CIRCULAR ECONOMY IN THE REGIONAL LEVEL

What, why and what it can mean in the archipelago?

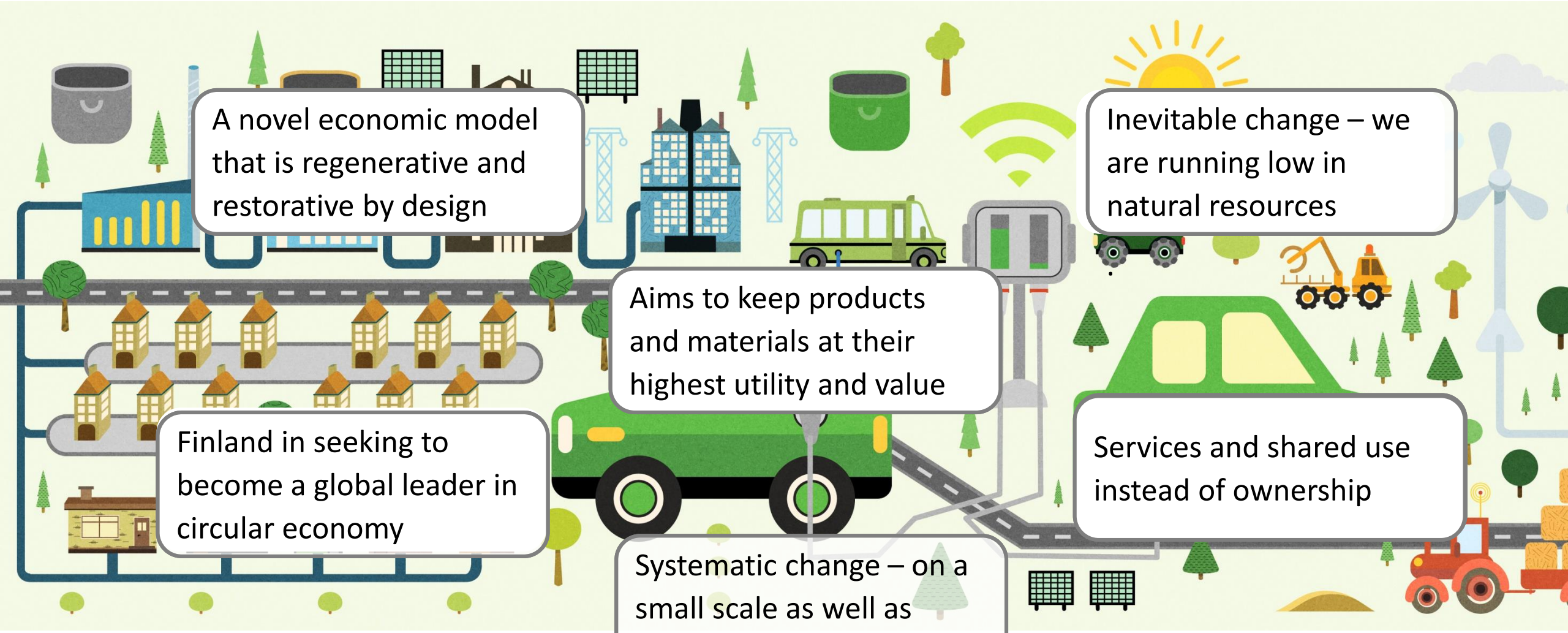
VALONIA

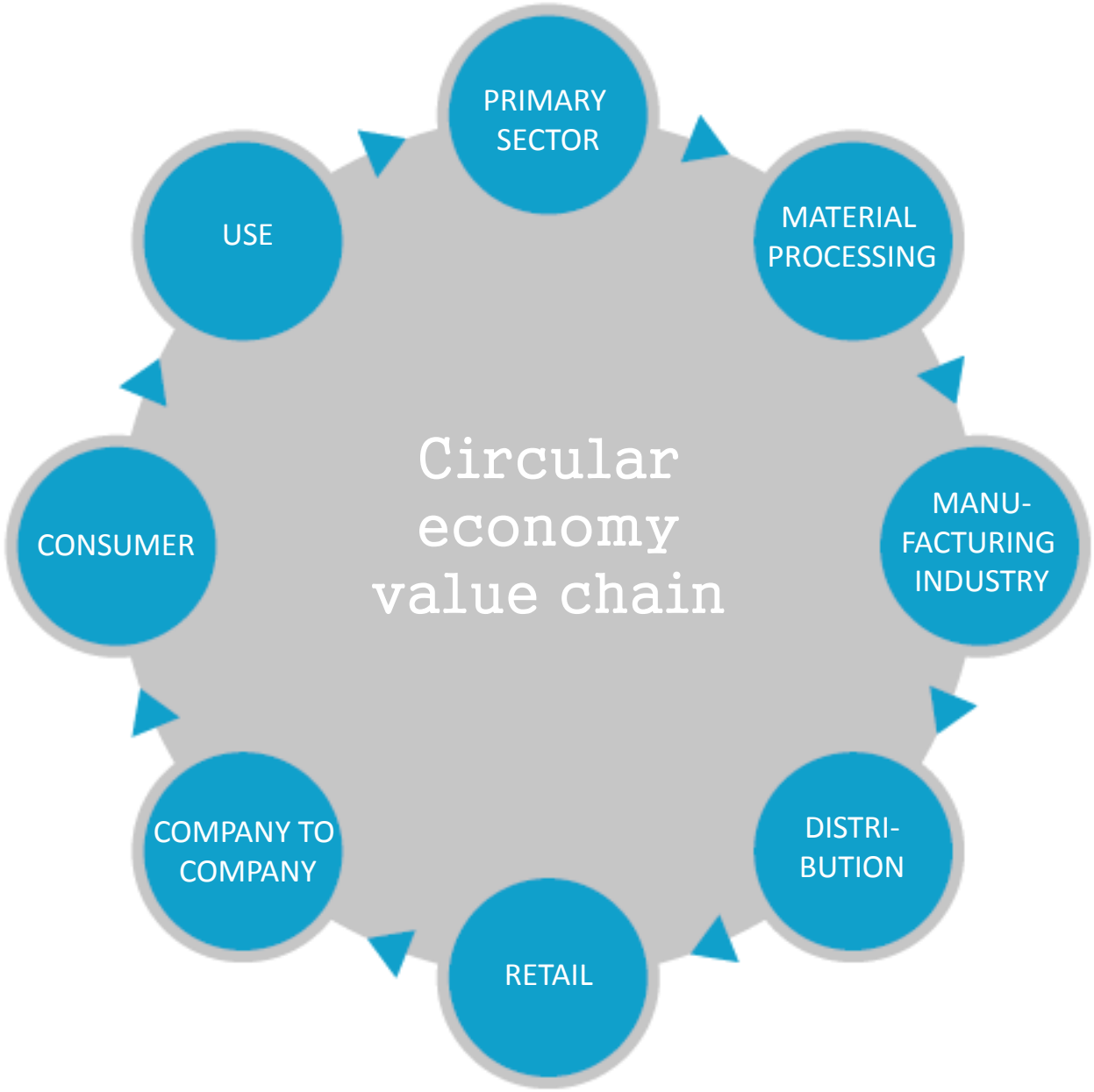
VARSINAIS-SUOMEN KESTÄVÄN KEHITYKSEN JA ENERGIA-ASIOIDEN PALVELUKESKUS

