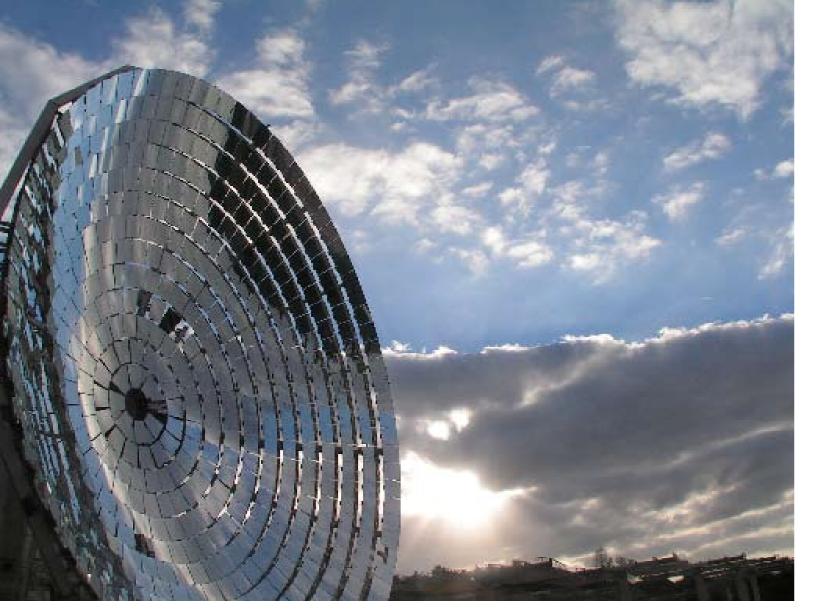


# sustainable consumption



# in this issue ....

- ... sustainable economics
- ... sustainable travelling
- ... why to become a vegeterian?





## **imprint**

## Youth and Environment is publication of Youth and Environment Europe

Youth and Environment Europe is a network of European youth organisations working with nature conservation and environment

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## Special thanks to:

European Commission and European Youth Foundation for the financial support that made the publication of this magazine possible





## **Editorial**

Sustainable consumption sounds like an utopia. How far from that dreamed state are we? What do we need to do to get closer to this ideal? What difficulties do we have to overcome?

Prof. Josef Šmajs, Czech philosopher describes the contemporary state of humans through our culture. Culture now stands against nature as more and more of our cultural manifestations harm the environment. Our main goal in our effort to survive as a species while not destroying the planet has to be a harmonisation of our relationship with nature. Nature is much stronger than the human species although we, as part of the interconnected web of nature, cannot survive without a healthy home to live in.

How does this exchange with nature look like? Nowadays we use natural resources and we transform them into things and systems that are harmful to the environment – rubbish, toxics, noise – non recyclable, non biodegradable. Our mission is to come back to the state where we are a part of the cycle of life. I write "come back" because not long time ago we lived in balance with nature, as many still do in the rural countryside. For a long time our ancestors accumulated knowledge about how to "survive in nature without harming it".

In the last century we have been losing this semblance of balance and we have come to the point of open madness, full of paradoxes and open cruelty. We can name examples perpetrated by governments and parliaments, corporations and capitalistic neocolonial globalisating system, but first of all we have to name ourselves as people responsible for such a disaster... and be a part of its rehabilitation.

Luckily we already know a lot of ways of how to put ourselves in nature and be a part of the solution. Various authors try to give some ideas in the magazine that you have in your hands. You can find diverse approaches: the analysis of our economical background (Dion Battersby), informative articles on organic food (Gjoko Zoroski), vermi-composting (Harzi Marzouk) and vegetarianism (Theresa Brosge). As well as essays on corporations and the importance of our choice (EVS - Toulcuv Dvur Jaime Fernández Truchado) or 'mobile phone' stupidity (ex-YEE EVS Mélanie Ruppe). Of course, you will find much more in our magazine, however the topic of sustainable consumption is too great to be covered in entirety. We hope that what you read will inspire you and help to improve your sustainable way of life and to be an inspiration for others. There are already thousands of people and communities that have made a choice to be move to being more sustainable. The Transition movement is spreading all over the world, including the philosophy of downshifting, responsible consumption, permaculture, and the alternative economy systems that restore direct connection between the producer and consumer are growing all around us. It shows that we still have a choice, an opportunity for change that is very much dependent on us and our action now. The former infrastructure is poisoned from the head to the tail and it is more and more difficult to find a "fair" way. This is why we have to share what we know with each other. A sustainable society is a society with open communication where we can freely learn from each other and the responsibility to create such a society is up to us. We all keen to see you in action!

> Michal Ruman YEE Former Chairperson (Konopa, Czech Republic)

## Global Financial Crisis and the Global Environment

"There is an economic crisis, a financial crisis, an energy crisis and there is a climate crisis. The climate crisis is permanent. All the other crises today, tomorrow, I hope will pass but the climate crisis is a permanent threat for the globe"

> Stavros Dimas, EU Environment Commissioner.

The media are full of stories about the present global financial situation; whether a crunch, crisis, collapse, or merely a downturn, economists agree that the growing wave of recessions will world. People are losing their jobs, homes and investments: Chinese factories are closing; European and American governments are spending hundreds of billions of dollars on rescuing financial institutions; protests have been staged on the streets of Reykjavik, Edinburgh and Kuwait.

clear, but what will be the affect on the environment as a political priority?

There are a growing number of voices who see the current financial climate as an opportunity for change and the catalyst needed to move towards more sustainable patterns of consumption and production; however, there are many others counseling vigilance to ensure that environmental issues are not forgotten in the economic panic. For countries in transition, these risks may be even greater.

"The risk consequences of ignoring climate change will be very much bigger than the consequences of ignoring risks in the a powerful message, but if oil financial system...you can boost demand in the best way possible will be little incentive for private by focusing on low carbon growth in future," Nicholas Stern, econo- countries could also benefit from mist and author of the Stern Report on the Economics of Climate schemes such as the Clean Deve-

Change.

One response to the Global economic crisis is to boost investment in new green technologies; this would create employment, have obvious environmental benehave serious impacts across the fits and hopefully create a more stable world economy in the peak oil era. This option has special resonance for a country such as Azerbaijan, which the IMF has predicted will reach peak oil production as early as 2010. At the time of writing, oil prices have dropped to \$47.00 a barrel and many such nations must be refle-The social implications are cting on a less oil-dependent future. Investment and diversification is needed now to stop social crash when the reserves run out.

> One environmental benefit of continued low prices is that the exploitation of ecologically sensitive extraction sites, like the Canadian tar sands or Rocky Mountain shales, become economically unviable.

> There are other signs for hope. US President-elect Barack Obama has pledged to invest \$150 billion into alternative energies, supply 25% of America's energy needs by renewables by 2025, and create 5 million new jobs. This is welcome news and sends out prices stay artificially low there investors to follow suit. Caucasus new technologies. Kyoto Protocol

lopment Mechanism enable richer countries to invest in large scale projects in this region, with economic and environmental benefits for the hosting nations.

Optimists also point to the fact that lower productivity and disposable incomes will directly lead to a decrease in green house gas emission, however temporary, and moderated consumption. It is appealing to imagine formerly consumerist societies reverting to low energy lifestyles and Do-It-Yourself attitudes, alongside a flourishing of social enterprise, as the effects of the recession are felt by ordinary citizens.

It remains to be seen if new poverty will lead to an increased awareness of the connections between consumerism, social inequality and environmental degradation. In addition, this argument very much refers to Western economies; the majority of incomes in the Caucasus do not have so far to fall. Increasing poverty levels in this region have very direct environmental effects such as illegal logging for fuel and in-

Likewise, governments and businesses in richer countries may feel green issues should submit to economic concerns. When people are experiencing sudden drops in their standard of living it is easy to convince them that ecological protection is an expensive luxury, and to funnel money away from social and en-

vironmental programmes. In the same way that the current financial crisis has been attributed to mistakes in the West, yet affects people worldwide, environmental problems such as anthropogenic climate change are fuelled by the actions of the rich world, yet the effects are disproportionately felt by poorer countries. Both raise issues of culpability and compensation, but in such economic downtimes nations tend to become more insular, and concern for the environment and international aid drops.

Such short term thinking does not just harm the planet; it is also a false economy. The Stern Review on the Economics of Climate Change claims environmental investment of 1% GDP starting now can avert future costs of 5-10% GDP if action is not taken until the worst effects become apparent.

The reasons to protect the environment are many and pressing; the current economic troubles do not take away ethical obligations or long term self-interest. Perhaps one solution would be a more widespread application of ecosystem valuation techniques. Once simply the calculation of annual resource yields; ecosystem valuation is now a complex tool that ascribes prices to the services provided by the system, from water purification and flood defence, to recreation and aesthetics. When viewed in this holistic manner it is often far more cost effective to spend money on environmental protection than replace these services or implement expensive adaptation measures. For instance, with the Damage Cost economic sense to preserve Geor-



One of the most striking examples of these ecosystem services is the Amazon rainforest. It plays a large role in climate regulation, water cycles and weather patterns. The forests draw water inland from the Atlantic then release 20 billion tonnes of water into the atmosphere every day, essential for agriculture and hydropower systems across the region. According to the authors of the TEEB Review 2008, global deforestation represents annual losses of \$2-5 trillion, while Wall Street has only lost up to \$1.5 trillion throughout Avoided model it may make more the economic downturn. It might be essential to give nature a price gia's coastal wetlands than install tag in order to ensure its protec-

The short term prospects for the Caucasus and world economies are bleak, but behavioural changes in the rich West could have benefits for the global environment in improved emissions, resource use and new technology. There is opportunity here, as well as trial; if governments in the Caucasus decide to support a new 'green' economy it could cushion the region from the worst of the predicted job losses and lay foundations for sustainable growth when the financial crisis is over.

> Dion Battersby (Look East Wild Earth, U.K.)

