

SIGNALS

local action – success stories in sustainability





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This booklet is a contribution to the Nordic-Baltic conference "Solutions local, together", held 31.01 – 02.02.2011 in Turku, Finland. "The conference organization has three levels – national, Nordic and local. All levels complement each other and enable to create multi-level synergy".

See www.solutions2011.fi.

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FOREWORD



Foto: Bjørn H Stuedal

The last decades have seen improvements in the state of the environment in our part of the world. Air and water quality is generally better. Less waste ends up in landfills. Parts of nature have been protected to preserve plant and animal habitats.

This does not mean that our job is done. Broad-based action is still needed to make the transition towards a low carbon future. All sectors must step up to maintain vital ecosystems and halt biodiversity loss. Private and public entities must continue to promote sustainable practices and solutions.

Municipalities and local authorities have a unique role to play in terms of making sustainability a reality. This booklet is about the types of creative and practical actions that we wish to see more of. Impressive frontrunners are profiled here. These include the rural renewable energy community Samsø Island in Denmark and the urban district of Vauban in Freiburg, Germany, with its sustainable buildings and transport solutions. Low-threshold actions

are also important. Norway's popular Eco-Lighthouse programme, whereby small companies and public institutions can achieve environmental certification, continues to spur a series of concrete activities in schools, kindergartens, businesses and other places of work.

The Norwegian Ministry of the Environment is a long standing supporter of the Ideas Bank Foundation and their important role in documenting and promoting sustainable practices at the local level. We hope that this booklet will lead to continued networking and action on key issues within Scandinavia and the Baltic Sea Region – starting at the Turku Nordic Sustainability Conference “Solutions local, together” in February and further onwards.

Erik Solheim
Minister of Environment and International Development

«This booklet is about the types of creative and practical actions that we wish to see more of»

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SIGNALS of possibilities

- The Ideas Bank Foundation has for many years been documenting examples and promoting local sustainability. This includes broad networking both within Scandinavia and beyond, as well as North-South links.
- Agenda 21, formulated at the Rio summit in 1992, inspired many communities to initiate ecologically and socially fairer projects. These success stories constitute a “cluster of excellence” which we aim to consolidate and promote. Documentation and presentation of experience is a key to spreading sustainable development faster and more effectively.
- The examples in this publication show that a large, unused potential exists for actions of many kinds.

+ SIGNALS of hope

- Together with two other Nordic organizations, the Ideas Bank Foundation initiated “The Balancing Act” campaign to support the UN Decade for Education for Sustainable Development launched under the Rio+10 conference in Johannesburg in 2002.
- The UN decade asks why progress towards sustainability targets is slow despite local successes. What are the dynamics that create success? We need to use all levels of education and science to come to grips with barriers, issues of consumption and leadership. Practice, theory and values must together show how we can turn possibilities into realities.
- The articles in this publication provide reflections on the road from possibilities to real hope.

= SIGNALS of sustainable futures

- In 2010 the Ideas Bank Foundation supported the Norwegian translation of Lester Brown’s “Plan B -Rescuing a Planet Under Stress and a Civilization in Trouble” In this book Brown offers ways to address the barriers, using both good examples and new ways of thinking about politics on all levels.
- These are the kinds of possibilities and hopes that should be taken to the Rio+20 summit next year. Neither plan A (business as usual) nor plan C (waiting a bit longer) provide hope of a sustainable world.
- The mix of local possibilities and national actions that gives hope is the only global road to a sustainable future.



Kai Arne Armann
Oslo, January 2011
Director, the Ideas Bank Foundation

WHY AREN'T WE MAKING MORE PROGRESS?

LET'S BE HONEST

There are many dedicated people, organizations, communities, and inspiring sustainability projects. They prove that sustainable solutions are possible right now. But are we making progress? We are reducing pollution, and increasing our energy efficiency - in buildings, industries, transport - to some extent. Yet the net result, seen at a national level, is near zero or in some cases negative. Our ecological footprint is already way above the

planet's carrying capacity - and is rising, not falling. The few big reductions in climate gas emissions have been due to financial and industrial slowdown in some countries. This publication however gives examples that suggest there is opportunity for more ambitious solutions with real results. Perhaps what we need most of all is a new look at what the key questions are. We invite you to explore these examples with us.

FOUR QUESTIONS to ourselves

1 CAN WE LEARN FROM EACH OTHER?

In Nordic discussions it is often noted that an approach or solution which works in Denmark or Finland, may not be feasible in Norway or Sweden, or the other way around. This may seem surprising; are these countries not similar? Can we not export good ideas to each other - even less so farther afield, to the Baltic region and other countries?

Local differences are often large. And standardized or centrally planned proposals are not often relevant. A study of best practice suggests that success is not primarily about choosing right *solutions*, but about *processes of change*. These always depend heavily on local frameworks, resources, opportunities. What then constitutes meaningful exchange, knowhow transfer, and development aid? *In what ways* can we really learn from and assist each other?

2 IS TECHNOLOGY THE KEY?

Research tells us that technological advances *alone* will not be enough. Cultural and behavioral change is essential too. This is mainly because efficiency gains are being eaten up by increased consumption. For sure, *technological* changes must be part of the solution; but, it is misleading to think that carbon capture and other large scale “technical fix” solutions alone will save the planet. In addition, a focus on the large scale technical solutions

shifts public perception of the issue from “my problem” to “a problem the engineers will solve for me”.

The above also suggests that there are two kinds of question we need to ask. One is the important question of what scale and type of technology is best. For, as New Scientist pointed out in a 2005 article: a good winter sweater is also technology. The other concerns the opportunity for many actions that do not need *technology* at all.

As has been said since Rio - motivation is the key. Sustainable development is a path, not a product. Hence our third question: how do we increase focus on the non-technical issues?

3 ... OR IS MONEY THE MAIN BARRIER?

The deep changes needed for sustainable development are seen as requiring lots of money. Yes, money is needed; but many successful projects have managed to find resources - both in rich and poor countries. How? This varies widely: public incentives, subsidies, rerouting of normal budgets, volunteer inputs, creative win-win solutions, cooperation with private capital ... we see many answers emerging. This too, clearly depends on local opportunities and resources. And there are many kinds of action that do not need money. Some of the examples in this booklet seem to invite questions about whether money is the main barrier preventing us from more action.

4 HOW DID THEY SUCCEED?

“Our Common Future” was published in 1987. The Ideas Bank and other organisations we liaise with have studied about 20 years of best practice with sustainability and Agenda 21. The success factors appear to be *different* in each case – and are not primarily about better or worse plans, technical solutions or budgets, but more due to local and cultural factors. Good *processes* seem to be a key. This publication focuses mainly on examples with excellent results; a fourth question is therefore: *why and how* did these happen? What are *the dynamics of success*?



Photo: CB

THE DYNAMICS OF SUCCESS

Our experience and exchanges with the sustainability initiatives described in this booklet point toward some common points and experiences.

There are four main groups of actors or stakeholders in development processes: authorities, capital, expertise and civil society. The most successful sustainability projects almost always involve all four, though in differing ways and proportions. This seems therefore to be an important condition for success.

The examples in this booklet confirm this as well as illustrating typical local differences. An important background for **Malmö** is two decades of good sustainability research, policy and information at government level in Sweden, as well as funding. *Public leadership and incentives* thus stand out in the Malmö story. In **Samsø** on the other hand, although a public competition gave the

initial impetus, local leadership was the key: aided by knowhow and high social approval of renewable energy in Denmark. Another point to note is that *municipalities* in Scandinavia have extensive decision making powers. –The key factor in **Vauban**’s success was very *active civil society organisation*. The ecocommunity of **Hjortshøj** builds on individuals’ commitment to *social cooperation*.

Many of these initiatives are enthusiastic about the positive life qualities that are achieved by the changes towards sustainability, including work with energy and climate emissions. These projects are contributing to vibrant communities, with lasting benefits - new economic activities and cultural blossoming – *in addition to* a better ecological footprint. What is there to learn? Things happen in local ways; how do we identify and then harness these energies, and communicate the positive effects of the changes?

SUSTAINABILITY AND TIME

Both of the words *sustainable* and *development* are about *time*. Experience shows us how SD is not a product that can be delivered once and for all. A low energy house can have a high energy use from day one, if the family misunderstands or misuses it. An ecological waste water system can very quickly go into decline. Sustainability is dependent on *sensible use and maintenance over time*, by a public who are both consenting and supportive.

The successful examples we highlight in this publication are all well known to many of our readers; we wish to highlight their *dynamics*, including that of *time*. Most of our examples have a history of between 10 and 25 years. Some could have progressed faster given better conditions. Which conditions? What is a reasonable time frame?

WHAT ARE KEY BARRIERS?

There is surely as much to learn from mistakes and failures as from successes. In our work we aim to identify weak points, experiences to be learned from. Perhaps surprisingly, it seems that barriers are often not a lack of knowledge or available eco-technologies. Often these projects mention difficulties of a practical kind: such as achieving genuine *cooperation* between departments and sectors; or even a simple lack of *continuity* - both political continuity and changes in key project personnel.

A few other key conclusions seem to be as follows:

Initial *visions and targets* often get watered down or forgotten over time - unless there is ongoing feedback and pressure from stakeholders. The positive voices of the users must be represented in decision making bodies and in the long term follow up.

Politicians often focus on goals and programs that are easy to define and immediately visible. This can lead to initiatives without proper process planning or sufficient engagement on the part of those involved. This has often led to disappointing results.

«It is not sustainable development as such which is most difficult, but the dynamics and organization needed to achieve any major change of focus and direction.»

Traditional *investors* often prefer big projects, as opposed to small scale, local development giving urban, entrepreneurial and social variety. Local communities need to pose conditions that provide profitability whilst ensuring the ecological and social benefits of sustainability.

Short term economic thinking may be a barrier, but many of the successes suggest that good ecology is good economics given the right conditions. This means that sustainability can engage market forces in constructive ways.

Some key factors are not local. What many say is needed *from the centre* are more positive incentives, and above all stable framework conditions. There have been repeated failures in this regard, that discourage investors; for example programs to promote wind power or bioenergy without ensuring favourable and foreseeable prices.

Yet a common lesson seems to be that given positive will and vision, these barriers can be overcome. It might be said that it is not *sustainable development* as such which is most difficult, but the dynamics and organization needed to achieve any major change of focus and direction.



Photo: BRO/GAIA architects

using good processes, of which Futures Workshops can be an important element. *Process planning* is a separate technique; and a fairly long time perspective may be needed.



In this section we give examples of communities that illustrate major sustainability initiatives at four different scales – a city, a rural municipality, an urban district and a housing community. All of them have been in action for some years, thus providing a wealth of experience both with concrete solutions, barriers, and the dynamics of success.

All of these have succeeded in broad mobilisation of people and cooperation across different sectors; and have built up skills and expertise as well as giving participants the all-important sense of ownership of the projects. All have worked towards goals that are clearly defined and long term. They also show that ambitious targets are best achieved by a combination of technology, leadership and individual behaviour.

And although they all build on common “global” principles of sustainable development, each seems to have built on the particular local challenge, energies and opportunities.

FOUR PLACES THAT INSPIRE



A city:

CRISIS AS CATALYST FOR CHANGE

The Swedish city of Malmö (pop. 300.000) has been a leader in sustainable city development. This includes work with the old parts of the city, Augustenborg in particular, as well as transformation areas such as the Western Harbour. Most of our efforts will have to be aimed at transformation of our existing cities. This is more challenging and complex than designing new areas. The city has managed to integrate sustainability into most areas of policy and planning. This has been combined with a strong focus on citizen awareness, education and information; as well as the collaboration of private business.



«We found ourselves in the deepest crisis imaginable. ... together we came up with a bold vision for the future of the city»

– Ilmar Reepalu, mayor for many years

MALMÖ



Photo: CB

A key focus has been on human scale, life quality, and integration of nature into the urban areas.

A crisis in the 1990s led city leaders to initiate a broad visioning process involving many stakeholders. The industrial brownfield site of the Western Harbour became an international test bed for sustainable solutions, involving not only environment but equally a social vision and not least, new integrated processes of working across sectors and disciplines. Leaders emphasize how the project has led to new routines, innovation networks, information channels and cooperation in the city administration as well as with the private sector and citizens.

Malmö has received many awards including the EU award for the 100% renewable energy area of Western Harbour, Swedish award for best environmental municipality, and the UN Habitat award for inner city revitalisation (Augustenborg). It is also a Fairtrade city and is very active in networking with other cities and initiatives.

The city has an ambitious climate plan, aiming to use 100% renewables by 2030. Thousands of experts now visit Malmö, a leader both as regards policy, processes and demonstration projects. Initiatives are holistic, spanning from energy and transports to social integration and business innovation. New planning methods such as the "Quality Program" developed for the Western Harbour, broke new ground in combining ecological, economic and social goals in one document and communicating these to all stakeholders including developers. These goals later became part of the design contracts, thus ensuring that the initial goals would be implemented and monitored.

Malmö impresses by the seriousness and thoroughness of the whole effort. The city has also cooperated with regional universities on research and not least on critical evaluations of the projects. A key seems to be Malmö's very honest approach to its achievements and will to learn from weak points.

It is evident that a strong factor in Malmö city's success is the background of two decades of progressive work with sustainability research, policy and information at government level in Sweden. Success was also greatly aided by holistic visions (both ecological and social); as well as generous public budget support. Long term groundwork and public incentives thus stand out as two key characteristics of the Malmö success.

www.malmo.se



Photo: CB



SUCCESS FACTORS

- a deep crisis in the 1990s provided a positive challenge for major change
- integrated planning processes in cooperation with stakeholders and citizens
- strong political leadership and administrative continuity
- a good degree of state funding for sustainable initiatives
- public ownership or control of land
- honest feedback to learn lessons for subsequent projects



BARRIERS

- high costs of initial brownfield site cleanup
- difficulty of achieving cooperation between administrations and sectors
- fluctuations in property markets and profitability
- reluctance of developers to take innovative risks
- financial losses with the Housing Expo Bo01

Pictures from Western Harbour and Bo01.



Photo: CB

«Think local – and act local»

Søren Hermansen



A rural municipality:

RENEWABLE IN TEN YEARS

Full self-sufficiency in energy - based wholly on renewables - within 10 years. In 1997, Samsø (pop. 4300) won a competition to become Denmark's "Renewable Energy Island". Samsø was not promised any special funds beyond existing Danish and EU funds to promote energy conservation and renewables. The project was backed by the municipality, the business and farmers' associations and a local environmental NGO. Together they established the "Samsø Energy Company" to carry out the project.

Here too, a local crisis was transformed into an equally local opportunity; the first public meetings were mostly concerned with typical problems of rural decline experienced by the community. The energy project attracted very broad support, and has led to a whole new identity for the island.

SAMSØ



In 1998, only 8 % of the island's electricity and some 15 % of its heating energy was obtained from renewable sources. The goal of 100 % was achieved mainly by new energy sources: windmills, district bioenergy heating systems, individual stoves, heat pumps and solar collectors. By 2000, the island was already self-sufficient in electricity, thanks to 11 large windmills. A remarkable feature is that no less than 440 of the roughly 2000 households own shares in the windmills. Many houses are also now equipped with solar collectors and new wood or straw-burning stoves. Citizen groups worked to mobilise support for district heating in the villages. In some, 70-80 % of residents were positive. The first, which uses solar collectors and a straw-burning furnace and serves 190 households, was opened in 2001. By 2005 the renewable share of heating energy was up to 65%.

Transport presents the biggest challenge: it was not realistic to have all cars running on electricity from windmills by 2008. The Energy Company chose the interim goal of exporting as much renewable wind energy to the rest of Denmark as the cars consume in oil. This was achieved in 2002 through the erection of ten 2.3 MW windmills off the south coast of Samsø. 80 % of the large investment cost was found locally, with Samsø Council paying half the cost, and 30%, as in the case of the onshore windmills, split between a few major and hundreds of minor local investors.