Riikka Leskinen, VALONIA

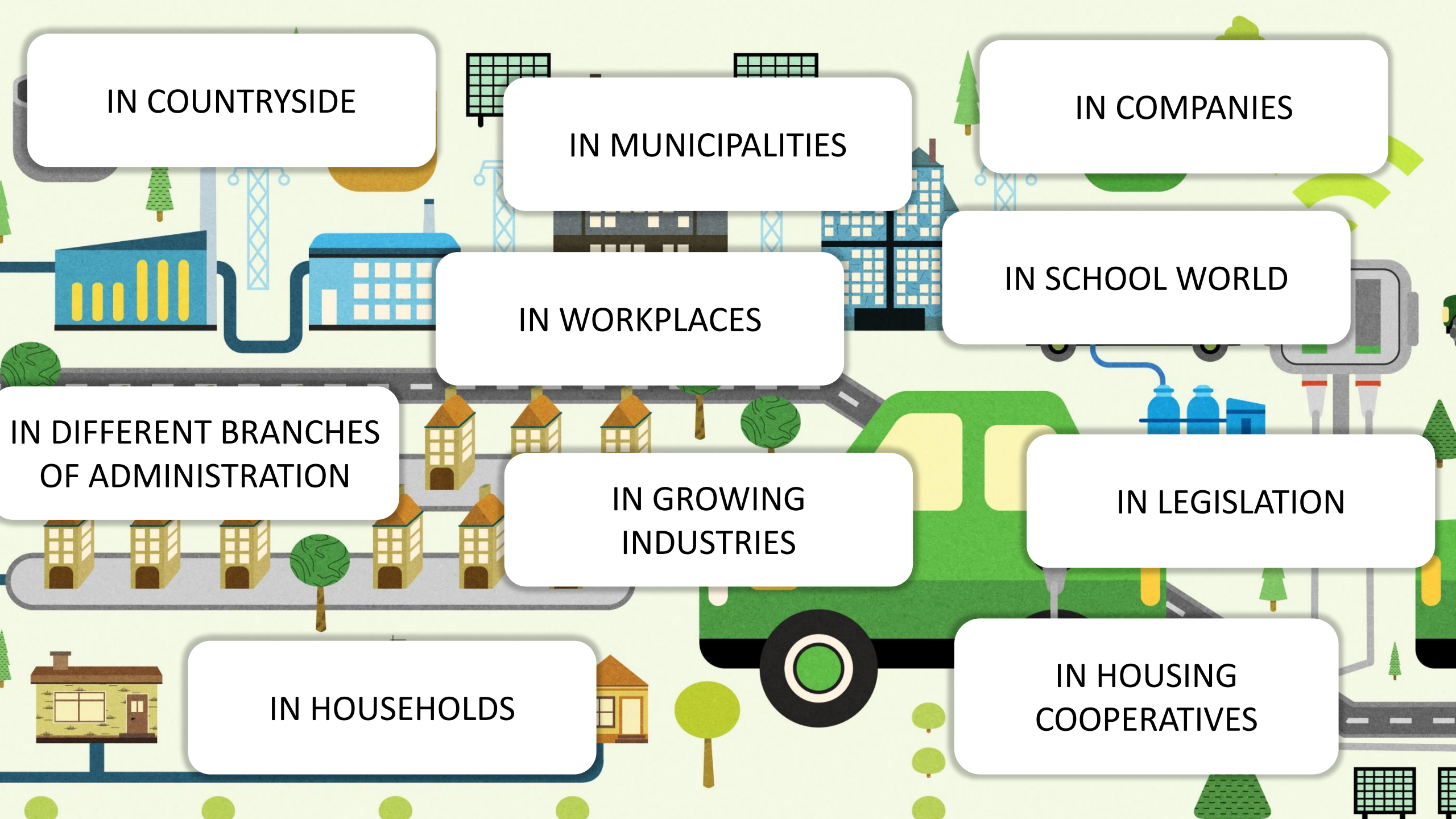
14.3.2018

Circular economy




Circular economy value chain
PRIMARY SECTOR
MATERIAL PROCESSING
MANU-FACTURING INDUSTRY
DISTRI-BUTION
RETAIL
COMPANY TO COMPANY
CONSUMER
USE

Circular economy has to cut through **the whole society**


IN COUNTRYSIDE
IN MUNICIPALITIES
IN COMPANIES
IN WORKPLACES
IN SCHOOL WORLD
IN DIFFERENT BRANCHES OF ADMINISTRATION
IN GROWING INDUSTRIES
IN LEGISLATION
IN HOUSEHOLDS
IN HOUSING COOPERATIVES

