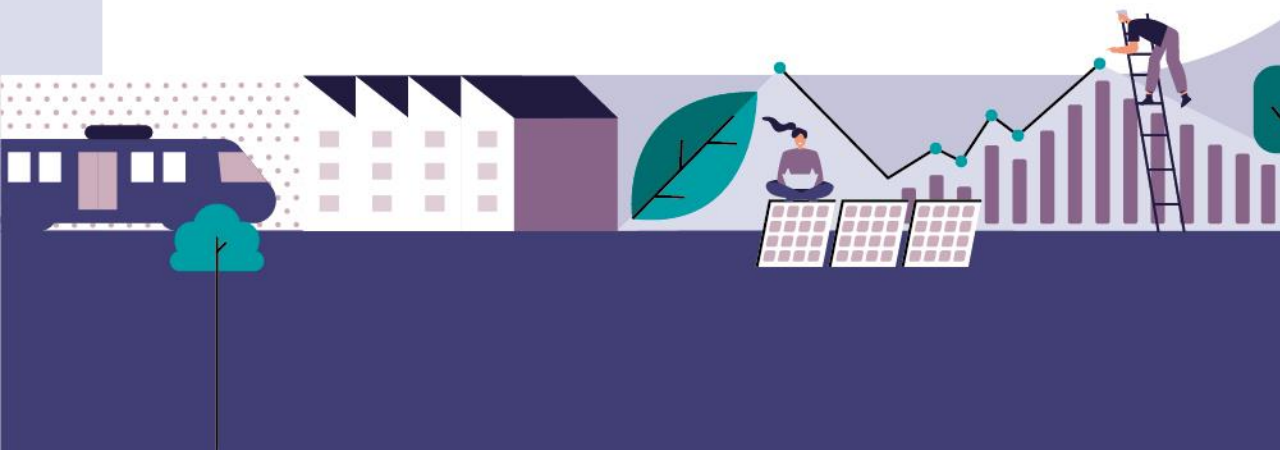


ON THE PATH TO SUSTAINABLE DEVELOPMENT - TERRITORIAL PERSPECTIVE OF GREEN INDUSTRIALISATION

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REGIONS 2030 PILOT PROJECT, REGIONAL EVENT, GDANSK

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About ESPON

- ESPON bridges research with policies
- We are one of EU **Interreg** programmes and are in service for over 20 years

We provide territorial **analyses**, **data** and **policy advice** to 27 European Union countries + 4 partner states (Iceland, Lichtenstein, Norway, Switzerland)

- We help public authorities to **benchmark** their country, region or city, **identify** new challenges and potentials, and **shape** successful policies for the future



What is the “green industrialisation”?

- A twin concept to green transition
- It zooms in on the role of manufacturing and related industrial sectors in a systematic overhaul of the way we produce, transport, store and consume products and services
- It relies on three transformations:
 - the move from fossil fuels to renewable energy sources
 - an increase in resource efficiency
 - the transition to a circular economy



