

Bright Green Forssa Region

ICA CoP Bio-Edu

Workshop

Leuven, 20.11.2025

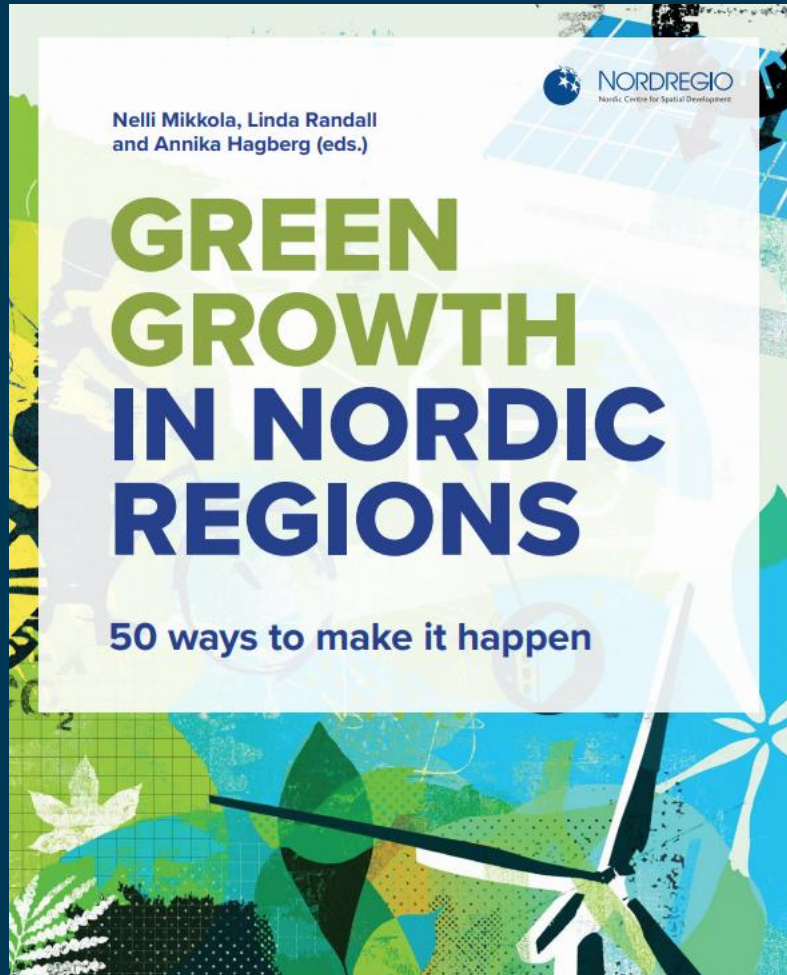
Mona-Anitta Riihimäki





HAMK

Häme University
of Applied Sciences



Building greener societies requires a holistic approach as well as collaboration across disciplines and governance levels on an unprecedented scale. In Nordic regions, many of the preconditions for a successful transition to the green economy are already in place. The Nordic regions have a strong scientific knowledge, a rich natural resource base, a firm tradition of cooperation on climate and energy, and Nordic companies are at the forefront of cleantech and bioeconomy development.

Nordic working group for Green Growth –
Innovation and Entrepreneurship 2013-2016

Table of contents

INTRODUCTION 6

CASES

CIRCULAR ECONOMY 10

- 1 Reykjanes Geothermal Resource Park 12
- 2 The water circulation system
In Southwest Finland 14
- 3 Kalundborg Industrial Symbiosis 16
- 4 Dalarna Network for
sustainable consumption 18
- 5 An ambitious approach to textile
recycling in Southern Finland 20
- 6 Locally sourced fodder supports
south Greenland's sheep-farming sector 22
- 7 Sotenäs Industrial Symbiosis 24
- 8 An ecosystem of Arctic Industries
In Kemi-Tornio 26
- 9 Sustainable sportswear 28
- 10 Starting from scrap in Øra region 30
- 11 Händelö Industrial Symbiosis Network 32
- 12 Eyde Cluster 34
- 13 Kirkkokallio Industrial Park 36

