

**ESPON Workshop:
“Green Economy in European Regions?”**

**The green economy as answer to restore the
economy?**

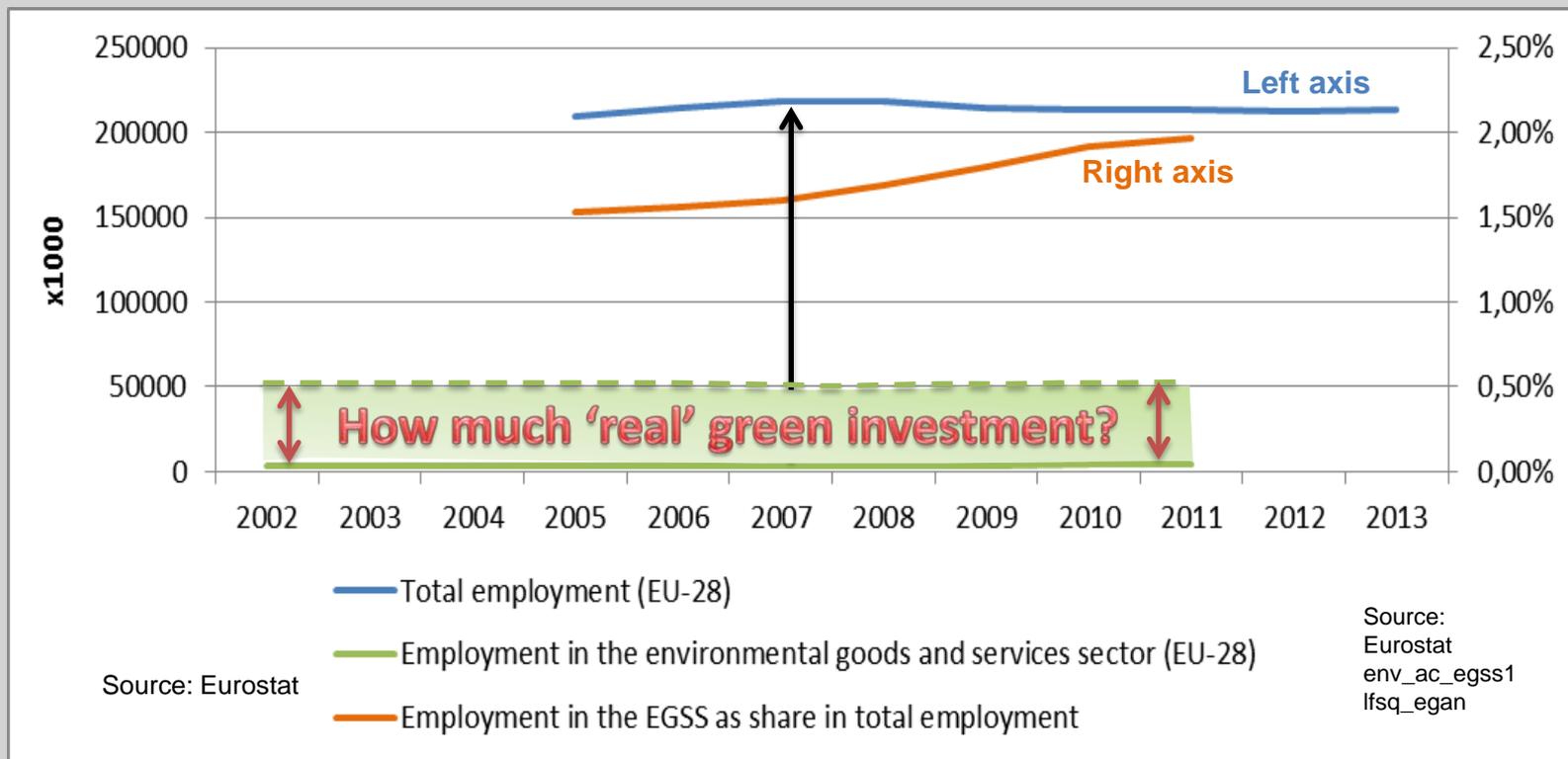
Carlos Tapia - Fundación Tecnalia Research & Innovation

