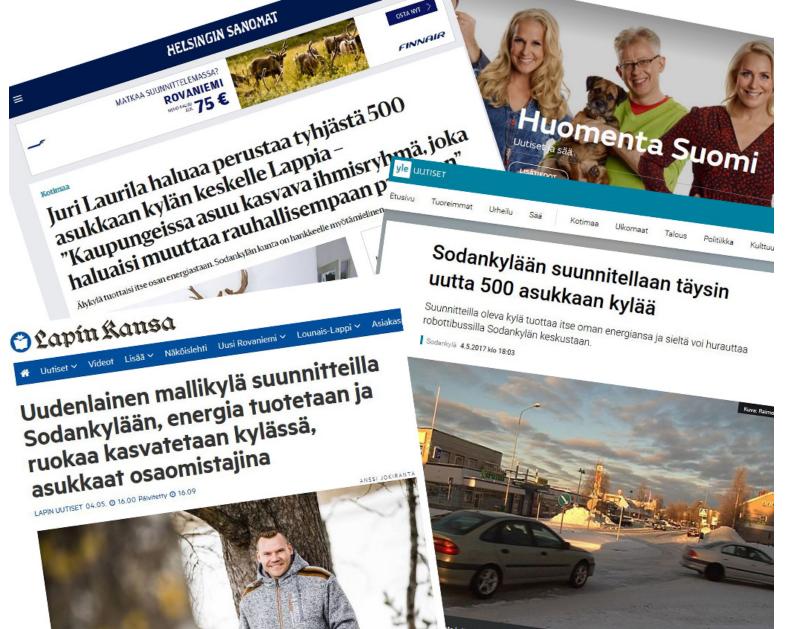


#### **ARCTIC SMARTNESS VILLAGE**





#### ARCTIC SMARTNESS VILLAGE "A New Smart Living"





#### ARCTIC SMARTNESS VILLAGE "A New Standard of Living"

- The Most Resilient Communities
- A new vital concept of smart living
- Modern place to live near of nature
- Aim is to Colonise the countryside by making the step smaller for moving out from the cities using technology and new way of thinking.
- Directing the moneyflows to inner circle with own production at the village increase the vitality of the villagers.
- A Model Village to Sodankylä. Building starts 2020-2021.





#### Smartness is it all.. "Think everything!"





## Wooden buildings "Healthy living"

- Locality
- Ecologic
- Low carbon print
- Health
- Esthetic
- Modular building
- All size buildings





#### Smart Living "Easy and safe"

- Smart technology at everyday living
  - Sound and motion direction
    - Lights
    - TV
    - Computers
    - Tablets
    - Sound devices
    - Shopping lists
  - Safety with sensors
    - Alarms
      - Burglary
      - Water damages
      - Changes at health
    - Changes at conditions
      - Structular conditions at buildings
      - Air quality







## **Energy production**

#### "Self-sufficient at energy – money stays at villagers"

- Energy plant
  - Electricity
  - Heat
  - Biofuels
    - Biogas
- Raw-materials
  - Wood
  - Biowaste and side streams
  - Other bio raw-materials
- Solar
  - Electricity
  - Heat
- Waste-heat utilization







## Digitalization (Sodankylä)

#### "The future is already here"

- Control systems
  - Energy, lights, heat etc.
- Communication
- House technic
- Smart traffic
  - Autonomical bus
- 3D –production lab
  - 3D printed products
- And what there will be..









## BLUE BIOECONOMY (Sodankylä) "Local food and Services"

- Fish and seaweed farming
- Greenhouse
  - Utilising CO2 and nutrient water from fishery
  - Water cleaning
  - Oxygen
- Recreation
  - Fishing, ice fishing
  - Boating, paddling
  - Swimming etc.





### CLEANTECH (Sodankylä) "cleaner environment"

- Water treatment
  - Water treatment plant
  - The separation of the waste water with double plumming
- Closed circulation systems
  - Fish farming/ greenhouse
- Everyday circulation economy
- Renewable energy sources





## **Communality** *"Together with friends"*

- Technical solutions
- Structural solutions
- Architectonic planning
- Motivation to work together
- Concrete benefit's
- Culture of working together







# Shared Economy

#### "Together wellnes for everybody"

- Inhabitants are owners
- Cooperatives, companies, associations
- Group building
- Shared economy at travel
  - Open houses
  - Activities
  - homestay
- Participation and decision making
- Joint spaces at the village
- Shared use cars, boats and other devices







## **Travel** (Sodankylä) "A true Lapland goes to your heart"

- Model Village as an target
- Hotel
- Location
  - Near of services and nature
  - 3 airports
  - Not (really..) competition
  - Mines
- Lapland
- Local products
- Meetings
- Participatory travelling
- Farm travelling (animal nursering, domestic animal farm etc.)

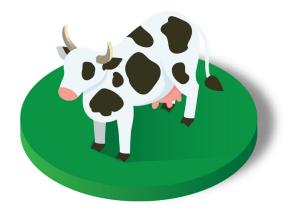






## FARM (Sodankylä) "Local food with locals"

- Farming
- Catlle
- Participatory travellling
- Domestic animals
- Farm work
- Greenhouse work







## Village (Sodankylä) "Home with jobs and services"

- Citizens 500
  - School
  - Daycare
  - Old people services
  - Healthcare services
- Jobs
- Home Offices
- More services to area
- Vitality around areas by increased demand of products and services





#### Dream of Sodankylä 2020 "Smart Village makes dreams true"