BIOECONOMY 38

- 14 Growing the bioeconomy in
Europe's forest region 40
- 15 Värmland and the Paper Province 42
- 16 The bioeconomy in sparsely populated
South Iceland 44
- 17 Biotechnology – the new oil in Hedmark? 46
- 18 Region Midtjylland, a sprouting giant 48
- 19 Public-private commitment for
bioeconomy in Örnköldsvik 50
- 20 Regionally driven bioeconomy
development in Central Finland 52
- 21 Skagafjörður's transition to a
knowledge-based bioeconomy 54
- 22 Norwegian wood to grow the
bioeconomy in Østfold county 56
- 23 Multi-stakeholder approach
the bioeconomy in Lolland municipality 58

BLUE GROWTH 60

- 24 Legasea Biomarine Cluster 62
- 25 Growing potential in the Ocean Rainforest 64
- 26 The Swedish Algae Factory 66

- 27 Biotech North makes Tromsø
"the hot spot for cold biotech" 68
- 28 Unlocking the potential of the sea at
AlgeCenter Danmark 70
- 29 Sybimar Ltd.'s closed circulation
concept for aquaculture 72
- 30 A circular approach to blue
growth from Nofir 74

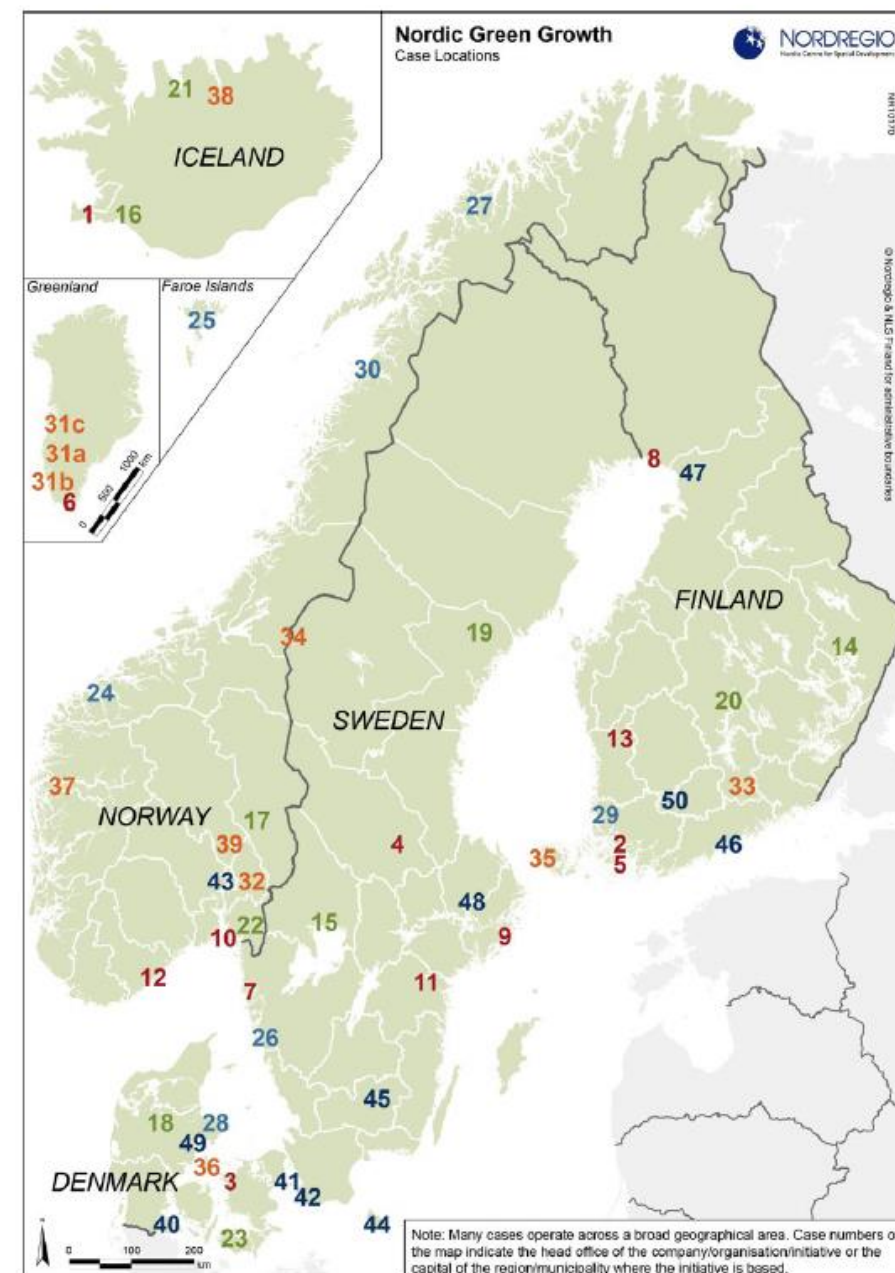
CLEANTECH AND RENEWABLE ENERGY 76

- 31 The future of energy
