

The Triple Challenge for Europe: Economic Development, Climate Change & Governance

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Main issues

- ▶ Europe is stuck in a (partly self-inflicted) **stagnation**
- ▶ And need to transform the economy due to the **climate challenge**
- ▶ These challenges are **closely related** and require a **coordinated policy response**
- ▶ As well as innovations in **governance**

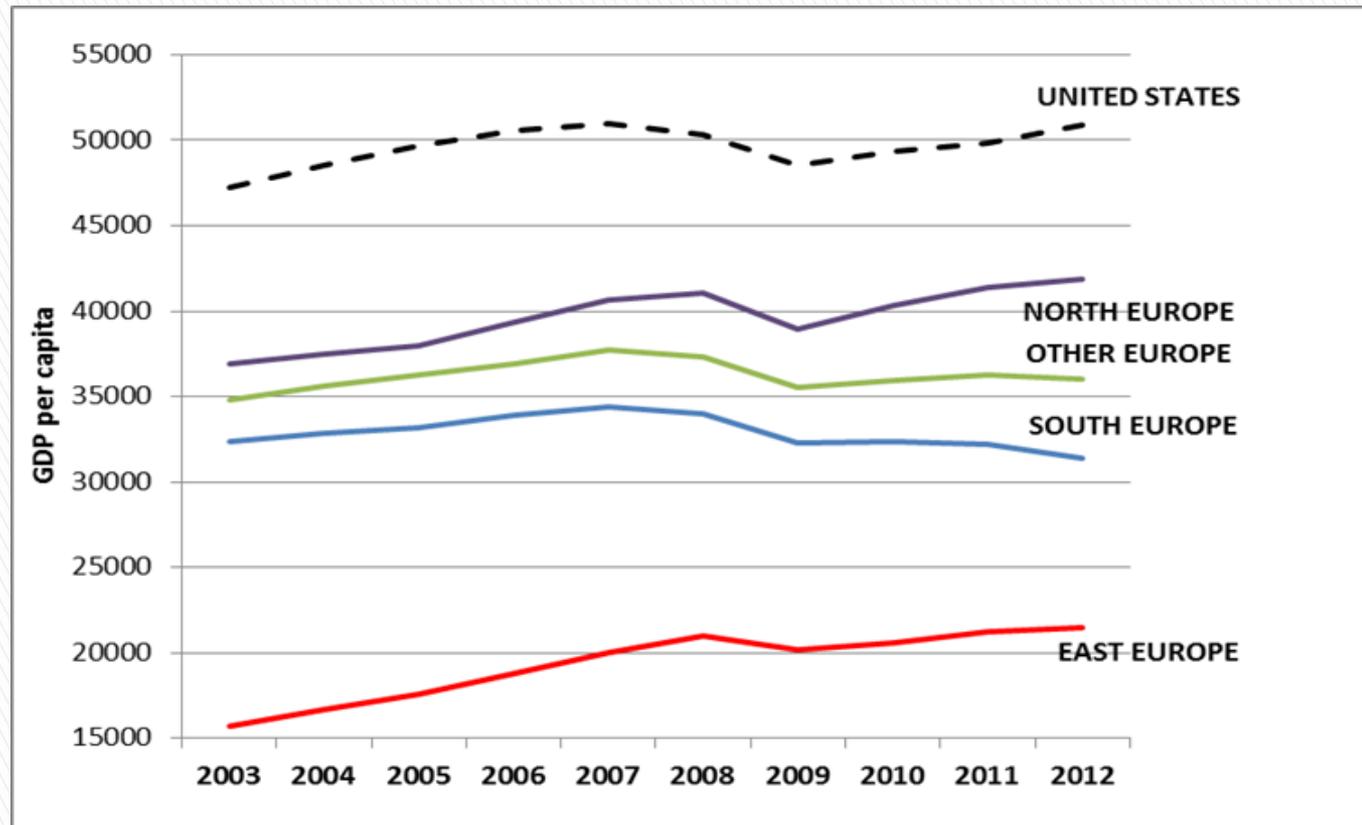


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The European Stagnation:

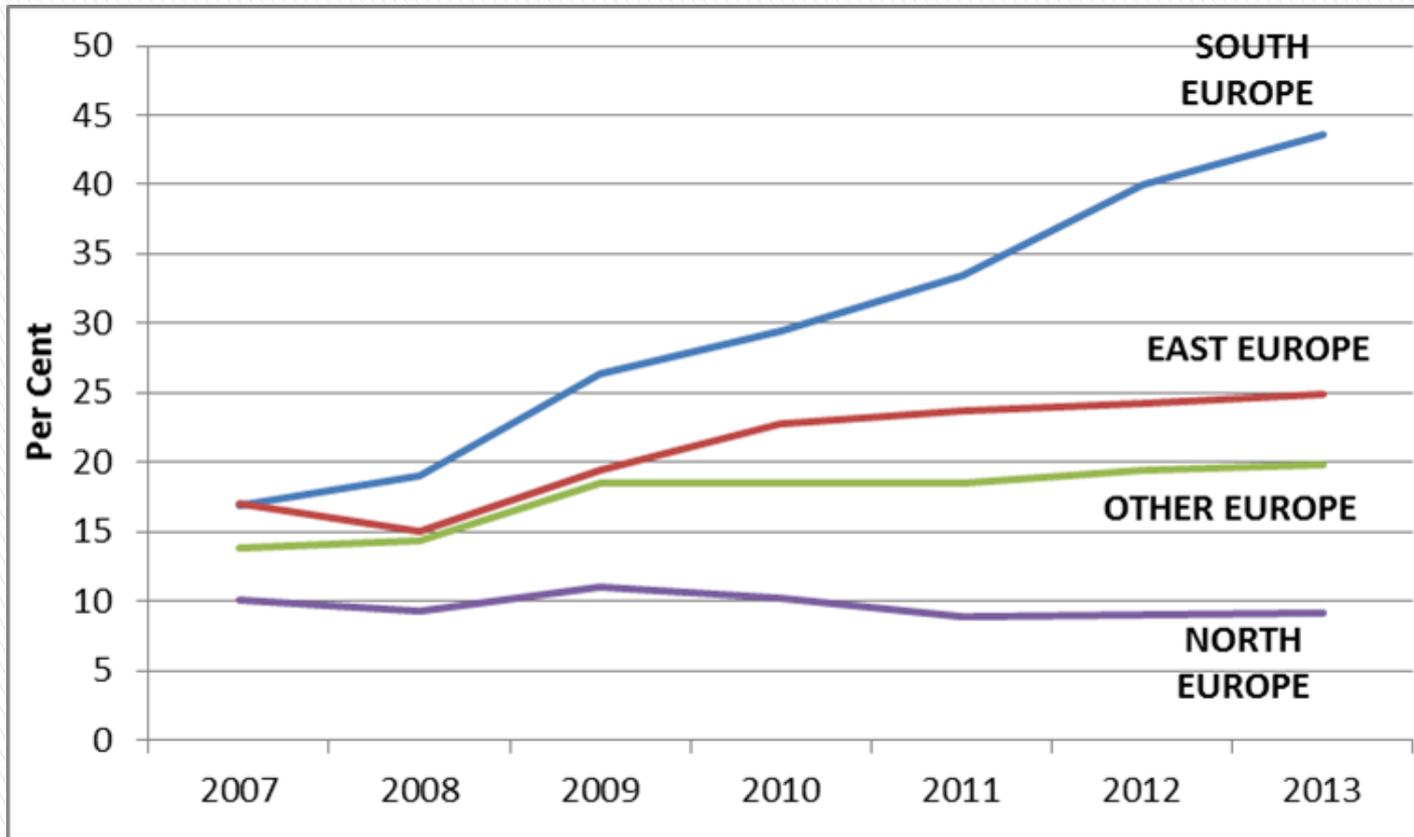
GDP per capita, US and Europe 2003–2012



From growth & convergence to stagnation & divergence, with parts of Europe falling behind

Why should we care?

Youth Unemployment (20-24 years)



