Energising EU Cohesion

Powering up lagging regions in the renewable energy transition

BertelsmannStiftung

3 Goals of the European Green Deal by 2050

- No net emissions of greenhouse gases (GHG)
- Decoupled economic growth from resource use
- No person and no place left behind

Where are the GHG emissions coming from?

Source: EEA

Renewable energy transition …

Phasing out fossil energy

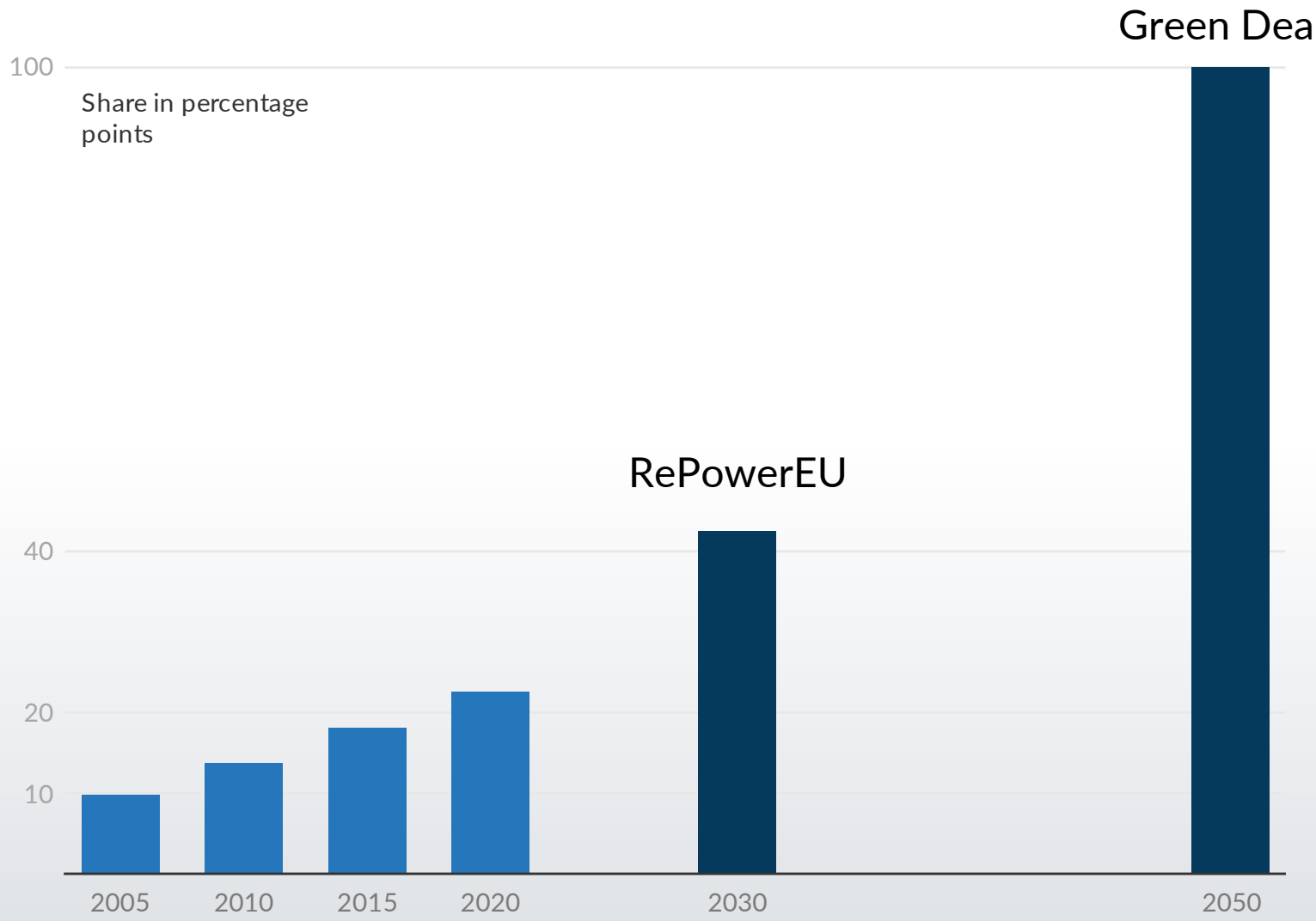
- Electricity generation
- Space heating
- Mobility and transportation