Samsø has inspired other countries and communities. How can we best encourage these success stories to spread?

The project has led to co-operation with the small Pacific island of Niue, Uleoung Do in Korea, Chongming in China and a number of European islands in an EU network called Islenet. The know-how developed on Samsø has also made the staff of the Energy and Environment Office attractive as consultants, for instance to island communities in Japan and the US. Samsø maintained its momentum even after a new Danish government sharply reduced subsidies for renewable energy and support for environmental NGOs such as the one on Samsø. Its manager, Mr. Søren Hermansen, attributes continuity to the broad local backing it has achieved. "People here regard this project as vital for the future of the whole community", he says.

The island has a range of follow up targets, including more organic agriculture. The project has been hailed as a major success story, and has also created new local jobs. Energy savings however have proved harder to achieve; the challenge of changing people's consumption patterns is thus a high priority for the next phase. Still, in addition to international acclaim and a reinvigorated social community, the island now has a negative carbon balance – a huge and inspiring achievement.

www.energiakademiet.dk

✓ SUCCESS FACTORS

- a government competition for renewable energy communities
- a group of leader individuals
- trust; a small community where people know each other
- engagement of the population and solid political backing
- inclusion of many small shareholders
- a no-compromise target: 100%.

⚠ BARRIERS

- initial challenge of mobilizing people
- fluctuations in (central) politics or prices for renewable energy
- persisting challenges posed by rural decline
- increasing consumption that negates energy saving measures
- difficulty of achieving sustainable transports



An urban district:

GETTING THE WHOLE PICTURE

The German city of Freiburg-im-Breisgau (pop. 200.000) has won many awards for sustainable development, in particular for the Vauban district. Interestingly, surveys about what sort of city people would like to live in show that Vauban appeals not only to people with “green” preferences, but is simply a question of excellent living quality. This includes good basics like employment, services, mobility and recreation. Achieving a low ecological footprint is, for many people, just an added bonus. Vauban’s success has been described as its skilled combination of ecological, economic and social qualities.

Ecology: Low energy buildings, widespread solar technology, ecological landscaping, water and waste recycling, local biomass energy plant. Outstanding public transport, pedestrian and cycle networks, car free zones, etc.

Economy: Short distances, local jobs, good services. Mixed use is recognized as a key to sustainable cities. This is a big change from the principles of zoning that were applied in planning during the past 70 years. And Freiburg

“This was started by activists, and it is active citizens who keep it alive – sustain the vision”

– local resident and organiser, Andreas Delleske

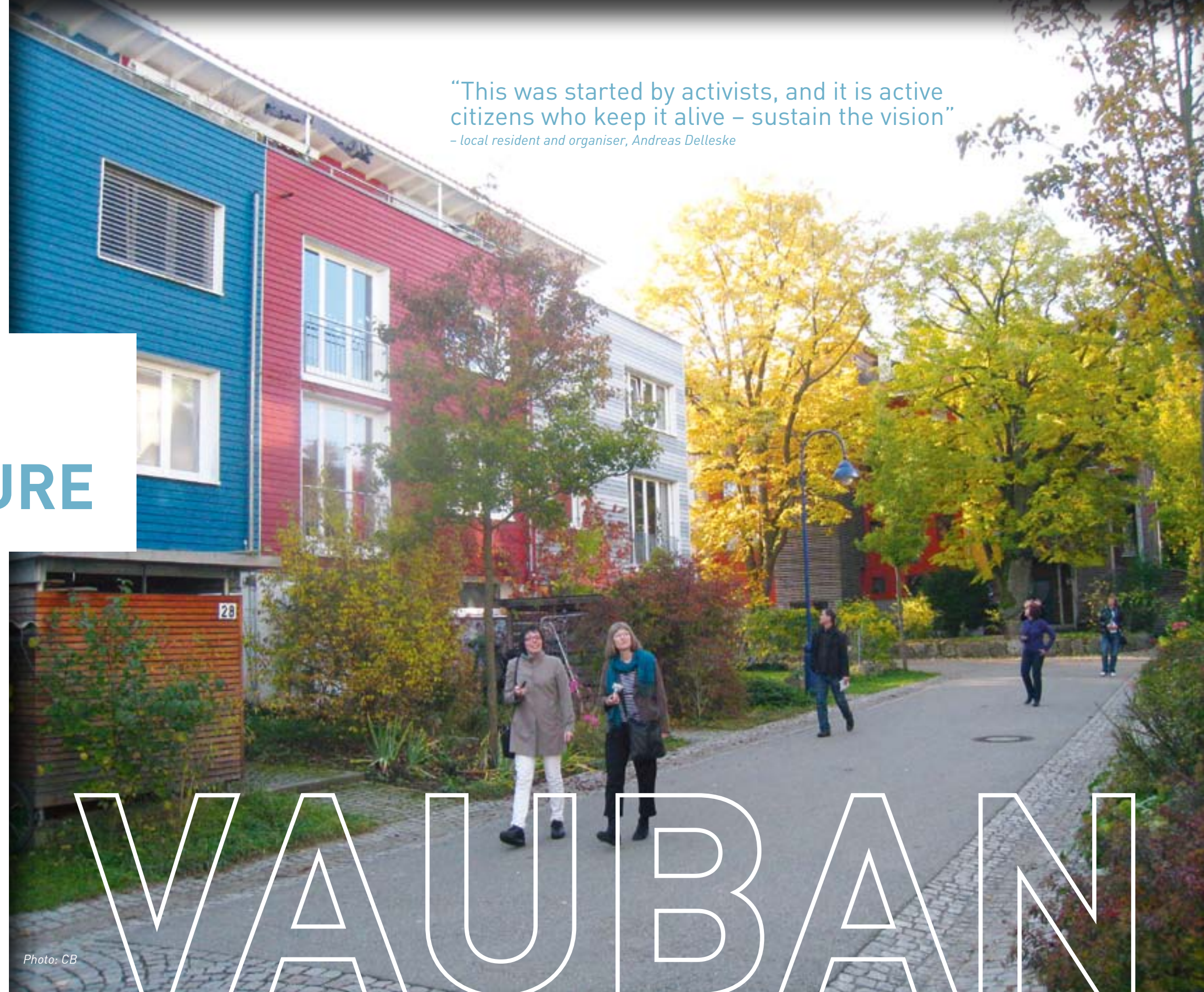


Photo: CB



Photo: CB

points out that short distances are the only way to reduce the need for motorized transport.

Community: Cross-sector cooperation, information and follow up, including the key user organisation Forum Vauban. Active citizen participation including in the planning phase, where special processes such as building cooperatives (“baugruppen”) are used. A leading idea has been that It is the users who will ensure that sustainability is maintained over time; local democracy is thus seen not just as a political goal but as a practical necessity.

Noticeable here is the ambitious vision which combines ecological, economic and social qualities, and strong participation processes. A background to this is Freiburg’s history as a university town with a long standing “green”

political trend, plus a southern German tradition of civic cooperation. The visions evolved from a committed student and activist milieu, and spread thence to city planners and finally political commitment. The initial energy of the local groups was combined with strong public planning by city authorities; a kind of supportive “top-down” management that enables, rather than decides; with processes and incentives that stimulate “bottom-up” activity and creativity by citizens.

Freiburg has become a centre for the solar industry, with real economic payoff: new academic, research and commercial activities – about 10,000 solar related jobs! Equally important, the same goals and sustainable solutions are now integrated into most of the city’s planning work, including in another large new district, Rieselfeld.

Approaches such as self-help building have many advantages. Building within “Baugruppen” saves about 20% of the construction costs. The private plots are often small, leaving room for public parks – again saving money. Students and people with low incomes could provide their own home for 500 EUR/sq.metre (the SUSI project), less than half of what is normal. Car-free or traffic-calmed zones are best for environment, safety, children and noise, but also make economic sense: both the inhabitants and the city administration saved money compared to other districts. One does not need sidewalks

(you walk in the middle of the streets, which are also play spaces) nor is owning a car parking lot compulsory. And creative incentives are provided: for example if you decide to be car-free, you receive a year’s free pass for public transport. In this way people find out that they really do not need a car to get around in Freiburg. The growth in use of private cars has been reversed. Cycling and public transport journeys have doubled over the last 20-25 years.

Transforming existing cities towards sustainability requires long term strategies. Here too a key success factor has been continuity; after nearly 18 years, the final phases in both Vauban and Rieselfeld are still being implemented. Innovation is important, but the human factors – ideals, active citizens, well organized planning, communication – are decisive. And the social qualities of Vauban are at least as important as the ecological ones.

Vauban is a low rise, medium density urban district, but the same triple bottom line of integrated social, economic and ecological sustainability can be applied in densities ranging from city centres to rural ecovillages. Definitely amongst the best urban ecology projects in Europe, Vauban is above all an example of good, sustainable urban living and quality of life.

www.vauban.de

Vauban includes both new construction (left) and ecological refurbishment of old buildings (right).



Photo: CB

Self-help may be at times inefficient seen from a developer’s point of view; on the other hand self-help and decentralized projects allow for better adaptation between needs and services. People identify much better with their neighborhood thus creating more social peace, and we build experience in practical democracy.

How else could our European democracies be improved if not by example? After all, to live means to pave the way into the future.”
– Andreas Delleske, researcher, community organizer and activist, Vauban



SUCCESS FACTORS

- active people participation
- integrated thinking and design processes
- mixed use
- public ownership or control of the land
- long term continuity



BARRIERS

- changing political focus from one election to the next
- tendency to revert to conventional “marketable” solutions
- need to maintain active citizen participation



A housing community

ECOCOMMUNITY – TAKING RESPONSIBILITY

Denmark is a pioneer of ecocommunities, which can now be found all over the world. Also often called intentional communities, these are groups inspired by a common vision which in most cases is deeply ecological as well as social. Most are rural, with strong elements of self sufficiency, but there are also urban examples. They vary in size from a few families to several hundred people.

Experience shows that building such communities is a long process requiring vision, will and patience, as well as a commitment to working together. Some have a large element of shared space, activities and even economy; some cater for handicapped, elderly and other special groups. Initially these communities often experience skepticism or conflicts with the local population. As time goes on they can become an integrated and indeed

«A real interest in living responsibly,
a social vision for people, plus lots of hard work»

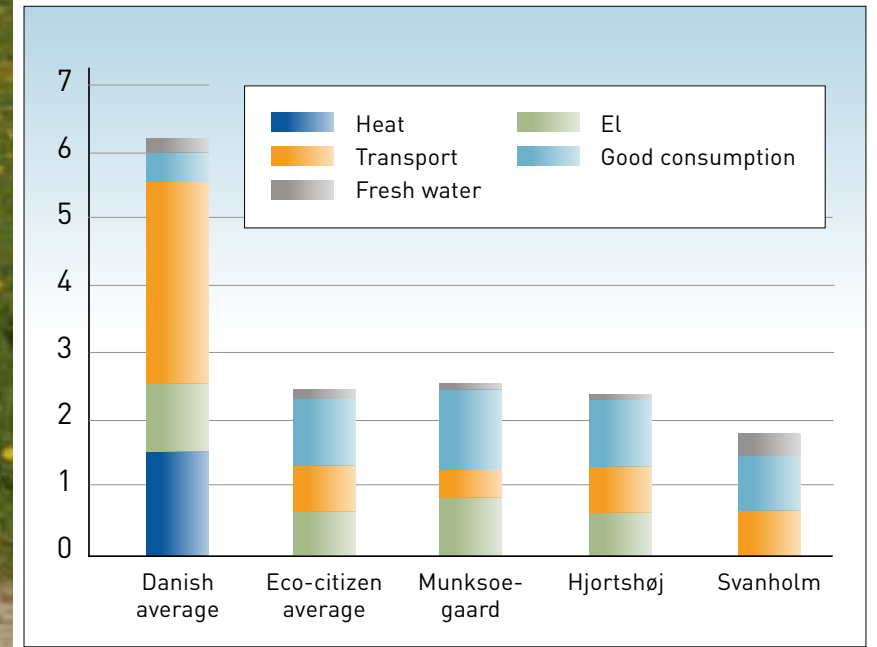


HJORTSHØJ



Left: Installation of a Stirling motor for combined heat and power.

Below: Research shows that people in Ecocommunities have reduced their ecological footprint to one third of ours.



The ecocommunity combines social goals and innovative technology.

important part of local life as well as important for the local economy. Some are quite experimental, but others cater to conventional families, where modern, high quality living is organised in a sustainable way – including growing healthy food, ecological water and wastes recycling, renewable energy, car sharing, communal facilities, and home workplaces.

Andelssamfundet Hjortshøj, near Aarhus, was founded over 20 years ago and now comprises more than 250 adults and children. It is organized mainly as a housing cooperative. Eight groups of houses have now been built, with increasingly advanced ecological solutions. Energy needs have been reduced to a minimum, and energy supply is almost entirely renewable, including solar energy and central biomass heating. Farming includes vegetables, livestock and chickens on quite a large scale so that the community has achieved quite a high degree of food self

sufficiency and also sells some products. The site was selected for proximity to good public transport; there is car sharing and many of the residents now have at least part of their work within the site. This includes farming, baking, ceramics, teaching, handcrafts and jobs that can be done online. There are many artistic, pedagogic and cultural activities.

The Global Ecovillage Network (GEN), which includes North-South links, has also played a big role, providing exchanges of experience and inspiration as well as concrete practical ideas, legal structures, hands-on courses and more - a good example of the role of networks in spreading best practice.

Not all ecovillages are successful, and some follow ideals that are perhaps too special for most of us. The successful ones illustrate a lifestyle that is ecologically and socially

very positive, characterized by modest consumption but without abandoning modernity. Ecology is a key, but so is the goal of human community. Perhaps these, far from being “idealistic dreamers”, are more realistic than most of us?

Scientific evaluation is extremely important and has until recently been scarce. Recent in-depth analyses of ecovillages in several countries have now shown that their ecological footprint is well under half the national averages. This is a big step on the path towards Agenda 21 – sustainable societies of tomorrow.

www.andelssamfundet.dk
www.gen-europe.org



SUCCESS FACTORS

- a socially and ecologically responsible vision of living
- often inspired by a few leading individuals
- determined cooperation and human supportiveness
- realism and practical skills
- support and tolerance from public authorities
- fairly typical sources of funding, plus some incentives for renewable energy etc



BARRIERS

- lack of patience or too idealistic ambitions
- interpersonal conflicts, lack of conflict solving skills
- unsuitable location (sometimes too isolated) or land/facilities
- bureaucracy, difficulties with permits or bank loans for ecological proposals

EIGHT EXAMPLES OF LOCAL ACTION

This section provides just a few examples of different types of action. All of these success stories remind us of the great potential of local ideas, local leadership, and local opportunities. Both the specific solutions, and above all the dynamics and processes are valuable for others. And, whether they focus on energy, local business, nature or democracy, all have the additional quality of strengthening the bonds between people – building community.

*Planet mosaic at Albertslund, see p.30.
Made as a message to the Copenhagen climate summit in 2009*



Green accounting in Albertslund

MAKING OUR FOOTPRINT VISIBLE



«No-one can longer ignore the need for welldirected action against consumption growth. But stopping growth is not enough. Major reductions in energy and resource consumption are needed...” The words are those of the Mayor of the Copenhagen suburb of Albertslund (pop.30,000), introducing the municipality’s “Green Accounts” in 1996. This groundbreaking local eco-auditing system, started in 1996, won “The European Sustainable City Award».

