrated production" viticulture.



### Fair-trade beverages

Coffee, tea and cocoa are among the best-known fair trade products. Originally distributed through specialized stores, they are now, more than 10 years later, widely available from supermarkets. In the case of beverages the most familiar emblem is the "Max Havelaar" label. It guarantees that producers and their families are paid fairly for their work and helps them meet their basic needs with respect to health, education, housing and social services; it also protects them against the disastrous effects of market fluctuations in commodity prices. This label ensures respect for basic human rights (no child labour, forced labor or slavery) and promotes stable, long-term relationships between economic partners as well as environmental protection.

www.maxhavelaar.ch (also in English)

# **Convenience** food

### Infosheet n°6

### Putting health and the environment on the menu

Over the years, eating habits have changed. Ready-made meals (refrigerated, freeze-dried or frozen) and snack foods have become increasingly popular. However, this way of eating produces heaps of trash, consumes excessive energy (especially frozen foods) and could present health risks (hidden salt, sugar, fat and additives).

### Canned or frozen food

Canning is a good way to preserve seasonal fruits and vegetables. From a health standpoint, canned goods contain as many vitamins and nutrients as fresh produce that has been picked weeks before it is eaten. From an environmental point of view, canning consumes less energy than freezing -- and aluminium can be recycled.

### Bulk buying

Food purchased in bulk is less costly than food purchased in small quantities and requires proportionally less packaging.

### Too much salt

Adults in Switzerland consume on average 12 g of table salt or sodium chloride per day, an excessive amount that contributes to high blood pressure (6 to 8 g per day is plenty). Of this, 80 per cent is "hidden" in industrially processed foods such as bread, cheese, pastries and ready-made meals. Potato chips, peanuts and a plethora of other snacks contain large amounts of salt (some manufacturers list the sodium rather than the salt content).

### Frozen vs refrigerated food

Refrigerated food is more energy efficient than frozen food in terms of preparation, preservation and cooking.

### Heaps of trash

According to a study conducted in a French supermarket, **one** shopping cart of groceries yields on average **two** shopping carts of trash.

### Additives

Industrial processing robs many foods of their taste and nutritional value while altering their aspect. As a result, numerous additives must be introduced to improve their presentation and taste and to help preserve them. These additives often trigger food intolerances. This is true, for example, of sodium glutamate (E 621), which is an inexpensive taste enhancer.

### Palm oil

Many foods contain palm oil produced by monoculture, a farming method that relies heavily on fertilizers and insecticides. Often located in south-east Asia, oil-palm plantations are contributing to the destruction of virgin rainforests. However, some palm-oil manufacturers use sustainable methods that are socially responsible and respectful of the environment. Find out which ones on www.checkyouroil.ch.

### **Reading labels**

Manufacturers of ready-made meals are required to provide a list of ingredients, with the exact proportions, on the label (e.g. the proportion of mushrooms in a mushroom risotto). The label also frequently provides information on the energy, protein, sugar and fat content of the meal. This gives consumers an idea of the nutritional value of the food on offer and makes it easier for them to compare products and make wiser choices.

### Eating on the run

New eating habits are gradually taking over. In the past, families generally ate three home-cooked meals a day while sitting together at the dining table. Today, people tend to consume ready-made meals, often alone, on the run and at irregular hours. Many prefer to snack at their desks rather than to sit down and enjoy a meal in the company of others.

### Quick meals can be healthy

To keep pace with these new habits, the manufacturers of ready-made meals have expanded their range of products. As a result, health-conscious consumers on tight schedules can eat balanced meals if they take the trouble to make smart choices. For instance, supermarkets now offer a selection of prepared salads made from fresh vegetables that provide the roughage and vitamins that nutritionists recommend.

### Not necessarily bad for the environment

Preparing food from scratch is more time consuming but often less costly than purchasing ready-made meals. Yet for a single person, eating industrially prepared food is not necessarily less ecological. This is because factories prepare large quantities at a time and therefore can make more efficient use of resources (basic ingredients, wa-



ter and energy). However, ready-made meals are only environmentally friendly if they are not frozen or over-packaged.

### Poor nutrition and obesity

The main problem with ready-made meals is that consumers have no control over nutritional value or portion sizes. Such meals often contain too much sugar, salt and fat. Combined with a sedentary lifestyle, they contribute to the growing problem of obesity among the population.

### "Bad" fat

Doctors recommend eating as little hydrogenated vegetable fat as possible. This kind of fat is made from highly processed, poor-quality oils (such as coprah or palm oil). Hydrogenation has the advantage of keeping industrially processed food (such as chocolate, biscuits, pastry, pizza or packaged soup) from going rancid at room temperature for long periods. However, it also produces "trans" fatty acids that have no nutritional value and can contribute to health problems such as cardiovascular disease.

### "Hidden" salt and sugar

Various forms of sugar (glucose, saccharose, lactose, maltose) are added to desserts and other foods, especially sauces, to make them more pleasing to the palate. Salt is also added to a wide variety of products, often in excessive amounts, for the same reason. These are often referred to as "hidden" salt and sugar.

### Food additives

Ready-made meals often contain a long list of food additives or "E" substances (colouring agents, preservatives, antioxidants, stabilizers, taste enhancers) and artificial flavouring. Although

these additives are authorized and often necessary to ensure that foods look appetizing and can be stored for long periods, some of them are suspected of triggering food intolerances or allergies.

### To find out more

www.maisonsante.ch Click on *Alimentation.* www.slowfood.ch Fighting the fast-food trend. www.adige.ch Nutritionists in Geneva.

www.goutmieux.ch See Appendix A.

www.fourchetteverte.ch See Appendix A.

www.opage.ch (also in English)

Click on Viticulture for a list of ambassadeurs du terroir restaurants that serve locally produced food and wines.

### **Recommended reading**

Savoir manger: le guide des aliments, Dr Jean-Michel Cohen, Dr Patrick Serog, Ed. Flammarion, 2004. Codes-E: guide des additifs alimentaires, Heinz

Knierieman, Ed. Bon à Savoir.

La vérité sur ce que nous mangeons. Votre assiette à la loupe, Joanna Blythman, Ed. Marabout, 2001.



### Eating out

Eating out is fun and saves time. However, restaurant goers don't always know where the ingredients used in their meals came from or how they were obtained. This is why certain establishments, which can quarantee that their suppliers adhere to methods which respect animals and the environment, display special labels. A label called "Goût mieux" is issued by the Swiss branch of the WWF to restaurants that use organic ingredients and fair-trade products. The "Fourchette verte" label is awarded to restaurants that serve balanced meals, offer non-smoking areas and recycle their waste. As for the "Ambassadeur du terroir" label, it is for restaurants that use fresh ingredients from local markets and locally produced wines.

### Cosmetics & Personal hygiene products Infosheet n°7

### Take good care of yourself – and of the planet

Cosmetic and personal hygiene products must comply with the relevant legislation. Even so, when choosing a product be aware that some are not good for either you or the environment: they may contain toxic or allergenic substances, pollute the air and water, produce unnecessary waste or threaten biodiversity.

### A cocktail of chemicals

Formaldehydes, phthalates, solvents (toluene), halogenated organic compounds and acrylates are just some of the toxic substances found in certain cosmetics, particularly nail varnish, lipsticks, deodorants, shampoos and moisturizing soaps and lotions. These substances may cause allergies, disrupt the endocrine system and damage internal organs and the nervous system. www.chemical-cocktail.org

### Animal oils

Traces of oils from animals threatened with extinction, such as mink, tortoise, whale and sperm whale, are frequently found in cosmetics. Palm oil from vast single-crop farms using huge quantities of artificial fertilizers and pesticides is another common ingredient. Jojoba oil, extracted from shrubs that can be grown in arid regions, is a good alternative to help protect biodiversity; cultivation of these shrubs also contributes to reducing desertification.

### Packaging

Small boxes can be put out for recycling together with paper. Product ranges for which refills exist can help reduce the amount of waste sent for incineration. Wherever possible, stay away from double packaging.

### Aerosols

Pump sprays and aerosol cans using air as propellant do not harm the environment. Deodorants and antiperspirants are available in solid or liquid form (as stick or roll-on deodorants), enabling you to stay fresh without a daily dose of aerosols.

### Extras you can do without

Bubble baths and bath products that perfume and colour bath water are full of synthetic substances that make waste water even more difficult to treat.

### Colour and perfume

Plain, unscented toilet paper that has not been bleached with chlorine adds fewer chemicals to waste water.



### Soap vs. gel

A 250 g piece of soap will last as long as four 250 ml bottles of shower gel. Some soaps and toothpastes contain triclosan, an antibacterial agent thought to contribute to the development of antibiotic-resistant bacteria.

### Labelling

There are no officially recognized labels for cosmetic and body care products. However, some products available on the market meet ecological and social criteria (Body-Shop) or just ecological standards (Coop Naturaline).

### **Excessive use of disinfectants**

Personal hygiene products with antimicrobial properties are very popular. However, they contribute to the spread of antibiotic resistance of bacteria – a matter of growing concern. What is more, products containing disinfectants such as, for example, triclosan, are no more effective in eliminating germs than a correctly used conventional soap (washing hands after using the bathroom, before meals, etc.). Therefore, antimicrobial products should be reserved solely for medical use. An obsession with thorough disinfection can even be harmful. Research has shown that ordinary exposure to germs and dust strengthens children's immune systems and lowers their chances of suffering from allergies and skin reactions.

### Protecting our rivers and lakes

Scientists from Canada, England and Germany have discovered evidence of contaminants from pharmaceutical and body care products, particularly sunscreens, disinfectants, hormones and phthalates (used to give products a smooth, shiny appearance), in rivers and lakes. The dramatic decline in fish stocks in Swiss rivers and lakes can be explained partly by the increasingly varied "chemical cocktail" poured into them (www.fischnetz.ch). While cosmetic and personal hygiene products are not the main culprits, their widespread use certainly adds to the problem.

Sprays and the ozone layer (03) In 1985 scientists discovered an enormous hole in the ozone layer that allowed the sun's dangerous ultraviolet rays to reach the surface of the earth. The use of chlorofluorocarbons (CFCs), found primarily in refrigerators, aerosols and insulating materials, was largely to blame. Scientists had been highlighting this threat for many years, and, subsequently, the Montreal Protocol was adopted in 1987 and entered into force in 1989. The Protocol established a timeline for eliminating the use of CFCs over a period of several years, and is a prime example of successful international dialogue to protect the environment.



Cosmetic products marketed in aerosols using CFCs as a propellant are no longer available. However, given the continuing presence of CFCs in the atmosphere, the ozone hole may still grow for another decade or two, before slowly shrinking...

### Using cosmetics appropriately

Cosmetics can harm your health because of the ingredients used to make them or if they are used incorrectly. Given the variety of substances involved, it is difficult to recommend one product over another. However, there are a number of general guidelines:

- read all instructions for use and warnings carefully
- beware of therapeutic properties attributed to cosmetics: cosmetics are not medicines
- test a product first if trying it for the first time: apply some to a small area of skin and wait at least 24 hours to check that you have no adverse reactions (this applies in particular to hair dyes)
- stop use immediately if you show any signs of a reaction (redness, irritation, etc.) and consult a doctor if the reaction persists
- store cosmetics in a cool, dry place and away from light (to prevent bacterial growth and spoiling)
- dispose of cosmetics as soon as you notice any change in their original appearance, colour or smell
- do not share your cosmetics, to prevent transmission of bacteria to another person
- keep cosmetics out of reach of children.

### To find out more

www.bag.admin.ch (also in English) The website of the Swiss Federal Office of Public Health.

### www.parchem.ch (also in English)

The website of the Swiss notification authority for chemicals.

### www.bodyshop.com (in English)

Natural cosmetics, not tested on animals.

#### www.europa.eu.int/comm/environment/chemicals/ (also in English)

European Union web pages with information on the new REACH programme, which aims to establish better evaluation of the effects of chemical substances.

#### www.chemicalreaction.org (in English) www.wwf.be/detox

Information sites on the dangers of chemicals, set up by environmental protection groups.

### Recommended reading

*Trucs et astuces de beauté*, Lacoste, Sophie, Ed. Marabout, 2001.

La beauté au naturel, Shaukat, Sidra, Ed. J'ai lu, 2001.

### Infosheet n°8

# Clothing

### Wear your convictions on your sleeve

We choose our clothes according to price, comfort, style and originality. However, in the interests of sustainability we should also think about the materials clothes are made of, the environmental impact of the processes used to manufacture them (water use, toxic substances, energy consumption) and the working conditions under which they were made in what is a highly competitive market.

### The story behind the brand

Companies often outsource production to subcontractors in developing countries, where workers enjoy little social protection. Check on the Internet to ensure that manufacture and distribution of, for example, a brand of sports clothing meet the conditions set out in the eight Fundamental Conventions of the International Labour Organization (ILO). www.cleanclothes.ch (also in English)

### Choosing the right kind of cotton

One-quarter of the pesticides and 10% of the fertilizers consumed worldwide are used in cotton cultivation; 270 litres of water are necessary to produce one kilogram of cotton fibre. In 2003, one-fifth of fields was planted with genetically modified cotton seed. So, check clothing labels and make a responsible choice as to which garments you buy.



### Some shops specialize in fair trade,

Fairly traded handcrafts

which ensures that craftspeople in developing countries receive fair payment for their work. These shops sell jewellery and many fashion accessories.

Check out the French-speaking network Magasin du Monde at www.mdm.ch.

### Souvenirs from abroad

The importation of skins and items made of some species of crocodile, lizard or snake skin is forbidden in Switzerland. It is also illegal to bring into the country furs from threatened species of the cat family such as tiger, leopard, jaguar and ocelot.

The list of endangered species is available at www.cites.org (in English).

### Second-hand clothes

One way to help protect the environment is to buy second-hand clothes, which means that already manufactured garments, often of good quality, can be reused. In Geneva, second-hand clothes shops include those run by Caritas, Emmaüs, the Centre social protestant and the Red Cross; there are also a number of privately owned stores. Clothing trade and exchange markets (before the start of the winter season and before summer) are organized by a number of community or parents' associations and by the municipalities. Lots of children's and winter-sports clothes are available, and you can also leave garments to be sold. www.genevefamille.ch (click on Agenda)



The Oeko-tex 100 label guarantees that products are free from pollutants (pesticides, heavy metals and dyes) that are harmful to health. The Oekotex 1000 label indicates that an item was manufactured in an eco-friendly manner. www.oeko-tex.com (also in English)



### Cheap clothes - not always a good deal

In general, it is better to buy good quality clothing. It looks more presentable, is more comfortable, washes better and lasts longer. In the end, good quality clothes are often no more expensive than cheap clothes.