production in Greenland 78
- 32 Lillestrøm – big things happen
in small societies 80
- 33 KymiJärvi II: the world's first SRF
gasification power plant 82
- 34 Green Highway linking
Östersund and Trondheim 84
- 35 Generating biodiesel
from fish waste in Åland 86
- 36 Local buy-in fuels low-carbon
economy in Samsø 88
- 37 Ampere, the world's first electric ferry 90
- 38 Towards a low-carbon
economy in Akureyri 92
- 39 Energigården, a small
farm for big change 94

GREEN CITIES AND MUNICIPALITIES 96

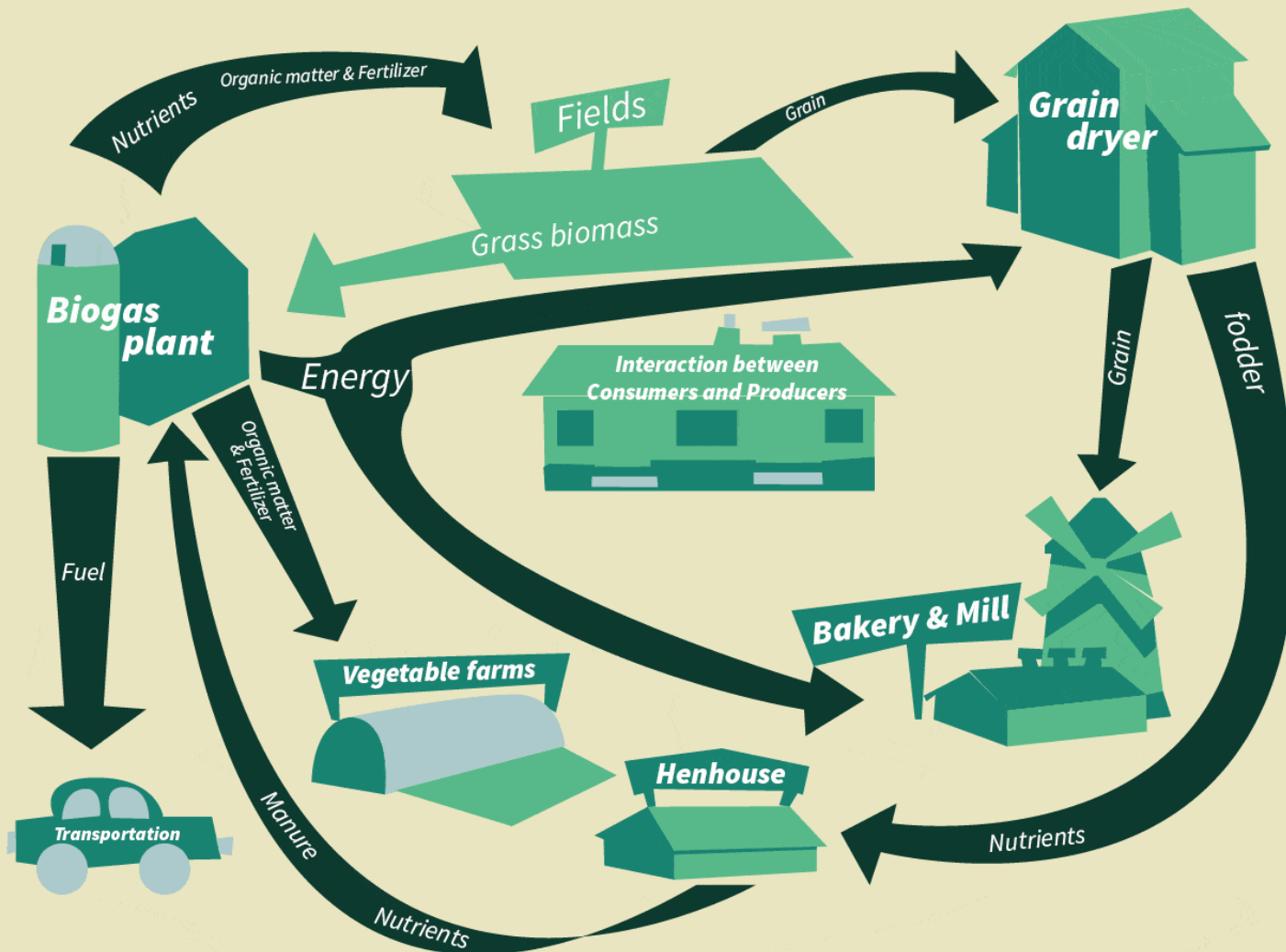
- 40 Eliminating carbon and
creating jobs with ProjectZero 98
- 41 Copenhagen, Europe's latest "green capital" 100
- 42 The City of Malmö, the bustling
brother down south 102
- 43 Cities of the Future, Norway 104
- 44 The "Bright Green Island" of Bornholm 106
- 45 Växjö, "Europe's greenest city" 108
- 46 HINKU Forum – Carbon
Neutral Municipalities of Finland 110
- 47 Carbon neutrality from the
northern municipality of Il 112
- 48 Skjutsgruppen ride sharing movement 114
- 49 Aarhus, the second city in the lead 116
- 50 Bright Green Forssa Region 118