The Green Accounts have had three parts: an annually updated Local Agenda 21; data on the emissions, wastes, energy and water consumption of all the municipal departments; and the same data for all businesses and residential areas in the entire municipality. A special feature is that data are broken down by neighbourhood or housing estate, so that residents can not only compare their own energy use, wastes and emissions to last year’s, but also to that of other neighbourhoods. This creates “friendly competition”, and stimulates the call on each housing area to work out its own, even more local, Agenda 21.

Folders are also distributed to all citizens showing the spread of energy and water consumption among individual households. Although dwellings are often identical, the consumption of electricity as well as heat, water and wastes can be clearly seen to

vary by factors of 5 to 10 times. In this way, every family can easily see how it compares to others. People learn that there is an enormous potential for energy savings by the high consumers, simply through changes in behavior – and cost free, in fact directly saving them money. Advice



Povl Markussen, Agenda Center Albertslund

on improvements is included. Local schools, too, are including sustainability in many classroom activities. The annual presentations have become an important educational and festive community event, where prizes are awarded to local green initiatives. The project is evolving over time. As noted above, individual behaviour is at least as important as technical improvements. Albertslund is now moving the system into a new phase where the high consumers in particular are being targeted for positive encouragement and advice.

Communicating the concrete picture is essential if consumers are to make good decisions. Many of us do not really know what energy and resources we consume, or how we compare with similar families who live in similar buildings around us. Much social research has shown that consumption can be greatly improved through clear and transparent information. The Green Accounts web site presents information on energy, water and wastes in a remarkably clear and simple way. Given today’s data systems this is not too difficult to set up. It is probably one of the most interesting initiatives geared to inform and influence our consumption. It surely deserves to inspire many others.

www.agendacenter.dk



These figures show how many households in each housing area use the most, average, or least resources (heat, electricity, water, wastes) – a clear and concrete annual reality check.

Municipal continuity in Lidköping

ANCHORING SUSTAINABILITY

In 1990 Yvonne Träff was just "local authority ecologist", running from one kindergarten to the next giving courses on composting. During the 1990s Local Agenda 21 gradually created a broader platform for her environmental activities as well as for future planning. She is now integrated into the municipal leadership as strategic planner, and the municipality's primary goal is sustainability – across all sector boundaries.



An ambitious definition of sustainability

Lidköping's main strategy document is titled "A welcoming and sustainable community" and opens thus: "Sustainable development is to be the guiding perspective for all activities and long term planning". The municipality's commitment shows in the way they have defined sustainability. Often defined as development that gives equal weight to ecological, economic and social aspects, Lidköping has formulated it in a way that is even more ambitious on behalf of nature and future generations: "The three aspects are equally important, but it is the ecological dimension that *sets the limits* for both the social *goals*, and the economic *means*."

This provides a clear hierarchy that can make a real difference when communities or enterprises confront value choices.

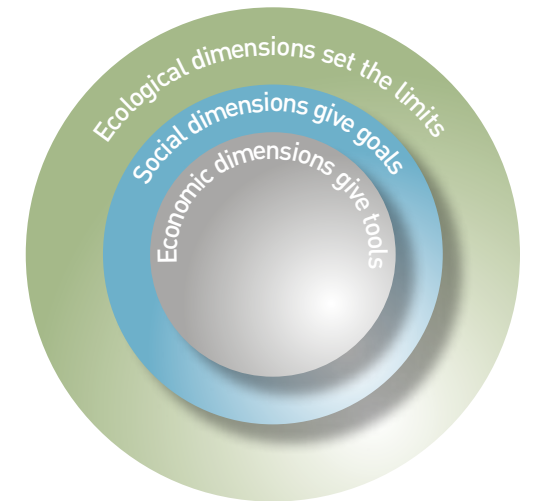
Success factor 1: Continuity

Yvonne Träff has worked in this community of 38,000 people for 20 years. Over the past 10-15 years she has seen her own and others' efforts lead to a stronger sense of commitment throughout the organization. A system for environmental management was set up in 1994, and is now linked to ISO 14001. Continuous improvement of performance is a requirement, and there is a clearly defined chain of responsibility at the top level of all units. In addition there are some 200 environmental coordinators and ombudsmen. These coordinators have monthly meetings with strategist Yvonne. Her comment is simple: How could we set goals for others if we don't do it together with them?

Success factor 2: Communication

It is, really, almost all about communication – says Yvonne, who works constantly with an information officer and with the top management in the municipality, comprising some 20 executives with strategic responsibilities. The head office has thus become an "office of sustainability". All staff can be sustainability staff, she explains, but they must be made aware of it. The heads of department now contribute towards sustainability, and the local politicians are increasingly giving their backing too.

Energy and climate advisor Jonas Wedebrand inspires local inhabitants in one of the many public events organized by the municipality of Lidköping.



Lidköping communicates an ambitious definition of sustainability.

Success factor 3: Competence

Knowledge is also a key. Lidköping is especially proud of its dialogue with the inhabitants. Every environmental activity is linked to at least one educational public event. There are study circles on themes such as "What can 38,000 people achieve?" and 28 schools are certified under the "Green Flag" system. Lidköping's energy and climate advisor targets the municipality's own activities, energy use and procurement as well as businesses and the public. Special focus is given to life cycle costing. Extensive training courses on energy and environment are provided for small and medium size businesses, providing knowhow on energy savings, working methods and contact networks.

Yvonne's story attests to a gradual shift from specialised environmental action to sustainability integrated into all decision making processes in municipalities. This integration is exactly the shift that has often been a goal of government policy. Lidköpings journey has reaped success; already in 2002 with the prize as Sweden's Eco-energy municipality, and in 2009 two European awards in 2009, the "ManagEnergy Award" and "Climate Star".

*Lidköpings kommun – Strategic planner Yvonne Träff
www.lidköping.se*



Environmental Certification in Norway THE ECO-LIGHTHOUSE PROGRAM

Eco-Lighthouse is a rapidly growing environmental certification programme in Norway, which is administered locally by municipalities. Businesses as well as public institutions may be certified as Eco-lighthouses. There are specific certification criteria for each type of business or institution. The scheme has been adopted by over half of Norway's 429 municipalities and over 2.600 certificates have so far been granted.

The Eco-Lighthouse program was initiated by the city of Kristiansand, and was initially supported by the Ministry of Environment but has succeeded in becoming entirely self-financing. Requirements are designed along four important principles: all actions should be profitable – concrete – relevant – and simple. The program is mainly

designed for small to medium size enterprises, whereas large ones are advised to certify according to ISO or EMAS.

The Eco-Lighthouse scheme has succeeded because it is a simple and user friendly system, and addresses day-to-day business at the same time as ethics. It is a "low threshold"

Health care and ecology hand in hand

Nøstehagen is a fairly new care centre in Buskerud county, with 16 apartments and 24 places for residents needing continuous care. In Norway these facilities are mainly planned and run by the local authorities. Nøstehagen was designed with a number of green features, including a heat pump, energy monitoring and eco-friendly materials, and has its own chicken run. Waste is composted or separated for recycling.

With the aim of creating a dynamic local social centre, many local organizations were invited to take part in planning the centre. Their suggestions led to the setting up of a café, an activity room, an outdoor gazebo, a greenhouse and fruit trees. The café in particular has become a popular meeting place for young and old in the community. Cultural activities, concerts and art exhibitions are arranged regularly.

Chess and bridge groups meet and a local chamber orchestra rehearses there. Rooms are let for a variety of activities. An annual flea market brings in extra income. Local "breakfast hosts" have been recruited, who come to help and chat with the residents. Garden work is also assisted by local volunteers. The operating budget of Nøstehagen is no higher than that of other similar care centres.

Nøstehagen was certified as an Eco-Lighthouse enterprise in 2002. In 2006 Nøstehagen won an award for energy conservation; despite its being an energy efficient building from the start, the management had succeeded in reducing energy use by another 32%. Manager Anne Grethe Wexhal emphasizes the importance of awareness and regular staff discussions about environmental performance.

Municipalities leading the way: four mayors cleaning up their own back yard: Vidar Lande, Ulla Nævestad, Elly Therese Thoresen og Tore Opdal Hansen. (Foto: Erik M. Sundt)

green approach, which encourages greater awareness and more profound action towards sustainability as time goes on. It is an easy, and therefore accessible first step for many, because it requires little new knowledge or money.

The municipality of Nedre Eiker near Oslo, was the first to reach the target of getting all municipal activities will be certified. This was planned together with employee representatives. Rather than hiring external consultants, the municipality let employee representatives in each workplace take charge of the qualification process, thus building up local networks and internal competence. This also reflects how sustainability and quality of working environment go hand in hand. In addition to increased awareness and mobilization, large savings due to reduced waste and energy were quickly apparent.

www.miljofyrtn.no





Local Green Business Network in the USA

«PEOPLE, PLANET AND PROFIT»

A broad initiative in the USA is BALLE - Business Alliance for Local Living Economies - North America's fastest growing network for ecologically and socially responsible enterprises. Organised within a non-profit NGO, BALLE now encompasses over 22,000 businesses that cooperate and share resources, creating a model for local, living economies.

The central objectives of BALLE include promotion of local small business, organic foods, renewable energy, green buildings, zero waste, community capital, independent media and local culture. Their vision of vibrant local economies is based on seven principles:

- thinking locally first
- a high degree of local self reliance
- equitable work, welfare, ownership and trade
- community building
- activities in harmony with local resources and ecocycles

- fostering diversity in all senses, both biological, economic and social
- measuring success that matters: knowledge, creativity, health and happiness, not only material.

BALLE operates on the business principle of making profits, but profits should be reasonable and ethical. The authors David Korten and Michael Shuman have been amongst their most influential inspirers. Shuman lists four main arguments in favour of local business, as opposed to large chains or multinationals, as follows:

- they don't move – they are reliable as long term generators of local welfare
- they have a much larger local economic multiplier effect
- they have a size and character most conducive to local community development
- they have a smaller carbon footprint.

Cleveland is one of the most depressed regions of the USA, with endemic high unemployment and environmental degradation as a result of industrial decline. The Evergreen Cooperative Laundry is a large scale laundry with over 30 employees serving local hospitals and other health centres. The laundry is one of 80 businesses in the regional Evergreen network, which is part of the national BALLE network. All its activities are built around local procurement and employment. Use of energy, water and chemicals has been reduced to a minimum. Washing powders used are phosphate free and bleaching uses a chlorine free process. As a result, Evergreen has the smallest carbon footprint of any laundry in the region.

Businesses are part owned by the employees. This is the "Cleveland model", comprising many cooperative businesses. Most, such as a solar panel manufacturer and an organic market garden, have green products. A feature of the Cleveland model is that 10% of profits go back into a fund to support new green businesses. The model is not just ecological but also has a strong community building effect. Program Director India Pierce Lee says: "Evergreen Cooperatives leaves me more optimistic about opportunities to change than anything else I've seen".

«Evergreen Cooperatives leaves me more optimistic about opportunities to change than anything else I've seen».

BALLE's function is to *connect* and *share*. Through seminars, workshops, online guidebooks and telecom links members are updated and given advice. It provides a huge network and support system to its members, including setting up new local BALLE networks and training in everything from finance and green business to energy, ecological production methods and ecofriendly building.

Municipalities as well as private businesses can play a big part in this type of activity – supporting local jobs and products, reinforcing the economy they themselves depend on. This does not prevent competition; in tending,

for example, priority can be given to local procurement if the price difference is small.

This approach to economics may offer a new view of the future – as in the following comment in *The Nation*, 11.02.2010: "The model takes us beyond both traditional capitalism and traditional socialism. The key link is between national centers of expanding public activity and procurement, on the one hand, and a new local economic entity, on the other, that "democratizes" ownership and is deeply anchored in the community."

www.livingeconomies.org

Sustainable Connections

Another example from the BALLE network is the Bellingham nonprofit organization Sustainable Connections. Executive director Michelle Long says the Pacific Northwest, with its forests, farms and fisheries, is uniquely suited to lead this economic revolution: "we can look at how can we grow and distribute food. How do we shelter ourselves? How do we power our lives? How do we define success in business?" The program is contributing to a thriving town where the local economy is becoming more diverse and robust.

Spokesman Bill McKibben says this scene of bustling local businesses isn't just feel-good, it's the very foundation of modern economics. He rejects criticism that he's an idealist who wants to turn back the clock to 19th-century localism. The utopians, he says, are the ones who think today's consumption patterns can be sustained forever. What started as a collection of small initiatives is becoming a significant force in the economy. National Public Radio described this business program as follows: "Bellingham may be the epicenter of a new economic model for a post-consumerist economy: Locally produced goods and services focused on what surrounding communities need and can sustain".

<http://sustainableconnections.org>

North-South Cooperation Dongobesh/Levanger

DISCOVERING ENERGY SOLUTIONS TOGETHER

Dongobesh secondary school in Tanzania has been linked with Levanger Upper Secondary School in Norway since 2001. Their cooperation for global understanding and sustainable development has been awarded twice for excellent results.

The ELIMU “Doing it Together Award” for 2009 was based on excellent documentation and practical follow-up of the joint project “Nishati Bora” – “sustainable energy” in Swahili. *“We found your project – Nishati Bora – to be relevant to the objectives and values of Friendship North/South especially in promoting sustainable development ... by making comparisons and documenting results you have created a resource that can be used in teaching and further experiments. The project can also be relevant to local communities near the schools. We are impressed to hear that the local community in Dongobesh has acquired skills for using biogas through Dongobesh Secondary School. Congratulations.”*

Dongobesh Secondary School had no electricity and cooking for 400 students consumed a lot of wood, contributing to deforestation. Instead the school now produces biogas from cow dung to produce cooking gas. Special large cooking pots have been introduced that are insulated to conserve heat and reduce energy use even further. The school has also installed a solar photovoltaic panel to light the library where boarding students do their evening studies.

The projects have inspired the local community which has also lacked electricity until recently. Villagers come to the school to learn how to produce biogas and some are already using it. The potential for biogas is quite substantial as most households keep cattle.

«The project can also be relevant to local communities near the schools.»

ELIMU Programme Manager Mohamed Komeja has visited Dongobesh: *“The project has inspired the twin schools to use energy conservation as a theme for their cooperation. During my recent visit to the school I was lucky to observe them together. The energy project formed a central part of the visit. The students from Norway were introduced to the process of producing biogas by a local technician who was carrying out maintenance work. According to a Norwegian teacher alternative energy is an important part of their syllabus back home”.*



Foto. Peter Hovdal

Further, they have developed a joint educational project from this, studying light. Using a light measuring instrument they measure the amount of energy reaching earth from the sun. Data are collected both in Dongobesh and Levanger. The students compare the energy produced in both countries and learn about the potential of harnessing solar energy. They hope to produce a pamphlet with data to be used in classrooms, says Komeja. As a token of appreciation the schools have received a diploma and a cash prize from Friendship North/South which is to be used to disseminate information about the joint project in Norway or in Tanzania or both.

The schools in Levanger and Dongobesh were also awarded the “Doing it Together Award” for 2004. They developed and produced a book that reflects upon ways of life in their respective communities. Friendship North/

South described their winning project as “an outstanding joint book project”. The book, “Habari gain? Koss går de?” has been published with assistance from Friendship North/South’s cultural grant and donation from the Norwegian Ministry of Foreign Affairs. Texts and drawings were made by the pupils in the two schools, and target groups were primary and secondary schools. Stories, fairy tales, poems and articles are written in English, Kiswahili and Norwegian.

The sister schools are now working on a new joint project, “Youth and Faith” which they hope to complete in 2011.

Levanger Upper Secondary School
peter.hovdal@ntfk.no

FRIENDSHIP NORTH/SOUTH
(www.vennskap.no) is a network of communities, municipalities, schools and other local institutions who are linking Norway and the South.