Source: <https://cepr.org/voxeu/columns/green-industrial-revolution-coming-0>



Green industrialisation and SDGs

SUSTAINABLE DEVELOPMENT GOALS

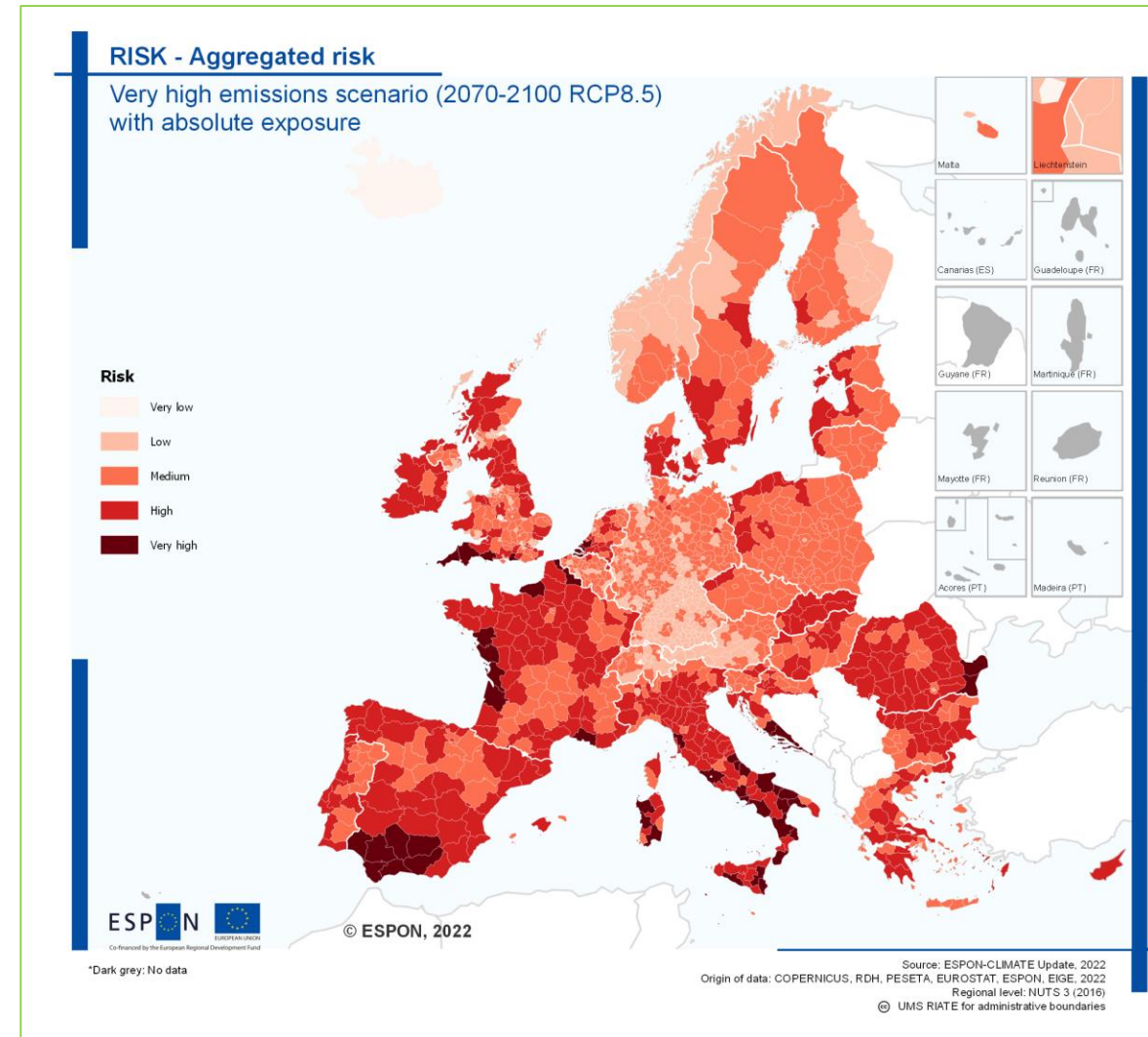


- The green industrialisation process strives towards more sustainable industrial production and consumption patterns
- It addresses the aim to promote inclusive and sustainable industrialisation (**SDG 9**) and responsible consumption and production (**SDG 12**)
- In addition, it contributes to reaching **social** and **environmental** goals, for example, by creating new and good quality jobs and reducing pressures on the environment
- The green industrialisation process can therefore be considered an important tool to reach the SDGs by 2030

