



measuring the blue economy

ad-hoc Member States' Expert Group
29 September 2015



we need better
information on the
size and growth
rate of the blue
economy

approach towards an Integrated Maritime Policy Database
sea and coastal areas in Europe
future sources of growth
blue growth Baltic
blue growth, Mediterranean, Black Sea, Adriatic Ionian
blue growth Atlantic
blue growth North Sea
impact assessment - coastal and maritime tourism

- **broad understanding of**
 - relative size of sectors
 - challenges of maritime data
 - characteristics of Member States' blue economies

- from first study
 - If Eurostat do not collect the data, it is impossible to get them elsewhere
- but not absorbed in subsequent studies
 - mistakes
 - results not reproducibile
 - indirect jobs not counted
 - unjustified projections
- so we started again



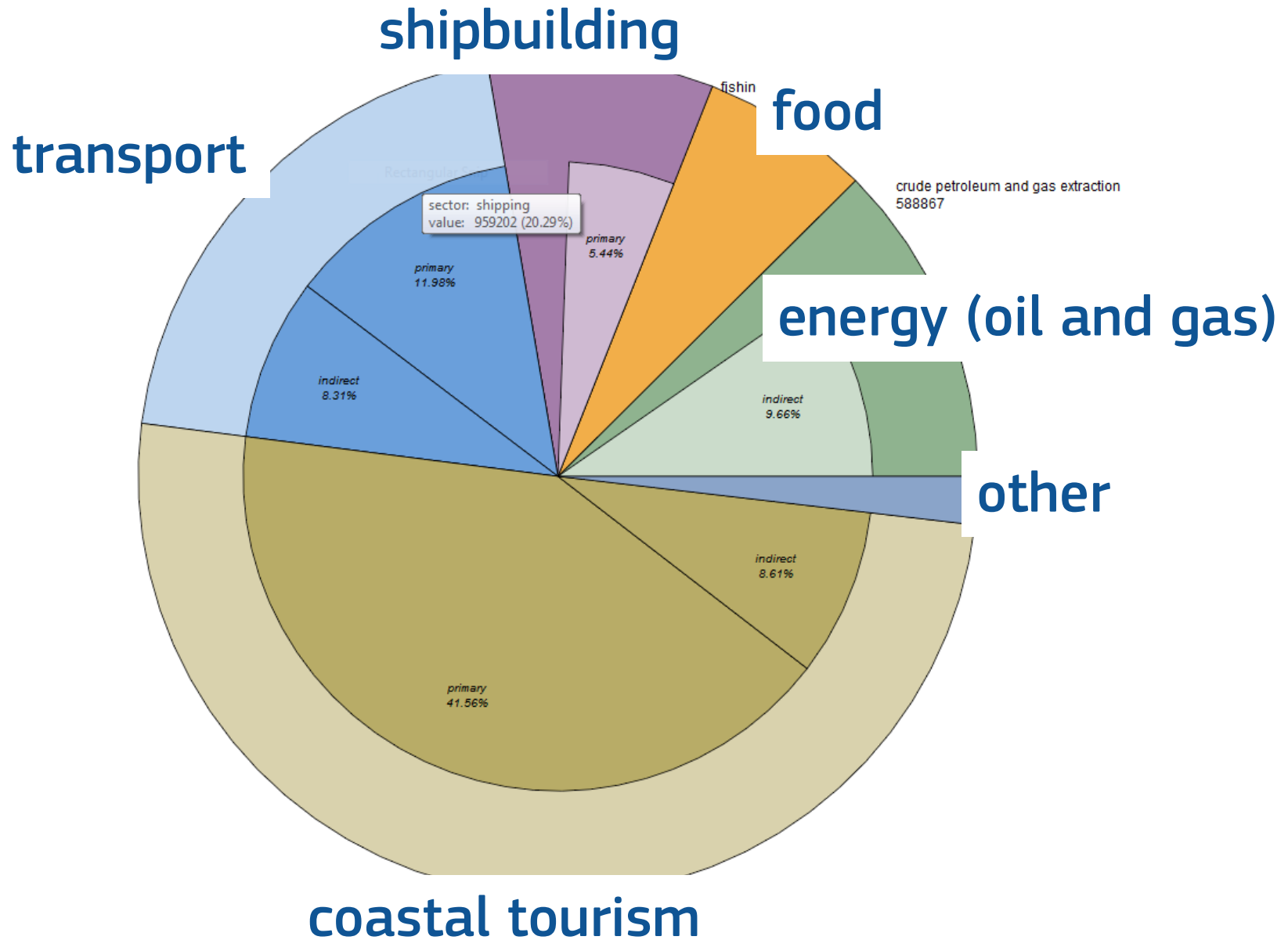


blue economy

- market activity taking place on European territory that is intrinsically linked to the sea



EU employment





- investment, production, and distribution based on supply and demand,
- prices of goods and services are determined in a free price system,
- excludes
 - education
 - research
 - etc



comparison with US

United States



living resources
ship and boat building
offshore mineral resources
marine transportation
marine construction
tourism and recreation

European Union

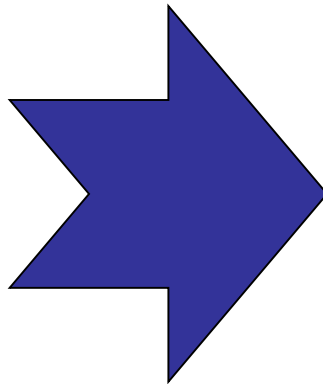


food
shipbuilding
energy
transport
(included under transport)
coastal tourism
other