Through dialogue, cooperation and exchange Friendship North/South seeks to promote sustainable development, human rights, international solidarity, democracy, and cultural understanding.

The Partnership Programme is a thematic programme based on mutuality and the principles of equality. It provides an essential service to society, especially to young people. It

provides a window on the world and contributes to shaping skills, interests and attitudes necessary for interacting with people from different cultural, social and economic backgrounds. The Programme also aims to reach out to groups in the local community around the school. These may include host families, friendship groups, parents, NGOs, neighbouring schools of all kinds, local authorities, the business community, and religious groups.



Foto. Peter Hovdal

“Castle, Cow, Car” REDUCING OUR ECOLOGICAL FOOTPRINT

Buildings, transports, food – these three are the main components of our resource use or ecological footprint. A concise way to put this is “castles, cows and cars”. In addition to resource-friendly and technological alternatives, there are many simple actions that can greatly reduce the ecological footprint of our food, transport and building resource use. This applies to companies and local authorities as well as individuals.

As is suggested in our discussion article on page 62, many of these require no new technology, no new budgets, and no reductions in our quality of life either – in fact they often offer us cost savings, better health, more social interaction, and less hassle. The following pages offer just a few case studies from each of these three main areas: buildings, food and transports.

SUSTAINABLE BUILDINGS FOUR OF THE BEST – The “state of the art” today

Buildings account for some 40% of our total energy use and greenhouse gas emissions. And a huge opportunity; sustainable design and construction can reduce their ecological footprint by 80-90%.

There are now thousands of “passive standard” low energy buildings. The industry is finding that this is not very difficult, or expensive. The extra cost is around 2 to 5 percent, and is quickly paid back. The passive approach is twofold. First, extremely energy efficient design reduces energy needs to a minimum. The building then only needs a minimum of solar or other renewable energy supply. But there is more than just energy. Sustainability includes healthy indoor climate, water saving, wastes recycling and ecological materials. Few people are aware that the embodied energy and environmental impact of the materials is a big part of the total life cycle footprint of a building.

A keynote is integrated and cross-disciplinary design. Where possible, components fulfill several functions; for example a solar roof is not an added feature, but replaces normal roofing, so that two functions are covered for the

cost of one. The state of the art today thus goes well beyond low energy use. The goal is attractive, healthy buildings, at a reasonable cost, with near zero net emissions.

Sustainability concerns users and behaviour. The easiest way to reduce one’s footprint is to use less space. This is also directly cost saving. Other keywords are long life, flexible design, natural components and as simple technology as possible.

Equally important: near-zero energy use is now also being achieved in renovating existing buildings. Many older buildings, with their simple structure and materials, are in fact not bad. Life cycle analyses show that it may often be best to preserve them – with such upgrading and energy saving measures as are possible. In addition comes their cultural and historical value.

Local authorities are among the largest procurers of buildings and other construction works. They also decide plans and permits for land development and buildings. Many local authorities are now setting climate goals for all public buildings.

PLUS ENERGY
HOUSES IN FREIBURG,
GERMANY

These houses, with energy saving design and heavy insulation, are now world famous. They have solar PV roofs which produce more energy than the houses need. They produce a surplus in summer which is sold to the grid, and buy back a little in winter. On an annual basis you are a net energy producer, and get not an energy bill but an income. There are now also “plus-energy” offices and other buildings. Similar designs are being applied in the Nordic climate too.

Rolf Disch architects, see www.solarsiedlung.de, www.rolfdisch.de

The Solarsiedlung houses produce more energy than they use.



Photo: CB

PUBLIC BUILDINGS
THAT SHOW THE WAY

This award winning community centre in the Austrian village Ludesch shows how a small community can make a big impact. Others are now competing to rival this fine example, which is one of the most environmentally friendly buildings in Europe. Attractive as a multifunctional, social meeting place, it has almost zero energy needs, ecological materials throughout, and a very acceptable cost thanks to outstanding design and planning.

Architect W. Kaufmann, see “Ludesch Community Centre” on google.

A small municipality has managed to make one of the world’s leading green buildings.



Photo: CB

ZERO EMISSION
RENOVATION

A typical old urban building in Zurich, Switzerland, which was renovated to near zero emission standard, Also using ecological materials. The cost was reasonable thanks to thorough and skilled design. Energy needs were reduced by three quarters.

This is difficult with some old building types, but excellent projects such as this show that the possibilities, even for heritage buildings, are much greater than was thought a few years ago.

Architect Karl Viriden, see www.viriden-partners.ch

Old buildings upgraded to passive energy standard!



Photo: CB

NATURAL BUILDING

Here too it is a local government with vision that has set the example. This award winning kindergarten school in Kongsberg, Norway, is built of timber, straw bale walls and clay plaster. In this way the building itself achieves almost zero ecological footprint. The focus here includes energy but is above all on health.

Nyhusgården kindergarten is 100 % heated by bio-energy. The highly insulating straw bale walls and roof and recycled foamglass in the floor result in a low energy building. A good indoor climate is ensured by natural and healthy materials and by user-controlled, natural ventilation. There is a very good response to the indoor climate from the users.

GAIA Tjome architects, www.gaiaarkitekter.no



A kindergarten that is healthy for both people and planet

SUSTAINABLE FOOD BRINGING HEALTH TO THE TABLE



THE SLOW FOOD MOVEMENT

Recently 5000 people attended the Slow Food conference in Torino, Italy, and 150,000 attended the Slow Food market. The movement originated in Italy 20 years ago. It focuses on sustainable agriculture, biodiversity, handicrafts, school meals and consumer information. Local resources, foods and traditional production techniques, usually small scale, are highlighted. The keywords of all Slow Food initiatives and events are quality and social communication – “the right to joy and pleasure”.

Activities in the Slow Food movement are, naturally, local and regional. In Finland, for example, eight regions now participate.

www.terramadre.org

“Slow” is a theme we are hearing more and more. “Slow City” also originated in Italy. There is an intriguing connection between Slow and Sustainability. Are we approaching changes in the world paradigm of always wanting everything bigger, smarter, faster? It’s not only that more people are looking for quality - both quality time as well as niche products; the very economics of speed are starting to change. Devoting a few days to public participation in city planning can resolve many expensive future conflicts. Taking a few extra hours to design buildings thoroughly for energy efficiency can have a huge payback. The shipping industry is finding that it is becoming more economical for tankers to go slower – reducing fuel and climate emissions. Is “slow” starting to make economic sense too?



TOWARDS 90% ECOLOGICAL FOOD PROCUREMENT

45% of all food bought by the municipality of Copenhagen in 2006 was ecological (organic) produce. The goal is to achieve 90% by 2015 - to be achieved without increasing the overall costs.

The city has nearly 1,200 canteens and institutions that prepare and/or serve food. It offers assistance, planning and training to staff at schools, kindergartens, care centres, hospitals and catering kitchens. The program began in 2001, as part of the city’s Local Agenda 21 plan. The plan has been on target with well over 60% being achieved by the end of 2009.

This is spreading. Copenhagen participates in a network, Green Cities, where the common ambition is to achieve a minimum of 75% ecological supplies. Public procurement can have a very powerful influence on behaviour as well as on the market.

www.kk.dk/Borger

GREEN BUFFET SUCCESS IN FINNISH SCHOOLS

“Operation School Food” has been introducing salad buffets in Finnish schools with an original approach, using “sapere” - taste training - as a pedagogic process. The Latin verb “sapere” means to taste, smell, have good taste. In a broader sense it also means to have sensory appreciation and be wise. The aim is to develop childrens’ skills as aware consumers in addition to increasing variety in their diet by tasting new products.

Harriet Strandvik, project leader - harriet.strandvik@martha.fi

Schools are provided with a buffet of special vegetables for a whole week – it is also cheaper to serve a vegetable buffet alongside the normal, industrial hot canteen food, which costs twice as much. The lower classes halved their consumption of the industrial foods and increased consumption of vegetables and bread by one third. The higher classes ate as much of the hot food but their intake of vegetables and bread increased by five times.



Healthy food and a zero energy office building to go with it – green leadership.



GREEN VISIONS, GREEN PROFITS – ECO FAST FOOD!

We often associate highways with fast junk food stops. The Swiss company Marché is changing all that. Our first example in this section was on slow food; this example shows that even fast food can be provided in a way that cares for the planet.

Now numbering more than 100 outlets in Europe, Marché proves that a commitment to ecology is becoming good business. This is not just about recyclable cups or whole wheat bread: the traveler is confronted by a vast array of appetizing foods, almost like a market bazaar – and all ecological, from fruit juices to salads, pizzas, Asiatic dishes, cakes, fruits, smoothies or ice cream. On their first visit people often take far more than they can eat – “your eyes are bigger than your stomach”!

Food is a large part of our ecological footprint – around 20%. Marché shows that a big business approach to ecological food can be as attractive as farmers’ markets and other local food initiatives. And Marché’s managers go further: the company’s serious green philosophy is expressed in its headquarters outside Zurich – an ambitious project by architect Beat Kaempfen that is Switzerland’s first completely zero energy office building.

This seems to be more than superficial “greenwashing” and suggests dedicated innovation for climate and sustainable development. And it tastes really, really good. This is, hopefully, the future of food!

www.marche-moevenpick.com
www.kaempfen.com

SUSTAINABLE TRANSPORTS SENSIBLE MOBILITY COMES OF AGE



TEACHERS REDUCING FLYING

Transport accounts for about one quarter of national GHG emissions, but up to half of our personal emissions if we travel frequently. Sweden's largest teachers' union is reducing climate emissions by setting firm guidelines on flying. Their goal is to set an example for all of their 230.000 members, for schoolchildren and for other unions and businesses. According to the guidelines air travel is to be avoided on trips of under 500 kilometres, and members should use train or bus for longer trips if it is possible to do so without starting before 6 a.m. or getting home after 8 p.m.. Meetings should be timed to make it possible to travel by train.

Like other organizations, Lärarförbundet also employs videoconferencing regularly. Such initiatives go to the heart of our problem – over-consumption of resources through often unnecessary trips – and are another example of how immediate, simple actions can be taken, which far from requiring extra budgets, save money. Public bodies in particular can make a large impact and lead the way.

www.lararforbundet.se



Photo: CB

The Mobility Centre, Freiburg, see p.20

SUNFLEET CAR SHARE

With its 330 ethanol and gas powered vehicles, Swedish Sunfleet Carsharing is a great alternative to private car ownership and a real contribution to reduced city traffic. Members have access at any time to good quality vehicles of various sizes, close by where they live and at a low cost.

The key is an advanced internet based ordering and billing system. Wireless communication connects your mobile phone, the data server and the car itself when you order, collect and return the vehicle. Sunfleet, which is operated by the Volvo company, now has around 12.000 members and car pools in 25 towns.

www.gronabilister.se

www.miljofordon.se

www.sunfleet.se



Mobility isn't about owning a car, but about getting around easily and efficiently. Well organized car sharing systems are good for the planet but also save us a considerable slice of our annual income. They also save us trouble, save space, save us having to build a garage... Perhaps one day soon, *not* owning a car will be a social status symbol?



Photo: CB

CLIMATE QUOTAS IN TRYG

Measures to reduce travel can now be found in many municipalities, and in the private sector. A good example is Tryg, one of Scandinavia's largest insurance companies. With videoconferencing they already save about NOK 35 million annually, in addition to many hundred tons of CO₂ emissions. The videoconferencing equipment is installed in most of their 28 branch offices and is usually fully booked. Now, CO₂ quotas for top management have been introduced. Travel is initially to be reduced by 10%; managers risk losing bonuses if they exceed their quotas. The system will soon be extended to middle management. All employees are actively involved in emission reduction work; a climate initiative led to over 250 suggestions for climate action.

It seems ironic given these promising trends that our road, rail and air traffic planners are still projecting huge growth in travel in the coming decades – costing billions. Could authorities take a more proactive approach to future transport policies?

www.tryg.no/om_oss

TOO MANY BICYCLES!

Few nations are as good as the Dutch when it comes to bicycling, although cities like Freiburg and Copenhagen are famous examples too. Bicycling is often as quick in city traffic as driving, and has a health bonus. Schools such as Vestre Grenå in Denmark have developed special policies for health and physical motion, leading to an action plan for pupils' "self-transport". The primary goal is that all children should have at least one hour of physical activity daily. Each class also monitors how many pupils avoid travelling by car to and from school. The winning classes were awarded prizes.

All very well, but the school now has a problem: no room for all the bicycles! No matter – they are going to solve that problem too.

"Bicycle sharing" is also becoming more widespread: the municipality of Oslo has a fleet of 1.200 bikes which one can collect and leave at various places in the city – at any time – for an annual membership fee of just 10 Euros. The bikes themselves are funded by the advertisements they carry.

www.uvm.dk/service/Publikationer

The United Nations' Decade for Education for Sustainable Development (2005-2014) was initiated to strengthen our capacity for action. The Ideas Bank Foundation has played a central part in a campaign for ESD10 called The Balancing Act – demonstrating how ecological and social action must form an integral part of education. This booklet presents examples and inspiring solutions that are of unique educational value, not only for schools but also for further education and civic capacity building for all groups, young and old.

In this section of the booklet we present both educational institutions and others who show how local hands-on practice can provide the best form of learning. Practice in turn informs theory, as well as contributing to value debates as to how a global and long term perspective should influence our choices and actions today.

The Childrens' Ecocity, see p.52

EDUCATION

FOR SUSTAINABLE DEVELOPMENT





A Folk High School: ECOLOGICAL PIONEERING ON THE CURRICULUM

Ecological pioneering is a subject in the curriculum at the Danish Vestjylland Folk High School. Pupils learn how to initiate ecological projects. Nordic Folk High Schools are specially geared to practical learning as well as focusing more on value discussions than normal schools. At this school, sustainability is a natural part of life. Organic food is on the table every day. A couple of straw bale buildings provide a practical test bed for natural materials, and the wind turbine generates more electricity than the school needs. Ground source heat and solar panels provide hot water as well as space heating. Eco-certified products and waste separation have long been the norm. The ecological technologies are also studied as part of education. As much as possible is sourced locally, strengthening the local economy.

as possible and assembling without screws or nails. In addition to team-building, mastering such tasks gives great personal confidence that will be valuable throughout life.

this way the school also functions as an integrated part of the local community, to the benefit of both sides.

«Ecological pioneering» on the curriculum



«It's easy to be eco in theory, but much more exciting in practice»

The two straw bale buildings are classrooms for studying ecological building and pupils are responsible for building maintenance. There are also nature expeditions on which pupils construct their own shelters, building in as climate neutral a way

The school draws inspiration from regional sources. There are excursions to study sustainable solutions including ecological building, wave and wind energy, sustainable transports and environmentally certified forestry. Pupils also visit researchers, artists, craftspeople and production facilities. This experience is easy to see during the regular meetings on sustainable living that are arranged with three local organizations. In

The "Garden of Wonder" is the outdoor classroom for organic agriculture, where pupils learn how to make the region's sandy soil produce a fine assortment of vegetables, fruit, berries, edible flowers and herbs. Twenty neighbouring families also work in the school's gardens. This is real "learning by doing".

Vestjylland Folk High School
kontor@vestjyllandshojskole.dk
www.vestjyllandshojskole.dk

A Secondary School: WORKING WITH LOCAL SUSTAINABLE PRODUCTION

When the Fobox company was manufacturing equipment for a test wave power plant to be built near Risør, Norway, students participated as part of the course "Technology and Industrial Production".

A group of students in the "House of Tomorrow" program won an award for Youth Entrepreneurship from the county of East Agder and were chosen as participants in a national camp on renewable energy and sustainability.