**Social cohesion – a goal of the past?
Consequences?**

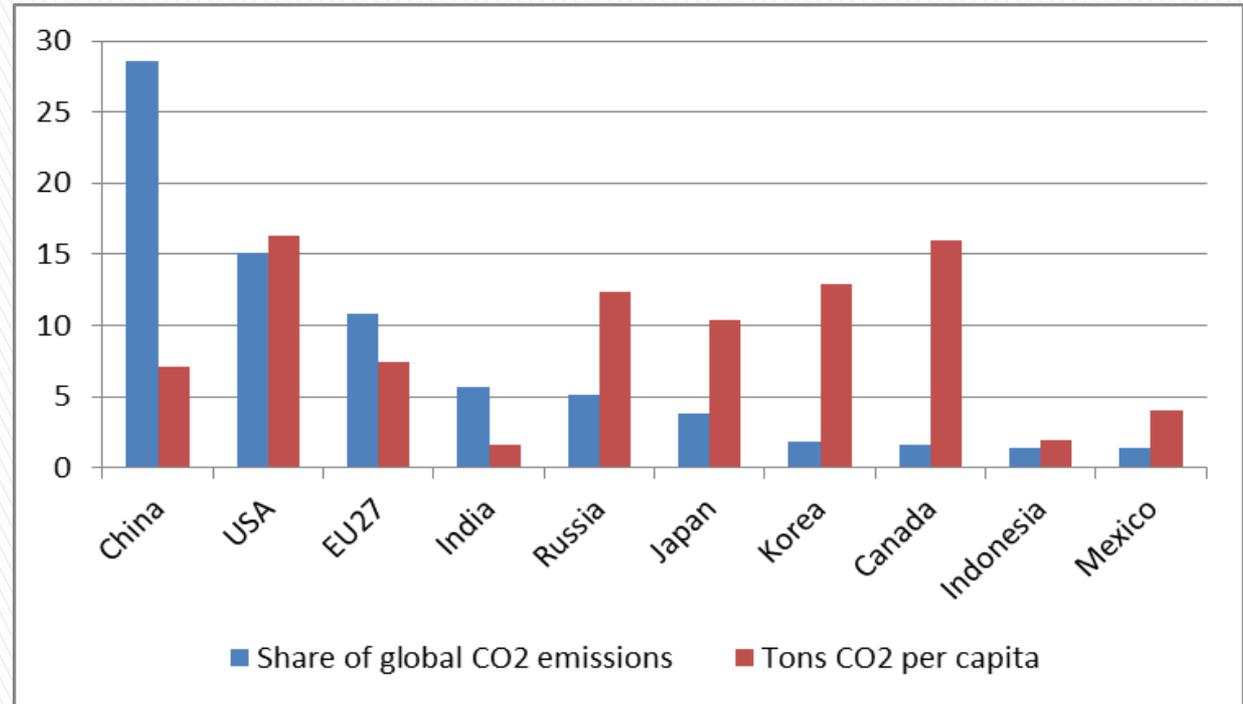
What explains the European stagnation? The financial crisis (for sure) but also:

- ▶ **Different capacities** for dealing with globalization (South lagging, North adapting)
- ▶ **Asymmetric effects of European integration** (East benefitted a lot before 2008, North some, South very little)
- ▶ **The Euro** – lacking necessary **policy coordination** – led to spread of **German-type austerity policies** that do not work (elsewhere)
- ▶ As a result, convergence turned **divergence**, growth turned **stagnation**, **unemployment** soaring, especially in the **peripheral countries** in the South and East
- ▶ Challenge: How to get Europe, and especially the weaker economies in the South and East, out of the **low growth/high unemployment trap?**

Without further harm to the climate!

Europe: The third largest emitter of greenhouse gases (after US/China)

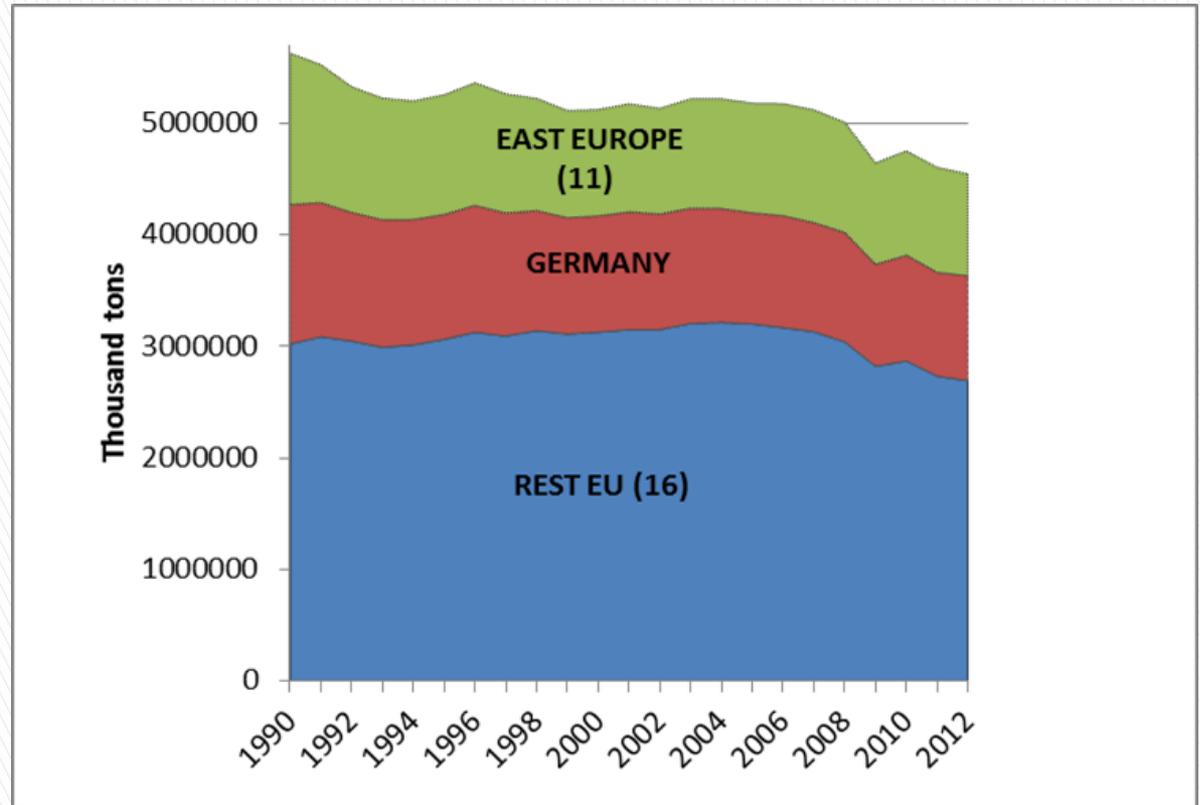
Global (European) emissions have to be reduced to a negligible level by 2100 to keep global warming within the 2% target