All themes link to every activity

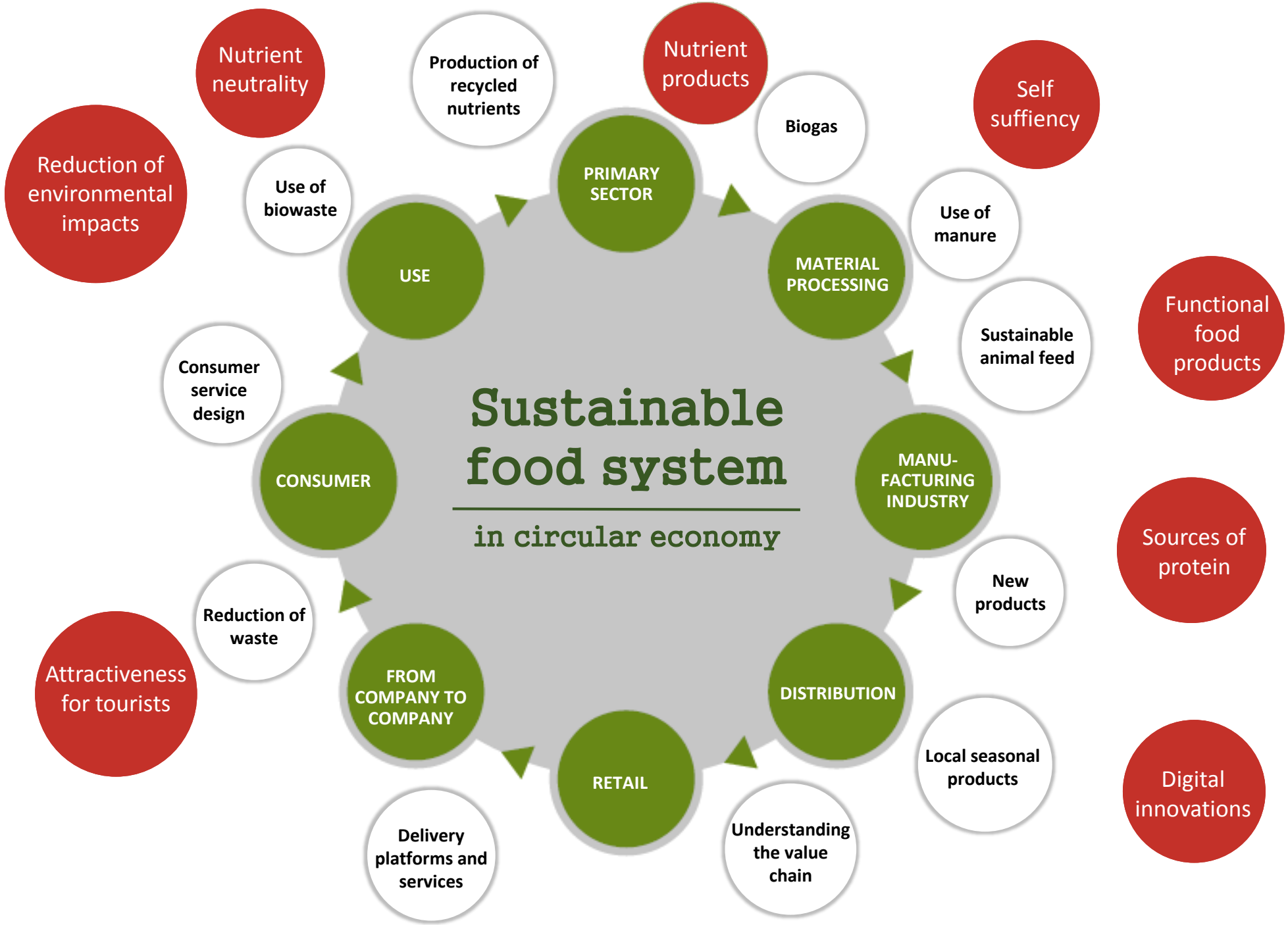
- Food
- Mobility and logistics
- Forest based loops
- Tehcnology
- Nutrient loops
- Sharing economy
- Living and building
- Energy
- Water
- …

Why a regional perspective?

- Southwest Finland got it’s own circular economy roadmap in 2017
- The potential growth is linked into local and regional strenghts and conditions
- The solutions strenghten the economy and self-sufficiency of the region
- Added value is found when the side streams are being utilized within a near distance. Multipolar competitiveness.
- Bolstering the attractiveness of the region and it’s cities
- Through the great success stories happen in the global arenas, the stepping stones should be close. In order to create strong products for export, domestic references are needed.