$$J_i = \sum_{j=1}^{j=n} \frac{p_i \alpha_i^j}{t^j}$$

$i \in P, j \in S, j \notin P$

- Eurostat structural business statistics and
- supply and use tables

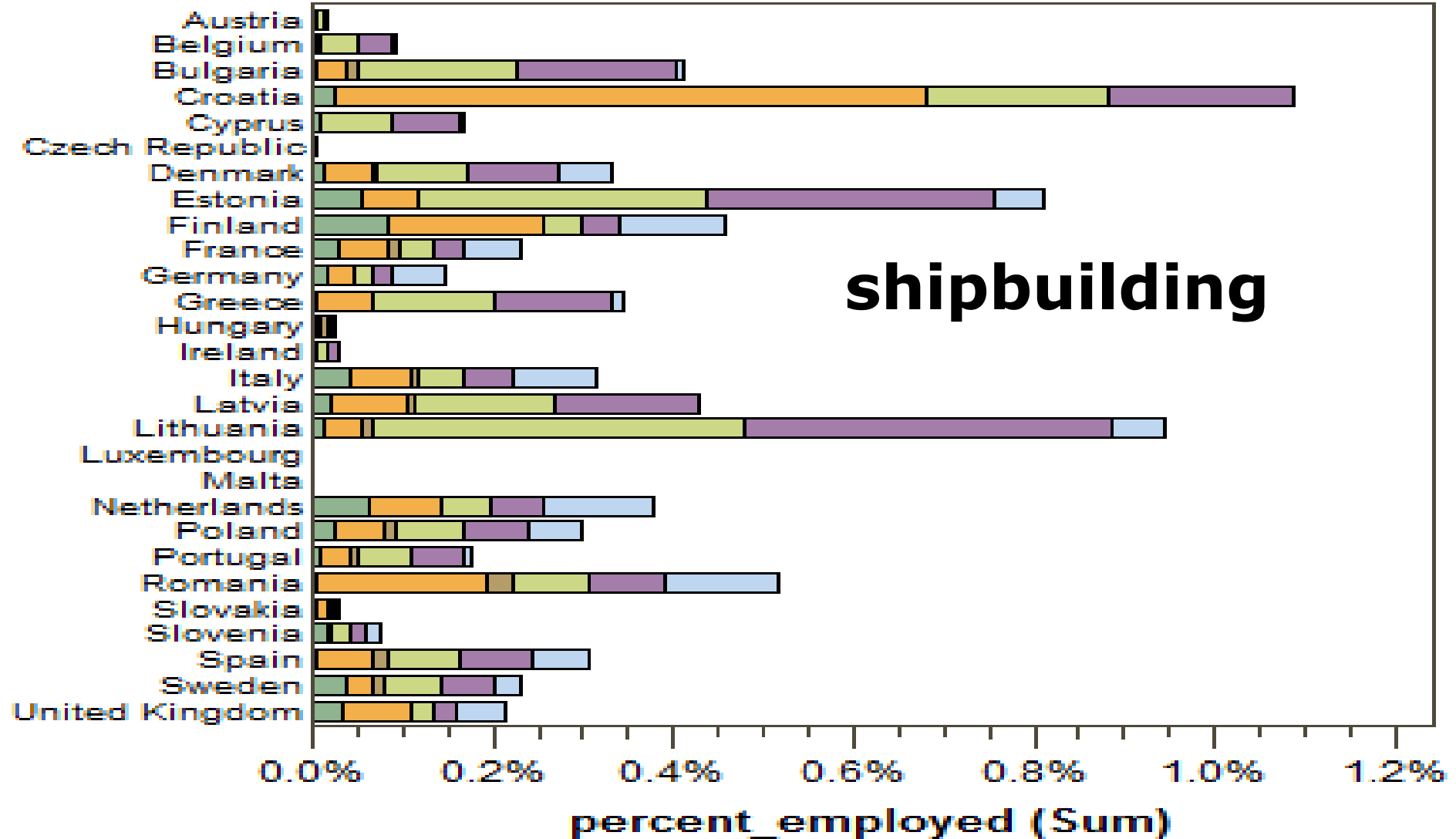


employment in enterprises providing goods and services to primary activities in each Member State



- **fisheries and aquaculture**
 - warehousing and transportation support 6%
- **extraction of petroleum and gas**
 - mining support services 28%
 - financial services 8%
- **shipbuilding**
 - machinery and equipment 13%
 - fabricated metal products 10%
- **ship repair**
 - repair of machinery 8%
- **water transport**
 - warehousing and transportation support 31%
 - coke and refined petroleum products 15%

