

# Fostering economic convergence for the green transition

How can the challenges of climate change mitigation and socio-economic convergence in the EU be addressed together?

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## Four key messages

1. The Green Transition is essential, but opportunities and challenges are distributed unequally across countries and regions
2. The resulting inequality bears danger of socioeconomic divergence and failure of the green transition
3. Challenges must be addressed by a mix of active industrial and energy policy – market-based policy alone will not suffice
4. The right policy measures need to be country-specific

In order to promote its overall harmonious development, the Union shall develop and pursue its actions leading to the strengthening of its **economic, social and territorial cohesion**.

*EU Treaty*



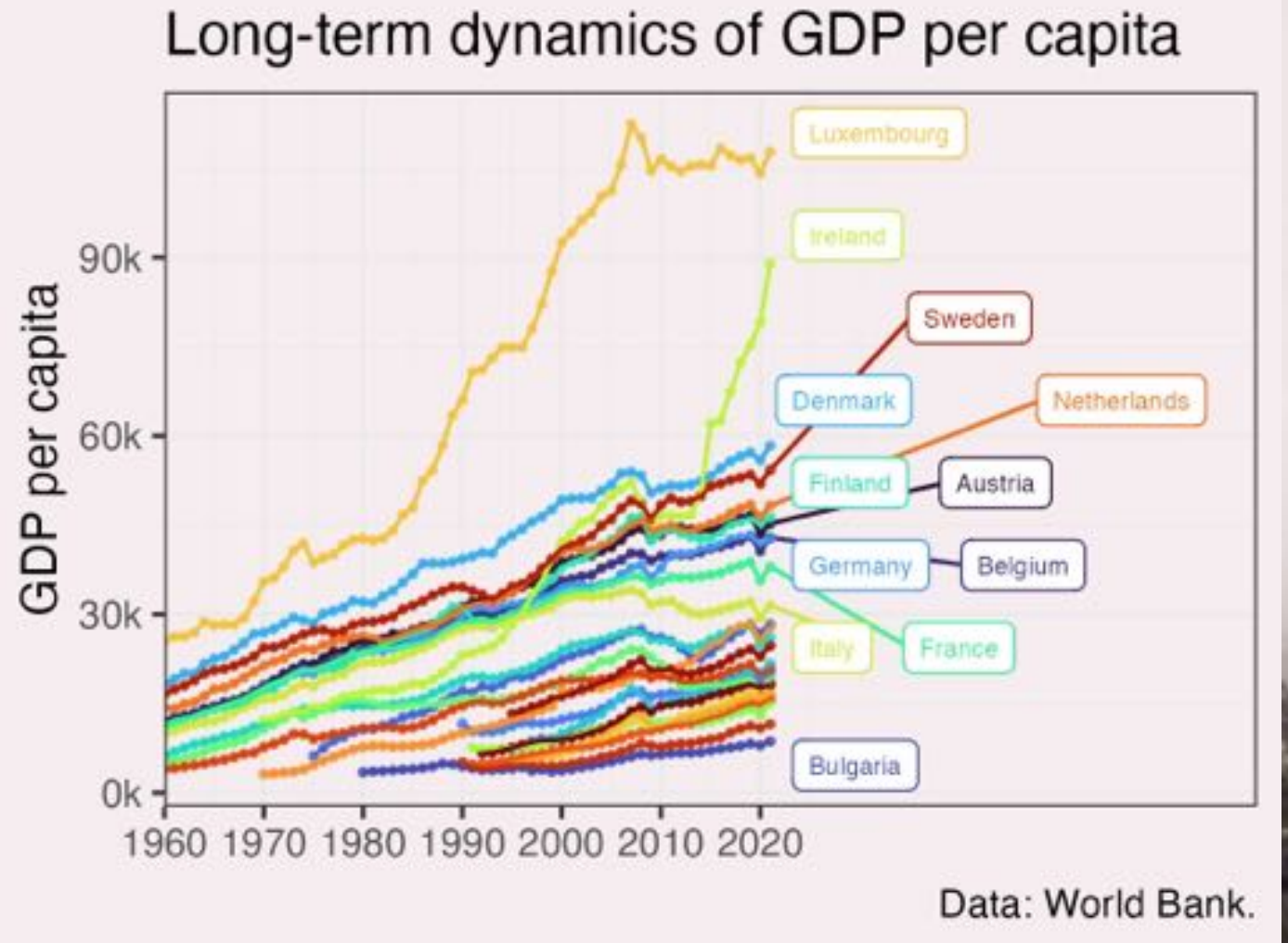
Cohesion policy is so powerful, [...] because it delivers on **a core promise of our Union** – that all regions are equal, that European citizens, no matter where, can live safe and prosperous lives.