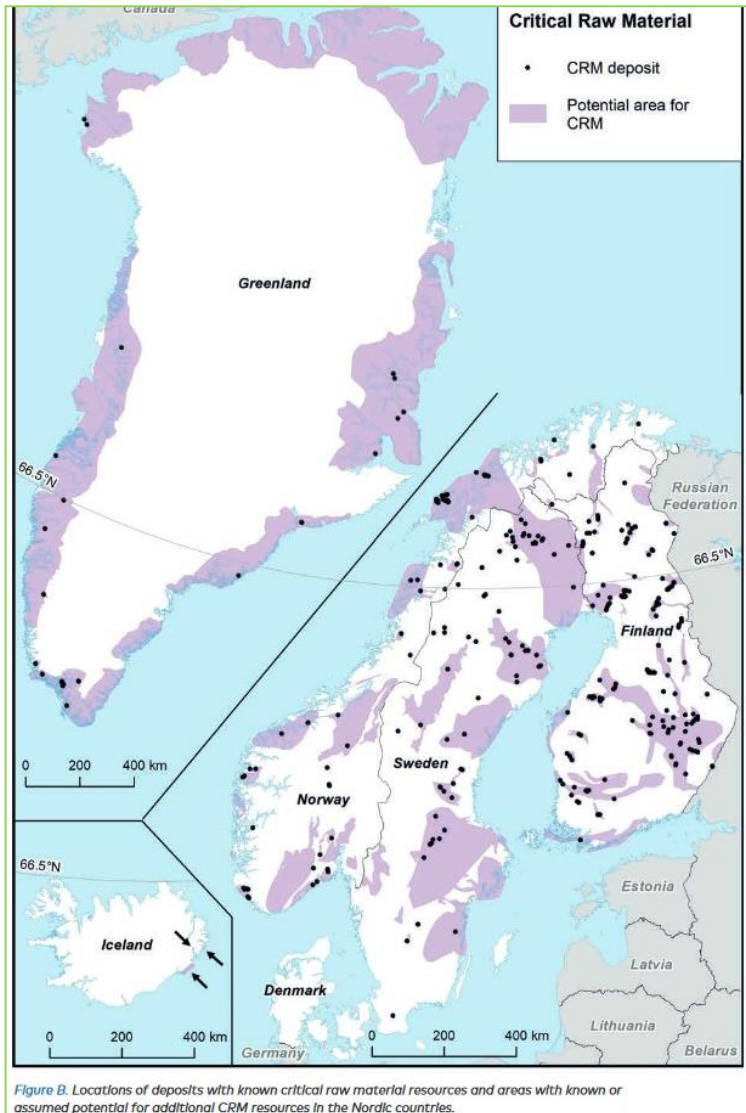


Why do regions need green industrialisation?

- Risk for regions to be affected by climate-induced hazards increases towards the end of 21st century
 - ecosystems, economic sectors, human health and wellbeing continue to be adversely impacted
 - regions continuously need to improve their adaptive capacity
- European Green Deal aims at climate-neutral Europe by 2050
- Clean energy required for transition to green production
- Higher energy prices in wake of Ukraine war accelerated the need for energy transition
- Strong policies and market conditions are key in renewable energy deployment