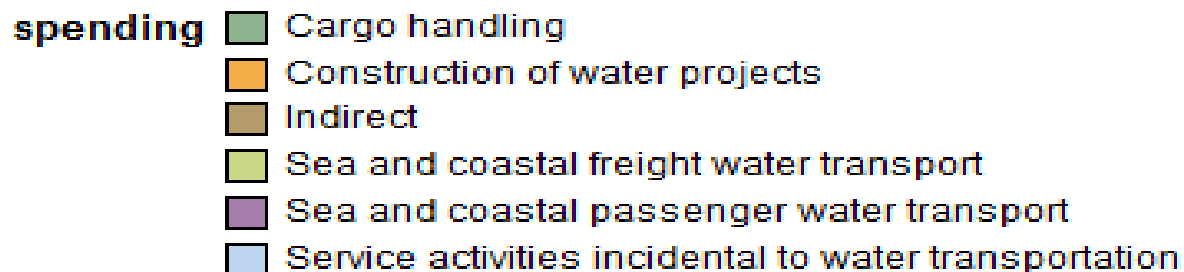
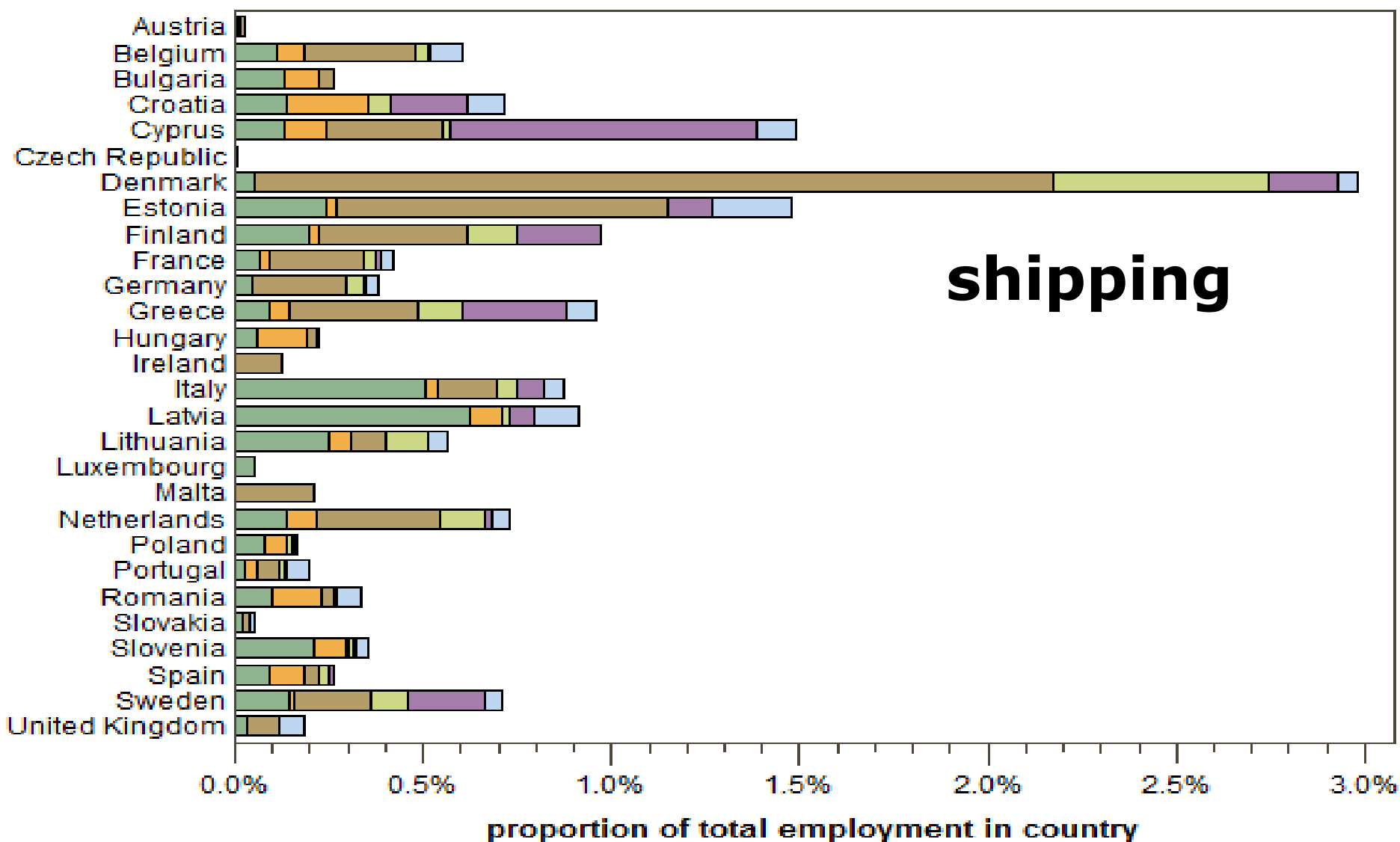
shipbuilding