*Ursula von der Leyen 2022*

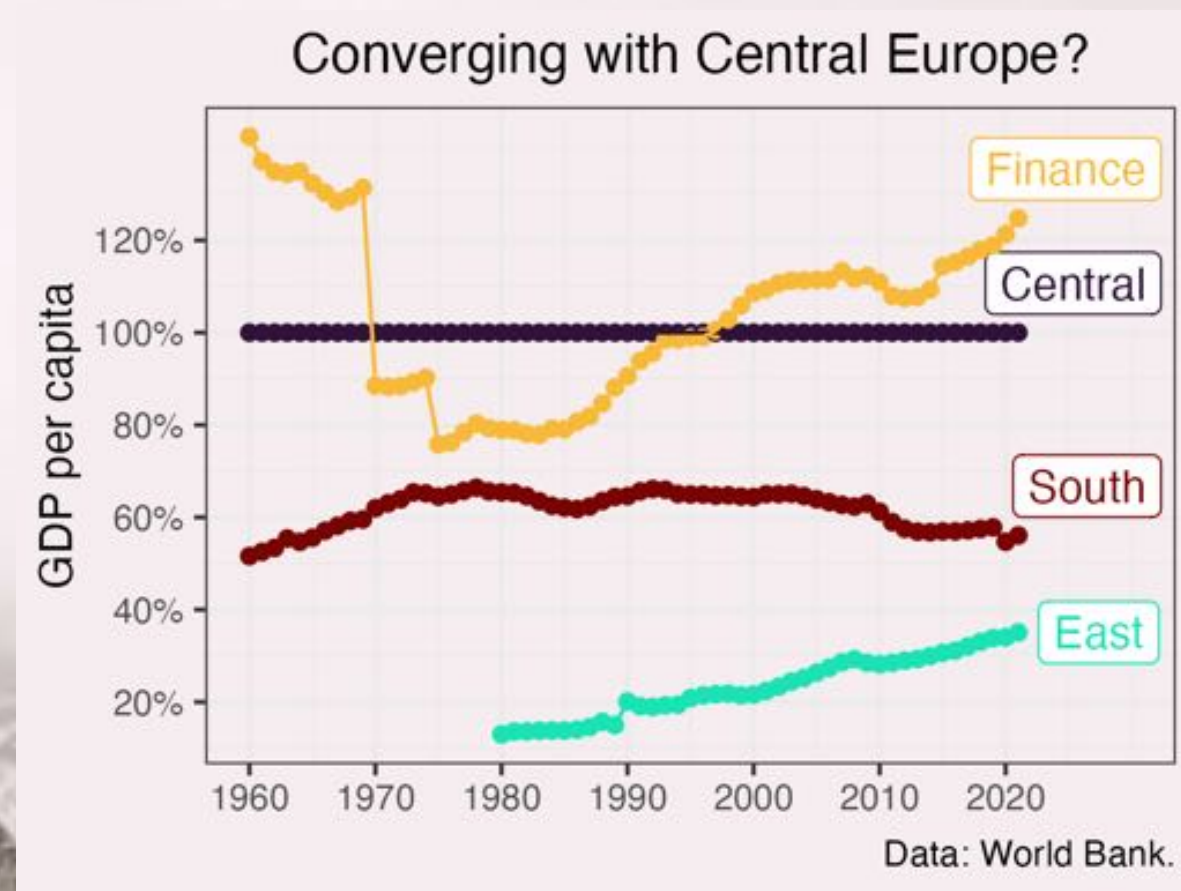
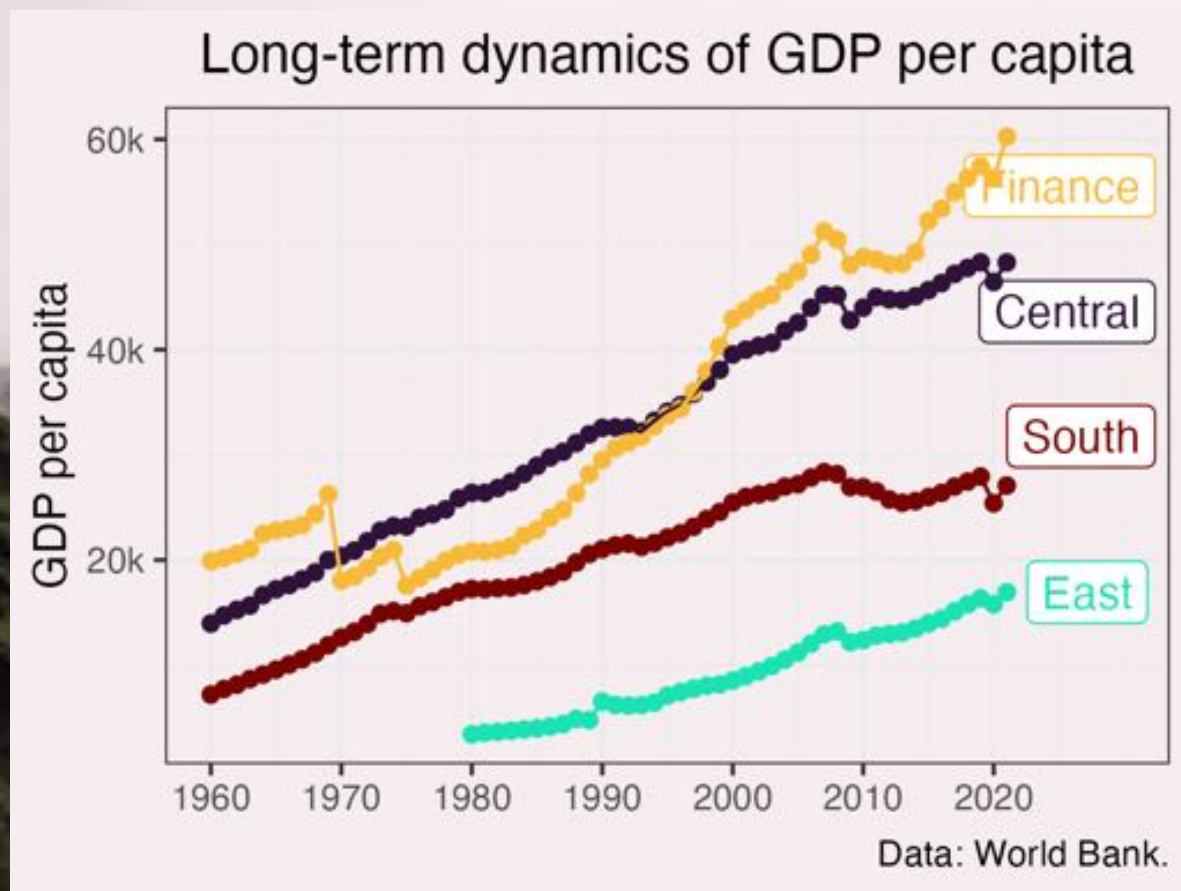


# What about convergence in previous decades?

Hard to  
tell on the  
country  
level...