29 September 2014, Brussels



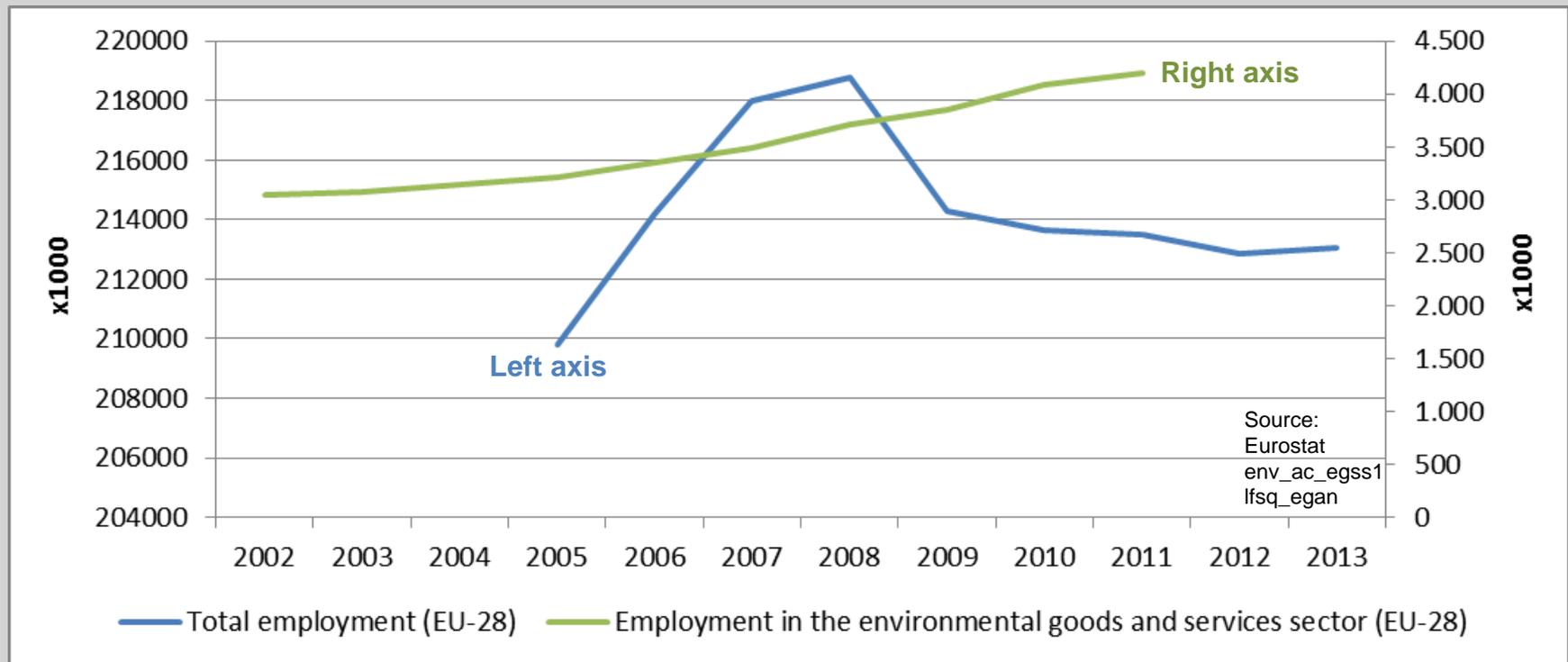
Restoring economic balances through the green economy?

Environmental Goods and Services (EGSS) cannot restore the economic balances in Europe on their own...



Restoring economic balances through the green economy?

... but it can be an important part of an economic strategy for its restoration....



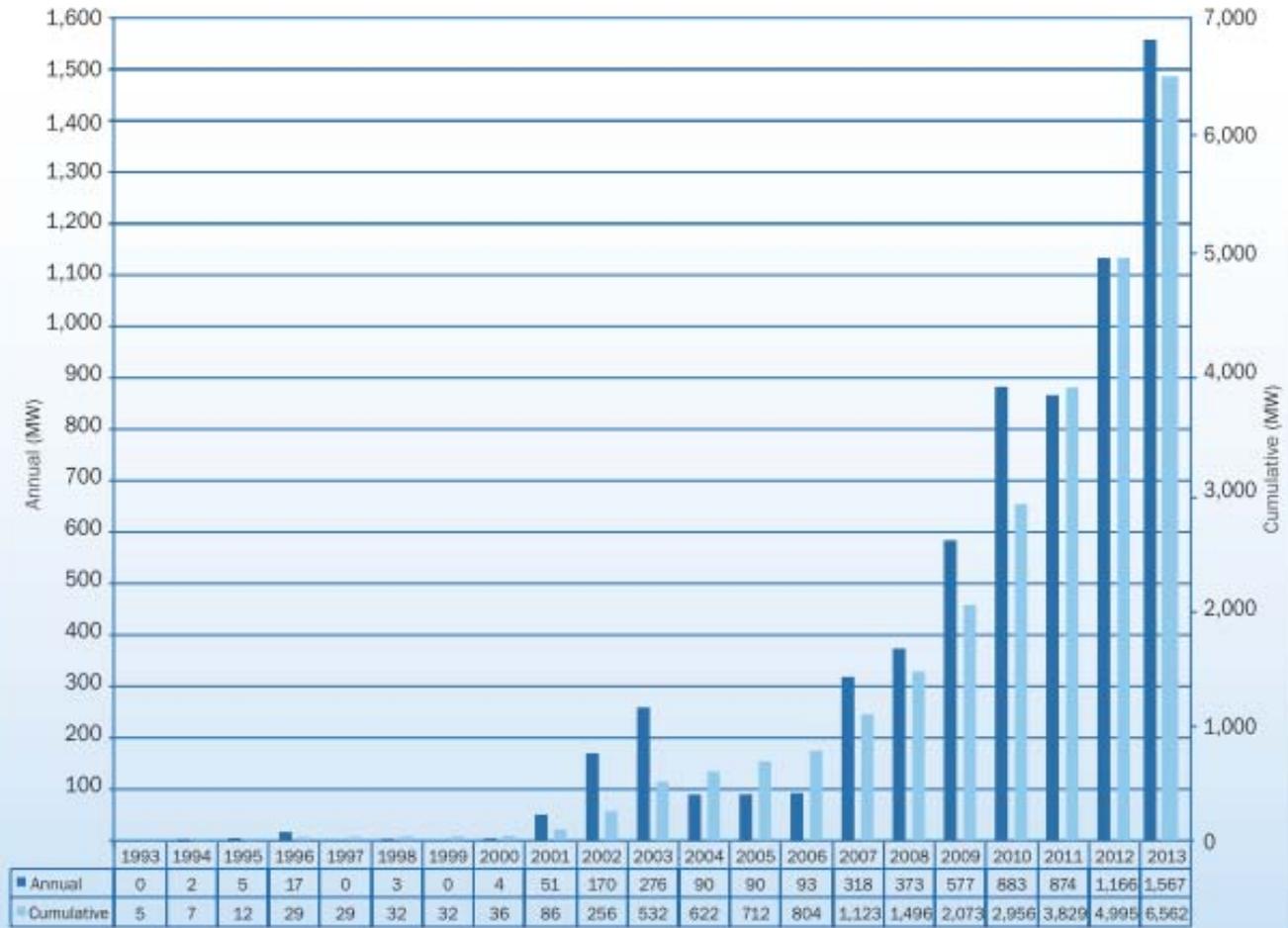
Restoring economic balances through the green economy?