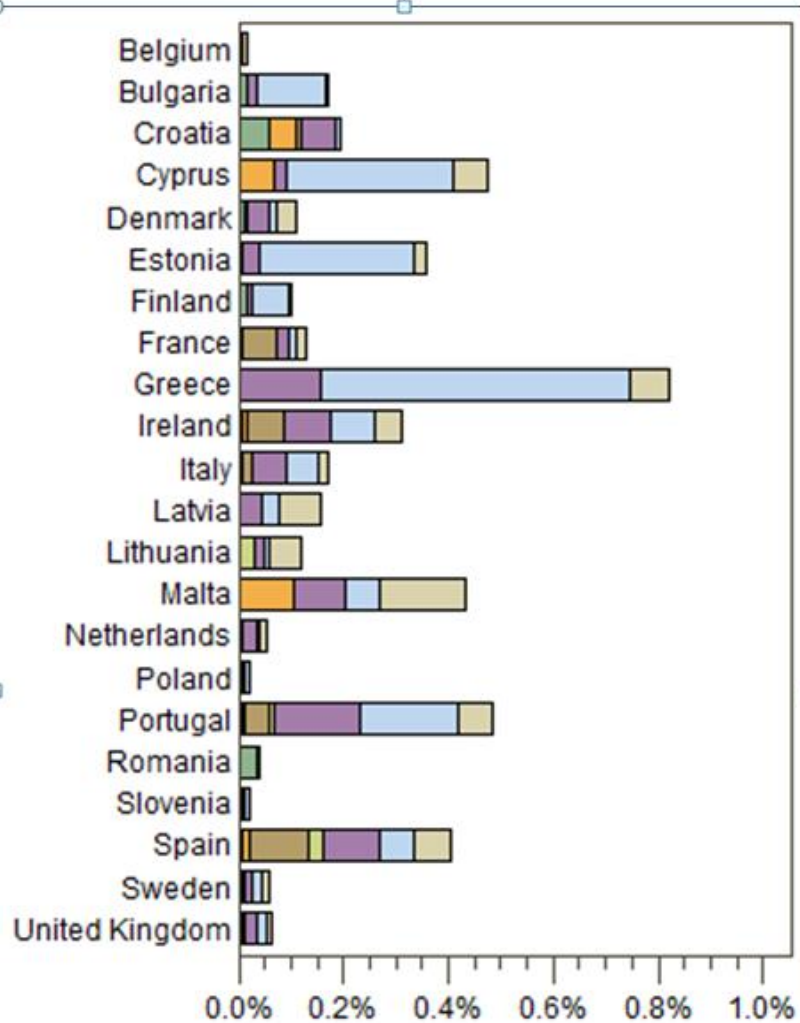


spending

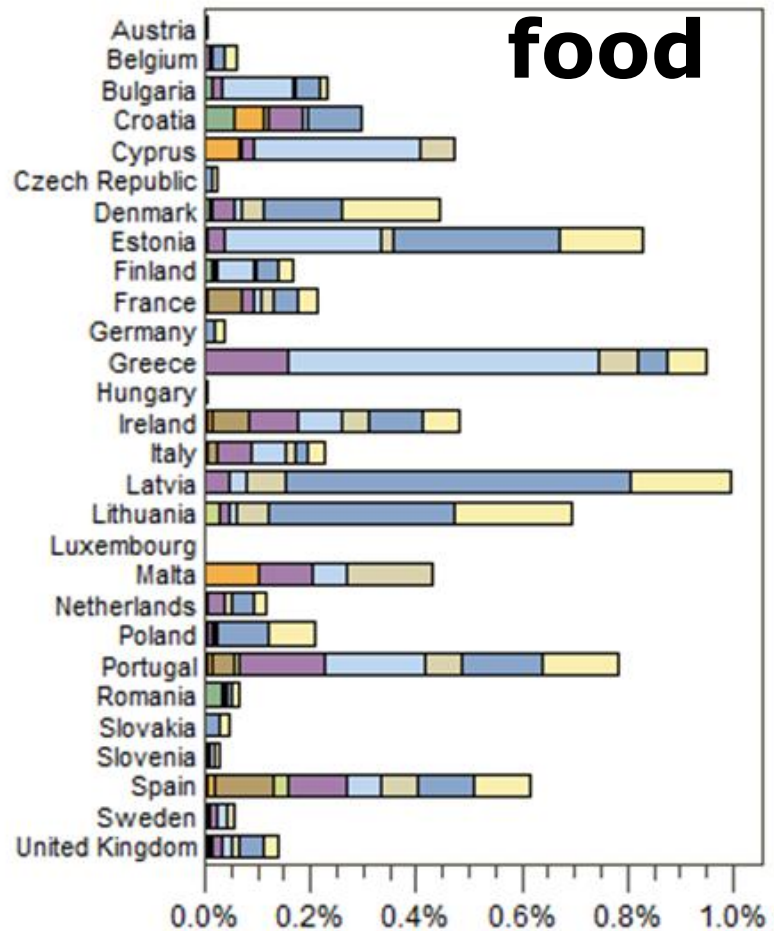
- Building of pleasure and sporting boats
- Building of ships and floating structures
- Dismantling of wrecks
- Repair and maintenance of ships and boats
- supplies to repair
- supplies to shipbuilding

shipping

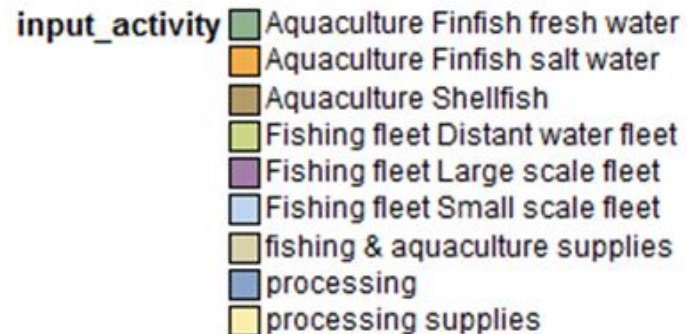




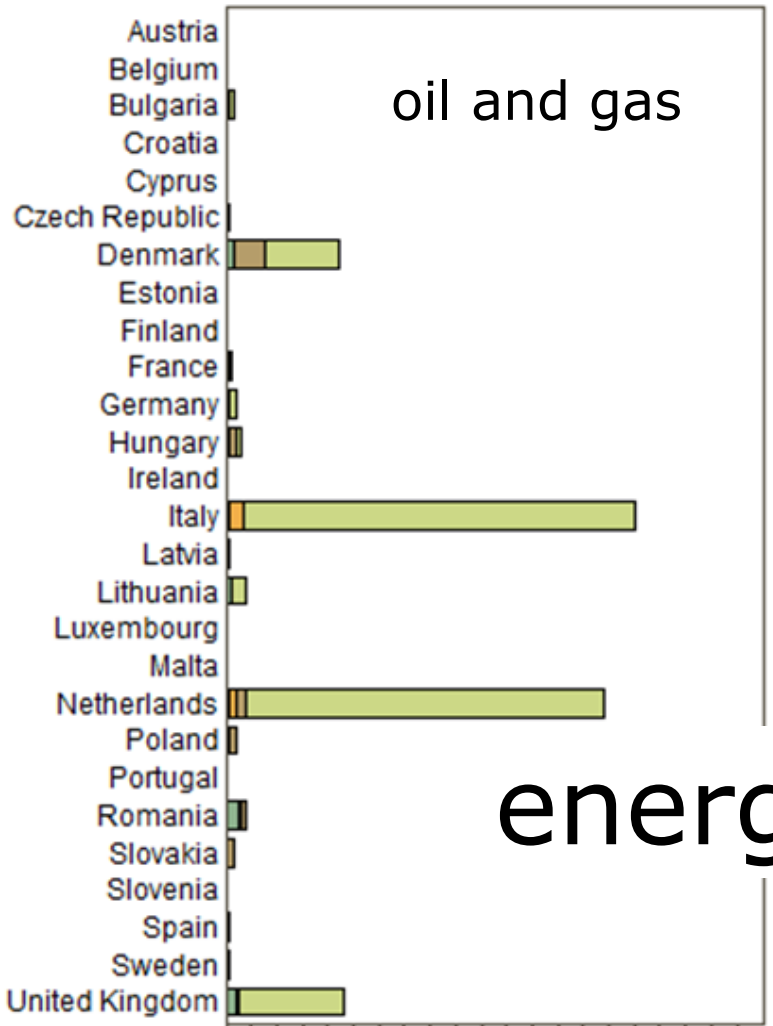
proportion of total employment in country



