introduction to eco-units

by Stephen Hinton & Folke Günther

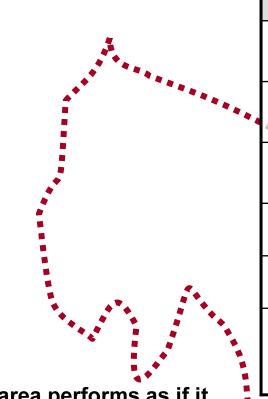




Main features of Eco-units:

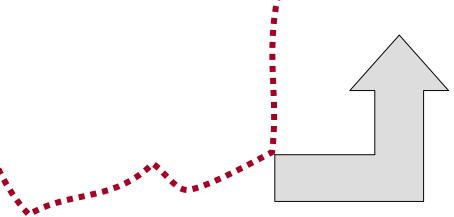
- Human actions strengthen the supporting ecosystem
- Aiming at self-sufficiency in food supply; close cooperation with the farming system belonging to the unit
- Combined living, working and food production in the same area
- Minimized need for fossil fuels decreased vulnerability
- Provide an experience of living in co-operation with nature
- A new form of investment in sustainable lifestyle

Human actions strengthen the supporting ecosystem



The area performs as if it were a mature eco-system. That is, absorbing as much energy from sunlight as possible and releasing very little water and substances outside its boundaries.

Measure	Units	Average	Eco-unit
Water used in agriculture	per person per year	15m3	Transpiration only
Water use domestic throughflow	Per person per year	68m3	Limited by recycling capacity only
Domestic waste, per capita	Per person per year	297Kg	minimal
Phosphorous emissions	Per person per year	766g	0g
Nitrogen emissions	Per person per year	4927g	0g
Fossil energy used to bring food from field to table.	Per person per year	1.2MWh	minimal



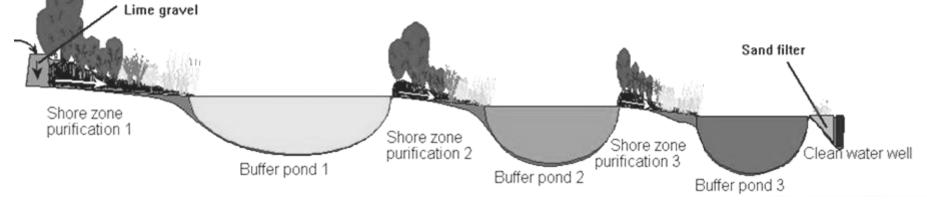
Aiming at self-sufficiency in food supply

Residents subscribe to food raised on the farming areas. The farm section plans around the needs of a defined market.

Near-zero pollution

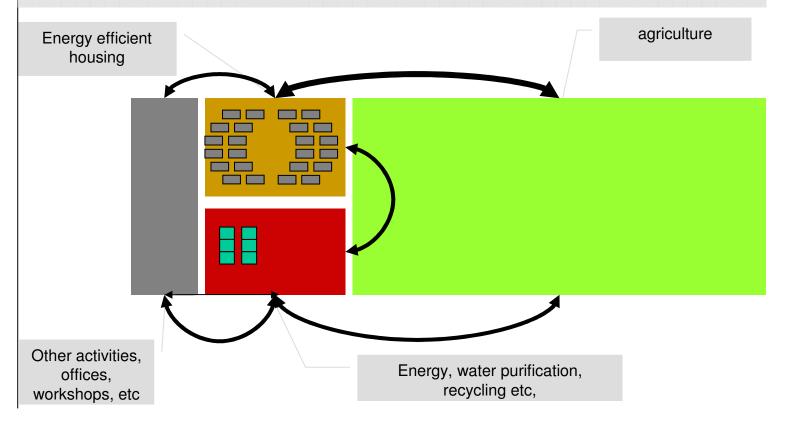
Eco units do not mix water with urine and faeces, so it is easy to recycle water in series of ponds, plant filters and other arrangements suited to the location and climate





Combined living, working, food production in one area

Eco-units provide office space for those who wish to work at home, either permanently or from time to time. Some Eco-units may specialize and produce goods and services for sale. Working at home dramatically reduces the need for commuting.



The eco-unit Area: 50 ha for 200 inhabitants

Functional size, pop. about 200

Plant nutriens in food are returned to agriculture

Orchards — Private gardens

Biological greywater treatment plant (wetpark) Clean water is returned to the households

Minimized need for fossil fuels

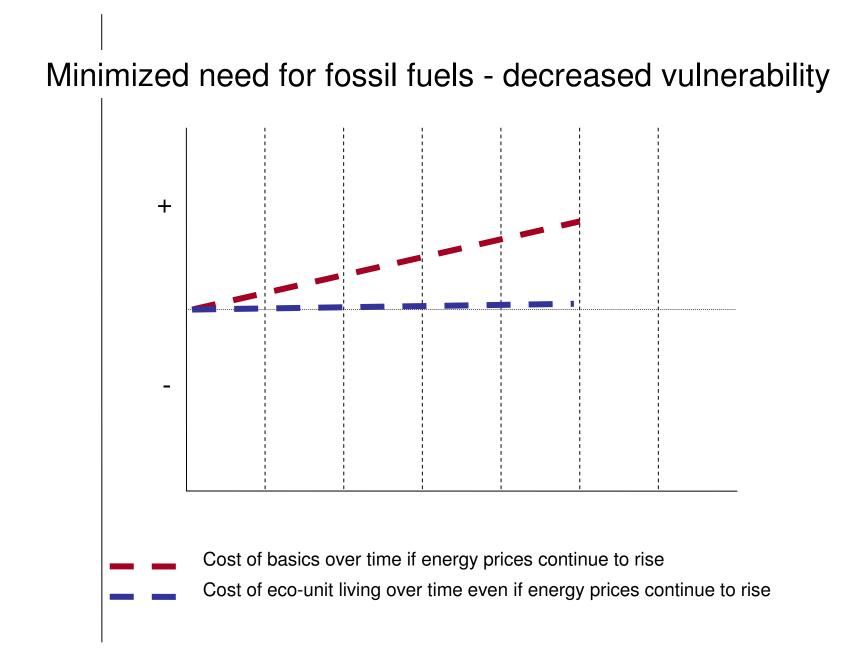
Diversified agriculture Providing most of the human food and all of the animal fodder