The above are two examples of the Risør Secondary School's action-based education – and its cooperation with the regional economy. Energy and environment were selected some years ago as a special focus, both for the curriculum and the school's own facilities. "Student enterprises" are a pedagogic method giving students skills in innovation and setting up businesses. Themes are practical solutions for climate, environment, recycling and fair trade. Over the course of a school year students establish, operate and then wind up a business. One class is now producing electric bicycles; another has begun importing products made of recycled materials from Cambodia.

The school was certified as an Eco-Lighthouse in 2009. Residual waste was reduced by more than one ton in that year; the canteen stopped using disposable articles; and the school has a partnership with the local waste company whereby all waste fractions are monitored and the company gives courses on waste management for both students and staff. The student representative body plays an active



Proud pupils opening their own fair trade shop. (Photo: Aust Agder Blad)

part and makes recommendations to the administration. There has been an extensive energy saving program including retrofitting insulation, new energy windows, heat pumps, energy sensors and a bioenergy heating system. Student administrator Julie Bjørnstad stresses how important it has been that the school selected a clear profile. This helps to maintain priorities. Full student involvement is essential, she says, and the

interaction with regional businesses is another success factor. In this way pupils are motivated by a sense of being genuinely involved in the local community and its production. "This isn't about playing shop in the classroom – it's for real".

Risør videregående skole; Heidi Tveide
heidi.tveide@risor.vgs.no
www.austagderfk.no/risorvgs

«To hear a ten year old explain the workings of a reed bed sewage system or highlight the benefits of landscaping as a wind barrier or energy source can be very empowering for the children. Most visitors are amazed ...»

THE CHILDRENS' ECOCITY



In this, the UN Decade for education for sustainability (ESD), one of the most original and enriching initiatives is "The Children's Ecocity" – a week long happening with and by schoolchildren, which has been organised in nearly a dozen locations in the United Kingdom (as well as abridged versions in Johannesburg and Thessaloniki). In addition to creating memorable, major local events – which are exceptionally media friendly! – the Children's Ecocity achieves several goals in one: Sustainability education, empowerment, local community involvement, and focus on issues such as urban regeneration, peace and children's rights.

Typically the event involves about 40 children from local schools, in the age group 9 to 12, who develop a large scale model of their town as they would like it to be in the future. The one-week event is preceded by significant preparation by an adult team over a period of 6 months: making the basic model, briefing schoolteachers, running classes on ecology, energy and town planning, arranging site tours and visioning games. In this way not only the limited teams of children are involved but whole schools.

At the end of the week the final model is presented – by the children themselves – to an audience of parents, teachers, planners and the local politicians. The results amaze the adults.

The Ecocity offers a rare and precious view of the world through the eyes of children whose experience is less constrained than that of adults. "Children have a positive contribution to make to the development of policies that impact on us all..." They learn about city planning, drainage, natural materials, streets and public space, cultural heritage, transport, energy, ecology; and important civic skills of teamwork, communication and civic participation. This is creative thinking about the future, including both one's own life quality as well as global awareness.

The Ecocity works best when it is followed up with an adult "outcomes" workshop to assess the ideas with city planners and local communities. The process involves meticulous preparations by a team with planning and pedagogic skills, and uses a range of artistic, creative and "fun" methods to involve the children. In addition to its huge educational value, the Children's Ecocity tends to attract broad sponsorship and huge media attention. A fantastic event!

Ecocity is an incredibly creative exercise in sustainability education for the children – and for the teachers and parents.

www.gaiagroup.org

CAPACITY BUILDING in municipalities



ECO-SUPPORT TO PUBLIC WORKPLACES IN FINLAND AND ESTONIA

“Eco-support” is a working model and a practical tool for promoting environmental awareness at workplaces. Eco-supporters are trained to guide and motivate their workmates to act in environmentally friendly ways. In this way the positive will amongst employees is translated into tangible results.

New environmental ideas and skills promoted by eco-supporters are saving money and natural resources.

«We are translating
positive will into
tangible results»

The program began in Helsinki in 2006 and there are now more than 700 operators in the network. The operations were expanded to Tallinn in 2007. Eight Finnish and three Estonian local authorities are currently developing the eco-support model, which has so far only been used in the public sector. Besides the Finnish and Estonian capitals, operations have been launched in Vantaa, Espoo, Kirkkonummi, Kauniainen, Kerava, Hämeenlinna, and Kotka in Finland, and Tartu and Rakvere in Estonia. By the end of 2010 more than 1200 eco-supporters have been trained. The Eco-support project is coordinated by the City of Helsinki and funded by the Central Baltic INTERREG IV A Programme.

City of Helsinki Environment Centre,
Silja Sarkkinen
ekotuki@hel.fi
www.eco-support.net

A “SCHOOL FOR POLITICIANS”

Tingvoll in Norway has been an “eco-municipality” since 1990. This comprises a commitment to steadily improve its balance with nature and the environment. The municipality was an early pioneer of waste sorting and composting, and has a national research centre for organic agriculture, “Bioforsk Økologisk”. Environmental education is high on the school agenda too.

Tingvoll became the first municipality to offer an environmental training course for the local councillors. Over the past 20 years, five successive local councils have taken this course together with the administrative staff. Capacity building is through creative dialogue processes in addition to lectures and study tours. In the course, global challenges are seen and studied in the light of local resources and potentials for local action.

The nearby municipality of Halså copied Tingvoll’s example, though they have not managed to continue it. The Ideas Bank also contributed to a limited course in the neighbouring county.

Odd-Arild Bugge, Technical Manager
oab@tingvoll.kommune.no

REGIONAL RESOURCE CENTRES

Information and outreach centres for green living are a key tool for spreading sustainable development; they can reach both the general public as well as schoolchildren, officials and others. Unfortunately they sometimes suffer from inconstant political support and funding. We are here presenting two very different centers, one regional and one national. The first aims at supporting a wide audience, the second mainly consumers.

Ekocentrum in Göteborg houses Sweden’s largest permanent eco exhibition and offers courses and exhibitions for administrations, businesses and the public. Special courses have been run for teachers, including one on how Local Agenda 21 can be integrated into teaching and another on equipping pupils to tackle global challenges and build hope for the future. Yet another is a four-hour

introduction to environmental issues for private and public employees, including advice on environmental certification and management systems such as ISO 14001. The Ideas Bank in Oslo runs similar courses connected in particular to the Eco-Lighthouse model.

Another Swedish centre, “Råd-rummet” in Karlstad, runs a unique environmental and consumer service for all citizens. It is seen as a vital part of the city’s policy for sustainability. Similar to but larger than the Norwegian “Grønn Hverdag” centres, it focuses on consumer behavior and practical green solutions in daily life. Råd-rummet is working in creative and interactive ways to mobilize citizens.

www.ekocentrum.se
www.karlstad.se

Ekocentrum educates private and public employees.



NETWORKING MUNICIPALITIES

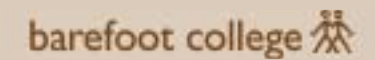
Norway ran the program “Living Municipalities” from 2006 to 2010. The aim was to anchor sustainability better in local communities. Nearly 150 municipalities worked within regional networks on six themes: Climate and energy, land use planning, quality of life and public health, North-South linking, future ecological production, and cultural heritage. The main focus was on climate and energy. Politicians, municipal staff and local resource persons participated in network activities that also drew on external expertise to discuss local experiences and proposals.

Fredrikstad was given
the role of «climate
coach»

A key factor was to study best practice examples from other places. Both large and small municipalities stressed the value of exchanges of experience, and some stated that they would not have had the capacity to develop climate and energy plans without the support of the larger municipalities. Fredrikstad, a town with the longest track record of environmental work in Østfold County, was given the role of “climate coach” to the others. Some developed joint plans and the program led to some joint projects. It has thus led to joint climate and energy efforts in several regions.

KS, Ole Jørgen Grann
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THE BAREFOOT COLLEGES



«For any rural development to be successful and sustainable it must be based in the village as well as managed and owned by those it serves».

The Barefoot Colleges, a NGO founded by Bunker Roy that began in Tilonia, India, has been fostering sustainable communities for 35 years. Working with a range of partners, it has spread to other countries, in Asia and Africa in particular. Tens of thousands of uneducated poor have been trained in skills such as solar engineering, water harvesting, accounting, building, education and health care. In many ways the Barefoot Colleges realize the goals of E.F Schumacher's Appropriate Technology in his Gandhi-inspired vision of community development and "Economics as if People Matter". This approach, designed to be ecological, inclusive and culturally sensitive is now quite widespread in developing countries through agencies such as Practical Action, providing basic needs and skills in local communities with little access to financing,

Such programs of adult training and education for sustainability are also intended to be important for the local economies. They aim to benefit - and empower - the poorest groups, and women and children in particular. Most of the projects by or similar to the Barefoot Colleges are in rural areas, but there are urban examples too.

What is required? The College says that professional knowhow is not difficult to find. Pedagogic and process skills are essential. But community engagement is seen as being the basis for changing the local world. These initiatives contribute to a much smaller ecological footprint, and to a better life through quick action and with small inputs of money; indicating that sustainability does not always require years of conferences and huge amounts of expensive technology.

How relevant is this to developed countries? In many ways these initiatives amongst the planet's poorest put us to shame. With deep local commitment, communities take charge of their lives and work together for local development based on democratic participation and ecological responsibility. We should not romanticize life in an Indian village; nevertheless, such villages are attaining good levels of health, education, local democracy, microfinancing, internet access, and other things that we like to consider the hallmarks of our "advanced" societies - at a fraction of our resource use. Although these initiatives have changed hundreds of local communities, there are millions more who could benefit, for only a fraction of the money that international agencies put into heavy top-down programs - which in addition often run

into problems if insufficiently sensitive to local needs, contexts and cultures.

In our own countries, Local Agenda 21 and sustainability initiatives are often delivering this same message: achieving sustainability is not primarily about eco-technology. It is the commitment of leaders and participants, the "personal chemistry" between people, the ability to work together, and local identity, that makes for success or failure. Does this only apply to developing countries? Are many of our efforts still in the wrong direction? The question is relevant for us all.

www.barefootcollege.org
www.practicalaction.org.uk





A BRIDGE WITH EASTERN EUROPE

LEARNING BY DOING - NOW

BRO in Norwegian means bridge, and this project is just that - a bridge between Norway and eastern Europe. The goal of BRO is "help for self-help", providing hands-on training in ecological building to village communities, first in Russia, since then also in Latvia and maybe soon in other East European countries. The exchanges involve a helping project for disadvantaged people in Russia. BRO is thus a unique combination of several goals simultaneously: ecological education, care, cultural exchanges, and practical assistance towards local sustainability in rural communities.



Initiated in 1998 by the members of the GAIA group of architects in Norway, BRO (formerly "Brobyggskolen") is a non profit organization in Norway and cooperating with the Skolnij Dom Ryzhkovo (School Project Ryzhkovo) and Svetlana Camphill Village in Russia.

BRO involves professionals, interested people of all kinds, and Norwegian school classes. Run largely in a spirit of voluntary cooperation, the project receives support from the Norwegian Ministry of Foreign Affairs. In addition to building much needed facilities in the host communities, the hands-on approach develops skills that can be applied by the communities themselves. Working visits are typically of 10 to 14 days' duration, daily construction work being enriched by evening seminars, discussions and cultural events.

The ecological buildings are specially designed for self-help and based on local, natural materials. They include using timber, straw bales and clay plasters as well as local traditional techniques. In this way costs are kept extremely low. Heating is usually with wood, and constructing special heat storing clay mass ovens has become a specialty of the trips. All building is thus "hands on", low cost, and exclusively using ecological principles.

BRO has in cooperation with Svetlana and Ryzhkovo planned and built several buildings including a garden house/ bakery and a family house at Svetlana, and at

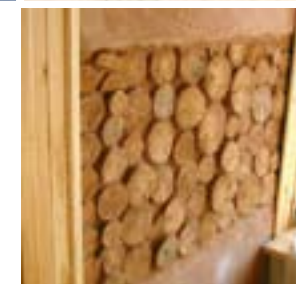
Ryzhkovo a family house, a guesthouse, a banja (Russian sauna) and a workshop. In Latvia at the Rozkalni Camphill Village BRO has built a large family house.

In many corners of Eastern Europe there are quite deprived rural communities, struggling to survive or to rebuild after conflicts. In many cases, dealing with daily crises prevents people from building long-term, sustainable and ecological solutions. An East-West focus can thus well be added to the better known North-South idiom though the challenges and contexts are different. In both cases, initiatives such as BRO are applying the excellent approach of combining cultural exchange and education for sustainability with real hands-on practical action.

www.camphill.no
www.brobygg.org
www.halmhus.no
www.naturligbyggeri.no



BRO is about learning and building a better world at the same time.





SOME FOOD FOR THOUGHT

**- ISSUES, IDEAS
AND PROCESSES**

HOW TO SAVE THE PLANET, COST FREE, BY NEXT FRIDAY

Why are sustainable solutions not spreading far more rapidly? We know action is needed on a much bigger scale. Don't we need to admit that without a radical re-think, our promised reductions of 40% or 50% in climate emissions are extremely unlikely? Or global equity?



Chris Butters

In 1939, almost every backyard lawn in England was dug up to start producing vegetables. In 1940, the entire automobile industry of the USA converted itself overnight to make other products. Big, noisy disasters such as wars shake us into immediate action – and with full public support. But environmental issues are not so much an immediate threat as a quiet, creeping crisis. Other urgent issues divert our attention from the complex, patient task of tending to the long term welfare of this planet and its inhabitants.

Yet at the same time, communities all over the world are building a better, fairer future - right now. The common factor, wherever we find these success stories, is human will and vision. Even some of the poorest communities in the world are achieving inspiring results, without finance or technological resources.

Perhaps we need to look at sustainability differently? Why do we think only lots of money and technology can save us? Or that sustainability means we will have to reduce our standard of living drastically? Are these ideas true? Perhaps paradise is, as someone said, not far away but just a few centimetres in front of us.

What if we could achieve it for free? By, say, next Friday?

It is now widely accepted that we must reduce our resource use by around 85% to avoid the probability of serious climate change. We are now at the stage where governments and communities are making commitments to emission reductions of 30% to 50% within 20-30 years. This is seen as being mainly a technical task; the three main components are carbon capture and storage (CCS), renewable energy (RES), and energy efficiency measures (EE). But is this realistic? A small mathematical exercise (see box) suggests that the numbers simply don't add up.

A REALITY CHECK

The following simplified figures show how increasing global consumption, plus population growth, make the achievement of emission targets extremely unlikely.

Countries are sorted into high, medium and low energy consumption groups, with low population forecasts for 2050.

In the high group, population is almost stable, consumption growth has been stopped (extremely unlikely!) and overall efficiency improvements of factor 3 have been achieved. In the middle group population increase is moderate, living standards have risen by 70%, and energy efficiency has doubled. In the low group, population growth is higher, the poor have tripled their living standard (also extremely unlikely), and energy efficiency has doubled.

Today:	pop x energy/cap:			total:	In 2050:		
High	1,0 billion x 5,6 toe			= 5,6 Btoe	1,1 bill x 1,9 toe		= 2,1 Btoe
Med	2,1	x	2,0	= 4,2	3,0	x	1,7
Low	3,0	x	0,5	= 1,5	5,1	x	0,8
Sum energy use:				11,3 Btoe	11,3 Btoe		

All the gains we are remotely likely to achieve in emission cuts are eaten up by increased world population and our increasing consumption.

Such efficiency gains are very unlikely. And most forecasts expect a large growth in energy demand, not zero growth as above. If so the picture in 2050 will be much worse. But even given this very optimistic scenario, total energy use in 2050 would be **the same as today** – and most of it would still be fossil fuels. It thus appears unlikely that global climate emissions will be reduced much at all, without very major policy changes. Perhaps 20% is a remotely realistic target?