Expanding renewable energy

- More wind, solar, hydropower, …
- Electrification of everything
- Storage and adapted grid

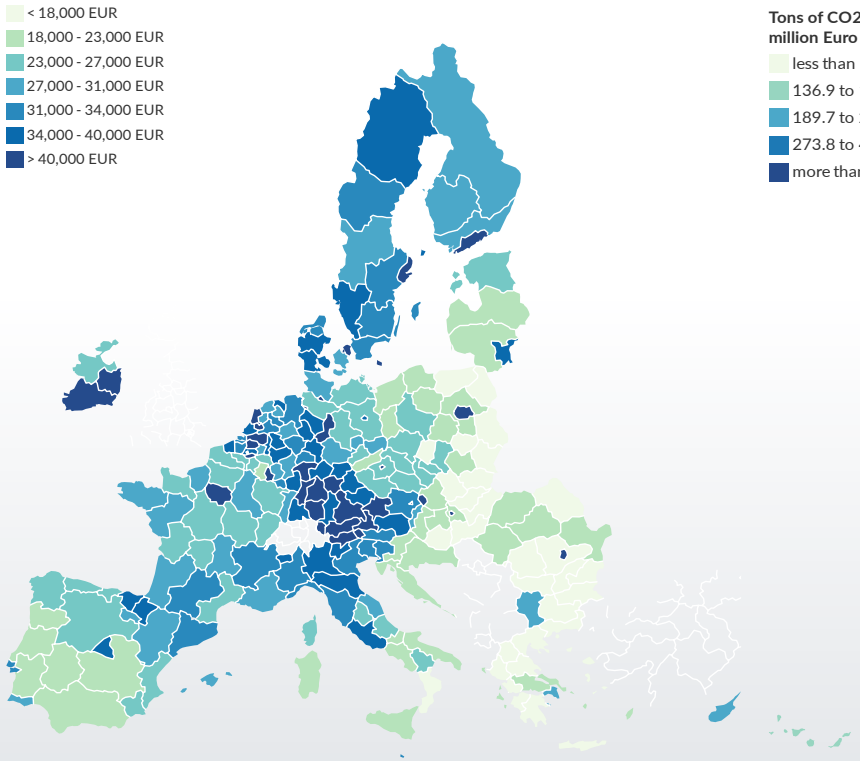
… with substantial impact on the economy

Where do we stand with renewable energy?