Green transition in Sweden



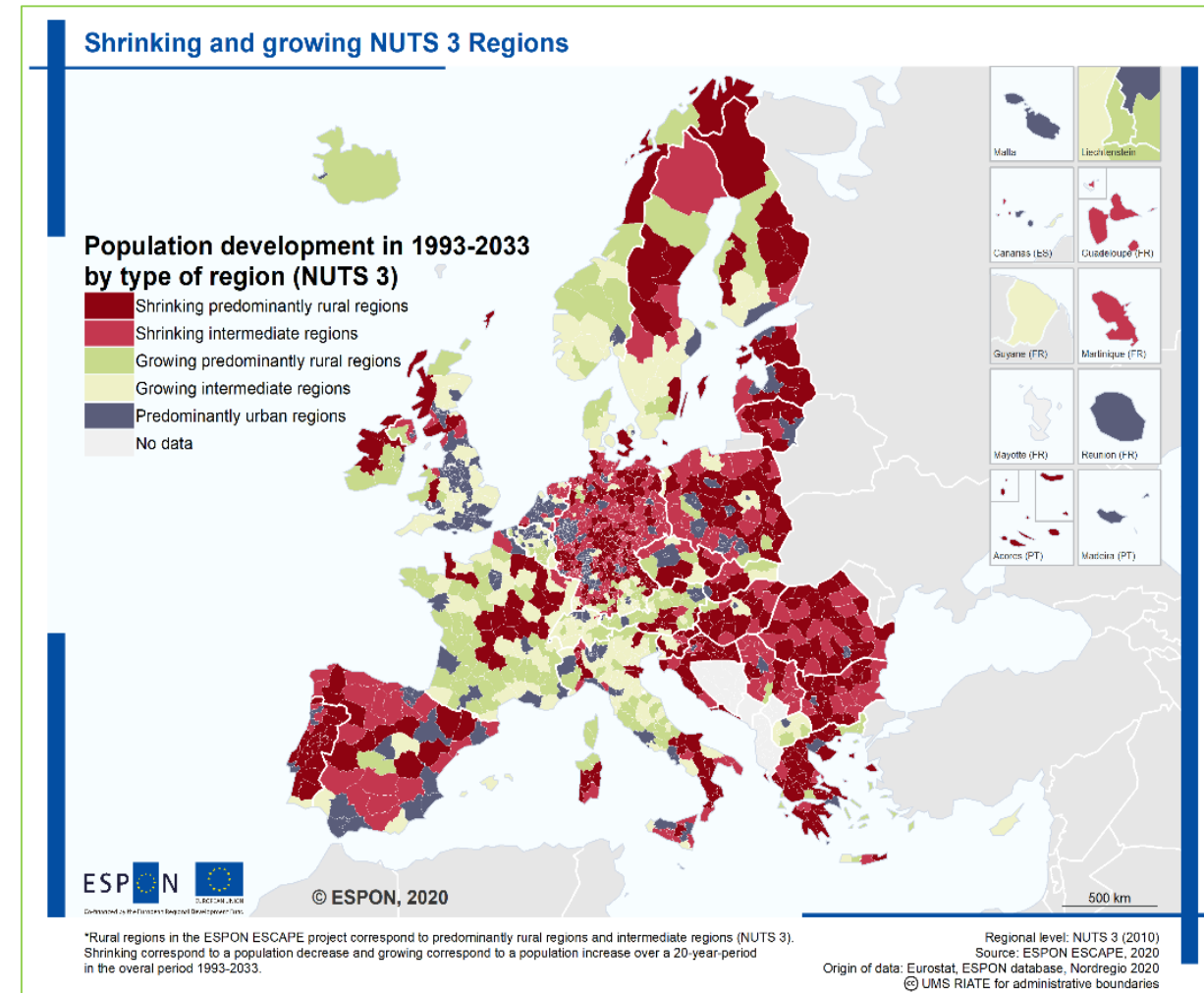
- Transition on its way: **-27% decrease** in greenhouse gas emissions from production since 2008
- More efficient production technologies, use of renewable energy sources, green innovation, changed consumption patterns
- **Green investments** in northern Sweden: around 98 billion Euro committed
- **Key factors:** Accessible and cheaper renewable energy and supply of raw materials (2023: LKAB mining company announced the discovery of a one million tonnes deposit of rare earths in Kiruna)
- **Challenges:** meeting the increasing demand for renewable energy, access to raw material essential for green technologies, incl. wind turbines and electric vehicles; domestic material consumption, insufficient grid capacity for electric infrastructure

Source: Pasi et al. (2021)

What do regions need to achieve green industrialisation? (1/5)

