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Inspire Policy Making with Territorial Evidence

Integrating territorial specificities of coastal areas in planning

Evidence from ESPON BRIDGES
08. September 2021

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Structure

1. Project background ESPON Bridges: Territories with geographic specificities
2. Specific challenges of coastal areas
3. ESPON BRIDGES Cases Study examples
4. Implications for planning purposes

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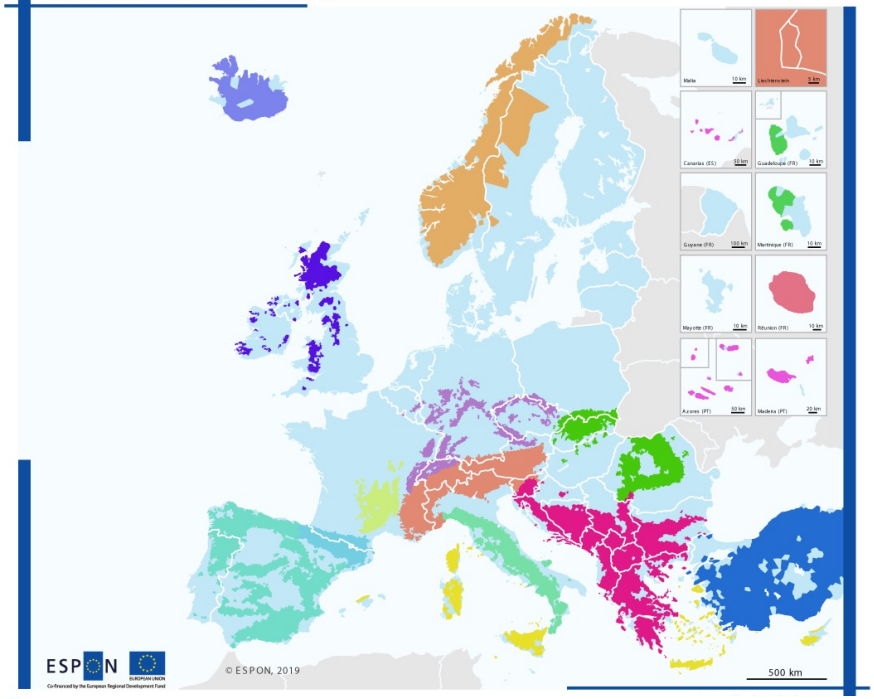
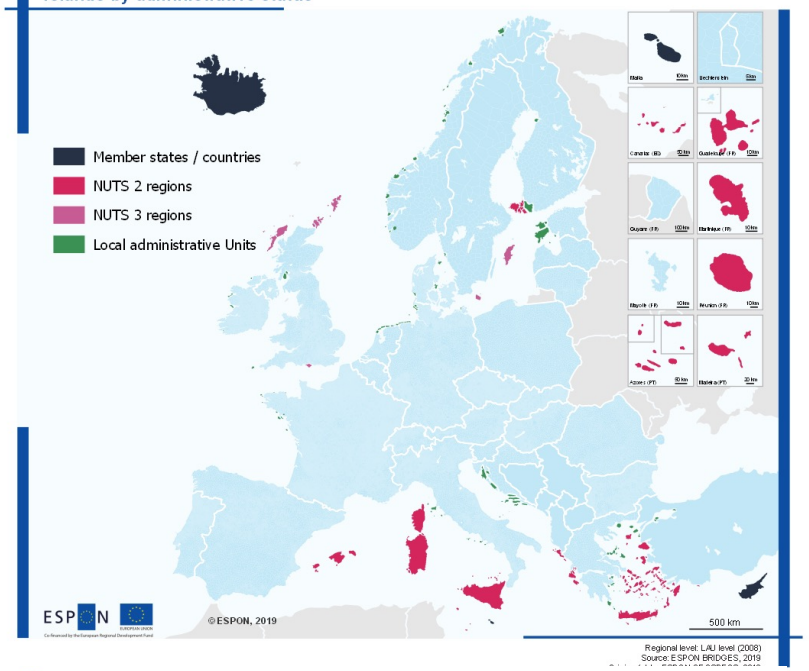
Project background ESPON Bridges: Territories with geographic specificities