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## Different approaches to sustainability: Losing the drive

The concept of sustainable development has developed since its first introduction in late 70s. In one way it became much more accurate and concrete, worked in details, in another way it has lost its sharpness and became a technical concept easy to implement but without a real and radical transformation of our society and policy.

from Jiří Vavroušek. Czech icon of modern environmentalism, first Czechoslovakian minister of environment in post-soviet era. Vavroušek proposed and personally used the term sustainable life instead of development because this, according to his view, keeps the imperative off growth. He stressed the humanistic aspect of the concept, the need for values that cultivate our capacities of mutual aid and cooperation. Together, with many other authors, he designed key points of transition to become a sustainable society.

More then 15 years later when we look around we can see an enormous effort that basically follows these ideas and predictions.

One of clarification came At the same time we find considerable effort to prevent such radical changes or at least postpone them. These efforts are visible mainly in economic and political spheres but are more and more accepted among NGOs and start to be dominant in environmental debates.

## Climate change as a hot political issue

Nowadays, climate change is recognised as a threat all over the world. There are just a few sceptics that reject the concept of "man made climate change". But in many discussions the only element considered is carbon diopresented as the main and most Dr. Jan Pokorný's from Charles

important threat that has to be tackled. This means that possible solutions reflect the effort to decrease CO2 emissions while often the links to other environmental threats, problems and issues. Bio-fuel clearly shows an example of this short sighted simplification and its consequences.

Climate change can not be seen as isolated from other environmental problems such as overall depletion and pollution of nature and its biodiversity. The impact of CO2 emissions should not be overestimated but seen in relation to other aspects of changes in environment.

One example: According to xide. The CO2 emissions are research completed by a team of University in Prague where they not absorbing water anymore, it lity and humanity, created scarcilooked at the transformation of lets it run away with any possible ty and, as a side effect, destroyed green and well watered land to a dry and decimated one effects the This local change can be seen as climate much more then the annual increase of CO2 emissions!

It is important to understand that our local activities affects global environment. And this is valid for the climate too.

They have compared thermal activity of green land (forest, wetland, lake area...) with the thermal activity of parking places or uncovered fields. Their comparisons highlight that the basic difference is that green space transforms around 70% of Sun energy to vapour and in doing so has a capacity to cool the climate by absorbing CO2 and transforming it to oxygen. Dry land reflects around 70 % of the Sun's energy directly as heat. It has no capacity to absorb or transform water and carbon dioxide and there is no oxygen produced. Let's see how these thoughts are interlinked.

### Local action for global change

The title is a paraphrase for the ecological slogan "think globally, act locally". It is important to understand the deeper message in the sentence, the fact that our local activities affect our global environment. And this is true for the climate too.

When in our local environment the green land – forest, pasture, is an industrial facility built or the agricultural field made instead of it, it changes our local climate. It is like you installing a heater (or freezer in winter) instead of air-conditioning, producing oxygen and vapour. Its surface is

nutrients and living organisms. an extreme environmental transformation with a high impact on the environment. Next to direct impacts we can see side effects some green spaces left around the "concrete area" the difference in temperatures of these two spaces can reach more then 20 degrees on sunny days. These differences cause unstable weather with an increasing number of dangerous manifestations. Seen globally, the composition of these unstable climates creates our global climate.

By increasing non-natural spaces we warm the planet directly. We can measure CO2 produced during this process or use Watts as a unit that enables us to measure annual change in heat production, but we should consider much more then that if we want to stop it. Neither CO2 nor Watts can fully illustrate the impact of continuous heavy industrialisation and commercialisation on the environment, such as pollution, loss of biodiversity etc. that are all an integral part of the sustainability issue.

#### What to fight first?

When I see our contemporary efforts to "cool the climate" and fight some other environmental problems I am filled with doubt and I am even partly scared. Why? wetland – is destroyed and there It reminds me too much of our past socialist era when the leading party put in an enormous effort to create the real communist society where there is no more inequality, war or scarcity. On the way to this paradise they killed and arrested people, disintegrated their mora-

the environment. We have not come to the end of this. I have an impression that there are no ends that can justify the means nor in ecology. Upcoming threats are not more important then current ones! on local climate: If there is still Pollution, land erosion, social and environmental oppression, hunger and exploitation, lack of freedom and power to direct our own lives, unification, efforts to manipulate and control genetic information... all these are contemporary prob-

> Climate change cannot be seen isolated from other environmental problems as overall depletion and pollution of nature and suppression of its biodiversity.

lems of high importance. And we cannot forget about them when we count our CO2 emissions or footprint. We have to first think how to save local environments, improve the quality of life of communities, increase our autonomy and capacity to live in harmony with nature and decrease our dependence. It is where our international efforts to save our planet meet deglobalisation and bioregionalism, where we come back to sustainability as an overall concept that leads us to a new transformed society applying local renewable resources, recycling techniques, education and social work creating a connected web of life. Thanks to science we can measure our impact of these efforts. But our own feelings of responsibility will be of the greatest importance.

> Michal Ruman (Konopa, Czech Republic)

## **Basic information**

## What is sustainability?

on the wellbeing of the natural world and and other living systems. the responsible use of natural resources.

ing term that can be applied to almost every facet of life on Earth, from a local to a the needs of the present without compromisglobal scale and over various time periods. Long-lived and healthy wetlands and forests their own needs. are examples of sustainable biological systems. Invisible chemical cycles redistribute water, oxygen, nitrogen and carbon through

Sustainability, in a broad sense, is the the world's living and non-living systems, capacity to endure. In ecology the word de- and have sustained life for millions of years. scribes how biological systems remain di- As the earth's human population has inverse and productive over time. For humans creased, natural ecosystems have declined it is the potential for long-term improve- and changes in the balance of natural cycles ments in wellbeing, which in turn depend has had a negative impact on both humans

Since the 1980s, human sustainability Sustainability has become a wide-rang- has implied the integration of economic, social and environmental spheres to: "meet ing the ability of future generations to meet

**Source:** 

http://en.wikipedia.org/wiki/Sustainability

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## **Economics and Happiness – or Having and Being**

The current global financial crisis has many names and many contributing factors. However, at heart it is the inevitable result of the post-second world war rush to unsustainable consumption. The statistics today show negative growth, collapsing national economies, mass unemployment and home repossessions.

However, global Gross Domestic Product (GDP) is still at an all time high, even if in 2009 growth is predicted to dip below zero for the first time in sixty years. This means that there is more money changing hands around the world than ever before, but there are also the greatest levels of inequality between the rich and poor. Even in the privileged countries of the North there are increasing levels of social breakdown and a widening poverty gap. If the environment is being degraded and people's lives are not improving, what does this economic development actually mean? Indeed, can there ever be true wealth without a rich environment?

claim that GDP is a measure of living standards or welfare, rising GDP is commonly used as shorthand for development. However, many leading experts now acknowledge that the omission of environmental and human costs make it meaningless as a measure of prosperity. Because GDP is a measure of spending, expensive natural disasters and man-made ecological catastrophes actually give it a higher value.

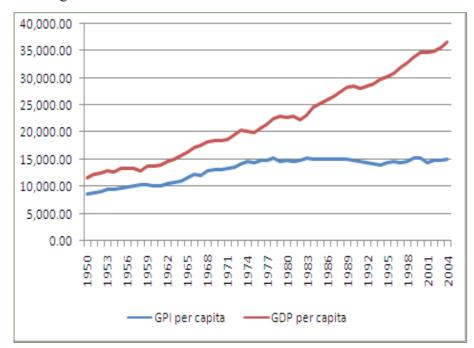
Interesting work is being done by organisations around the world on sustainable economic models, which give value to elements usually ignored by classical economic theory. Redefining Progress, an American think tank, created the Genuine Progress Index or GPI, which they publish annually as a counter to conventional GDP figures released by the government. They start with the same data, but also consider factors such as time use, income distribution, natural resource depletion and environmental damage as development indicators. Monetary values are of money last year, that doesn't ascribed to these and the GDP figures adjusted up or down accordingly.

For instance, voluntarism and unpaid childcare can be valued according to the cost of hiring replacements or by the amount of wages that could be earnt if these groups entered the employment market, and that sum added to the GDP totals. The exploitation of non-renewable fossil fuels Although economists do not is seen as borrowing from future sion making; according to Canagenerations so subtracted as a cost; GDP calculations treat it as current income. In conventional accounting, a large chemical spill would generate double income: sets are not counted and valued in

from both the initial production of chemical products and the later clean up expenses. The GPI system subtracts costs according to the negative impacts on human and ecosystem health. In simpler terms, if you spent a large amount mean you had a good year - it could have been because of high medical bills or replacing stolen property.

## Fig.1 GDP vs GPI in the USA

This form of analysis seeks to explain how a country's GDP can rise massively, although the lives of the majority get harder. It also serves a useful role in decidian group GPI Atlantic "What we measure is literally a sign of what we value as a society. If critical social and ecological as-



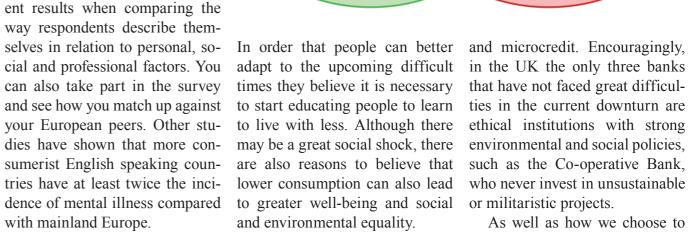
our measures of progress, they receive insufficient attention in the policy arena."

In a similar vein, the New Economics Foundation in the UK is lobbying for 'wellbeing' to be taken into account, rather than merely financial reports, when measuring a countries wealth. At www. nationalaccountsofwellbeing.org you can see the results of their research across Europe; countries with very similar population sizes and GDPs show markedly different results when comparing the way respondents describe themselves in relation to personal, social and professional factors. You and see how you match up against your European peers. Other studies have shown that more consumerist English speaking countries have at least twice the inciwith mainland Europe.