Note also that in this scenario the poorest are not yet anywhere near present western living standards. If that is a goal then all targets would need to be even more ambitious! Hence: The only likelihood of large global emission reductions is if the poor stay just as poor as they are now.

Estimates such as the above suggest we need a serious rethink. Large emission reductions cannot possibly be achieved unless we not only become much more efficient, but also *decrease our overall consumption*. This means that lifestyle shifts must be brought on to the agenda - as soon as possible.

We need to remember that *energy efficiency* is not the same as *energy reductions*. It's no use buying the most advanced energy efficient fridge, or car, or house, if it's twice as big as our old one. Our *total* energy consumption will still be going up! Efficiency without reduced consumption gets us nowhere.

Do we have to go back to the cave then? Fortunately, *standard of living* is not the same as *quality of life*. There are simple ways to achieve progress – if we refocus. We need to look at the real goals of our activities – health, welfare, happiness – rather than, as today, choosing many home and leisure activities that need big inputs of technology



and resources. Others can give as much pleasure. To quote the concept of the Bhutanese: our ultimate goal is not Gross National Product but Gross National Happiness. Which can be reached in different ways; but not all ways are happy for the planet.

SUSTAINABLE PARADISE

Helge is a highly qualified and optimistic engineer from central Norway. His vision of tomorrow's sustainable world is as follows:

"After breakfast on Friday I pack, switch my zero energy house to standby mode and drive my electric car ten minutes to the new fastlink station, where I leave it plugged in to recharge at the free park and ride facility. The high speed rail takes me the 500km down to Oslo in just over two hours. After my business meetings there, I decide to spend the weekend with friends in Paris. Even though Scandinavian Airlines has full carbon offsets and runs 100% on biofuels now, I prefer the high speed rail which takes me to Paris in only five hours. We eat dinner at one of those restaurants that has wonderful ecological beef. All French wines are ecological now too. We spend Saturday at Neuilly water park, where the solar powered wave machine is just fantastic. Before taking my return flight I buy a new set of linen shirts, a new, recyclable 2 terabyte Mac Greenberry for my son and two of those super cheap Fairtrade hemp carpets made in Laos. A good weekend! On my way home I send an sms to reset the house temperature and buzz my interactive smartfridge to check what I need to pick up on the way home ..."

All of which, Helge, is quite possible, technically speaking. But, um, how many high speed rail links has Norway, one of the richest countries in the world, managed to build over the past 50 years? None. And how did those cheap carpets get from Laos to Paris? And that great eco beef from Argentina, wasn't that where there used to be a rain forest?

So, Helge – your future world is terribly efficient, a whole lot of fun, and there are endless new products to consume. Is this what it looks like now in Nepal, Kenya and Laos too? High speed rail all over the world! Lots of solar powered water parks in Bangladesh! Wow! Fun for everyone! Um, actually, no, no high speed rail. Kenya and Laos are still trying to pay off the highways they built in 2020. Um, actually, the whole of Bangladesh is now a water park. Seawater that is. Time for a reality check, Helge. It doesn't add up.

PRICE AND VALUE

Perhaps we now know the price of everything and the value of nothing. Vibrant, local economic networks such as BALLE in the USA (see page 36) do not have the profit margins that the finance world seems to require. But they have a far, far greater value, in terms of local employment, local resources and local community building. There is a huge difference between finance and economics!

Surveys in affluent societies suggest that many people are tired of material consumerism and would rather reduce their income to have more leisure and "quality time". Although few actually do this "downshifting" in practice, it does suggest a possibility of new trends. This may naturally be harder in developing countries, where people are just heading at full speed to their first discount store, brandishing their new credit cards.

We have to face the fact that changing energy and consumption patterns is very much a sociological and cultural issue. So, let's forget about the technology for just a minute, and see where other paths might lead us.

LOOKING AT CONSUMPTION

The three main components of our resource use are what we eat, what we drive and how we live – about one quarter each – which can be summed up as "castle, cow and car". There are ways we can reduce our footprint to about one third, for free, overnight.

A zero energy home

Zero energy or zero emission buildings, and even plus energy buildings, are already a reality. They cost a few percent more (soon paid back by low energy bills). This can't be done overnight, but quite quickly. It would help if our state and banks provided more incentives. But the easiest step of all is to reduce the size of our house. This saves resources in all ways - immediately - and it saves us big money.

A partly vegetarian diet

Mainly sourced locally, and still allowing some meat. This can reduce our food footprint by about two thirds. It's healthier, but also saves us money, mainly from buying less meat. It assumes that local and ecological food becomes far more widely available. Which depends on demand from us consumers.

Living car free

This saves us a packet - so much that we can easily afford a few taxis or a rental car for the odd weekend. It assumes really good public transport and good alternatives such as car share. More bicycling means better health too. Maybe it's fair enough to have a car if we live out in the country, or for a few years when we have small kids. But we do have to cut out excessive air travel.

State, stuff, and services

The other main components of our footprint are the resource use of public amenities and services, and all the "stuff" we buy, such as clothes, furniture and technical gadgetry.

The services are something every good society should have, but their impact can also be reduced through efficiency. And perhaps a more healthy and sustainable society would need less police, dentists, psychiatrists, hospitals and waste dumps?

As for all the stuff ... well, that's something we can decide on right now. Less bling also means direct savings. Okay, it's easier said than done – and the poorer half of the world is just discovering all the joys of stuff.

The above choices – note, they are *choices*, *not technologies* – reduce our total footprint to around one third, as good as overnight. Without any more global conferences. Without any "breakthroughs in technology"; mostly without any technology whatsoever. And without costing us a cent.

On the contrary we have saved a lot of money. Enough to pay for all those carbon offsets we are going to need if we still insist on flying off to exotic tourist traps, rather than hiking in our own beautiful mountains ...

CONCLUSION

The big picture tells us that technology alone is not the answer. We need to bring consumption and lifestyle choices into the picture – and into policy. It's understandable, though unhelpful, that industry never wants to discuss reducing material consumption. It's also understandable that politicians prefer to avoid such issues.

But we, who are supposed to be leaders in this field, must do so.

Perhaps the politicians don't really have so much to fear. They might even gain wide respect for courage and plain talking. We need strong leadership now more than ever.

Thus there are two rather different approaches to sustainability in our societies. On one hand the technology driven climate lobby and market forces; on the other, the voices of community development, cultural values and quality of life. The technocrats seek new ways to manipulate the planet; on the other side, we who aim to address the *whole* concept of sustainability. We need, urgently, to supplement the narrow technical approach with an agenda of real lifestyle shifts - positive downscaling - and to develop ways to communicate their immediate value. Ways to sustainability that are people-focused and are better, cheaper, and far quicker.

Yes, and of course we're going to need both approaches; both technology and people, science and wisdom. These two are not opposing but complementary principles. We need a world where the two can achieve some kind of balance and dance together.

See pdf article on google "A Holistic Method of Evaluating Sustainability, Chris Butters"

WHAT DO WE REALLY MEAN BY SUSTAINABLE SOCIETY?

The **techno-optimist** sees all the world achieving high lifestyles, including a full array of consumer goods, private cars, large dwellings and air travel – by economic growth, efficiency, renewable energies and vast technological progress. But is this future possible?

The **pessimist** picture, often painted by industries and supporters of "business as usual", sees us having to lower our living standard and return to more primitive lives without many of today's amenities and individual freedoms.

The **sustainable** vision is of a very positive but different life, with a high level of satisfaction and welfare but in ways that use far less resources. The key lies in choices. Many of the amenities we associate with a "modern" lifestyle, such as computers, education, culture, health services, eating out ... consume relatively little resources. Just a few – such as large houses, cars, a high meat diet and frequent air travel – do.

THE NORDIC MODEL

– is it able to sustain?

The Nordic societies are among those which have succeeded best in achieving economic growth and overcoming poverty within their own borders. As a result we are now also among the highest consumers of the world's natural resources. Has the Nordic model outlived itself, or could it also contain the seeds of a sustainable development?



John Hille

The “Nordic model” of social development has long interested people outside the Nordic countries. Of special interest to those with more or less social democratic leanings, it has also attracted attention in financial circles, in part since all the Nordic countries are near the top of international competitiveness rankings.

The exact content of the Nordic countries’ model is less clear. All are welfare states with strong social security and a willingness to redistribute income. But this is not unique to these countries. The first well-developed welfare state was arguably New Zealand, and the term itself originates from Britain where it was a vision for Attlee’s post-war government.

In one of the last years of the Soviet Union, the Ideas Bank – at that time a part of the project “Project for an Alternative Future” – got a visit from one of Mikhail Gorbachev’s

advisors. He wanted the recipe for the Nordic model, apparently hoping to be able to introduce it back home. With typical Russian determination, he demanded to know which attributes all of the Nordic countries had in common, and that no other western country could show. Rightly or wrongly, we ended up settling for the *strong degree of local democracy*. None of us could name other countries where municipalities played such an important part in the political system, and where local democracy also was, or had been, so firmly anchored in civil society. (Our guest may not have been too satisfied, as our answer suggested it might be difficult to do that by decree from Moscow.)

Later, the Nordic Council of Ministers asked the magazine *Mandag Morgen* (Monday Morning) to describe what the Nordic countries have in common and what has made the Nordic region “a global winner”. Through selected interviews eight main points emerged:

- Equality – we take care of each other
- Trust
- Short distances to those in power – a low degree of hierarchy
- Social inclusion – we want all to participate
- Flexibility
- Respect for nature
- Aesthetics – we like simplicity and harmony
- Protestant work ethics

The four or five first points tie in with commonly cited features of the Nordic model, such as strong welfare states and democracy with broad diffusion of power. But the report also states that these eight attributes stimulate competitiveness. In egalitarian societies the consequences of failure are bearable, so people dare to be innovative. Where there is trust, transaction costs are small. Where there is a short distance to those in power “subordinate” employees will show initiative and take responsibility instead of waiting for orders. And so forth. In societies with fewer of these attributes it is easier to postulate a *conflict* between competitiveness and generous welfare provisions.

The *Mandag Morgen* study also emphasizes the even level of education in the Nordic countries. They have few “elite” schools or universities, but also few workers with no educational qualifications.

Few Scandinavian words have been exported into other European languages since the Viking era, but

two concepts with social significance can be noted. The first is *ombudsman*, which now occurs in several European countries and languages. The second is *folkehøgskole*, although this word has been naturalised to Volkshochschule or folk high school. Both examples fit *Mandag Morgen*’s image of the Nordic strengths. Ombudsmen exist to lessen the distance to the powers-that-be, and safeguard people’s rights. Folk high schools were introduced to offer ordinary people more than a basic education, at a time when only a minority could send their children to secondary schools.

Can the world afford the Nordic countries?

The debate on the Nordic model mainly concerns the model’s economic success, and whether this can be maintained. Whether the model is *sustainable* is another question. Is it compatible with global equity while avoiding ecological catastrophes?

Mandag Morgen identified “respect for nature” as one Nordic characteristic. Other surveys from several Nordic countries confirm that people consider contact with nature important for their quality of life. This could be an impulse to sustainable behaviour, but the connection is not automatic.

Nordic initiatives have contributed to a “green image” around the world. Sweden was the first country to ban DDT and Norway the second. The first UN Conference on the Human Environment (1972) was held in Stockholm. In that same year Norway appointed the world’s first Minister of



The Childrens Ecocity – Children visioning the future of their own community.

Best on environment, worst on sustainability?

Since 2006, scientists at Yale University have published an environmental ranking of most countries. Their methodology means that affluent countries, with the resources to tackle environmental problems, tend to do well. In 2010 the Nordic countries took 1st [Iceland], 4th, 5th, 12th and 31st place out of 163 countries.

However, the *Living Planet Reports*, published by the World Wide Fund for Nature, produced almost opposite results. In 2010 the WWF ranked 130 countries by their ecological footprint per inhabitant. Iceland was not included, but the other Nordic countries came in as Nos. 3, 12, 13 and 17 from *the bottom* of this ranking.

The Nordic countries have maintained a high profile regarding international problem-solving and solidarity. In relation to their size, no other countries have contributed as much to the UN's budgets and to its peacekeeping operations, or held as many top positions in the organization. Besides the Netherlands they are the only countries which have long fulfilled the UN goal of donating at least 0,7 % of their income to developing countries. (Finland and Iceland excluded).

Every year the American Centre for Global Development ranks 21 affluent countries by their contributions to global development. In 2010 Sweden, Denmark, Norway and Finland were ranked 1st, 2nd, 4th and 7th respectively - results largely due to contributions to peace and security, and spending on aid. In other areas, such as trade, immigration policies (except for Sweden) and environment, Nordic performance was middling. Finnish immigration policies and Norwegian trade policies were even judged to be among the worst. In other words, the Nordic countries showed the most solidarity in areas that hardly affected everyday life at home. We export money, which we have in abundance, or we export peacekeeping forces and peace initiatives. But to integrate immigrants, open our markets

Environment. One of his successors, Gro Harlem Brundland, went on not only to become Prime Minister, but to head the World Commission on Environment and Development. Denmark has become known as the world's wind power laboratory, Finland as a world leader in bioenergy, and Iceland for its ambition to become the first "hydrogen society".

The reality has been a bit more mixed. Norway, Finland and Iceland are among the European countries where energy consumption and CO₂ emissions have grown the most over the past 35 years, while Sweden and Denmark have managed to reduce their emissions, and Denmark has not even increased its final energy consumption since 1973 – a unique feat among industrial countries. However, statistics on energy consumption and emissions only show a part of the picture. The effects of our consumption are often felt far from home

Consumption of goods is both high and increasing in all Nordic countries. Danes and Norwegians occupy more dwelling space per capita than any other people in Europe. The Danes have always ranked high in meat consumption, while the Swedes and Norwegians are catching up: in both countries, meat consumption has grown by half since 1990. Over the same period Norwegian consumption of clothing doubled, while imports of furniture tripled and those of sports gear quadrupled. International air travel, where all the Nordic countries are near the top of the world ranking, is also growing dramatically.

to poor countries or reduce our consumption of resources - these are challenges that demand adjustments in both everyday life and the economy.

A model in crisis?

The UN summit in Rio in 1992 was the first to put *both* environmental challenges *and* global injustices squarely on the agenda, and thus to challenge affluent consumption patterns. The resulting Agenda 21 document had four main parts. The final part is about financing and implementation, but the remaining three sent an important signal. Part 1 is about global inequalities, Part 2 about environmental challenges and Part 3 about the *need for all major groups in society to contribute*. In other words the heads of state assembled in Rio recognized that the problems could not be solved "from above". A broad democratic mobilization was needed, in which businesses, trades unions, local government, NGOs, women's organizations, youth and ethnic minorities must participate.

Subsequent summits have underlined how much remains to be done. The UN "Decade for Education on Sustainable Development" was launched in 2005. Education and public participation are among the keys to sustainable development. The Nordic countries have strong traditions in both fields, and should therefore have good prospects.

Yet these strengths are not very evident in the Nordic performance on environment and development to date. The Nordic countries have excelled in measures that can be decided "*from above*"; large aid budgets and contributions to the UN, regulation of industrial emissions, bans on toxic substances, large nature reserves. But our patterns of consumption are near the bottom of the global sustainability league and show few signs of improving.

In this respect, the Nordic model has not succeeded very well so far. At least two explanations are possible. One is that the "model" as such is unravelling and may not last.

Another is that the opportunities for promoting global sustainability that could spring out of these social values have not yet been seriously implemented.

Many think that some of the Nordic values have weakened during the past couple of generations. Communities where the level of trust is such that people leave their homes unlocked are undoubtedly fewer. Income disparities have grown. The societies have become more differentiated, not just ethnically due to immigration but also because of the growing variety of accepted lifestyles. We have fewer common frames of reference, and this might reduce both the will and the capability to engage everyone.