Transnational mountain massifs

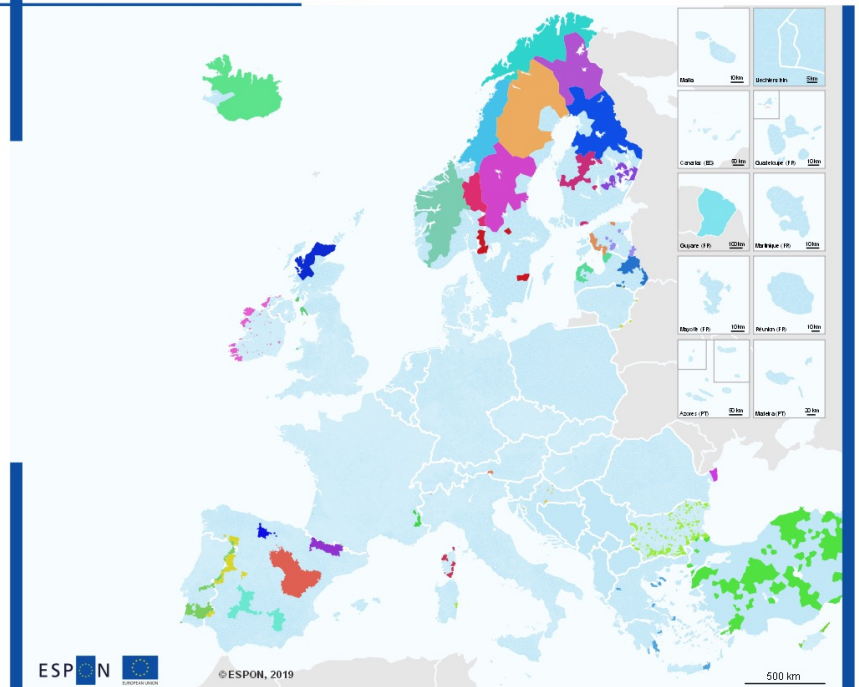


Islands by administrative status

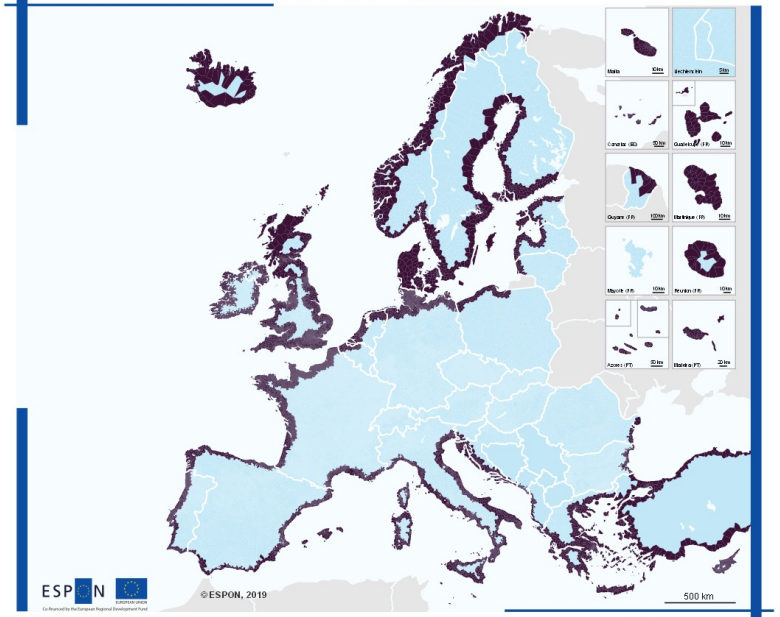


Regional level: LAU level (2008)
Source: ESPON BRIDGES, 2019

Sparsely populated areas in Europe



Coastal areas : delineation based on travel time to coast



Regional level: LAU level (2008)
Source: ESPON BRIDGES, 2019
Origin of data: ESPON GEOSPECS, 2012
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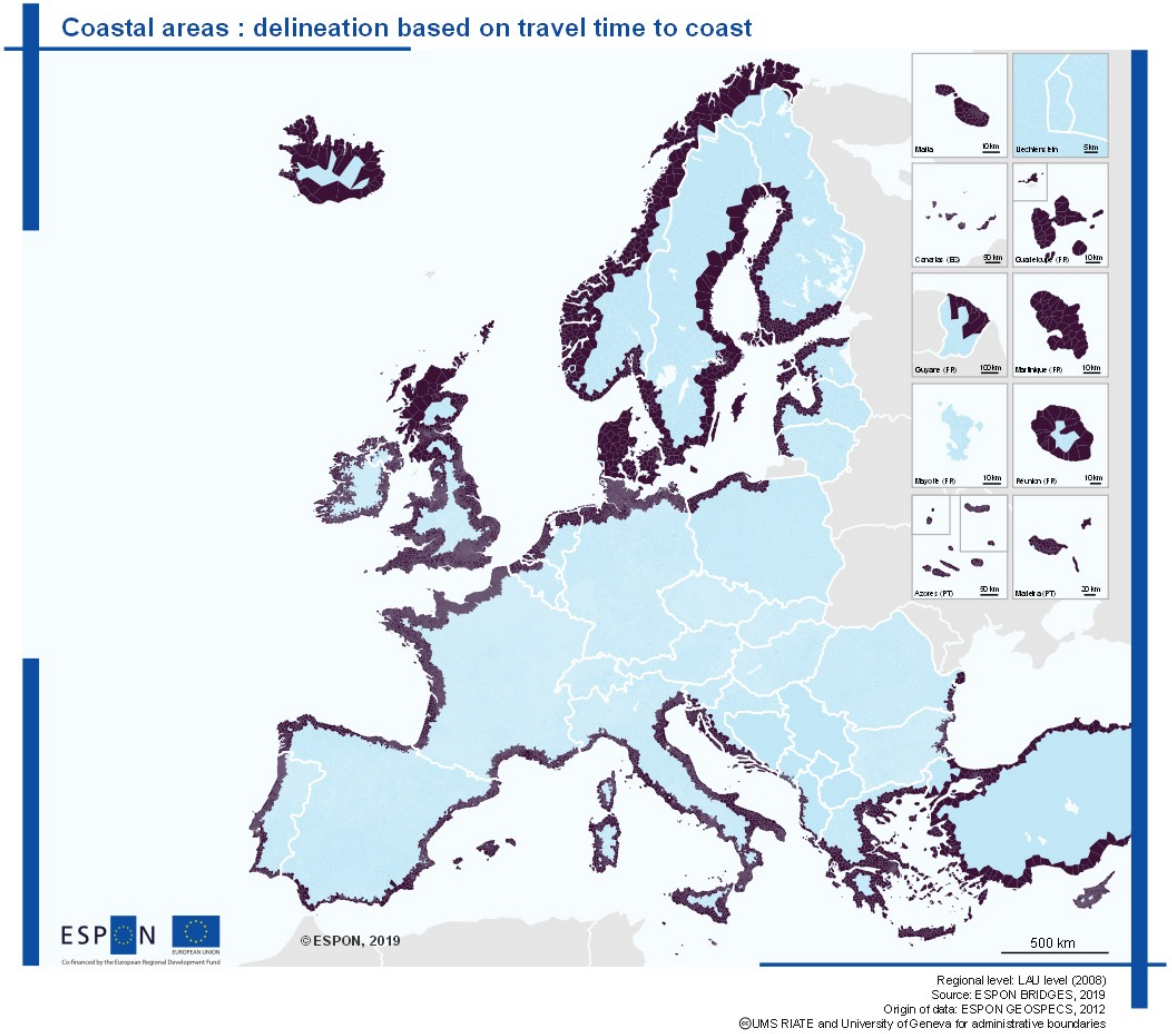
Local administrative units within 45 minutes from coastline on average

Coastal Areas



Local administrative units within 45 minutes from coastline on average

Bridges Project

Table 1-1: List of modules

Transversal Axes	List of modules
1. Innovation and economic development	M1.1 **Innovation**: specificity of innovation processes in TGS
	M1.2 **Sustainable tourism:** perspectives and strategies for sustainable tourism in TGS
2. Accessibility and transport	M2.1 **Public Service Obligations (PSOs)**: Identification and implementation of PSOs in in the field of transport in TGS
	M2.2 **Social-innovation**: Social innovation in the provision of Services of General Interest (SGIs) in TGS
3. Social development	M3.1 **Labour market transitions:** Mobility of workers (both geographical and between different types of status on labour markets) and their contribution to the understanding of social and economic patterns in TGS
	M3.2 **Residential**: Residential economy is the sum of activities directly and indirectly generated by the consumption of services and goods by people who are present in a region without being economically active there, e.g. commuters, pensioners, secondary home owners, visitors, inactive persons. This can be a significant component of development strategies in TGS.
4. Physical environment, natural resources and Energy	M4.1 **Conservation**: Biodiversity conservation and sustainable development in TGS
	M4.2 **Energy**: Renewable energy provision and production in TGS
	M4.3 **Climate**: Climate change in TGS

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Specific challenges for coastal areas

