



Co-financed by the European Regional Development Fund

Inspire Policy Making with Territorial Evidence

Greener, low-carbon Europe

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Context

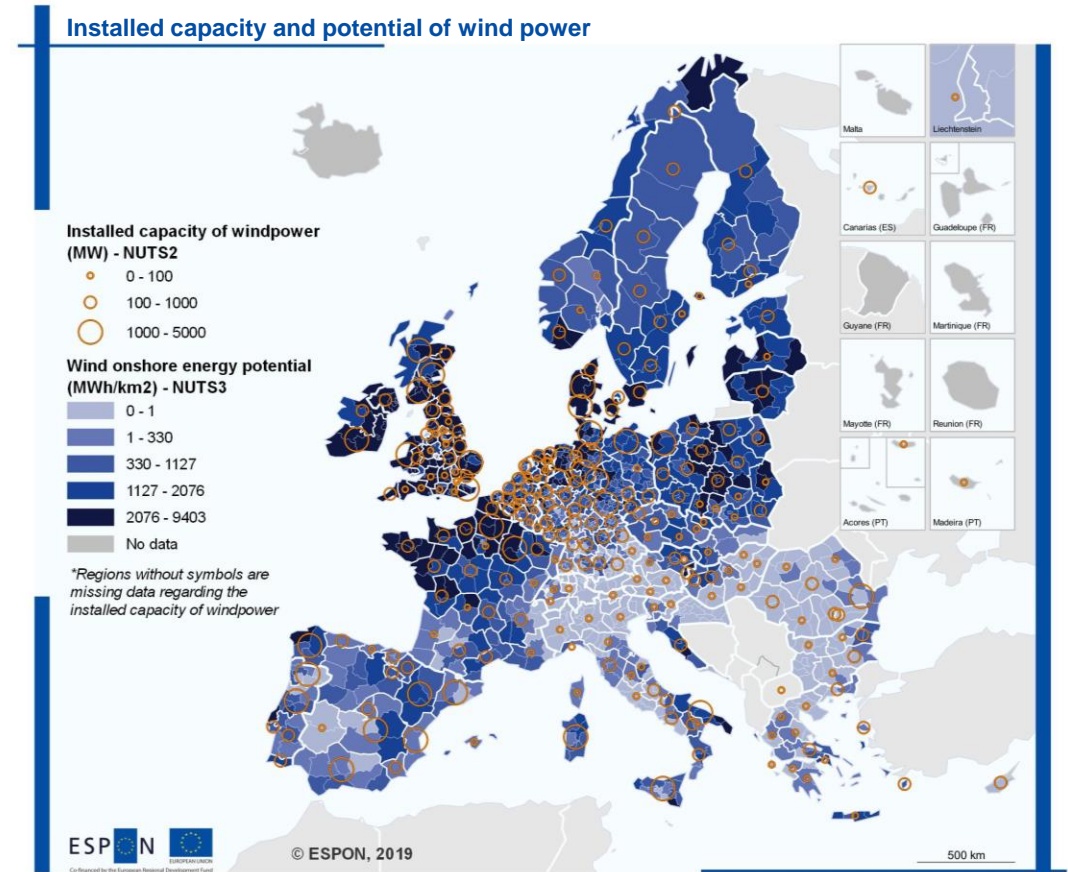
- The transition towards a low-carbon economy has become one of the main challenges of Europe.
- Geographic conditions and specificities represent the main factors influencing the renewable energy potential and climate change vulnerability of a territory.
- Harnessing the regional potential for renewable energy is mostly dependent on national policies, as are energy efficiency measures in regions with scarce resources.
- Territorial vulnerability to climate change depends on territorial endowment with (renewable) energetic resources, exposure to natural disasters or related risks, potential of green infrastructure, and the level of socio-economic development required for investment in mitigation and adaptation measures.
- A circular economy requires specific development opportunities for different types of territories at different scales, as well as new business models aiming at recycling and reusing waste.

Investments in renewable energy should follow geographic potentials

- Fossil fuels are still dominant in energy demand and global greenhouse gas agreements have not been met.
- Renewable energy potential is mainly influenced by climatic and geographic differences.
- Energy efficiency measures remain important, especially for regions that are vulnerable to energy poverty.