EU policymakers pride themselves on being on the right track but is that really true?

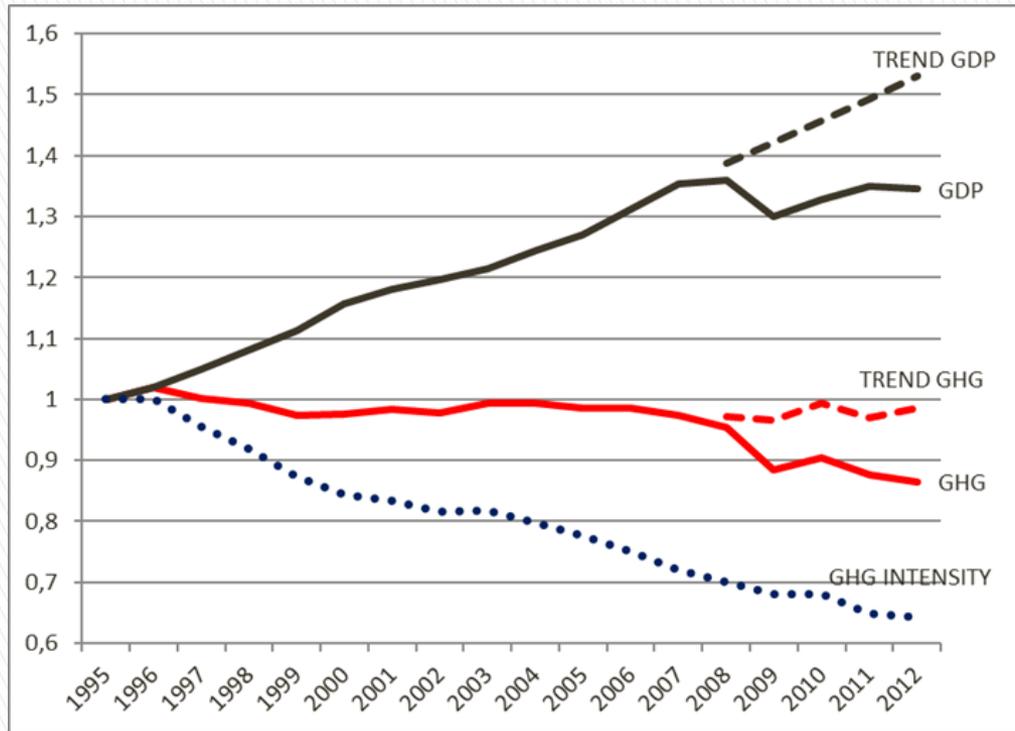
No substantial reduction in European GHG emissions prior to the crisis

European policy makers like to compare with 1990. No wonder why!



Entire reduction 1990–2008 caused by rapid deindustrializing in the former socialist East in the early 1990s.

Recent decline in European GHG emissions caused solely by the crisis



GDP growth , GHG emissions and GHG intensity
EU28, 1995-2012

To reach 2100 goals, the GHG intensity must decline **twice as fast** as in the past (or **GDP must shrink every year**).