Growing affluence does not only make it *possible* to consume more – it also affects attitudes, including the urge to consume. Affluence makes different lifestyles possible, but consumption researchers note that people in differentiated societies need to express which sub-culture they belong to and do so through consumption, be it of clothes, cars, interior decor or exotic travel. Furthermore, affluence not only seems to weaken people's ties to their communities, but also to promote a "care-free" attitude in other areas. According to surveys in Norway, people thought it more important to solve environmental problems than to promote economic growth around 1980 and again around 1990. These were periods of recession and rising unemployment. But during the boom periods of the mid-1980's and since the mid-1990's, most people have given priority to economic growth, though a slight turnaround has been visible recently.

Are local communities sustainable in the Internet age?

The Nordic model has balanced individual values and strong local government. Over the past generation, however, many would say that the scope for local action has been reduced by increasing state regulation. Local politics may thus engage people less. In both Norway and Finland, participation in local elections has dropped from

about 80 % in the 1960's, to around 60 %. In Denmark participation has been more stable, but considerably lower than in general elections.

If interest in local democracy is declining, there could be other reasons too. That people identify less with their local community could be one. Our networks are no longer as localised as they were. They can be both national and world-wide in the real or virtual sense (incidentally fuelling consumption of transport and IT equipment). In addition to formal local democracy, this also affects another traditionally important intermediary in the Nordic model: civil society. Non-profit organizations and social movements, strong at the local level, have traditionally been an important part of Nordic people's lives. Many of these socially involved organizations have seen membership decline during the past generation, while groups focused on common leisure interests have grown. The local enterprises with which communities and many individuals once identified strongly, - particularly savings banks and co-operatives - have lost local ties as they have merged into larger units. They no longer lubricate local democracy to the same extent.

The tradition of public education¹ suffers from some of the same tendencies. Evening courses related to hobbies or leisure attract far more people than study groups on social issues. In the mainstream media, including the state broadcasters which once had public education as their mission, the element of entertainment has increased markedly at the expense of information.

These trends affect opportunities to mobilize for sustainable development. On paper, Nordic municipalities responded better than most to the UN call for Local Agenda 21 processes (and Sweden is the only country in the world where *all* municipalities did so). But few municipalities succeeded in inspiring truly broad public participation in the process. Many of those that achieved significant results did so through technological measures which

were often funded "from above", by central government and/or the EU. And the average person's consumption pattern has definitely not become more sustainable.

Signals of hope?

Is it possible to "reinvent" the Nordic model to make it sustainable? Can it be remoulded to the social realities and global challenges of today?

The *way in which* Samsø (page 16) achieved its success is a good example of the Nordic model at work. A company that consists of four equal partners: the local government, the Business Council, the Farmers' Union and an environmental organization - a cooperative basis - widespread trust and social inclusion, combined with a short distance to those in power.

Where successes are found, there were often innovative processes. In 2001 the City of Stavanger was awarded the "Synergy 21" prize for its work towards sustainability. The city achieved its results by developing new network models to meet people where they are, whether in business, civil society or the local government organization. Also, new forms of participatory planning were used in Stavanger, including futures workshops.

The rural community of Grästorp in Sweden managed, without much external funding, to achieve major reductions in waste generation and oil consumption and a large increase in the use of public transport. Games and humour helped arouse a somewhat sleepy civil society to the extent that that Grästorp now holds five Guinness' records in waste collection. The distance to those in power was the first victim of Grästorp's Local Agenda 21. The bishop of the district has had to climb out of a rubbish container to preach the gospel of recycling. The Swedish Minister of the Environment has been publicly berated in Grästorp by the fairytale figure Mulle - who had heard rumours that the Minister had got there by airplane and not by train. And the municipal Director of Technical Services

Games and humour helped Grästorp to achieve major reductions in waste generation and oil consumption.

has had to climb onto the roof of the Town Hall every year wearing a propeller on his back and toss organic sweets to a crowd of laughing and cheering children. Grästorp has also entered into a twinning relationship with Marrupa in Mozambique. Meeting poor people from Marrupa has undoubtedly given some people in Grästorp a new insight into their own affluence.

Despite this, the average consumption of resources is high, both on Samsø, in Stavanger and in Grästorp. Yet these communities have shown that democratic impulses are both alive and able to find new expressions, in relation to sustainability.

There are other "signals of hope" of at least two kinds. Some groups are experimenting with *radically* less resource demanding and more environmentally friendly lifestyles. There have never been more ecovillages and experimental communities in the Nordic countries than today, nor perhaps more individual households making a conscious effort at "simple living", not to mention groups aspiring to turn their communities into "Transition Towns", of which there are now some 80 in Sweden alone.

Local stunts or national role models?

Will the local examples of democratic renewal, from Samsø to Stavanger, remain good but isolated examples? It remains to be seen how "renewable" the Nordic model is on a macro level. There have been sporadic signs of a will to innovate from governments as well, either by raising the issue of how consumption could become sustainable - as the previous Swedish government did - or by fostering new channels for participation adapted to the internet age and even harnessing them to sustainability issues, as in the Danish government's "One ton (of CO₂) less" campaign. Yet any talk of a decisive new turning must still be in the future tense.



Postscript

This article was originally written in 2006, but has been updated to take account of new reports and statistics. Since then the world has experienced a financial crisis that has put the *economic* virtues of the Nordic model to the test. With the spectacular exception of Iceland, it is fair to say that they have stood up reasonably well, with unemployment at lower rates and growth picking up faster than in most EU countries. This of course does nothing to blunt the horns of the dilemma: growth vs. sustainability. Several Nordic countries did temporarily step up spending on environmentally useful projects to counter the recession. However, none used it as a cue to change direction, by accepting less or no growth and asking how that could be combined with maintaining - or even enhancing - social equity and democracy.

1 The Scandinavian expressions - folkeopplysning in Norwegian and Danish, folkbildning in Swedish - can hardly be precisely translated. The literal meaning of folkeopplysning is "enlightenment of the people".



THE FUTURE SCENARIO WORKSHOP

– learning for democracy

“Together: politicians, administration and citizens. In this way we came closer to decisions that will also lead to action” - “Thinking outside the box, and having concrete and visionary work together, was stimulating, it should be done regularly.” - “The challenge is to continue this way of working and to ensure subsequent follow up.”



Kirsten Paaby

This is how participants in one of our Future Scenario Workshops (FSW) described their experience. The FSW was developed as a tool for strengthening democracy and participation; it addresses the participants as competent and empowered human beings. The necessity of citizens’ commitment and participation in the work for sustainable community development has been stressed ever since Rio in 1992. It has two main democratic reasons:

Firstly, a “top-down-perspective” indicates that any ambitious sustainability policy needs to be rooted in citizens’ commitment and contribution in order not to be a passing fashion. A good understanding of the choices that balance short term and long term considerations is needed: people must be involved as responsible citizens and not only as consumers.

Secondly, a “bottom-up-perspective” also shows the need for citizen mobilisation because changes and development happen through social and technical innovation, created by individuals or in groups and communities.

The Future Scenario Workshop

The FSW was invented by the German futures scientist and journalist Robert Jungk in the sixties¹. The objective is to foster practical and collective creation of sustainable futures, based on the experience and knowledge of all participants. As opposed to scenarios based on projections of present trends, participants become “social architects” who envision the future in an active and empowering way, by critique of the present, construction of concrete utopian future pictures, and action plans. This is organized within a framework of “free communication”. The FSW method bridges between sectors and disciplines and integrates different kinds of knowledge and skills in the making of choices.

The FWS has a clear political intent. “How to give back democracy to people” was a driving force behind Jungk’s work; to enable ordinary people to develop their wishes both for their individual lives as well as for their local communities and society as a whole. It is a method that makes democracy a way of learning. Combined with other methods for community development it is a tool for stimulating and developing a political culture of participation and for building partnerships between citizens’ groups and local authorities.

Positive outcomes include:

- Concrete actions for social change towards a more sustainable future
- New networks and cooperation
- Mutual learning across sectors and groups
- Strengthening the sense of community
- Creation of hope, trust and commitment
- Building self-confidence and empowerment.

The critique phase can also be fun, as in Re Environment Forum, Norway



Foto: CB

¹ Jungk Robert, Müllert Norbert, “Future workshops: How to create desirable futures”. (1987) London. England. Institute for Social Innovations.



sort and categorise the critique into clusters named “critique themes”. The phase ends with so-called “critique pictures”, a dynamic physical expression of the critique themes, for example through “human statues” or short dramatic tableau’s².

In the *Utopia developing phase* the participants develop solution-oriented, creative and innovative views of the future based on the critique. Here one is encouraged to think as idealistically and freely as possible: “If we could decide and everything were possible, how we would like our community to look?” This phase is the “heart” of the workshop, and follows the same procedure of brainstorming followed by editing into “Utopia-Themes”. The participants then choose which themes they wish to develop further in subgroups. The pedagogical platform for this round is: “Visitors have heard about the great results of the work that started with the workshop in 2010! In 2030 they come for a study visit. Describe what they will see, hear, feel, and touch”. This phase ends with a collective look into the future through presentation of the concrete future pictures created by each subgroup.

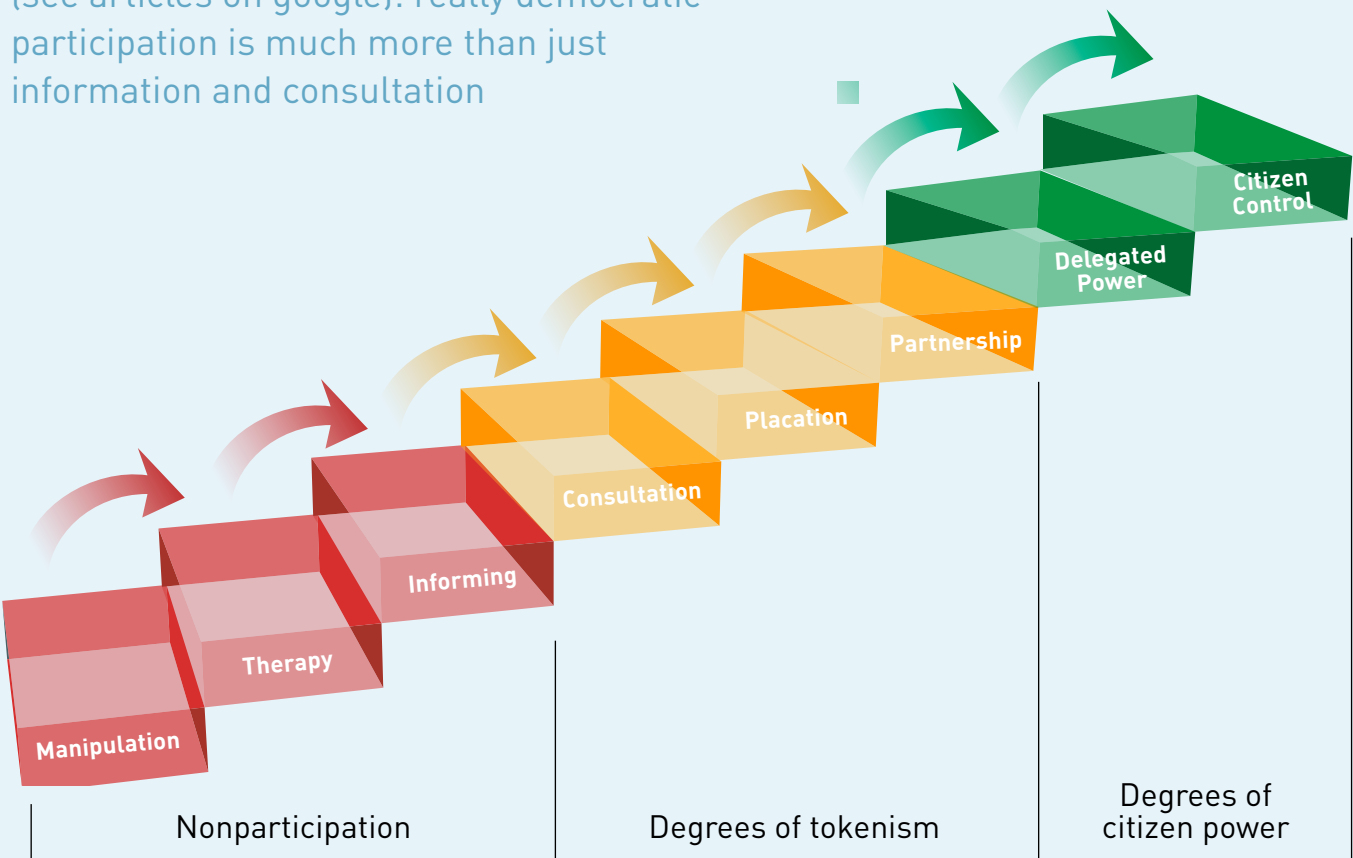
A future picture is taking shape



The FSW is structured in three interlinked phases: Critique - Utopia development - Realisation. It is facilitated by one or two skilled workshop leaders and always has a concrete theme, such as: “Our community in 2020 – a model of renewable energy and a sustainable everyday life” - “A green city district where youth enjoy living” - “What is a common good life for both people and the wild reindeer”. The democratic approach and open atmosphere of the FSW is nurtured by the following simple precept which is strictly followed: “Nobody’s critique or ideas is to be rejected, all views are to be heard and noted”.

In order to make social change it is important first to evaluate what is not functioning. In the *Critique Phase* participants articulate their critique in a brainstorming session where views in words or short sentences is documented on wall paper by the facilitators.. This creates an important basis by identifying the negative issues one wishes to change. The overall theme is elucidated from different angles. Thereafter participants and facilitators

“The Ladder of Participation”, after Sherry Arnstein (see articles on google): really democratic participation is much more than just information and consultation



The *realisation phase* opens with a constructive “devil’s advocate” critique of each of the future pictures. The aim is to find weaknesses, test, strengthen and develop the future pictures. This step takes place in plenum followed by group work where participants discuss how to realise these futures. Participants agree on steps to take and make concrete plans of action: “Who does what, together with whom, and when”?

A FSW requires at least one full day, preferably two. Participants can for example be citizens in a community; citizens together with civil servants and policy makers; students; or employees of a business. Participation

is based on commitment and pleasure but not on any obligation or coercion. One must always be aware of possible power factions and interest groupings in an FSW. It may be necessary to divide into two parallel workshops that meet and exchange views during the process. For example one might have students in one group, teachers in another; citizens in one group and elected officials in another. This depends on each concrete FSW context.

Where there are more than about 25 participants it is usually best to conduct parallel workshops; all groups can meet at the end when presenting their action plans, as well in the exhibition of the future pictures.

² This technique is inspired by the Statue Theatre of Augusto Boal

Barriers and success criteria

The FSW is not appropriate for all situations and needs to be combined with other approaches for social change. Success depends on good preparations and good follow up work. The following are decisive success criteria:

- Political backing including a long time perspective – “a policy of will”
- A culture of working across sectors, cooperation with civil society and the private sector
- A flexible structure in the administration that can meet citizens in a comprehensive way
- Participation at all levels, as early as possible and in a continuous process
- Recognition and dialogue between different types of knowledge – theoretical, professional as well as experience-based knowledge. Expertise has to “play ball” with lay knowledge based on everyday experience.

The broader challenge when working for social change is to create a more permanent context of learning. Often this only happens in “glimpses” in connection with specific programmes and projects. The challenge is to create a continuity, especially at the local community level, with constructive feedback loops as in nature.



Choices for the future, Setesdal in Norway

**Care for nature and people
hand in hand**

In Halkaer-Aadal in Denmark local citizens used FSW and follow-up workshops to develop initiatives for nature management combined with human social development. These included restoration of wetlands in cooperation with local and regional authorities, a “job-generator”, 8 new eco-friendly houses, a network linking local producers and consumers, and farmers converting to ecological farming.