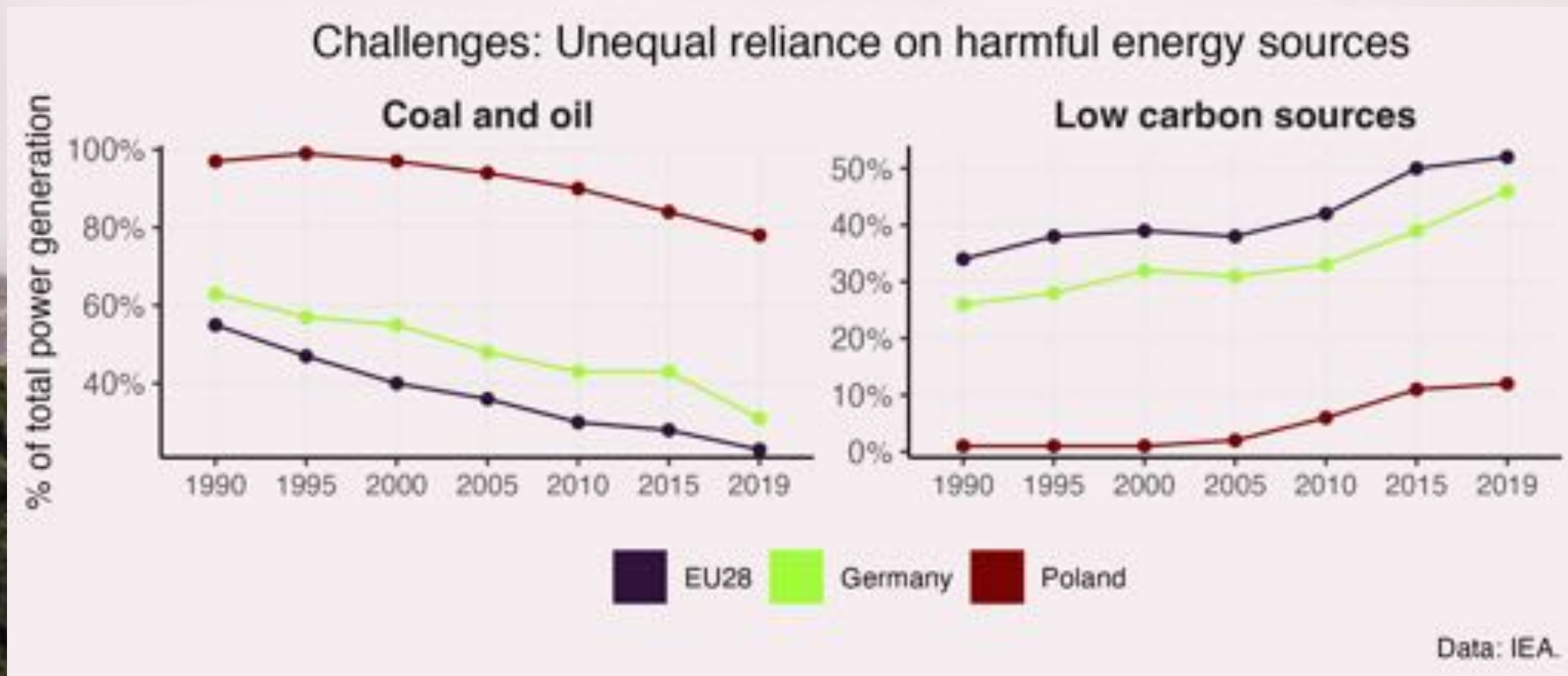
# What about convergence in previous decades?



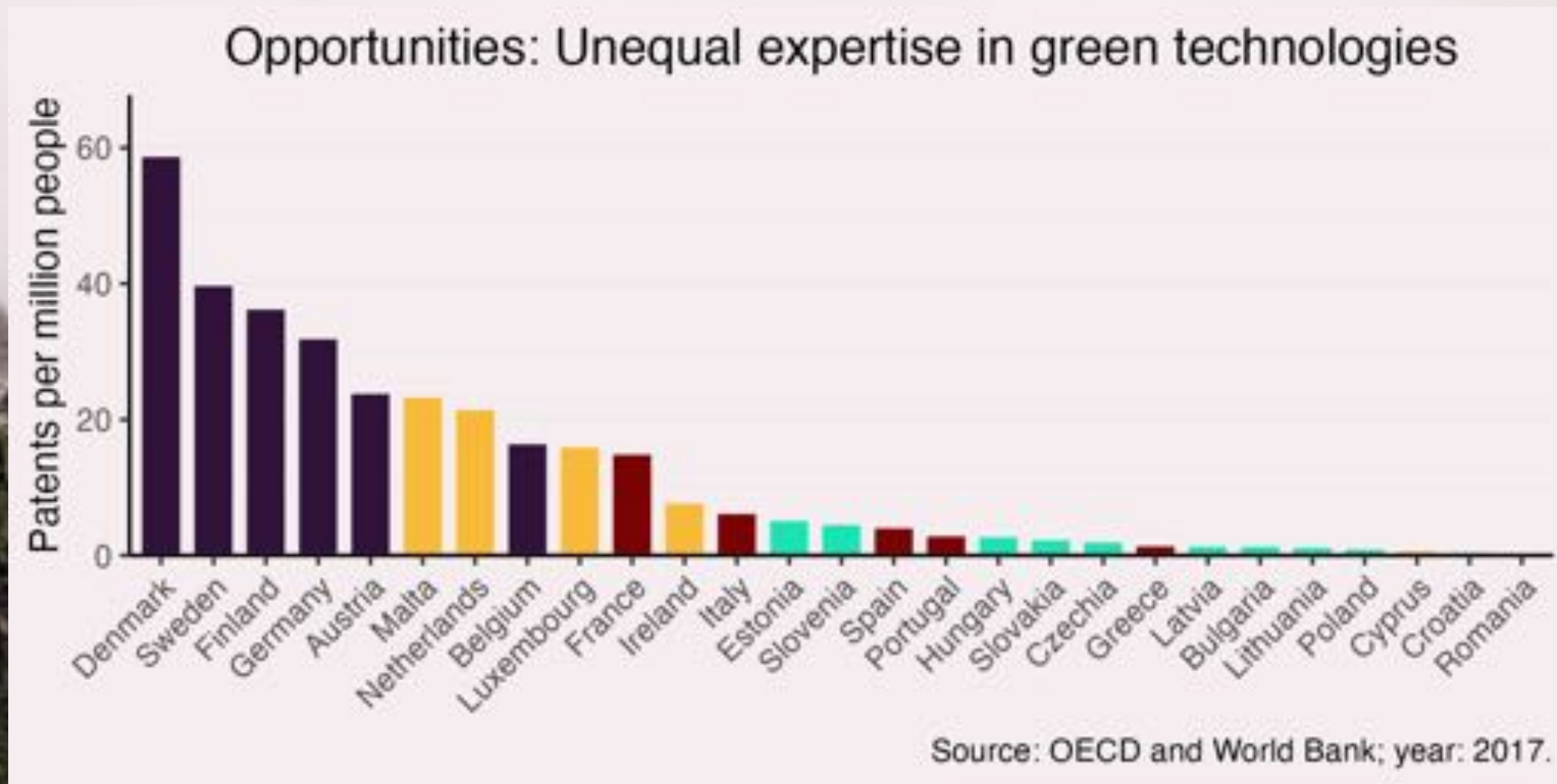
More details on country taxonomy: Gräbner et al. (2020), Structural change in times of increasing openness: assessing path dependency in European economic integration, *Journal of Evolutionary Economics*.  
<https://doi.org/10.1007/s00191-019-00639-6>