Transition to a 100% renewable energy supply and consumption can be achieved by harnessing the specific energy potentials of regions and through decentralised and democratic energy systems.

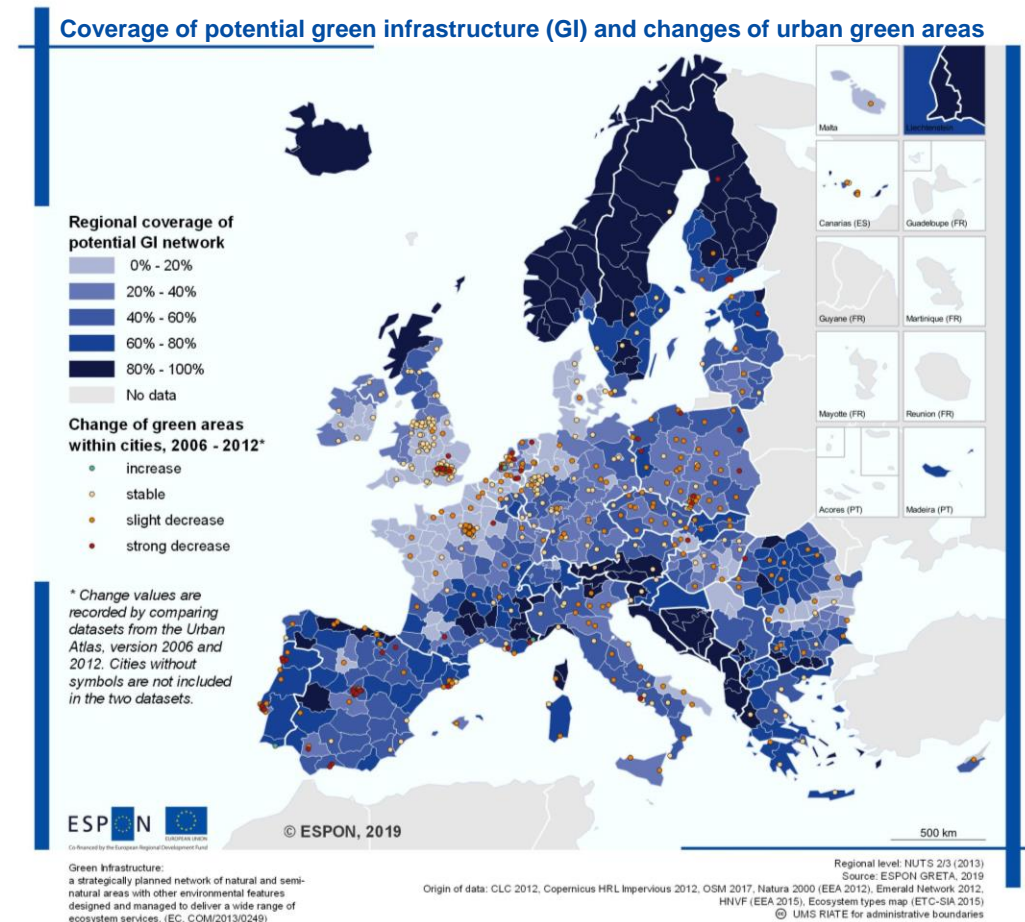


Potential Green Infrastructure shows different territorial patterns on regional and urban level

- Ecological connectivity is hindered by increasing landscape fragmentation due to transport infrastructure, construction activities and settlement dynamics across Europe.
- The potential GI network at regional level shows low coverage in north-western Europe, south-eastern UK and Ireland.
- At urban scale, the coverage with green areas is generally decreasing due to urbanisation and economic development.



To support cooperation on regional and local levels, GI-related policies should consider all three integral elements of GI: connectivity, multifunctionality and heterogeneity (of landscape elements) and the links with spatial planning and management.

