

ARCTIC  
Smartness  
RDI-  
Excellence

Arctic Development Environments Cluster -  
Regional RDI infrastructures and local  
innovation ecosystem -case Lapland

*Ms Kristiina Jokelainen, Director, International Relations and S3 Implementation,  
Regional Council of Lapland*

# Drivers – Arctic Smart Specialisation

- Lapland Smart specialisation journey began in 2013
- Strategic step- by-step implementation/approach – **Arctic Smartness 2014**
- 5 Arctic Smartens clusters launched 2015
- Arctic Smartness ERDF projects to support:
  - Regional capacity building
  - Involvement to H2020, EIT-KIC, Interreg Europe, Erasmus+, other interregional and national projects - leveraging impact in total near to 20M€ (60-65% international)
- To support innovation development - Arctic Development Environment Cluster
  - Regional RDI joint collaboration and critical mass in RDI and Education
  - TRL implementation as Arctic Smartness language combining RDI infra with several legal entities
  - ERDF 2018-2020: Lapland regional research, development and innovation Centre of Excellence <https://arcticsmartness.eu/arctic-smartness-rdi/>
  - Plug-in-labs and cross-border/interregional collaboration and Lapland to the EU RDI roadmap
- Updated International Smart Specialisation 2018
  - RDI infrastructures lay foundation for the continues EDP, growth and scaling

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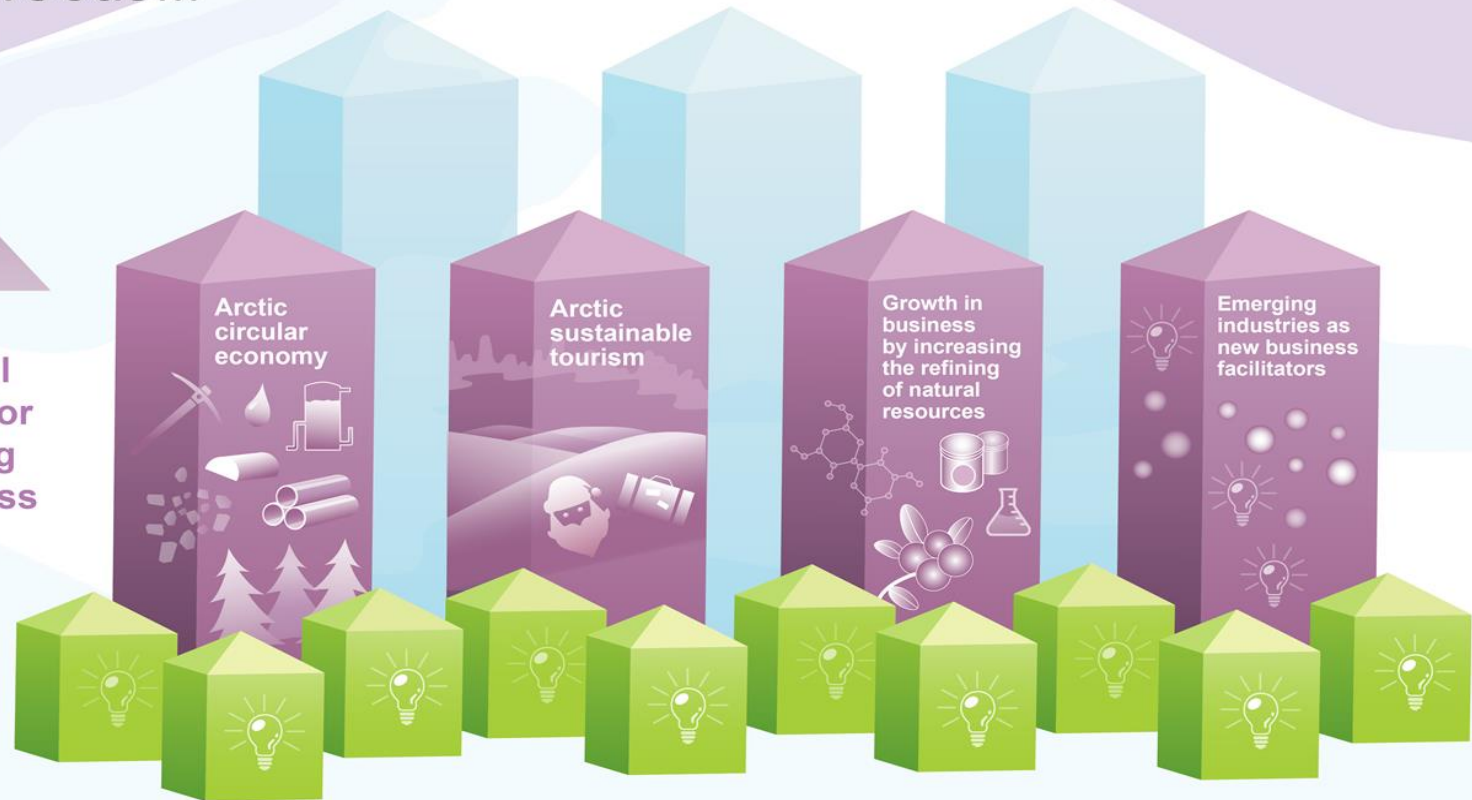