### Working conditions

The fact that some types of clothing, particularly T-



shirts and sports shoes, are getting cheaper all the time is the result of Western companies relocating their factories to parts of the world where workers are paid less and have no social protection, such as Asia and Central America, in order to stay competitive. To counteract this tendency, the Clean Clothes

Campaign adopted by Swiss organizations (www.cleanclothes.ch) calls on manufacturers and distributors to take specific measures to improve the working conditions of those who produce the fabrics or make the clothes. This involves, among other things, ensuring that textile workers' health is not harmed by the chemical products used to treat the fibres and materials they work with.

### Cotton: gentle on your skin but not always on the planet

Cotton is found in all types of clothing: trousers, shirts, T-shirts, underclothes, even shoes. It therefore comes as no surprise that cotton is the most widely sold fibre in the world. Every year, cotton producers – mainly from China, the United States and India – grow more than 19 million tons of cotton. This has an impact on the environment, mostly owing to the soil and water pollution caused by cotton cultivation, which requires large amounts of artificial pesticides, herbicides and fertilizers. The World Health Organization (WHO) has classified many commonly used pesticides as "extremely dangerous", in particular for the nervous systems of children and animals. Cotton also requires large amounts of water, which can lead to ecological disasters. The best-known of these is the drying up of the Aral Sea in Uzbekistan and Kazakhstan. In the 1960s, when water from the two rivers flowing into it was first diverted for irrigation, this huge inland sea began shrinking until it amounted to no more than one-sixth of its original volume and one-third its original surface area.

### Choosing textiles? Think of the environment and your health

Although clothing made from organic cotton is available in Switzerland, organic cotton accounts for only 0.03 % of global cotton production. There are also other natural fibres - made from plants (for example linen and hemp) or produced by animals (wool and silk) - whose production has less of an effect on the environment. Synthetic fibres (nylon, polyester, industrial fibres) are made from oil, a non-renewable resource, or are obtained by chemically treating cellulose (rayon, viscose). Most of these fibres are then treated to change their appearance (through washing, bleaching, dying, printing, etc.); often these finishing processes seriously damage the environment and sometimes they are harmful to health, as traces of products (formaldehyde, fluorinated resin, caustic soda and heavy metals) found on the finished articles can cause allergies.

### "Sustainable" clothing – still not much to choose from

If you want to dress in an eco-friendly way, look for the Oeko-tex 100 and Oeko-tex 1000 labels, the European Eco-label and Coton Bio (Migros). If you want to add an ethical dimension to your choice, select from ranges such as Naturtextil, Naturaline (Coop) or specialized shops.

Unfortunately it is not easy both to follow the fashion and to wear natural fibres grown in a socially and eco-

logically responsible way. The choice of articles is limited and few shops carry them. For now, this type of clothing remains the work of pioneers. But it may have a promising future and, who knows, one day become the latest trend ...



### To find out more

www.patagonia.com (also in English)

www.switcher.com (also in English) Pioneers in sustainable development in the clothing sector.

### www.ethique-sur-etiquette.org

A collective of organizations and associations.

### www.nicefuture.ch

Under Les classements consom'action NiceFuture, the site ranks brands, shops and mail-order sales catalogues by compliance with ethical and environmental criteria.

### www.helvetas.ch; www.pandashop.ch

Mail-order sales of ethically produced clothing.

### Recommended reading

Vêtement, la fibre écologique, Goldminc, Myriam, and Aubert, Claude, eds., Ed. Terre vivante, 2001.



### Recycled clothing bins

There are more than 250 recycled clothing bins throughout the canton of Geneva. They are there for the public to dispose of used clothing and shoes that are in good condition. A number of charity

organizations that collect and sort this used clothing. In 2003, 3.4 kg of clothing per inhabitant were collected, cleaned and repaired, and given to those most in need or resold by charity organizations in their second-hand clothing shops.

This collection system, set up in 1994, fully reflects the spirit of sustainable development: it reduces the costs of incineration of waste by public authorities, it funds support services and it creates jobs for people in difficult situations, who are employed in the various workshops.

# **Electricity & Lighting**

Reduce the strain on your pocketbook, and on the environment By choosing low-energy (compact fluorescent) lights, by reading the "Energy" label before making any purchase, by bringing "green" electricity into our homes and by avoiding waste, we can all help cut consumption and limit the impact on the environment of electrical power generation.

### The best type of light

To produce the same amount of light as a conventional bulb, an energy-efficient (compact fluorescent) bulb consumes about five times less electricity. And it lasts eight to 10 times longer. The extra cost (six to 20 Swiss francs) pays for itself within about two years. The website www.topten.ch presents the 10 best products on the market.

### Halogen lamps

A halogen lamp needs 300 to 500 watts to light a ceiling. That's 10 times more electricity than the model equipped with a U-shaped fluorescent tube (36 watts). Small halogen lamps may have low voltage (12 volts) but they still consume a lot of electricity since it's the wattage that counts.

### Tube lights

Tube lights fitted with an electronic ballast offer good power economy. And they have the added advantage of switching on instantaneously and generating light free of flicker. The new fluorescent powders provide light of excellent quality (tri-band models).

### Clean electricity (courant vert)

You can choose the source of electricity that powers your home or your office, a way to encourage use of solar panels, wind turbines, bio-gas generators and micro-hydroelectric plants (see overleaf).

### The best batteries

Electricity from a battery costs up to a thousand times more than electricity from the mains. If you really do need batteries, the best are the nickel metal hydride (NiMH) ones that are rechargeable up to a thousand times over. Alkaline batteries perform better than zinc-carbon batteries for devices that you use only occasionally (flashlights, portable radios) or ones requiring very little energy (clocks, remote television controls). But remember that all discarded batteries are considered hazardous waste and must be left for recycling at the designated containers in stores and collection points.

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### The best location for the light switch

Low-voltage lamps (12 volts) run on a weaker current than that supplied by the electricity grid (220 volts). So each is equipped with a transformer. But the on/off switch is too often located down-current of the transformer, so a little electricity continues to be consumed even when the light switch is off. If possible you should choose products that have the on/ off switch up-current of the transformer. It's a wise precaution to place the transformer at a good distance from your head owing to the magnetic field it creates.

### Plug strips with remote switch

To avoid wasting electricity with the stand-by mode (see Sheet no. 10, "Household appliances and electronic goods"), you can buy a remote switch that connects through a wire to a plug strip on the floor and powers all your equipment. This way you can keep a single on/off switch in a convenient place and control the power supply to your computer and peripheral accessories without having to crawl around under your desk.

### Labels



The packaging for all lamps sold in Switzerland carries a label marked "Energy" that gives the product a rating according to a Europewide system. The most energy-efficient products are in the A category, the least efficient in G (see overleaf).



### **Electricity in Switzerland**

About 60% of the electricity produced in Switzerland is generated by water power, 36% by nuclear power and 4% by coal- and oil-fired plants. Less than 1% is produced by solar power, wind or bio-gas generators. There remains a lot of room for development of renewable energy sources.

### **Consumption is rising**

Despite efforts by the Swiss government to stabilize electricity consumption, it has been growing steadily in recent years – by 2% in 2003, for example, which raised it to an unprecedented 55 billion kilowatt hours. This increase is due in part to a growing population but also to the fact that the number of households in Switzerland is rising even faster than the population. The average number of inhabitants per dwelling has dropped steadily over the past half century, and today stands at less than two and a half. In the 10 years between 1990 and 2000, the average dwelling-surface area per person rose from 39 square metres to 44. All this results in greater energy consumption per individual.

### Choosing clean electricity

36W

28W

In some parts of Switzerland such as Geneva, you can encourage environment-friendly electricity production by choosing the *courant vert*, or clean electricity, option for your billing. That is, you can agree to pay a little bit more per kilowatt hour. Your contribution is used to subsidize programmes to produce electricity with solar (or "photovoltaic") cells, wind turbines, bio-gas generators, and hydroelectric plants that do not damage river ecosystems. If you choose *courant vert*, nothing changes in the actual current that comes out of your wall socket. But your initiative promotes development of renewable energy sources that, for the moment, are more expensive than traditional sources.

### **Cutting consumption – a priority**

Geneva's utility company (the Services industriels de Genève, or SIG) offers customers a range of environmentfriendly schemes that it calls "SIG Vitale". But it should be remembered that Geneva's policy of not purchasing electricity produced in nuclear power stations is feasible only because other parts of the country are willing to do so. Renewable energy development can work only if we all reduce our electricity consumption. The best way to do this is not to waste it in the first place. A further prerequisite is for more consumers to promote renewable energy production by opting for *courant vert*.

### To find out more

### www.geneve.ch/environnement-info

A cantonal office offering information on anything related to the environment.

Chemin de la Gravière 6, 1227 Les Acacias, tel. 022 327 47 11 www.sig-ge.ch

Site of the SIG, Geneva's utility company. Offers practical advice, in particular as regards lighting. Tel. 022 420 88 11

### www.topten.ch

Provides lists of the most efficient lights, household appliances and electronic equipment available on the market.

### www.courant-vert.ch

Everything about electricity from renewable sources in the French-speaking part of Switzerland.

### The most energy-efficient lights

These are the bulbs and tubes most widely available on the market and arranged in order of their energy efficiency. The coloured letter corresponds to the light's rating on the "Energy" label (which ranges from A for "Excellent" to G for "Very poor"). Fluorescent lights (on the left) require far less energy than incandescent bulbs (on the right) to produce the same amount of light.

### Electrosmog

Energy-efficient lights generate more powerful electromagnetic fields than do traditional lights. It is not yet known to what extent these fields may be harmful to health. But beyond a distance of 30 cm, their force is comparable to the fields generated by conventional lights.



### Choose your appliance well and use it wisely

The amount of electricity and water used by an appliance can vary greatly from one model to the next. Therefore, before making a purchase, do research and look especially carefully at the appliance's "Energy" label. To cut your expenses and save resources also be on the *lookout for "hidden" energy consumption (for example in stand-by mode).* 

### Noise

A relatively silent washing machine or dishwasher can be used at night, when electricity is cheaper, without disturbing the neighbours. A quiet refrigerator will always be welcome. In the case of some appliances, the Energy label offers information on the level of noise emitted.

### Electricity consumption in stand-by mode

Domestic appliances and electronic goods switched to stand-by mode account for some 13 to 15% of a household's total electricity consumption. Even after they have been turned off, a computer and its peripherals use an average of 20 W. You have everything to gain by connecting appliances to a plug strip having its own on/off switch.

### Energy consumption

Two seemingly equivalent household appliances can differ vastly in terms of performance and energy consumption. The "Energy" label is compulsory for some new appliances. The website www.topten.ch lists the best models on the market.



### Wireless technology

A growing number of peripherals and IT networks use wireless (Wi-Fi or Wi-Lan) technology. The links are established using radio frequencies, thereby contributing to the emission of radiation into our environment. Also, batteries (or accumulators) are needed to run the keyboard and mouse.

### 220 volts to run the telephone?

Conventional telephones do not need batteries, nor do they have to be connected to the mains. They emit no radiation and work even in case of a power cut.



### Mobile phones

The radiation produced by mobile phones is suspected to be harmful. What is more, in developing countries, the process of extracting some of the minerals needed for their manufacture is at times detrimental to the health of minors.





The Energy label is compulsory for large household appliances, lights and cars. The best appliances are rated "A" (in some cases "A++"), while the worst performers earn a "G". www.etiquetteenergie.ch

Some certified labels are awarded to household and electronic appliances on the basis of respect for environmental criteria. Below are some of the most common:



European environment label www.eco-label.com (also in English)



Blue angel (Germany) www.blauer-engel.de (also in English)



Nordic swan (a Scandinavian eco-label) www.svanen.nu (also in English)

### Household appliances & Electronic goods

### Household appliances: the downside of bottom-of-the-range products

The price of the cheapest household appliances has decreased substantially over the past few years. Marketing strategies such as promotional sales and other "special offers" have helped turn domestic appliances into everyday consumer items. Although this may initially leave your pocketbook looking healthy, lower-end goods may later turn out to waste resources and energy, since they often do not last as long as more expensive ones and generally use more water and electricity.

### It all adds up

Household appliances that generate heat (stoves, ovens, tumble-driers) or cold (refrigerators, freezers) on average account for more than 60% of a household's electricity consumption. The former have to be able to draw more power from outlets, while the latter run all the time. When purchasing a refrigerator, consumers generally look at its size and price, forgetting that it will usually last for about 15 years. During its useful life, however, the cost of the electricity used by the refrigerator will far exceed its initial price. A good quality model with an "A" Energy label will use 50% less electricity than a "G"-rated one. Over the refrigerator's lifetime, this difference will add up to about 1000 Swiss francs. Not only that, a more expensive model will also be more silent, sturdier and more practical. Therefore, the cheapest refrigerator may not necessarily be the best deal ...

### **Reducing water consumption**

Your choice of household appliance will also affect the use of other resources. In the case of washing machines and dishwashers, some models may use up to twice as much water per wash cycle as others. The appliance's Energy label indicates water consumption as well as other information such as a washing machine's capacity in kg of dry laundry, the number of dishes that fit into a dishwasher, washing and drying times, etc.

### Electronic goods: the accelerating pace of technological innovation

In the field of electronics, appliances become obsolete and are rejected by consumers in search of a newer model primarily because of advances in technology. The rapid changes in mobile telephone, computer and peripherals technology use up significant amounts of resources and produce a great deal of waste that is difficult to dispose of correctly. In the case of computers, you can avoid



purchasing a new one by simply equipping your existing computer with higher-performance components (mother boards, hard drives, DVD

readers, etc.) Advances in information technology also have their good sides. Flat screens, for examples, use less than energy than cathode-ray tubes and generate less electromagnetic radiation. On the other hand, a growing number of peripherals are wireless and hence require more batteries and accumulators.

### Beware of hidden energy consumption

Many appliances draw power all the time, even when they

would appear to be switched off, and therefore use electricity without serving any useful purpose. Energy is used in this way (also called stand-by mode) not only by IT equipment but also by television sets, video and DVD players, coffee machines, microwave ovens and Hifi systems. To waste less electricity, simply opt for appliances which do not have a stand-by mode or which can be disconnected from the power supply.

### Used appliances can be returned to a dealer free of charge

Having bought a new appliance you would normally want to dispose of the old one. Owing to the recycling tax that is included in the purchase price of any household appliance or electronic good bought in Switzerland, you can return old office equipment, entertainment electronics or household appliances to stores selling them, free of charge. It is not necessary to have purchased the appliance in the shop to which you are returning it, nor do you have to purchase a new item there. When returning an old refrigerator, take care not to damage the cooling circuit, as otherwise gases harmful to the atmosphere may escape.

### To find out more

### www.sig-ge.ch

Geneva's energy-supply company. The section *Ma maison* ("At home") contains practical advice on how to reduce your electricity consumption.

### www.topten.ch

A list of the most efficient appliances on the market.

www.energy-plus.org (also in English)

Shows the way to appliances with an A+ and A++ "Energy" label.

A social reintegration service which, among other things, specializes in the recycling and sale of used IT equipment.