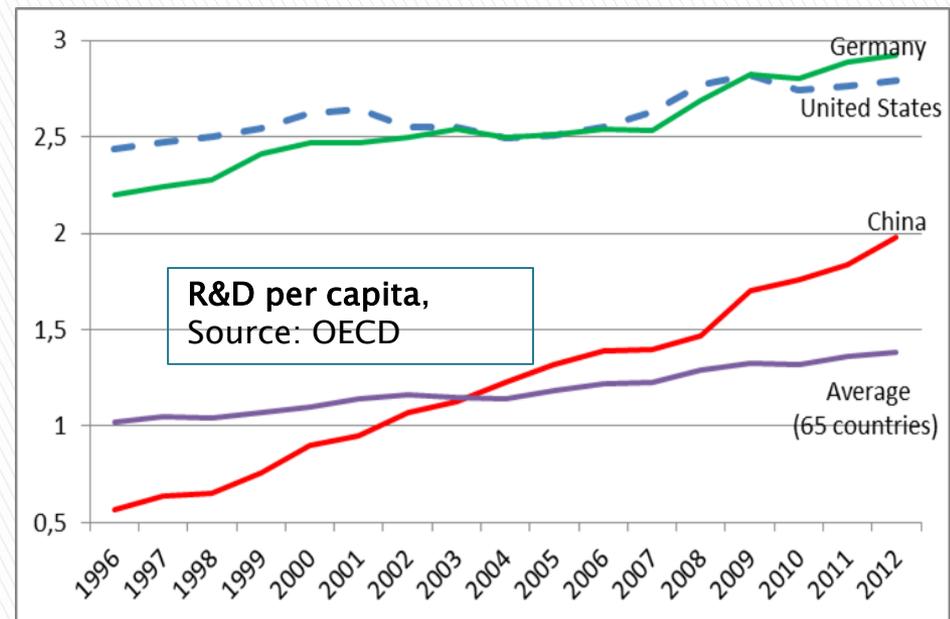
A radical transformation of the economy required

Can it be done ?

Or are we doomed to stagnation (Robert Gordon)?

- ▶ Is mankind **less capable to innovate** than before? **NO!**
- ▶ Large **potential for change** – but requires **action & innovation in policy and governance**
- ▶ “**Headwinds**” (e.g. demography & inequality) real but can be dealt with by changes in the **policy stance**
- ▶ **Current austerity policies not the answer**

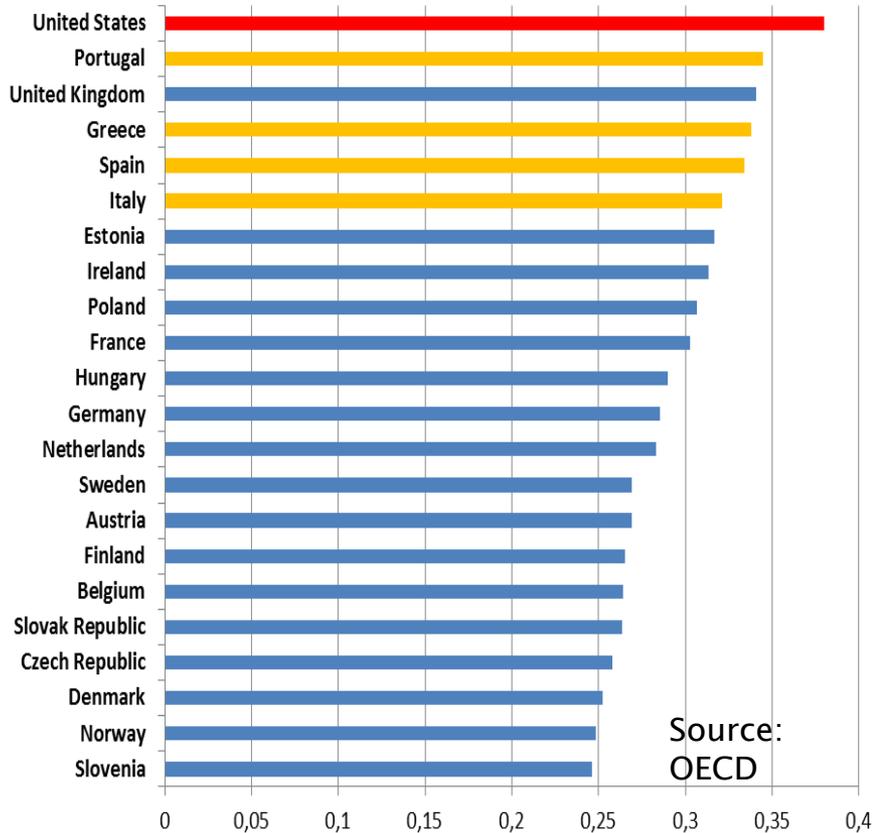
Never have more resources been used to search for new and better solutions