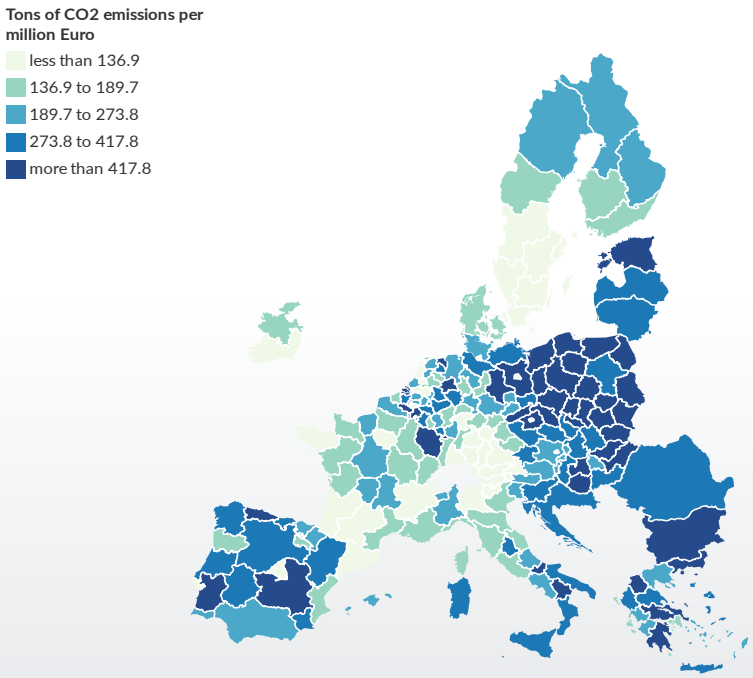


Different regional starting positions

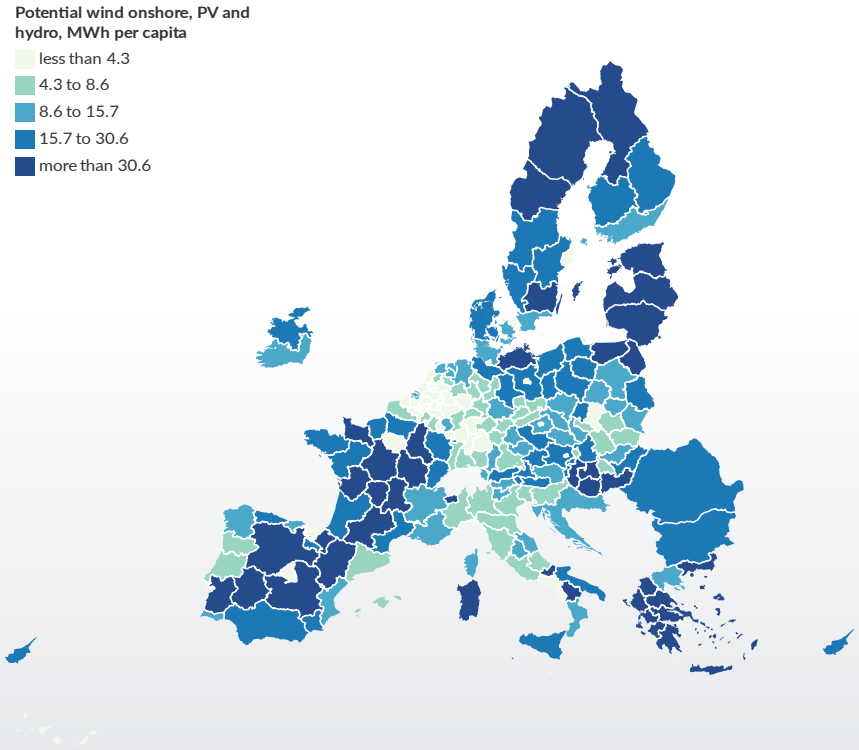
GDP (per capita, 2019)



CO_2 intensity (2019)



Renewable potential



This study

- What are the economic effects of the renewable energy transition?
- Which regions are likely to gain?
- What does this mean for economic cohesion in Europe?