### Brochure

Téléphone mobile: un danger pour la santé? DIAE-DASS, 2003, available from Environnement-Info, tel. 022 327 47 11.



# Gardens & Balconies

### Promoting biodiversity

Colourful gardens and balconies full of flowers are most enjoyable places for us to relax in. A careful choice of plants and plant care products can turn them into most welcome small havens for wildlife, at a time when our civilization pays little heed to the needs of other species.

### Pesticides

Pesticides destroy biodiversity, leaving gardens vulnerable to parasite attacks. In cases of dire necessity, use natural pesticides such as rotenone and pyrethrum, which are non-persistent, being biodegradable.

### Choosing fertilizers

Organic fertilisers such as compost, bone meal and horn meal, or ground minerals provide plants with the same chemicals as artificial fertilizers, but pollute our water less. To limit the need for lawn fertilizer you can sow a mixture of grass and clover which turns nitrogen from the air into available nitrates in the soil.

Some nurseries and supermarkets offer or-

### Organic and fair-trade plants

Plants for butterflies

Instead of the usual geraniums, why not plant some indigenous species like thyme, crocuses and sedums, or some herbs like sage, rosemary and lavender for insects including butterflies to feed on.

www.plantes-sauvages.ch

### ganic herbs such as basil, rosemary and parsley, which are grown in biodegradable pots. Decorative plants with a "fair trade" label are sometimes available. They ensure decent working conditions in the nurseries in which they are grown.

### Indigenous species

A mixed hedge made up of indigenous shrubs will provide dozens of species of local wildlife with "board and lodging". If you really must have an evergreen hedge, you can choose privet. Its flowers are rich in nectar and local birds enjoy its fruit. An indigenous plant, it is far more eco-friendly than the ubiquitous thuja, which originates from Asia.

### Easy-going roses

Before falling for a pretty face, make sure the rose you have chosen is disease resistant and can cope with a range of living conditions. Some varieties need constant attention, including spraying with pesticides, to do well. Since roses are a longterm investment, it's worth asking for advice from your local rose growers.

#### The charcoal of choice

Some brands of charcoal are made of wood from sustainably managed forests and carry the FSC (Forest Stewardship Council) label.



Some brands, including Mioplant (Migros) and Oecoplan (Coop) offer a range of eco-friendly plants, composts and other growing mixtures as well as plant care products.

### A welcome haven for wildlife

An impeccable stretch of lawn, neat flower beds brimming with exotic species, the whole surrounded by a well-trimmed thuja hedge, may look attractive to some, but they are very poor value for wildlife. A more natural approach to gardening that welcomes indigenous shrubs and flowers will not only please the senses but also encourage birds, butterflies and other species to make their home in your garden. Choose Cornelian cherry (Cornus mas), an indigenous dogwood, instead of forsythia to brighten up the garden in spring and enjoy the bonus of edible fruit in late summer. Elderberries attract up to 60 different species of birds; by contrast, the fruit of the common or cherry laurel (Prunus laurocerasus) will only be eaten by three kinds of birds. This widely planted hedging shrub has become an invasive alien in local forests. Crumbling walls, rotting branches, a pile of stones and heaps of leaves in odd corners provide shelter and food for a number of creatures.



### Remember the butterflies ... ... and their caterpillars

Butterflies will feed off species both indigenous and alien, but their caterpillars are very choosy creatures: they will only feed off a very limited number of local plant species. A number of butterflies are endangered species because their specific food plant has become rare. By including a wide range of local plants in your garden the chances are you will provide lots of different butterflies with the right food for their caterpillars. Some very common plants attract a number of species: nettles are a prime favourite. Wildflower meadows are particularly attractive to butterflies, and carefully chosen container plants on balconies will also appeal to them.

www.pronatura.ch



### To find out more

#### www.jardin.ch

For amateur gardeners: practical advice, gardening calendars, natural plant-care products, etc.

www.pronatura.ch (introductory section in English) Environmental protection association with a keen interest in preserving wildlife species.

#### www.cps-skew.ch/english/e\_index.htm

Blacklist of invasive plants, that is to say, alien species that have no place in our gardens.

#### Recommended reading

Le Jardin au naturel, comment créer un espace où la nature reprend ses droits, François Couplan, Bordas, 1995.

Les quatre saisons du jardinage, an organic gardening and environment magazine, edited by Centre Terre vivante, www.terrevivante.org.

### Forget the chemicals!

"Green" gardening practices require no chemicals, but they do use organic solutions to help fight pests and diseases. For instance, greenfly and other aphids can be sprayed with a 2% solution



of soft soap and water or diluted nettle-brew. Ladybird larvae – which you can buy and release in the garden – devour huge quantities of aphids. Many common diseases such as mildew, rust and black spot can be treated with plant extracts which can be bought in garden centres and nurseries in ready to dilute mixtures. Crop rotation in the kitchen garden will help prevent a number of diseases and growing disorders. Against slugs beer traps are an effective option.

### Make your own compost

Composted garden and kitchen waste is a nutritious source of humus which improves the overall balance of your soil. Making your own means you can save money ... and peat bogs, from where most peat is extracted. Nearly all the ready-made composts available in shops contain a fair share of peat and should be



avoided. Burning garden detritus is both wasteful and bad for the air you breathe. In addition, compost heaps attract helpful species like birds and hedgehogs, which feed on garden pests such as worms.

If you really have no room, or no desire, to make your own compost, a number of municipalities in Geneva collect garden and other organic waste in special containers. It is taken to large composting sites from where you can collect compost at a very reasonable price (free up to 30 kg at *Site de Chatillon*). www.acg.ch

### Choosing the right lawn mower

Electric lawn mowers are the better option for small areas, since motorized mowers are very noisy and polluting, especially if they are not fitted with a catalytic converter. A lawn mower with a 4-stroke engine but no catalytic converter emits almost as much hydrocarbon into the atmosphere as 26 cars with catalytic converters. Two-stroke engines are even more polluting.

All mower engines should be run on alkylate petrol, which remains expensive and is not widely available. This fuel contains far less sulphur and benzene than conventional petrol and produces virtually no soot and smoke during combustion. It also helps engines last longer. A further benefit of regular maintenance is that your lawn mower will polute less and run smoothly for longer. Nevertheless, some 70% of the lawnmowers in use are never put through any maintenance routine.

### Mowing – less is more

Cutting grass less frequently and less short makes for a more natural turf and reduces the need to water and apply fertilizer.

Cutting to a height of 6 to 7.5 cm on a fortnightly basis is usually quite enough.



# DIY & Home improvement Infosheet n° 12

### Be creative without taking risks

Home improvement work (interior decorating, painting, renovation, building, etc.) can bring us into contact with substances and materials that are dangerous for the environment and for our health – above all organic solvents. It is therefore important to choose the right kinds of materials and products and to pay close attention to lists of ingredients and instructions for use.

### Treating wood

Boron salt is an environment-friendly and effective alternative for protecting new wood against wood-eating insects (furniture beetles, termites) as well as fungi and mould. Synthetic pyrethrins are highly effective for the treatment of wood already affected, and do little harm to mammals and birds. As a rule, water-based products are better for human health and the environment, but act less quickly than products based on organic solvents.

### Cadmium accumulators

The European Union is planning to ban accumulators containing cadmium (NiCd), a heavy metal that is particularly dangerous when it ends up in the natural environment. These batteries are gradually disappearing from the shelves and are being replaced by lighter and less bulky models (NiMH and lithium-ion). However, they remain common in power tools. These batteries have to be recycled (shops are obliged to take them back without charge).

Paint

### Pressed wood panels

The label "Lignum CH-6.5", awarded by Swiss manufacturers, guarantees that pressed wood contains less than 6.5 mg of formaldehyde (an irritant and allergen) per 100 g. Imported materials classified "E1" also comply with this standard. There are also makes of pressed wood panels containing even less formaldehyde: they can be identified by the sign "V-100". Try to avoid large surface areas of pressed wood panels inside your home.

Paints and varnishes containing solvents release volatile organic compounds (VOCs) into the air. These harm both the environment and human health. Several kinds of low-solvent paint (containing 2-15% solvent) are available, which are just as effective as conventional types (see overleaf).

### Wood

The adhesives used to lay floors can contain up to 70% sol-

vents. To avoid indoor air pollution, both while the floor is

being laid and afterwards, choose a glue with a low solvent

content, that is to say, without acrylamide, acrylonitrile, vi-

nyl acetate, benzene, dioxane, formaldehyde or acetalde-

Solid-wood boards, wall plates or panels carrying the FSC label stem from forests managed in accordance with the principles of environmental and social sustainability. Wood from Switzerland or one of its neighbouring countries will have traveled a relatively short distance from the forest to the store.

### Dangerous left-overs

Because paints, solvents and other DIY left-overs are so toxic they have to be returned to a sales outlet (shops have to take them back free of charge). Some recycling centers, for example the one at *Site de Châtillon* in Bernex, also accept this kind of waste.

Opening hours: www.geneve.ch/dechets (go to A votre service - installations cantonales).

### Labels



European environment label www.eco-label.com (also in English)



Blue Angel www.blauer-engel.de (also in English)



Wood for building and renovation from sustainably managed forests www.fsc.org (in English)

Glues and adhesives



NF Environnement – the French environment certificate www.marque-nf.com

hyde.

Some brands, such as Oecoplan (Coop) have a range of eco-friendly DIY products (for example paints)

### Choose water-based paints...



Volatile organic compounds (solvents) in paint, varnish and other common products promote the formation of ozone in the air we breathe. Some of them are particularly

toxic and can provoke allergies or result in poisoning. These substances also contribute to the greenhouse effect. A growing number of manufacturers are replacing organic solvents with water. However, even these products contain small amounts of VOCs (from 5 to 20%).

### ... or plant-based products

Another environment-friendly solution is to opt for plant-based paints made from renewable raw materials (canola oil, natural citrus oils, linseed oil, turpentine).

### Paints ranked by order of preference

1<sup>st</sup> choice (the most eco-friendly type of paint): natural, water-based paint (plant-based paint)

2<sup>nd</sup> choice: natural paint containing turpentine and/ or citrus distillate as solvent

3<sup>rd</sup> choice: water-soluble acrylic paint

4<sup>th</sup> choice: water-based vinyl paint

5<sup>th</sup> choice (the least eco-friendly type of paint): alkyd paint.

### Sealing parquet floors

There are alternatives to conventional parquet-sealing products, which release especially high quantities of solvents. Water-based sealants, waxes and hard oils manufactured using natural raw materials dry quickly and hardly smell at all. In addition, paint brushes can be cleaned with water.

### Cheap tools may turn out to be expensive in the long run

Some special offers propose bargain prices for a whole range of tools, which on occasion turn out to be little good at doing the job for which they were intended and break easily. It is usually preferable to buy fewer but better quality tools, which will give you better service and last longer. If there are tools which you need only rarely, consider renting them.

### Disposable vs. reusable paintbrushes

If you use non-water-soluble paint you will have to clean the paintbrush with solvents, usually in a sink or washbasin. If that is the case, it is better for the environment to buy a

cheap paintbrush and to discard it with the ordinary household refuse after use. To prevent solvents from being released, wrap the paintbrush in an old plastic bag you were going to throw away anyway.



### Know your hazard symbols

In Switzerland the law on toxic materials stipulates that all dangerous substances must indicate their risk category, which ranges from 1 (for the most dangerous products) to 5 (for the least dangerous substances). Since 2005, to comply with EU norms, toxic substances carry the following hazard symbols, as applicable:



The labels also mention special risks or safety advice. Read this information carefully while still in the store. This way you can easily buy any protection equipment such as goggles, gloves or masks recommended for use with the product in question.

### Be wary of VOCs

Volatile organic compounds (VOCs), also referred to as volatile solvents, evaporate at room temperature. Usually they consists of a mixture of chemical compounds which can affect human health by inhalation or contact, for example by aggravating respiratory problems, irritating the skin and triggering allergies, or even by causing neurological damage.

And as for air pollution... The odour coming out of a car's gasoline tank and what we sometimes call "new" smells are the result of VOCs. We are surrounded by them in our everyday lives: they are found in varnishes, paints, paint strippers, glues,



sealants, resins, insulating foams, adhesive coatings, particle board, plastics, plasticizers or flame-retardants in electrical appliances, insecticides, fungicides, deodorants, cosmetics, inks, cleaning products, water-proofing substances, etc.

### New legislation

In 2000, Switzerland adopted a new law on chemical products. Since then, various ordinances (PARCHEM) have gradually been coming into effect. In the European Union, a new regulation entitled REACH (Registration, Evaluation and Authorization of Chemicals) was adopted in December 2006, so as to be able to better evaluate the impact on health and the environment of the tens of thousands of chemicals already on the market, as well as the many more to be sold in the future.

### To find out more

### www.eco-logis.com

Information on products and materials for eco-friendly building, renovation and DIY.

### www.maisonsante.ch

Practical advice on any activities around the home likely to be harmful or result in accidents.

### Recommended reading

Le guide de l'habitat sain – les effets sur la santé de chaque element du bâtiment, Suzanne et Pierre Déoux, Ed. Medieco, 2004

Maisons Bio, offers advice on materials, renovation, design and interior decoration, Julien Fouin, Ed. Flammarion, 2005.

# Cleaning

### Use a light touch

*Choose your cleaning products with care (natural ingredients) and use them in moderation so as to reconcile hygiene and cleanliness with sustainable living.* 

### Biodegradable products

A product is considered "biodegradable" if it degrades (breaks down) naturally (OECD test 302B). However, even a product labeled "100% biodegradable" is not without environmental impact, since only the biodegradability of the cleaning agents (surfactants) is determined and not that of any other synthetic substances such as perfumes or colors, contained in a product.

### **Clinical cleanliness**

Disinfectants have no place in household products designed for the general public. They pollute and are a risk to public health because many disinfectants are toxic, irritating the eyes or skin, or even allergenic.

### Disposable cleaning cloths

Practical but expensive, disposable cleaning cloths impregnated with cleaning products and disinfectants are an additional source of waste (20 kg per year for the average household).

### Buying in France

Laundry powders sold in Switzerland may not contain phosphates so as to prevent the invasive growth of algae in lakes and rivers. Beware: in France, certain brands still contain phosphates.

### Natural products

To protect health and the environment, prefer products made with natural raw materials over those made with petroleum products. For example, you can use cleaning vinegar (a degreasing agent), grain alcohol (a stain remover), and soaps – for example soft soap –made with vegetable oils (rapeseed, olive, coconut oil, etc.).



### Microfibers

A clean surface doesn't need to smell of lemons or roses. To clean floors, the kitchen, the bathroom, the car or the windows, a microfiber cloth and tap water often does a perfectly good job.

### Phosphates

In Switzerland, phosphates are banned in laundry soap but not dishwashing products. The website of the International Commission for the Protection of Lake Geneva, www.cipel.org, lists the ten dishwashing detergents releasing the lowest quantities of phosphates per wash cycle.