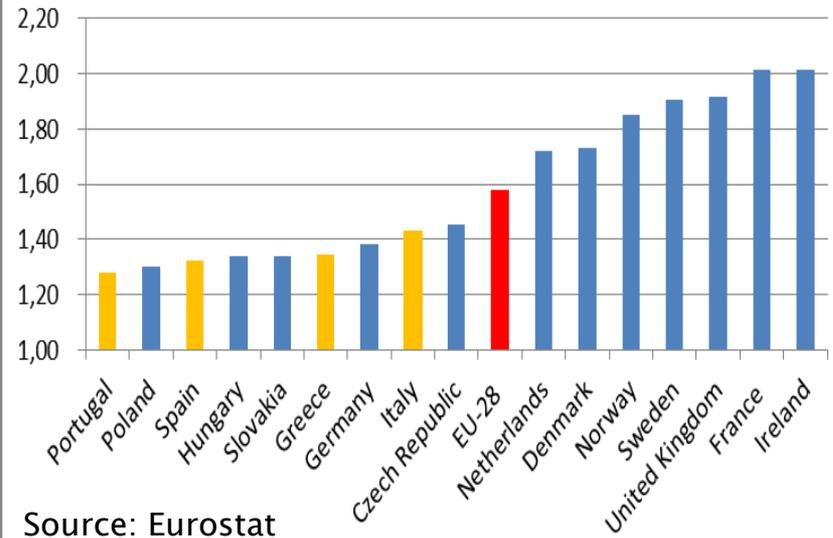
Or education–levels been higher!

“Headwinds” strongest in the South (East)

Inequality, Gini-index, 2010



Live births per woman 2012



The South (East) of Europe needs a “new growth model” – not more austerity

A new policy stance

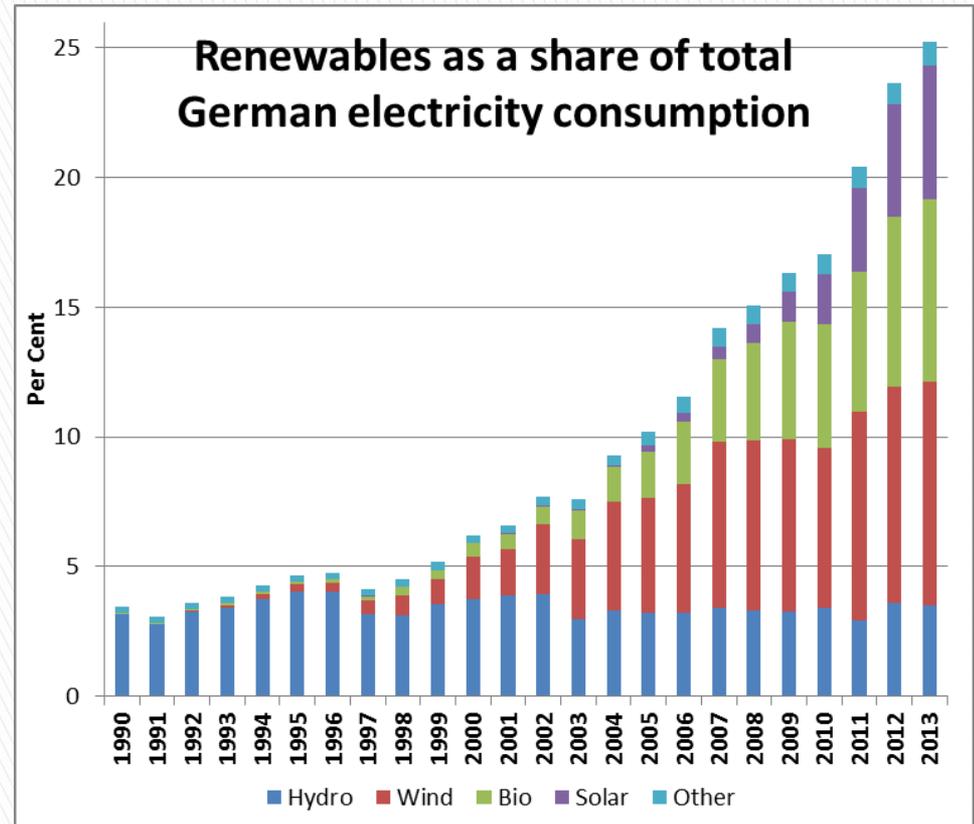


- ▶ Strategically important: A **commitment to transform** the economy towards sustainability
- ▶ Need to **penetrate all policy areas** (example development aid)
- ▶ Changes in **governance** (coordination across **levels & sectors**) required
- ▶ And active involvement of **NGOs**
- ▶ Main policy elements: Support **renewables**, change **transport**, increase **energy efficiency**, actively **reduce the size of polluting sectors** (e.g. coal, oil and gas etc.)
- ▶ **Share the burden** (compensate losers)
- ▶ A **global perspective**: Protectionism will not do the trick (example China in solar)

It can be done!