Energy transition impacting the economy

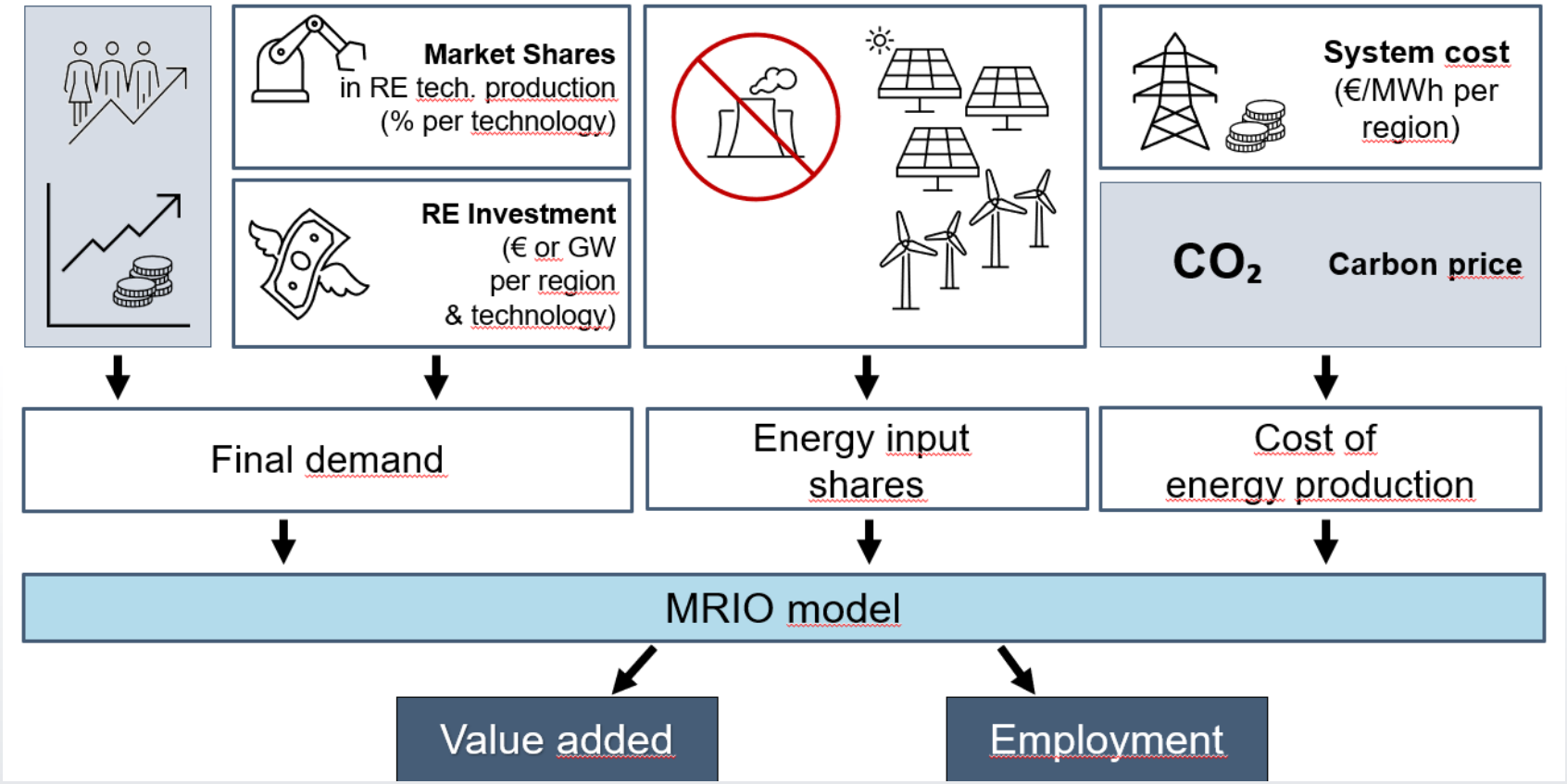
Phasing out fossil energy

- Reduction in mining and exploration activities
- Less processing of fossil materials
- End of power generation from coal and gas and fossil cars

Phasing in renewable energy

- Producing more solar panels, wind turbines, …
- Installing panels and turbines
- Maintenance of panels and turbines