Specific challenges of coastal regions

- Coasts are a limitation and Interface
- Many often competing spatial claims

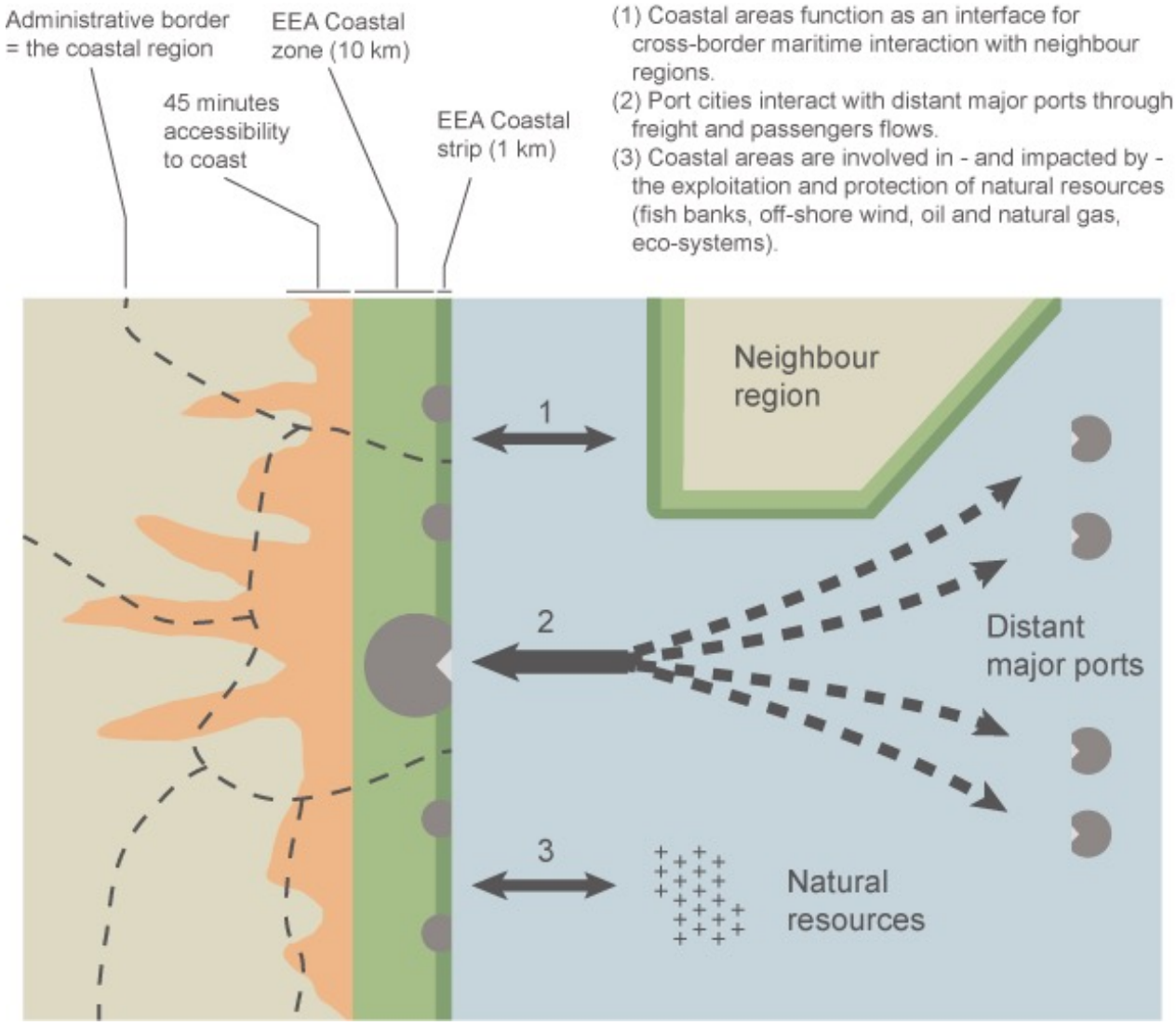
"the band of dry land and adjacent ocean space (water and submerged land) in which terrestrial processes and land uses directly affect oceanic processes and uses, and vice versa"
(Ketchum, B. H. 1972)

Coasts as interfaces

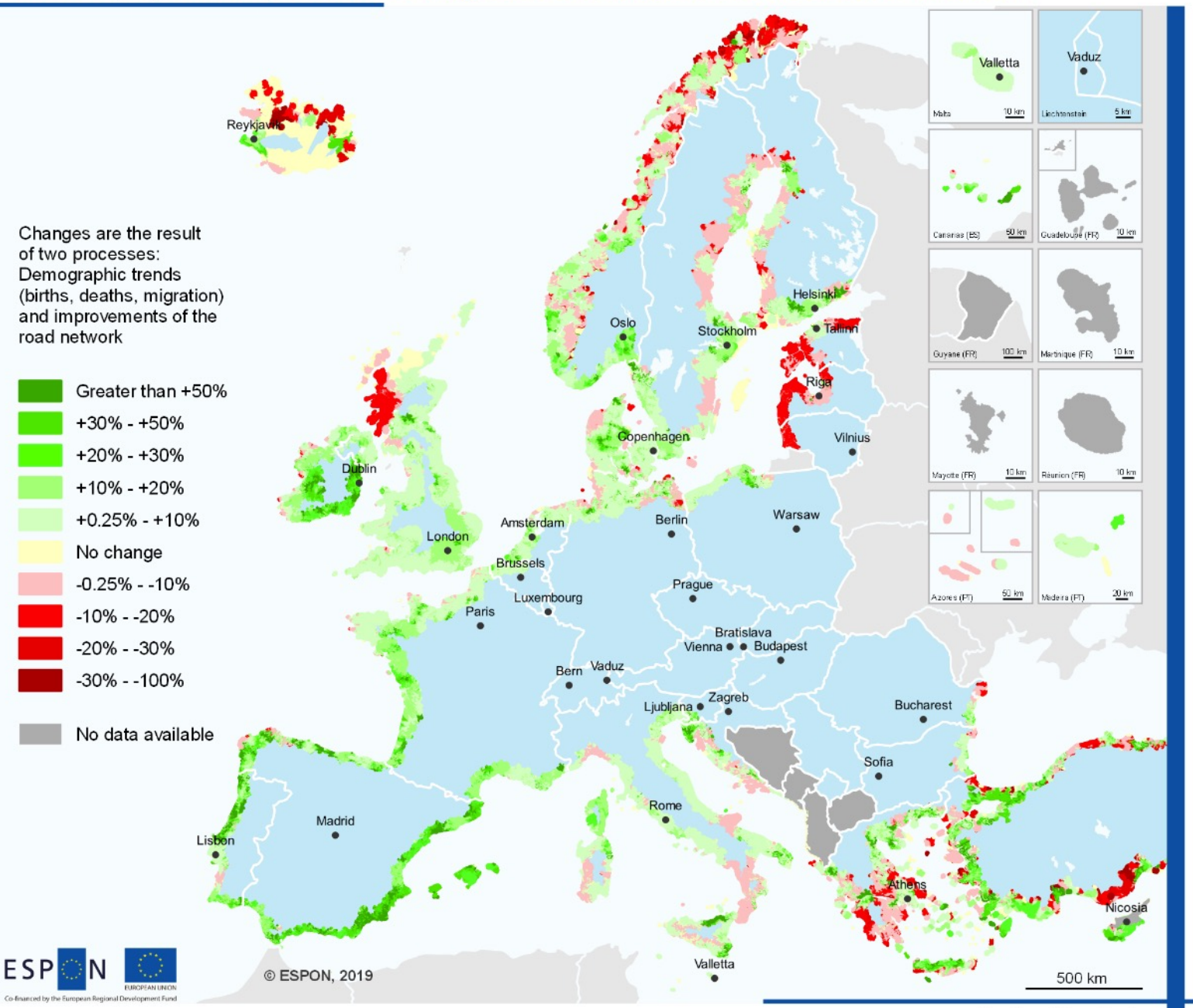
Table 6-1: Coastal areas face pressures both towards the sea and land