### Powders, liquids and tablets

Laundry soap is sold in many forms: large cartons, little packets of concentrated powder, washing liquids, tablets, capsules, etc. Concentrated powder has the advantage of producing less packaging waste and can be dosed with precision.

### Labels



European Eco Label www.eco-label.com (also in English)



Blue Angel www.blauer-engel.de (also in English)



NF Environnement- French environment certificate www.marque-nf.com

### **Tough legislation**

In Switzerland, household cleaning products are tightly regulated by legislation, more so than in neighboring countries. Some substances, known to accumulate in water, the soil and living beings, are completely prohibited. Others are allowed, but in limited proportions, which is why it is advisable to use these products judiciously.



### A little goes a long way

To be kind to the environment, your health and your budget use the absolute minimum

required to get the job done, and only in the quantities recommended by the manufacturer. In dishwashers, the amount of dishwasher salt and detergent should be adjusted according to water hardness (in Switzerland hardness is measured in "French degrees" (°f)), which varies according to where you live.

(For more information, see www.sig-ge.ch, "ma maison", click on "mon eau potable", then "dureté de l'eau").

### Less is more

Having only a few cleaning products which can be used for many different purposes will reduce consumption and the risk of accidents.

### Microfibers and water

Advertising falsely promotes the idea that to be clean it has to smell good. However, to clean your furniture or your tiles, a microfiber cloth and a little warm water does

the job perfectly well: tests show that this method is sometimes better at removing stains than a regular cloth and detergent. You can also use a microfiber cloth without water for dusting. Microfiber cloths hold up well with good care (make sure to read the washing instructions).



### **Avoid disposables**

The success of pre-treated disposable cleaning cloths can be explained by their practical advantages, but also by the fact that advertising promotes the value of "disposable" as a modern solution. In addition, consumers mistakenly believe that they are being eco-friendly because they are not using water. However, disposable cleaning cloths account for a considerable share of household garbage. The success of these products is even more surprising considering their higher overall cost, as shown by a

### To find out more

### www.observ.be

Site of the Observatoire bruxellois de la consommation durable, with very comprehensive pages on cleaning.

#### www.frc.ch

Site of the Fédération romande des consommateurs, a Swiss consumer rights organization.

Belgian study that looked at annual cleaning expenses of an average household:

- Traditional cleaning (broom, floor rag, water and detergent): 12.5 liters of detergent, 1820 liters of water, 1.2 kg of packaging waste. Annual cost: Sfr. 50.-
- Disposable cleaning cloths: 1530 cloths,
   23 kg of additional waste. Annual cost: Sfr.
   700.-



### A clean oven without detergent

Oven cleaners are caustic products that attack burned food encrusted on oven walls. Although effective, they are dangerous to both the user and the environment. Cleaning your oven lightly after each use ensures that grease and food does not become hard and encrusted. When you buy an oven you can choose a model with easy-to-clean oven walls (enameled walls with a smooth and regular surface). There are also self-cleaning ovens treated with a *catalyst* (a coating promoting the oxidation of grease) and *pyrolytic* ovens, which are heated when empty to very high temperatures. Although *pyrolysis* is the most effective method, it is also more expensive and uses the most energy.



Wood care products generally contain oils, waxes, and organic solvents (most frequently white spirit). These solvents, which allow protective substances such as oils and waxes to penetrate the wood, are dangerous to your health and the environment. Instead, buy products based on vegetable oil, or even pure beeswax. But the most economical, healthy, and environmentally safe method is the following:

1. dust the wood with a lightly dampened microfiber cloth

2. remove any grease with a cleaning vinegar or lemon juice

3. nourish the wood with ordinary vegetable oil (olive oil, almond oil, peanut oil, etc.).



# Furniture & Floor covering

# How to reconcile today's comfort with the well-being of present and future generations

It takes substantial amounts of energy and materials to manufacture furniture and floor coverings, while some carpets and rugs are made under deplorable working conditions. It is therefore important to keep the principles of sustainable development firmly in mind when buying any of the above items.

### Carpets and rugs

Some manufacturers exploit their workers, whether they be children or adults. The STEP label guarantees all workers involved in the making of a rug or carpet decent working and living conditions.

www.step-foundation.ch (also in English)



### Wood vs plastic

Wood is a renewable resource, whereas plastic is produced from oil, which is non-renewable. When plastic furniture is incinerated,  $CO_2$  is released into the atmosphere. This aggravates the greenhouse effect and accelerates climate change. Although wood also releases  $CO_2$  when burned, it is carbon neutral since the trees from which the wood was obtained absorbed  $CO_2$  when they were growing.

### Pressed wood

Pressed wood can be harmful to both the environment and human health: its manufacture requires between 4 and 20 times more energy than that needed to process solid wood; the volatile solvents released by the glue holding the wood chips together sometimes contain formaldehyde, which is harmful when inhaled; and pressed wood produces toxic fumes when incinerated.

### Indigenous wood

Only one out of three pieces of wood furniture sold in Switzerland are made of indigenous types of wood. You can do something about this by taking an interest in the provenance of the material from which furniture is made. The label Q-qualité Suisse guarantees that the wood in question is Swiss and comes from a sustainably managed forest.

### Tropical wood

When choosing furniture made out of tropical wood, make sure it is FSC-certified, as only this will ensure that only as much forest is logged as can grow back naturally. From an energy point of view, indigenous wood is the ideal option.

### Furniture upholstery

Some mattresses, sofas and padded stools are stuffed with synthetic foams containing substances such as formaldehyde, butadiene, nitrosamines and brominated flame-retardants (often called BFRs), all of which are harmful to health. More wholesome, natural alternatives are available, for example latex, pressed wool and horsehair.

### Floor coverings

Avoid synthetic materials produced from petroleum (standard wall-towall carpeting, plastic flooring in the form of tiles or purchased by the meter) and instead choose flexible floor covers made of natural materials such as rubber or true linoleum (for example on a cork basis), or from natural fibres such as sisal, coconut, hemp or wool. If you suffer from allergies avoid shag carpets, which gather dust more easily. Also, make sure that the adhesives or glues used to lay the flooring contain as few volatile organic solvents (VOCs) as possible, since these products release harmful vapours.

### Labels



The **STEP** label guarantees that all workers involved in the making of a rug or carpet enjoy decent working and living conditions.



The **FSC-Forest Stewardship Council** label indicates that the wood comes from sustainably managed forests and that workers have access to social protection. www.fsc.org (in English)



The **Q-qualité suisse** label indicates that wood was produced and processed in an eco-friendly way and originates from Switzerland. www.wvs.ch, see under *Certification*.



The **Rugmark** label guarantees that a rug or carpet was not made by child workers, and supports projects in India, Nepal and Pakistan. www.rugmark.de (also in English)

### Stop deforestation

According to the World Resources Institute, 80% of the world's original forest cover has been cut down or degraded, for the most part during the last 30 years. However, surveys show that there are two opposing trends: forests in the northern and temperate zones (North America, Europe and Russia) are doing better than those in the tropics (Latin America, Africa and South-East Asia). Even though the practice of clearing whole swathes of forest is still prevalent in some parts of Canada and Russia, on the whole forests in the boreal and temperate zones are gaining ground, particularly on agricultural land and mountain pastures. The big problem lies in the overexploitation of tropical forests to meet export demand; here, the sustainable management of forests is still extremely rare.

### FSC - the label for "sustainable" wood

The logging of wood per se does not harm the environment, and it is quite possible to manage forests sensibly by respecting their biodiversity and the rights of local communities. It was with this aim in mind that the FSC (Forest Stewardship Council), founded in 1993, developed its concept of certified forests. Today the FSC label stands behind the sustainable management of 45 million hectares of the world's forests, of which only 9.5 million are located in the tropics. The FSC also ensures that every stage of the wood's journey from the forest to the consumer is traceable. Only if the entire process is certified can a product, such as a piece of furniture, carry the FSC label.

### Carpets and child labour

Carpets and rugs are sometimes produced under deplorable working conditions, affecting children and adults alike. In some countries, poverty often forces people to work for next to nothing and to make their children work instead of sending them to school. It is sometimes claimed that children's small fingers are



better at weaving rugs and carpets. This is completely untrue. Only an experienced adult is able to weave complex patterns in wool or silk. The reason some manufacturers employ children lies not with their nimble hands but the fact that they are a cheap source of submissive labour.



### The fair trade label STEP

Fair trade is an essential way of fighting poverty and its consequences. When adults earn enough money, their children do not need to work and can attend school. In the case of hand-made rugs, the STEP label guarantees decent living and working conditions, and certifies that the rugs are not woven by children. The foundation associated with the label also works to teach rug weavers how to read and write and offers them access to basic health care. Rugs carrying the STEP label are on sale in some department stores and have conquered a sizeable share of the market, accounting for 40% of total sales in 2002. The list of sales outlets can be found on www.step-foundation.ch (also in English).

### When furniture has reached the end of its life

In Geneva, furniture that can no longer be used can be disposed of for free at the three recycling centers situated at Site-de-Châtillon in Bernex, Chânats in



Bellevue, and La Praille in Carouge. In addition, every commune runs its own collection system. In the city of Geneva, bulky items are collected for free by the municipality, but by appointment only (tel. 022 418 42 22). Charity organizations collect used furniture in good condition free of charge at your home and sell it in their stores (for a list of organizations see: www.geneve.ch/dechets/service or www.ge.ch/dechets/service, *Adresses utiles*).

### To find out more

#### Second-hand furniture

Geneva charity organizations which accept and sell used furniture :

Salvation Army (Armée du salut)

www.armeedusalut.ch, tel. 022 736 15 80

#### Caritas

www.caritas-geneve.ch, tel. 022 708 04 44 or 022 880 04 25

### Centre social protestant

www.csp-ge.ch, tel. 022 884 38 00 or 022 341 13 02

www.emaus-ge.ch, tel. 022 342 39 59

#### www.cites.org (in English)

Convention on international trade in wild plants and animals threatened with extinction (CITES), information on endangered types of wood.

#### www.droitsenfant.com

Information on the rights of the child, especially as regards child labour.

### Brochure

Votre guide du bois – franc jeu pour les forêts anciennes – a guide to wood without FSC label, but whose exploitation does not threaten the last remaining ancient forests. The guide can be downloaded from www.greenpeace.ch, Diversité biologique/Documents.

# Housing

### Open the door to sustainable housing

When looking for a new place to live you will probably consider location, rent, size, natural lighting and how well equipped the house or apartment is. From the perspective of sustainable development, however, you might also wish to take other criteria into account, such as distance from work, proximity to basic services, energy consumption and environmental impact.

### More expensive but closer to work?

Choosing a house or apartment is generally a long-term decision. When comparing rent, consider the time and money saved by moving into a home located close to public transport or your place of work. If you work 15 km from home and don't have access to public transport, you will spend at least a 100 francs per month on gas alone and that's without taking into account the time lost in traffic and the damage caused to the environment when you commute by car. www.tpg.ch

### Housing cooperatives

Members of a housing cooperative buy shares (costing between Sfr. 15,000 and 30,000, depending on the size of the home). With the capital, co-ops buy or construct buildings, often to high environmental standards, and then rent out the apartments at low rates. The co-ops themselves manage their buildings. When co-op members move out, their shares are sold to the new tenants.

Information: www.codha.ch, or Groupement des cooperatives d'habitation genevoises (association of Geneva housing cooperatives, tel. 022 906 0590, secretariat@grcoophab.ch).

### "Villa"-type single-family homes

A large house can have a pretty big environmental footprint if it uses a lot of energy and water, and if pesticides are sprayed in the garden. Some neighborhoods are located so far out that it is practically impossible to get by without a car. But there are still ways to be environmentally friendly, for example by using a solar water heater, reserving garden space for wildlife, birds and butterflies, and getting around by bike at least some of the time to keep fit.





### Sharing your home

If you share your home with a lodger or rent out a room to a student you will be kind to the environment by reducing each individual's need for space, heat and energy-consuming appliances. It is also a good way to lower your rent and get to know other people.

### Building and renovating

Whether you build or renovate, using certified eco-friendly materials helps to save natural resources and to keep your home healthy while reducing indoor pollution. The Centre Info Pro-CIP, run by the Service cantonal de l'énergie, offers tips on how to save energy through better insulation and lighting options, and on renewable energies that can be used to heat your home and hot water (solar energy, wood heating and heat pumps). See www.geneve.ch/scane, and Infosheet No. 12 "DIY and Home improvement".

### Labels



Natureplus building materials are certified healthy and environmentally sound. www. natureplus.org (also in English)



ovation. The FSC label ensures that forests are managed in an environmentally and socially responsible way. www.fsc.org (in English)

### MINERGIE

The MINERGIE® label certifies that a home is comfortable and quiet, and has reduced energy consumption. www.minergie.ch (also in English), tel. 0800 678 880

### More space for you, more space for me

Since 1960 the population of Switzerland has increased by about 1.5 million. In the same period, the number of households too has risen by 1.5 million; there are now 7.2 million people living in more than 3 million households. The soaring number of households not only contributes to the housing shortage – it also increases the population's environmental footprint, as each person occupies more living space, consumes more energy for heating and lighting, uses more appliances and electronic equipment, and produces more waste water and trash. As homes are located increasingly far from workplaces the number of motor vehicles has mushroomed – and they are being used for longer commutes.

### A worldwide phenomenon

A study of 141 countries carried out at the University of Michigan in the United States has found that there has been an increase in the amount of residential space per person throughout the world. Of the disappearance of natural areas, only half can be attributed to population growth; the rest is due to the fact that people now live less often in families, and households are thus becoming smaller. Even in countries with shrinking populations, there is increasing demand for both housing and housing space. In the developed countries, individual homes are being built bigger and bigger, while nearly a quarter of the Earth's population is living in substandard housing - and we are not even talking about those having no roof over their heads at all...

### Increasing energy needs

A third of the world's energy consumption is used by residences - for heating, cooling, cooking, lighting, amusement or to power various types of equipment and machinery (such as lifts and pumps). This consumption produces 12 per cent of the world's greenhouse gas emissions. The demand for energy is continuing to grow rapidly as our societies seek ever more space and comfort. According to Swiss government statistics, on average about 44 square meters of space were occupied per person in 2000; this is about 10 square meters more than in 1980. Also, homes and public places are being heated to higher temperatures. The International Energy Agency (IEA) predicts that world demand for electricity will double between 2000 and 2030. Housing accounts for the fastest growing share of this demand.

### To find out more

### Groupement des coopératives d'habitation genevoises

Case postale 1379, 1211 Geneva 1 tel. 022 906 0590, fax 022 732 0655 secretariat@grcoophab.ch

### www.logement-durable.ch

A site on housing and sustainable development set up by the Office féderal du logement (Swiss federal office for housing).

### www.maisonsante.ch

Practical advice on housing and interior design.