# Arctic industries at the centre

..more specific  
industrial focus...

Three economic backbones of Lapland  
underlying the emerging Arctic business

International  
spearheads for  
the emerging  
Arctic business

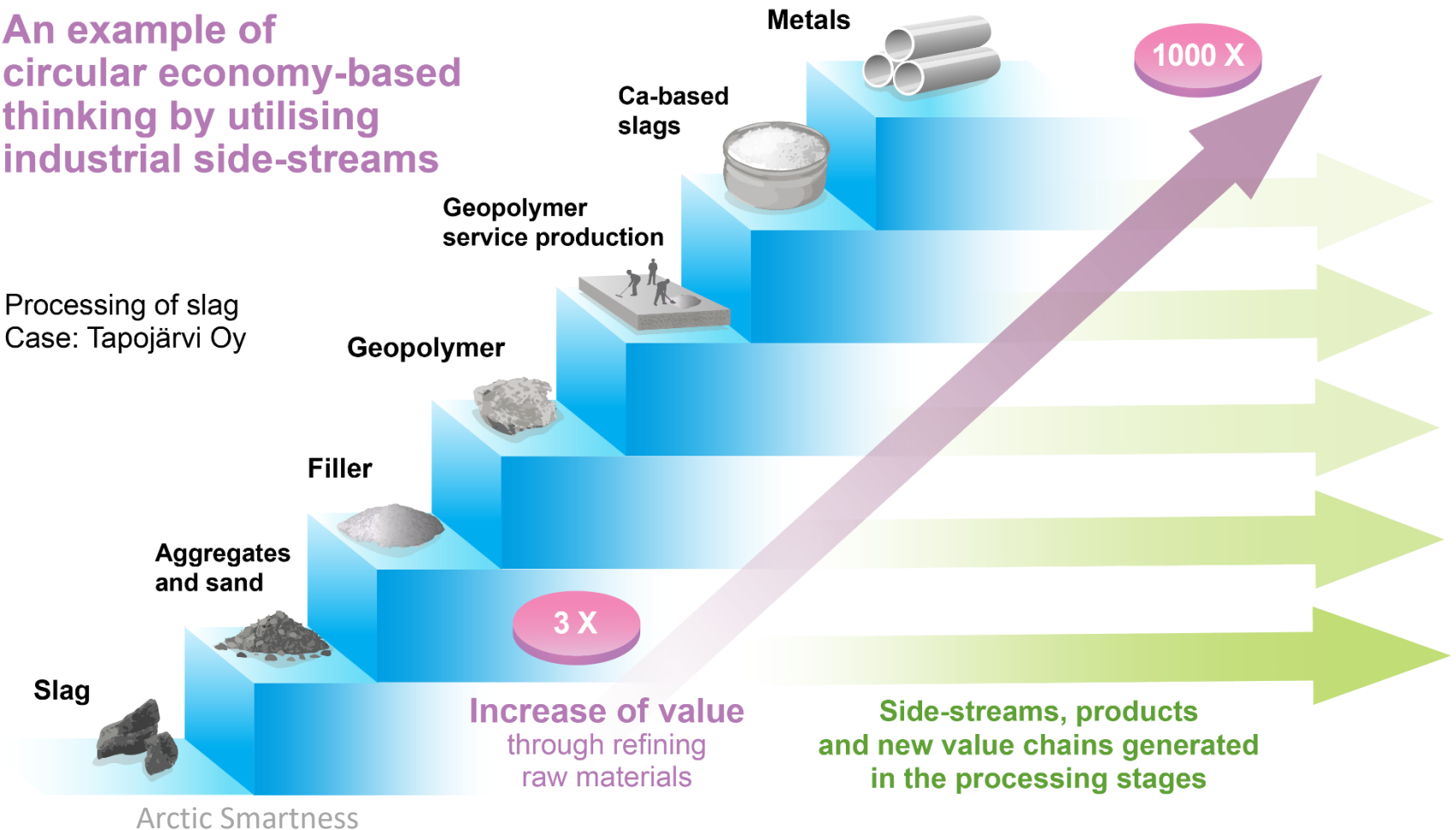


The new industries will emerge with the support of four strategic business spearheads