proportion of total employment in country

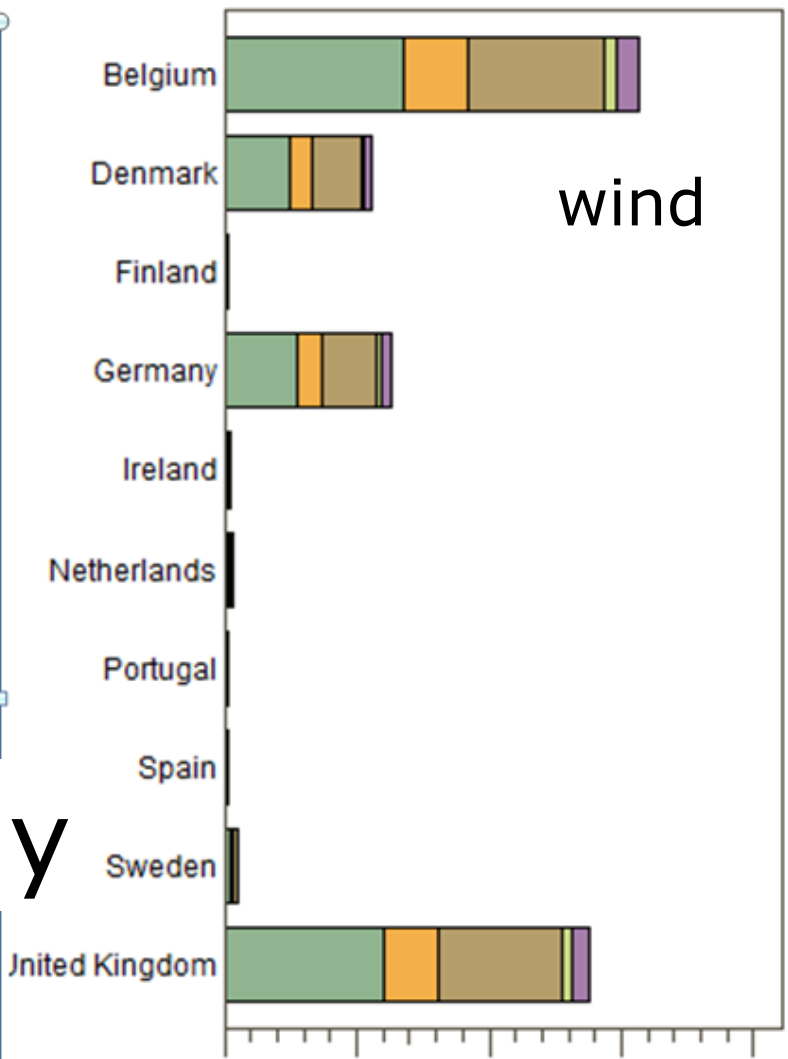


oil and gas

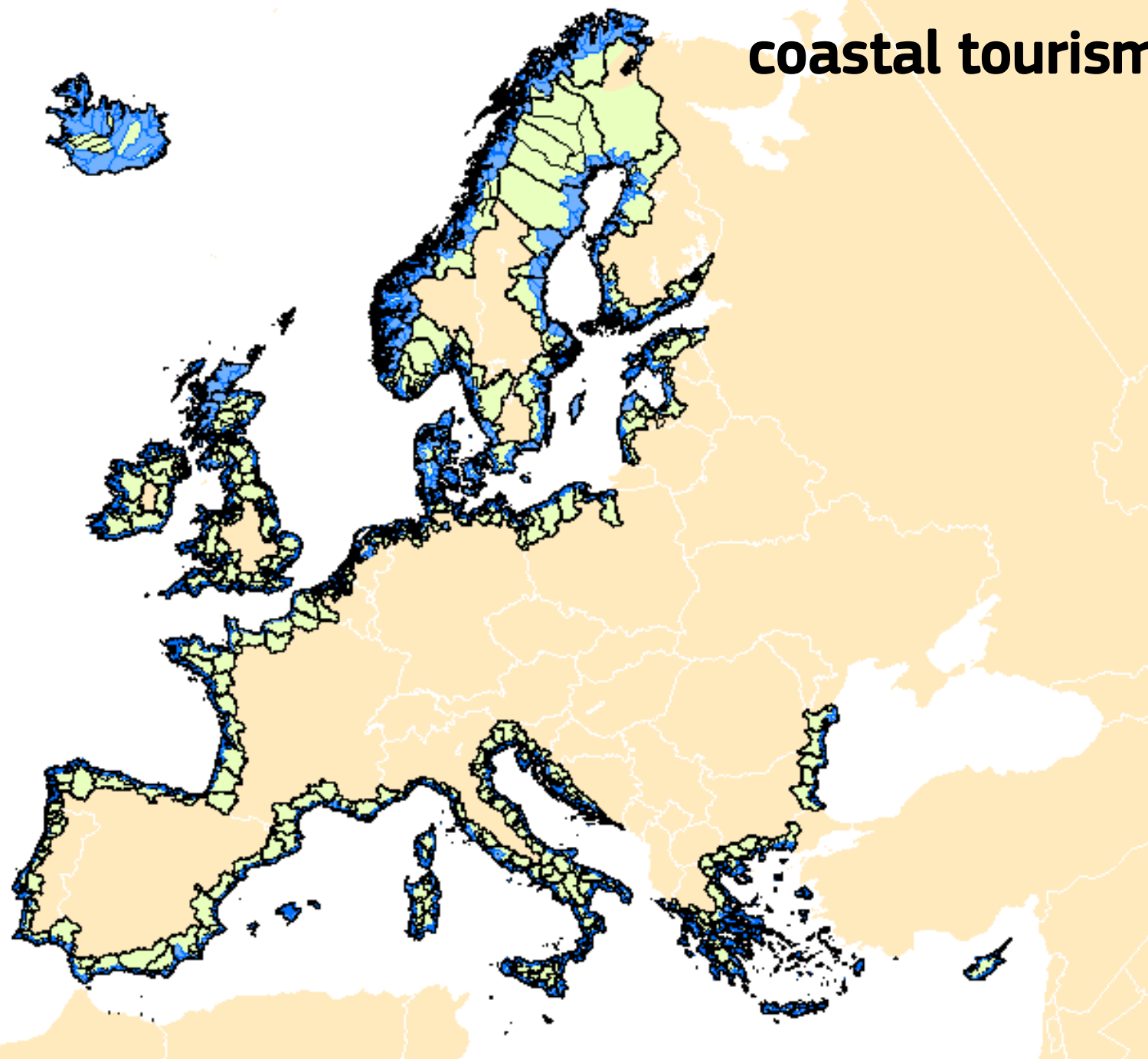


energy

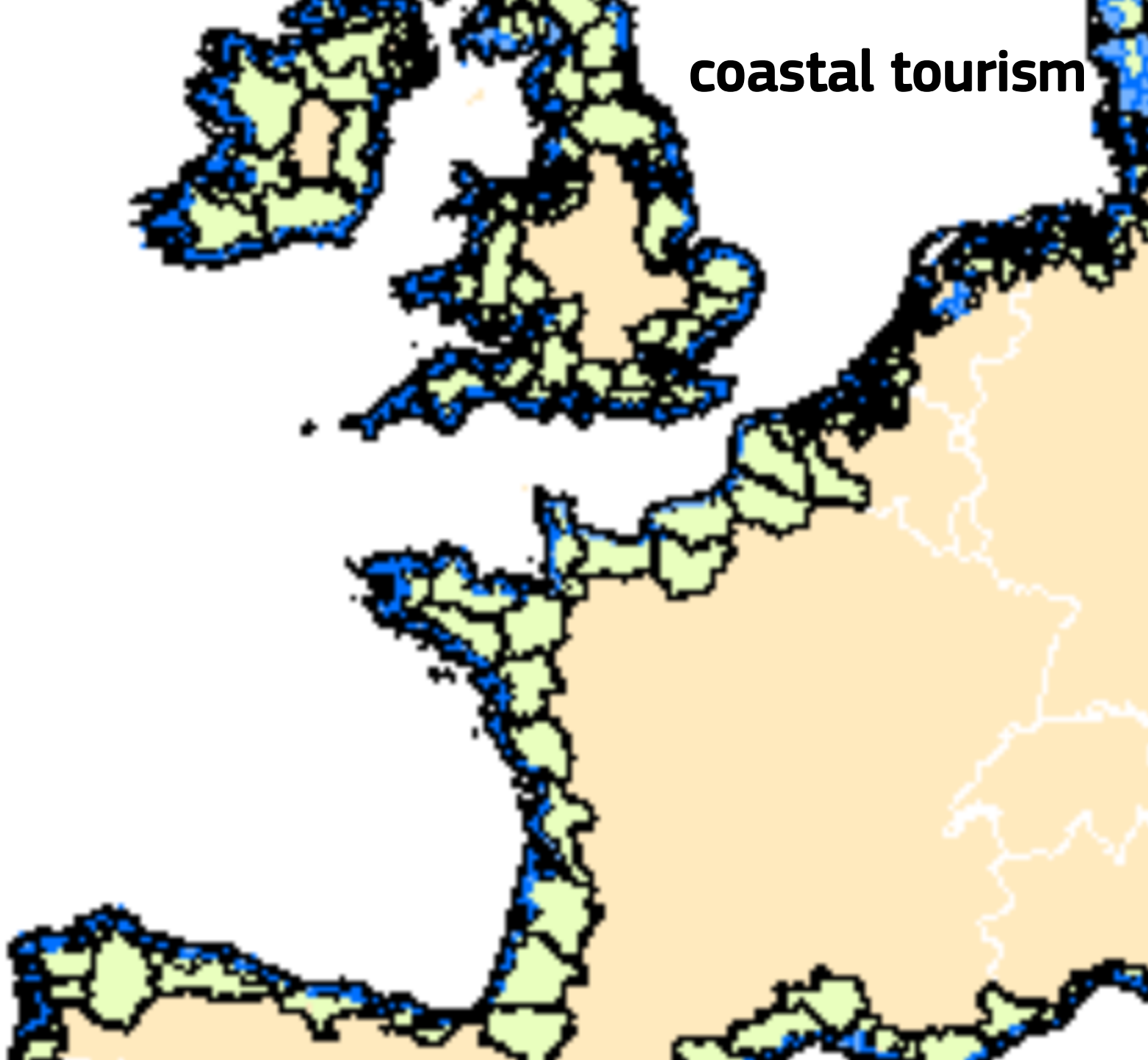
wind



coastal tourism



coastal tourism





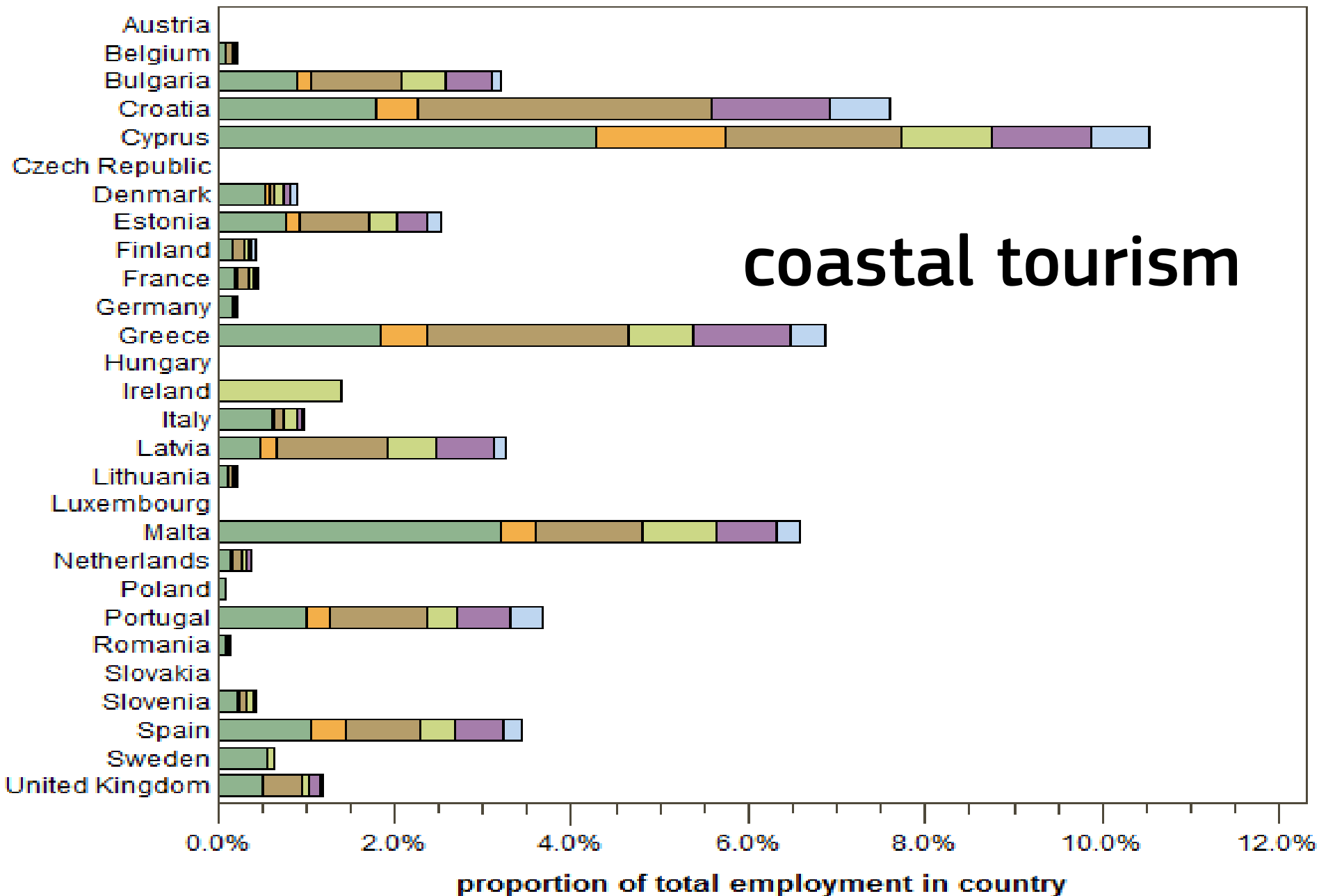
- accommodation
 - night spent from surveys of tourism destinations.
 - turnover and employment assumes same characteristics as non-coastal
- transport, food and beverage services and "other"
 - from surveys of tourist spending
 - turnover to employed ratios.
 - "retail activities" used to estimate employment generated by spending on "other"

