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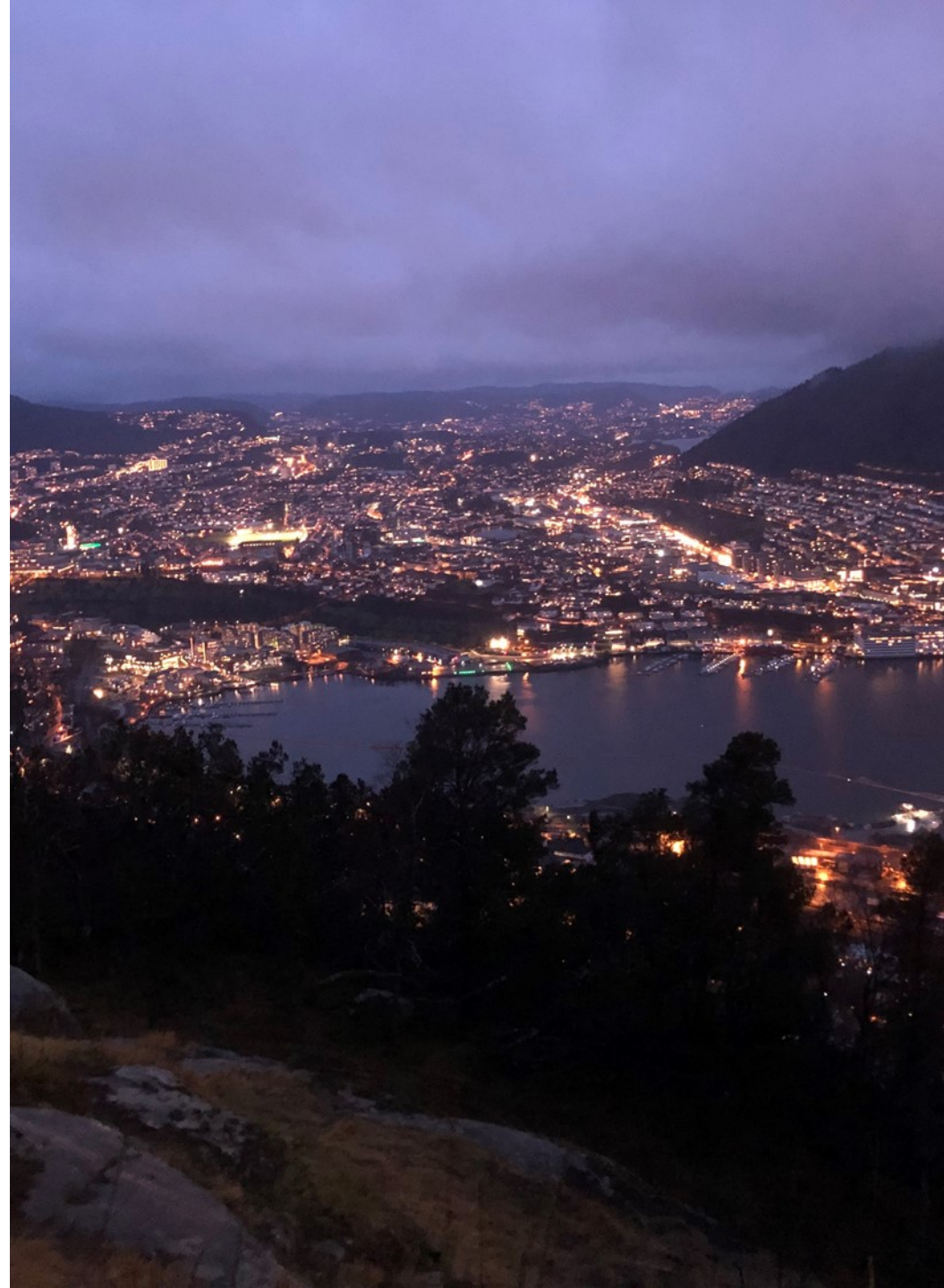
# Kan smart spesialisering være et verktøy for bærekraftig omstilling?

