



circular eco villages

Six eco villages have been studied on the dimensions of planet, people, organisation and innovation, to understand how eco villages can successfully function.

The studied eco villages are:

- Groene Dak, Utrecht
- EVA-Lanxmeer, Culemborg
- De Bongerd, Zwolle
- Meanderhof, Zwolle
- Buitenkans, Almere
- Boddegat, Ede

An ecovillage is

a community, in which people participate and cooperate, to integrate ecological, social, cultural and economic dimensions of sustainability, and to reduce the impact on the social and natural environments

4 essential elements of an eco village are planet, people, organisation and innovation, and are explained here



Circular economy is a way of organising the provision of products and services, that maximises the health and wellbeing of humans and eco systems. A circular economy uses renewable energy (such as solar power) and sees waste as a resource.

Planet

Eco village communities intend to minimize environmental impact. This can be done through high tech (solar power) and low tech solutions (compost toilet).

It is important that these solutions are in line with the abilities, preferences and needs of the residents that use them.



People

Eco village residents live with each other, as opposed to next to each other. They take care of each other & their environment.

Social cohesion is a key element of eco villages, and is created through:

- Social activities
- Connectedness (trust, identification, perception of fairness)
- Focus on the common good (solidarity and participation)

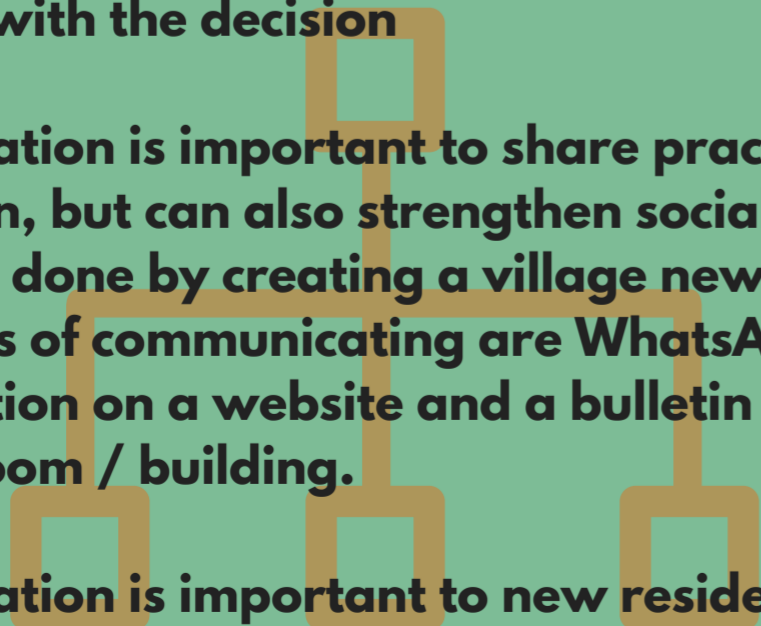


Organisation

Eco villages are organised horizontally, meaning that everyone in the community is equally involved in decision making. Decision making is based on consensus, so everyone is heard, feels included and can agree with the decision

Communication is important to share practical information, but can also strengthen social cohesion. This can be done by creating a village newspaper. Other ways of communicating are WhatsApp groups, a login section on a website and a bulletin board in a common room / building.

Communication is important to new residents as well, to create a shared understanding of what it means to live in an eco village.

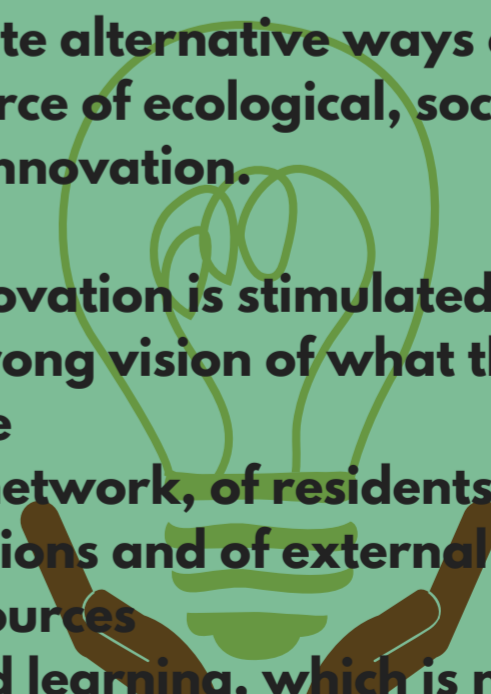


Innovation

Eco villages create alternative ways of living and can be seen as a source of ecological, social and organisational innovation.

Change and innovation is stimulated through:

- A clear and strong vision of what the eco village wants to achieve
- A supportive network, of residents that support alternative solutions and of external partners that can provide resources
- Evaluation and learning, which is necessary to adjust when solutions or situations are unsupportive of the village's goals





best practices

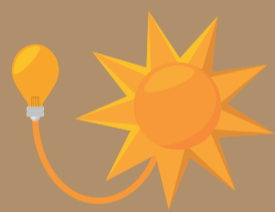
OF CIRCULAR ECO VILLAGES

PLANET - An overview of successful circular solutions and technologies applied in eco villages, that work for its residents and contribute to a more environmentally friendly planet.