Economic model for assessing the impact

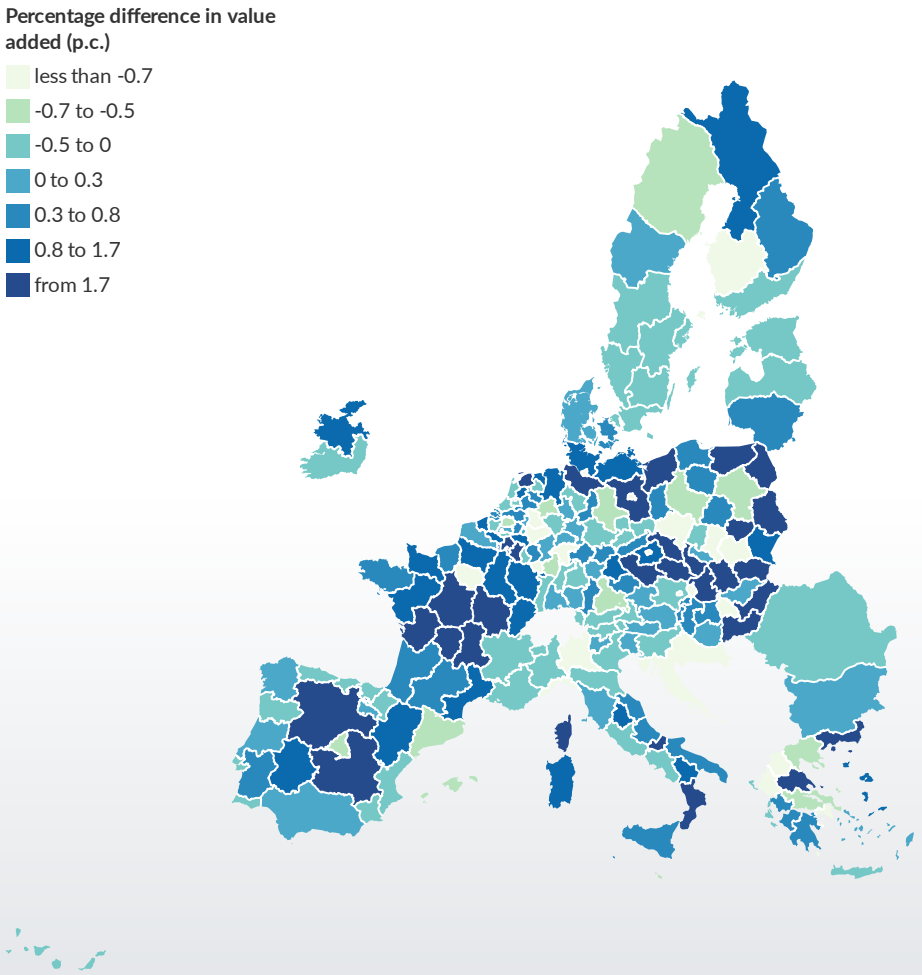


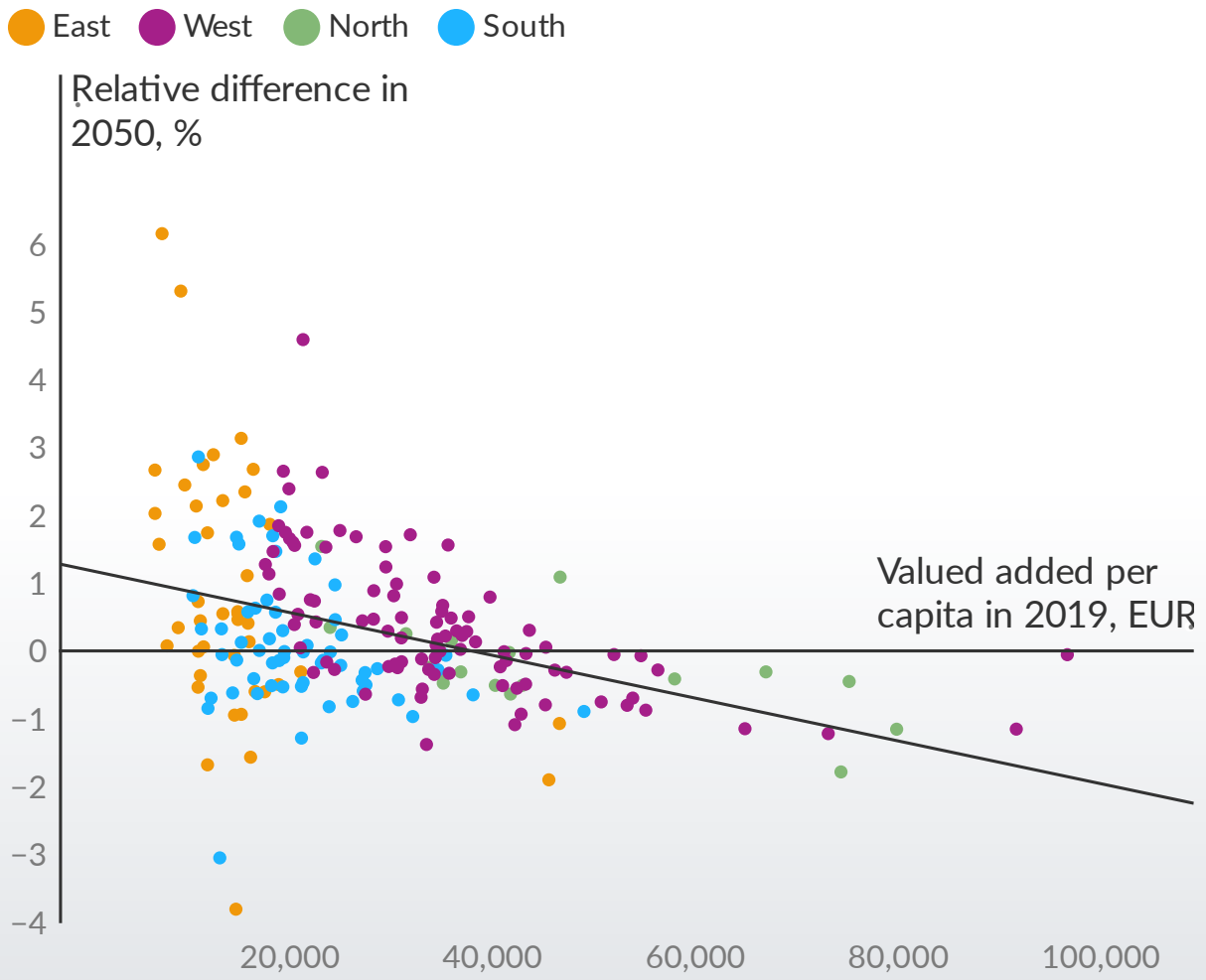
No change on overall economic performance …