Lars Coenen

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Verkstad for Regional Utvikling 02.12.21

Kommunal- og moderniseringsdepartementet, Oslo



# Background work / paper

## Objective

- › Develop a conceptual framework and guidelines for the design and implementation of Smart Specialisation strategies (S3) for the achievement of the Sustainable Development Goals (SDGs)

## Team

- › Michał Miedziński (University College London), Katerina Ciampi Stancova (JRC), Monika Matusiak (JRC), and Lars Coenen (Western Norway University of Applied Sciences & University of Oslo)



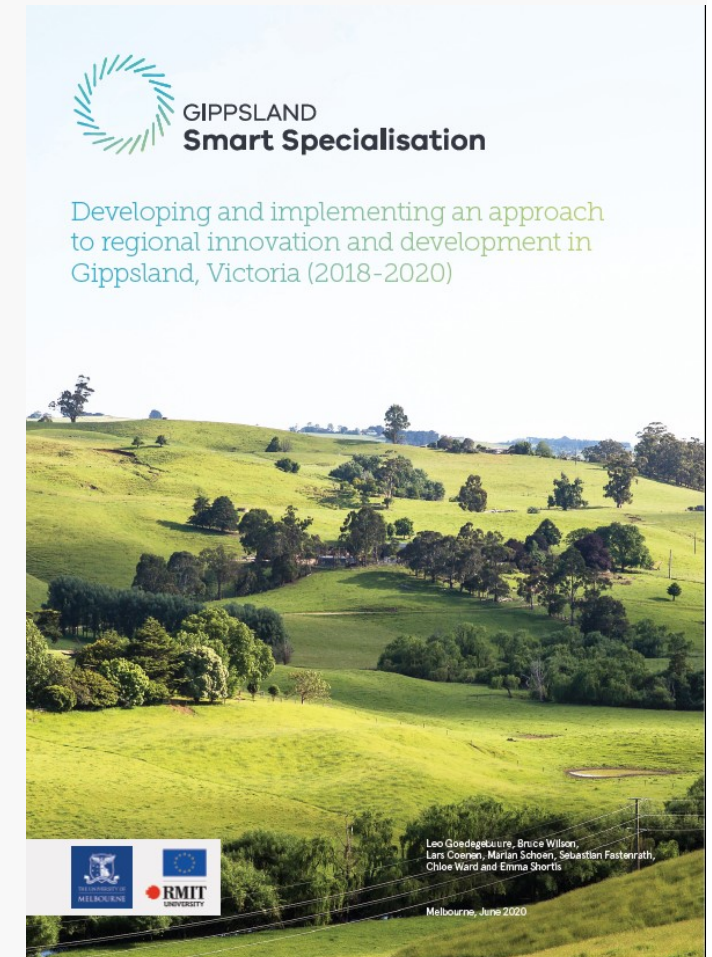
# Background work / paper

## Objective

- › Applying the ‘Smart Specialisation Strategy’ (S3) methodology pioneered in the European Union, this project initiated by the Victorian Latrobe Valley Authority brings together government, business, research and education and civil society in Gippsland to co-design a shared vision for the region’s future prosperity, environmental sustainability and social wellbeing.

## Team

- › Leo Goedegebuure, Lars Coenen, Sebastian Fastenrath, Marian Schoen (Univ. of Melbourne), Bruce Wilson, Emma Shortis & Chloe Ward (RMIT)