The issue lies not just in measurements of economic development or progress, although these illuminate the discrepancies inherent in so-called wealthy societies, but with the entire hypertime that global economics recogings, possessions, appearances nised that we have been living on credit too long – not bank credit, although there has been too much of this too, but environmental and social credit.

## Fig. 2 The 3 elements of sustainability

Current thinking in the area of Sustainable Consumption and Production believes that a paradigm shift is already on its way. Due to resource depletion and a called alternative economic tools changing climate many experts include Local Economic Trading believe that a return to pre-2008 consumer society is impossible. credit unions, ethical investments



**Environment** 

**Social** 

/Sustainable

Viable

Bearable

**Equitable** 

Proponents of 'affluenza' such as the psychologist Oliver James blame our past economic and consumption excesses for the high rates of unhappiness found in rich societies. He believes people decapitalist economic system. It is fining themselves through earnand celebrity cannot meet their true emotional needs, as they con• Be beautiful – not attractive fuse "having with being".

> tarian regimes or centralized economies, are there alternatives to the current system that could work better for people and the environment?

> Around the world there have been many innovative projects which question the role of classical banking/financial theory. So-Systems (LETS), barter, Ripple,

in the UK the only three banks ethical institutions with strong environmental and social policies, such as the Co-operative Bank, who never invest in unsustainable

**Economic** 

As well as how we choose to earn and keep our money, there are some other steps James suggests people can take to help them weather consumerist society:

- Consume what you need not what advertisers want vou to
- Without reverting to authori- Meet your children's needs not those of little adults
  - Be vivacious not hyperactive
  - Be playful not game-playing

Sustainable economics does not have to mean deprivation and might even lead to truly richer societies.

> Dion Battersby (Look East Wild Earth, U.K.)

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## Change the world, change your consumption

One of the ways to improve our habits of consumption is to take care of all the things that are hidden behind the big trademarks we use every day and try to find new options leading us to the fair trade. Knowledge is a power.

#### From consumer to consumer

There are many products that go through our hands every day. From the pack of milk, to fruits, shampoo and clothing to even the car or the energy that is being used by switching on the lights. Behind all these things there is nothing else but trademarks. Big international companies or smaller, local enterprises that first of all look for its own survival, as the market economy is dependent on energy. Their biggest worry is the magical word that opens the door comes afterwards. Every day we consume a quantity of products. properties... consumer goods that logically come from some

many people responsible for the final product we receive, from the distribution process that makes it possible to get them into our hands, and finally - the salesman that sells it to us.

## What do you think you know?

Between curiosity and the need, it is important to know what is going on and where things we consume come from. The deeper we dig, the more surprises we discover. Unfortunately they aren't always good. Perhaps it would be to capitalism: Profit. The service interesting to know that, for example, Coca-Cola has squadrons causing death in Colombia by syndicates (with over five deaths registered until now), that it has place in the world where there are been exposed and accused of ra-



cial discrimination, the illegal privatisation of springs in South and Central America and is involved in the exploitation of children in Brazil harvesting oranges to make Minute Maid or Fanta.

## **Basic information**

## What is sustainabile consumption?

able consumption, but most share a number of common features, including an emphasis

- sire for 'wants' and luxuries);
- Favouring quality of life over material standards of living;
- Minimising resource use, waste and pol-
- Taking a life-cycle perspective in consumer decision-making; and
- Acting with concern for future genera-The Oslo Symposium in 1994 proposed a

working definition of sustainable consumption as "the use of goods and services that

There are many definitions of sustain- respond to basic needs and bring a better quality of life, while minimising the use of natural resources, toxic materials and emissions of waste and pollutants over the life - Satisfying basic human needs (not the de- cycle, so as not to jeopardise the needs of future generations".

Sustainable consumption asks us to consider issues that go beyond the individual when we shop. These include not only the ecological impacts of what we buy but also the equity, human rights and political dimensions of sustainability in the production and consumption process. These aspects of sustainable consumption provide guidelines on how to reduce the social and ecological impacts of what we consume.

It would also be worth to knowing the problems relating to cocoa, as it is so popular all over the world. Many children are being kidnapped in Mali and taken to work in places such as: the Ivory Coast, the first worldwide producer, Ghana, Cameroon and slavery, something that human-French revolution and that today our sacred capitalism decided to put in the practice again. 11 million of sharecroppers live on the income produced by cocoa; not one of them will ever become rich in their life inspite of working never see the amount of profit between them and the trademarks. Trademarks like Nestlé (Switzerland) Mars (USA), Philip Morris (USA... yes, the same in fact that makes Marlboro has also Milka, Suchard, Toblerone; their pure vocation is to make money), Ferrero (Italy). They involvement in the cocoa business more than profitable. They are now creating inter-

Another issue is the application of the pesticides in agricultural plantation. Over 2 million of people die from the application of these pesticides each year. Principal producers are Bayer, Basf and Shell (of fuels, that let it be said in passing, financed the civil war and arms dealing in Nigeria). These pesticides are used in all kinds of cultivations like cocoa. corn, and the bananas of Honduras or Nicaragua exploited by trademarks like Chiquita, Dole and the United Fruit Company which turned these countries into "banana republics", introducing their own job dictators that made

changes its flavour.

the business possible.

phytosanitaries in the textile industry. Cotton is a plantation easily affected by plagues, and therefore it is deemed necessary to apply toxic products in order to have a good harvest. This takes us Nigeria. This carries the name of to two situations: miles of hectares contaminated at phreatic level by ity decided to abolish after the the application of the same products, and thousands of cases of workers dying who can not read the usage instructions due to their illiteracy or because they are not available in their native language and they die due to this high toxicity. Also Levi's has been ac-12 hours per day, and they will cused at international level for things like workdays of 15 hours, sexual harassment in their factories in Bulgaria or administration of amphetamines to the workers to assist in working throughout supplies, etcetera... the night. Nike and Adidas have been accused of infant exploitation, salaries of 2 euros per day and other atrocities. This is the of our stylish sneakers or favournational laws about the percent of ite jeans. All this leads to mencocoa in the chocolate which even tioning the energy industries that are another topic we should know about and it's much darker than we can possibly imagine. So look

up something about Shell, Repsol Also there is the problem of and co... you can find a lot of really interesting information in many books and on the Internet. But there is a concrete case about the Spanish "ecological" company called Endesa, which currently together with the Chilean government pretends to build 5 mega artificial marshes in Patagonia that will affect up to 200 human communities and many places in nature. And the list continues with the pharmacy industry, the producers of infant toys, the trademarks of milk (read more about Nestle and their politic in Africa about the mother's milk...), the trash food like Mc-Donalds, the patents of genetically modified seeds for cultivating everything (Monsanto is a name that all we should know...), drinkable water

## Let's give a chance for change!

All right, we are consumers so reality that hides behind each pair let's consume. Let's satisfy our needs as willingly as we can, but let's not forget that behind every trademark there are activities which may exploit human beings, the environment and communities that we live in. Now, in the time



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the truth about them is easier than ever - it is reachable only with a couple of clicks. So the question is only about our personal compromises. Let's forget about the way of thinking: if only I do it, nothing will change. Let's spread out what we know. As consumers we have to be responsible of our consumption. We as consumers have a responsibility to buy ethically, organic and fair trade products wherever possible. With our money we support the producers, so let's think before we spend them!

Let's just construct the World more fair. Let's begin the Change from our own house, knowing that all is in our hands. Going step by step we can change many things. Let's never stop dreaming your own point of view: that another world is possible.

## Another way of consumption is possible

We can find many ways to im- Hans Weiss prove our customs. We can search - "No Logo" by Naomi Klein

We can buy products only from Galeano panies, or even start to practice Fromm self-sufficiency - cultivate our own food, recycle our clothes, use ideas from the consumer guides improve our knowledge about the Freud. companies whose behaviour is awful and let's simply NOT buy their products as there are plenty of others available.

All the comments given in this article come from the books and websites mentioned below. They can be interesting for developing

#### **Books:**

- "The blackbook on brand companies" ("Schwarzbuch Markenfirmen") by Klaus Werner and

- of globalisation, getting to know for the fair-trade shops in our city "Upside Down: A primer for the or find ways of bring sustain- Looking-Glass" and "Open Veins able products closer to our place. of Latin America" by Eduardo
  - environmentally friendly com- "To have or to be" by Erich
    - "The stages of psychosocial development" by E.Erikson
  - local products and borrow other "Group psychology and analysis of the Ego" and "Beyond the by Greenpeace or Intermon. Let's pleasure principle" by Sigmund

### Websites:

www.oxfam.org/en www.greenpeace.org/internationwww.adbusters.org www.countdown2010.net

Thanks to YEE for giving me the opportunity to publish this article. Consumo gusto,

www.billboardliberation.com

Jaime Fernández Truchado (ex-EVS in Toulcuv Dvur)

## Organic food – sounds good

There are no doubts that by using agricultural chemicals such as fertilizer, pesticides and so on, we solved our short term goal, but left a dangerous legacy for future generations. Let us be louder about our concerns and fight for organic... Food is our common ground, our universal experience.

#### In general

Probably all of us have heard about organic farming or organic food. Sounds tasty and healthier... mmm... Yes. Since World War II, traditional farming and livestock ranching have been influenced by ces. agricultural and technological advances aimed at increasing mass production. In addition to the use of pesticides to fight insects, anti-

used in the livestock and dairy ingrew out of the desire to return to dustry.

While scientific advances to produce lower labour costs, a higher yield per hectare and longer shelf life for the food products, has created negative consequen-

We are now exposed to a lot of synthesized foods and chemicals that over time have replaced traditionally high-nutrient foods in our biotics and growth hormones are diet. The "organic" philosophy

basics, slow down the head-long plunge into modern, new-fangled, relatively untested methods of food production. The original movement, however, was broader than what we now understand as "organic."