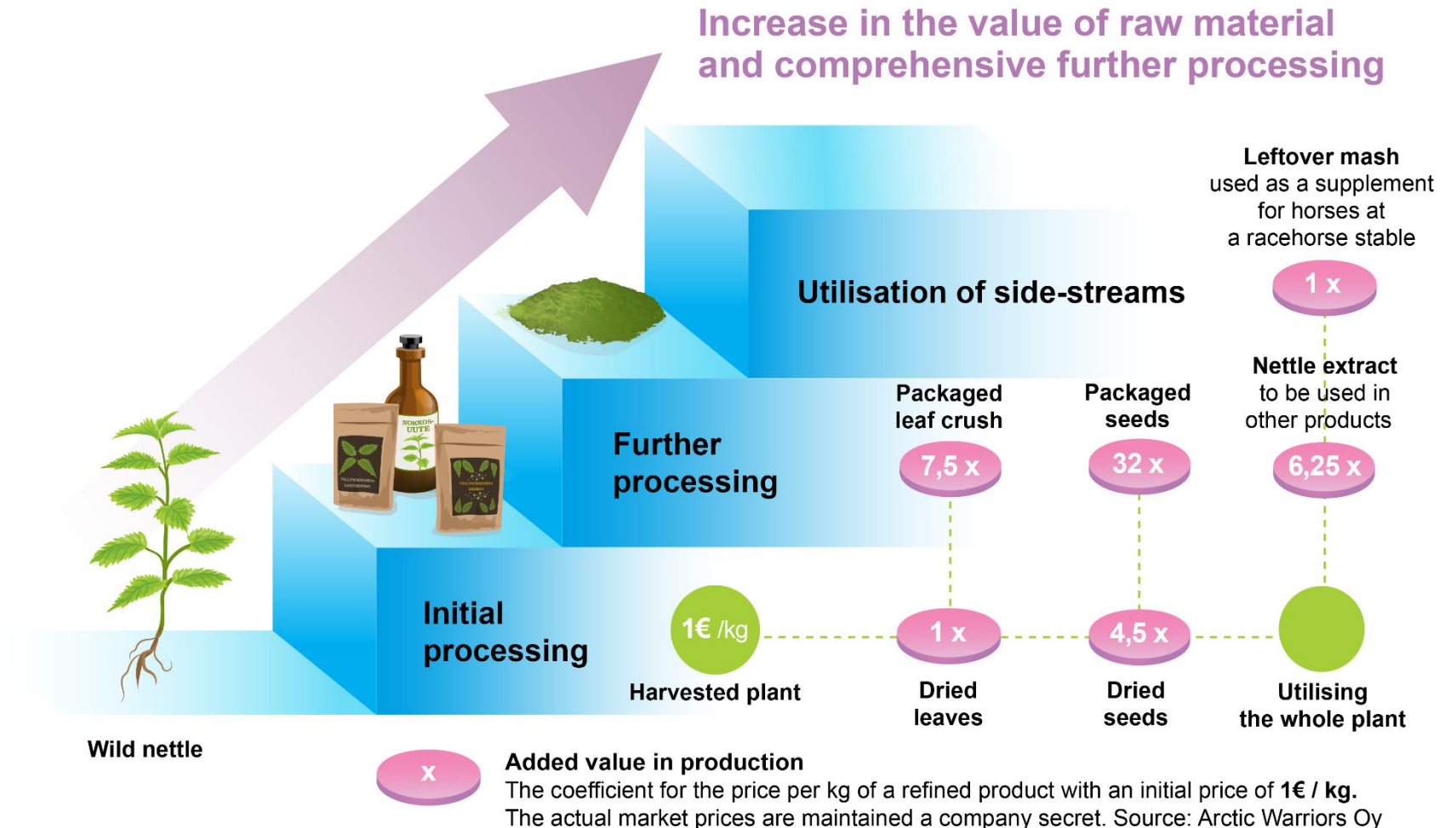
# Mangling the big processes – circular economy