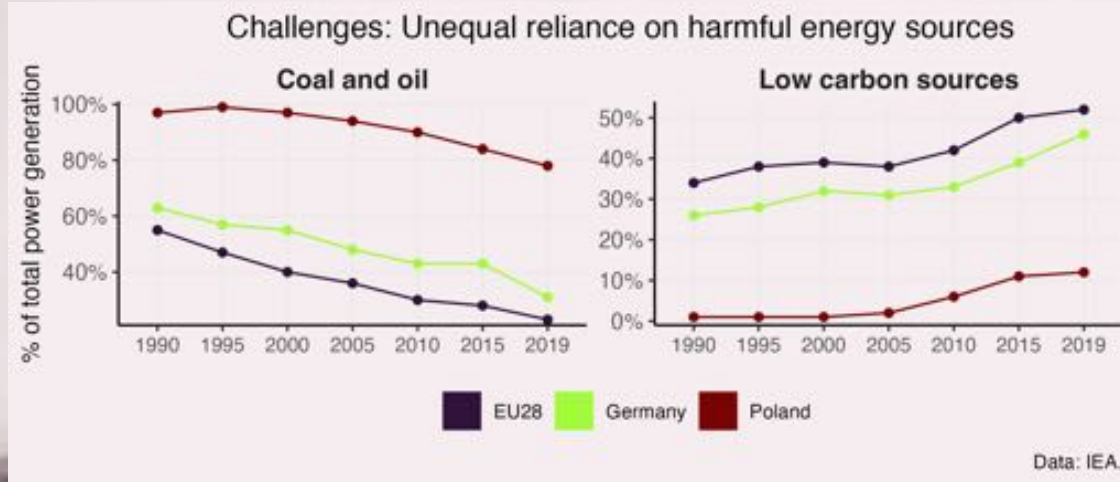
# The green transition as a thread to catch-up dynamics?



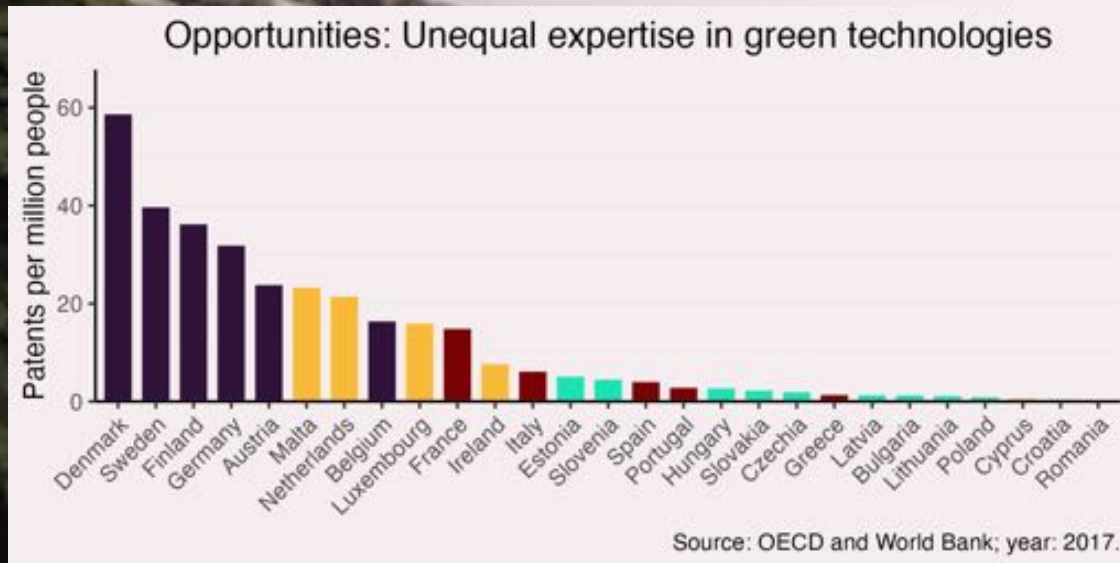
# The green transition as a thread to catch-up dynamics?