Organic refers to an "earth friendly" and health-supportive method of farming and processing foods. Weeds and pests are effectively controlled using environmentally sound practices that sustain our personal health and the health of our planet. However, organic farming is often regarded as inefficient. But according to new studies, it could yield up to three times as much food as other methods that have come to be considered conventional.

The term "organic" applies to

both animal and plant foods. Or-

ganic farmers build soil organic matter with cover crops, compost,

and biologically based soil amendments. These produce healthy plants that are better able to resist crop must be produced on land without the use of synthetic substances (pesticides, herbicides, fertilizers) except those provided by the agreed standards. No prohibited substances can have been produced from animals that are fed organic feed and allowed access to the outdoors. They must be kept in living conditions that accommodate the natural behaviour of the animals. Ruminants must have access to pasture. Organic livestock and poultry may not be cording to uniform standards, given antibiotics, hormones, or medications in the absence of illness; however, they may be vaccinated against disease. Parasiticide a particular country. All products use is strictly regulated. Livestock sold as "organic" must be certidiseases and parasites are controlled primarily through preventative measures such as rotational grazing, a balanced diet, sanitary housing, and stress reduction. tors verify that organic practices Examples of organic farming methods include: rotating crops between fields (which helps keep pests from building up and improves soil fertility), planting specific bushes and flowers to attract beneficial insects which ward off cility's cleaning and pest control



disease and insect predation. The unwanted pests, spreading mulch or manure to keep weeds at bay and the like. Organic farming produces nutrient-rich, fertile soil which which nourishes the plants and it keeps chemicals off the land to protect water quality and applied to the land for 3 years wild life. Organic farming also prior to harvest and etc. Organic gives us food that is safer to eat meat, dairy products, and eggs are and much more likely to keep us

#### Certification

Certified "organic" refers to agricultural products that have been grown and processed acor private organizations accredited by the governmental body of fied. Certification includes annual submission of an organic system plan and inspection of farm fields and processing facilities. Inspecsuch as long-term soil managefarms and neighbouring conventional farms, and recordkeeping are being followed. Processing inspections include review of the fa-

methods, ingredient transportation and storage, and recordkeeping and audit control. Organic foods are minimally processed to maintain the integrity of food without artificial ingredients or preservatives.

#### For the environment

In addition to avoiding pesticides, antibiotics and hormones, the organic philosophy incorporated a respect for the environment, including land, natural water sources and animals. Organically grown foods are cultivated using farming practices that work verified by an independent state to preserve and protect the environment. For example, fertilizer runoff from conventional agriculture is a major culprit in creating dead zones - low oxygen areas in the water bodies where lake or marine life cannot survive. Conventional farming also causes soil erosion, greenhouse gas emission, increased pest resistance and loss of biodiversity. The intensification ment, buffering between organic of agricultural production over the past 60 years and the subsequent increase in global nitrogen inputs have resulted in substantial nitrogen pollution and ecological damage. The primary source of

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nitrogen pollution comes from nitrogen-based agricultural fertilizers. Nitrogen fertilizers release or break down into nitrates - chemical compounds plants need to build proteins. When present in excess of the amounts needed by plants, however, nitrates percolate through the soil, contaminating surface and groundwater supplies.

Besides their harmful impact on aquatic life, high nitrate levels in drinking water can cause serious illness in humans. Unlike conventional farmers, organic agriculturalists don't use bagged nitrogen fertilizers and must come up with natural ways of providing this necessary element. Organic farms do not release synthetic pesticides into the environment some of which have the potential to harm local wildlife. Organic help retain significantly more carfarms are better than conventional farms at sustaining diverse ecosystems, i.e., populations of plants and insects, as well as animals. When calculated either per unit



area or per unit of yield, organic value of organic farming and food farms use less energy and produce less waste, e.g., waste such as packaging materials for chemicals. Organic farming practices bon in the soil, making the soil more productive, better able to retain water, and helping to prevent global warming.

Consumer awareness of the

products continues to grow, making organic a viable and attractive economic option for a growing number of producers worldwide. Organic food – yes, let us vote for health and environment.

> Gjoko Zoroski (Ecologists' Movement of Macedonia (DEM) - Youth)

## Interview: What is compost?

"When we did a survey and asked people if they separate organic waste, 60 % wrote that they do. So we changed the question and described what the organic waste is and the number decreased to 40 %. Letting people know about organic waste and composting is still the most important work that must be done," declared Jan Šarapatka from EKODOMOV association based in Prague. We asked him more about compost...

Why do we need to think about organic waste?

In mixed garbage there is a big portion of organic matter that is biologically degradable. These bio-wastes could be easily recycled and used afterwards as a substrate or fertilisers for land. In Czech garbage there is around 40 - 50 % of organic waste, so it

means big losses if we don't use all this material. Moreover once it is placed in land-fill it produces methane which is a strong greenhouse gas.

Could you specify what is it, bio or organic waste?

It is all waste from kitchens or from the garden, which originates

from – plants and animals. For animal waste there is a need of hygienisation, so warming up, which ensures that no pathogenic organisms can spread from the compost. Easily said it is all waste from the kitchen, vegetable and fruit skins, tea bags and coffee-grounds etc... When we use separation bins and local composters, we can place there only vegetable waste, but no

milk and meat waste.

*So, then what is compost itself?* 

huminised matter of organic waste that is decomposed to a substrate where the big portion is humus. The humus is a colloid part of the to be willing to separate organic earth. So, compost is a homogenised substrate that is used as fertiliser or as a replacement of peat to answer the organic waste quesmulch or mould.

What is so good in compost? What are its main components?

From the organic part the most important component is the humus. Then there is an inorganic part that contains important nutrients such as nitrogen, potassium, phosphor, in fact all mineral substances. It is difficult to name all it is all aired without the need to organic parts as it is a colloid. But humus helps with water retention in the land. That is very important by students observed and found – because of the use of chemical fertilisers the land loses the ability to create humus. The land is then dry and is not able to absorb water. Any intensive rain just stays on the surface so a flood can easily occur. Next to that, land without moisture affects the local air climate and could be one reason why the global climate is warming.

You mentioned local composting. How does community composting work? I can imagine that I have a garden, I cut grass there and I put it to compost. But what does it look like in a community composting system?

composting Community works as a substitute to "garden" composting and is used mainly where people have no possibility

garden, for example when they live in a city. Or where there is a bigger-scale organic waste col-Compost is a mineralised and lection by a municipality or any other city service available. It is the right time for the community composting but people have wastes and compost it. So people gather together and settle an aim tion and they create a community composter. The community can be formed by 10, 30, 50 people, depending on the capacity of the composter. We usually work with a capacity around 0,75 m3, it has two chamber boxes and is able to transform 1500 kg of organic waste per year. The box is closed and has a passive aeration system with a passive chimney effect. So dig it up and it composts itself. Scientific studies made recently that the metamorphosis takes when all organic wastes are transformed to compost; it means even celluloses like animal bedding or

to compost organic waste in the ever. It is important that a thermal phase takes place there; for one week there is around 45 - 50 degrees, so it means that the matter is partly hygienised there. It works well. Ekodomov has installed almost 30 community composters over the last two years and we plan to make 20 more this year. Just in Prague there is around 7 composters installed, for example one of them in maternity centre.

> What can people do with the compost afterwards if they have no garden?

So we have organic waste that is transformed in the community composter to compost. Compost itself is not a waste; it is absolutely wholesome matter that can be used as fertiliser for home plants or for small gardens in front of houses. If we do not have any of these opportunities to use it we can then throw it to the forest from 12 to 15 months. It is a time or land because it is just natural earth or enriched soil. So there is no problem with what to do with it. But usually people take it to their weekend houses and gardens



**Y&E Magazine** September 2009 **Sustainable Consumption 14** 15 Y&E Magazine September 2009 **Sustainable Consumption**  or for plants in their flats as they understand that it is a valuable fertiliser.

In England I saw a community composting place which was large-scale where people could bring their organic waste. It was connected to a garden-husbandry and they cultivated there organic vegetables and so. In the same time they put compost to bags and sell it. So it was contributed to the local, social and environmental economy. Do such things work somewhere else?

In Czechia it doesn't work yet. It is well spread in Flanders, Belgium, Holland. The problem here is legislative. From the legislative point of view the community composting is understood only as a composting of municipality not as a composting of its citizens. We are trying to change the formulation and make a clear distinction between those two. At the same time these types of community composters can not be used to sell the compost. But there are small facility companies which states in one of the directives that are allowed to sell the compost.



Another problem is that farmers don't want compost. Because they are afraid it comes from wastes which could be contaminated by heavy metals and such. The aim would be that farmers themselves take organic wastes from municipality and have control over its quality. They could get money for its liquidation and they could use it as a fertiliser for their fields. There is a super system that works in Germany and Austria but in our country farmers are still afraid. And municipalities don't give such an opportunity to them, they don't offer that. This we want to change.

From the survey EKODOMOV did this year it appears that 40 % of Czech people separate organic waste. But your experience tells a different story. A Lot of people just doesn't know what organic waste means, and they lose the opportunity tto make compost. What can you recommend to those who want to separate organic waste in their flats?

There are clear possibilities and tools for home separation.

These are biodegradable plastic bags that have a capacity to take out moisture, thus the volume of waste decreases and once it gets dry there is no anaerobic degeneration, meaning that it doesn't smell. When there is water it rots but thanks to the quality of bags it doesn't. Another tool is vermicompost. It allows transforming the waste to compost with the help of earth worms which live in a closed box. It is quite an alternative method that I don't believe that will spread fully but those bioplastics I think can work anywhere. It is a little bit more expensive but one bag can stay for 14 days, or 3 weeks, depends on your consumption degree.

How do you see the potential of home or community composting?

The potential is important because even in cities most of houses have a garden. The problem is more with a tendency of citizens that they don't want to compost. But the strategy for example of Prague magistrate is to use all potentials of home and community composting and once it is used then implement municipal system with the help of separation bins, "composteiners" and collecting organic waste for biogas station in Malešice.