An example of circular economy-based thinking by utilising industrial side-streams

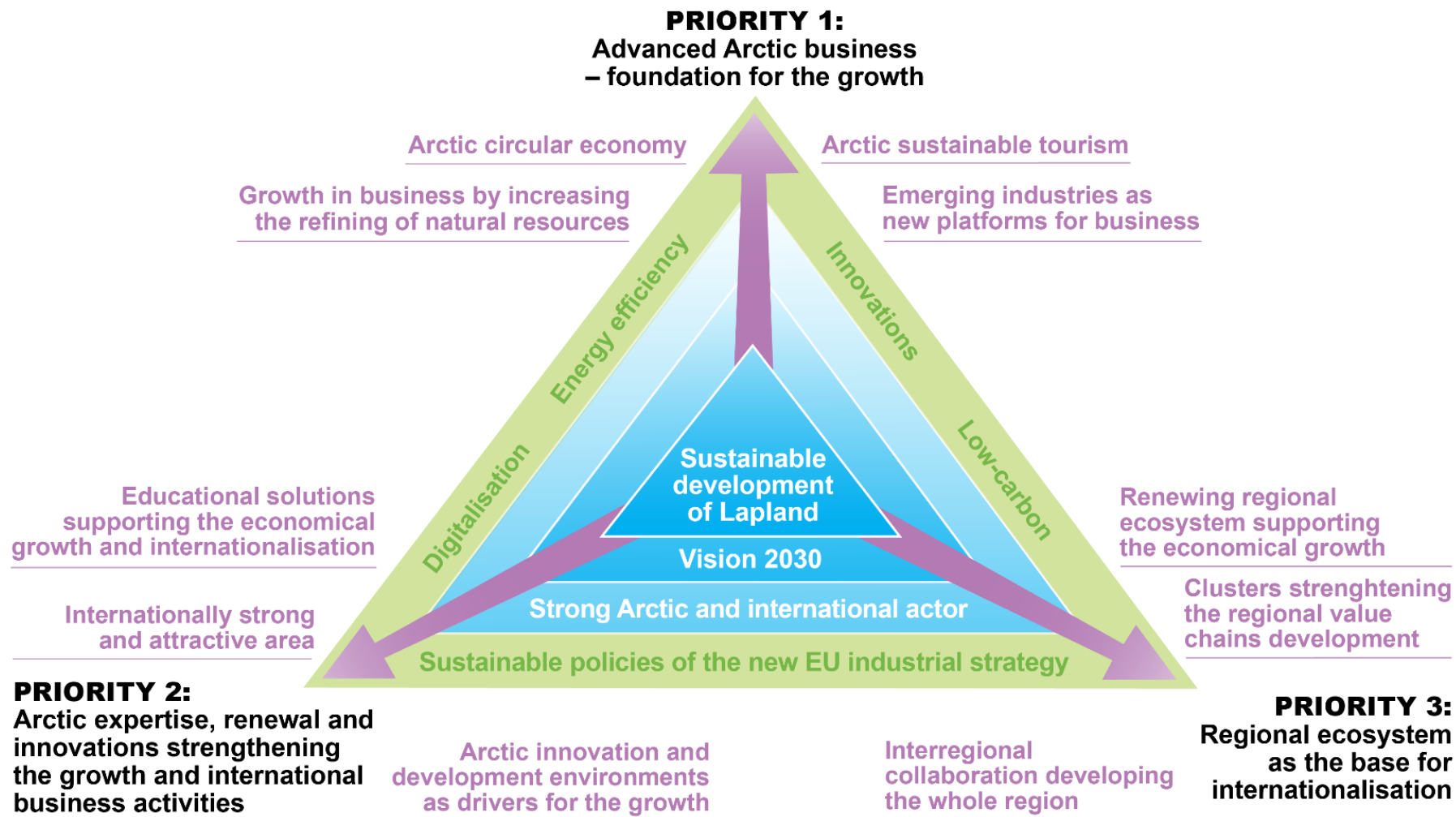
Processing of slag  