- 0.3% less value added in 2050
- 0.1% less employment in 2050

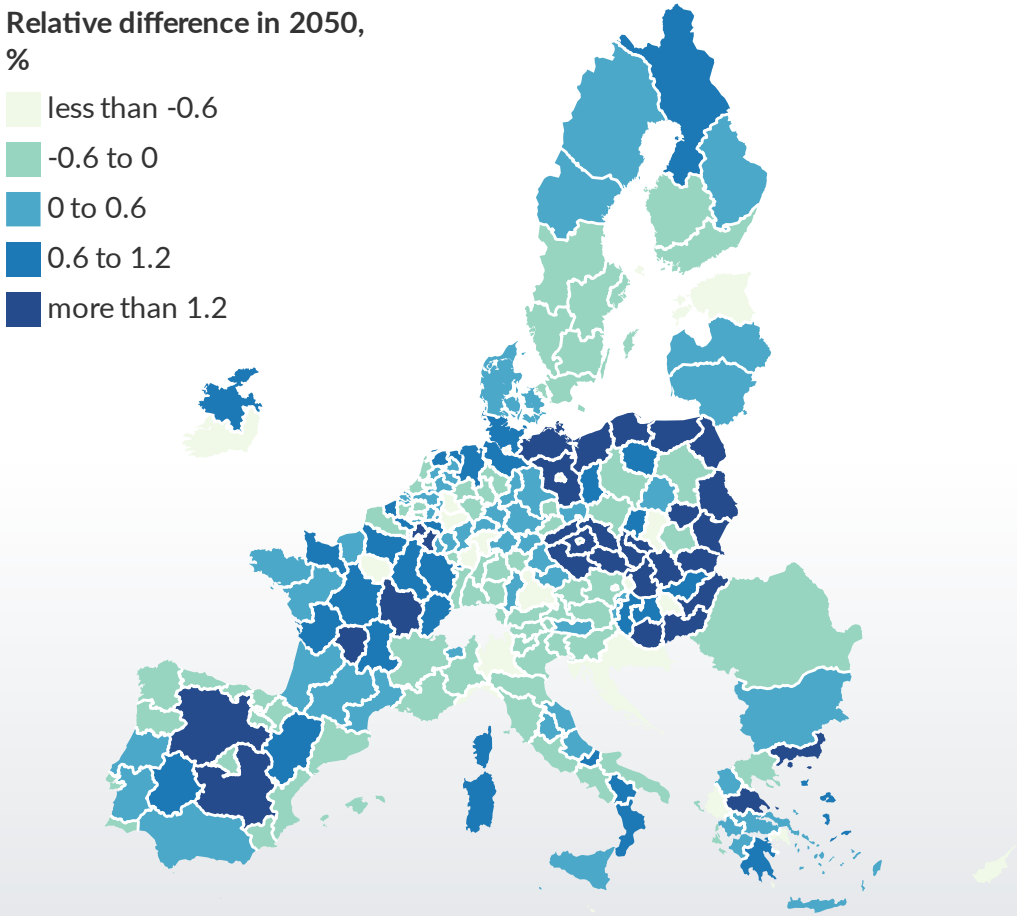
… but substantial variation across regions!