... and have much relevance for some sectors...

The graph shows the 1993-2013 expansion of the offshore wind energy production

Source: EWEA (2014), *The European offshore wind industry - key trends and statistics 2013*

FIG 11: CUMULATIVE AND ANNUAL OFFSHORE WIND INSTALLATIONS (MW)

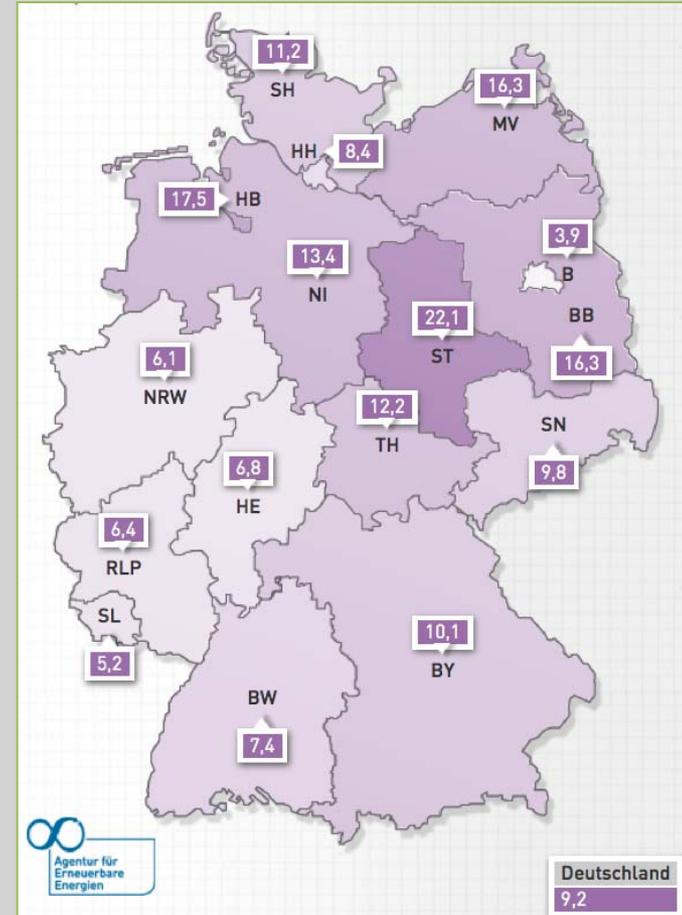


Restoring economic balances through the green economy?

... and have much relevance for some regions and cities (I):

The map shows the number of jobs in production of renewable energy plants per 1000 employees in Germany by Länder, in 2012.

Source: Agentur für Erneuerbare Energien 2014.