Tools from the Ideas Bank

The Ideas Bank offers expertise with methods that promote sustainable practice and cross sector cooperation between public authorities, civil society and the private sector. These include intensive scenario building processes such as the FSW and other techniques for creating dialogue, egalitarian participation and creative visioning. We also facilitate training seminars on best practice in sustainable development, communicative planning and participation methodologies.

www.idebanken.no

**Community development work
and citizens’ participation in
Europe**

The Ideas Bank participates in the European organisation Combined European Bureau for Social development (www.cebsd.org). CEBSD promotes community development with a focus on citizen participation and civil society. It cooperates with other European networks such as the Central and Eastern European Citizens’ network (www.ceecn.net). An example is the ongoing project: “Citizens Action and Learning for Local Democracy in Europe”, which is part of a broader long term effort to strengthen local democracy. A short term goal will be implementation of the recently approved document by the Council of Europe – “The Code of Good Practice of Civil Participation in Local Decision Making”.

www.coe.int/t/ngo/Source/Code_good_practice_en.pdf

**EVALUATING SUSTAINABILITY
– THE VALUE MAP**

With the Sustainability Value Map we have for the first time a genuinely holistic tool for planning, evaluating and comparing sustainability in projects. It is now being used in several countries, and in a surprisingly wide variety of ways. In its simplified version, illustrated here, it can be used without extensive calculations; it is the process of using the Value Map that generates whole thinking and brings forth the essential sustainability issues in decision making.

Chris Butters

In contrast to existing assessment tools the SVM visualises *the whole concept of sustainability*: not just environment but all three aspects of ecology, economy and society in one diagram. This enables users to “see the whole picture” and to avoid specialist thinking.

The set of 3 x 8 criteria shown is a basic set but is not fixed; the SVM is a flexible tool that can - indeed should - be tailored to different purposes. In this way users develop “ownership” of the process. They themselves discuss and select the set of criteria, adapting the evaluation to their own context and to specific project types. By then assessing quality in the different areas and filling in the SVM, one arrives at a “star” – a bigger star meaning better. One sees at once whether the result is notably one-sided or whether it is fairly balanced. Any “holes” or weak areas are easy to see and discuss. With the SVM it is easy to notice win-win connections as well as tradeoffs.

Ecology, economy and society each occupy one third of the circle, and all parameters are given an equal area. Some researchers have spent vast efforts to develop a relative weighting of the factors. Weighting satisfies the tidy scientific mind - but is not actually useful in many practical applications.

The Value Map is scaled in a deliberately demanding way. Value 0 means an extremely poor standard; the second ring, value 2, corresponds to average quality or normal practice - such as current building codes. Value

3 shows a result above current practice; and the outer ring, value 5, corresponds to what we could call fully sustainable. For example: in the energy sector, a low energy building will score 3, a passive standard building 4 and a zero energy building 5. Few projects will reach the outer rim at more than a few points. The message, and it’s important, is that sustainability is not just a matter of 15% or 30% improvements but of big changes in the world. The horizon is a long way away. This too must be *communicated* graphically.

One of the unique features of the SVM is that it integrates objective and subjective issues – quantities as well as qualities. Whilst the *Ecology* factors are largely objective, *Social* ones are largely qualitative. As regards *Economy* it should be noted that the word means not only money, but housekeeping – the management and organization of society as a whole.

A zero energy house (good ecology) may be expensive (economy) or ugly (society). If so, it’s just not an interesting product! This shows how sustainable solutions must be good in *all three* areas, and in a reasonably balanced way, otherwise they won’t work. The SVM thus also makes tradeoffs explicit; a better result in one area is often at the cost of another area. The SVM is a tool that brings forth discussions which are vital in decision making processes.

The SVM is for experts as well as user participation processes. It is not an abstract model but a practical

working method, proving extremely powerful for planning and evaluation. It is also used for “before” and “after” evaluations, such as local community workshops.

Many existing “ecoprofile” systems only assess the ecological issues, and require complicated calculations. In real-life decision making processes, decisions are complex and exact “scores” are often less important than the process that users go through to arrive at their decisions.

The real world can’t be neatly partitioned into categories; ecological, economic and social issues often overlap. The

interrelationships are really important. This itself leads to some of the most interesting discussions which the Value Map brings up.

The Value Map visualizes the goal that all city plans, buildings, and development initiatives should fulfil the three conditions of sustainability. Our working methods must make clear the links between ecology, economy and society. The SVM is a powerful practical tool for working with each other and integrating all three parts into our thinking and planning processes.

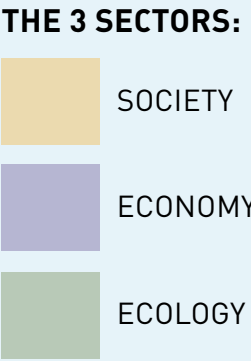
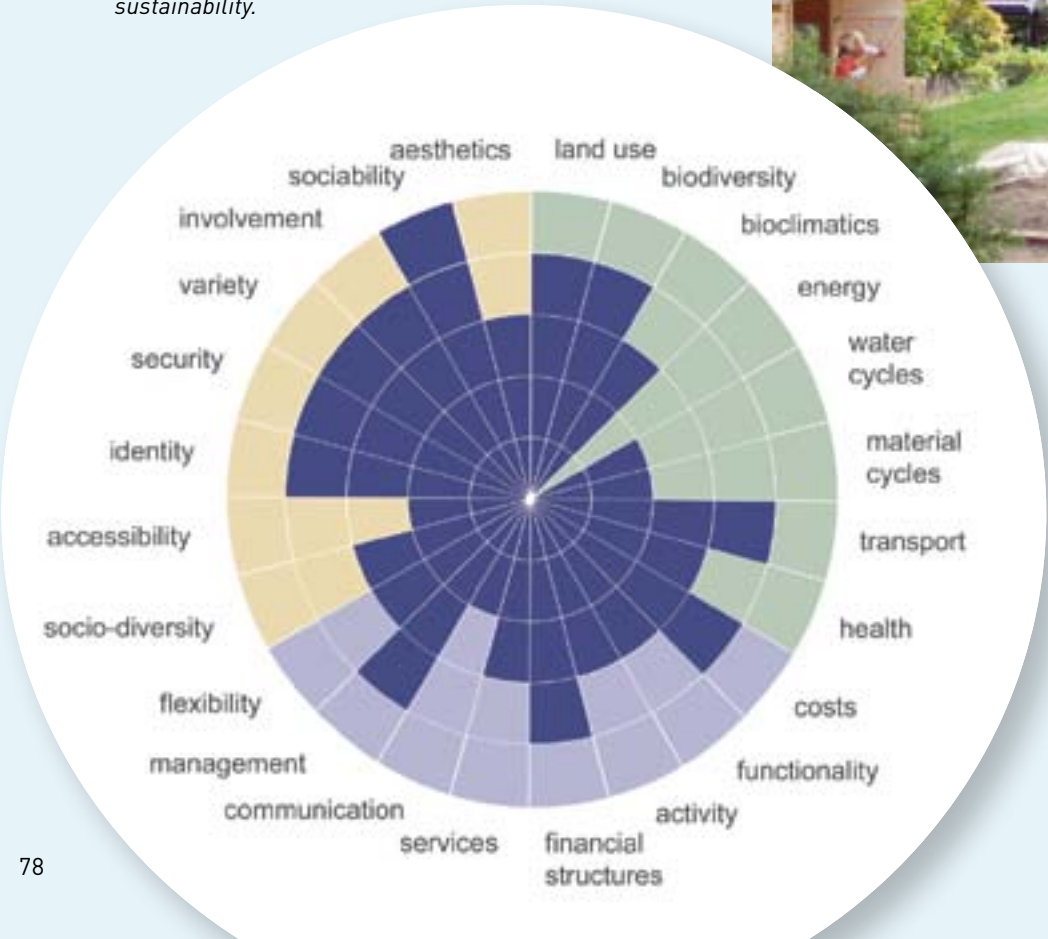
Compare the three cases illustrated below!

1 Cluster housing: NESODDEN, NORWAY

Great social qualities, play areas, car free, low costs, integrated into nature, schools and services nearby, compact space use (Rosland architects). Excellent in most areas; the few “holes” in this Map show the relatively poor energy standards of the 1970’s. But these eco-technical aspects can be retrofitted. The overall plan is the key to sustainability.



Photo: CB



2 Typical slum: CAPETOWN

The most eco-friendly people? Very compact land use. Space efficient, only one room per family! Near zero energy use (they can’t afford any). No cars either. 100% recycled materials. Near zero building costs. Totally flexible, the whole place can be demolished in an hour. But other aspects such as sanitation, health, empowerment and security are a disaster. This extreme example shows how an unbalanced diagram is no good. Slums make for a really low carbon footprint – but not a sustainable world!



Photo: CB



3 Vauban district, FREIBURG, GERMANY

The most sustainable city? Low energy buildings, solar heating, biogas, car free areas, superb public transport, high biodiversity, user participation, local jobs, social mix, reasonable costs. Planning that has integrated ecology, economy and community. Excellent in most aspects!



Photo: CB



2011 and beyond: CITIES TO LEAD EUROPE TO SUSTAINABILITY IN 2020

Europe 2020 is the EU's growth strategy for the coming decade and focuses on the EU becoming a smart, sustainable and inclusive economy. The European Union is now preparing itself for a strategy that sees sustainability as one aspect among others. Time is running short for local governments in Europe to show that they can lead the change towards a sustainable Europe - not by focusing on growth, but foremost on sustainability.

One way of proofing local governments' lead role is showing what they have already successfully achieved. ICLEI is proud to see its members Malmö and Freiburg, among other excellent examples, reflected in the publication, Signals of Hope. Local governments need to continue their excellent work and should constantly look for further improvements. However, they are also in need of the EU's and member states' accommodating structures to enhance their role for a sustainable Europe in 2020.

For local governments worldwide, Rio 1992 was the starting point of Local Agenda 21. The year 2012 will see the Rio+20 Conference taking place in Rio de Janeiro in May. Before further global commitments can be made, stock taking will need to take place: What are the outcomes of two decades of local processes for sustainable development around the globe? What types of local governance processes deliver progress, and



under which framework conditions? ICLEI will prepare a global evaluation study of local sustainable development processes, having emerged following the Local Agenda 21 mandate. The results of the study will inform policy recommendations and position papers, which will be fed into the UN preparatory process for the Rio+20 Conference.

To further discuss the role of cities in the EU 2020 strategy, and be informed about the Rio +20 preparations, ICLEI is pleased to invite you to its European Convention 2011. The Convention will gather European (ICLEI member) cities and partner organisations in Brussels on 12-14 September 2011. It provides a unique opportunity for European cities to assume a leading role in shaping and implementing the EU 2020 strategy. The conference will engage participants in a captivating discussion of the immediate and future challenges facing European cities in their quest to create a sustainable society.



Wolfgang Teubner
Managing Director
ICLEI European Secretariat

About ICLEI:

ICLEI – Local Governments for Sustainability currently has 1,200 member local governments (associations) worldwide and 200 in Europe. ICLEI provides technical consulting, training, and information services to build capacity, share knowledge, and support local government in the implementation of sustainable development at the local level.

The Solutions local, together – CONFERENCE AND THE FUTURE

The Nordic Conference on Sustainable Development in the Baltic Sea Region in Turku 31.1.–2.2.2011 has gathered together hundreds of professionals from local, regional and national levels, experts and entrepreneurs. They have shared their own sustainable solutions and shown how one can learn and adapt from each other in order to improve the practices in their own local authorities. The focus was on practical sustainable solutions. This is a natural step in the process of creating a more sustainable future for our societies.

It has been recognized that regional and local actors often go further than national governments in shaking up the business as usual. Sharing good practices and multiplying new solutions contribute to an effective cooperation and positive innovative entrepreneurship; they create new partnerships and thereby strengthen the state of sustainable development in the Baltic Sea Region and Europe.

The work is not done with the Conference. The next step is as important as the earlier steps of the development. Now it is up to our local actors to take the Solutions with them home and use them.

The Union of the Baltic Cities will take further the lessons learnt during the preparations of the Solutions local, together –Conference. Our aim is to disseminate solutions, models, good practices and assist our local authorities as much as possible. Cooperation, national and international, has been one of the success factors in the developing the Nordic countries as well as the entire Baltic Sea Region to what it are today. We are confident that close cooperation will be a key factor also in the future and we have a mandate to support and strengthen the cooperation!

www.solutions2011.fi



EU and ESD10

– The Council conclusions on education for sustainable development

The Council of the European Union emphasises (extract) that:

1. ESD has an important contribution to make to the successful implementation of both the EU Strategy for Sustainable Development and the new Europe 2020 Strategy.

2. The most important role for ESD is to equip individuals and groups with the knowledge, skills and attitudes they need to make conscious choices aimed at achieving and preserving a world which both they and future generations will deem fit to live and work in. Educational institutions, local communities, civil society and employers are all key players in developing and promoting such competences.

3. ESD fundamentally concerns the way we think about our complex world and the way we behave. It promotes values, principles and practices that help people to respond effectively and confidently to current and new challenges. It therefore has implications for education and training at all levels which may go beyond simply including sustainable development as another subject in the curriculum.

4. Sustainability can play an important role in national lifelong learning strategies and can be used as a tool to enhance quality at all levels of education and training.



http://consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/educ/117855.pdf

UNESCO:

"Education for sustainable development aims to help people to develop the attitudes, skills and knowledge to make informed decisions for the benefit of themselves and others, now and in the future, and to act upon these decisions. The United Nations Decade of Education for Sustainable Development (2005-2014), for which UNESCO is the lead agency, seeks to integrate the principles, values, and practices of sustainable development into all aspects of education and learning, in order to address the social, economic, cultural and environmental problems we face in the 21st century."



THE BALANCING ACT:

is a Nordic campaign for education for sustainable development. The visual symbols for the campaign are a series of eye catching sculptures, created by the Danish sculptor, Jens Galschiøt. The organizers are Ecocentrum in Sweden, Eco-net in Denmark and the The Ideas Bank Foundation in Norway. See: www.thebalancingact.info

Childrens' Ecocity, see page 52



The Ideas Bank "Sustainability Arrow"
– a tool for education and strategic
thinking about sustainability.

The Ideas Bank also offers courses,
study tours, consultancy and futures
workshops. See:

www.idebanken.no



Rio2012@idebanken.no

WHAT IS YOUR MESSAGE TO RIO+20?

What are key experiences within your local community? What is needed by way of better international and national framework conditions? Together with Nordic frontrunners the Ideas Bank Foundation is documenting experience with sustainable development and Agenda 21. As part of preparations for the coming Rio+20 world summit in 2012, we hereby invite and warmly urge our readers to send us information on examples of outstanding sustainability practice.

Send to: Rio2012@idebanken.no

SUSTAINABLE ACTIONS ARE WORKING!

This booklet presents inspiring examples - ranging from whole cities to neighbourhoods, schools and specific projects - of innovative and successful sustainability initiatives. These success stories highlight the need for action to be local - and hence the great potential for local action by other towns and communities.

The examples address all three pillars of sustainability - ecology, economy and community - as well as illustrating creative working methods and cross sectoral integration. In this booklet we also pose some questions about how to achieve faster action towards sustainable development .

For nearly 20 years the Ideas Bank Foundation in Oslo, Norway has documented, promoted and disseminated practical sustainability. Our work includes North-South perspectives in addition to extensive Nordic and European networking, education, and capacity building. This booklet is published in the context of the UN Decade for Education for Sustainable Development, and in particular for the Nordic-Baltic conference "Solutions local, together" held in January-February 2011 in Turku, Finland.