More value added in lagging rural regions





More employment lagging rural regions by 2050



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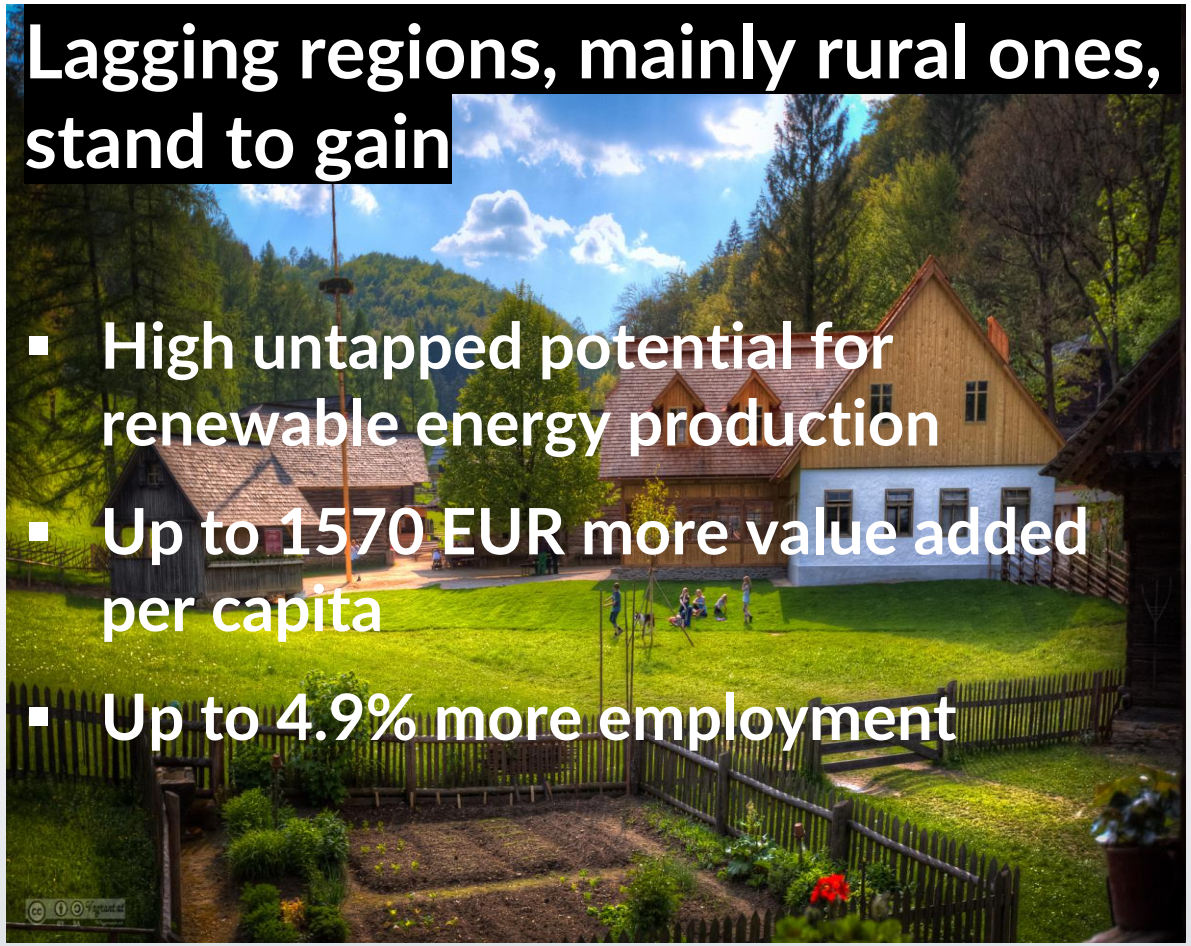
Rural regions to catch up