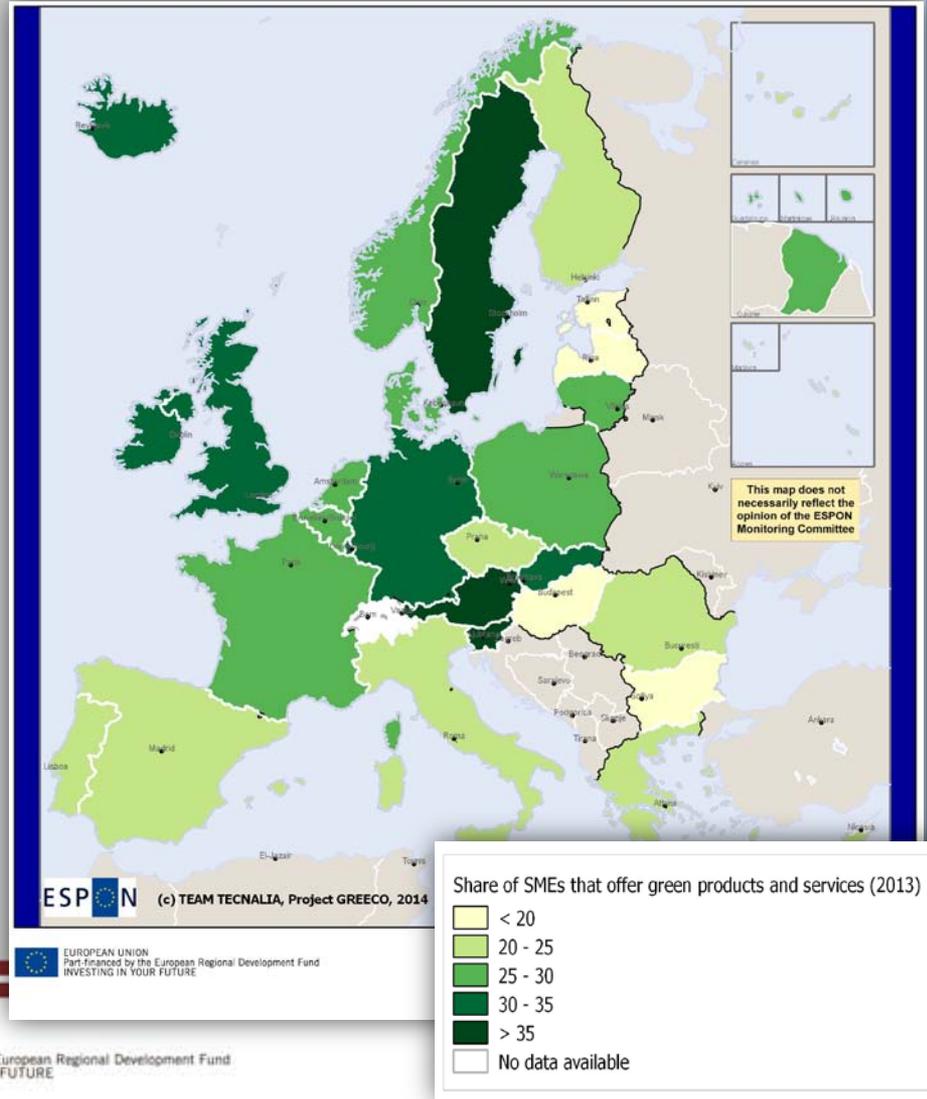


Restoring economic balances through the green economy?

... and have much relevance for some regions and cities (II):

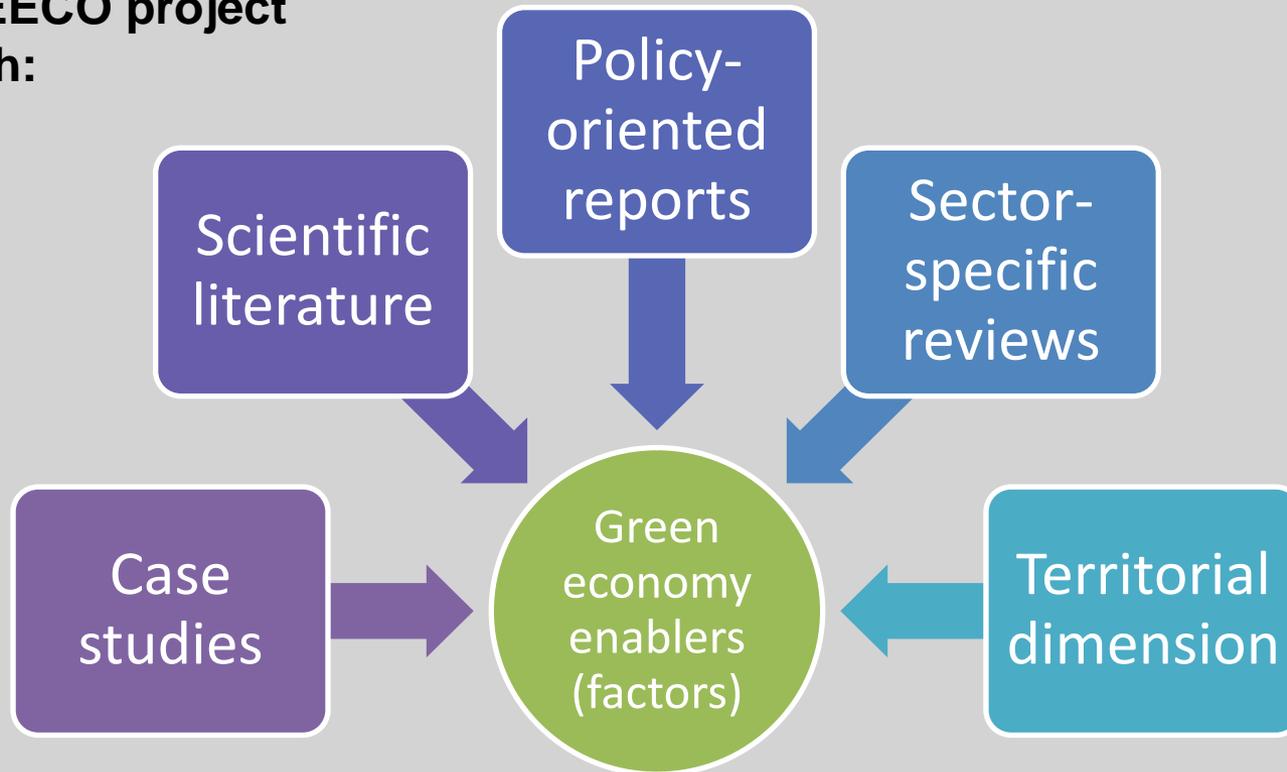
Share of SMEs offering green products and services

The map shows the share of SMEs offering green products or services (Question 17), as reported by Flash Eurobarometer 381 (September 2013): SMEs, Resource Efficiency and Green Markets.

