

Rural development: the Baltic context

Which policies are best suited for economic development and post-2020 programming in Northern rural regions?

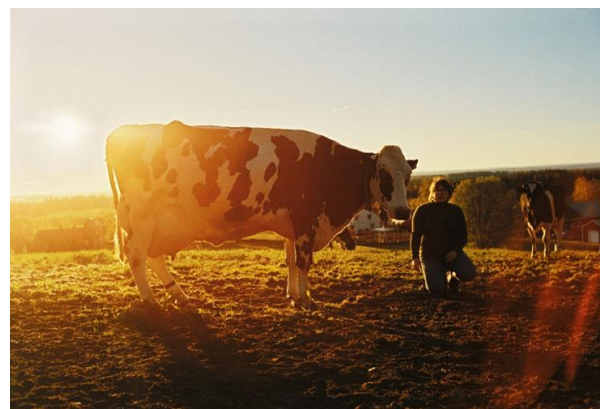
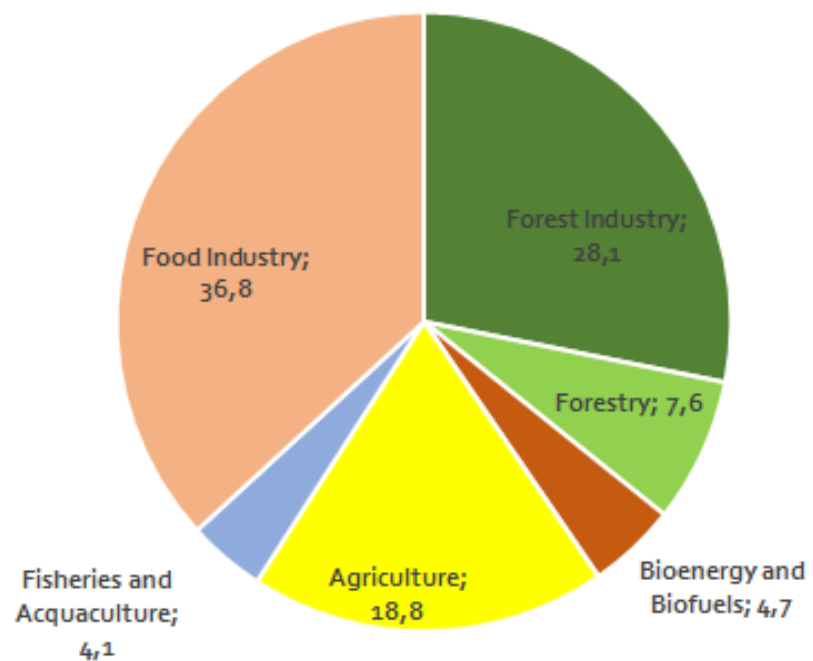
Karen Refsgaard (Research and Deputy Director
Jukka Teräs, Senior Research Fellow
Nordregio

Current trends and opportunities for rural development in the Nordic regions

- Rural assets and successful policies
 - Bioeconomy
 - Bioresources - dispersed, necessary and public
 - BioServices: Tourism and recreation
 - Silver economy
 - Networks matter – also for funding
 - Human and organisational resources
 - Local trust
 - Tradition of good cooperation between local authorities and businesses
 - Entrepreneurial spirit with innovative ideas
 - Changing mobilities
- Towards successful policies and good practices
 - For different economies and platforms,

Bioeconomy: Sustainable Rural Development and place-based thinking

Share of the Sectors included in the Bioeconomy
in the Nordic Countries, in percent



Rönnlund, Pursula, Bröcki; Hakala, 2014

Gíslason & Bragadóttir, 2017)

Lange 2015

Teräs et al. 2014: Bioeconomy in the Nordic region: Regional case studies

North Karelia: A forerunner in regional bioeconomy

The Forest Bio-economy sector in North Karelia		
Sector	Workplaces	The revenue
Forest Economy	200	300 M€
Renewable Energy (mainly Bioenergy)	1350	160 M€
Wooded products and wood based construction	1000	400 M€
Pulp and board based industry	200	330 M€
Technology industry	1200	400 M€
R&D&E, Management	400	50 M€
Travelling and eco-system services	N/A	2-5 M€
Total	6300	>1600 M€

Figure 1: Forest bioeconomy sector in North Karelia in 2012 (Regional Council of North Karelia, 2012)