LIST OF REFERENCES 120



Map: Geographical locations of the 50 regional cases

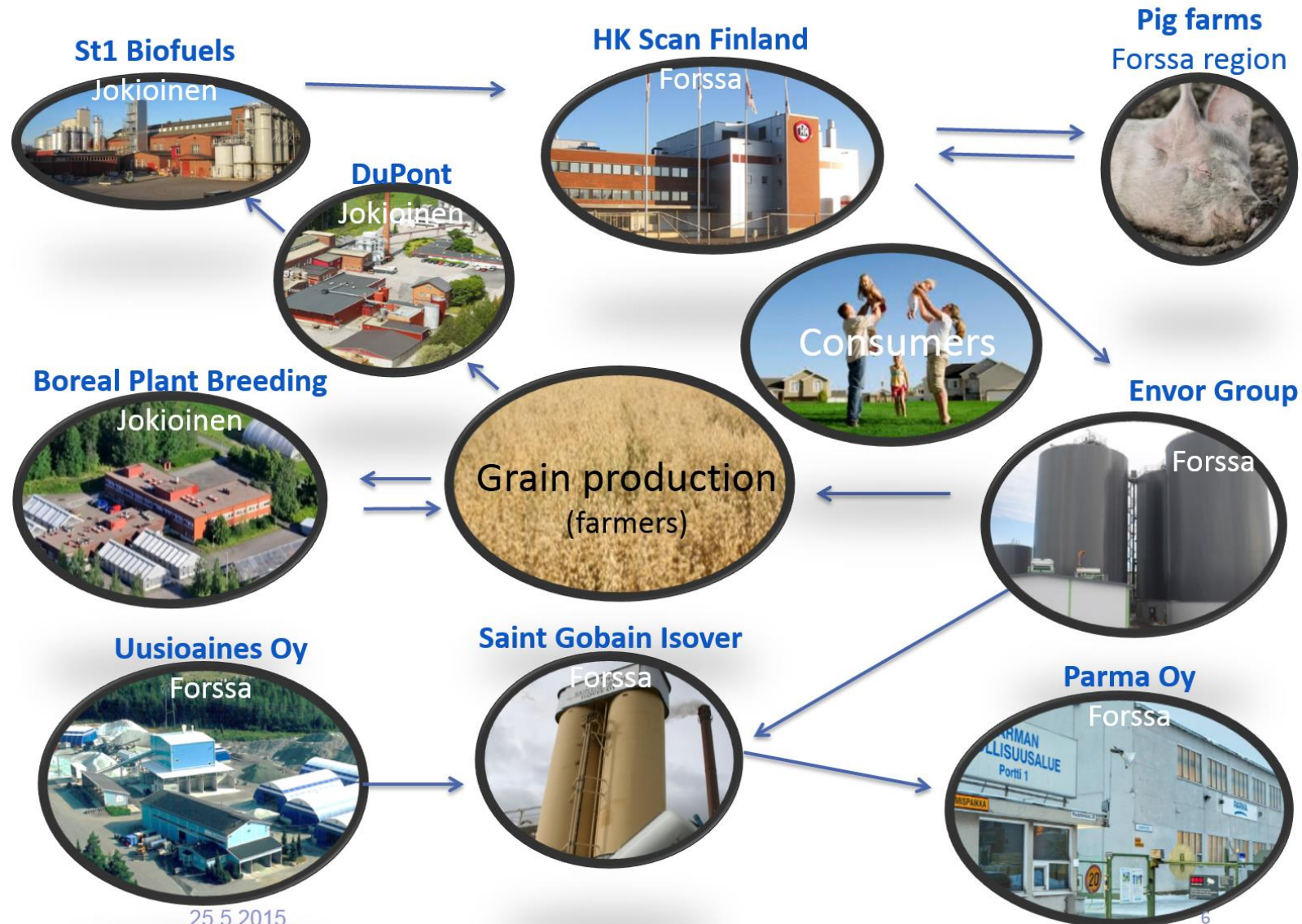
From grains to symbiosis

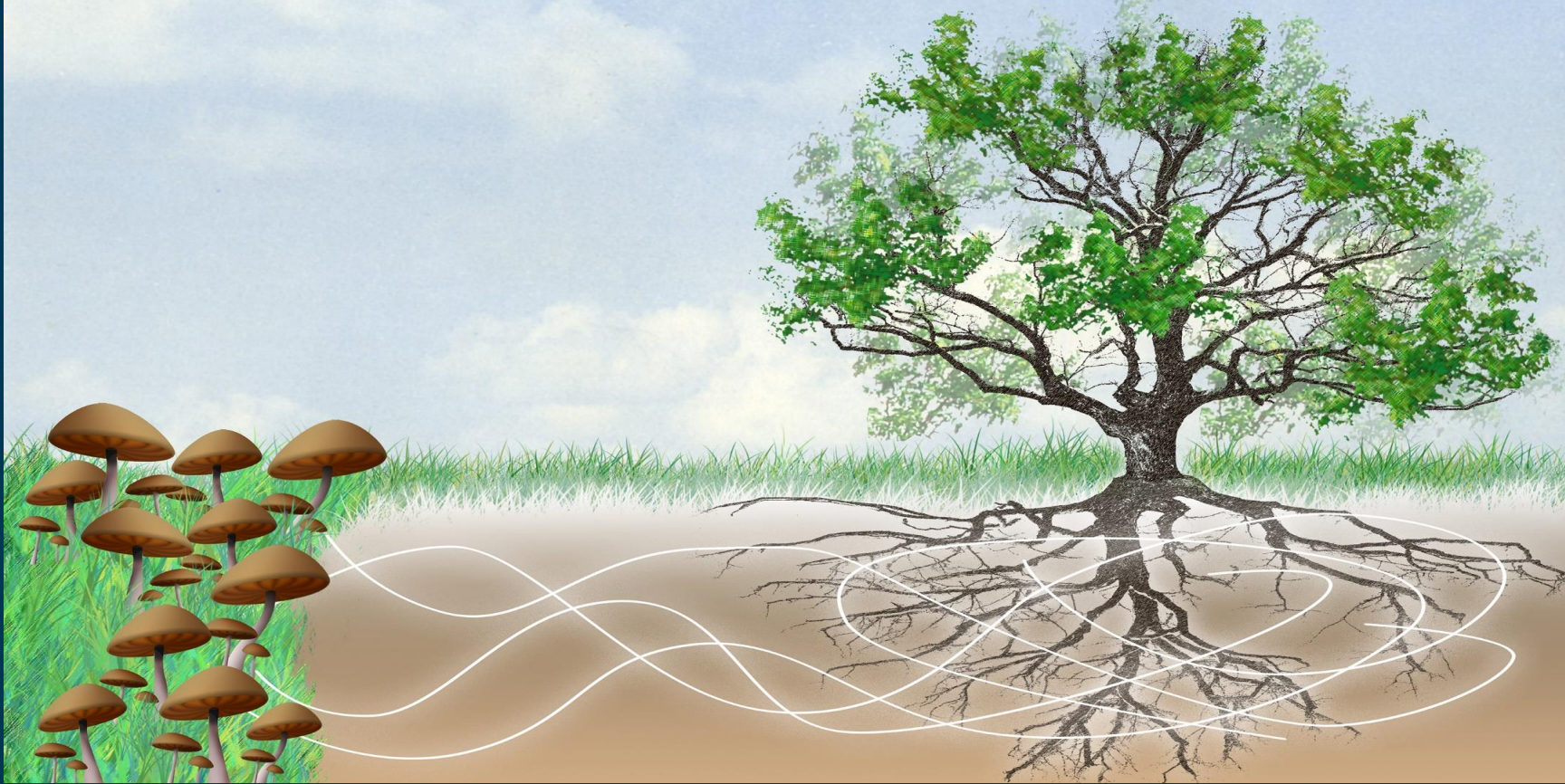


- Bright Green Forssa Region consists of 5 municipalities.
- About 35 000 inhabitants.
- At Bright Green Forssa Region focal areas are
 - environment,
 - energy,
 - well-being,
 - technology and
 - logistics.

