Food and energy – needs of rural community

In rural Lapland, almost everything what is needed for living can be produced locally. Now the raw materials are processed outside and brought back as consumer products. By balancing the economy between decentralised and centralised systems is the key for sustainable rural development.

Communities are holding enormous amounts of biomass, at the same time energy is transferred from outside. Sustainable energy could be produced in the communities to decrease capital leakage. Modern agriculture is needed for profitable energy production.

By developing smart food processing and logistics in rural Lapland the capital outflow is reduced. Energy production from local raw materials and transfer can be decentralised and localised to the arctic rural area as well.

Arctic Smart Rural Community cluster is connecting small entrepreneurs and developers inside to modern cluster model. Cluster adds value to food production enterprises, SMEs, farmers and decentralised energy production in Lapland region.

We only borrow nature from our children. Sustainable utilisation of natural resources guarantees carbon neutral energy production. The carbon neutral economy is the key to climate change prevention.

Consumption balance of village Kierinki

Reference: ProAgria Lapland Natural Resource Institute Finland 2014

Our case study of village Kierinki in municipality of Sodankylä. All inhabitants and companies were interviewed how much they are using energy. The main findings were the potential of bioeconomy, capital outflow through transportation fuels, electricity and heating.
Circular economy – the future of rural life

Our vision is that villages of the rural Lapland can develop a functional circular economy of energy, food and tourism. Nowadays a local village of 150 people consumes energy for one million euros a year. By investing in own energy production this same amount of money stays in the village. Excess energy and local capital offers an opportunity for modern processing of local resources.

Localised food production and processing will decrease dependency on industrial subcontracting. This new concept offers fair earnings, stronger social community, digitisation and market’s ownership.

When capital stays in the region the positive socio-economic impacts are measurable. The circular economy evolves and takes a leap to the next wider circle of energy, food and business activity.

Our Vision – by thinking small we can develop something big

**LAPLAND TODAY**
- European northernmost region
- 100 369 km² – 8 % water area
- 181 000 inhabitants – ca. 200 000 reindeers
- Migration to the urban areas
- Strong mining, forestry and tourism industry
- Purest air in the world and the cleanest water in the EU
- The largest controlled organic picking area in the world, strong concentration of flavonoids and antioxidants

**GOAL FOR LAPLAND RURAL COMMUNITIES DEVELOPMENT 2025**
- Strong cluster facilitated local value chains
- Vital rural communities refining natural products and agrofood with modern technology
- Turning outflow of euros into income to the local communities
- Smart local energy production solutions at place
- Cut off the migration from the rural communities
- Villages are hubs of diverse entrepreneurialships

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