Share of productive forest area of total land in FI = 67%

Private persons own 60% & fairly evenly distributed



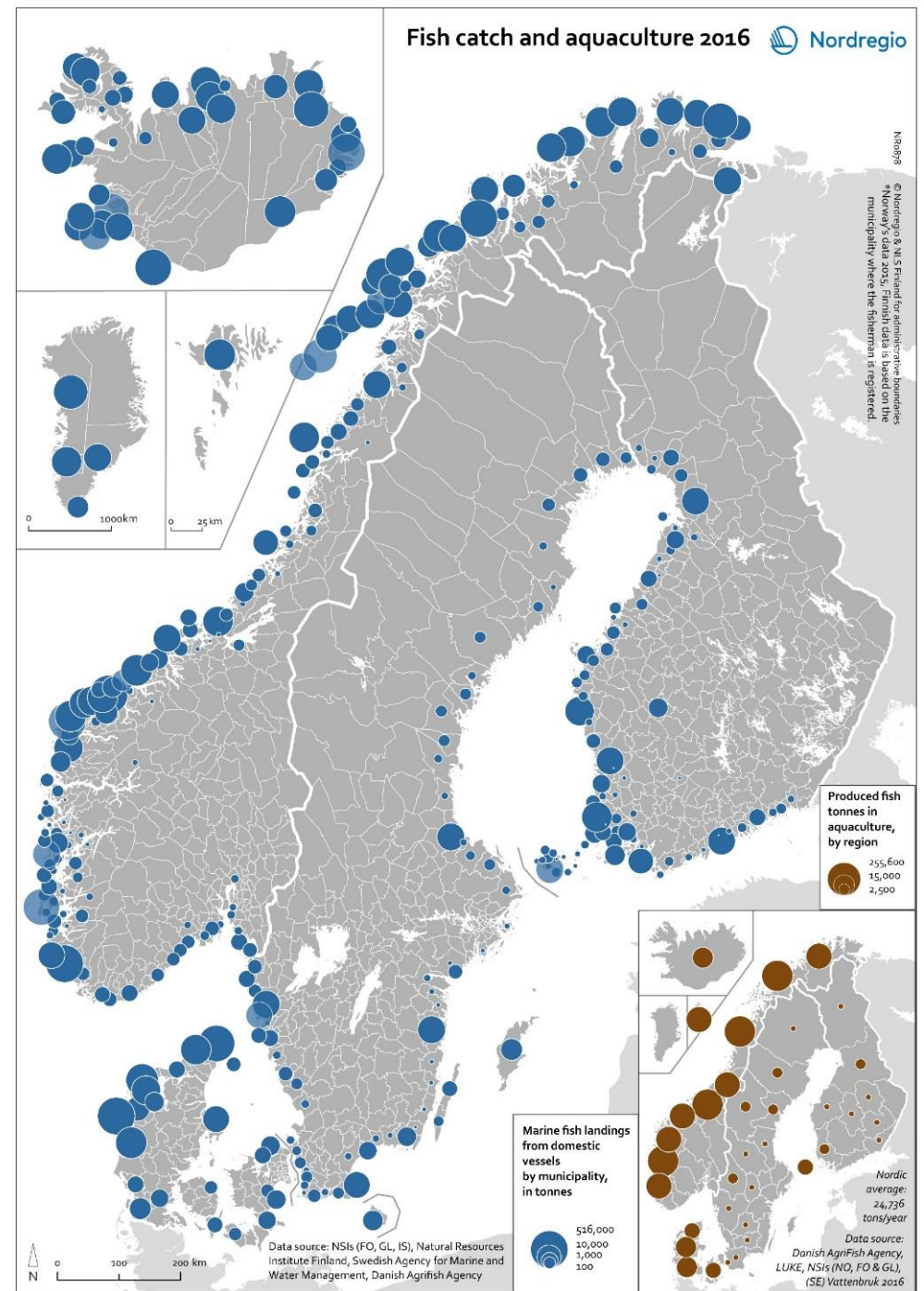
-«Nowadays, innovative processes take place at the regional, national and global levels through collaboration and networking between different actors. Engaging with these networks and clusters is of essential importance.

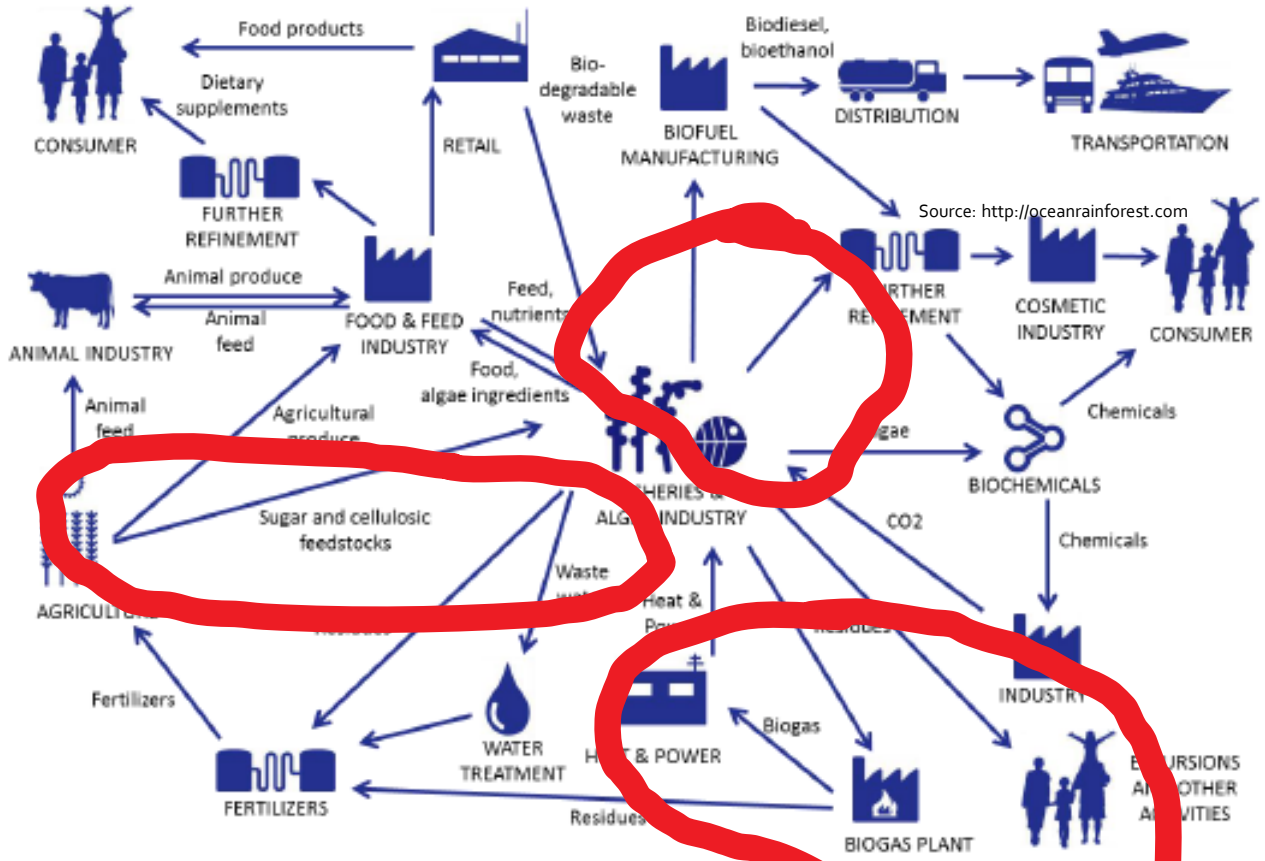
- Moreover, from the regional perspective, we have effectively managed to put forward public sector collaboration to ensure that scarce resources are used productively. One benefit of being a relatively small region is that we are agile and adaptable when it comes to dealing with emerging policies»