does not include



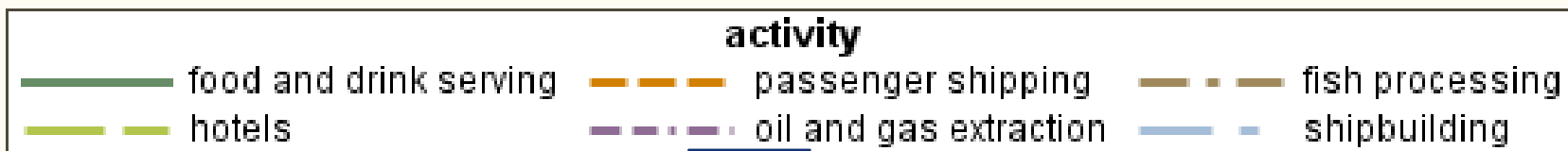
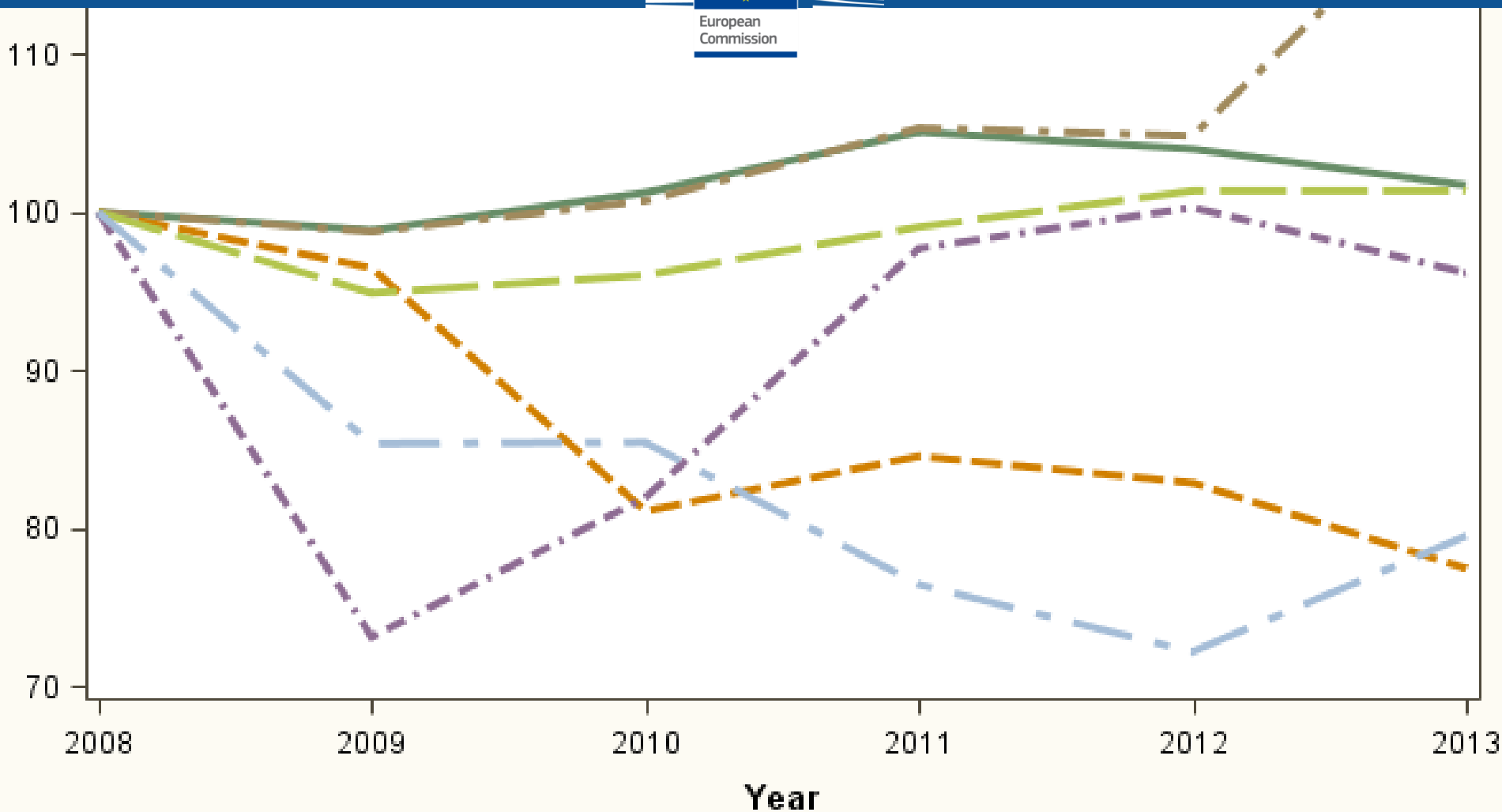
- business trips (would add less than 10%)
- construction, maintenance and management of second homes
- day trips