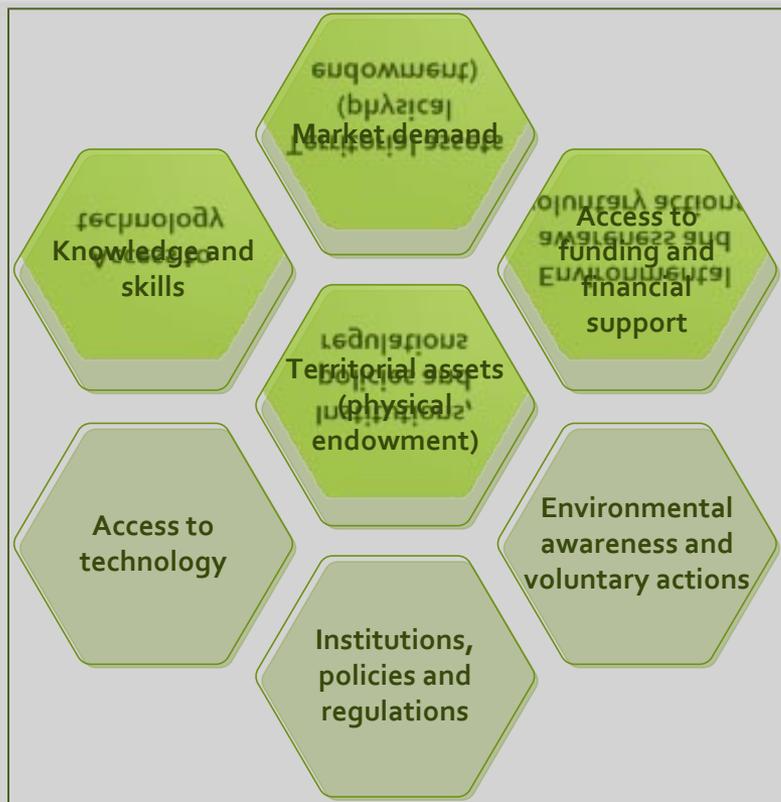


Characterizing green economy potentials within regions

The GREECO project approach:



Assessing green economy potentials: a Multi-Criteria Assessment

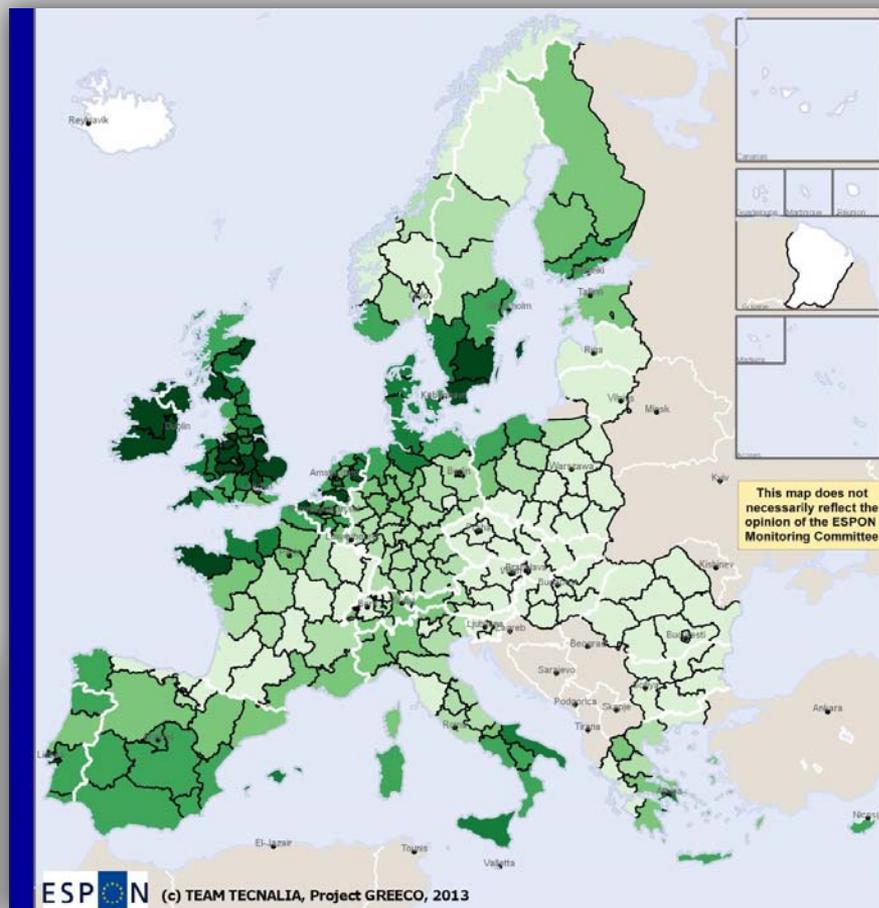
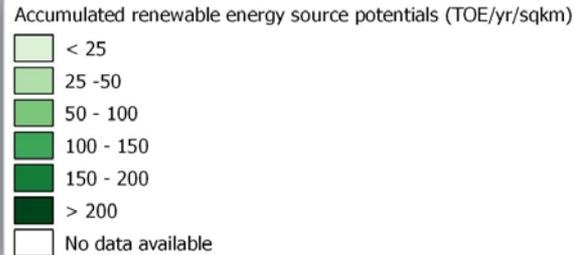


Green economy factors	Indicator
Good governance: institutions, policies and regulations	European Quality of Government Index (2009)
Key economic instruments: access to funding and financial support	Public/private support to SMEs for increased resource efficiency and/or the production of green products and services (2013)
Territorial assets and physical conditions	Combined onshore wind, photo voltaic and biomass energy potentials (TOE per square kilometre per year) at NUTS 2 level Percentage of Natura 2000 area by NUTS 2 region (2009)
Access to technology	Accumulated patents in selected environmental technologies per million inhabitants at NUTS 2 level (2005-2010). Share of patents in selected environmental technologies over total number of patents (2005-2010). Number of greentech clusters per million inhabitants (2013)
Expected market demand	Estimated annual CO2 emissions savings potential for the building sector in 2050 (Mt per square km per thousand inhabitants)
Human resources, knowledge and skills	Percentage of persons aged 25-64 and 20-24 with upper secondary or tertiary education attainment, by NUTS 2 regions (2011).
Environmental awareness and voluntary actions	Weighted share of municipalities that have signed the Covenant of Majors and have also submitted an Action Plan by mid- 2013.