**Interview with
Risto Poutiainen**
Region Mayor
Regional Council of North
Karelia, Finland

Fisheries & aquaculture





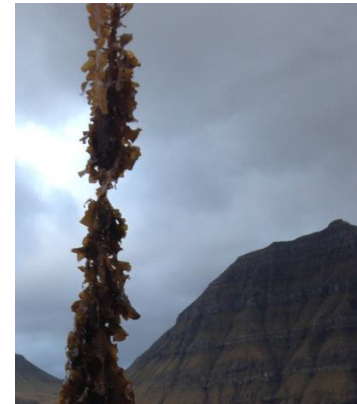
Faroe Islands: Front runner in developing offshore cultivation systems for seaweed

- primarily used in food and feed*
- can replace use of plastic,
- used in textiles and medicines
- Can serve as biofuels

Company Ocean Rainforest:

- one of the very few companies seeding, cultivating & harvesting seaweed on a commercial scale in offshore conditions.
- to combat climate change through cleaning the oceans
- Seaweed captures CO₂ and nitrogen; similar function at sea as trees & plants on land.

*livestock fed on macroalgae-based feed emits 60 percent less methane than if fed on traditional feed



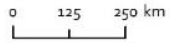
Biogas production



Iceland

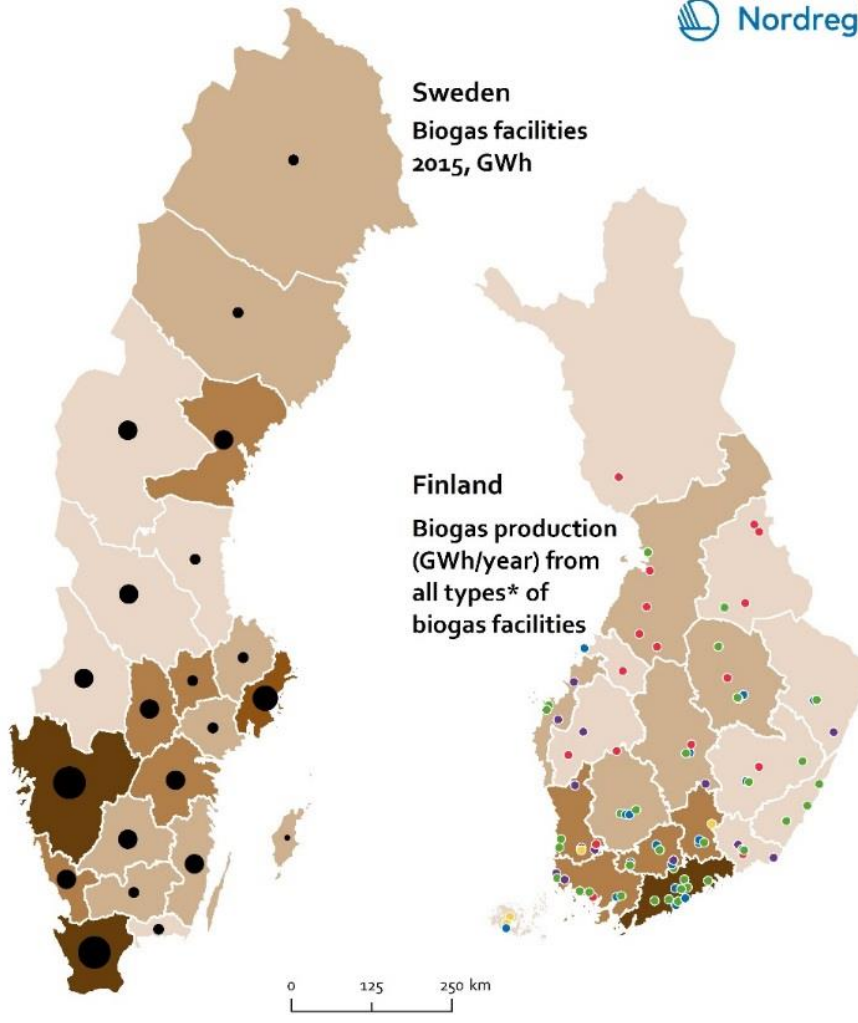


Álfarnes biogas facility in Iceland



Denmark

Bioenergy produced by biogas 2015 GWh



Sweden
Biogas facilities
2015, GWh

Finland
Biogas production
(GWh/year) from
all types* of
biogas facilities



Nordregio © Nordregio & NILS Finland for administrative boundaries

Data sources:
Danish Energy Agency,
Finnish Biogas Association,
Swedish Energy Agency

*FI: Most of the production figures are from 2016 but some are estimates based on the previous year's production data (2009-2016). The production data of biogas facilities in the landfills shows content of energy but it might differ with the actual exploitation.

Type of biogas plant

- Biogas from farms
- Biogas from landfills
- Industrial biogasplants
- Communal waste treatment plants
- Waste water treatment plants

Produced energy in GWh

- 0.4 - 23.9
- 24.0 - 63.0
- 63.1 - 150.9
- 151.0 - 305.3
- 305.4 - 559.7

Number of facilities producing bioenergy

- 1 - 3
- 4 - 9
- 10 - 16
- 17 - 31
- 32 - 54

Energy production by biogas in Nordic regions

Data sources: DK: Danish Energy Agency; FI: Finnish Biogas Association (Biokaasuyhdistys); SE: Swedish Energy Agency (2015 report on Biogas production and usage); IS: Local knowledge



Utfordringer

Små bedrifter
Små og spredte fagmiljøer
Lav FoU-aktivitet
Lite innovasjon
Lite nyskaping

Ageing as an
economic
opportunity

*«Omsorgskrisen skapes ikke av eldrebølgen. Den skapes af forestillingen om at omsorg ikke kan gjøres annerledes enn i dag»
Kåre Birger Hagen
(Meld. ST. 29 (2012-2013):
Morgendagens omsorg*