### www.air-interieur.org

Information on indoor air pollution.

### Recommended reading:

### Brochure

L'été au frais, les bons tuyaux pour se protéger de la chaleur en faisant des économies, distributed free by Environnement-Info, tel. 022 327 4711

### Book

Notre habitat écologique: Détails pratiques d'une expérience réussie, Annie Bertrand, Editions du Dauphin, 2002.





In Geneva, housing is the single largest contributor to the greenhouse effect. Tenants pay for their heating fuel or gas through their monthly utility charges. Everyone can reduce consumption during the heating season by lowering the indoor temperature and by not leaving

windows open for excessive periods (air your home out thoroughly and well, but for just a few minutes each day). If all tenants did this, the amount of energy used to heat the building would be reduced significantly. Over a year, monthly charges could be reduced by as much as a month's rent.

For instance, here is how much less energy a threeroom apartment would consume if all tenants kept their windows closed and lowered the thermostat:

- Thermostat at 21° C, bedroom a bit cooler, aired briefly but thoroughly: **600 litres of heating fuel**;
- Thermostat at 23° C, same temperature throughout, windows often open: 800 litres of heating fuel.

Doctors advise against overheating. The warmer the air, the drier it is, and this is conducive to allergies. Keeping the thermostat at 20° C is not only ecofriendly, it's better for you, too.

# Cars

### Reconsider your means of transport

Car transportation is practical and comfortable, but it comes at a high price, especially in terms of health. As a responsible consumer you can limit the pollution cars cause by choosing an appropriate vehicle, using it wisely, and wherever possible opting for "gentle" alternatives such as public transport, walking, bicycling, etc.

### Hybrid vehicles

Hybrid vehicles use less gasoline and result in less environmental pollution as they use both a combustion engine and an electric motor. At slow and moderate speeds (for example in urban areas, when waiting at a red light, etc.), the car is totally or partially driven by electricity. From around 60 km/hour and up, the gasoline engine kicks in, and also recharges the batteries.

### Consumption

Not using much gasoline saves money and reduces  $CO_2$  emissions. Cars with fewer cylinders generally use less fuel and are less expensive to purchase. In addition, they all test well on safety (www.ecomobiliste.ch).



### Carpooling

Instead of buying a car, you can occasionally rent one or become a member of a carsharing scheme (see overleaf); the rest of the time use public transport, cycle or walk.

### All revved up

The number of large, excessively powered and hence gas-guzzling cars on the road is growing all the time – and yet most SUV drivers never make use of the four-wheel drive mode of their cars' engines.

Marque Type	AUTO Model
Carburant Transmission Polds	Diesel Aut. 1630 kg
Consommation de carburant Mayenne: mesurée conformément aux prescriptions de la directive 80/1286/CEE	5,8 litres / 100 km
Emissions de CO2 Le CO <sub>2</sub> est le principal gaz à effet de serre responsable du réchauffement planétaire	138 grammes / km
Consommation relative Consommation de carburant rapportée à la moyenne de tous les types de véhicules offerts	
A B C	В
D E	
F G	

#### graduationn's a disposition' analy touls less plonts due to verse of peuveint are consume as informat a historises winvasulase energies ch La consommation de carbumant et les efinissions de CO<sub>2</sub> d'un vehicule sont fonction non saudemart de son rendrament dansgrisplane, mais également du comportement a volant et d'autures facteurs no matteringues.

### Labels

The Energy label rates cars according to seven categories, ranging from A (best) to G (worst). The less fuel a car uses and the less  $CO_2$  it emits in relation to its weight, the better the energy rating. But be careful: a two-ton vehicle with an "A" rating invariably uses more fuel than a small 850-kg car rated "D". The main aim of the label is to make it possible to compare similar cars in the same vehicle class. In the Canton of Geneva, if you buy a new car that uses little fuel and whose  $CO_2$  emissions are low you are exempt from automobile taxes for the first three years. www.geneve.ch/voiturepluspropre; www.etiquetteenergie.ch

### Gasoline vs diesel

Diesel engines are more fuelefficient than gasoline-powered ones. However, unless diesel cars are equipped with a filter to retain carcinogenic soot particles, they will emit 100 to 1000 times more fine particles than a gasoline engine and three times more nitrogen oxides (NOx).

### Air conditioning

Air conditioning is standard equipment in most cars. But in summer, air conditioning results in 10 to 30% less fuel efficiency and the unavoidable loss of refrigeration fluid accentuates the greenhouse effect.

### The downside of freedom of movement



The car, symbol of freedom and mobility, is also a source of problems, such as ac-

cidents, congestion, air pollution and global warming to name but a few... Air pollution caused by car traffic causes 1,700 premature deaths annually in Switzerland and about 12, 500 cases of pediatric asthma; nor should we forget about noise pollution: in Geneva, nearly one out of every two persons suffers from noise, primarily due to road traffic.

A car costs between Sfr. 500 and 1,000 a month; it is therefore expensive for households and can contribute to indebtedness. Some 20% of Swiss households do not have a car. The figure is even higher in cities: 27% in Geneva. For drivers wishing to reconcile mobility with sustainability there exist several original solutions. Here are a few:

### A more economical, eco-friendly and less noisy way of driving

Eco-Drive<sup>®</sup> (www.eco-drive.ch) offers driving lessons for new and experienced drivers. If applied correctly, the Eco-Drive method reduces consumption by up to 15% and emis-

sions by up to 30%. Training is given by a licensed instructor (called an Eco-Coach). Basic principles include: - accelerating rapidly

- shifting to the next highest gear at 2500 rpm (or even shifting directly from 2nd to 4th gear) and downshifting at the last possible moment
- anticipating, so as to avoid unnecessary braking
- not downshifting in order to slow down the car
- not letting the engine run when the car has come to a stop.

### **Renting and Car Sharing**

If you need a car only from time to time, renting is the best solution. In Geneva about 20 rental agencies compete for business. There is also another option: the car sharing cooperative Mobility Carsharing. Its 58,000 members are charged an annual fee and are then billed per hour or per kilometer. The cooperative has some 1,700 cars available from 1,000 parking places throughout Switzerland, with many positioned near train stations or city centres. Cars can be reserved 24h/24h by phone or Internet. Car sharing has been shown to be more economical than car ownership if you travel less than 12,000 to 15,000 km a year; moreover, it avoids all the problems of parking and maintenance.

www.mobility.ch; www.autopartage.ch

### Carpooling

Many cars are occupied only by their drivers, a good number of whom leave from about the same place and travel to the same destination. To encourage carpooling, an Internet site matches (free of charge) passengers with drivers seeking and offering to share driving and expenses – either occasionally or regularly (Geneva region). www.covoiturage.ch

### To find out more

### www.tcs.ch

Touring Club Suisse – the web site's section *Informations techniques* offers useful information for prospective car buyers.

### www.ate.ch

Association transports et environnement—promotes more environment-friendly mobility. See their *EcoMobiliste* guide for information on eco-friendly cars (www.ecomobiliste.ch).

### www.upsa-ge.ch

Union professionelle Suisse de l'automobile – Geneva section.

### One bus = 60 cars

If all the passengers of a full bus were to drive in their own vehicles this would put 60 more cars on the road. Those who walk, bicycle or use public transport not only make space for their fellow citizens but also give the gift of clean air and silence.





### Automobile waste

Batteries and oil are dangerous waste. The recycling tax included in the sales price of new batteries entitles consumers to leave their used batteries with any sales outlet (free of charge). Used engine oil can be taken

to most of the communal recycling centres (déchetteries).

### "Green" tires

Your choice of tires not only influences car safety but also has a significant effect on fuel consumption (savings of up to 6% are possible) and noise: from 50 km/hour up, the noise made by a car's tires will exceed that of the motor (www.geneve.ch/bruit/pneu. html). The lifespan of a tire will vary from 10,000 to 40,000 km,

depending on the quality of the rubber, inflation to the recommended pressure, your driving style and correct wheel alignment.



# Money

### How to manage your money responsibly

Depending on how we save, invest or borrow, money can become a tool for sustainable development and contribute to ethical, social and environmental change.

### Ethical investments

By carefully choosing where you invest your money, you can reconcile your financial interests with environmental and ethical principles (see overleaf).



### Ethical pension funds

Pension funds manage assets with a view to preserving their long-term value. Some institutions, like the Ethos Foundation in Geneva and Nest in Zurich, have an investment policy based on social and environmental principles.

### Donations

Many associations are striving to make the world a better, fairer place. Governments acknowledge the value of their work by making donations to such associations tax-deductible. The



ZEWO label guarantees that such associations are well managed.

### Responsible shareholding

When you own shares in a company's stock, you also have rights, including the right to vote in the general meetings. This can be a way to influence the company's social and environmental policies.

For further information, go to the websites of: Association d'Actionnaires pour une Economie Durable (www.actares.ch) and Fondation Ethos (www. ethosfund.ch).

### Savings accounts

If you want your savings to support "green" or socially responsible business ventures, open a savings account at a bank that operates on the basis of such principles. Switzerland has several banks of this kind (see overleaf).

### Consumer credit

By encouraging people to spend, consumer credit can lead to overindebtedness, pauperization and social exclusion. According to one study, 275,000 people in Switzerland are trapped in a spiral of debt.

### Credit cards

Some banks link their marketing strategy to environmental causes. For example, one bank gives a portion of the fees it charges businesses for processing credit card transactions to the World Wildlife Fund. For cardholders, there is no difference between this kind of card and its traditional counterpart. www.wwf.ch, see under *Je veux agir*.



### Ethical investment funds

Thanks to the increasing number of "green" or "ethical" investment funds on offer, you can invest your savings in deserving companies and help bring about a more sustainable type of society. To set up ethical funds, financial institutions use social and/or

ethical criteria to select the "best" companies by sector of activity. Such funds often include traditional companies that do business all over the world and are quoted on the stock exchange. They also include young, innovative companies that

are starting up in environmental or social fields. The arms, tobacco, nuclear and petroleum industries are ruled out as a matter of principle. In Switzerland, ethical investments already amount to 5 billion francs but this is still comparatively little, representing only 1% of total investments.



A list of ethical funds is available on www.nicefuture.com, in the section entitled Mon portefeuille.



### Choosing a bank

Banks have very different approaches to allowing social and environmental concerns to shape their investment strategies. By choosing your bank carefully, you can have a better idea of how your money is being used. Here are a few questions worth asking:

- Does your bank provide transparent information on its investments?
- Does it conduct a complete evaluation of its investments from a social and environmental point of view?
- Are certain sectors of activity like arms and tobacco ruled out as a matter of course?
- What portion of the bank's investments go to innovative or pioneering ethical companies?
- Are ethical investments simply one of many branches of activity or are they the very core of the bank's operations?

### To find out more

#### www.nicefuture.com

This association concerned with quality of life and sustainable development provides theoretical and practical information on such things as ethical savings and investments. See the section entitled Mon portefeuille.

### www.evb.ch (also in English)

The Berne Declaration - an association that promotes, inter alia, ethical investments.

### www.centreinfo.ch (also in English); www.covalence.ch (also in English)

Two consulting firms that conduct research on the social and environmental responsibilities of companies.

#### www.actares.ch

An association of shareholders for a sustainable economy.

### www.ethosfund.ch (also in English)

A Swiss investment foundation for sustainable development.

### **Overindebtedness**

The figures provided by debt-collection agencies, debt-counseling services and the cantonal Offices des poursuites, which keep track of debt proceedings, show how widespread overindebtedness is in Switzerland, where the problem affects one household in 10 and one teenager in four. According to these figures, a growing number of people are overindebted and the average size of debt is constantly increasing. In the past few years alone, it has risen from 35,000 to 50,000 francs.

Today, debt problems come ahead of poverty and unemployment as the main reason why people seek help from charity organizations like Caritas and the Centre Social Protestant.

A survey conducted in June 2004 found that one Swiss in 20 was a "compulsive buyer" likely to have debt problems some day. This is a poorly known phenomenon since it is difficult to detect before the onset of real difficulties. However, it is directly related to our consumer society, in which the act of purchasing plays a central role.

Young people are particularly vulnerable to overspending. Exorbitant cell phone bills and a compulsive attraction to brand names are often cited as the main causes of teenage debt. Since they have so little income, youngsters tend to take out loans to pay back what they owe. www.nicefuture.com



### Small credits

Small credits can also lead to overindebtedness. The Swiss law on consumer credit is designed to better protect consumers and prevent them from getting caught up in a spiral of debt. However, lenders do not always play by the rules. Some consumer credit ads fail to provide the information that by law they must or to mention that loans that result in overindebtedness are prohibited.

For further information, see the following brochures published by the Fédération Romande des Consommateurs (tel. 021 312 80 06): Budget, Vos droits face aux dettes and ABC... vos droits.

# Travel

### Think beyond the beach and the sun

When deciding where to go for a vacation, consider not only location, price and available amenities, but also the environmental impact of your mode of travel and how your stay might affect the local population and economy, both now and in the future.

### Going to Paris with less CO<sub>2</sub>

The train requires three times less energy per person than the plane, and therefore produces much less  $CO_2$ . Between Geneva and Paris, the *TGV* train takes roughly the same amount of time as the plane. Although the ride is longer by train, less time is required before boarding and there is no need to travel from the airport to the centre of Paris.



### A change of scene close to home

There is no need to travel thousands of kilometres to experience the pleasure of discovery. The areas around Geneva are filled with natural and cultural sites. Regional tourism not only costs less and reduces the negative impacts of travel but also supports the local culture and economy.

### Vacation in a bubble

On holiday we often enjoy the change of scenery and ability to get away from it all without really entering into contact with the local population. Travel should also mean meeting local inhabitants, artisans and shopkeepers.

### Tourist resorts

Mass tourism – centred around hotels, beaches and plenty of sunshine – tends to concentrate many economic activities in one particular area. Economically speaking this might seem like a good thing for the host region. However, this kind of development can have negative effects in the long term, especially when large numbers of farming families leave their land to find better-paid jobs in hotels. In some island destinations, the fact that previously cultivated terraces were abandoned resulted in soil erosion, which now threatens the livelihood of the inhabitants.

### Enough water for everyone

Hotels, gardens, swimming pools and golf courses all require large amounts of water and electricity. In regions where water and energy are scarce, rationing is sometimes imposed on the local inhabitants to ensure that the tourists are comfortable.

### Labels

Many tourism activities carry national or regional labels, but few are recognized at the European or international level.

The European eco-label is awarded to tourist accommodation and camp site services which encourage public education, keep their consumption of energy and water in check, minimize the amount of waste they produce and use renewable resources and less toxic chemicals. www.eco-label-tourism.com (also in English)

The Blue Flag is awarded to beaches and marinas meeting high standards of water quali-



ty, publicenvironmentaleducation, environmental management (recycling) and safety. www.blueflag.org (in English)

### Sustainable tourism

By travelling or vacationing in another part of the world we bring money to the region, thereby helping the economy and improving the existence of the local population. However, a poorly managed tourist economy can, over time, degrade its *raison d'être* by ruining the landscape through the construction of hotels, airports and roads; destroying the vegetation and wildlife; making over-intensive use of natural resources; attracting large



numbers of local inhabitants; encouraging transport systems which produce noise and air pollution; and producing large quantities of trash and waste water, which spoil the landscape and contaminate the soil and water...

