

Not Just Eco-Technology

Danish ecovillagers train themselves to change energy consumption at an award-winning project near Copenhagen.

By Lone Samuelsson 1734 words: 1270 text; 464, sidebar.

The physical layout of our two-year-old cohousing-style ecovillage Munksoegaard (pronounced roughly “Monks-sa-GIRD”), consists of 100 housing units: five two-story cohousing clusters of 20 residential units, each with a common house, on 25 hectares of former farmland. Here 250 people (150 adults and 100 children) live together in a project based on environmental sustainability and the spirit of community. In 2000, when Munksoegaard was still in the design stage, we won first prize in a Danish competition for the best sustainable design for the 21st century. By 2001 when we moved in, 500 people were on the waiting list.

From the beginning in 1995 we wanted to make living at Munksoegaard desirable and affordable for all age groups and levels of society, so we came up with an innovative ownership method, the first of its kind in Denmark. In one of our 20-unit housing clusters residents own their individual residences and a share of their common space, and access to all our common property, as in any standard cohousing community. A second housing cluster is cooperatively owned, which means that every resident owns the whole cluster and leases the right to live in a particular housing unit, and in this case, the Danish welfare system partially subsidizes interest payments on the mortgage. The remaining three housing clusters are rental units, with one reserved for young people, one for senior citizens, and the third for anyone of any age. In these rental clusters the government partially subsidizes the interest payments, and low-income residents can apply to have part of the rent subsidized as well.

These various ownership arrangements ensure that low-, medium-, and high-income families can live at Munksoegaard. We consider it especially important for community health and happiness that young people at the beginning of their working lives are able to live here: The fact that the full range of ages is represented is treasured by all.

We are 100 percent self-managed. We have no hired caretaker; we painted our houses ourselves; we mow the lawns, clear the roads of snow, and maintain our own

wastewater and central heating system. This allows us to reduce our costs and also to build a strong feeling of community solidarity.

We divide up community tasks according to our abilities. No one, for example, would expect an 80-year-old lady to do landscaping work; it is perfectly fine if she bakes cakes and makes coffee for our meetings instead. Consequently, Munksoegaard is also a good place to grow old, as there is always someone to offer help when needed.

Government assistance was also very important in building Munksoegaard. When we began our property search, we wanted a site within 30 minutes of Copenhagen by public transport, and with access to at least 20 acres of farmland. We also wanted one where we had freedom to experiment with our own heating system and wastewater management—in short, we wanted sympathetic local officials who would be kindly disposed towards some crazy ecologists who wanted to build 100 housing units!

We found what we were looking for in Roskilde, a town 30 km from Copenhagen. The local councilors (similar to locally based state legislators in the United States) were not only kindly disposed toward our project, but positively enthusiastic to be the home of the largest ecological village in Denmark. The mayor himself took an interest in the project right from the start, and soon the more progressive officials within the local government followed suit. The officials who were not so keen about the project, however, pointed out that they would have to bend the rules and search for new ways to do things that they had never done before, often responding, “That is not possible” or “We usually don’t do it like that,” to our requests. When we couldn’t persuade the local bureaucrats, we had to go to our councilors and most of the time they helped us out. For example, existing regulations don’t permit developing a housing project with three different ownership structures, so we appealed to our councilors to persuade the local officials to interpret these regulations in a way that was favorable to us.

Today, in fact, many local government officials are rather proud of us. Not only are we on very friendly terms with them, but whenever they have visitors, they bring them over to show off our ecovillage.

The desire to create a sustainable lifestyle is one thing that unites us here at Munksoegaard: We share the goal of minimizing our ecological footprint on the Earth. From the beginning we prioritized sustainable initiatives: In order to keep our CO2 emissions low we would have a central heating system based primarily on wood pellets with an oil back-up; the project would be located close to public transportation; we

would carpool; we would have extensive water saving initiatives, including urine-separating toilets and a shared laundry using rainwater catchment.

But these technological initiatives wouldn't be sufficient for a sustainable reduction in our ecological impact: We'd also need to fundamentally change our lifestyles—to fly less, drive less, heat our houses less, use less water.

In order to guide us in improving our behavior, we decided to undertake ecological audits. Since we have only lived here two years, we have only undertaken one audit so far. What did it tell us?