# Key questions for today

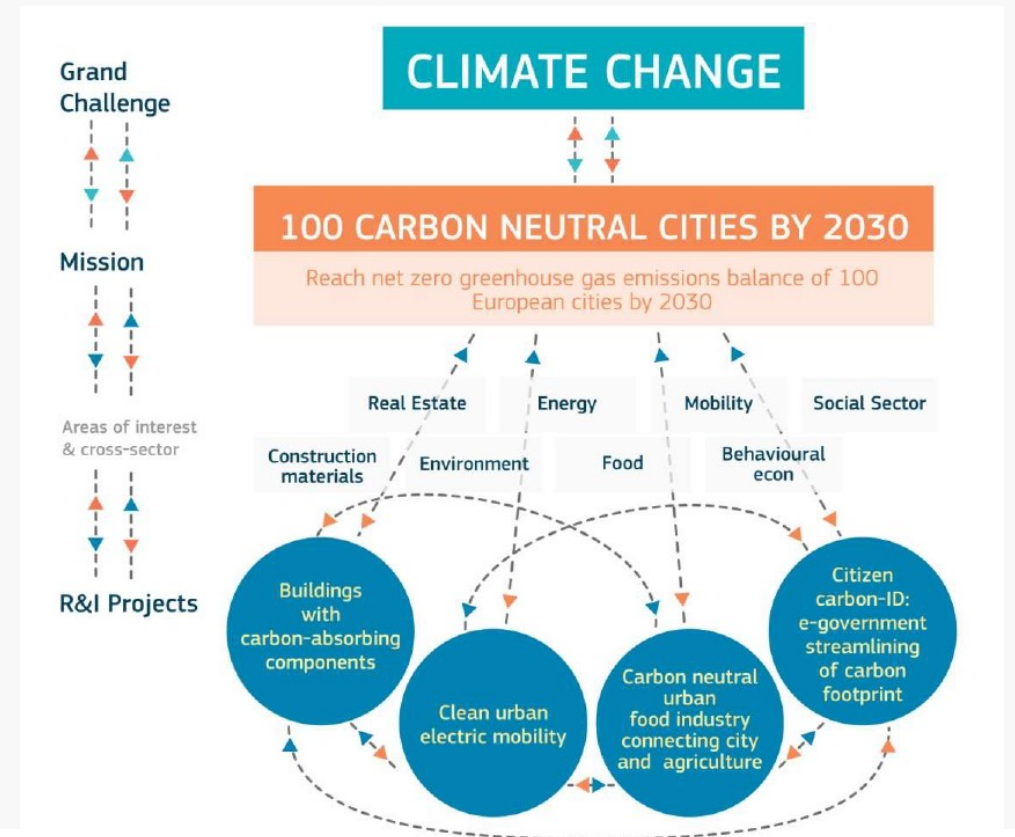
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- › What can smart specialization learn from research on sustainability transitions?
- › How can smart specialization be adapted to place-based sustainability transitions?