Sustainable tourism takes into account the long-term management of all of a region's resources and not only short-term economic interests. The goals of sustainable tourism are to preserve the quality of the environment, the beauty of the place, and the social relations among the inhabitants.

### Causing more harm than good

Tourism money can also be a destabilizing influence, especially if there is a significant difference in standard of living between the tourists and the inhabitants. Taking advantage of financial windfalls, farmers sell arable land for the construction of resorts and roads, etc.



Local crafts disappear because people prefer to work in the better-paying tourist industry. A region that has staked its future on tourism as its sole economic engine can become highly dependent on this source of revenue and may lose part of its local skills and autonomy.

Often tourism increases the cost of living and creates a new social hierarchy that accentuates the hardship of

poverty. This dynamic is one of the causes of sex tourism – notably child sex tourism – which has a long history in many Asian countries such as Thailand and the Philippines. Today new tourist destinations are home to this trade – Brazil, the Dominican Republic, Cuba, Mexico, Kenya. According to UNICEF, more than two million children are victims every year.

A further phenomenon are the somewhat voyeuristic "ethnological" tours to villages inhabited by ethnic minorities that practise unusual customs. These tours are usually run with the approval of a country's authorities, although the people being "visited" are rarely consulted and do not necessarily receive any of the money paid by the foreign tourists who have come to observe them.

### To find out more

#### www.cff.ch (also in English)

Train schedules for Switzerland and Europe.

#### www.geneve-tourisme.ch (also in English)

The section on Country-style accommodation offers information on places to stay in the Geneva countryside, local products, and suggested itineraries. Tel. 022 909 70 00

### www.myswitzerland.com (also in English)

Portal to holidays in Switzerland: in the mountains, with children, etc. Suggestions on how to get around on foot, bicycle, using the postal bus system, etc. Ideas for excursions to suit all tastes.

Tel. 00800 100 200 30 (toll free).

### www.tourisme-rural.ch

Country-side vacations in French-speaking Switzerland.

### **Neighbouring France**

#### www.hautesavoie-tourisme.com; www.savoie-tourisme.com; www.ain-tourisme.com; www.franche-comte.org; www.yourvisit.info/index\_fr.html

Hotels, beaches and tourist sites that have been awarded one of the EU environment labels.

### Magazine

La revue durable, issue on sustainable tourism (in French), www.larevuedurable.com.

## Emissions of CO<sub>2</sub> per passenger, for every 100 kilometres

Carbon dioxide  $(CO_2)$ , emitted in particular by engines burning fossil fuels, is the principal greenhouse gas causing global warming. Air traffic plays an important role because it produces  $CO_2$  at high altitudes.

Even though trains are often competitive with planes in terms of total travel time, more and more people are choosing air travel because of the very low prices advertised by some airlines.

Air travellers may choose to offset the  $CO_2$  emitted during their trip by buying a ticket that comprises a surcharge on the basis of the amount of  $CO_2$  produced by the flight and invests this money in renewable energy facilities (solar panels, biogas, etc.). For a Geneva-London round trip the surcharge is about 25 Swiss francs.

www.myclimate.ch (also in English)


# Back to school

## Teaching by example

Back-to-school purchases have less impact on the environment and health than daily decisions on matters like transportation and snacks. They nevertheless provide an excellent opportunity to talk about sustainable development with budding responsible consumers.

#### Sustainable erasers

From the point of view of sustainable development, the best erasers are made of natural non-tinted (opaque or beige) rubber, rather than of plastic, which is non-renewable. Novelty erasers often tend to erase less well.

#### Renewable materials

Metal and wooden rulers are more robust than plastic ones. They also have another advantage: wood is renewable and metal can be recycled.

#### Durability

A sturdy schoolbag that "grows" with the child can last years. Some bags are made of recycled material, meaning you can come full circle in reclaiming waste.

#### Solvents

Top ecological marks go to water-based or solvent-free felt pens (marked "washable" on the package).

#### Solar power

Calculators allow children to use solar energy (or to take advantage of the light from desk lamps). Some models come with a battery for overcast days.

#### **Recycled paper**

Most stores sell notebooks and notepads made of 100% recycled paper that is unbleached or has been bleached without using chlorine. Notebooks are easier to recycle if the cover is made of carton rather than plastic.

#### Tape vs fluid

Correction tape is preferable from the environmental point of view as the dispensers can be refilled. If you do opt for correction fluid, try to avoid those that contain organic solvents, which are harmful to health and the environment.

## Pencils

Unvarnished wood pencils do not use superfluous dyes, which can be highly toxic synthetic products. Some bear the FSC label guaranteeing that the wood comes from a sustainably managed forest.

#### A health plus

It will cost a family between 50 and 300 Swiss francs, depending on the child's age, to buy a schoolbag, notebooks and other school supplies. Brand names moved into this sector several



years ago, and stores now stock articles displaying film or cartoon heroes – albeit usually at a higher price.

Although the market continues to be dominated by plastic gadgets, you can still buy supplies produced to meet sustainable development criteria. The supplies must:

- be hazardless for the user
- have been produced with a minimum of environmental damage
- be relatively sturdy (quality, solidity, durability)
- generate the least possible waste.

Families often go shopping for back-to-school supplies together. This is an excellent opportunity to explain to children what their choices imply in terms of sustainable development.



To find out more

#### www.pandava.com/f/milkant.php

The WWF's site for "eco-friendly" office supplies. www.ecoconso.be

A network of associations working for sustainable consumption; the site contains a wealth of information on office and school supplies.

#### www.prevention.ch/lepetitdejeunergouter.htm

Tips for healthy breakfasts and snacks.

#### www.pedibus-geneve.ch

Information on existing "walking bus" routes and instructions on how to go about creating a new route.

#### www.familles-ge.ch

The Canton of Geneva web site containing information for families.

#### www.genevefamille.ch

Comprehensive web site for families with children.

#### The problem of overweight children

In Switzerland, about 30% of children and teens are overweight, and 10% are obese. The World Health Organization (WHO) considers obesity to be a worldwide epidemic. Since the 1960s, the number of obese people worldwide has multiplied by four, if not five. There are complex reasons for this, but two factors stand out: a poorly balanced diet (see sheets no. 5, "Beverages", and no. 6, "Convenience food") and lack of daily physical activity.

#### Getting to school by leg power

By taking the "walking bus" (pédibus), children from kindergarten to second grade can avoid having an excessively sedentary lifestyle and use an environment-friendly mode of transport. "Walking buses" function like real buses – they run to sched-



ule and the children walk single file – but run on leg power. Their itineraries are carefully selected and even have scheduled stops. The "drivers" tend to be volunteer parents who take "the wheel" one week at a time. Many Geneva municipalities, or *communes*, already have walking bus routes established by the GAPP (Group of Parents' Associations) and ATE (*Association Transport et Environnement*). Families living far from a route can drop their children off at the starting point, reducing the amount of traffic around schools.

#### A balanced breakfast and mid-afternoon snack

Breakfast and mid-afternoon snacks are all too often forgotten or simply skipped. Yet they are key parts of any 4-to-10-year-old's diet. A well-balanced breakfast comprises a dairy product (yoghurt, milk or cheese), cereal or bread (with some butter and jam or honey) and a beverage (milk, cocoa or water). It provides the energy needed to start the day and improves concentration.

When school is done for the day, at around 4 p.m., children have to "recharge" before the evening meal – whether to play or to do their homework, so it's time for a snack. A glass of milk, yoghurt, a fruit or a slice of whole-wheat bread is better than cookies, sweets, soft drinks and other sugary snacks.



# Flowers and Gifts

#### Infosheet n°20

### Give a gift with a future

A bouquet of flowers or a toy will always be a welcome gift. But wouldn't it be good to know that our generosity is also kind to the planet and to the workers who made the presents we give? Therefore, some thought should be given to their environmental impact and the methods used to produce them.

#### Christmas trees

Look for Christmas trees with an FSC label (see Appendix A), as this guarantees that they come from forests managed in accordance with sound environmental and social practices. Also consider purchasing an indigenous tree or one grown in the region (spruce, Nordmann fir, silver fir), which will not have travelled as far to the point of sale.

#### Pets

An animal is not a toy. Dwarf rabbits live for up to eight years and suffer if they are not kept with other rabbits. Exotic fish are not meant to live in a fishbowl. The popular red-eared slider turtles grow large very quickly and end up smelling bad. Never release turtles or fish into the natural environment because they endanger the local fauna.

#### **Plastic toys**

Plastic toys are made from petroleum, a nonrenewable resource. They often wear badly, crack with age, and cannot easily be repaired, unlike toys made of wood or metal.

#### Ethical toys

If a game or toy carries a fairtrade label, it was made under decent working conditions. Articles labelled *atelier protégé* were made by handicapped people in a sheltered workshop.

#### Second-hand toys

Flea markets and usedtoy sales (usually organized by neighbourhood or parent associations) extend the useful life of children's toys and therefore help to get the most out of the energy, materials and labour that went into making hem.

#### Fair-trade flowers

Giving flowers carrying a fair-trade label (see overleaf for more information) ensures decent working conditions for those who cultivate them. Local markets and flower stores sell flowers from the canton of Geneva, labelled *Terre-Avenir*.

#### Battery-powered toys

The manufacture of a battery requires 50 times more energy than it will release in its short useful life. In some toys batteries provide power for a secondary function of which children quickly grow bored (talking dolls, noisy trucks, yoyos with flashing lights and such like). Sometimes the batteries are inaccessible and end up being thrown away with the toy instead of being recycled.



Max Havelaar and FLP (Flower Label Program) guarantee that flower growers respect certain ecological and social criteria. The **Genève Région - Terre Avenir** label identifies flowers grown in the canton of Geneva.







#### Eco-friendly and socially responsible toys

The toy market has become huge, with sales in Europe having grown at an annual rate of about 10% over the past ten years. This trend would seem to be the result of relentless advertising and the fact that many parents too readily give in to their children's demands.

Many toys offer little in the way of guarantees regarding the working conditions of those who made them. Others are hugely wasteful of energy, if one compares the toys' useful life with the energy and raw materials necessary to make, wrap, and ship them. Buying a toy with a European brand name in no way guarantees that it was actually made in Europe (check the place of manufacture stated on the package). To remain competitive and keep prices as low as possible, manufacturers outsource some or all stages of the production process, generally to Asia. Outsourcing is often equivalent to exploitation which may take the form of child labour, low wages, and long hours in poor, unhygienic working conditions.



#### Gifts that encourage learning

Giving a "sustainable" gift to a child takes into account aspects that contribute to the development of self-confidence and respect for others. Some examples:

- toys that require active input from the child (a book on handcrafts, home-made jewellery, a construction set, etc.)
- toys that are solid, washable, repairable and made of wood, metal, or natural fibres
- sports equipment or membership in a sports or fitness club
- tools of discovery: magnifying glasses, binoculars, microscopes, etc.
- subscription to a children's magazine
- trip to a farm camp, arts workshop, visit to a museum, etc.
- games that can be played as a group.



# Flowers that will put a smile on everyone's face

Switzerland spends more on cut flowers per capita and per year than any other country in the world (124 Swiss francs per person in

the year 2000). Flowers grown in Switzerland cover only about 10-15% of this demand. The rest is imported from distant places like Columbia, Ecuador, Kenya, and Zambia. However, despite the fact that flowers from these countries have to be flown in, they still require less energy than those produced in, for example, Holland in continuously heated and lit greenhouses.

One rose in four comes from equatorial regions, where the cut-flower industry has enabled many women to find paid employment. However, some NGOs decry the ongoing use of dangerous pesticides, long since banned in Europe, which have the potential to damage workers' health.

#### **Flower labels**

The globalization of the flower market has put European cultivators in competition with flower growers around the world, pressuring Europeans to cut costs. As a result, it is not uncommon in Europe to find illegal workers working in greenhouses, badly paid and with no benefits. To help improve this situation, you can buy flowers carrying a recognized label. The Flower Label Program (FLP) not only stands for decent wages, but has also banned the use of certain pesticides and requires that workers be provided with adequate protective clothing and medical followup. This program also asks that horticultural enterprises offer day-care centres and schools for older children.

Since 2001 fair-trade Max Havelaar flowers are available from the large retail outlets.

### To find out more

#### www.juniorweb.com and www.passionjeux.be Examples and advice on educational games and toys.

www.ecoconso.be

A group of organizations active in sustainable development; information relating to gifts and toys.

#### www.globaleducation.ch (also in English); www.caritas.ch; www.mdm.ch, www.epsetera.ch

Ideas for gifts, toys and games that teach about fair-trade, solidarity with others and the environment.

#### www.terre-avenir.ch

Under La Terre/Les Bonnes addresses/Vente directe you will find a list of places in Geneva where you can buy flowers directly from the producer.

#### Recommended reading

Les Jouets de la Mondialisation, Carole Crabbé and Isabelle Delforge, Ed.Vista and Magasins du Monde-OXFAM, 2002.

# Multimedia

## Connected to the future

In 2005, people in Switzerland spent 10.3 billion Swiss francs on multimedia equipment. Computers, mobile phones, MP3 players, digital cameras... these devices open up new horizons in terms of work, communications and leisure. But they also consume huge quantities of energy, and they have an impact on natural resources. Just to take one example: 2 million mobile phones were sold in Switzerland in 2005; on average, each phone was used for just eight months.

#### MP3 players

MP3s don't involve manufacturing and transporting CDs – or their cases.

#### Screens

Flat screens (LCD or TFT) consume much less electricity than conventional TVs, plasma screens or video projectors. The bigger the screen, the more electricity it uses.



#### Desktop vs. laptop

A laptop uses between 4 and 13 times less energy than a desktop. On the other hand, laptop batteries have a limited life.

#### Digital cameras

Depending on what you do with your camera, you may not need the maximum number of pixels available on the market. If you want to print your pictures at up to 10 cm x 15 cm, then 4 million pixels is plenty. And even for 30 cm x 45 cm, you need only 5 million pixels.

#### Printers

In a home situation, inkjet printers consume less energy than lasers. And bear in mind that you can carry on printing long after the printer tells you it needs a new cartridge. There are companies that will refill your cartridge, reducing waste still further. But of course, the best way of cutting down is to only print what you really need!

Storage media

such as USB keys.

Go for re-usable media,

### Impact on natural resources

To make one computer requires 240 kg of fossil fuels, 22 kg of chemicals and 1,500 litres of water. Together, all these resources weigh more than a rhinoceros. Their impact on the environment is anything but virtual!