Open ditches

Nutrient reclaim Landscape diversity Predator habitat Lee – planting Biomass production

Nutrients, water and biomass are recycled. Food transport is minimized and solar energy is captured Eco-Units offer an experience of living in close cooperation with nature

Eco-unit borders are within view, and you can walk around the unit easily. Not only do you get your accommodation, energy and most of your food from this area, you are also part of the group that provides stewardship to these services will last. You are part of the eco-unit and it is your home.

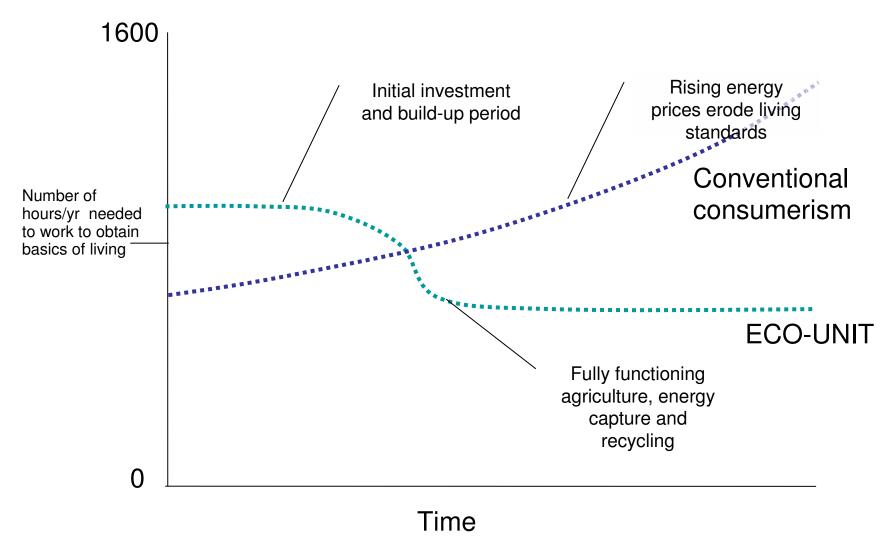


A new form of investment in sustainable lifestyle

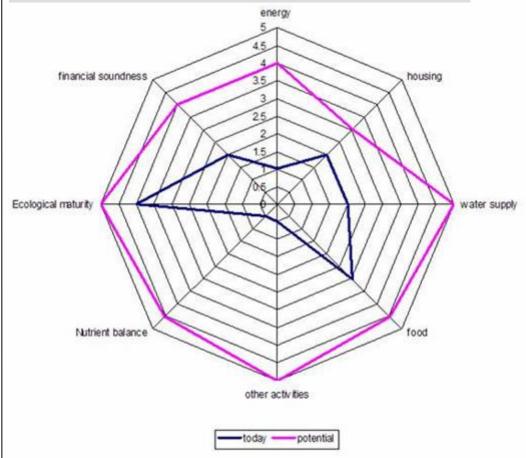
Today, people spend Lesiure activities, 327 hrs. 20% 43% of their working year to earn enough to pay for Accomodation, food and non accommodation, food and alcoholic drinks, household services, 681 hrs, 43% Meals out, 73 hrs, 5% basic household services. Tobacco, 11 hrs, 1% (Based on figures from Alcoholic drinks, 73 hrs, 5% SCB, the Swedish Furniture, textiles, household Statistical service.) As items, 86 hrs, 5% Consumables, 34 hrs, 2% energy prices rise, the Clothes, shoes, 72 hrs, 4% cost of these basics will Transport, 243 hrs, 15% rise too, as they are all heavily fossil-fuel dependent.

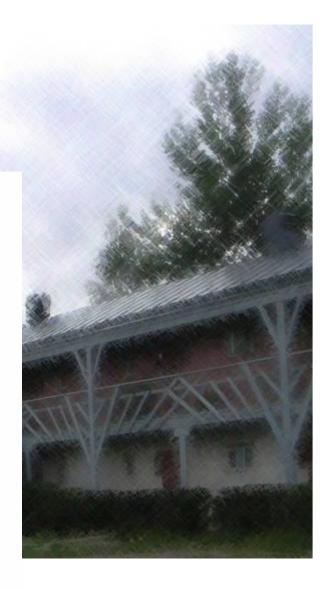
Not so for eco-units. The renewables-based activities keep energy costs down. This means eco-units will become more competitive, and therefore command a higher price on the open market.

Eco unit living requires less working hours to obtain basic living as they reach full function



Eco-units can be built from scratch or an area can be adapted along eco-unit principles. In both cases you can start by doing a pre-study to explore possibilities.





AVBP and Holon consultants would be pleased to advise you on how you can start to explore possibilities to found an eco-unit. Please contact us:

> Stephen Hinton +46730311625 Stephen.hinton@avbp.net www.avbp.net/en

> > Folke Günther

folke@holon.se

www.holon.se/folke