# The green transition as a thread to catch-up dynamics?



- Unequal distribution of challenges and opportunities
- Inequalities as potential source for dangerous path dependencies



This threatens the future of the EU and a successful green transformation



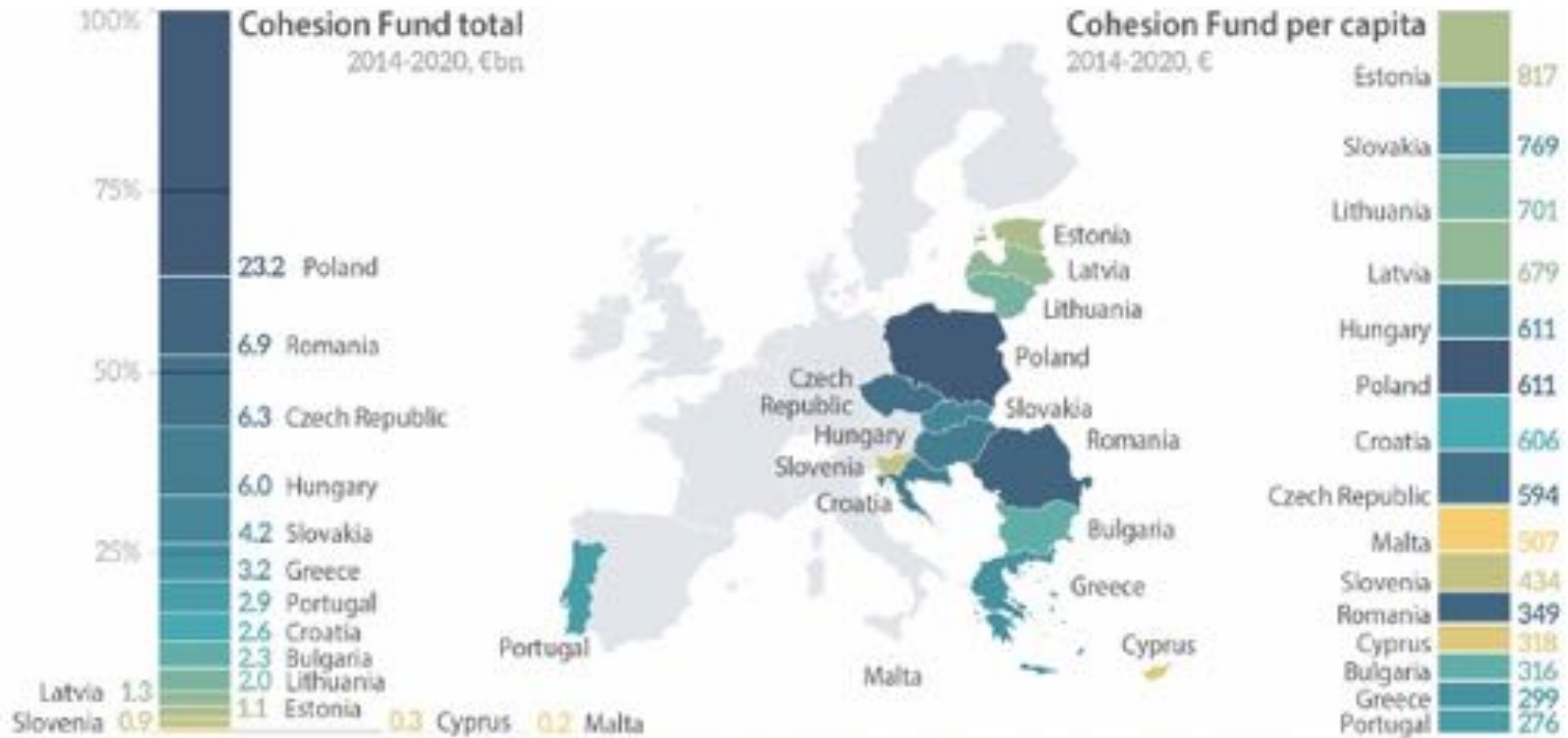
A scenic view of a mountain range. The foreground shows a steep, green mountain slope with some dark, rocky patches and small evergreen trees. In the background, more mountain peaks are visible, some covered in snow or light-colored rock, and the entire scene is shrouded in a thick, white mist or fog, creating a sense of depth and mystery.

How to achieve  
convergence and the  
green transformation?

Not all Member States, regions and cities start the transition from the same point or have the same capacity to respond. These challenges require a strong policy response at all levels.