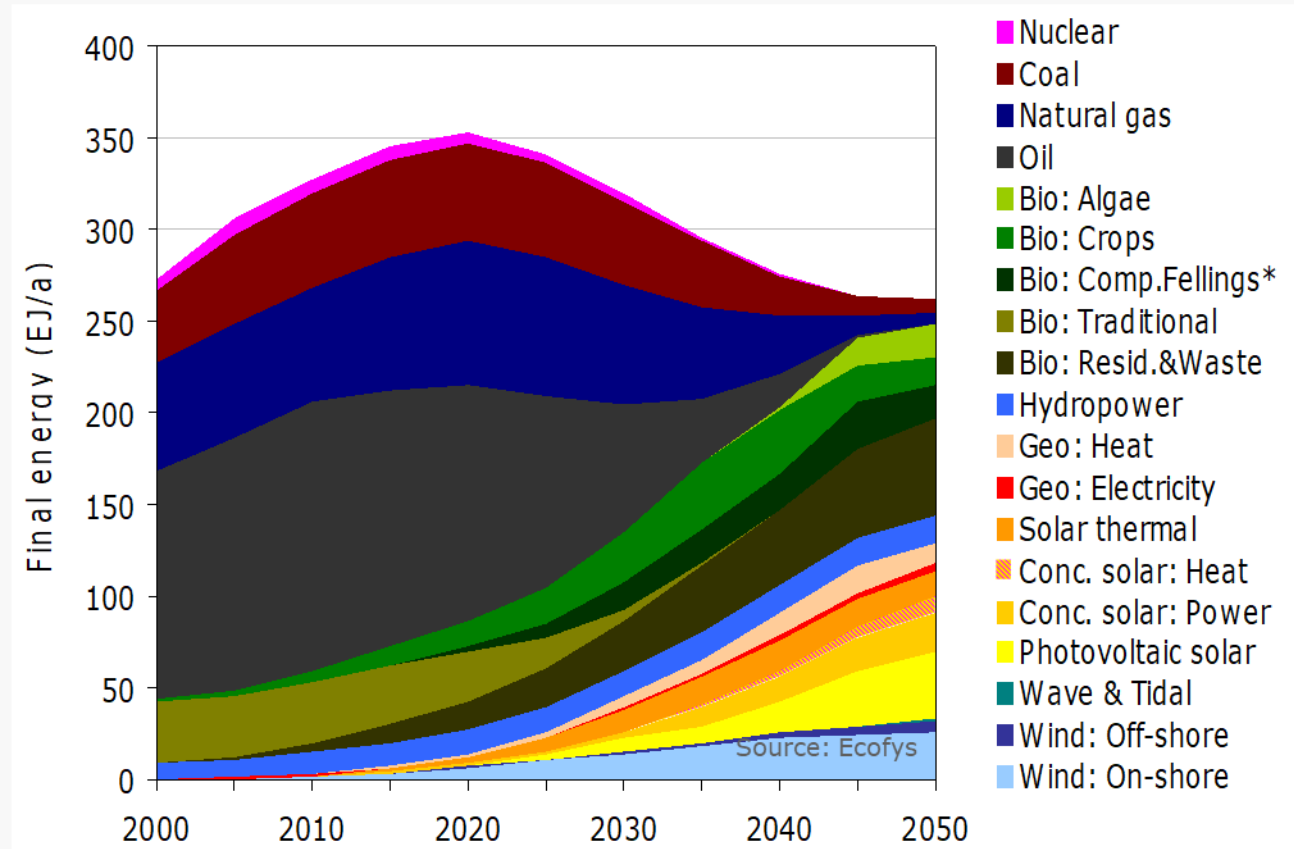


# Innovation for sustainability challenges

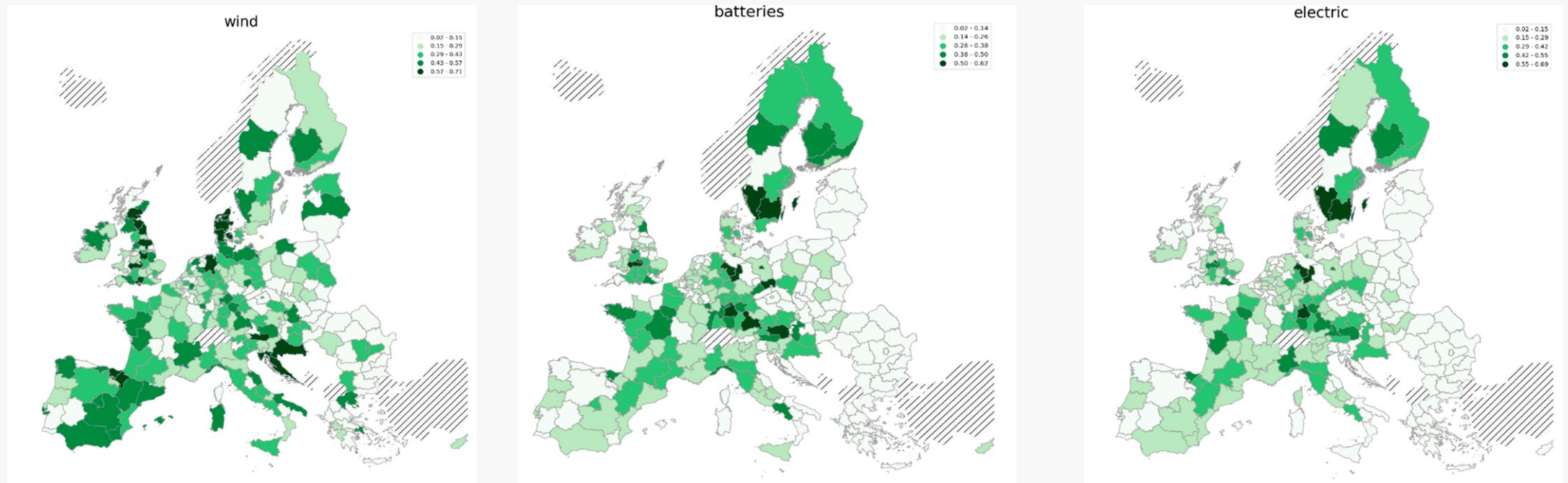
Lund Declaration(s) (2009; 2015): Europe must speed up solutions to tackle grand challenges through research, alignment and impact