Germany's "Energiewende"

- ▶ **Bottom-up** initiative
- ▶ Several technologies supported (avoiding premature lock-in)
- ▶ Priority to renewable energy in electricity grid
- ▶ Surprisingly rapid transformation
- ▶ Thriving capital-goods industry
- ▶ 2000–2012: 250 000 jobs creates
- ▶ (Increasing) resistance from coal industry/districts, incumbents, EU commission

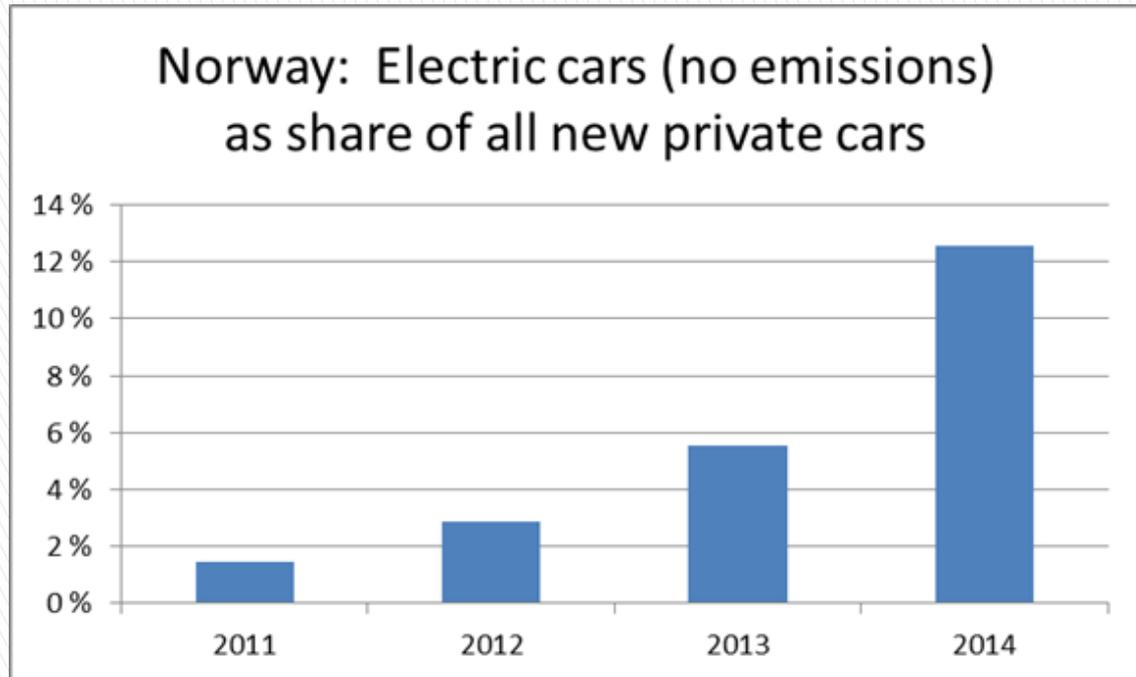


Germany's "Energiewende" – supporting transformation, diffusion and innovation

It can be done!

Electric cars in Norway

- ▶ Share of electric cars in Norway: **three times the Dutch level, thirty times that of Germany**
- ▶ **Local initiative in Oslo** – migrated into national policy
- ▶ **Incentives:** Tax exemptions, free parking etc.
- ▶ **Surprisingly rapid change**
- ▶ In a country with cold weather and long distances!



Combination of incentives to users and technological progress did the trick!

