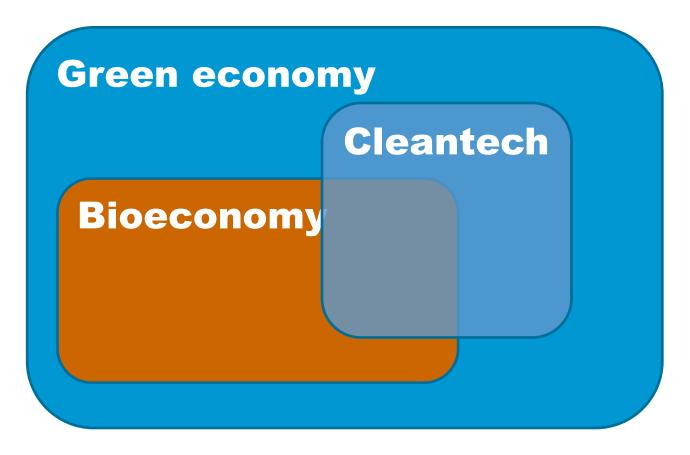
# Sustainable possibilities in villages: 'Green economy' in Sodankylä - Suggestions for transition steps

Transition Towns Movement in Scandinavia -seminar 24.2.2015 Helsinki Hilkka Vihinen



# **Green economy – Bioeconomy – Cleantech**







# **GREEN ECONOMY**

Economy functions within the boundaries set by the ecological system of the globe.

The structure and functioning of the economy support ecologically, socially and economically sustainable wellbeing. *(profound change)* 

In addition to the use of renewable resources, resource efficiency and carbon neutrality, emphasis also on **social justice and place-based solutions**.

# The guiding principles of 'Green economy'

- Ecological & social spheres set the boundaries for the economic sphere
  - and provide new opportunity structures



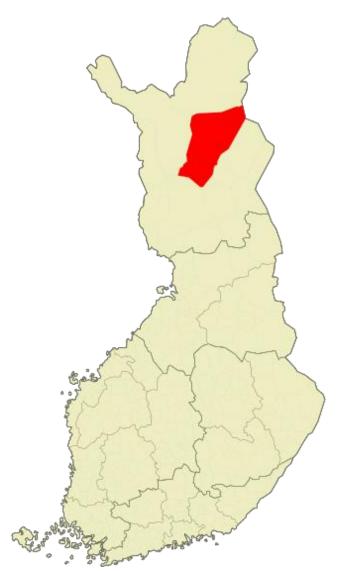


# Sustainable development in

- Food production
- Energy production
- Waste management
- Living & housing practices
- Trades & businesses
- Services & communal decision making



# Project: generic model of green economy, pilot case Sodankylä





# Green economy model: part 1

Starting systemic change:
identifying locally ecological
boundaries and launching a social
process for a green economy
roadmap

## How to plan & implement this in practice?

## Application of 'Natural Step' -method.

- Method for implementing participatory sustainable devepment
- According to four predefined Sustainability Principles:

In a sustainable society, nature is not subject to systematically increasing...



...concentrations of substances extracted from the Earth's crust,



...concentrations of substances produced by society,



...degradation by physical means,

and, in that society...



...people are not subject to conditions that systematically undermine their capacity to meet their needs.

#### Examples:

- No accumulation of heavy metals, fossil fuels
- No accumulation of plastics, DDT
- No overharvesting (forests, fisheries), destroying habitat
- Not endangering people's right to safety & sufficient payment

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# Tailoring & implementation of the 4 Sustainability Principles by utilizing participatory 'Visioning' & 'Backcasting'

[Can be done at micro/macro organizational levels]



Commitment to and operationalization of green economy locally



Sustainability principles (Natural Step)

Backcasting





Strategic programmes Action plans



# Green economy model: part 2

Economy and businesses



## Economy and businesses

- Emerging simultaneously centralized and decentralized, local markets (e.g. in energy production)
- Hybrid solutions are likely: centralized systems realize the gains of mass production, while decentralized systems can utilize resources more holistically, short local economy chains are more resilient
- Wisdom lies in matching the two systems
- Because of price changes, circular economy and new technology, rural areas can become more self-sufficient, which means that multiplier impact can lead to stronger local economy

26.2.2015

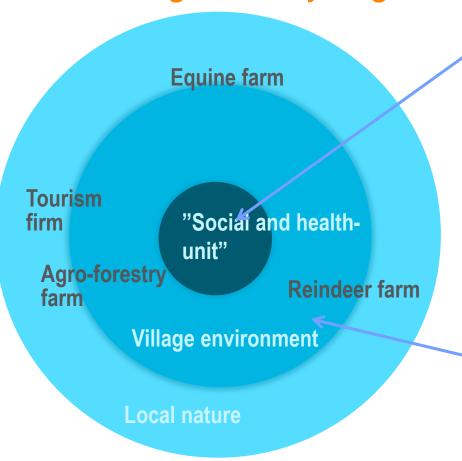
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# Green economy in rural areas - case Sodankylä

Production in the area Consumption in the area Self sufficient Area produces in excess Consumption with Mining imported goods and Local energy Local food Tourism services Construction materials Virtually all goods Research GreenCare / tourism Primary products and services



## Village society in green economy



#### **Green care**

(Responsibility of public sector: public, private or public/private partnerships (incl. NGOs)

## **Green empowering**

(community, companies, NGOs) using natural elements in wellbeing services

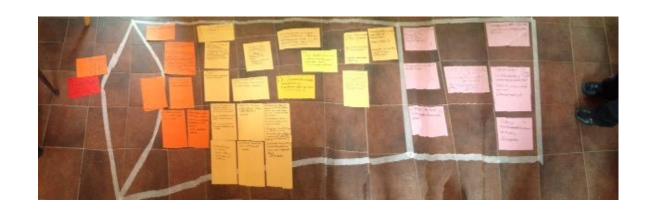
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# The common Green economy development vision for Sodankylä 2030:

The municipality of Sodankylä aims at:

- increasingly managing waste in closed circuits (minimizing nonrecyclable waste outputs) and sustainable use of materials,
- self-sufficiency in energy production, general carbon-neutrality, and distributed and renewable energy solutions.
- Mining industries will be managed responsibly; they do not restrict the possibilities to use natural resources for other purposes.
- The number of inhabitants will increase steadily and the identity and cultural heritage of local villages will be respected and maintained.
- Business sectors, trade and services will favor and develop networked solutions, novel technologies that enable community participation, and short value chains that support local value creation.
- The municipal development strategy and its status of progress will be actively evaluated and maintained.

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...and Sodankylä was saved? To be continued! ©