Landward pressure	**Seaward pressure**
Harbour developments	Waste discharge
Land reclamation	More sailing boats
Ports and jetties	Dredging of shipping routes
Touristic and recreation facilities and services	Sea fisheries
Renewable energy (e.g. offshore wind)	Water sport and swimming
Industrial complexes	Tidal and wave energy
Coastal defence	Aquaculture
Shoreline management	Oil and gas exploration

Coasts as interfaces



Relative population potential change in coastal areas between 2001 and 2011



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Resolution: 1x1 km grid cells
Source: ESPON BRIDGES, 2019
Origin of data: TCP International, 2019; ESPON GEOSPECS, 2012, RRG GIS Database, 2018
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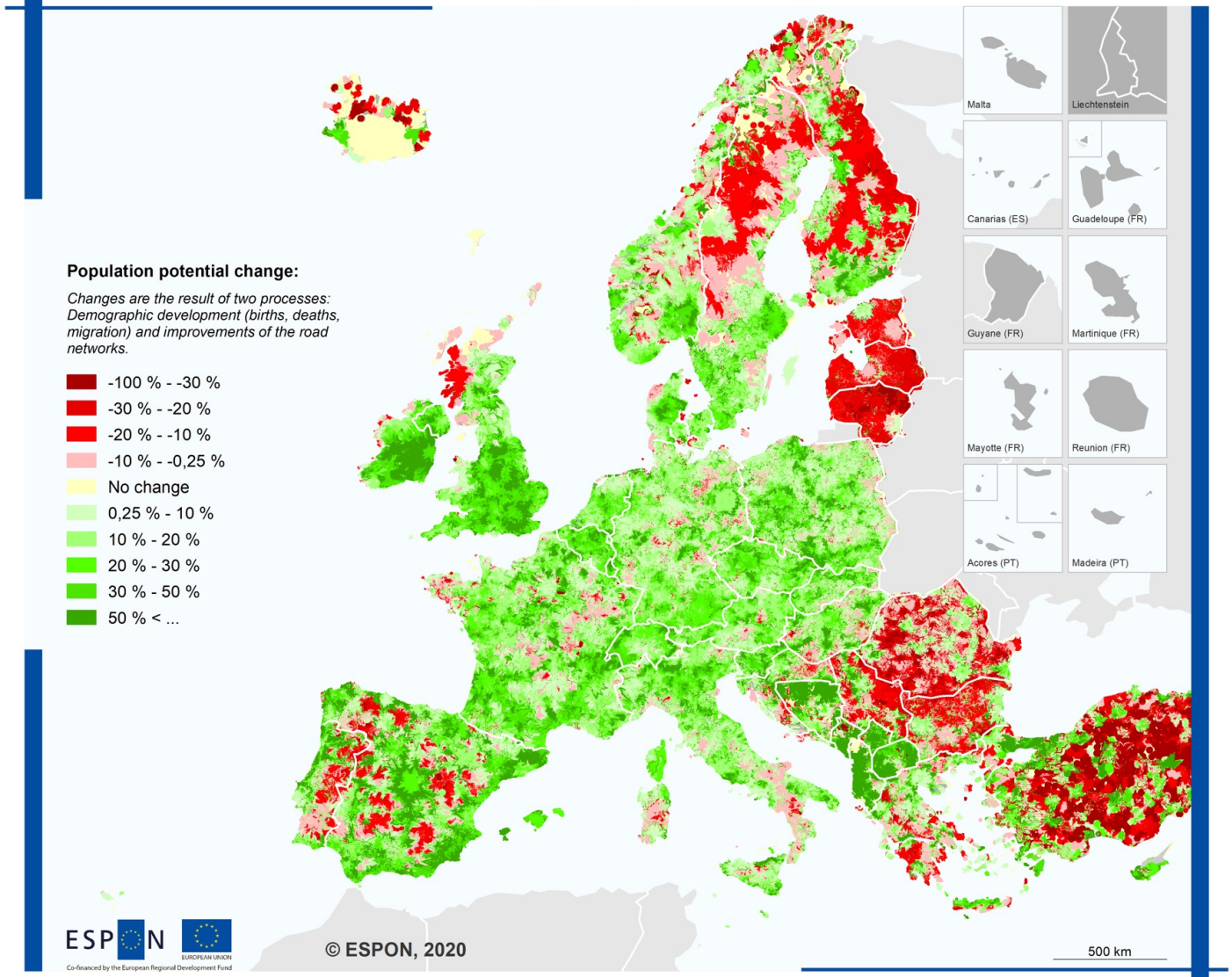
Population potential 2001-2017: Change rate (in % of 2001)



Territorial units: grid, 1x1 km
Source: ESPON BRIDGES OUTREACH, 2020
Origin of data: TCP International, 2020; BBSR, 2019; RRG GIS Database, 2020
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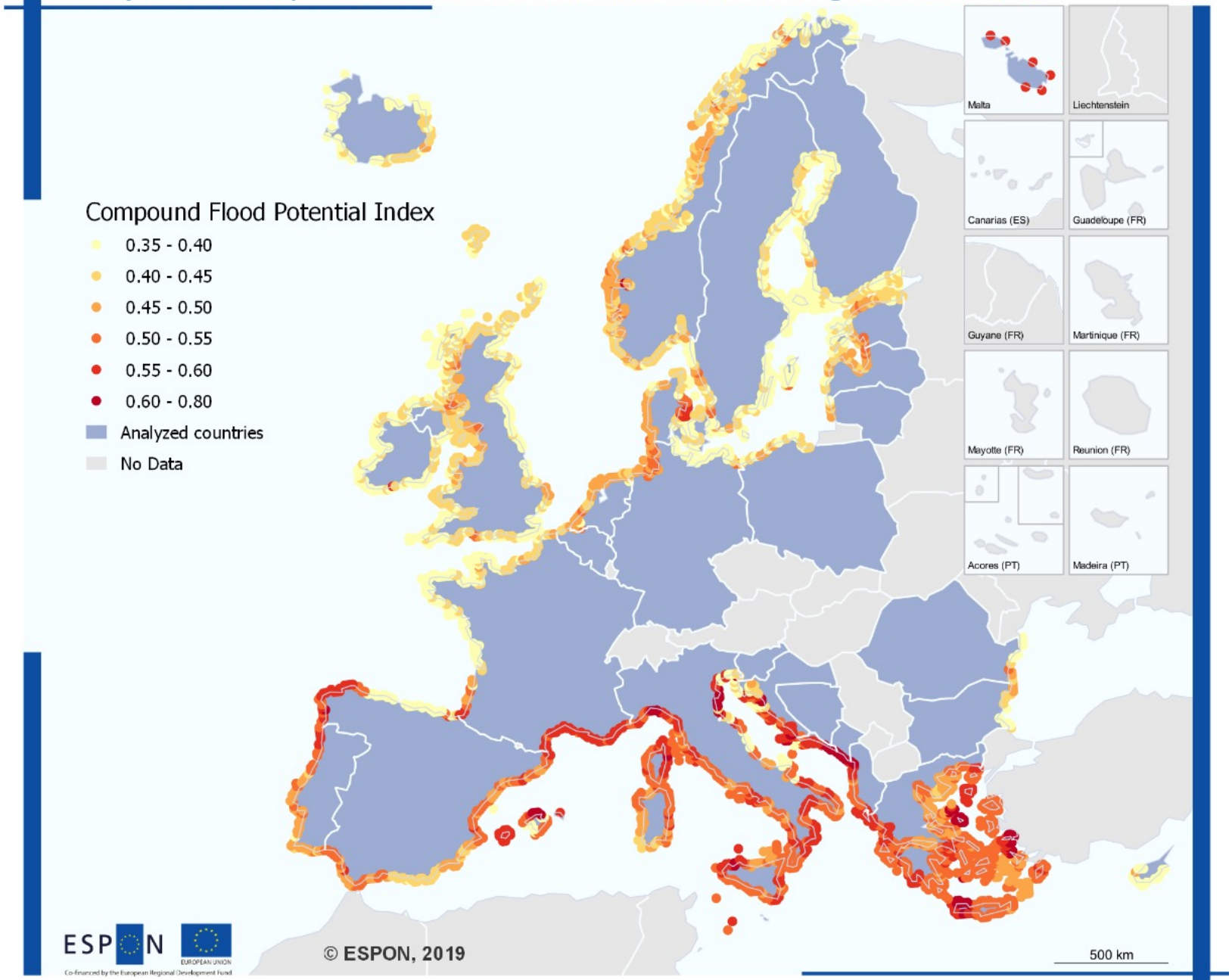
Compound flood potential index for flash flood – storm surge co-occurrence