# The transition to net-zero energy



# The uneven geography of low-carbon technologies



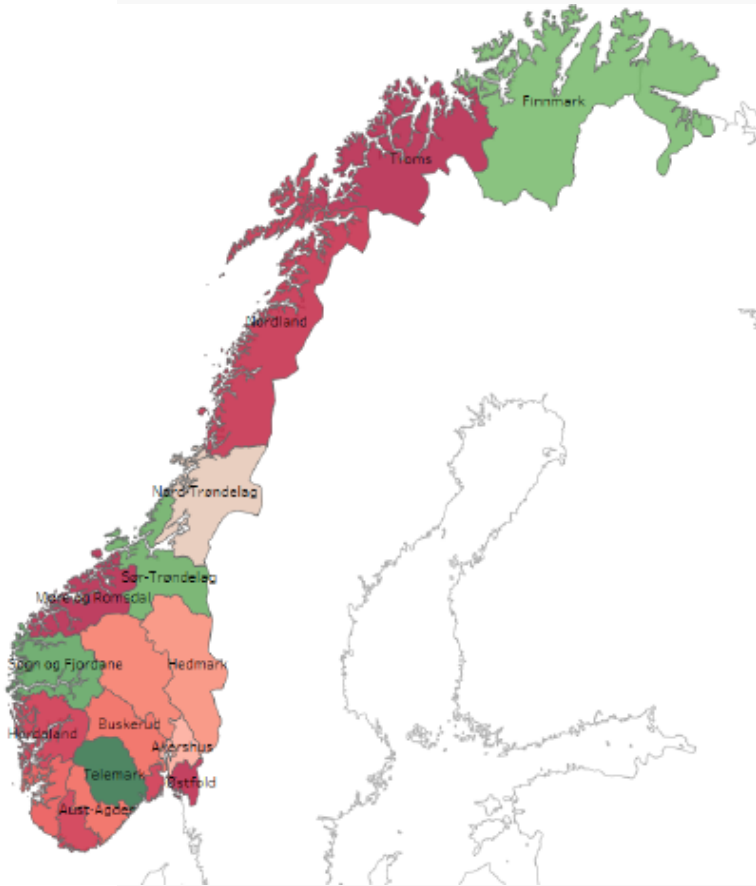
# What drives regional specialisation into green technology?

- › Technological relatedness enhances regional diversification into cleantech and
- › Specialisation in fossil fuel technology did not hamper cleantech knowledge production in European regions (van den Berge et al., 2020)
- › Regional presence of dirty technologies hampered the development of new green technological specialisations in a region
- but
- › ‘Dirty’ technologies can provide local capabilities on which new green technologies can build and
- › Relatedness tends to be weakened by national political support but strengthened by regional political support (Santoalha and Boschma, 2020)