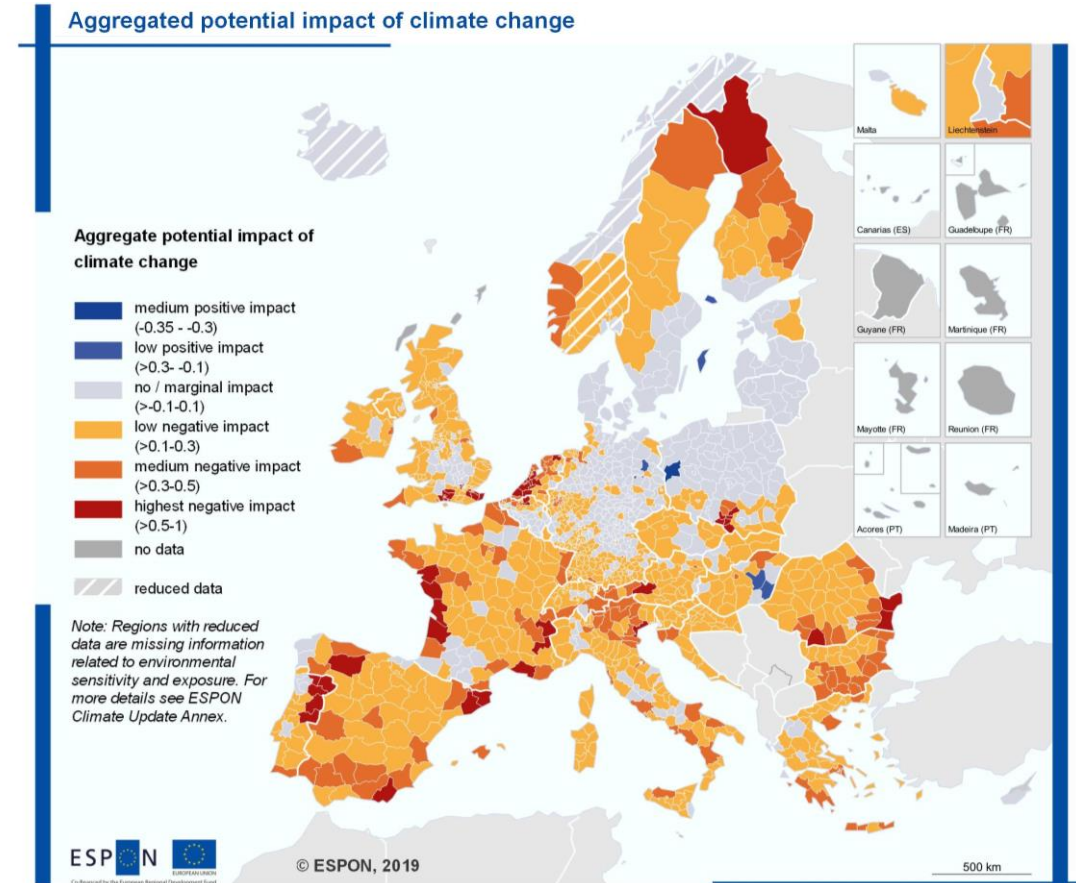


Territories vulnerable to the impact of climate change need guidance from front-runner regions and cities

- The regions that are the most exposed to the overall impact of climate change are in the south of Europe and in regions with geographic specificities.
- Climate change will have the highest environmental impact in the north and south of Europe, especially in mountainous regions, in river deltas or along coasts, and in regions with large protected areas.
- The regions in south and south-east Europe are the most exposed to natural hazards (e.g. floods and droughts).



Transfer of good practices requires a shared database of successful adaptation and mitigation strategies and comparative studies meant to identify differences and similarities between territories.