3.1 Demography, employment and shortage of skilled labour – a zero sum game?

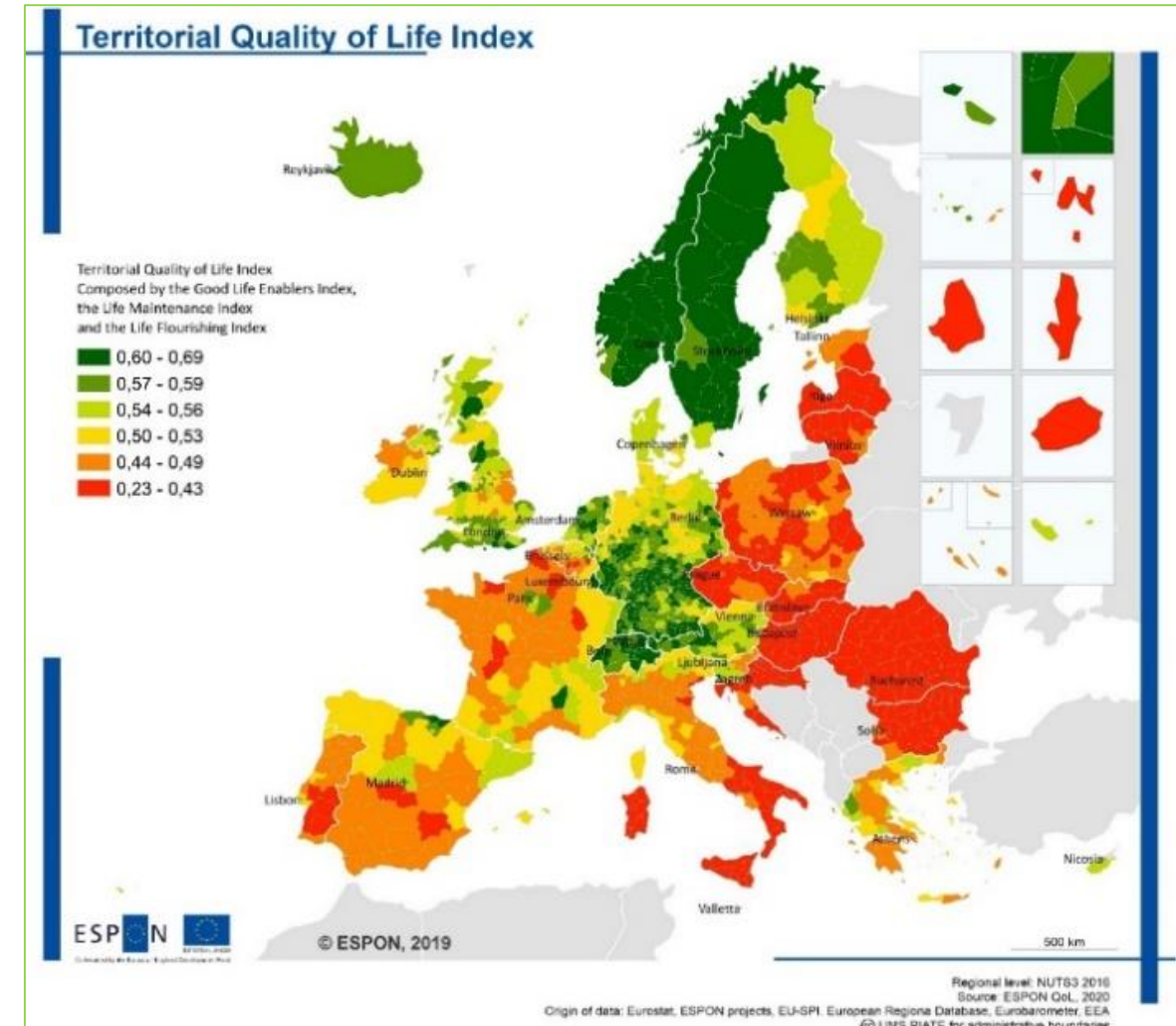
- Many host regions are affected by decades of shrinking and ageing, economic decline, reduced access to services and loss of attractiveness
- Green industrialisation could reverse this downward spiral development, create new jobs, attract people from other regions and overall improve regional attractiveness
- BUT: **shortage of qualified staff** in public administration can be a limiting factor



What do regions need to achieve green industrialisation? (2/5)