Regional level: NUTS 0 (2013)
Source: ESPON BRIDGE, 2019
Origin of data: JRC-Liscoast, 2018
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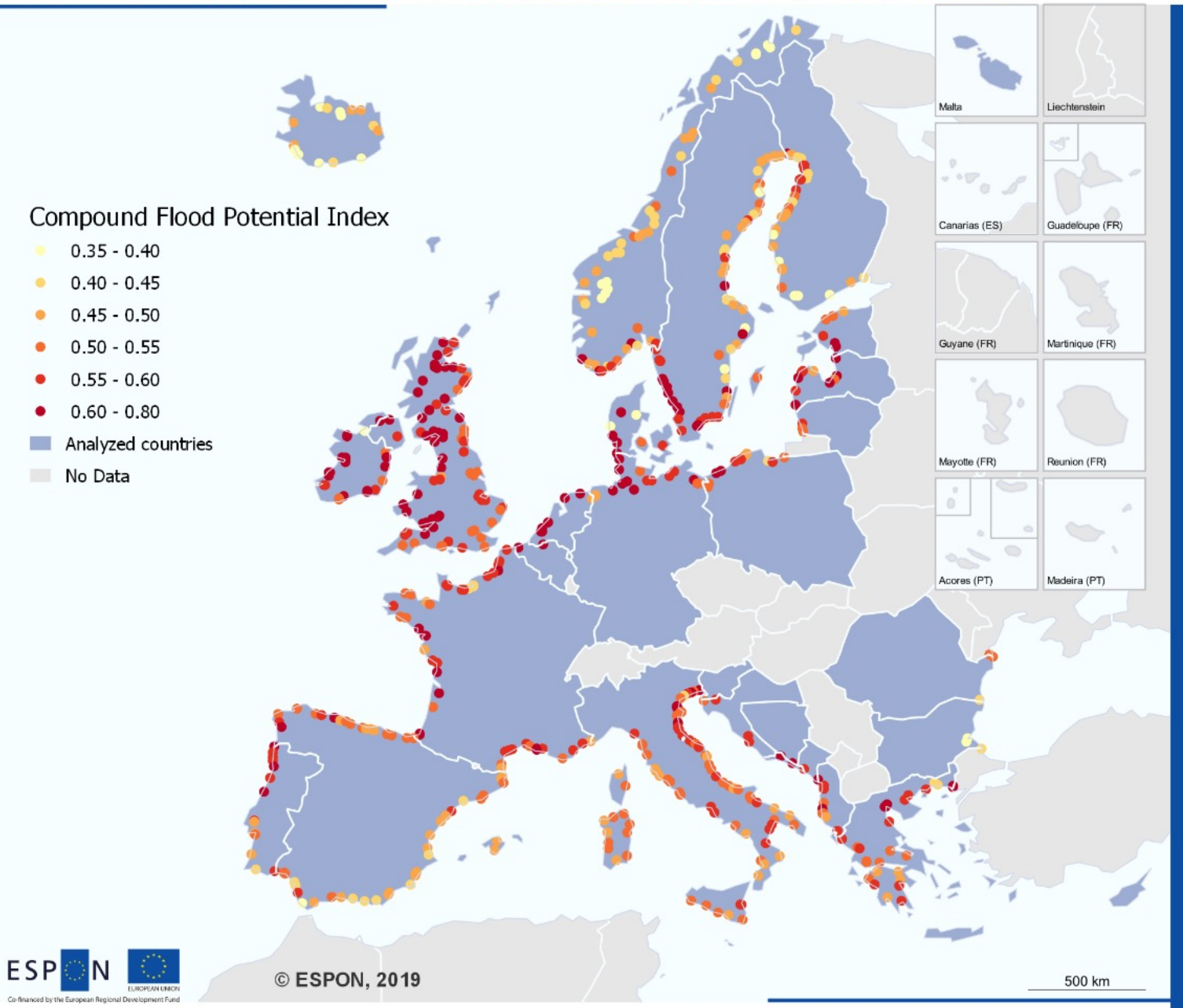
Compound flood potential index for river flood – storm surge co-occurrence