Example of bio-based circular economy in South-West Häme Region

- Key players in local industrial symbiosis around grain production

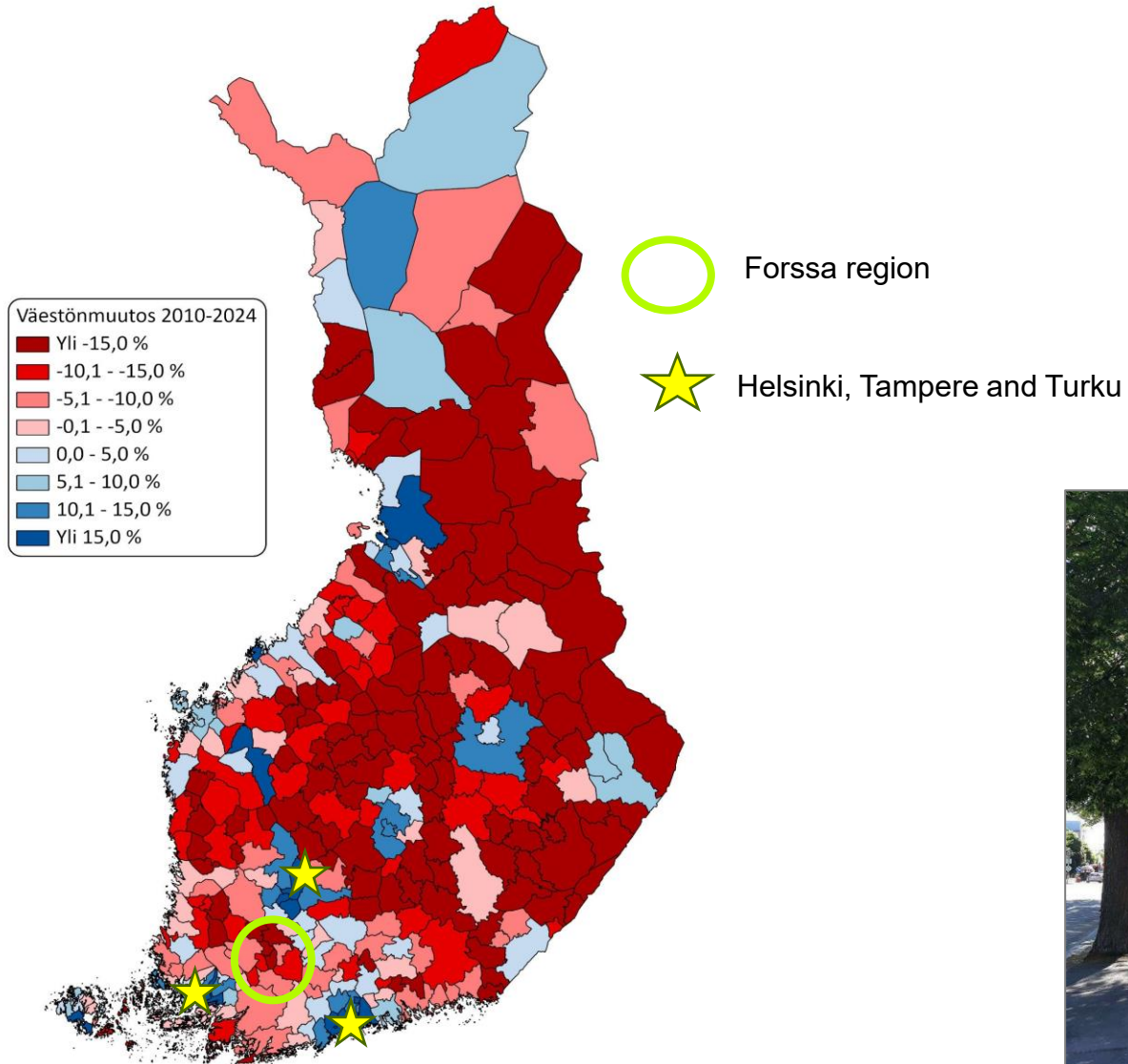




Role of the University at Bright Green Forssa Region

- Research and development in agriculture, bioprocesses and digitalization of symbiosis in circular economy.
- Degree programme in Sustainable development (est. 2009)
- Degree programme in ICT, Bioeconomy (est.2017)
 - ICT, Circular economy (2020)
- Degree programme in entrepreneurship in well-being

Demographic development at Forssa region



Example of bio-based circular economy in South-West Häme Region

- Key players in local industrial symbiosis around grain production



Symbiosis was described based on existing industry without common vision for future.