3.2 Planning for the sustainable society – housing, local attractiveness and social sustainability

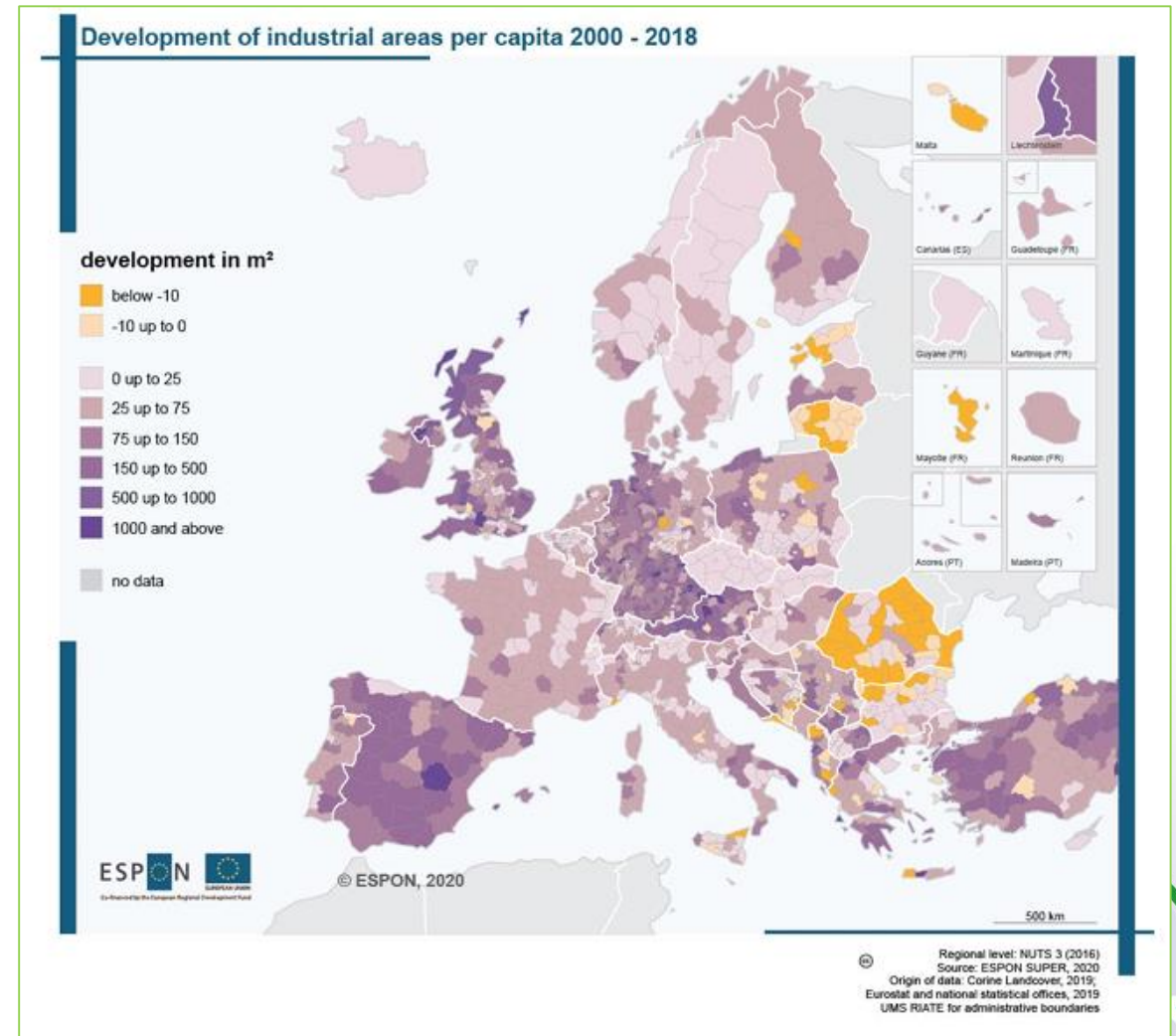
- Attractive regions offer affordable housing, access to wide range of services and infrastructures and appealing environment
- Difficult task for municipalities/regions with very limited financial resources and uncertainty if investments will pay off.
- Social sustainability is key to avoid exclusion of established resident population.
- Visioning can be a useful tool for steering growth development in an integrated way and could define limits to growth.



What do regions need to achieve green industrialisation? (3/5)