EU Green Deal



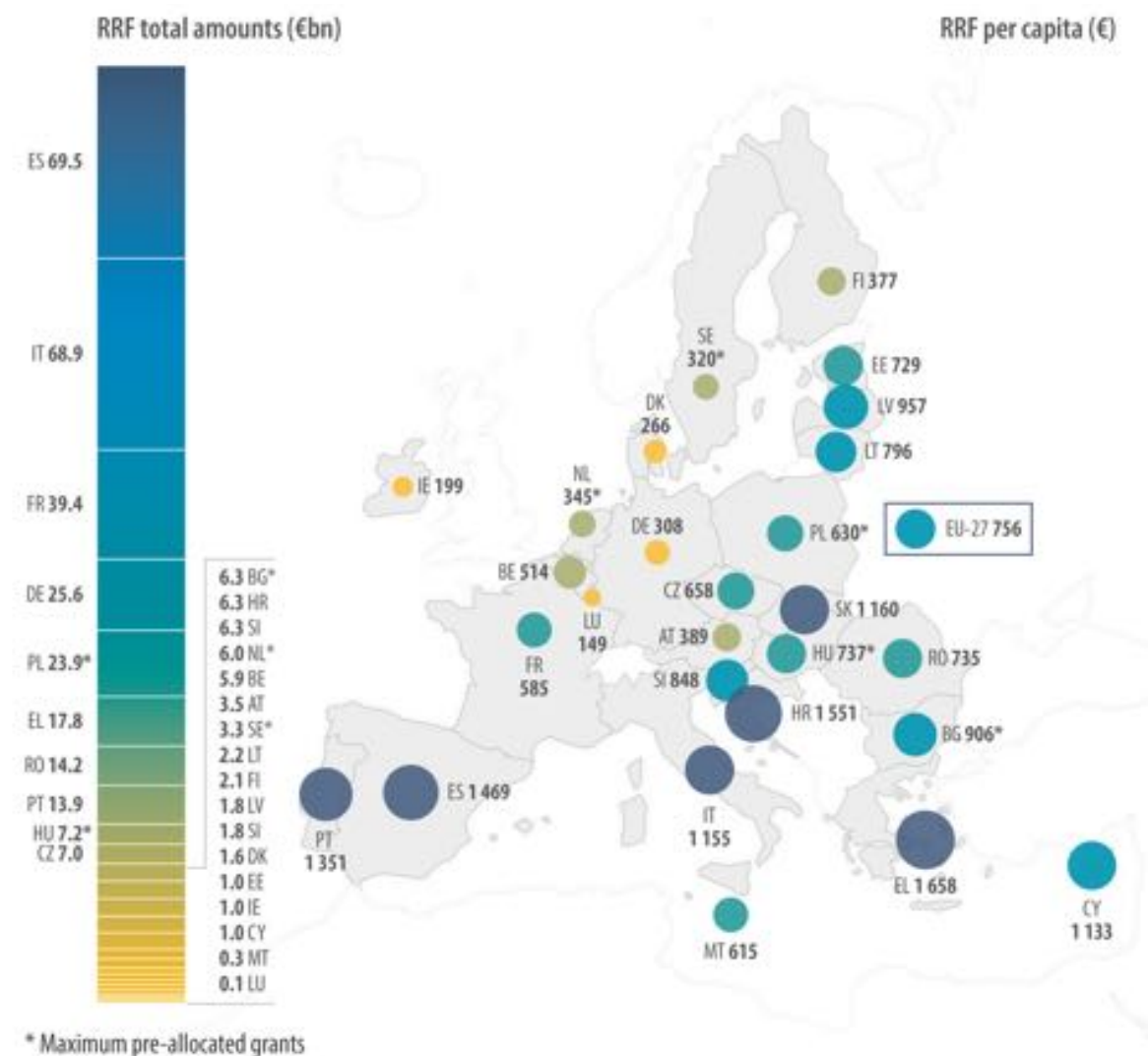


Cohesion Fund allocation per Member State and per Capita (2014-2020)

Source: EPRS (n.d.) based on EC (n.d.) and Eurostat (n.d.) data:

<https://epthinktank.eu/2016/10/10/eprs-and-the-2016-european-week-of-regions-and-cities/the-cf-allocation-per-member-state/>





Source: EPRS based on European Commission and Eurostat data

EPRS| European Parliamentary Research Service

RRF grants by Member State and per capita (current prices)

Source: EPRS based on EC and Eurostat data:

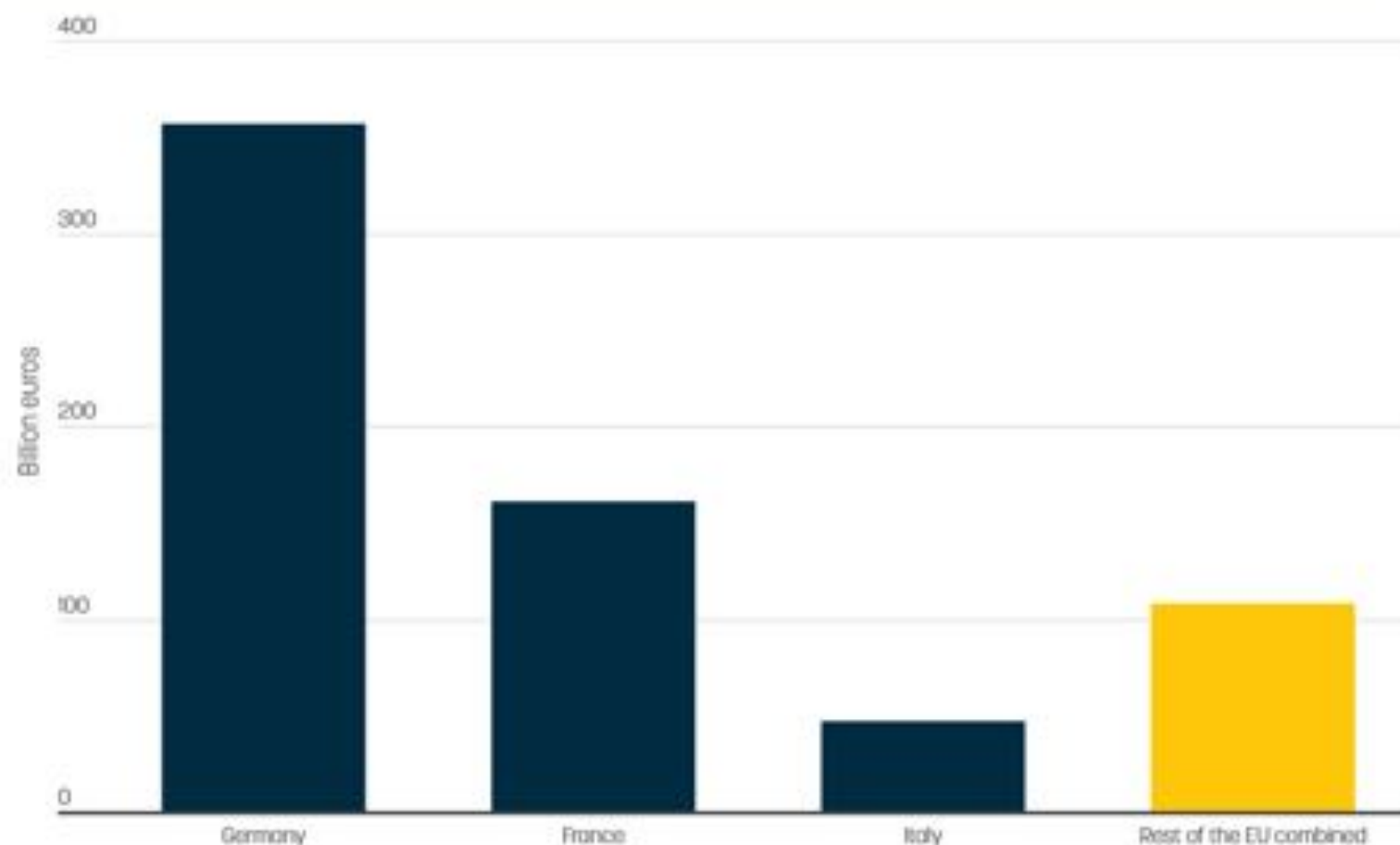
[https://epthinktank.eu/recovery-and-resilience-map-update-oct2021\\_gw/](https://epthinktank.eu/recovery-and-resilience-map-update-oct2021_gw/)