### What do you really need?

All in one devices are becoming

increasingly common – things like mobile phones that can take photos, surf the Internet and play music. But will you actually use all these features? Chances are, you already have a camera, an MP3 player and access to the Internet. So when choosing a new piece of equipment, look at what features it offers – and decide what you really need.

### **Photo printers**

Photo printers are relatively cheap to buy. But they guzzle vast quantities of ink. And their ink cartridges are expensive, need frequent replacement and generate more refuse.



# Replace disposable batteries with rechargeable, and avoid stand-by mode

Choose mains-powered equipment, or equipment that runs off rechargeable batteries. Either of these is better than disposable batteries – they really should be a last resort. But even rechargeable batteries have a shorter life than the equipment we put them in. It's well worth reading up on how to use rechargeable batteries properly, so as to get the longest possible life out of them. Equipment left on stand-by accounts for between 13%

and 15% of an average household's electricity bill. Connect several pieces of equipment to one power strip, fitted with a switch.



### A second life for equipment

Even if you have no further use for a piece of electronic equipment, it may be just what someone else has always wanted. When you buy a piece of equipment, it's a good idea to keep the original packaging, along with manuals, software, etc. That way, it will be easier for someone else to make use of the device when you no longer need it. Various associations can find new homes for your unwanted equipment.

# Disposing of used electric and electronic appliances

Electronic equipment contains heavy metals – lead, zinc, arsenic, etc. These are poisonous, and constitute a danger to health and the environment if they are not disposed of properly. MP3 players, computers, cameras and mobile phones should be handed in at a shop that sells this kind of device. Under Swiss law, the shop has to take them back, free of charge, with no conditions. When you bought your gadget you paid a tax to cover the cost of recycling it. CDs, DVDs, cables and cartridges are also accepted free of charge. You can consult the list of products that the scheme covers on www.swico.ch (also in English).

### To find out more

# www.bag.admin.ch (also in English) or http://etat.geneve.ch/dt

Information on the health impact of radio waves from mobile phones.

www.eu-energystar.org (also in English) Energy labelling for office equipment.

www.greenpeace.org (in English) Guide for the responsible hi tech consumer.

www.swico.ch (also in English) Click on "Recycling", then "List of Equipment", for a list of products that retailers must take back free of charge.

#### Recommended reading

Repérages dans une forêt d'antennes

Available free of charge from the Direction générale de la santé, rue Beau-Séjour 24, tel. 022 839 98 30

### Electromagnetic radiation

The health impact of the radio waves emitted by mobile phones is still unclear. In the absence of definite information, it is recommended that you take certain precautions, so as to limit the amount of electromagnetic radiation you absorb:

- Choose a mobile phone with the lowest level of radiation. The radiation of a mobile phone is expressed as the Specific Absorption Rate (SAR). The Council of the European Union recommends a maximum of 2 watts per kilogram.
- Don't hold the phone against your ear while it's establishing a connection.
- Avoid phoning in cars and trains. The base stations your phone connects to have a range of about 1 km. If you are moving quickly, your phone has to keep finding a new base station. When a phone is looking for a new base station, it transmits at higher power.
- Avoid phoning from inside a car, even when stationary. The body of the car partially blocks the radio waves, again forcing the phone to transmit at higher power.

# Some of the more common quality labels Appendix A

The website **www.labelinfo.ch** offers extensive information on the facts behind most of the certificates and quality labels found in Switzerland.

#### What the letters stand for:

- A = Animal-friendly
- B = Organically grown
- E = Respect for the environment, eco-friendly manufacturing
- G = Sustainable management of resources
- P = Local or regional product
- S = Socially responsible

### Food

Genève Région - Terre avenir	P, S, E, A	Products carrying this label are grown or produced in the Geneva region. The label is controlled by an independent organization and ensures that producers comply with standards regarding quality, traceability, fairness and eco-friendly agriculture. www.terre-avenir.ch
SUISSE FARANTIE Suisse Garantie	P, E, A	This label indicates that the product was produced and transformed in Switzerland (or in the border regions of neighbouring countries), to high environmental standards. Products are controlled and certified by an independent organization. www.suissegarantie.ch
Max Havelaar	S, E	The <i>Max Havelaar</i> label is awarded to products made and sold in accordance with international fair trade standards (Max Havelaar is a member of Fairtrade Labelling Organizations). www.maxhavelaar.ch
BIO SUISSE Bio Suisse	B, A, E	The "bud" label indicates organic products grown without the use of artificial fertilizers or phytosanitary products. www.bio-suisse.ch
мс	G	The MSC (Marine Stewardship Council) label indicates ocean fish caught using fishing methods that promote the long-term health of fish populations. www.msc.org
Dolphin Safe	E	The <i>Dolphin Safe</i> label, which features on cans of tuna fish, guarantees that the fishing technique used prevents the accidental capture of dolphins. However, it says nothing about whether the tuna fishery is sustainable. www.eii.org
Coop naturaplan	E, A	This Coop label indicates that the food item was produced in an eco-friendly and animal-friendly way. Sometimes the products are also organically farmed, in which case they further carry the "bud" label of Bio Suisse. www.coop.ch
ENCACEMENT Bio	В, А	The <i>Bio</i> label of the Migros supermarket chain indicates certified organic products, which comply with the standards of the Swiss ordinance on organic agriculture. www.engagement.ch
IP-Suisse	A, E, P	Food items carrying this label were produced in Switzerland in an environment-friendly and animal-friendly way. Compliance is controlled by independent organizations. www.ipsuisse.ch
Bio Natur Plus	В, А	Manor's label <i>Bio Natur Plus</i> indicates certified organic products, which comply with the standards of the Swiss ordinance on organic agriculture. www.manor.ch
Natura-Beef	E, A	This label is awarded to meat from young animals born to lactating cows. If the label reads <i>Natura-Beef Bio</i> , it means that in addition the animals were organically farmed. www.svamh.ch
claro <sub>Claro</sub>	S, E	A fair-trade label. A growing number of products in the <i>Claro</i> range is organic ("bio").

See also Labels alimentaires – Analyses et évaluation, Ed. WWF, PSA, FRC, November 2003.

#### Eating out B, S The Goût Mieux label, the result of a WWF initiative, guarantees that meals are prepared using Mieux Gout certified organic or fair-trade products. www.goutmieux.ch Goût Mieux S, E The Fourchette verte label is awarded to restaurants that serve balanced meals, offer nonsmoking areas and recycle their waste. www.fourchetteverte.ch Fourchette Fourthette verte Ρ The Ambassadeur du terrain label is awarded to restaurants that use fresh, local ingredients mbassadeur and locally produced wines. du terroir aenevois

# Textiles

South Parties Cocko-tex	E, S	The Oeko-tex 100 standard guarantees that processed textile products carrying the label do not contain any harmful substances. The Oeko-tex 1000 standard further stands for eco-friendly production methods. www.oeko-tex.com
Migros Eco	E, S	This Migros label guarantees eco-friendly garments and other textile products, which were produced under reasonably safe working conditions. In particular, the use of toxic and allergenic substances is prohibited. www.engagement.ch
Le Coton Bio	В	This Migros label guarantees the use of organic cotton (that is to say, cotton grown without the use of pesticides, artificial fertilizers or herbicides) in clothing, towels, etc. Compliance with organic farming standards is controlled by independent experts. www.engagement.ch
Coop	E, S	This Coop label indicates textiles and cosmetic products manufactured in an eco-friendly and socially responsible way. www.coop.ch
STEP STEP	S	<i>STEP</i> guarantees decent working and living conditions for carpet and rug weavers. www.step-foundation.ch
Rugmark	S	The <i>Rugmark</i> label guarantees that a rug or carpet was not illegally produced by child labour and supports schools and social programmes in countries manufacturing rugs and carpets. www.rugmark.de

# Wood and housing

FSC FSC	E, S, G	This label is awarded to wood from forests managed in accordance with high environmental and social standards (building wood, parquet floors, furniture, other items). The label is subject to independent controls. www.fsc.org
THE MURONNENE	E	The NF Environnement label guarantees complies with certification standards, and additional environmental criteria. www.marque-nf.com
Q-Qualité suisse	P, E, G	The Q label stands for the eco-friendly production and transformation of Swiss wood. www.wvs.ch, go to <i>Certification</i> .
	E	Awarded to buildings which make rational use of energy, preferably renewable sources of energy, and have integrated building ventilation systems. www.minergie.ch
Natureplus	E, S	<i>Natureplus</i> building materials respect the environment and are not harmful to health. www.natureplus.org

# Cleaning products and domestic appliances

E a segar Caracteria Caracte	Energy label	E	The Energy label is not a quality label in the usual sense but indicates the energy consumption of light bulbs and domestic appliances (as well as the amount of noise they produce and their water consumption). On a scale of A to G, A is the best rating. www.energieetiquette.ch
C.	Eco-label	E	Products carrying the European <i>Eco-label</i> are certified by an independent body to comply with high environmental and quality standards. www.eco-label.com
	Blue angel	E	This German environment label guarantees that products are certified by an independent body to comply with environmental standards. www.blauer-engel.de
	Nordic Swan	E	This Scandinavian environment label ensures that products are certified by an independent body to comply with environmental standards. www.svanen.nu

## Other

Blue Flag	E The Blue Flag is awarded to beaches and marinas meeting high standards of water quality public environmental education, environmental management (recycling) and safety. www.blueflag.org.	
FLP	E, S	The FLP (Flower Label Program) label guarantees that flower growers respect certain ecological and social criteria. www.flower-label-program.org

# Measuring sustainable development Appendix B

These days there is much talk about sustainable development – with varying degrees of credibility. In some quarters this has lead to a certain cynicism as to the relevance of the very notion of sustainability: "Does sustainable development really amount to more than a vague idea? Haven't we perhaps been practising sustainable development for years, without even realizing it?"

However, there are clear criteria for measuring and defining sustainable development, using a combination of the following two indicators:

the ecological footprint, which can be used to estimate environmental sustainability by measuring the area of land that a population requires to produce the

resources it consumes and to absorb its waste. Approximately 11.3 billion hectares of Earth's surface, or 1.8 hectares per capita, is biologically productive land. However, in 2001 the equivalent of 2.2 hectares per capita were exploited, or about a fifth more than the planet can sustain;

► the Human Development Index (HDI), which can be used to estimate social and economic sustainability. Used since 1990 by the United Nations, the HDI measures standard of living (GDP per capita), life expectancy, access to education and knowledge (adult literacy and school enrolment ratio). An HDI greater than 0.8 is considered to be above average.

### A. Method of evaluation



#### B. Breakdown by country



**Figure A** shows the above two indicators in combination. A society that wishes to live harmoniously and "sustainably" should be situated to the right of the vertical line that represents an ecological footprint of 1.8 hectares per capita (in order to be ecologically sustainable) and above the horizontal line that represents a human development index of 0.8 (so as to be socio-economically viable).

**Figure B** shows the same diagram, different groups of nations having been added. It is quite clear that at present none of the world's nations is engaged in sustainable development. At the two opposite ends of the spectrum we find:

- nations with a non-viable socio-economic index but an excellent ecological footprint (not surprisingly, since they lack the most basic resources); and
- nations with a very high HDI but such an enormous ecological footprint that we would have to have several planets at our disposal if all of Earth's inhabitants were to consume at a similar rate (the number of planets is shown in each case).

For example, if every single person on Earth were to consume at the same rate as someone currently living in Switzerland, it would take three planets to meet the needs of the world's population.

Therefore, our fundamental priority must be to reduce the size of our ecological footprint, in particular by changing our patterns of consumption.

Appendix B is largely based on the work of the French research economist Aurélien Boutaud, who developed a model for defining sustainable development using a combination of the indicators ecological footprint and HDI.

## Tools for evaluating sustainability

Some of the tools that can be used for a general assessment of sustainability are described below:

Life Cycle Analysis (LCA)

The LCA is a method for investigating the environmental aspects and potential impacts of a product throughout its life ("from cradle to grave"), from the acquisition of its raw materials to its manufacture, use and, ultimately, elimination. This tool can therefore be used to analyse the total environmental impact of a product or an activity. Using the LCA it is possible to compare products or processes that have the same function, to identify those stages of a process that have the greatest environmental impact, to develop new products or processes, to initiate or guide public policies and to influence the choice of raw materials, energy sources, types of packaging, methods of waste treatment, etc.

#### **Ecological footprint**

The ecological footprint is used to measure the area of land needed by a given population to meet its requirements (production of resources, waste disposal, etc.). It varies with the lifestyle of the population (consumption, land use, food supply, energy, etc.). The ecological footprint can be used to estimate environmental sustainability

www.footprintnetwork.org www.wwf.ch www.agir21.org

#### **Global Reporting Initiative (GRI)**

The Global Reporting Initiative (GRI) is an international initiative set up to develop and promote the use of its Sustainability Reporting Guidelines by businesses and organisations.

www.globalreporting.org

#### Human Development Index (HDI)

The Human Development Index (HDI) is a measurement tool developed in 1990 by the UNDP (United Nations Development Programme). It combines the indicators standard of living (GDP per capita), life expectancy, and education and knowledge (adult literacy and school enrolment ratio). The United Nations has set a target HDI of 0.8. This indicator can be used to assess social and economic sustainability.

www.undp.org

#### MONET

MONET is a system of indicators designed for monitoring sustainable development (*MOnitoring der Nachhaltigen EnTwicklung*). Its purpose is to inform both the general public and decision-makers by evaluating the current situation and trends in terms of the three aspects of sustainable development (social, economic and environmental development). MONET is managed jointly by the Federal Statistical Office (FSO), the Federal Office for the Environment (FOEN) and the Federal Office for Spatial Development (ARE).

www.bfs.admin.ch

### Internet sites & Bibliograp Appendix C

#### Sustainable development

#### www.geneve.ch/agenda21

www.ge.ch/agenda21 Site of the canton of Geneva's sustainable development service

www.ville-ge.ch/agenda21 Agenda21 unit, city of Geneva

www.are.admin.ch Federal Office for Spatial Development (ARE)

#### www.un.org/esa/sustdev

United Nations Department of Economic and Social Affairs - Division for Sustainable Development

#### www.agir21.org

Association working to encourage the public, but especially young people, to become involved in efforts to build a more sustainable society

#### www.equiterre.ch

Association specialized in sustainable development

#### www.agora21.org

Platform for information and discussion surrounding topics related to sustainable development

#### www.nicefuture.com

Association whose aim is to encourage the general public to become involved in sustainable living

#### www.consodurable.org

Offers information on products manufactured in accordance with the principles of sustainable development, and provides a platform for exchange between consumers interested in sustainable living and like-minded businesses

#### Economy and business

#### www.actares.ch

Association of shareholders encouraging a sustainable economy

#### www.centreinfo.ch

Company offering advisory services and conducting research on social and environmental responsibility for investors

#### www.covalence.ch

Company offering advisory services and conducting research on social and environmental responsibility for investors

www.ethosfund.ch Swiss foundation for investment in accordance with the principles of sustainable development

#### www.sustainable-governance.ch

Partnership of Ethos Services and Centre Info working for corporate governance and the responsible exercise of shareholder voting rights

#### www.fer-ge.ch

Federation of businesses in French-speaking Switzerland, Geneva section

#### www.ccia.ch

Geneva chamber of commerce and industry

#### www.progressistes.ch

Association of self-employed professionals and entrepreneurs wishing to promote a sustainable economy

#### www.apres-ge.ch

Association promoting a social and solidarity economy

#### Environment and sustainable development

#### www.environnement-suisse.ch

Federal Office for the Environment (FOEN) www.unep.org

United Nations Environment Programme (UNEP) www.wwf.ch

#### WWF Switzerland, see under Consommation

#### www.greenpeace.ch

Greenpeace Switzerland, see in particular under Biodiversité/ Surpêche/Quel poisson dans votre assiette?