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© ESPON, 2019

Regional level: NUTS 0 (2013)
Source: ESPON BRIDGE, 2019
Origin of data: JRC-Liscoast, 2018
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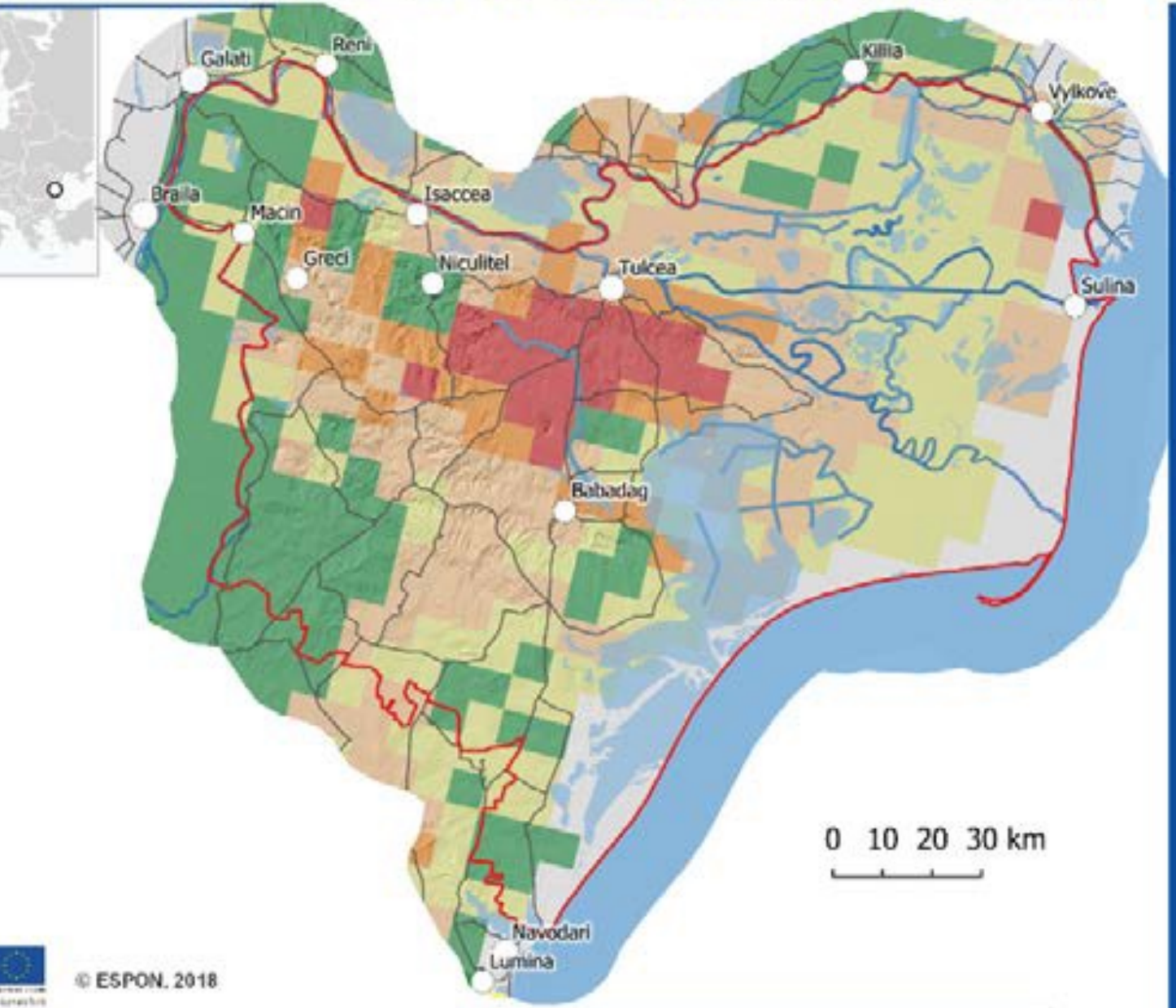
Delta: Flood recurrence - RCP 4.5 - return period 10 years (year 2050)



Legend

Case study area

% change relative to the 197

- -78 - 0
- 0 - 40
- 40 - 100
- 100 - 160
- 160 - 214

© ESPON, 2018