The Silver Economy

Høgskolen i Innlandet Avdeling for Folkehelsefag



Institutt for sykepleie

Institutt for helsefag

Institutt for tannpleie
og folkehelse

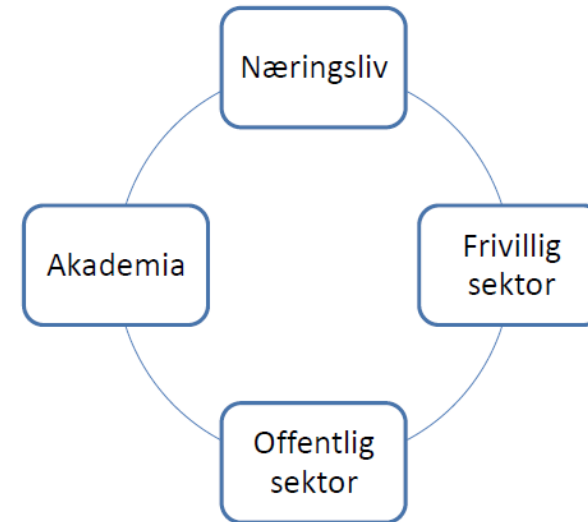
Institutt for idrett og
kroppsøving

1650 studenter
135 ansatte



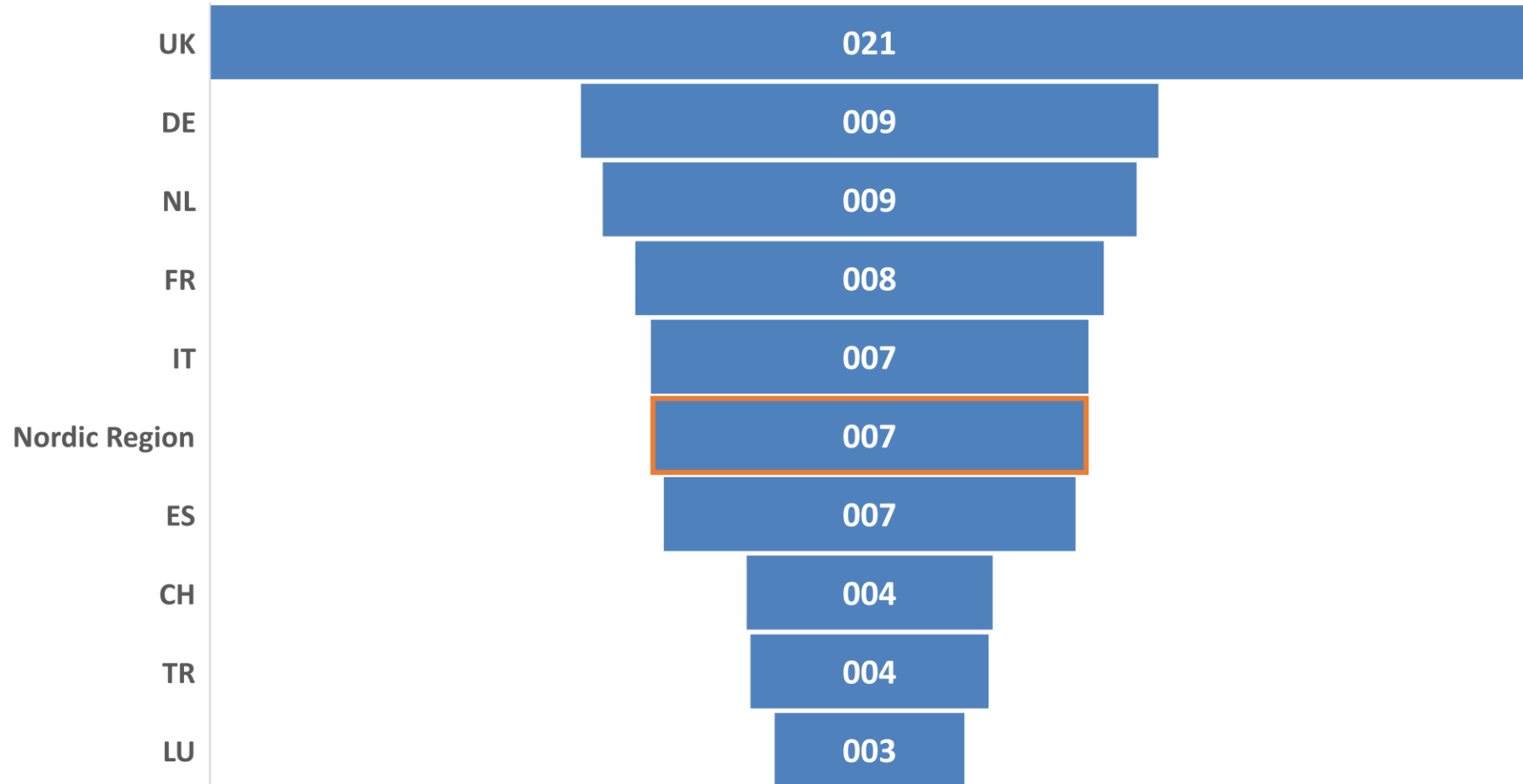
Terningen Nettverk

Kompetanse – Forskning – Innovasjon
for bedre folkehelse



Attracting FDI in rural areas

Europe's top 10 largest receivers of FDI
as share (%) of Europe's total FDI inflows, 2003-2016