Green economy enablers: Territorial assets and physical conditions

Combined onshore wind, PV and biomass energy potentials (TOE per km² per year) at NUTS-2 level (2013)

Source: GREECO project



Wind energy



Photo-voltaic



Bioenergy (forest residues)



Bioenergy (manure residues)



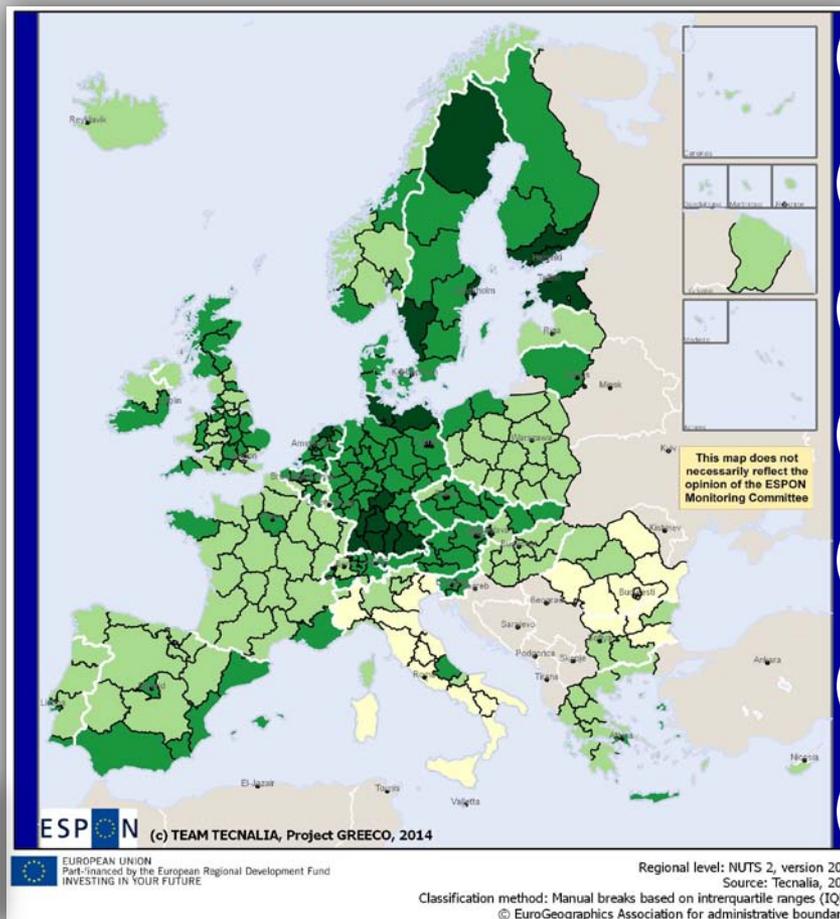
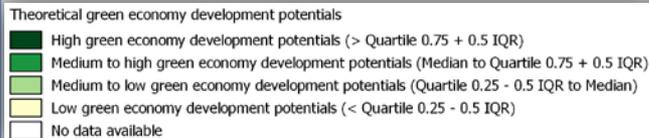
Bioenergy (agriculture residues)



Green economy potentials: a Multi-Criteria typology

Regional typology of theoretical green economic potentials at NUTS 2 level (2013)

Source: Own elaboration basing on a Multi-Criteria Assessment.