Where does Czech Republic stand in comparison with other European countries?

It is difficult to define, but in general CR is behind especially with comparison with Germany, Austria, Belgium or Holland where there is a continuity of farmers' families that have a relation to composting and it is a common thing for them, a matter of course. There are either much methane as energy source.

vermicomposting is well-spread. They transform animal waste such fully even in cities. as wastes from the fish industry into compost, that surprised me What are the possibilities to ask for really. In Poland, because there was no collectivisation of land, it is common that farmers make informative campaign as you do? compost as they have a field, milk and meat production.

but there is a European Union strategic target implemented here itself, for educational activities and we have to increase our por- from EHP Norway and for investtion of organic waste separation ments and realisation from Operby 2010, so municipalities have started to be interested in it. Although we told them that five for collection of organic waste or years ago and there has still been no reaction, just few exceptions as Nová Paka, Kroměříž, part of Plzeň or Písek. But now, munici- Then partly it is possible to finance

Operational Programmes, so it is just up to them to realise it. So the more biogas plants where they use potential is big, we are pushed to certain limit where we will pay Regarding other countries, in sanctions if we don't respect it, so waste situation, they could get a Russia and Ukraine for example let's see. But we are on a way and it is possible to resolve it success-

> money for community composting, home composting or for an

We have received money from So, we don't run so well here, the State environmental agency, from Department of Environment ational Programmes Environment where it is possible to get money for composting boxes. So, there are finances but there is a lack of people able to write those projects.

palities want to solve it, there are local composters with the help of municipality. So the community can come to municipal office and asks for financial support for the project that can help to solve the subsidy from department of environment.

> How much money do I need for a composter?

Altogether you need around 1000 euro; for the production of 10 -20 families, so 30 - 50 people.

And vermicompost?

Those that we have are imported from US, so it is a disadvantage. It costs 120 euro. But you can do it yourself, it is open for creativity.

Thank you for your answers!

Michal Ruman (Konopa, Czech Republic)

## The forgotten secrets of nature



Adopted several years ago by Indian farmers and Cuban, vermicomposting is a natural, fast and waste. In both nutritional and odorless natural fertilizer, the material obtained, called vermicompost or worm, regenerate the soil, and expanding their production. His technique of manufacture, and forgotten millennium, agriculture rid of the use of pesticides and helps to rethink the question of waste produced by human activity. Tested in Algeria in 2006, an ex-

it has yielded encouraging results.

For a decade, this product efficient processing of organic from the groundwater of a handful of red worms from California raises the international craze. In Cuba, this natural compost is the of industries vermicomposting most important input for replacstimulates root and plant growth, ing commercial fertilizers have entists from several universities become difficult or impossible to import from the collapse of the Soviet Union. It is estimated that in 2003 the island has produced one million tons of worm. In In- of the worm; their data corrobodia, some 200 000 farmers who practice the traditional method.

periment was done at Boumerdès, A network of 10 000 of them has a monthly production of 50 000 tonnes. Over the past decade, Australian farmers and the American West Coast have increased their use of worm, causing the growth in these regions. Meanwhile, sciin the United States, Canada, India, Australia and South Africa have begun to document the benefits associated with the use rates the observations made by users of this amendment natural.

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How to explain his sudden success? Achieved through the natural digestion of waste by worms in a vermicomposting this end and aerated soil is a regenerator of land that promotes water retention and encourages self-sufficiency of a land that treats and enriches. Stable, neutral, and directly assimilated by plants, it does compared to traditional manure, no fermentation and respects aerobic soil. Born to a simple technicality and quick, vermicompost, which provides lombricompostière only 10 kgs per cycle, will be ready in two or three months, while a conventional compost require a year such that only one kilo of this noin large quantities, it usually re-

quires more labor than traditional compost supplemented by industrial products. Different in form and spirit, these two systems are nevertheless complementary and vermicomposting fit both family consumption requirements of a farm. Finally, by recycling waste and for life, it reduced on average by 30% the amount of garbage accumulated in a year. These animals are therefore now an army of cleaners to private individuals, local authorities and industry.

Agricultural region, with 80% of the land is intended for gardening, crops and fodder grain, Boumerdès concentrates a large and of patience. Its effectiveness is increasing number of people on a limited space that emit tons of ble material equivalent to 10 kg of daily waste dumping and public manure traditional. But, produced non-protected. Working to protect natural heritage, an association

of the wilaya used vermicomposting as an alternative to the deteriorating health and the environment. The simplicity of this technique to the recovery of waste has attracted Thénia women, who quickly integrated into their daily operations. Free of odors and constraints, they have actively promoted this method in their community, concluding with the gardener of the world, the Indian farmer and Canadian researchers, that the respect for life and intelligence of nature remain modest absolute last resort and human face of poverty or the absurdity of the potential profitability at all costs.

> Harzi Marzouk Agguini Madjid (APEDD, Algeria)

## **Nature Knows Best**

"When both the study of the household (ecology) and management of the household (economics) can be merged, and when ethics can be extended to include the environment as well as human values, then we can indeed be optimistic about the future of mankind."

Eugene Odum, 1977

"This is a simple card game", - Monika is holding a huge card batch and dealing out the cards for about twenty people sitting around the table.

"Each of you will be given four cards. When the round begins, I will come to each of you in order, and you will play two of your four cards by placing two cards face down on top of the stack in my hand. Your earning in dollars is determined by keeping your red cards. In each round, for each red card that you keep you will earn four dollars for the round, and for each black card that you keep you will earn nothing. Red card that





are placed on the stack affect in adding total number of red cards to everyone's earning."

In spite of these simple rules, the game exited players a lot. Trying to deal with their own earnings, some players also tried to work for the common benefit as well, and it became more complicated than it was got that the same set of cards is dealing out for everyone in each round (two red and two black). The results of different round were varied and accompanied with cheers of approval or red cards if I am leaving them?!" that was the guestion in some, could read in smart faces.

perfomance was to demonstrate the main operation microeconomics laws: people have rational preference among outcomes that can be identified and associated with a value; individuals maximize utility and firms maximize profits. Our table was the model reflexed in the other branch of mainsream economics, macroeconomics theory, considering with the ditherent mathematics laws (statistics, models, rates and indexes). Mainstream economics could thus be called by somebody mathematical economics.

Despite attemptes of formed humane parties, our results seemed to be closed to Gaussian law: most of us were middle-earning, small part was loosers and the other small part was winers. But we almost broke the rules than trainer declared that the common benefit would go to poor african children

what can happen in case of nature involment. There is much more



than mathematics... The new economic ideas state that uncomplete mutual understanding economists can not avoid the environment beyond their own comfortable "tanot. "Why are you keeping the ble". There are quite a lot of critics of existing economic theories, but most of the environment-econommostly girl's eyes. "I don't care, I ic system concepts and activities am working on my growth!" you remain however uncoordinated and take place in publications that In general, the purpose of this have a different general theme and hence can be unnoticed.

The youth training course "Green Economy" took place in december of 2008, in hot time of crisis crunch, and was organised by FYEG (Federal of Young European Greens, http://www.fyeg. org/cms/) and Green Economics Institute, the academic institute which was found in 2004 in order to unite scintific resarches in this sphere in proper level, setting standards and high qualitty progress, realising publications in the regular academic journal ("International Journal of Green Economics") and providing different support and exictance in long period of time.

Green Institute is an independent, international networking body, promote education, research and training. Its main aim is to create a new discipline that works for the benefit of all people everywhere, for the planet, the It is not difficult to imagine biosphere, non-human species, nature, and other life form.

So, we just needed to listen to

this wise suggestion and try to found the methods to come to the bright future. Although there are lots of different perspective and definitions (and they are supported to develop), there are current problems which Green Economics try to address and find solution. Among them the problem of poverty of 1/5ht of humanity, species extinction and biocide, the serious possibility of a 25 metre sea level rise... and other well-known world problems.

According to Green Economics distinctive methodology and basic concepts, the most pressing current problems are grouped into four main categories:

- ecological/economical;
- intellectual;
- political;
- moral.

There are unique insights considering each issue in Green Economics. I cannot describe the all, but just notice that the most of them are corresponding to the idea of sustainable development and long-term concerns (in spite of existing mainstream economics tends to limit focus to shortterm ones).

Meanwhile, the new idea of Green Economics is in appearance of kind of philosophic doctrine, alternative view of mainstream economic development. "History, time, social and environmental justice are all incorporated back into the discourse to develop a truly "real" social and natural science, together with new learning from environmental science and philosophy" write Miriam Kennet, one of the founder of the institute. "Green economics reclaims economics from the preserve of purely quantitative measurement, graphs, statistical data and the assumption of "homo

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economicus" to create a complex, other schools of economics. interdisciplinary, holistic, long term, social science which is informed by qualitative and quantitative date from natural science" By combining economics with knowledge from the natural science, the founders of Green Economics Institute argue that new discipline can incorporate a much wider, more practical, multidusplinary range of knowledge than

It is wonderful that more and more economists become to be aware of world around. It looks like not only in tales people can obtain the natural wisdom and holism, but more scientists of nowadays have got the point.

Today environmental and economical issues already have strong link. Although, in environmental system it is much more dif-

ficult to say where recourses finish and nature starts, otherwise of fixed dates in economics model.

To know more about problems facing and methods suggesting, go to Green Economics webpage - www.greeneconomics.org.uk

The International Journal of Green Economics www.inderscience.com/ijge

## Unplug your head, let your phone down

There is a general consensus on the good, almost the duty of sorting, recycling, composting, buying bio, in brief, living the most "sustainable" we can. Everyone nods in it, and the last stray sheep feels alone. The (R?)evolution is in march forward, no doubt!