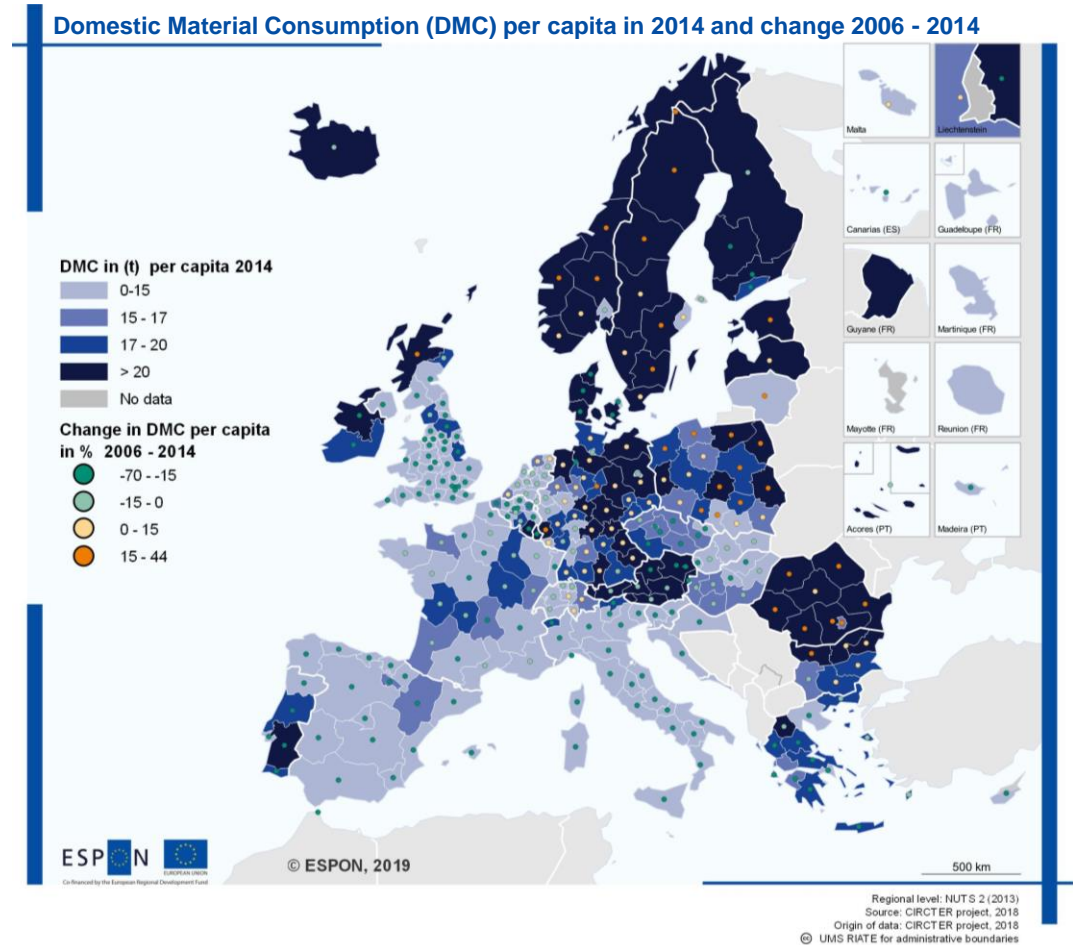
Regional level: NUTS 3 (2013)
Origin of data: EEA, 2012, 2013 (CORIN 2006), 2014 (NATURA2000), E-PRTR 2012, OSM2014, GISCO 2006, Eurostat 2006, 2011, 2013, 2014, JRC 2006, 2012 (ENSEMBLES), 2013a (Eurocities), 2013b (LISFLOOD), 2013c, 2014, USGS 2011, DVA 2004, ATSR 2014, Statistics Iceland 2011, Bundesamt für Statistik 2011, 2014, Amt für Statistik Liechtenstein 2014, 2011, HESTA, 2014, © UMS RIATE for administrative boundaries

Circular economy can break the links between economic growth and resource use

- Changes in Domestic Material Consumption (DMC) show a strong correlation with economic cycles.
- Personal income is one of the main drivers of total amount of waste generated.
- The implementation of Circular Business Models (CBMs) is favoured by agglomerations.
- Circular economy material providers play a particularly predominant role in rural regions.
- Regional economies are stimulated by the possibility of implementing circular economy strategies ranging from industrial symbiosis schemes to remanufacturing.



The implementation and diffusion of CBMs requires cooperation and sharing of knowledge between regional and local governments, material providers, industries, and scientific centres.



// Thank you

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