#### www.cites.org

Site of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

#### www.dechets.ch Site on waste and recycling in Switzerland

Health

#### www.maisonsante.ch

Practical advice on any activities around the house likely to be harmful or result in accidents (a site of the Geneva public health office)

#### www.prevention.ch

Information on preventive medicine

#### www.geneve.ch/pharmacien

The office of the cantonal pharmacist informs about therapeutic and toxic substances, as well as those dangerous for the environment

#### Fair trade

#### www.mdm.ch

Magasin du Monde – a chain of fair trade stores www.maxhavelaar.ch

Max Havelaar Switzerland

#### Consumer protection and practical advice

#### www.geneve.ch/consommation Consumer protection service

www.consommation.admin.ch Federal Consumer Affairs Bureau

### www.frc.ch

Association for consumer rights and protection, active in the French-speaking part of Switzerland

www.chemical-cocktail.org The European Consumers' Organisation

www.bonasavoir.ch Site of the French-language Swiss consumer rights magazine Bon à savoir

#### www.etiquetteenergie.ch Energy labels of appliances and cars (Switzerland)

www.sge-ssn.ch

# Swiss nutrition society (SSN) www.efficace.ch

Swiss agency for energy efficiency. Offers information and advice on the energy efficiency of domestic and home entertainment appliances

#### www.topten.ch

Lists the best products and services for the home and the office

#### www.terre-avenir.ch Site of the Geneva agricultural association

# Selected bibliography (of French-language original)

Guide du consomma(c)teur. Mieux orienter ses achats pour favoriser le commerce équitable et le développement durable, Stéphanie Mariaccia, Sang de la Terre, 2003

Le guide du consommateur responsable, Milène Leroy, Marabout, 2002

Le guide éthique du consommateur, Pierre Cadet, Albin Michel, 2001

Briser un tabou: réduire la consommation, La Revue Durable, no. 13, November-December 2004, January 2005

La consommation citoyenne, Alternatives économiques, special issue no. 10, March 2003

Le guide vert du consommateur, special issue no. 102 of 60 millions de consommateurs, July-August-September 2001

Le guide du citoyen, Guide du Routard, Hachette, 2002

Consommer sans nuire, special issue of the *Revue* Environnement of the Federal Office for the Environment (FOEN), January 2004

*Eco-citoyen au quotidien*, Chaib, Thorez, Sang de la Terre, 2000

Guide des vacances écologiques, 2000 adresses et lieux pour vivre des vacances différentes, Ed. du Frayasse, 2002

Devenir éco-consommateur, acheter et consommer mieux; a practical guide compiled by ADEME, www. ademe.fr

Protégeons notre plantète sur les conseils de la famille durable;UNEP, sustainable development week, France, 2003. www.familledurable.com

*Guide écologique de la famille,* Le Bouar, Belotti, Rav., Sang de la Terre, 2000

Le guide de l'habitat sain: les effets sur la santé de chaque élément du bâtiment, Suzanne and Pierre Déoux, Medieco, 2004

L'écologie, c'est la santé, Suzanne and Pierre Déoux, Frison-Roche, 1993

La maison des [néga]watts, le guide malin de l'énergie chez soi, Thierry Salmon and Stephane Bedel, Terre Vivante, 1999

Facteur 4, deux fois plus de bien-être en consommant deux fois moins de ressources (English title: Factor Four: Doubling Wealth, Halving Resource Use), Report to the Club of Rome, Terre Vivante, 1997

L'entreprise verte, Elisabeth Laville, Village mondial, 2002 Les pionniers de l'entreprise responsable, Patrick d'Humières and Alain Chauveau, Ed. d'Organiastion, 2001

Dictionnaire du développement durable, ARMINES, C. Brodhag, F. Breuil, N. Gondran, F. Ossama, AFNOR, 2004

Modes de consommation et de production durables (in English: Resource Kit for Sustainable Consumption and Production Patterns); a set of 12 infosheets offering information and practical advice on a range of topics to help readers put the principles of sustainable living into practice in their everyday lives

#### www.unep.org/publications

La planète attitude – les gestes écologiques au quotidien, G. Bouttier-Guérive & T. Thouvenot, WWF-Le Seuil, 2004

Labels alimentaires – Analyses et évaluation, WWF, PSA, FRC, 2003

#### English-language resources

#### www.environmenthouse.ch

Website of the International Environment House, Geneva.

www.wwf.org

www.greenpeace.org

www.eco-labels.org A guide to environmental labels found in the US.

#### www.enviroliteracy.org

Website of the Environmental Literacy Council, an independent, non-profit organization which gives teachers the tools to help students develop environmental literacy.

#### www.globalactionplan.org.uk

Website of an environmental charity that helps people make positive changes at home, at work, at school and in the wider community.

#### www.energysavingtrust.org.uk

A UK non-profit organisation working to cut emissions of  $\rm CO_2$  by promoting the sustainable and efficient use of energy.

#### www.yourhome.gov.au

An Australian home consumer guide.

#### www.thegreenguide.com

A consumer guide informing about product choices and daily practices that are good for health and the environment.

#### www.grist.org

Environmental news and commentary.

#### www.unep.net

Authoritative environmental information based on themes and regions.

#### www.coinet.org.uk

Information on the impacts of climate change, and practical steps that people can take to reduce them.

#### www.patagonia.com/recycle

Find out about the garment recycling program of Patagonia Clothing.

#### www.theyellowhouse.org.uk

Learn how the Marshall family in the UK went green.

Hope's Edge: The Next Diet for a Small Planet, by Frances Moore Lappe and Anna Lappe, Tarcher/Penguin 2002

The Food We Eat, Joanna Blythman, Penguin, 1998

Worldchanging: A User's Guide for the 21st Century, edited by Alex Steffen.

# Are you a responsible consumer?

Appendix D

cimes y

This test is about your habits as a consumer. To find out what sort of consumer you are, answer the questions below, marking the answer that best fits your own shopping habits. **0 = "Never"; 1 = "Rarely"; 2 = "Sometimes"; 3 = "Usually"** 

Count the number of points (adding together the totals for each of the three columns) and then read the assessments below to see how you fared.

		Never	Rarely	Someti	Usually
Sheet 1	When I go shopping, I check not only the price and quality of goods but also the country of origin and the conditions of production.	0	1	2	3
Sheet 2	To support local trade and cut down on travel, I try to shop in my neighbourhood shops.	0	1	2	3
Sheet 3	When I am shopping, I choose local fruit and vegetables and rare or 'old-fashioned' varieties.	0	1	2	3
Sheet 3	I prefer to eat vegetables and fruit that are in season.	0	1	2	3
Sheet 4	I eat meat no more than three times a week and I add variety to my diet with cereals and pulses.	0	1	2	3
Sheet 4	I buy fish that is not overfished, for example mackerel and herring, organically farmed salmon, or freshwater fish such as arctic char ( <i>perche</i> ) and <i>féra</i> .	0	1	2	3
Sheet 5	I drink tap water rather than bottled water and avoid artificially sweetened drinks (sodas).	0	1	2	3
Sheet 6	I choose products wrapped in as little packaging as possible and I recycle waste (glass, plas- tics, aluminium, cans, paper and cardboard).	0	1	2	3
Sheet 7	I try to choose products in refillable containers – especially toiletries (liquid soap, shower gel) and cleaning products.	0	1	2	3
Sheet 8	I buy underwear made of organic cotton.	0	1	2	3
Sheet 9	I buy low-energy light bulbs for my home.	0	1	2	3
Sheet 10	I buy low-energy (Class A) household electrical appliances (refrigerator, washing machine, dishwasher).	0	1	2	3
Sheet 11	I use organic, biological products for treating my plants.	0	1	2	3
Sheet 12	I select natural (plant-based), water-based paints for decorating my home.	0	1	2	3
Sheet 13	I avoid the purchase of disposable cleaning items such as impregnated cloths.	0	1	2	3
Sheet 14	When buying wood furniture, I check that it carries an FSC label.	0	1	2	3
Sheet 15	In winter my home is heated to a maximum temperature of 20 $^\circ C$ – a healthy temperature.	0	1	2	3
Sheet 16	For private transport, I make use of a car-sharing service (for example Mobility Carsharing).	0	1	2	3
Sheet 19	When buying stationery for work or my family, I choose recycled paper.	0	1	2	3
Sheet 20	When buying presents, I avoid battery-powered or plastic toys.	0	1	2	3
Appendix A Labels	Whenever there is a suitable alternative, I choose products with labels showing that they comply with ecological or fair trade recommendations.	0	1	2	3
	Total points in each column				
	Total of all columns				

#### Results

Between 41 and 63 points

Congratulations, you are aware of the important role your shopping habits play in sustainable development. Keep it up and spread the good word!

#### Between 21 and 40 points

You are definitely on the road to more "sustainable" living. How about setting yourself three new targets to achieve over the next month?

#### Between 0 and 20 points

Hmm! You still have a lot to learn about "sustainable" living. Why not take a first step in the right direction ?

# Useful addresses

#### Canton of Geneva

#### Service cantonal du développement durable (cantonal service for sustainable development)

Established in 2001, the Service is in charge of the canton's Agenda 21 programme and coordinates the implementation of the law on public action to promote sustainable development (*loi sur l'action publique en vue d'un développement durable*). In this capacity, the Service compiled the present Guide for Sustainable Living. Avenue Blanc 53, 1202 Genève Tel. 022 327 89 90 Fax 022 327 89 79 agenda21@geneve.ch www.geneve.ch/agenda21 www.ge.ch/agenda21

#### Service cantonal de gestion des déchets

(cantonal waste management service) Chemin de la Gravière 6, 1227 Acacias Tel. 022 327 43 44 Fax 022 327 80 89 www.geneve.ch/dechets www.ge.ch/dechets

#### Service de l'information et de la

communication - SIC (a service offering information about everything to do with the environment) Reception 9h-12h and 14h-17h Chemin de la Gravière 4, 1227 Genève Tel. 022 327 47 11 Fax 022 327 80 99 info-service-dt@etat.ge.ch

#### Service de protection de la consommation

(consumer protection service) Quai Ernest-Ansermet 22, Case postale 76, 1211 Genève 4 Tel. 022 327 39 00 Fax 022 327 39 89 spco@etat.ge.ch www.geneve.ch/consommation www.ge.ch/consommation

#### Section des programmes de prevention

et de promotion de la santé (office for preventive health and health promotion programmes) Avenue de Beau-Séjour 22-24, Case postale 166, 1211 Genève 4 Tel. 022 839 98 30 Fax 022 839 95 50 maisonsante@etat.ge.ch www.geneve.ch/dass www.ge.ch/dass

#### Service du pharmacien cantonal (office of

the cantonal pharmacist) Av. de Beau-Séjour 24, 1206 Genève Tel. 022 839 98 60 Fax 022 839 98 89 section.toxiques@etat.ge.ch www.geneve.ch/pharmacien www.ge.ch/pharmacien

#### Service cantonal de toxicologie

industrielle et de protection contre les pollutions intérieures (cantonal service dealing with industrial toxicology and protection against indoor pollution) Avenue Ste-Clotilde 23, Case postale 78, 1211 Genève 8 Tel. 022 327 80 00 Fax 022 327 80 09 http://etat.geneve.ch/dt/site/protectionenvironnement

#### Service cantonal de l'énergie (cantonal

energy service) Rue du Puits-Saint-Pierre 4, Case postale 3918, 1211 Genève 3 Tel. 022 327 23 23 Fax 022 327 20 94 scane@etat.ge.ch www.geneve.ch/scane www.ge.ch/scane

#### Service de l'agriculture (cantonal

agriculture service) Ch. du Pont-du-Centenaire 109, 1228 Plan-les-Ouates Tel. 022 884 91 50 Fax 022 884 91 60 www.terre-avenir.ch www.geneve.ch/agriculture

#### City of Geneva

Agenda 21 unit Rue de la Croix-Rouge 4, Case postale 3983, 1211 Genève 3 Tel. 022 418 29 03 Fax 022 418 29 01 www.ville-ge.ch/agenda21

#### Other Geneva addresses

#### Services industriels de Genève

(SIG) – Geneva's utility company Ch. du Château-Bloch 2, 1219 Le Lignon Postal address: Case postale 2777, 1211 Genève 2 Tel. 022 420 93 00 E-mail: info@mieuxvivresig.ch www.sig-ge.ch or www.mieuxvivre.ch

#### Federal government

### Federal Office for Spatial Development (ARE)

Palais fédéral Nord, Kochergasse 10, 3003 Berne Tel. 031 325 06 25 Fax 031 322 78 69 www.are.admin.ch/are/en

#### Federal Office for the Environment (FOEN)

Papiermühlestrasse 172, 3063 Ittigen Postal address : 3003 Berne Tel. 031 322 93 11 Fax 031 322 59 32 www.environnement-suisse.ch

#### Federal Office of Public Health (FOPH) 3003 Berne

Tel. 031 324 92 31 Fax 031 323 37 72 www.bag.admin.ch

#### Federal Consumer Affairs Bureau

(FCAB) Effingerstrasse 27, 3003 Berne Tel. 031 322 20 21 Fax 031 322 43 70 www.consommation.admin.ch

#### Associations

#### Equiterre

Rue des Asters 22, 1202 Genève Tel. 022 329 99 29 Fax 022 320 39 77 info.ge@equiterre.ch www.equiterre.ch

#### Fédération Romande des

Consommateurs (FRC) Head office Rue de Genève 7, 1002 Lausanne Tel. 021 312 80 06 Fax 021 312 80 04 info@frc.ch www.frc.ch

#### NiceFuture

Chemin du Boisy 3, 1004 Lausanne Tel. 021 647 25 30 Fax 021 647 25 31 info@nicefuture.com www.nicefuture.com

#### WWF Suisse

Chemin de Poussy 14, 1214 Vernier Tel. 022 939 39 90 Fax 022 939 39 91 service-info@wwf.ch www.wwf.ch