What was missing?

- Co-created, shared strategy.
- Continuity in policy making.
- System thinking across institutional borders in development of industry, municipality, research and education.

What happens in 2025?

Goals set by region, industry and university:

- Attraction and retention of education: The number of students and graduates must increase.
- Attraction and retention of the area: Students live at the area during the studies and stay after graduation.
- Active participation of municipality, policymakers and industry in development of the education at the area.



What happens in 2025 →

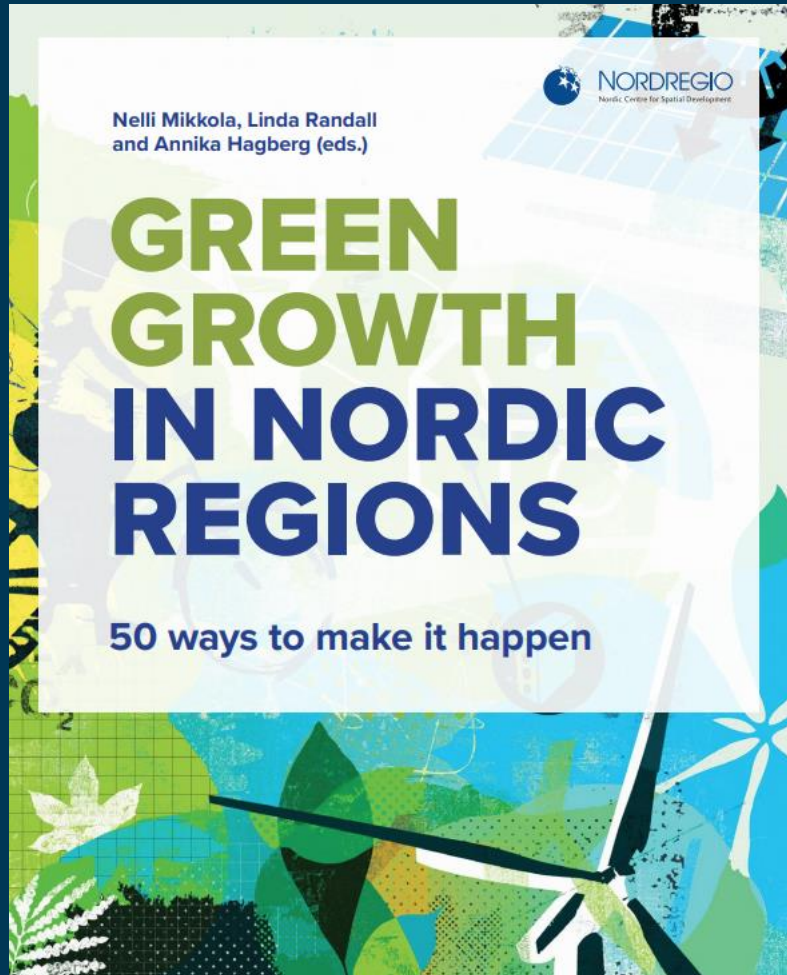
- HAMK's education in Forssa is expanding. Multidisciplinary education model attracts students - especially from the region through special pathways designed for upper secondary high-schools and vocational schools.
- Collaboration with work life will be strengthened within the region. Students' entrepreneurship and start-up activities are supported in cooperation with stakeholders.
- Cooperation will intensify with the City of Forssa and other stakeholders and support the implementation of the new education model + **Strengthening positive images of Forssa as a student city**





HAMK

Häme University
of Applied Sciences



Takeaway messages from 50 case studies:

- **Collaborate across disciplines, sectors and borders**
- Ensure a stable and encouraging funding and policy framework
- **Engage the community and empower individuals**
- Learn by doing and embrace green growth opportunities

Nordic working group for Green Growth –
Innovation and Entrepreneurship 2013-2016



HAMK

Häme University
of Applied Sciences



Thank you!

Häme University
of Applied Sciences
www.hamk.fi