Case: Tapojärvi Oy



# Increase the value – support SME



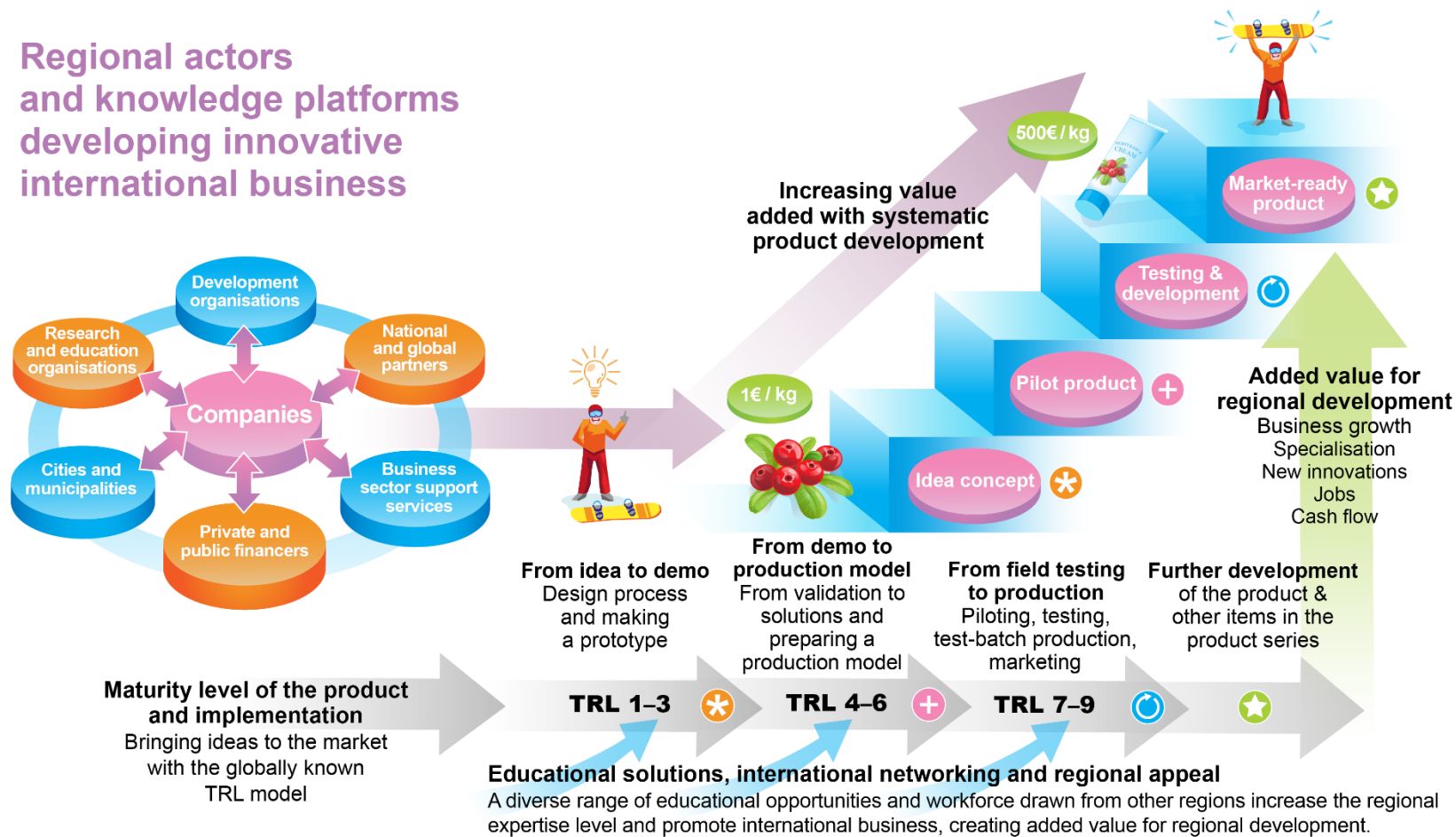
# New S3 – smart choices