We learned that, as a group, we use 38 percent less water than the average Danish household, and 25 percent less electricity. Carbon dioxide emissions from our heating system and electricity consumption are both 60 percent lower than the average. Our residents who use the carpool drive only 5 percent of the Danish average.

We also calculated these figures for each of us individually. The variation in our community was enormous. The person who released the most CO₂ through transportation released 90 times as much as the person who released the least. The person with the highest consumption of water used 10 times as much as the one who used the least.

These figures tell us several things. First, we learned that so far, our use of sustainable technologies, rather than changes in our behavior, has accounted for greater reductions in water and power consumption, driving time, and CO₂ emissions. This is most obvious in our use of water: The greatest impact has come from the urine separating toilets; consumption of hot water has not been greatly reduced and would require a change in habits, such as, for example, taking shorter showers.

The figures also benefit us on a personal level, helping each of us move towards a more sustainable lifestyle as we compare our consumption with others living in comparable circumstances. We also work with the figures on a collective level, trying to identify patterns in our CO₂ emissions and work out whether relatively high readings are the result of technological or lifestyle factors.

When we can, we encourage using new technology or changing our lifestyles to reduce consumption or CO₂ emissions. For example, electric power consumption in our common houses tends to be relatively high, but we don't know which gadgets or appliances are responsible. We're currently studying this and will make the results available to the community in due course.

While Munksoegaard members are very proud to live in Denmark's largest ecovillage, we look forward to continuing to reduce our energy consumption, use innovative technologies, and impact our environment less.

Lone Samuelsson, who has a Masters degree in Economics, has been one of Munksoegaard's most active founding members since she first joined the project in 1996.

Pull quotes:

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sidebar:

Ten Years of the Danish Ecovillage Network

by Hildur Jackson 464 words

The Danish Network of Ecovillages (LOS), organizes projects that help ecovillages as well as those that promote localization and bioregionalism. Founded in 1993 by members of ecological, social, and spiritual community projects in Denmark, LOS hosts celebrations, exhibitions, and seminars, and has published books, booklets, videos, a CD-ROM, and our quarterly ecovillage magazine, *LOSNET*.

In 1997 LOS initiated a Danish national competition for the best sustainable settlement for the 21st century, with 500,000 Danish Kroner as prize money, donated by Gaia Trust and five national government ministries, including the Ministry of the Environment. The competition focused on whole settlements and their methods for renewable energy, local wastewater treatment, social environments, health, food production, and so on. The judges, appointed by LOS and the government ministries, spread the award among nine projects. The first prize went to Munksoegaard for its planned sustainable ecological systems; the second prize went to Hertha, a Camphill community in Jutland, for its social-spiritual integration of handicapped and non-handicapped people. In 1998 LOS edited a beautiful, inspiring book with the best ideas from the competition, *Welcome to the Future: Sustainable Settlements in Denmark*.

To help raise funds so that aspiring ecovillages can buy land, LOS brought a proposal to the Danish Parliament to award 100 million Danish Kroner to 20 new Danish ecovillage projects, at 5 million Kroner each, enough for each project to buy sufficient land. In return for the grants, each ecovillage must become specialists in a different area of sustainability, such as wastewater treatment, conflict resolution, and so on—thus developing 20 different grassroots-based sustainability research institutions. The Parliament hasn't approved the proposal so far, but we hope to see results some day.

Banks and credit unions are reluctant to give construction loans to ecovillages, because they must undertake special risk evaluations because of ecovillages' non-standard legal features (such as joint ownership of land) and unusual ecological features (such as off-grid power, biological wastewater treatment, and so on). So LOS lobbied the Danish government successfully to pass a law guaranteeing a 30 percent government reimbursement on credit union loans to ecovillages. But even though this reduces their risk, credit unions here continue to automatically reject loan applications from ecovillages

Ecovillages aren't yet on the Danish political agenda, and the new conservative government eliminated subsidies to all green projects, including ecovillages. But the concept is spreading. When Munksoegaard members moved in in 2001, 500 people were on the waiting list. We see ecovillages as a vision for the future for Socialists and Liberals alike, and as a model which can create real global equality and justice.

Hildur Jackson is co-founder, with her husband Ross Jackson, of Gaia Trust, Global Ecovillage Network, and the Danish Ecovillage Network.