A photograph of a modern industrial factory floor. Several large, orange robotic arms are visible, positioned over a complex system of metal tracks and machinery. The background shows more industrial equipment and a bright, well-lit environment. A semi-transparent teal banner is overlaid on the top half of the image, containing white text.

€ 933bn

Additional yearly investments in the EU  
needed to achieve net-zero by 2050  
(McKinsey 2020: Net Zero Europe)

## State aid under the "Temporary Crisis Framework"



Notes: State aid approved under the Temporary Crisis Framework and related Treaty measures.

Source: Letter of EVP Vestager to EU finance ministers on 13 January, 2023.



A scenic view of a mountain range. The foreground shows a steep, green mountain slope with some dark patches, possibly rocks or dense vegetation. In the background, several mountain peaks are visible, some covered in snow or light-colored rock, and the entire scene is shrouded in a thick, white mist or fog, creating a sense of depth and mystery.

Why markets alone cannot  
solve this and we need active  
industrial policy





60%

Of the necessary investments for the EU to become carbon neutral by 2050 don't have a business case. (McKinsey 2020)



An aerial photograph of a city landscape. In the foreground, a multi-lane highway with several overpasses and ramps is visible, with cars traveling in both directions. To the left of the highway, there's a river flowing through the city. In the background, a dense urban skyline is visible under a clear blue sky with some light clouds. The overall scene depicts a modern, developed urban environment.

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## Fiscal Policy for a Thriving Europe

A Feasibility and Impact Analysis  
of Fiscal Policy Reform Proposals

ZOE Institute for future-fit economies  
Transformative Report #2 – 10/2021

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## New Fiscal Rules for the EU – Design Choices Matter

ZOE Institute for Future-Fit Economies





## Path dependencies

1. Pre-conditions for production
2. Relatedness of technological capabilities

A scenic photograph of a mountain range. The foreground shows steep, green slopes with patches of dark rocks and small evergreen trees. In the background, jagged mountain peaks are partially obscured by thick white mist or low clouds. The overall atmosphere is serene and somewhat somber due to the overcast sky.

How to fix this with Industrial  
Policy?



# Carrots and Sticks: Making Industrial Policy successful through conditional support





An aerial photograph of a modern, multi-story building with a prominent green roof. The roof is covered in lush green vegetation and small trees. The building has a modern architectural style with large windows and balconies. The surrounding area is also green, with trees and a paved walkway. The image is used as a background for the text overlay.