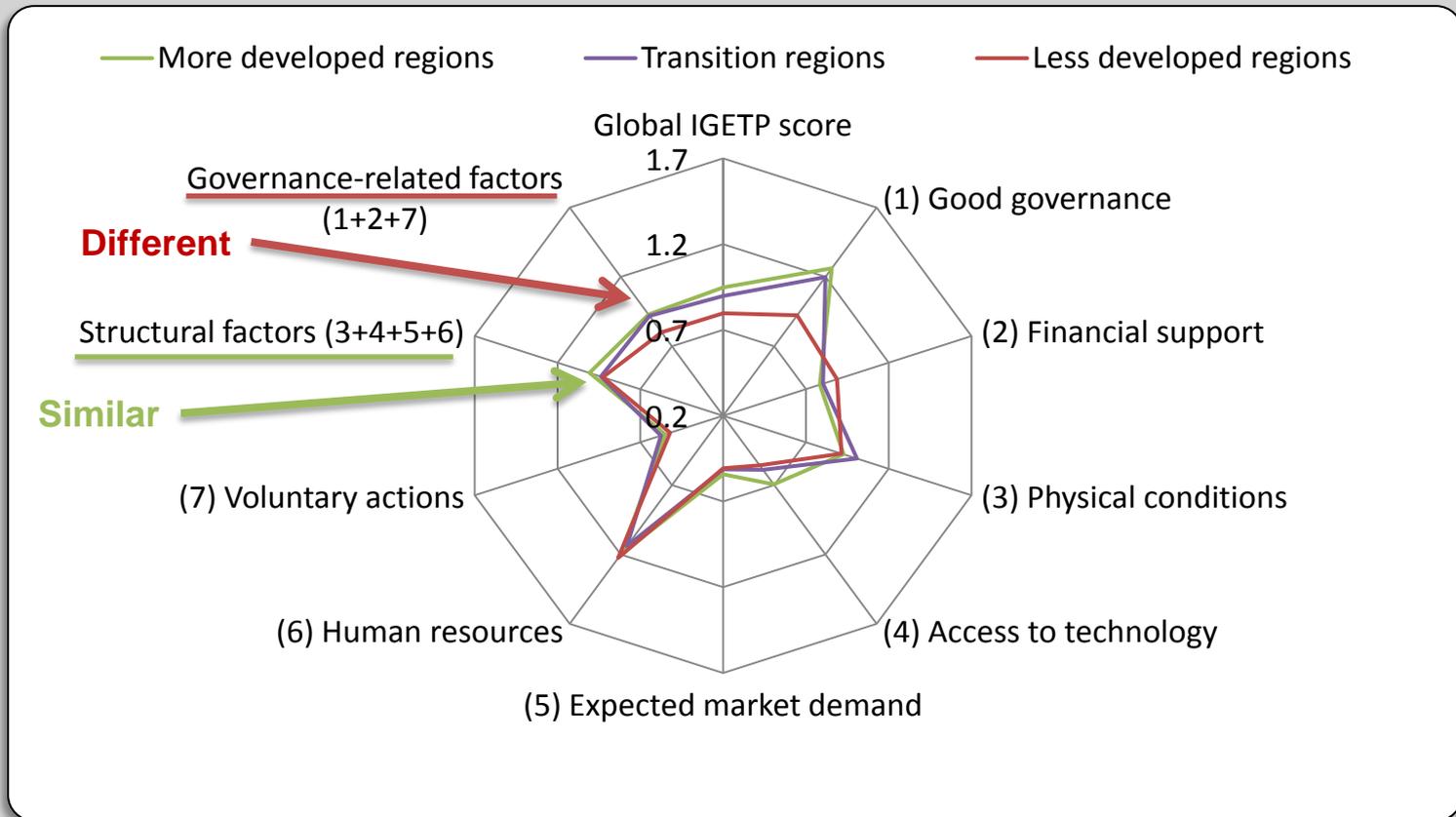


-  Good governance
-  Financial support
-  Territorial assets
-  Access to technology
-  Expected market demand
-  knowledge and skills
-  Voluntary actions

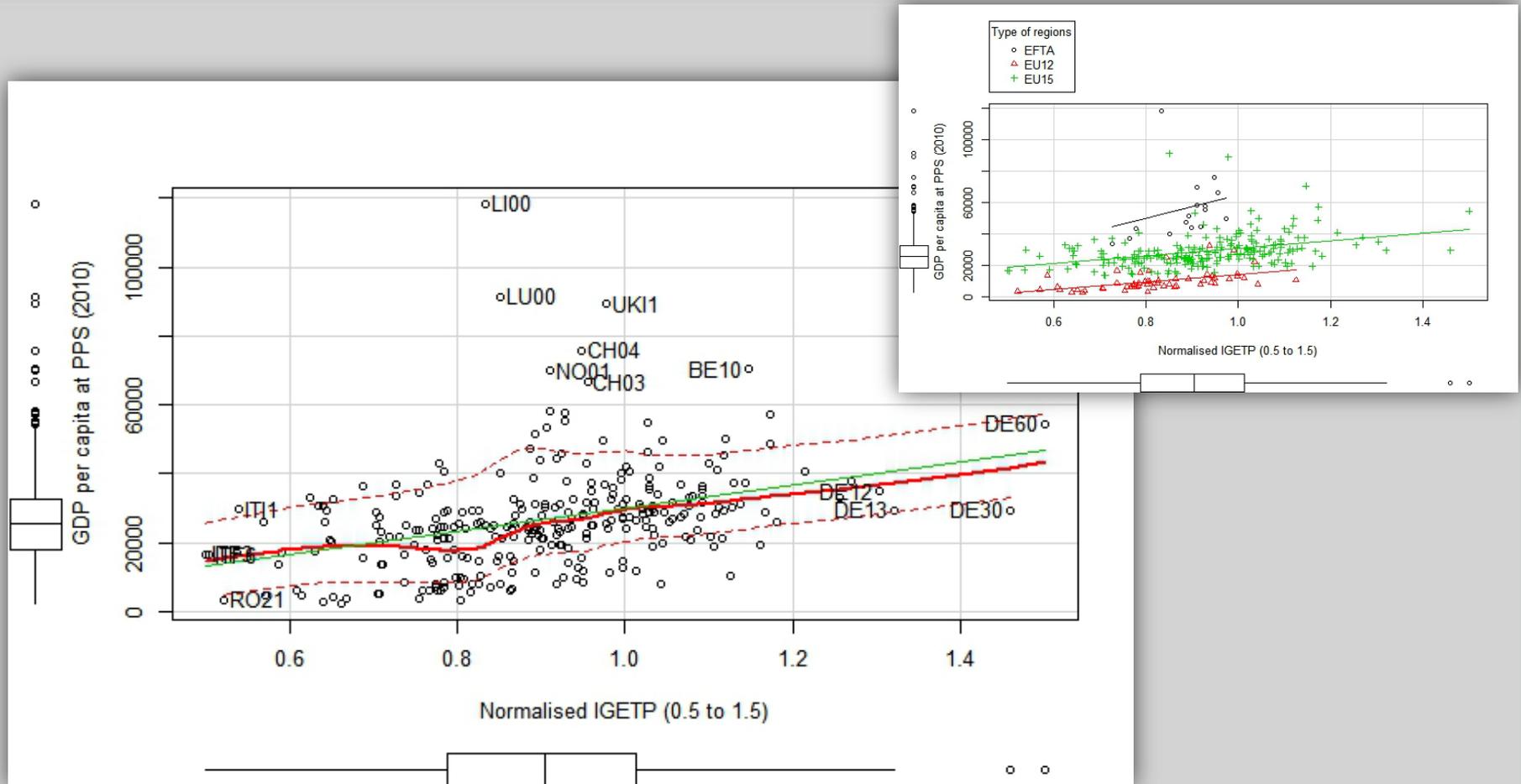
Regional level: NUTS 2, version 2010
 Source: Tecnalia, 2014
 Classification method: Manual breaks based on intrrquartile ranges (IQR).
 © EuroGeographics Association for administrative boundaries