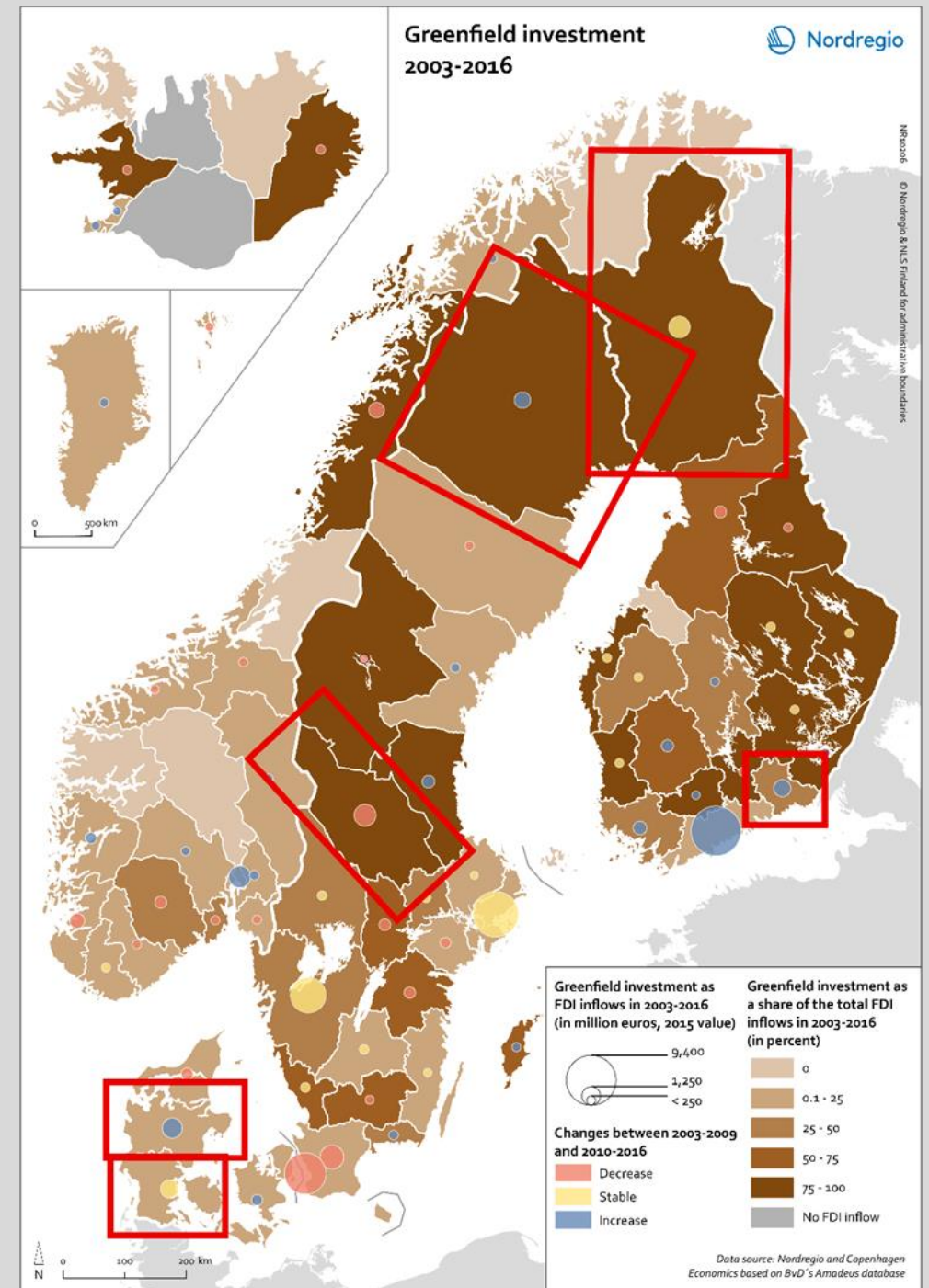


FDI profile in selected regions 2003-2016 (all FDI)

#	Region	Country	Innovation profile	FDI country of origin	# of projects	FDI value (EUR, million)
1	Midtjylland	DK	Leader	SE	279	6 829 671
2	Færøerne	DK	n/a	DK	16	304 356
3	Hedmark	NO	Strong -	SE	24	477 566
4	Västerbotten	SE	Strong -	FI	43	929 382
5	Norrbottn	SE	Leader -	FI	33	1 310 883
6	North Karelia	FI	Strong +	US	17	362 800

Greenfield investments 2003-2016

- 2003-2009 completely dominated the scene in many Nordic peripheral regions
- 2010-2016 – increased M&A inflow or reduced FDI activity