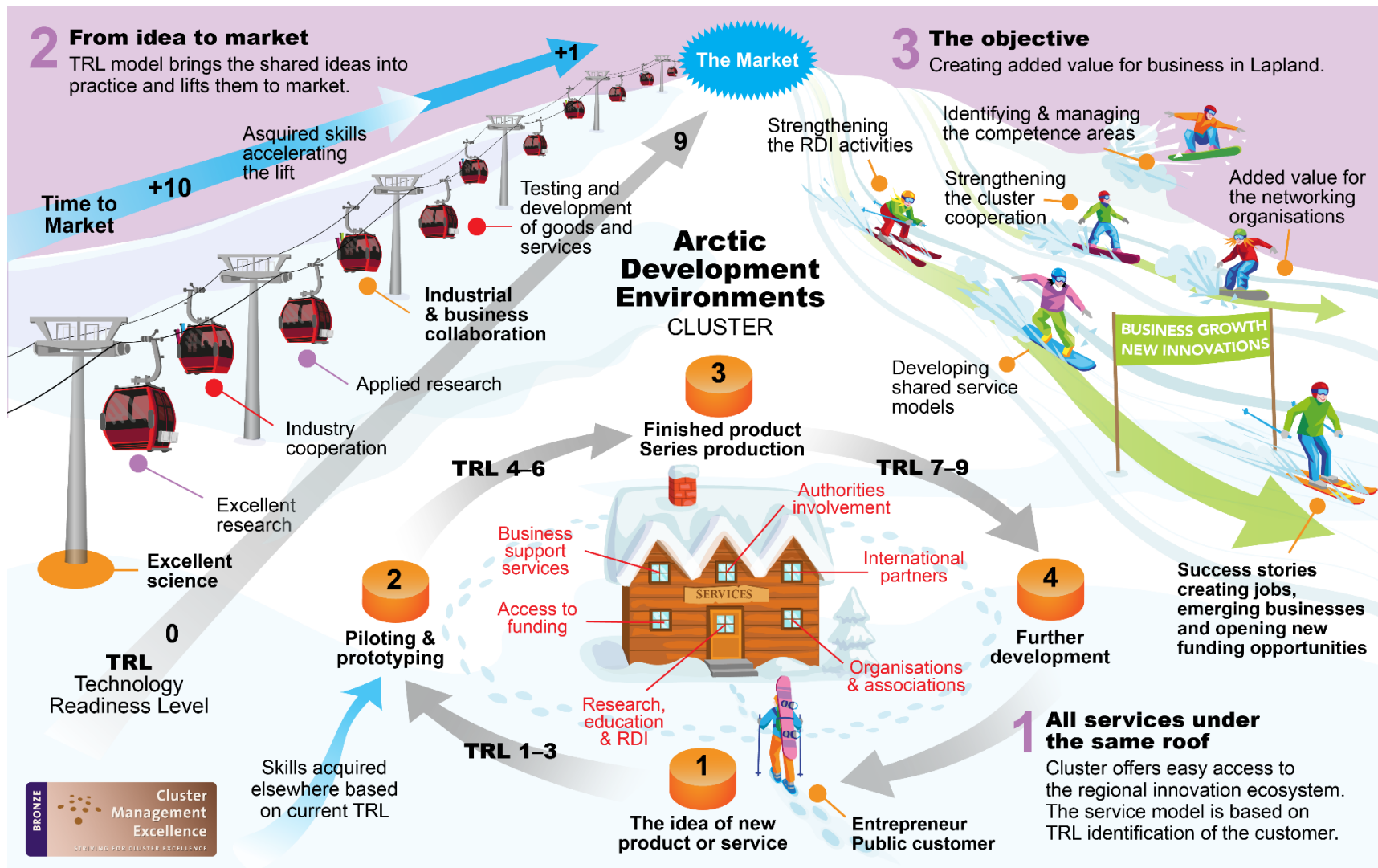
# RDI provided added value

Regional actors and knowledge platforms developing innovative international business