Territorial level: 5 km grid
Source: ESPON BRIDGE, 2018
Origin of data: SWICCA: SMHI-RCA4-EC-EARTH-rcp45
EuroGeographics for topographic elements

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ESPON BRIDGES Cases Study examples – Implications of coastal changes for planning practices

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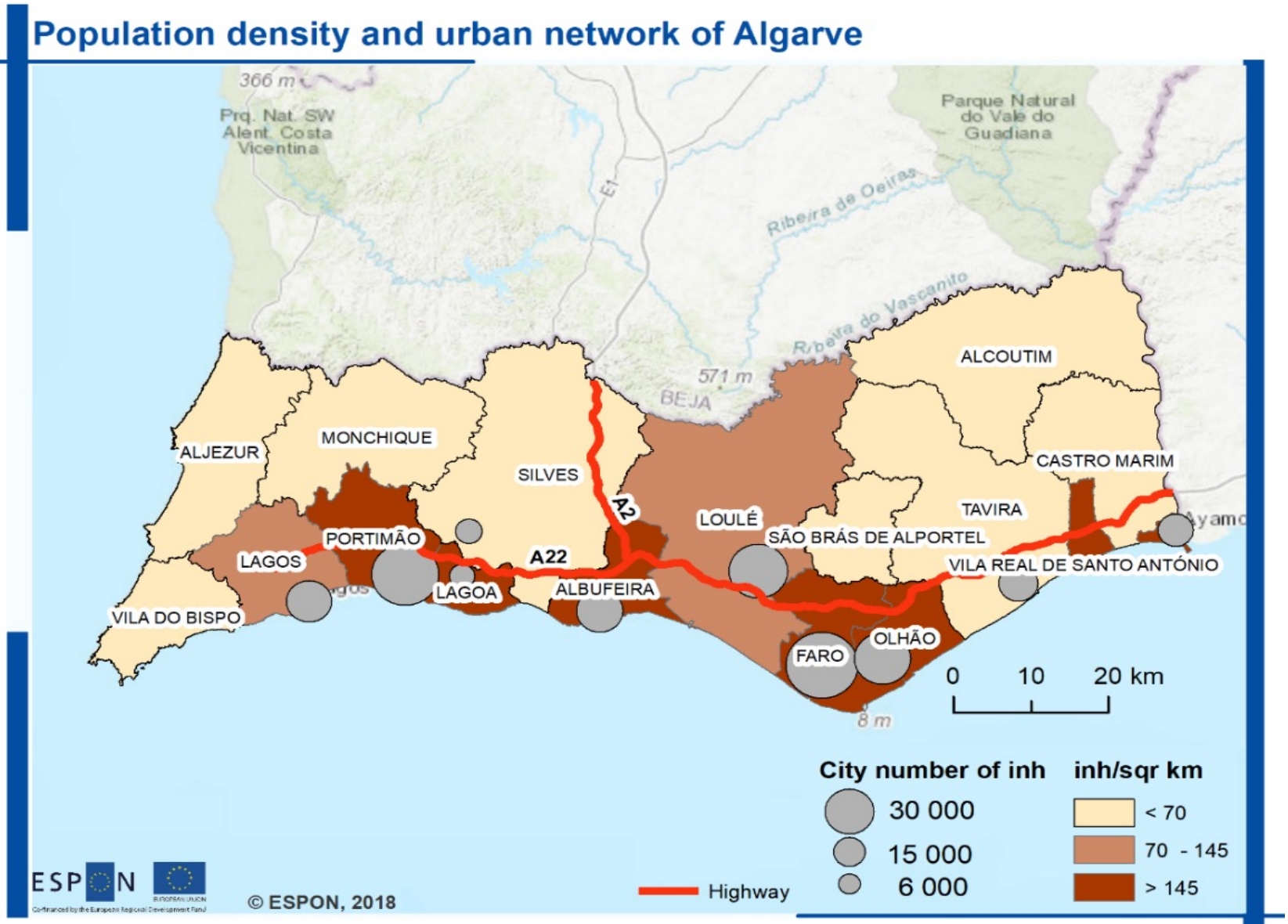
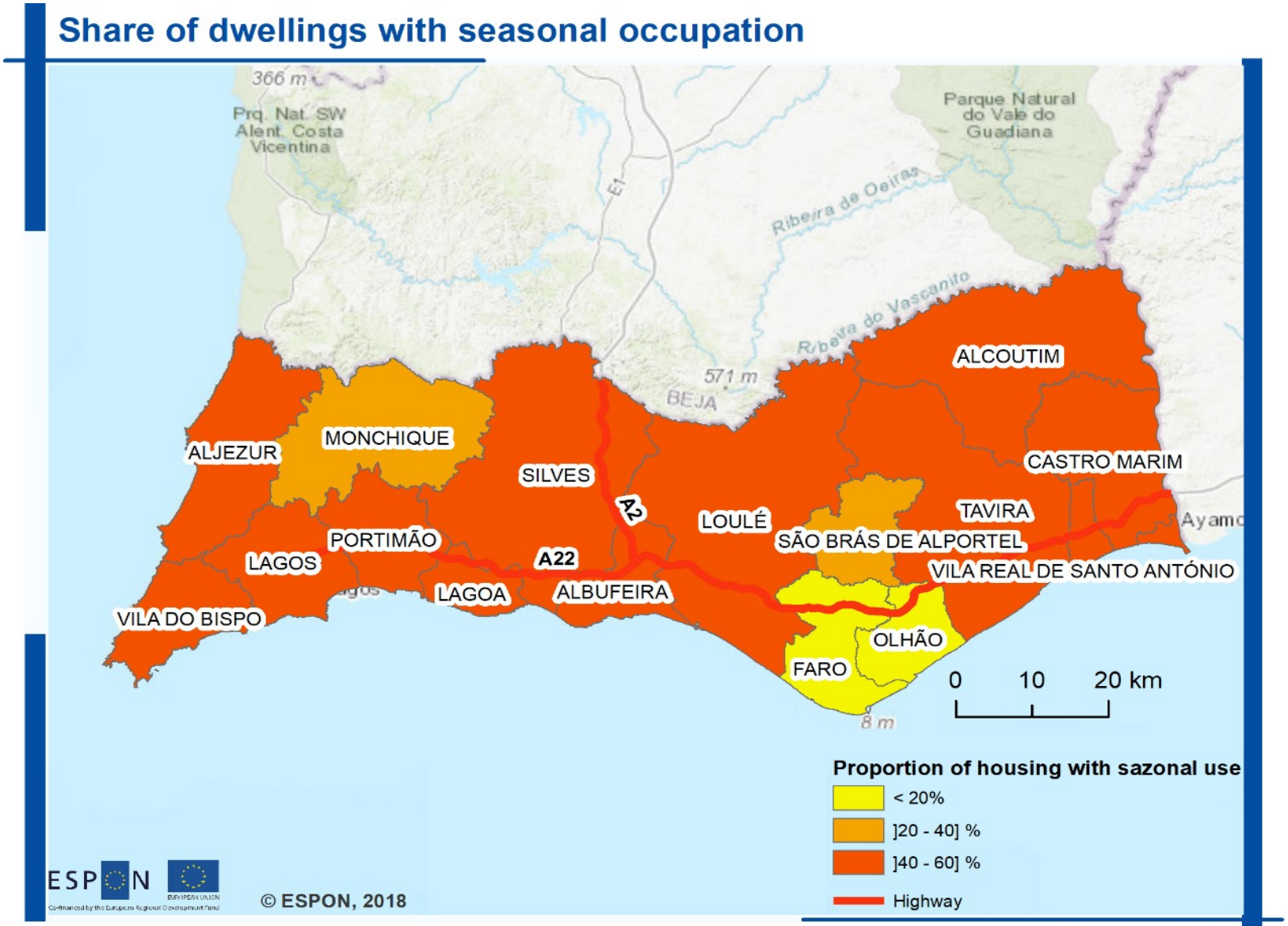
Case Study: Algarve