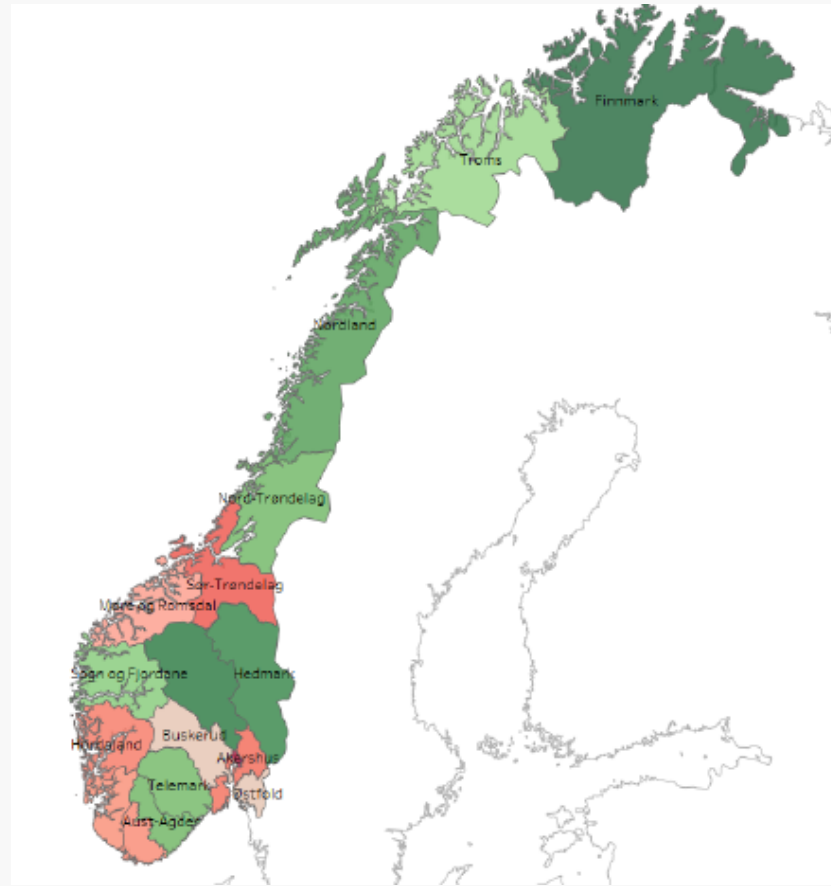


# The uneven distribution of green skills

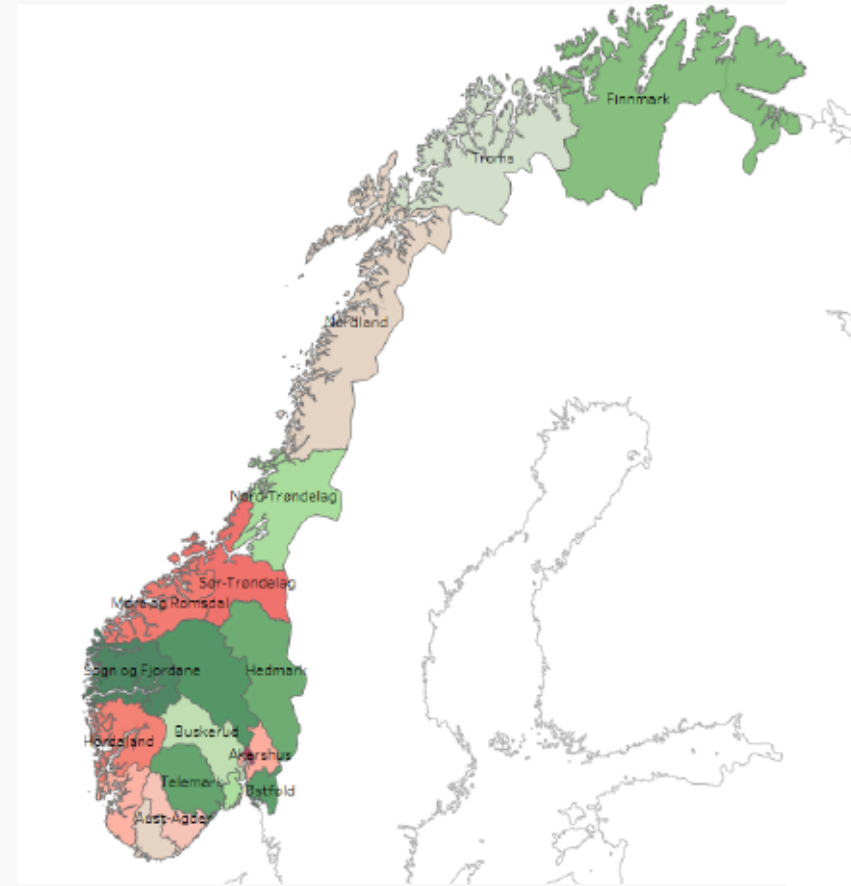
By education



By occupation



By firms



Source: GONST project - Østergaard, C. R., Holm, J. R., Iversen, E., Schubert, T., Skålholt, A., Sotarauta, M., ... & Suvinen, N. (2019). The geographic distribution of skills and environmentally innovative firms in Denmark, Norway, Sweden and Finland.