→ Local potentials (natural resources, services, knowhow, material flows) need to be identified in order to reach economic growth in circular economy.

Focus areas in the regional roadmap


Sustainable food system
in circular economy
PRIMARY SECTOR
MATERIAL PROCESSING
MANU-FACTURING INDUSTRY
DISTRIBUTION
RETAIL
FROM COMPANY TO COMPANY
CONSUMER
USE
Nutrient products
Biogas
Production of recycled nutrients
Nutrient neutrality
Use of biowaste
Reduction of environmental impacts
Self suffiency
Use of manure
Sustainable animal feed
Functional food products
Sources of protein
New products
Local seasonal products
Understanding the value chain
Digital innovations
Delivery platforms and services
Reduction of waste
Attractiveness for tourists
Consumer service design

So what does all this mean for **the archipelago?**

Archipelago has…

A lot of positives

- An interesting inital position
- A lot of interested actors and groups
- Miniature societies as testing environments

But also it’s own challenges

- Distances
- Cost-efficiency
- Fragile environment

What to do and consider in **different themes?**

Food system

- Sustainable farming practices
- Targeted fishing as a part of nutrient recycling
- Farm-scale symbiosis
- Local food rings

Building

- More than waste management at the construction sites
  - Future housing trends
  - Repairing
  - Multifunctional spaces and buildings
  - New innovation methods
  - Life cycle as a starting point
  - Recycled materials in buildings and infrastructure
  - Maintenance
  - Land-use
  - Energy
  - Mobility
  - New procurement ways
  - Smart tecnology

Utön uusi yhteysaluslaituri syntyi kalkkikivikaivoksen sivukivestä

22.12.2017 | IN LIIKKUMINEN JA LOGISTIIKKA, TEKNISET KIERROT | BY ARTTU

Nordkalkin Paraisten kalkkikivikaivoksen sivukiveä on hyödynnetty lossirantojen, aallonmurtajien ja laitureiden rakentamisessa saaristossa. Viimeisin esimerkki tästä on Utön yhteysaluslaituri, jonka rakentamisessa käytettiin tänä syksynä 5 000 tonnia sivukiveä. Sivukiveä hyödynnettiin laiturin rakenteissa ja sitä suojaavan aallonmurtajan pintaverhoilussa.

Paraisten kaivoksesta louhitaan vuosittain noin kaksi miljoonaa tonnia kiveä. Tästä määrästä arviolta kolmannes on eri laatuisia sivukiviä, joita voidaan hyödyntää esimerkiksi betonin ja asfaltin valmistamisessa, infrarakentamisessa sekä ranta- ja satamarakentamisessa. Kalkkikivikaivoksen sivukivet ovat EU-standardit täyttäviä tuotteita.

Hyödyntämällä Paraisten kaivoksen toiminnassa joka tapauksessa syntyvää sivukiviä säästetään luonnonympäristöjä kalliokiviaineksen otolta. Kalkkikivikaivoksen sivukiven hyödyntäminen saariston rakennushankkeissa tarkoittaa myös usein meritse tapahtuvia lyhyitä kuljetusmatkoja, mikä vähentää kiviainesten kuljetuksista aiheutuvia ympäristövaikutuksia, kuten kasvihuonekaasu- ja hiukkaspäästöjä sekä melua.

Energy

- Farm-scale biogas plants
- Solar energy
  - Joint resident procurement – case Mynämäki
- Waste heat
- Decentralized energy production

Mobility and logistics

- Shared vechiles
- Remote working possibilities
- New possibilities from MaaS (Mobility as a Service)
- New (intelligent) materials for infrastucture
- Cooperation platforms

Procurement

- Nutrient recycling as part of procurement criteria
- Food producers trained to offer theirs products
- Enhanced market dialogue
- Innovative examples suitable for sparcely populated areas

Plus

- People in public office – are they trained in this area?
- Circular economy in the school world – in every level!
- Participation, co-creation

Tack!

Contact:
Riikka Leskinen, head of department, Valonia
riikka.leskinen@valonia.fi

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VARSINAIS-SUOMEN LIITTO
EGENTLIGA FINLANDS FÖRBUND
REGIONAL COUNCIL OF SOUTHWEST FINLAND