Good! But still, something strikes the observer. Something that appears contradictory with our attempt to act with sense: our use of the mobile phone. Like for tobacco in the 70's, we know it might be dangerous (grilling some of the brain cells), but we don't really think of it. Like they smoked everywhere, we phone everywhere, and to say sometimes really empty things ("I am in the train, the train is leaving, I phone you when I arrive, take care, bye, kiss, oops!"). And no one, or so few seem shocked or even bothered about it! Try to dare to ask the lady to speak less loud; you'll get back aggressive vibrations, the ones, which say, "You are so intolerant!" This lady sincerely couldn't keep doing in her life without asking this existential question: "where are you now?"

That's a fact, we can't anymore organise ourselves in our everyday life without it. We are not ministers, but we have to keep "contact", it's vital.

I could exaggerate, make you times for no, at 4 o'clock it means smile with satirical example (so easy!), but why don't we start to - Train yourself to be CONCISE, think for us.

Yes yes, be the change you you see the person. want to see said the wise. We like that one! Yeeeah! So THINK!



Some tips to consume less phone:

- Leave written notes.
- Creates codes with your friends, use the ring once for yes, three

this or that, ... be creative!

- let the exiting details for when
- When you have a lot of things, write them down before calling.
- The person you meet is not at the spot. Open your eyes, maybe a beautiful person is also waiting. Be patient! Open a book or take the paper where you write the new words you learnt in Armenian.
- Remember your personal life doesn't interest the others in the
- Tip for when you have a rendevous. It is so "class" like they say in French, so elegant, so stylish, so respectful to turn off your f... phone for once and enjoy the beautiful person in front of you!

Melanie Ruppe (ex-EVS of YEE)

## Livestock is a major threat to environment

In 2006, the United Nations Food & Agriculture Organization (FAO) issued a stunning report on global warming. Livestock production is responsible for more climate change gasses than all the motor vehicles in the world. In total, it is responsible for 18 percent of human induced greenhouse gas emissions. It is also a major source of land and water degradation.

bal greenhouse gas emissions of human induced greenhouse gas (as measured in carbon dioxide emissions. It is also a major source equivalent) are due to the growthe world. It's not just methane bal greenhouse gas emissions and and manure - land-use gases, especially deforestation to exland for feed crops, is a big part. Emissions also arrise from the energy used to produce fertilizers and pesticides for feed crops, transportation of animal feed, run slaughterhouses, and pump water.

Livestock now use 30 percent of the Earth's entire land surface. In Latin America, 70 percent of been turned over to grazing. Anisignificantly to acid rain.

heart of almost every environmental catastrophe confronting for feed crops, transportation of the planet - rain forest destruction, spreading deserts, loss of fresh water, air and water pollution, acid rain and soil erosion.

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Incredibly, 18 percent of glo-tal, it is responsible for 18 percent animal feed, run slaughterhouses, of land and water degradation. (as measured in carbon dioxide equivalent) are due to the growing

> For the production of one kilo meat, about 7 to 16 kilo soy or corn crops are needed to feed the animals. In addition, for every kilo of beef, 100 to 200 litres of water are needed. (German magazine "Focus")

former forests in the Amazon have world. It's not just methane and manure -- land-use changes, espemal waste accounts for 64 percent cially deforestation to expand pasof ammonia, which contributes tures and to create arable land for feed crops, is a big part. Emissions Livestock production is at the also arise from the energy used to produce fertilizers and pesticides

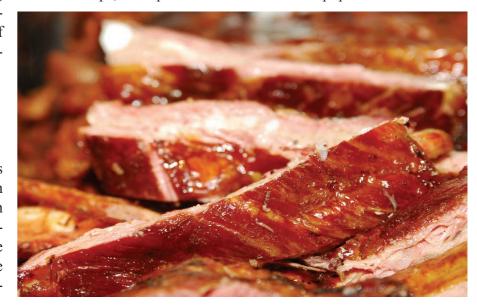
and pump water.

Livestock now use 30 percent of the earth's entire land surface. ing numbers of livestock around Incredibly, 18 percent of glo- In Latin America, 70 percent of former forests in the Amazon have been turned over to grazing. Animal waste accounts for 64 percent pand pastures and to create arable numbers of livestock around the of ammonia, which contributes significantly to acid rain.

> Livestock production is at the heart of almost every environmental catastrophe confronting the planet - rain forest destruction, spreading deserts, loss of fresh water, air and water pollution, acid rain and soil erosion.

## Farm animals outweigh people

The world is experiencing a population explosion of farm animals. Between 1950 and 1994, global meat production increased nearly fourfold, rising faster than the human population.



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By 1994, the combined weight of the world's 15 billion farm animals surpassed the weight of the human population by over one and a half times (see table below). Overpopulation puts pressure on the earth's resources. Each person has needs for food, water, shelter, heating/cooling and transportation. To a large extent domesticated animals have the same needs. In United States and in Canada, farm animals outweigh their human people by a factor of four to one.

## Farm animals naturally inefficient

Farm animals are inefficient converters of plants to edible flesh. In 1993, US farm animals were fed 192.7 million tonnes of feed concentrates, the bulk of it corn, in order to produce 31 million tonnes of carcass meat - making for a ratio of 6 to 1. Additional feed was also provided in the form of roughage and pasture. In terms of feed utilization, broiler chickens are the most efficient requiring 3.4 kilograms of feed (expressed in equivalent feed-



kilogram of ready-to-cook meat. feed to meat ratio of 8.4 to 1. For eggs expressed as weight, the ratio is 3.8 to 1. For cheese the ratio is 7.9 to 1.

In the USA, 80% of the fresh water and 17% of the fossil energy are used for food production. Livestock uses 80% of these resources.

Like us, animals are naturally inefficient because much of their food is converted into energy for

ing value of corn) to produce one movement, excreted as manure, or used for the growth of body parts Pigs are the least efficient, with a not eaten by people. Very little can become direct edible weight gain. For example, cattle excrete 40 kilograms of manure for every kilogram of edible beef produced. The meat industry makes an effort to utilize some of the by-products, but because of the huge numbers of animals slaughtered, this can be a challenge. Farmers prefer to use easy-to-spread chemical fertilizers instead of trucking manure over long distances from factory-style animal farms (also know as confined animal feeding operations CAFO's). On hog-raising operations in the U.S., only about one sixth of manure is utilized. Excess animal waste often ends up in rivers and groundwater where it contributes to nitrogen, phosphorus and nitrate pollution.



### **Excessive use of energy**

Animal foods demand the lion's share of energy used in agriculture. According to one study, meat production requires 10 to 20 times more energy per edible tonne than grain production. Growing feed crops requires extensive energy for ploughing,

	Agricultural land (HA) per person	Amount as pasture	Percent of cereal crop fed to animals <sup>a</sup>	Farm animal to human weight ratio <sup>b</sup>
Bangladesh	0.08	0 %	0 %	0.4 to 1
India	0.20	5 %	1.6 %	0.65 to 1
Indonesia	0.22	27 %	10 %	0.5 to 1
China	0.41	80 %	25 %	1.1 to 1
Mexico	1.13	77 %	38 %	3.4 to 1
Russian Fed	1.48	40 %	55 %	2.1 to 1
USA	1.64	56 %	69 %	4.0 to 1
Canada	2.51	38 %	77 %	4.3 to 1
World	0.87	69 %	33 %	1.7 to 1

#### Notes:

a. Cereal crop totals have been adjusted for importing and exporting.

b. The animal to human weight ratio is based on a total of the live weights of farm animals alive on any given day. The fact that the average weight of a cow or pig differs in each country has been taken into account. For people, the average weight is assumed to be 60 kilograms.

With exports taken into account, North America uses seven times more land on a per capita basis than many countries in Asia. This discrepancy can be explained by the fact that large areas of land are used for grazing, and significant amounts of domestic grain supplies are fed to farm animals.

29% to 15%.

Furthermore, the housing of pigs and chickens in huge win- susceptibility to infection." dowless sheds requires energy belts and electric lighting. Slaughterhouses are also energy and walling fleets of trawlers. ter intensive.

transporting farm animals at vari- processing, packaging and refrigous points in their life cycle. Ac-

harvesting, pumping irrigation by the Humane Society of the U. water, transportation, and produc- S. "Before they are slaughtered, no refrigeration and little or no ing fertilizer and pesticides. Once livestock travel an average of grown, the crops are processed 1,000 miles, but some journeys using additional energy. For in- are much longer. Long-distance stance, corn is heated in order to transport not only increases the reduce its moisture content from opportunities for animals to come into contact with – and to spread - diseases, but also increases their

For harvesting fish, extensive for artificial ventilation, conveyor energy and resources go into building, maintaining and fuel-

Finally, animal products There is also the energy spent tend to require more energy for eration than plant-based foods. cording to a March 2006 report In contrast, many vegetables,

fruit, grains and tubers require processing.

#### Livestock grazing

According to FAO, the fifth part of the world's land area is used for grazing, twice the area used for growing crops. Much of this land was once wild grassland supporting a diverse range of plants, birds, rodents and wild grazing animals. Forests are also cleared for grazing. Central America has seen over one-third of its forests cut since the early 1960's, while pasture land has increased by 50%.

**Y&E Magazine** September 2009 **Sustainable Consumption 22** 23 Y&E Magazine September 2009 **Sustainable Consumption**  cultivation, but with care it can of world grain reserves, ensurgenerally be used sustainably for livestock grazing. Cattle, sheep and goats are ruminant animals that fare best on a diet of grass.

A shift in society toward plantbased diets would ease these problems simply by reducing livestock populations and their demand for land and other resources. On a per capita basis, the land requirements of countries with plantonly a fraction of the levels seen in countries with high meat production rates. Fewer animals to

Grassland is often unsuited for feed could lead to a rebuilding for the body. Numerous studies ing dependable supplies for direct human consumption in countries facing food scarcity.