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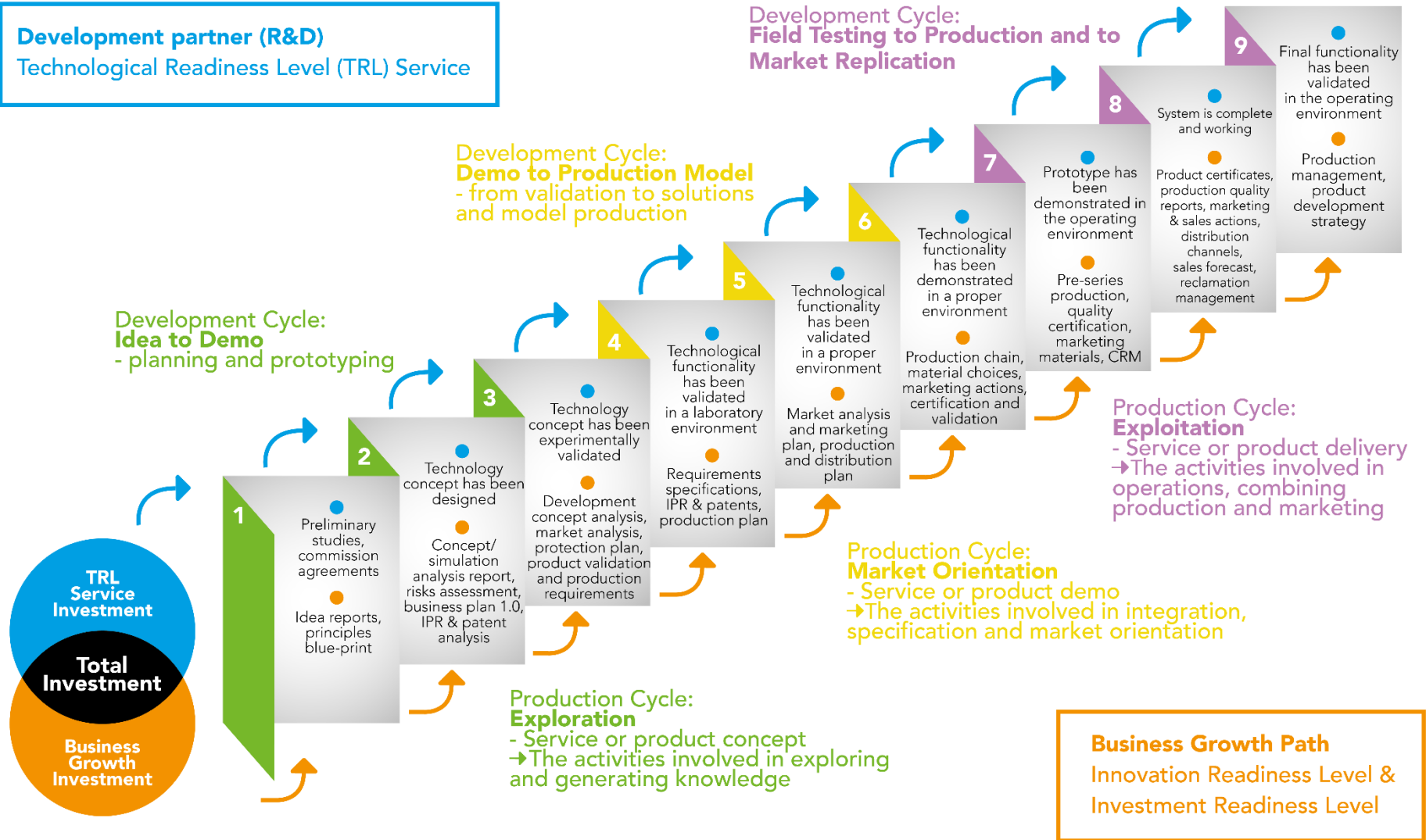
# Towards Lapland RDI based ecosystem