Residential Economy

Populaion density



Proportion of housing with seasonal use (%)



Story

- Mass tourism comes alongside with its problem:
- Regional spatial planning strategy- Algarve – Plano Regional de Ordenamento do Território para a Região do Algarve
- Planning and Smart Specialization Strategies are important tools to cope with the development challenges.
- RIS3 Algarve was launched in 2015. The following priority specialisation areas have been selected:
  - tourism; sea related economic activities; agro-food and forestry; green economy; health and life sciences; ICT and creative industries.

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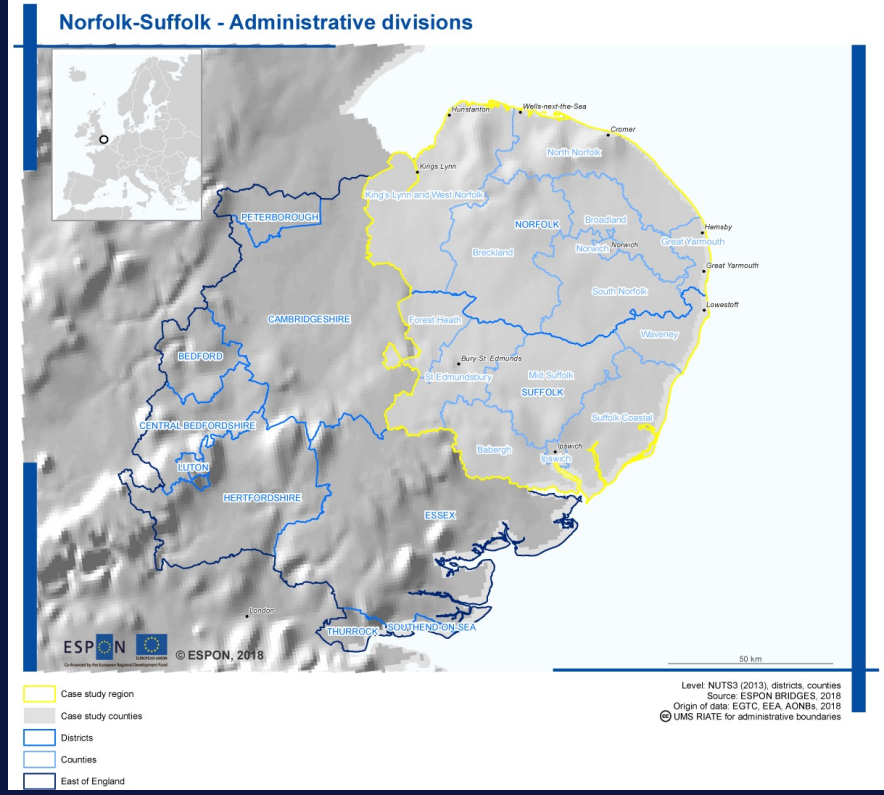
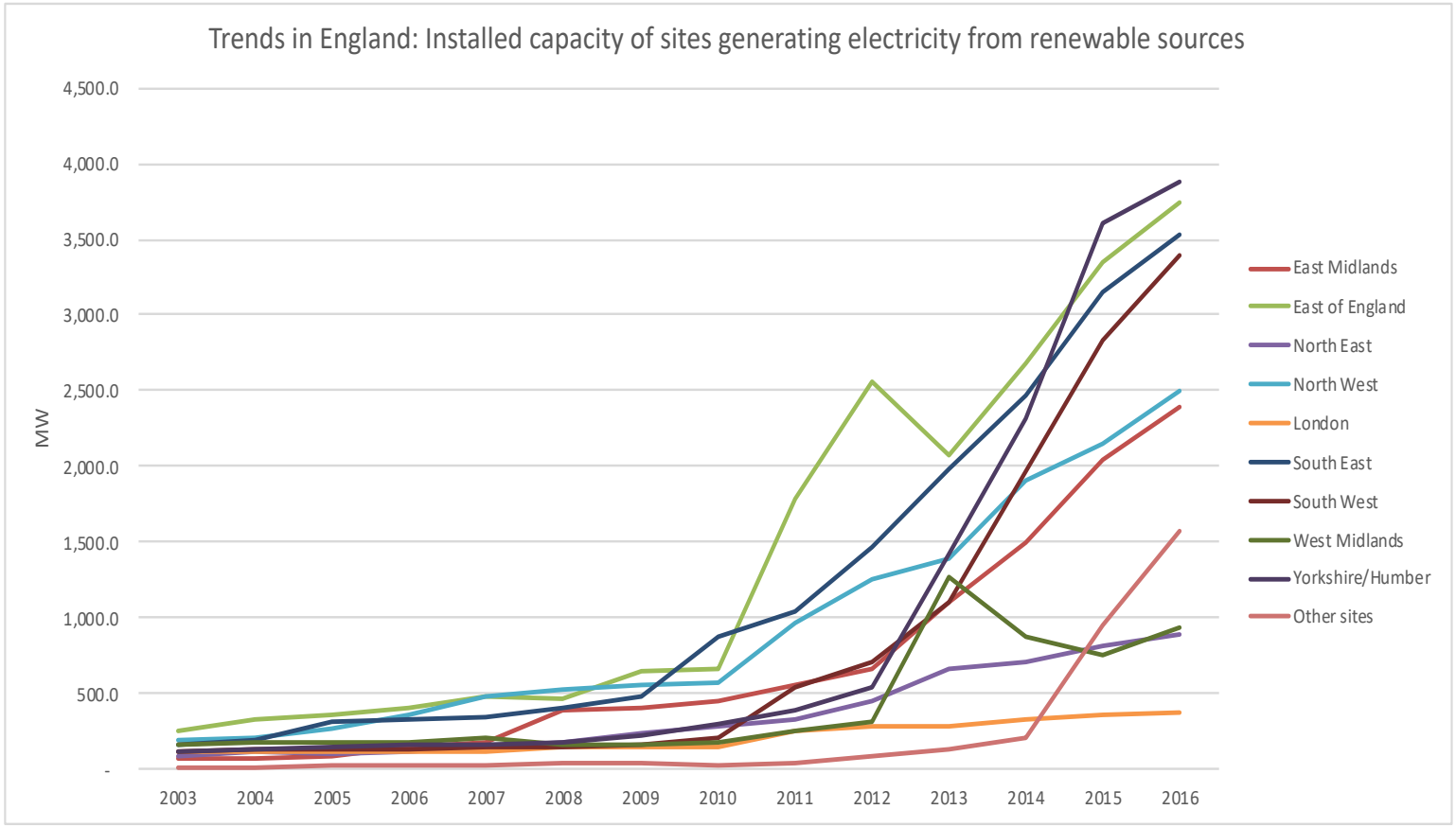


Case Study: Norfolk-Suffolk

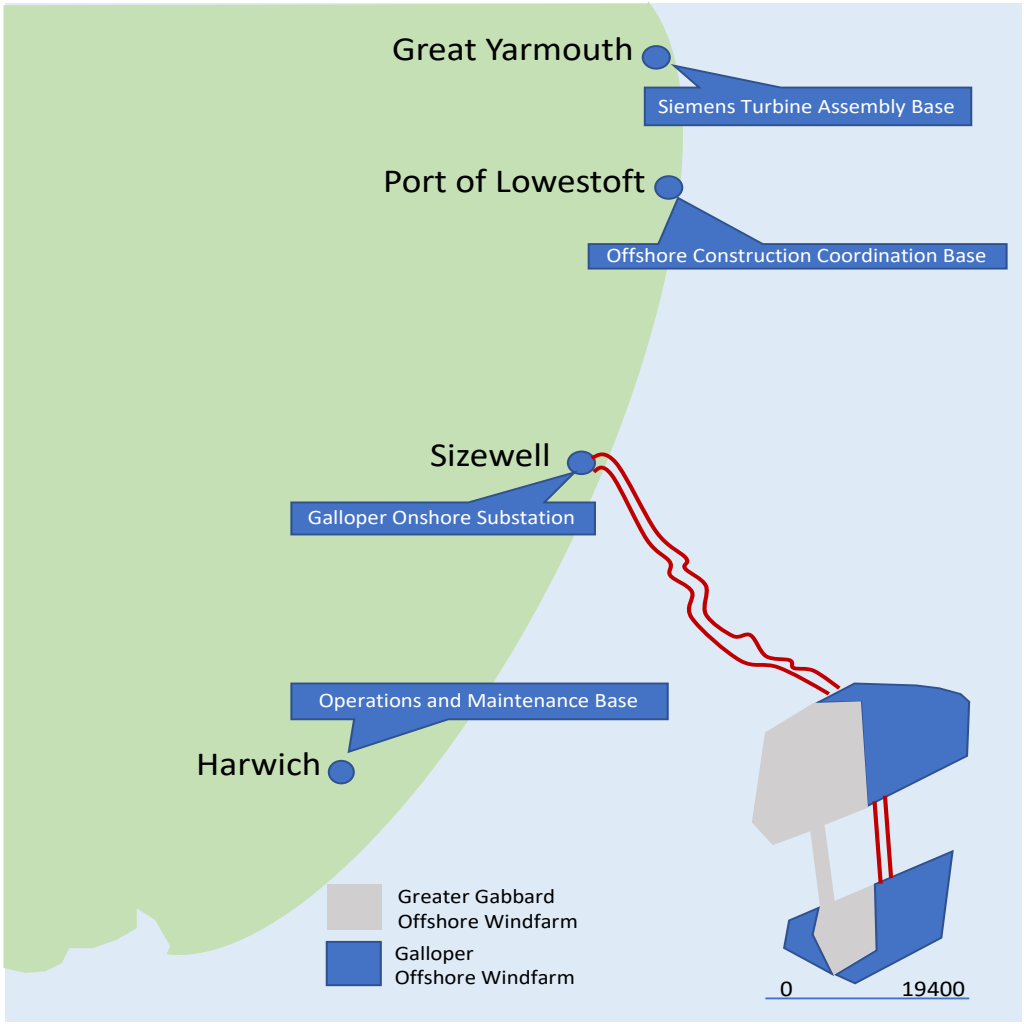
Developing an Energy Coast

East Anglian Energy Coast



Example of the Galloper Windfarm

The biggest project in front of the coast of Suffolk under construction is the Galloper wind farm.



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Conclusions