Lagging regions, mainly rural ones, stand to gain



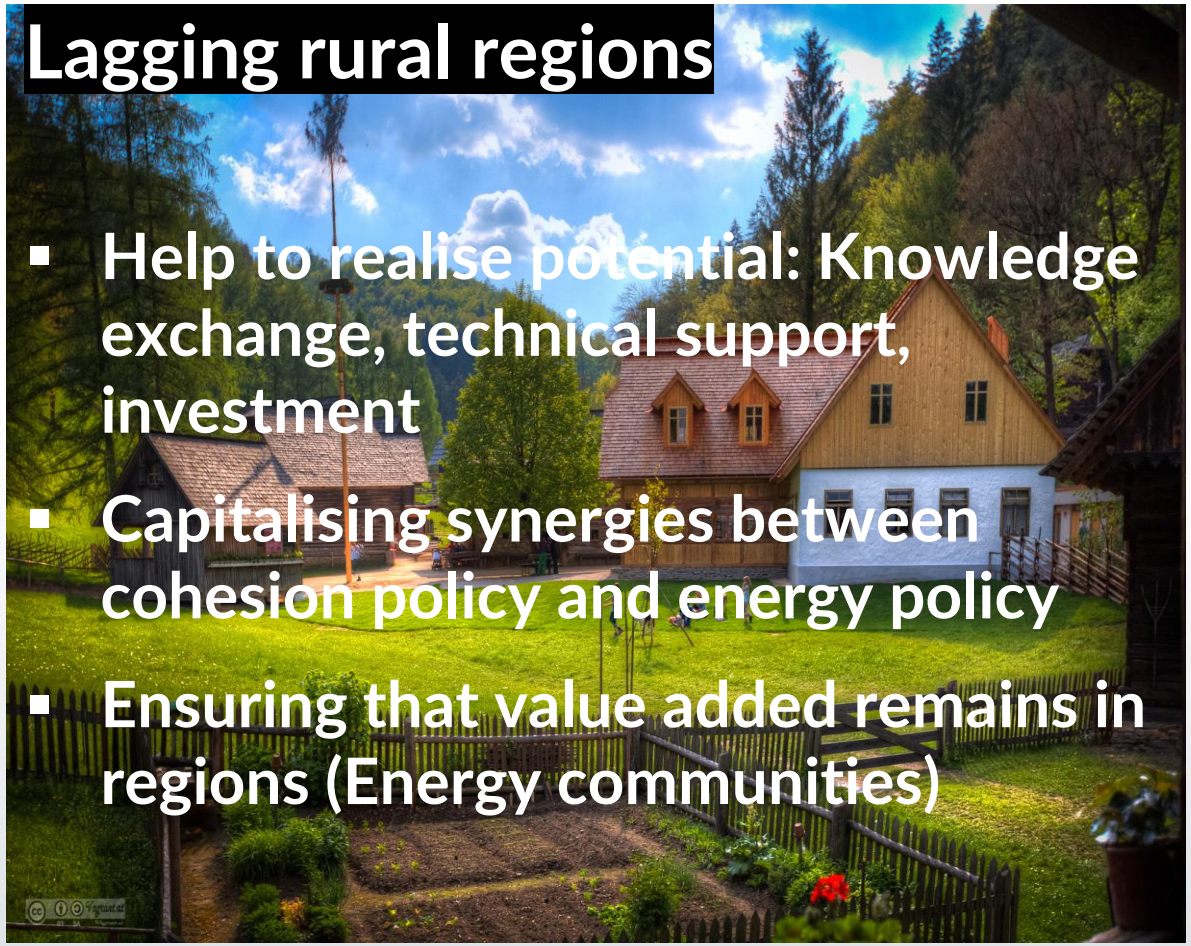
- High untapped potential for renewable energy production
- Up to 1570 EUR more value added per capita
- Up to 4.9% more employment

Urban regions, many economically leading, will be challenged

- Limited renewable energy potential while high energy demand
- Up to 2450 EUR less value added per capita
- Up to 2.1% less employment

Cohesion Policy needs to adapt

Lagging rural regions



- Help to realise potential: Knowledge exchange, technical support, investment
- Capitalising synergies between cohesion policy and energy policy
- Ensuring that value added remains in regions (Energy communities)

Leading urban regions

- Risk of ending support for renewable energy transition and, thus, the Green Deal
- Proactive management to maintain current economic prosperity
- Collaborations with rural regions is key (Renewable Energy Partnerships)

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Shaping the Future.