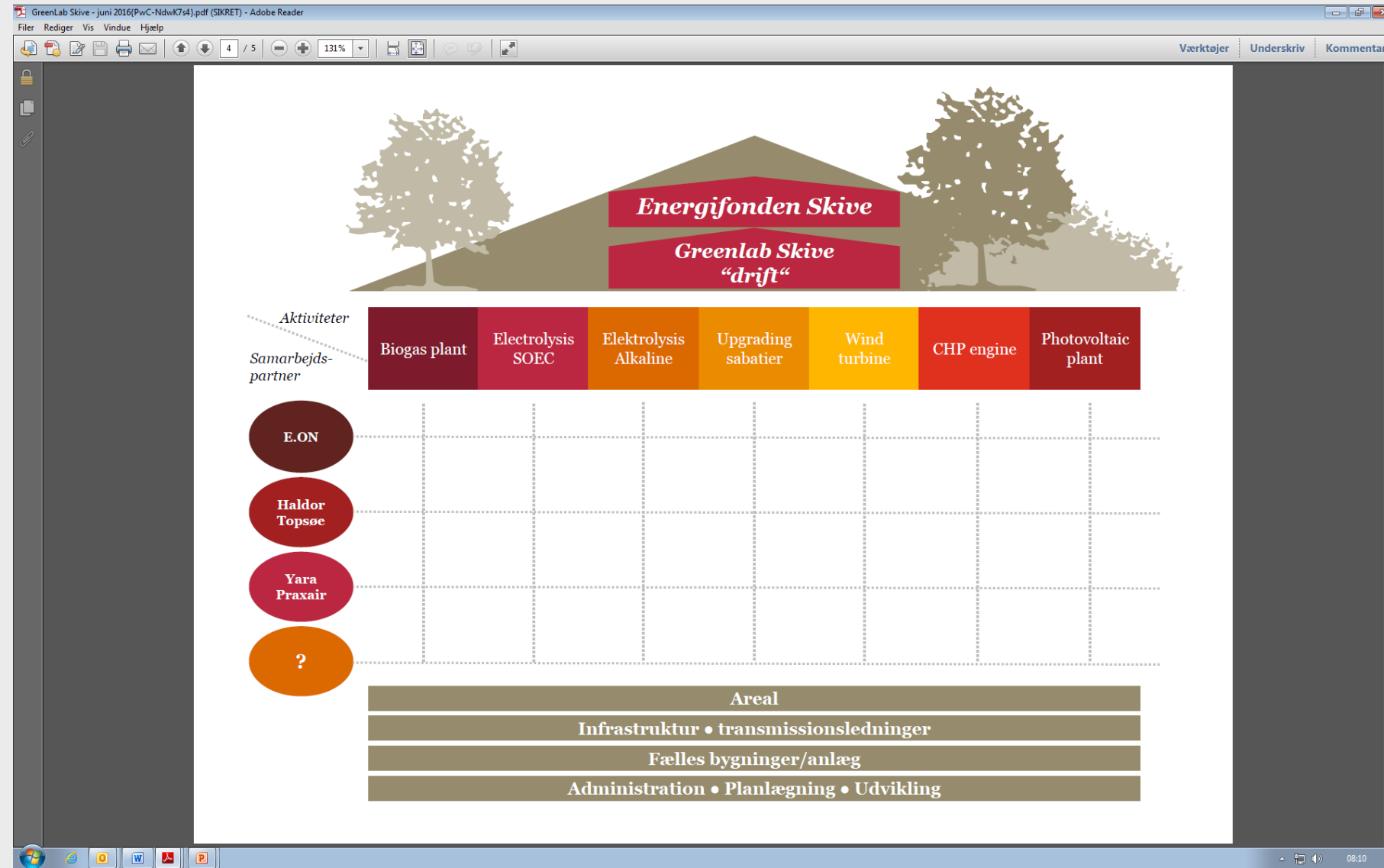


GreenLab Skive - a circular business park in rural DK

- Symbiosis between businesses
- Optimizing energy
- Utilising waste
- COOP₂
- FDI flows
- Multiproducts

Steen Hinze 2016:

<https://www.biogas2020.se/wp-content/uploads/2016/11/2-steen-hinze.pdf>

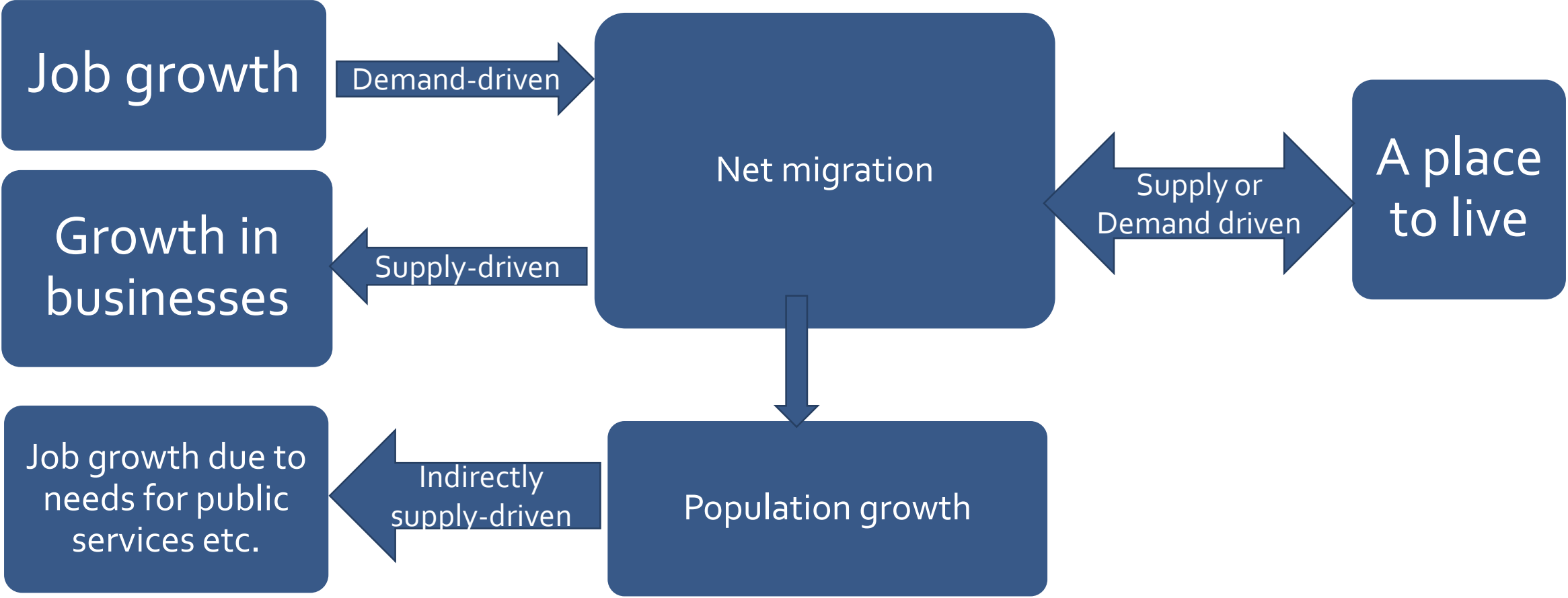


Challenges within existing policies and structures

- A rural-urban divide in structural policies
 - Services
 - Economic structures and incentives
- Lack of awareness of circular economy
- Innovation policies
 - Smart Specialisation with urban and tech-science focus
- Single industry and SME-focus not supporting clusters and platforms
 - Financing
- Cultural restrictions
 - The dominating mental mindset
 - A biased green urban thinking!
- Diversified economic base
 - Tourism and mining