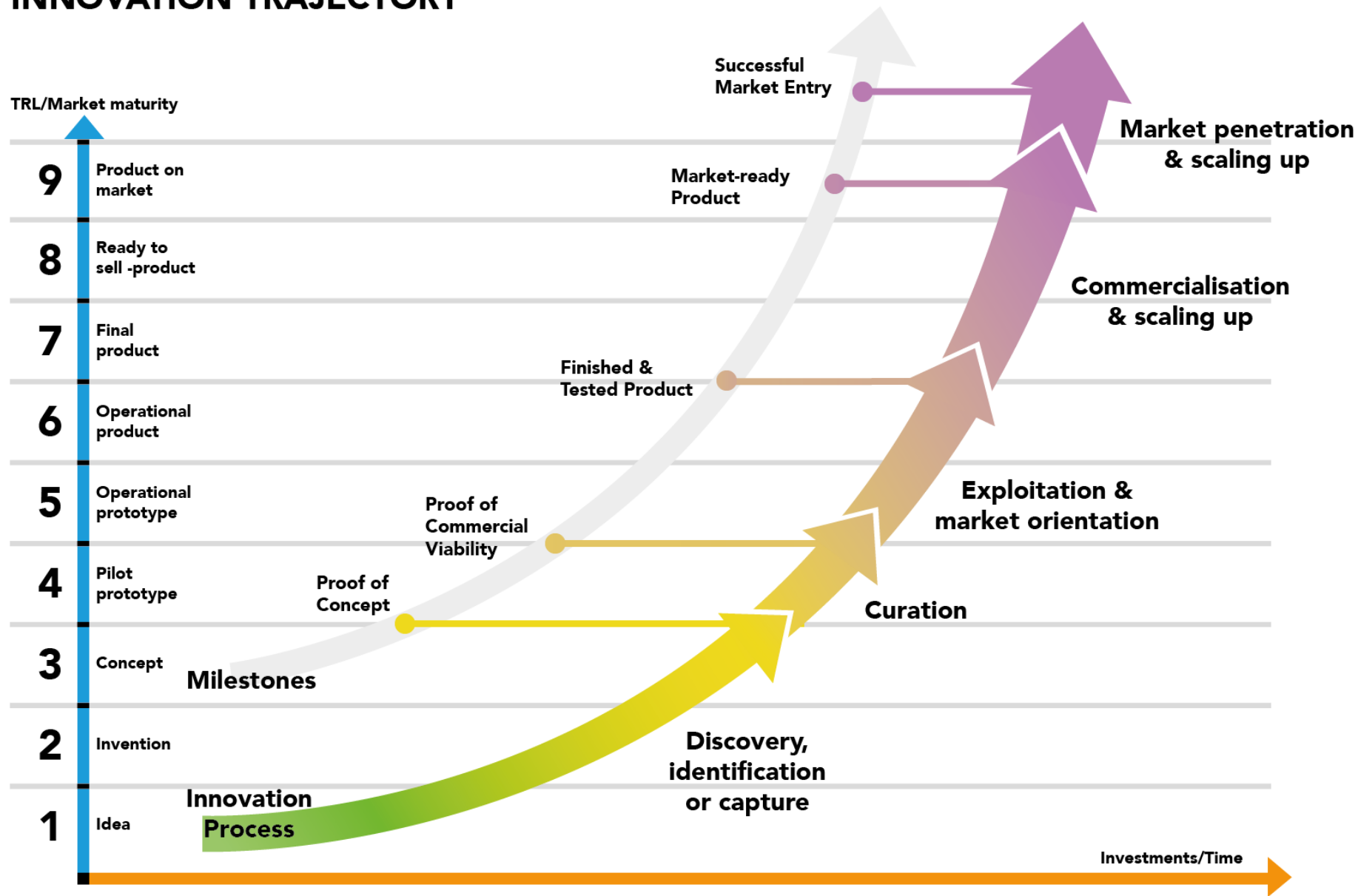
# Supporting entrepreneurial growth through RDI

Development partner (R&D)  
Technological Readiness Level (TRL) Service



# Innovation and TRL

## INNOVATION TRAJECTORY



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# Piloting Regional RDI services

- During the ASR –project we are going to test our service model and service path to real customers and companies
- Try to find suitable companies (4-6 pieces with co-operation ASG-project and regional development offices) who have production or service development needs in different kind of TRL –levels
- Defining the customers needs and design to implement plan with timetable, prices and financing possibilities
- Define the best possible case based expert teams with co-operation ASR-members (Lapland University, Lapland University of Applied Sciences, Geological Survey of Finland and Natural Resources Institute Finland etc.)
- Testing and piloting multidisciplinary RDI- and financier organizations -co-operation in real business service cases
- Get the feedbacks and reports from pilot cases and with the help of them – develop and improve the service processes and put them to the practice.

Examples of pilot companies (negotiations) : sales company (natural products), design and construction company, brewery, machine shop



# Pilot process



# Pilot case

- Finnish Sales Company (natural product) who wanted to sell bottled Lappish water in Amazon online shopping
- Demand: Product and design needs to be as Lappish as possible with as low carbon foot print as possible
- First they wanted to know which material has the lowest carbon foot print as possible
- After negotiations they hired to, Lapland University of Applied Sciences and Natural Resources Institute Finland to find it out
- The research is funding out by Business Finland (innovation voucher)
- This first ASR-Project pilot case will be ready by 10th June.

# Arctic Smartness Research

## Arctic Development Environments

*"Welfare and business opportunities for Lapland by offering modern and effective development environments for companies' and organisations' RDI activities."*

**Thank you!**

More info at: <https://arcticsmartness.eu/>

Contact: [raimo.pyyny@lapinamk.fi](mailto:raimo.pyyny@lapinamk.fi) or [harri.malinen@ulapland.fi](mailto:harri.malinen@ulapland.fi)