3.3 Land take – land use conflicts and divergent interests

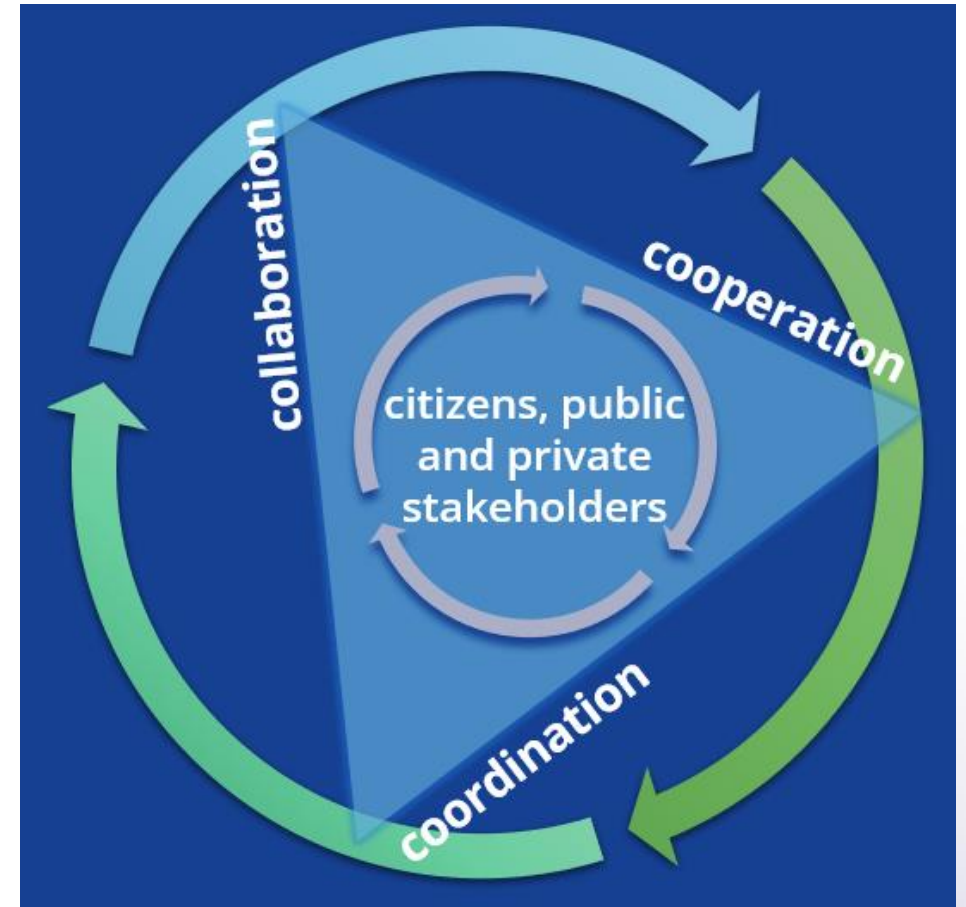
- Green industrialisation requires (new) land, but land is limited → activate brownfields for new land use demands
- Changing land requires trade-offs between different interest groups as well as economic, environmental and social issues → safeguard sustainability with SEA
- Sustainable energy production → example of a 'positive zoning' and monitoring tool by Salzburg (AT)
- Reconciling spatial conflicts → make an inventory of competing users and use SIMP tool to identify and manage social impacts together with relevant stakeholders (Social Impact Management Planning)



What do regions need to achieve green industrialisation? (4/5)

3.4 Territorial governance – how to obtain tangible local benefits?

- Natural resources should not only be used for the greater good but also provide tangible local benefits → avoid creating geographies of discontent
- Key factors for managing the impacts of green industrialisation in rural regions → coordination of policies and actions & capacity building for governance at local level
- Local Benefit Analysis Toolbox (REGINA project) → maximise local economic benefits from large-scale, resource-based industries → local communities can better prosper from their natural advantages
- Take into account potential asymmetric impacts using TIA → increase effectiveness & efficiency of the policy → increase political support for a policy & boost its benefits

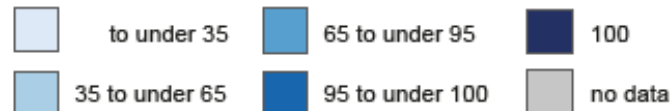


What do regions need to achieve green industrialisation? (5/5)