#### **Solutions**

is a powerful way to reduce the amount of land needed to support your existence (your ecological in food choices, away from anifootprint). Less farmland means based agricultural economies are more wilderness. It also means less soil erosion, less dams, less pesticides and less energy use. Plant-based cuisine is also healthy

show that vegetarian foods greatly help in the prevention of heart diseases, cancer and many other diet-related diseases.

As the earth's human population continues to expand, two things are critical for our survival: ad-Eating low on the food chain equate food resources and intact wilderness areas. One sure way to achieve both is a dramatic shift mal products toward plant-based

> Theresa Brosge (ex-EVS of YEE)

## Sustainable tourism

Sustainable tourism is not a marketing idea to attract new markets - it is a strategic term to describe a specific approach to the development of tourism. Sustainable tourism aims to take all impacts, positive and negative, into account. All tourism has the potential to be more sustainable.

## Sustainable tourism principles

Increasing evidence shows that an integrated approach to tourism planning and management is now required to achieve sustainable tourism. It is only recently that there has been a growing recognition of the importance of combining the needs of traditional urban management (transportation, land use planning, marketing, economic development, fire and safety etc.) with the need to plan for tourism.

Some of the most important ity empoyment to its community ism operations, impact assaseprinciples of sustainable tourism residents and a linkage a between ment, monitoring of cumulative development include:

- Tourism should be initiated with should be established. the help of broad-based community-inputs and the community established for tourism at al levshould maintain control of tour- els – national, regional and local hertiage and natural resources ism development.



the localbusinesses and tourism

- A code of practice should be - based on internationally accept-- Tourism should provide qual- ed standarts. Guidelines for tour-

impacts, and limits to acceptable change should be established.

- Education and training programmes to improve and manage should be established.

Source: Jamieson, Walter and

Alix Noble, "A Manual for Sustainable Tourism Destinaton Management" CUC-UEM Project, AIT, 2000

## But how can sustainable tourism be achieved?

Evidence suggests that it requires co-operation between concerned companies and the managers of destinations. It does not, however, require a marked interest from consumers. Some companies have suggested that they will only take steps to achieve sustainable tourism if they recognize a clear 'market demand' for holidays that are overtly 'green' Research, however, has indicated that few tourists want holidays that are 'green' within the mass days that are 'green' may repeat the pitfalls of ecotourism. It may



may not occur, and also may not sort management. If these actions lead to sustainable tourism.

or 'environmentally friendly'. ed that sustainable tourism does not have to be advertised as environmentally or culturally sensitive in order to succeed. Research has resort managers achieve this kind tourism market; and that holi- indicated that profits may be increased simply by adopting some general environmental principles, not be profitable or sustainable such as recycling waste, planning to encourage market demand for for long-term sustainability, and 'green' tourism as this demand seeking local partnerships for re-

result in cleaner, less crowded, Instead, evidence has suggest- holiday resorts, then they are in effect sustainable tourism without being labelled so.

> But how can companies and of success? This question is more controversial. One proposal has been to increase the vertical integration of tourism companies, so that individual companies have greater control over the market-

## **Basic information**

#### What is sustainable tourism?

opment that avoids damage to the environment, economy and cultures of the locations serve natural heritage and biodiveristy where it takes place. The aim of sustainable tourism is to ensure that development is a positive experience for local people; tourism ticity of host communities, conserve their companies; and tourists themselves. Under sustainable tourism, it may be unlikely to tional values, and contribute to intercultural experience the kind of 'boom and bust' that understanding and tolerance led to the rapid growth, and then despoliation of locations such as the east coast of Spain in the 1970s.

#### **Sustainable toursim should:**

resources that constitute a key element in uting to poverty alleviation

Sustainable tourism is a tourism development, maintaining essential ecological processes and helping to con-

- 2) Respect the socio-cultural authenbuilt and living cultural heritage and tradi-
- 3) Ensure viable, long-term economica operations, providing socio-economic benefits to all stakeholders that are fairly distributed, including stable employment and income-earning opportunities and social 1) Make optimal use of environmental services to host communities, and contrib-

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ing of holidays, transportation of deep competition between major tourists, and then management of resorts. Such integration may help avoid the disappointment and despoliation of resorts that occurs when tourists interested in conventional mass tourism are sent to sites perhaps better suited to bird watchers or hill walkers, as has occurred in Corfu. But this suggestion, however, is occasionally opposed as it may imply that smaller tourism companies cannot enter the market. Furthermore, reducing competition from smaller companies may result in reducing the pressure for lower prices of holidays. Since the 1980s, the British

companies such as Airtours, First Choice, and Thompson. But it is generally the presence of competition from smaller, less regulated, companies that leads to the rapid over-development of resorts, or the reluctance of large companies to increase their costs by attending to the long-term sustainability of locations.

The achievement of sustainable tourism, therefore depends in part on providing the right incentives for companies and resort managers to reduce the negative help avoid the impacts of tourism impacts of tourism, and then a variety of local practical steps tourism industry has experienced (such as limiting numbers, or rapid cuts in prices as a result of zoning land use) to reduce these

impacts. But in the long term, the ultimate achievement of sustainable tourism also requires tourists and companies to think more about how tourism may impact on other people's homes and livelihoods. Marcel Proust once wrote that most tourists seem to want to travel through one hundred countries with one pair of eyes, whereas the best journey would be to travel through one country with a hundred pair of eyes. By seeking more diversity and depth in holiday destinations, tourists may on destinations, and also achieve a more satisfying experience.

Prepared by Beatrise Trope

## **Measure the impact of your transport!**

There are several online calculators where you can measure the impact of your lifestyle and your travel, especially the amount of CO2 that you produce. See the difference in figures between your travel to a meeting by plane and by train! Try the following:

www.bestfootforward.com/carbonlife - A quick and easy calculator to measure the impact of your lifestyle on carbon dioxide emissions.

www.defipourlaterre.org - Calculator for French speakers

www.resurgence.org/carboncalculator - Carbon calculator which asks so many questions that it will take a few hours to complete

www.myfootprint.org - Website in many different languages to measure your environmental footprint with data from countries worldwide



## **Basic information**

#### What is sustainable tourism?

Sustainable tourism has the following ning and management, characteristics:

### **Economic prosperity**

- Long term competitive and prosperous **Environmental and cultural** tourism businesses
- pay and conditions for all employees

## Social equity and cohesion

- Tourism that improves the quality of life biodiversity of local communities,
- Community involvement in tourism plan- unique and diverse culture

- Safe, satisfying and fulfilling visitor experiences

# protection

- Quality employment opportunities, fair Reduced pollution and degradation of the global and local environment
  - Tourism that maintains and strengthens
  - Tourism that maintains and enriches our

## Forward green festivals: Campaign for more ecological cultural events

Sunny campaign is a long-term project initiated by YEE Renewable Resources Working Group in 2004. This year the campaign goes directly to youth visitors of cultural events.

for greener festivals starts in three days in three "Visegrad" countries: Czech Republic, Slovakia and Hungary. This next year Youth and Environment Europe, ganise a series of demonstrative events giving examples of eco- energy." logical changes for cultural festirenewable energies, compostable toilets, water recycling and sourcing local food will be presented.

The campaign for greener festivals is inspired by the tendencies visible in United Kingdom, France, Spain or Belgium and selves.

One example is the Rock in Rio festival organised in Portugal, Rio de Janeiro and Madrid. The slogan

The international campaign the best to aspire to it. For 2008 "Rock in Rio solar school project" won the Energy Globe Award in the youth category. Roberta Medina, executive vice-president of Konopa association together with Rock in Rio explains how they do it: "We decided to compensate Eurosolar.cz, Sosna, Nimfea and 100 % of emissions of our festi-Green Action Hungary will or- val. We planted 97 000 trees and we run the festival on partly solar

But a green festival, it is not vals such as biodegradable dishes, only about energy and CO2 emissions. And also although planting trees is a move in the right direction, reducing consumption and using renewable energy should be the first consideration. The topic is complex and it needs the cooperation of different stakeholders. among festival organisers them- This is why festival organisers and ecological companies will get an invitation to a round table ternational network of sustainwhere the best concept of cooperation shall be designed with the for 2010 festival is "For the better intention to decrease the negative World" and festival organisers do impact of cultural events on the



environment. As well as that, illustrative guidelines will be prepared by project partners to help share experience and facilitate the transition of cultural festivals to more sustainable ones.

"We keen to create an inable festivals. Our main aim is to spread the message about ecological solutions and their use to broaden public understanding and motivate people to apply those at home; to show that with a little effort we can produce less or minimum waste, save energy and reduce our dependency on natural resources," explains Michal Ruman and Dániel Herpai from the project team.

The project is supported by International Visegrad Fund and Partnership Foundation.

You can check ongoing events www.sunnycampaign.net

> Michal Ruman (Konopa, Czech Republic)



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## "Consumption matters!" - Guided Tours on **Sustainable Consumption & Globalization**

In industrialised countries, the standard of living has risen so that items considered luxuries a few decades ago are common among the middle classes today. Life expectancy is higher, more people than ever before have adequate food, housing, running water, warmth, electricity, transport – comforts that make life more convenient.

model of growth has been devastating. The consumption patenvironmental deterioration.

or her own "ecological footprint" gauging the personal consumption in terms of the biologically productive land needed to provide the resources, and absorb the waste one is producing. Our consumption of goods and services can be analysed at all scales, from the effects of individual lifestyle choices and spending patterns, to the resource demands of specific goods and services we draw on. For people to live sustainably, the Earth's resources must be used at a rate at which they can be replenished. The project Konsum Global is an appeal for action and is humans, nature, and future genopen to many interpretations as to how sustainability to the core of its meaning can be achieved.

On our guided tours, we follow the tracks of everyday consumer goods, which often travel around the world before making it to the store around the corner. We want to raise awareness of social and environmental problems, show

From a broader perspective this to us as consumers and explain how we can exert an influence on worldwide companies through our terns of "western societies" have behaviour. Sustainable consumpreached an overwhelming level of tion certainly does not change the whole world, but it is part of a Everyone is able to measure his change and can therefore make a big difference for people and the environment.