coastal tourism



spending accommodation air transport food and beverage service indirect other other transport

activity	indicator	Value (€ billions)
crude petroleum and gas extraction	turnover	160
offshore wind	investment	4
fishing	revenue	7
aquaculture	turnover	2
fish processing	gross value added	7
shipbuilding and repair	turnover	43
shipping	turnover	110
tourism (residents)	turnover	51
tourism (non-residents)	turnover	130
total		≈450





year	Total employment	Onshore jobs	Offshore jobs
2007	163,744	152,170	11,571
2008	158,627	143,840	14,783
2009	194,691	170,990	23,698
2010	202,278	162,864	39,414
2011	203,835	162,536	41,298
2012	254,497	195,616	58,881
2013	252,807	174,966	77,841
2014	262,061	187,035	75,026

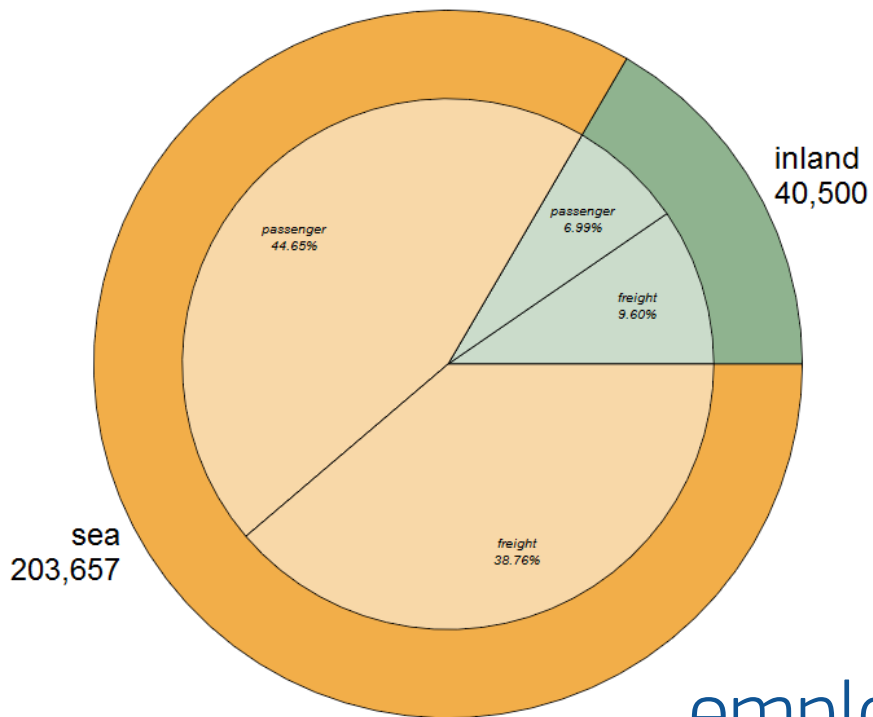
Subsectors	percent
WT manufacturing	37.0%
Component manufacturing	22.0%
Wind farm development	16.0%
Installation and maintenance	11.0%
IPP/utilities	9.0%
Consultants	3.0%
R&D/universities	1.0%
Finance	0.3%
Others	0.7%
Total	100.0%



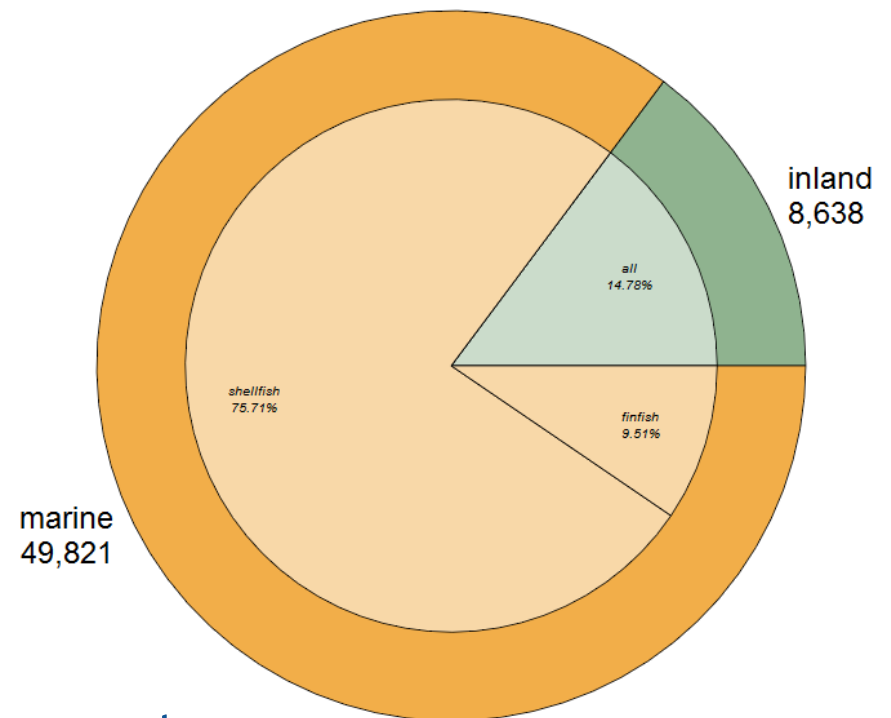
EWEA

THE EUROPEAN WIND ENERGY ASSOCIATION

shipping




aquaculture



employment



1. the definition of the blue economy (section 2.1);
2. the main sectors identified (has any important contribution been forgotten?);
3. the assumptions made (focus on market economy, neglecting business travel or day trips, etc);
4. the estimate of number of people employed (in EU and Member States);
5. the conclusions regarding growth rate;
6. the most appropriate approach for estimating the contribution to GDP.

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- replies to questions
 - contact points
 - availability for further meetings
 - (in better meeting room)