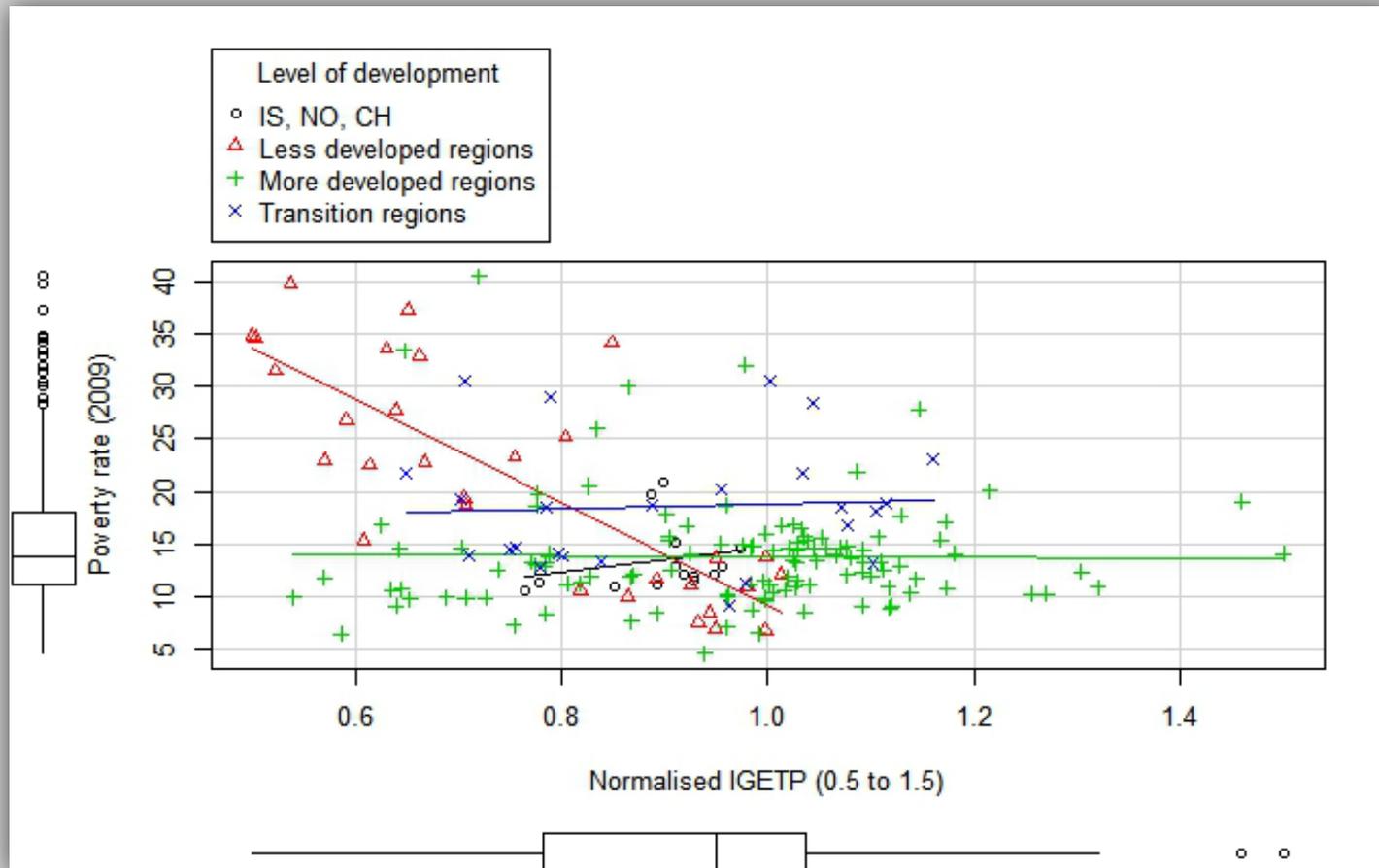
How do green economy enablers differ across regions?



How does IGETP relate to GDP per capita



Green economy potentials: evidence for taking policy action



Green economy potentials: evidence for taking policy action

Relating green economy performance and green economy factors

	Green economy performance	Access to funding	Governance setting	Knowledge and skills	Expected market demand	Physical assets	Access to technology	Awareness
Green economy performance	1,000	-0,144	0,612	0,096	0,120	-0,165	0,581	0,109
Access to funding		1,000	-0,173	0,151	-0,024	-0,143	0,017	-0,076
Governance setting			1,000	0,189	0,071	0,034	0,439	-0,053
Knowledge and skills				1,000	0,047	-0,443	0,288	-0,162
Expected market demand					1,000	-0,202	-0,024	0,211
Physical assets						1,000	-0,281	0,051
Access to technology							1,000	-0,050
Awareness								1,000

Least squares coefficient estimates of the proposed multiple linear regression model...



Summary of key messages for this slot

1. From a systemic perspective **an economy with high rates of “green growth” is not necessarily a “greener economy”**.
2. **Delinking fossil energy use from GDP is progressing** across the EU and **local government set more ambitious targets and tighter emission budgets than the EU**
3. Territories are diversely endowed to start and consolidate transitions to a greener economy and thus **“greening strategies” should be place-based** (just as they need to be sector-specific)
4. The territory, previously characterized by mono-functionality, today needs to be viewed as **spatial structures determined by multi-functionality**, and thereby requiring revised understanding of the complexity of territorial structures.
5. **EGSS is actively contributing to economic recovery**. However, investments in such sectors have not been (and will not be) enough to offset reductions in traditional sectors.
6. **The ultimate goal of EU cohesion and territorial policies should be decoupling (locally) economic and employment growth from environmental degradation, resource depletion and energy consumption.**
7. From this perspective, **long-term transformative approaches seem be those yielding better results.**



Thank you for your attention!