> Therefore we have to ask ourselves certain questions and consider these before deciding on what we want to consume: Where does a particular product come from? What are the working conditions like for the employees? Does the producing company provide minium wages? Where have the raw resources been harvested? What impact has their extraction on the natural environment? What are the real costs of this product, considering the costs borne by erations?

Global intend to conjure up all these aspects and to remind of crucial general guidelines before their own with friends in their buying a product: Are the real costs worth the benefits of the purchase? The more people questioning a companies' chain of production, the greater pressure comthe alternatives that are available panies will feel to participate in



social and eco-labeling programs. The country-wide city guidance project KonsumGlobal was launched by JANUN e.V. and the BUNDjugend in 2007. The idea behind is to engage young people as multipliers, who take the initiative in an increasing number of German cities. Konsum Global is conceived for juveniles between the ages of 14 to 20, but is The guided tours of Konsum a project also applicable for other age groups. Everyone is welcome to join in and to form a group of own country.

> Information material and downloads in English can be found at www.konsum-global.de.

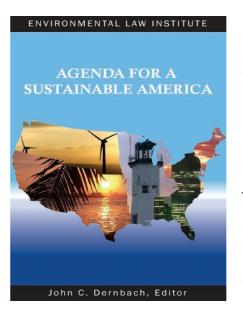
> > Laura Pasura

# AARSIM



## Looking for more?

If you are reading this, it probably means you already have gone through the rest of the articles and we hope that at least some of them raised your interest. Are you looking for more? Here you can find an information about recently published books on the topic of sustainability.



"Agenda for a Sustainable America"

You may be interested in a recently published book, Agenda for ment must adopt, as soon as posa Sustainable America (Environmental Law Institute Press, John C. Dernbach ed., 2009). While the U.S. emissions to its fair share of book focuses on a broad range of sustainable development issues, it become the most prominent sustainable development issue in the United States. The book is a comprehensive assessment of U.S. progress toward sustainable development in recent years and a roadmap of more than 100 specific next steps toward achieving a sustainable America. The book contains 28 separate substantive chapters (by 41 contributing authors, all experts in their fields) on a variety of issues, including production and consumption of energy; climate change; transportation; forestry; oceans and estuaries; religion; and state, local,

and national governance. Agenda workforce. for a Sustainable America also has three introductory chapters book, or to order a copy, go to subject as well as the book's basic findings and recommendations.

climate change has become a major driver toward more sustainable actions in the United States, fresh water). The book contains ten overall recommendations. The effort. first three are

- 1) the United States should systematically reduce its ecological footprint;
- 2) the United States governsible, greenhouse gas emission reduction programs that will reduce safe global emissions; and
- 3) The United States should concludes that climate change has create more employment opportunities in environmental protection port and restoration, and make it easier for unskilled and low-income persons to enter and remain in the pdf/enr pcatalogue07.pdf

For more information about the that provide an overview of the http://www.agendaforasustainableamerica.com/.

A sample chapter is also avail-In recent years, the book finds, able. The book's chapter on national governance, "Still Stumbling Toward Sustainability: U.S. National Governance, 2002and is having a growing effect on 2008,"emphasizes the importance a variety of other issues (such as of addressing climate change in any U.S. sustainable development

> You can download this chapter at http://papers.ssrn.com/sol3/papers.cfm?abstract id=1096214. Then click on "Download," and follow the simple instructions.

## "Showcasing Europe's best energy solutions"

This book was published by European Commission Directorate - General for Energy and Trans-

You can download it here: http://www.energyagency.at/publ/



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EDEN Centre	"Luigj Gurakuqi", Pall. 87B, Ap.15 (pas Kafe Europa) Tirana	Albania	www.eden-al.org
Federation of Youth Clubs Armenia FYCA	Shirak Street 6-30, 378414 Yeghvard	Armenia	www.youthclubs.am
Stepanavan Youth center	Charents st. 137, 377320 Stepanavan	Armenia	www.stepanavanyouthcenter.org
Active Young citizenship initiative	Baghramyan, 4 line, house 30, 0033 Yerevan	Armenia	The state of the s
Association for Sustainable Human Development	33 Khanjyan st., apt.18, 0010 Yerevan	Armenia	http://users.freenet.am/~ashd
ÖNJ - Österreichische Naturschutzjugend	Pater-Stefan-Str. 7, 5061 Elsbethen	Austria	www.oenj.at
JNM - Jeugdbond voor Natuur- en Milieustudie	Kortrijksepoortstraat 192, 9000 Gent	Belgium	www.jnm.nl
Natuur 2000	Bervoetsstraat 33, B-2000 Antwerpen	Belgium	www.natuur2000.be
Jeunes et Nature	BP 91 B-1300 Wawre	Belgium	www.jeunesetnature.be
Ecosouthwest	P.O. Box 29 2700 Blagoevgrad	Bulgaria	ecosw.dir.bg
YEO Rhodope	Tourist Information Centre, 4710 Shiroka Luka	Bulgaria	www.rhodope.net
Eco Club Yetti	University of Mining and Geology, 1100 Sofia	Bulgaria	www.modope.net
Hnuti Brontosaurus	Hvězdová 10, 602 00 Brno	Czech Republic	
Konopa	Chyaleč 236, 542 11 Chyaleč	Czech Republic	www.konopa.cz
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Natur og Ungdom	Klostermrllevej 48A, DK-8660 Skanderborg	Denmark	www.natur-og-ungdom.dk
Luonto Litto	Annankatu 26 A, 5.KRS. 00100 Helsinki	Finland	www.luontoliitto.fi
GYEM - Georgia Youth EcoMovement	4.Khetagurov Str. App 7, 0102 Tbilisi	Georgia	saemtbilisi.mail333.com/en
Alliance For Society Advancement (ASA)	3mk, 5 kv, bl-24a, Apt-2., 380097 Tbilisi	Georgia	
Studio Re	Aleksidze street, Institute of Geophysics, 0193 Tbilisi	Georgia	www.studiore.org.ge
Bundjugend	Am Kollnischen Park 1a, 10179 Berlin	Germany	www.bundjugend.de
DJN - Deutscher Jugendbund fur Naturbeobachtung	Geiststraße 2, 37073 Göttingen	Germany	www.naturbeobachtung.de
Naturschutzjugend NAJU	NAJU-Headquarter Herbert-Rabius-Str. 26 D-53225 Bonn	Germany	www.naju.de
Naturschutzjugend im LBV	Postfach 1380, 91157 Hilpoltstein	Germany	www.naju-bayern.de
JNM - Jeugdbond voor Natuur- en Milieustudie	Spuistraat 47/A1 1012 SR Amsterdam	Holand	www.jnm.nl
IVN	Plantage Middenlaan 2c 20123 1000 HC Amsterdam	Holand	
FTK: Club of Young Naturalists	Ludovika ter 6, H-1083 Budapest	Hungary	www.ftk.tar.hu
ECO-Unesco	26 Clare St., Dublin 2	Ireland	www.ecounesco.ie
Green Future	House of creativity Vilties 16, LT- 31121, Visaginas	Lithuania	
DEM	ul. Vasil Gjorgov 39, b 6, 91000 Skopje	Macedonia	www.dem.org.mk
Nature Trust Malta NTM	P.O. Box 9, VLT 1000	Malta	www.naturetrustmalta.org
Organizacja Mlodziezowa Ligi Ochrony Przyrody	ul. Tamka 37/2, 00-355 Warsaw	Poland	www.lop.org.pl
Oddział Akademicki Polskiego Towarzystwa Turystyczno-Krajoznawczego w Krakowie (OA PTTK)	Radziwillowska 21/4, 31026, Krakow	Poland	oakrakow.pttk.pl
OPE - Organisation for the promotion of Ecoclubes	Rua da fonte dos casados 920 4415-234 Pedroso Vila Nova de Gaia	Portugal	www.ecoclubes.org
GAIA	Travessa da Nazaré, 21, 2º 1100-368 Lisboa	Portugal	www.gaia.org.pt
Ecological Mountain Foundation	7th M.Eminescu street RO, 5600 Pietra Neamt	Romania	
Eco Terra	Str. Cetatatea de Balta 116, Bl.8, Ap. 17, 060954 Bucharest	Romania	
LUGA Environmental Organisation	Volodarskogo, 5/1-83, Leningradskaya Oblast Luga 118230	Russia	
EYC Environmental Youth Club	Leninskie gori 119991 Moscow	Russia	
Civil initiative	Uritskogo str., 25 188350 Gatchina (Leningradskaya oblast)	Russia	
Young Researchers of Serbia	Bulevar Umetnosti 27, 11070 Novi Beograd	Serbia	www.mis.org.yu
Zveze Za Technico Kulturo Slovenije	Lepi pot 6 SI-1000, Ljubljana	Slovenia	www.zotks.si/portal
Asociación Ambiental y Cultural Oro Verde	C/Grande, nº 2, 24273, Las Omañas, Leon	Spain	groups.msn.com/oroverdeleon
Fältbiologerna	Brunnsgatan 62, SE 802 52 Gävle	Sweden	www.faltbiologerna.se
For the Earth!	14 Naberjnaya Street, 734003 Dushanbe	Tajikistan	www.seu.ru/members/fe
Arkadas	Ilhan Akgün C. 12/C, TR 33960 Silifke	Turkey	
GSM	Bayindir Sokak 45/9, 06650 Kizilay / Ankara	Turkey	www.gsm-youth.org
METU Nature club	Middle East Technical University, 06531 Ankara	Turkey	metu.edu.tr
Look East Wild Earth	2 Pound Place, SY23 1LX Aberystwyth	U.K.	www.lookeast.org.uk
Youth Environmental League of Prydnyprovya (MELP)	kim. 175, bud. 6, vul. Moskovska 49000 Dnipropetrovsk	Ukraine	www.melp.dp.ua