NATURAL & REUSABLE MATERIALS

In most eco villages, houses are built with wooden skeletons, finished with clay stucco. These materials are environmentally friendly, can be reused and do not compromise user experiences.



SOLAR ENERGY & SOLAR BOILERS

All projects apply solar energy and solar boilers to preheat tap and central heating water. These renewable energy sources function well according to eco village residents. Solar boilers require some maintenance every few years.



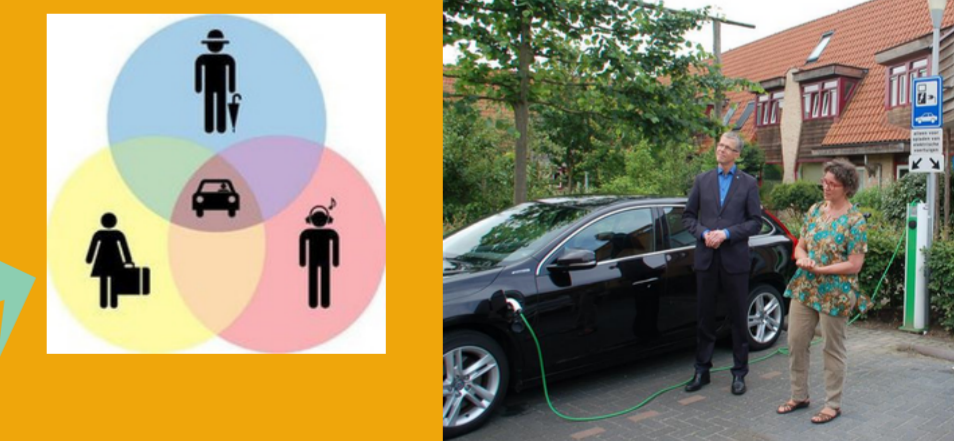
HELOPHYTE FILTERS, RAINWATER COLLECTION & COMPOST TOILETS

Groene Dak and **EVA-Lanxmeer** installed elaborate water systems. Rainwater is filtered and used as drinking water. Waste water is cleaned through helophyte filter. These solutions function well. Groene Dak experimented with a compost toilet, but composting did not occur naturally, forcing people to stir their own excrements and leading to a accumulation of ammonia, and finally the compost toilets had to be removed.



WASTE SEPARATION & PREVENTION

None of the eco villages took waste related measures. In transition to a circular economy, there are many opportunities with regard to prevention and recycling of waste.



CAR SHARING & ELECTRIC CARS

Meanderhof installed an electric car charging pole that runs on solar power and has arranged for Greenwheels to place a car in de neighbourhood, to facilitate car sharing and discourage buying cars.



LOCAL FOOD PRODUCTION

Most eco villages have vegetable, fruit & herb gardens, that mostly fulfill recreational purposes. **EVA-Lanxmeer** built an urban farm, that provides the neighbourhood with food. It includes a shop and functions as a Care Farm. If an eco village lacks the facilities to locally produce food, joining a local food scheme or a community supported agriculture farm is an option.



best practices

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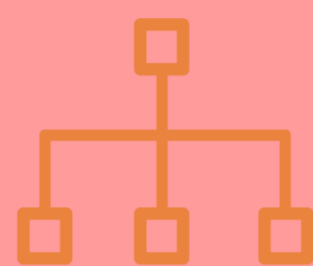


PEOPLE

Social cohesion is essential for an eco village to function, as it supports collective action which is necessary to achieve social and ecological goals.

Meanderhof in Zwolle has high social cohesion, which is reinforced in various ways:

- Organising social activities: movie nights, sports nights, cooking club, yoga lessons, weight loss club, workshops and lectures, holiday celebrations
- Creating shared facilities: communal bicycle shed, shared tools, a common room with various facilities and a pizza oven in one of the gardens, no fence policy to encourage engagement
- Taking care of each other & the environment by: garden days and taking care of vulnerable people



ORGANIZATION



Het Groene Dak in Utrecht is the most explicit example of a horizontal organisation. Het Groene Dak wanted to cater to non traditional households and a wide range of people, and through its horizontal and consensual structure made sure that everyone was part of the project.

EVA-Lanxmeer in Culemborg consists of 12 courtyards, with each their own and organisational structure. Each courtyard has the freedom to design and maintain the courtyard area as they please, as long as this is done collectively. Each courtyard has found there own way of doing things, which is important to the atmosphere in each courtyard. Some courtyards have monthly meetings and garden days, others just go with the flow and have a less structured organisation.

Each courtyard (and eco village in general) has its own character. To maintain this character, a clear vision and an application procedure that properly informs new residents on the vision and character of the village is very important in maintaining the village and attracting supportive people.



INNOVATION

Ecological, social and organisational change is achieved mostly in eco villages with a clear and ambitious vision, a supportive internal and external network, and where learning occurs.

These conditions are present in Het Groene Dak and EVA-Lanxmeer, the villages with the highest degree of ecological experimentation. Het Groene Dak experimented with many water related technologies (rainwater collection and filtering, flow greenhouse, helophyte filters) and EVA-Lanxmeer has created its own water and heating system.