Changed mobility

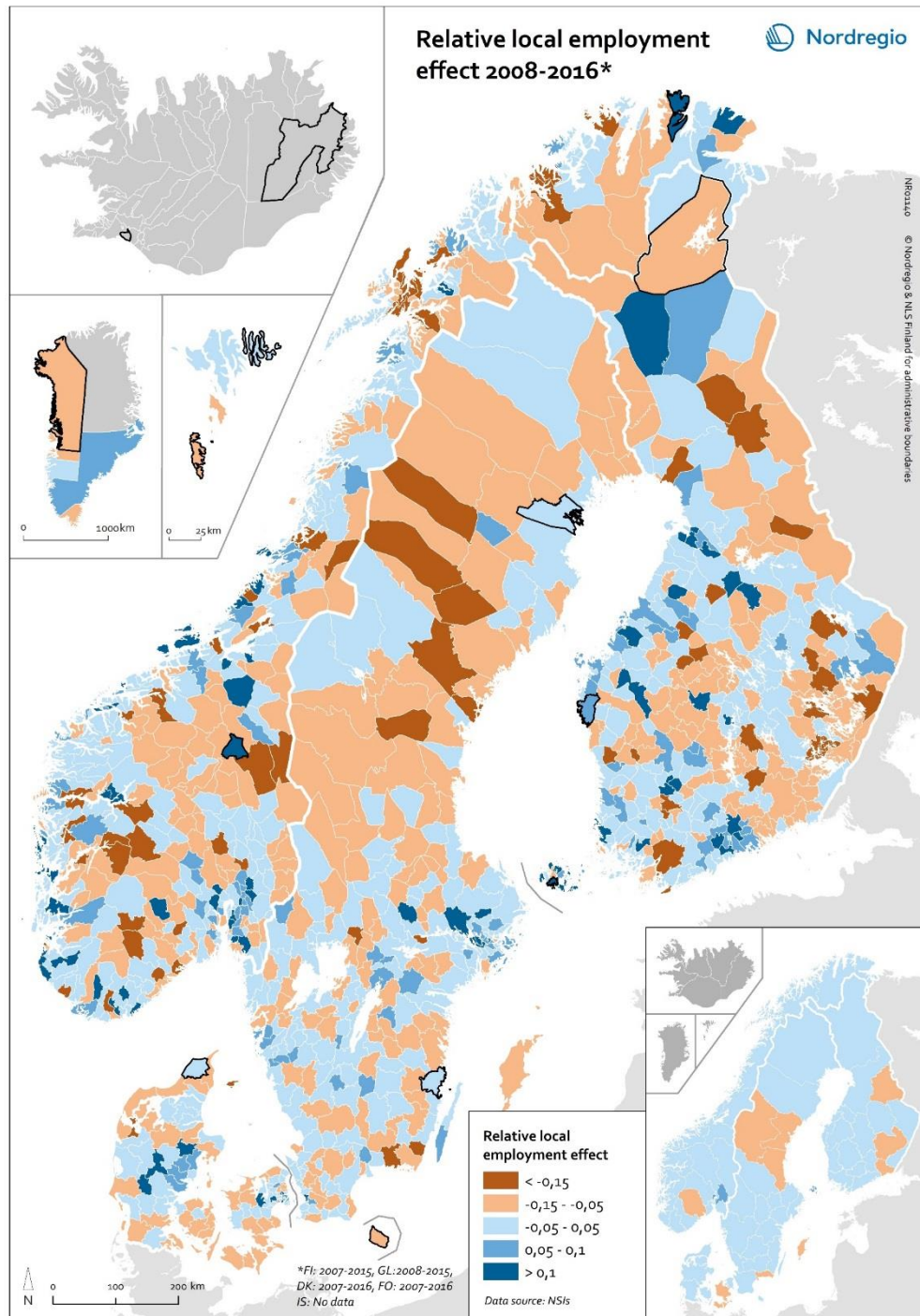


Jobs

People

Place

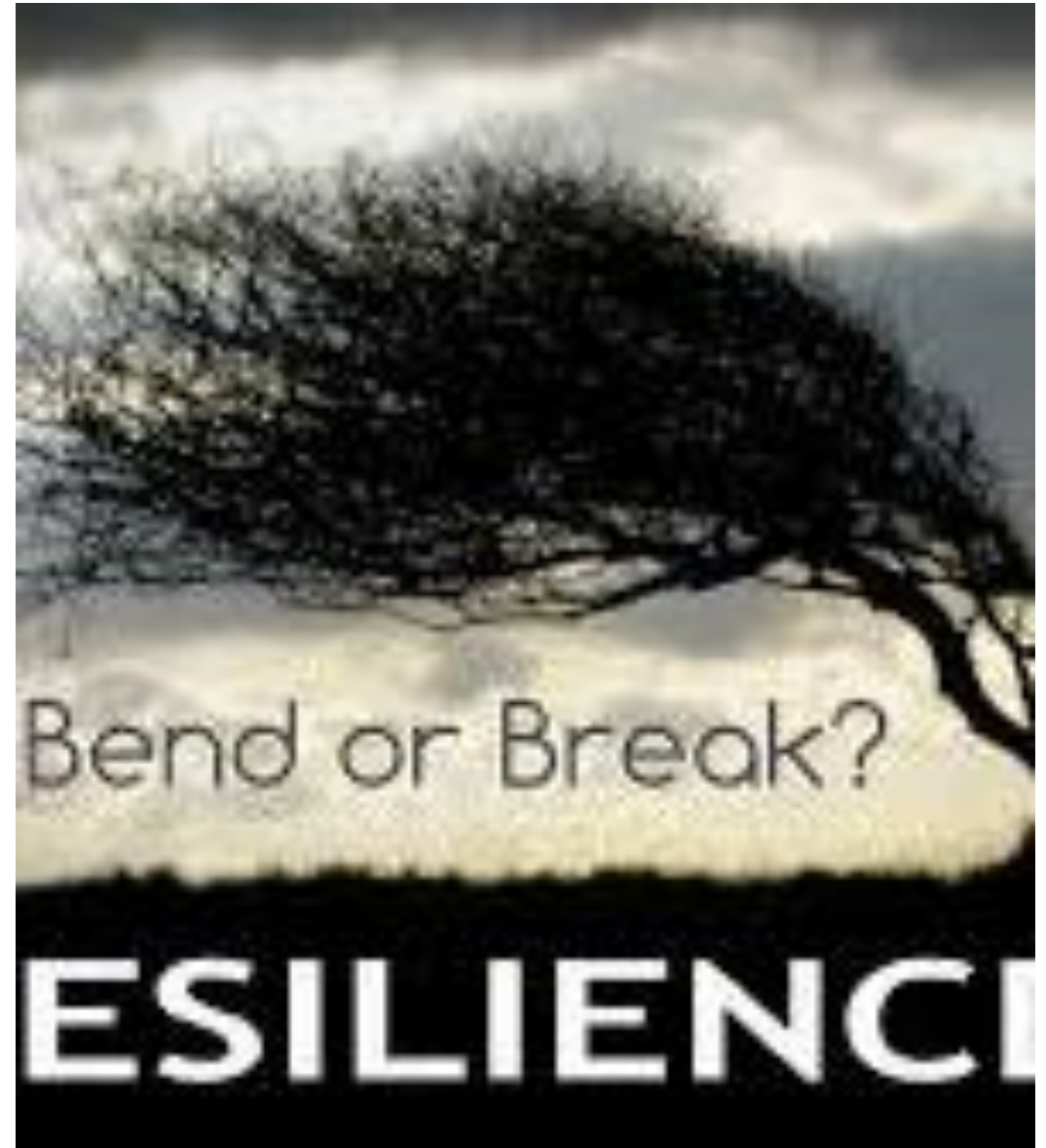
Local Employment Effect , 2008-2016



Regional Economic and Social Resilience

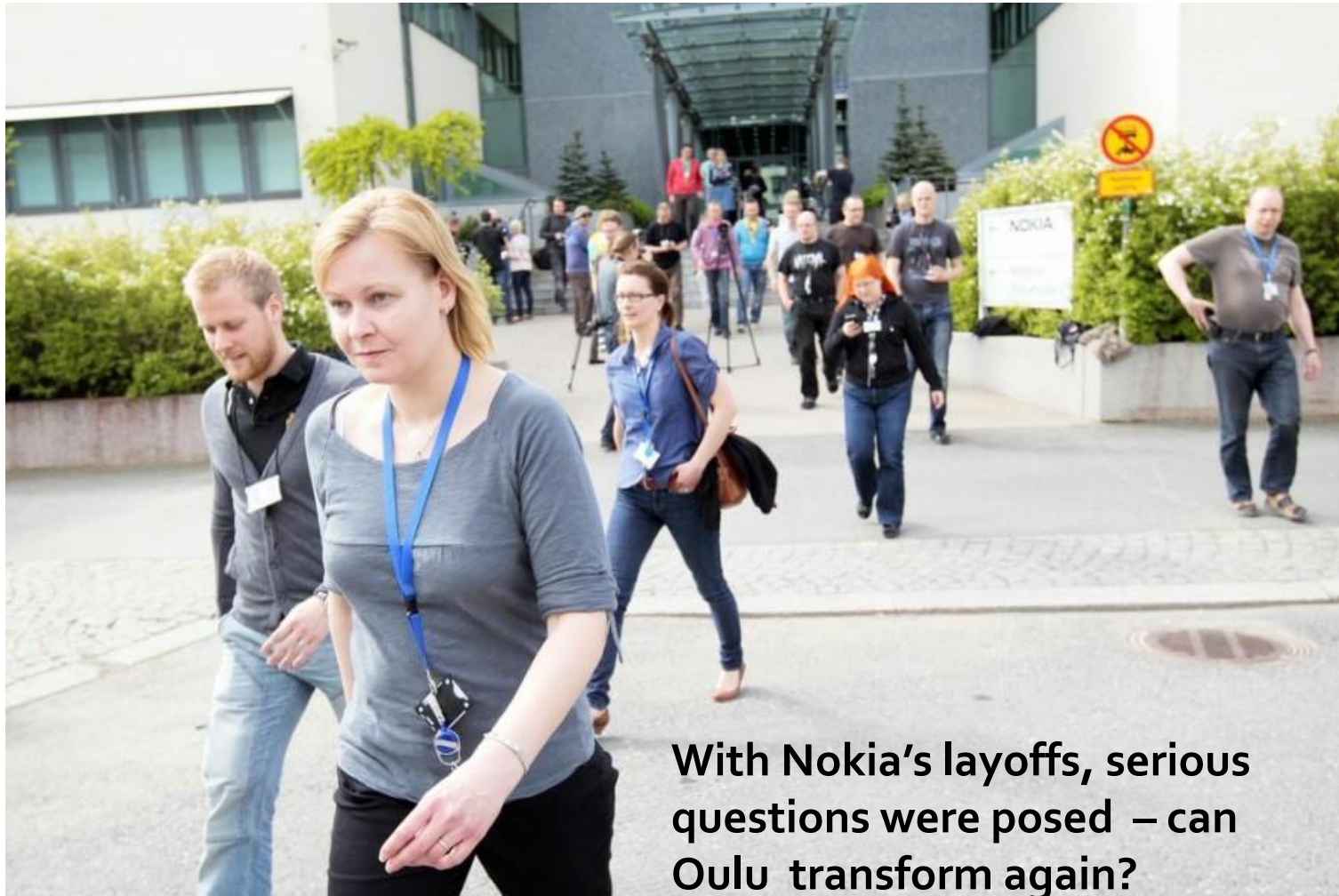
The ability of a region to recover from disturbances

- Economic Resilience: understand how regions react to recessionary shocks & build capacity
- Social Resilience: role of human agency – communities/networks & social values and rules
- Resilience - not only the ability to react to shocks but also the ability to anticipate and prepare for the shocks



**Known for the
"Oulu Phenomenon":
the rapid conversion from a traditional
industrial town to an internationally-
known centre of ICT-related
technologies in the 1980s and 1990s**





With Nokia's layoffs, serious questions were posed – can Oulu transform again?

Resilience - Findings of the study

- The study has identified both regional shocks (e.g. abrupt drop in commodity prices) and slow burns (gradual loss of competitiveness)
- Nordic regions are exposed to various types of risks ranging from commodity prices to technological, natural and geopolitical risks
- Low awareness of potential risks in the Nordic regions - only few regions with resilience plan. Mainly reactive measures only
- Different types of risks require different actions (e.g. diversification, broadening of markets, investing in social and human capital)
- Individual actions, by all members of society, are important in strengthening resilience, and complement far-reaching strategies.

Giacometti A: 2018: ResilienceNordregio WP

Policies suited for economic development and post-2020 programming in Northern rural regions?

- Adaption to local resources
 - bio, elderly, trust, entrepreneurial spirit....
- Platforms and Partnerships
 - Funding and organisation
- Facilitation/capacity building/mobilisation
 - Education and increased knowledge and new relations
- Roles for regions and municipalities
 - Public procurement and infrastructure, Business development schemes
- Existing EU policies – revision towards more rural thining – LS3
- Structural areas:
 - health, support for businesses, transport and infrastructure matter
 - Crossborder regions (sea and land)
- Considering changed mobility
- Building resiliency

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