## Building future-fit Industries:

1. Ecologically sustainable
2. Economically viable
3. Related to existing capabilities

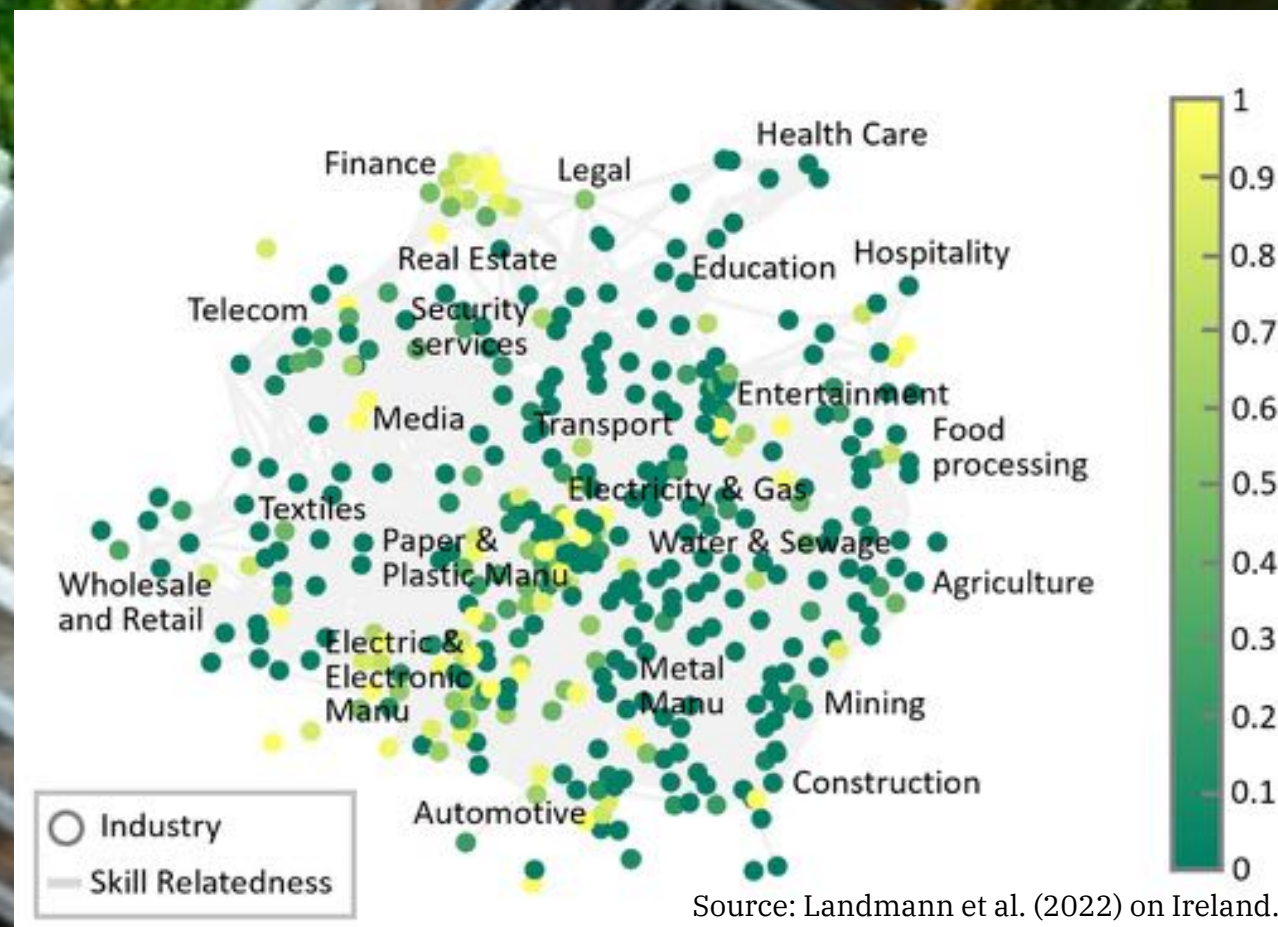
(Hafele et al., forthcoming)



# The challenge of skill relatedness

Countries cannot simply move from one set of economic activities to another

New activities must be related to the present ones

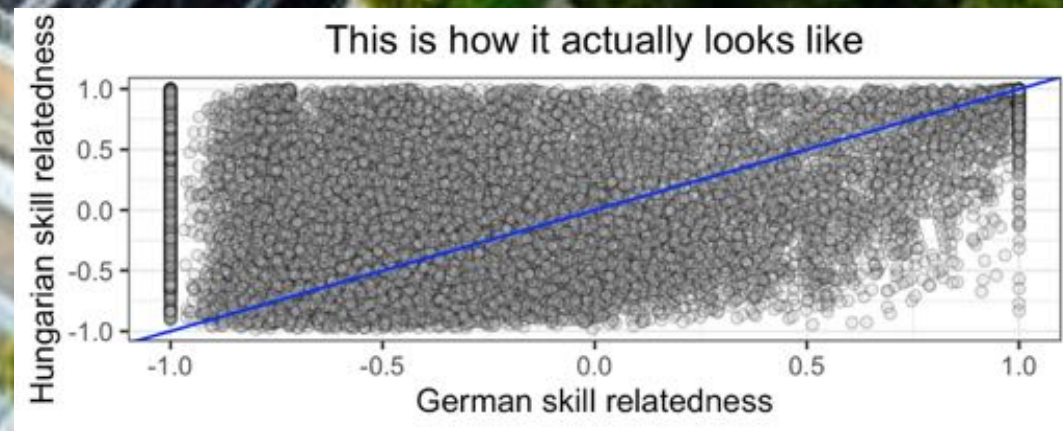
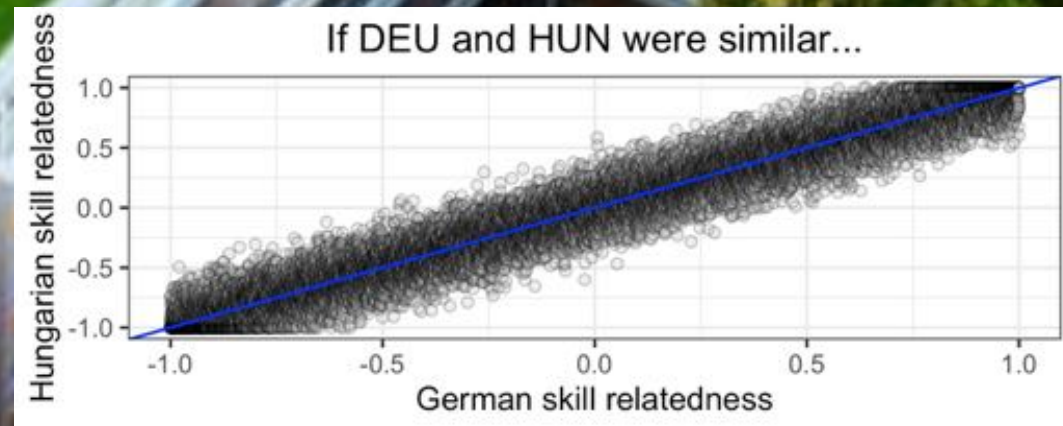




# The challenge of skill relatedness

Relatedness networks are very country-specific

Transition strategies must be country-specific as well





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# Outlook: selected open questions

1. What are country-specific key vulnerabilities and opportunities?
2. Which industries to support, which to phase out?
3. How does skill relatedness differ across countries and how does it translate into industrial policy?
4. How to get the political support to implement these policies?

# Outlook: open research questions – selected works

Governing a green transition – Identifying future-fit replacement sectors for threatened industries in Germany and Hungary



The Green Transition and Polarization in Europe  
A multi-level assessment with Germany and Poland as Case Studies





# Thank you

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