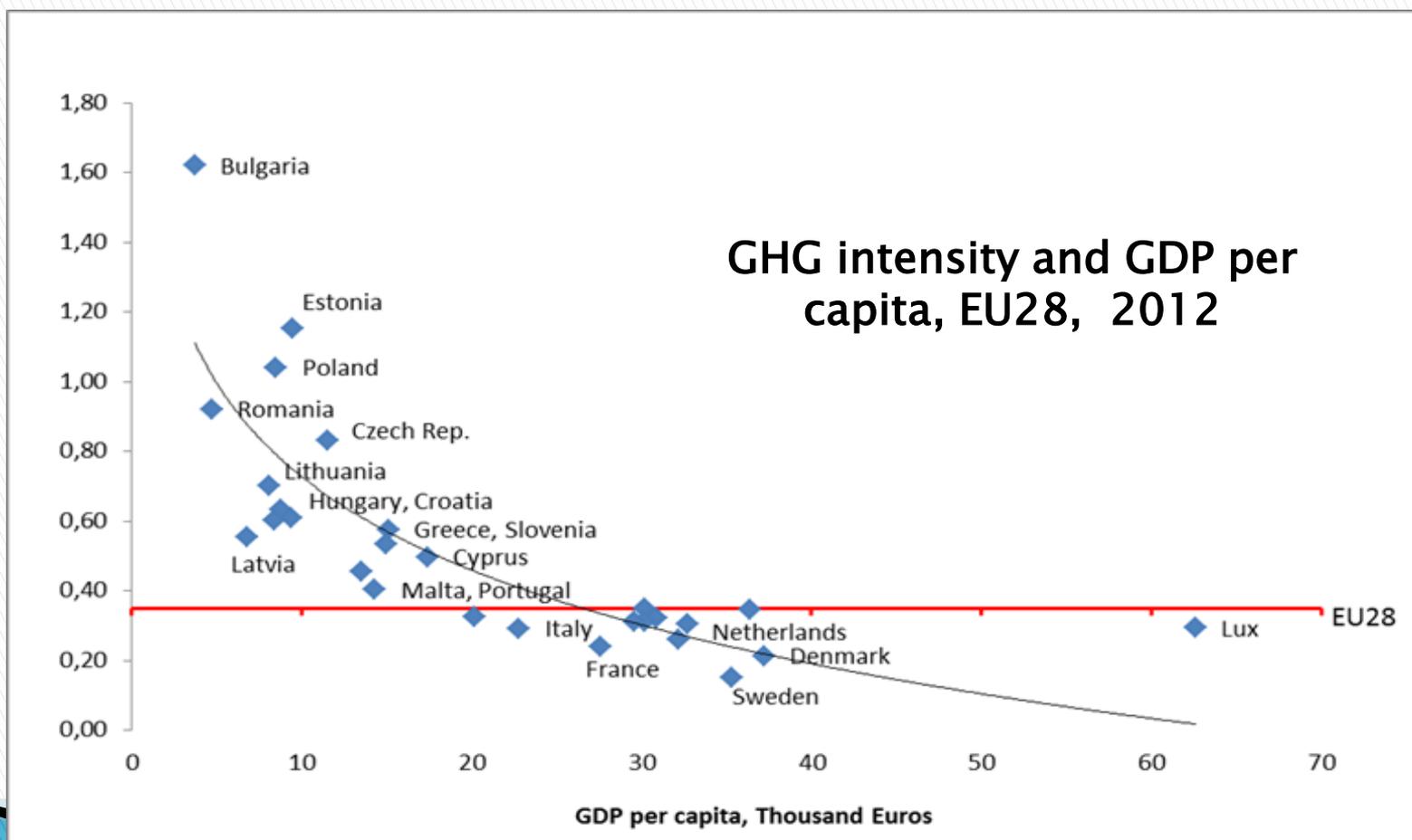
Innovation and transformation

- ▶ Current EU approach: **market fundamentalism (ETS) & linear model** (support R&D)
- ▶ Won't **deliver** (in time),
- ▶ More important for innovation: **capability, opportunity** (e.g., demand) and **learning** (by doing, using, experimenting etc.)
- ▶ And a range of **sectoral policies** (policy **coordination**)
- ▶ Need to accept **uncertainty** & not only focus on the currently most “**cost-effective**” solutions

The European trading scheme (ETS)

- ▶ **Vulnerable to lobbying & business cycles**
- ▶ Result: **CO₂-Price far to low** to have a real impact
- ▶ **Other policy instruments required**

The poorest areas in Europe are the ones most in need of radical change towards sustainability



A European program for sustainable growth

- ▶ Transition towards **sustainability** requires **substantial investments** in sustainable energy production/distribution, increased energy efficiency, public transport, infrastructure for cars driven by electricity and fuel cells etc.
- ▶ These needs most pronounced in **East & South** which are also the most depressed economically
- ▶ Europe needs a **program for sustainable growth**, with a particular focus on the poorer countries, targeting investments for reducing GHG emissions
- ▶ Delivering **growth** – and **jobs** – where it is most needed while speeding up transformation, diffusion, learning and innovation

More: Fagerberg, Martin, Laestadius: The Triple Challenge for Europe, OUP, 2015

The triple challenge for Europe

(list of content)



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