# Regional Innovation policy meets sustainability transitions

## VINNVÄXT Biorefinery of the future 2008-2018 Coenen et al. (2015)



# Biorefinery Örnsköldsvik



R&D-led renewal of traditional industry

Establishment of cutting-edge industrial symbiosis

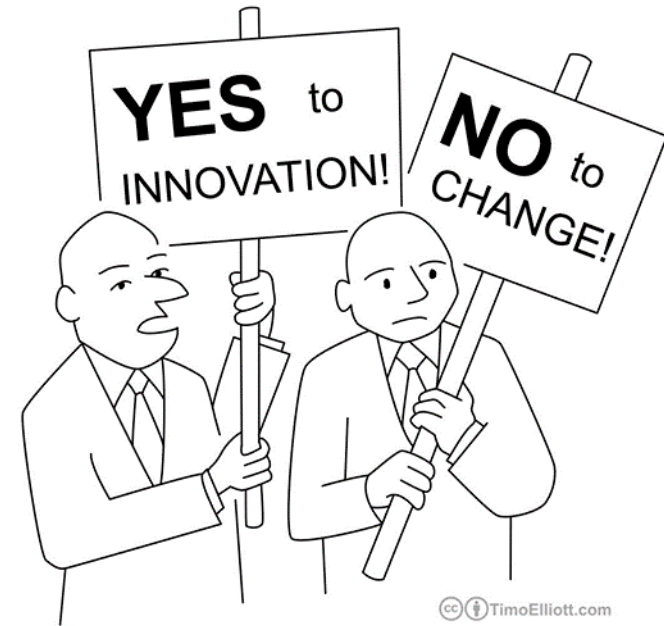
Diversification of paper and pulp industry

Non-technological barriers to innovation & transition

- Business models
- Regulatory framework
- Unintended consequences

# Three challenges for innovation in the context of sustainability transitions

- › **Wicked problems**
- › **Transformative change**
- › **The dark side of innovation**



*“We only have two demands!  
Why don't people just give us what we want?”*

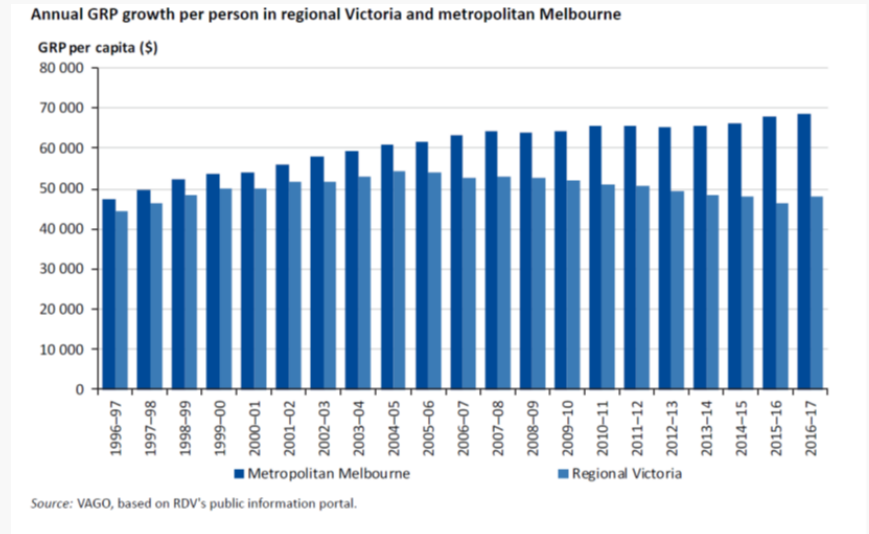
# Smart Specialisation for Just Transition: the case of Gippsland, Australia

Growing divide between urban and regional Victoria

Crisis & decline of coal industry

Search for a new model of regional development

Adoption of Smart Specialisation Strategy by the Latrobe Valley Authority





# Translating the Smart Specialisation 'Manual' to Gippsland

- › **Analysis**
  - › Regional Innovation System + sustainability challenges
  - › Tradeable & foundational economy
- › **Governance**
  - › Innovation stakeholders + 'problem owners'
  - › Nurture collaboration, trust and deliberation
- › **Entrepreneurial Discovery Process**
  - › Collective experimentation, problem-solving & contested innovation
- › **Policy Mix**
  - › Growing institutional capability
- › **Monitoring and Evaluation**
  - › Fit-for-purpose / policy-learning

# Transformative challenges for Smart Specialisation

- › **Directionality** - Shared direction towards the SDGs
- › **Demand articulation** – Beyond technology push
- › **Policy coordination** – limited capacities of individual regions
- › **Reflexivity** – responsible innovation and associated dilemmas





Thank you