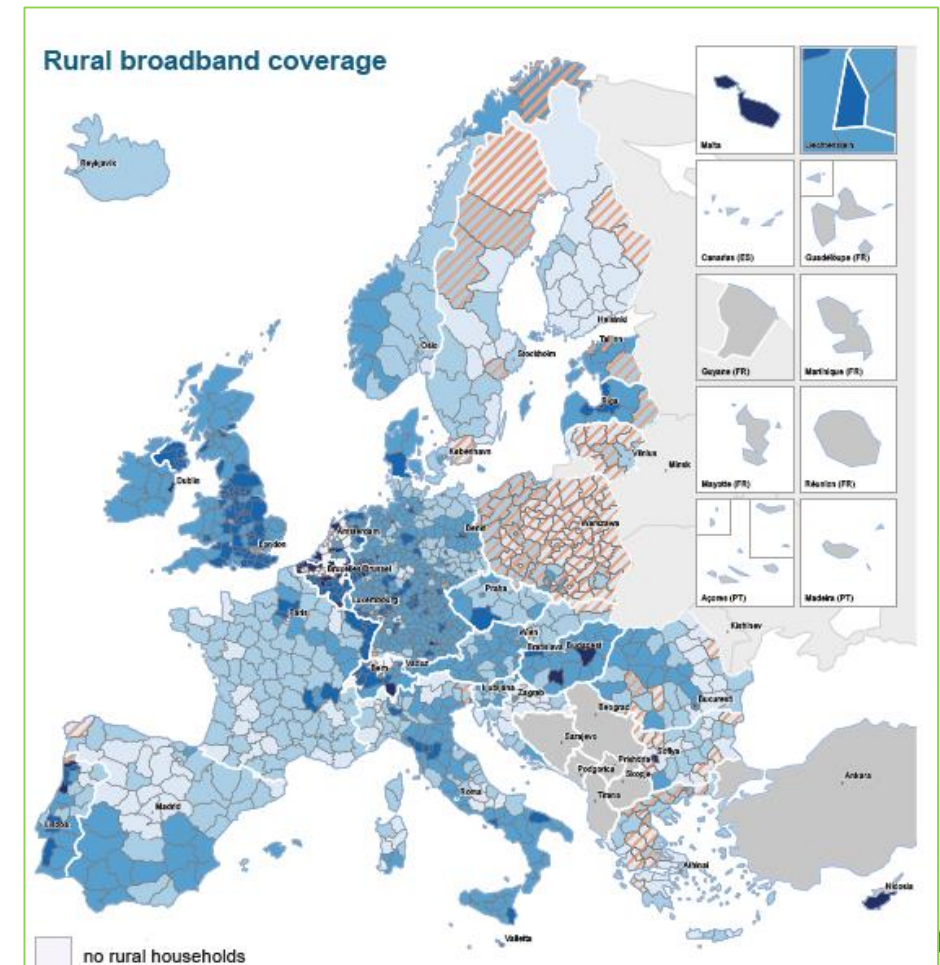
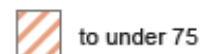
3.5 Digitalisation in public service provision and planning

- Broadband coverage of rural areas stays behind - 100% fast broadband coverage in rural areas by 2025 (EC Rural Vision)
- Digitalisation in health and social care - improve economic efficiency, quality of services & health and wellbeing of citizens (in remote areas)
- Digital cooperation platforms - support the set-up of industrial symbiosis and circular flows (matchmaking for SMEs, sharing knowledge, etc.)
- Digitalising the planning process with digital plan data and a digital plan portal - increase transparency and participation

Next generation access broadband coverage
(% of households), 2019



Least developed fixed broadband coverage
(% of households), 2018



The winding path. Conclusions

- Green industrialisation is an enabler for sustainable development but involves system change
- It brings opportunities but also challenges; and requires planning and anticipation
- Green industrialisation will cause deep structural changes in regions, often disruptive in character
- Many local administrations struggle with limited human and financial resources, which calls for support from higher levels of governance
- Place-based policy responses using territorial governance is key to set up new infrastructure and offer services of general interest, to make more attractive the places people live, work and stay
- Hidden aspects to pay attention to: social bonds (sense of community), positive narrative and visioning (collective belief), education on green transition and reindustrialisation



Picture: Stockholm's Kungsgatan Street, September 3, 1967

First morning after 'Dagen H', the day when Sweden changed from driving on the left side to driving on the right

Source: @HistoryInPics

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// Stay tuned. Read the upcoming policy brief!

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