



# measuring the blue economy

**Glenio Abbey Hotel,  
Galway,  
24 November 2015**



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



- studies undertaken
  - 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
  
- led to 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
  - mistakes
  - results not reproducible
  - indirect jobs not counted
  - unjustified projections
- so we started again



- market activity contributing to the EU's Gross Domestic Product that depends intrinsically on the sea.

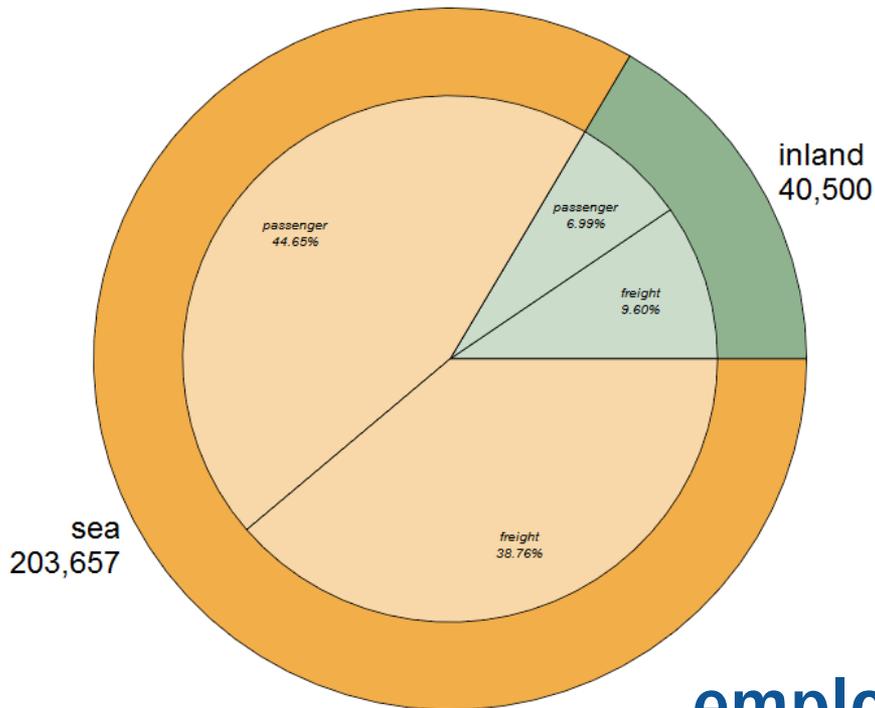
## includes

- activity not on EU territory
- inland waterways and freshwater aquaculture

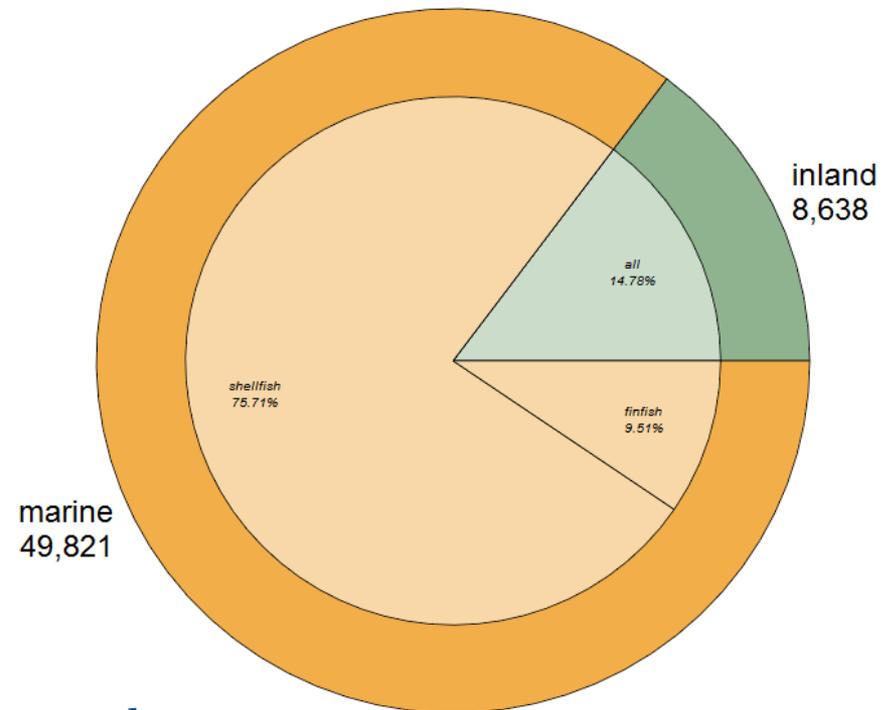
## does not include

- non-market activities  
education, research, defence etc

## shipping



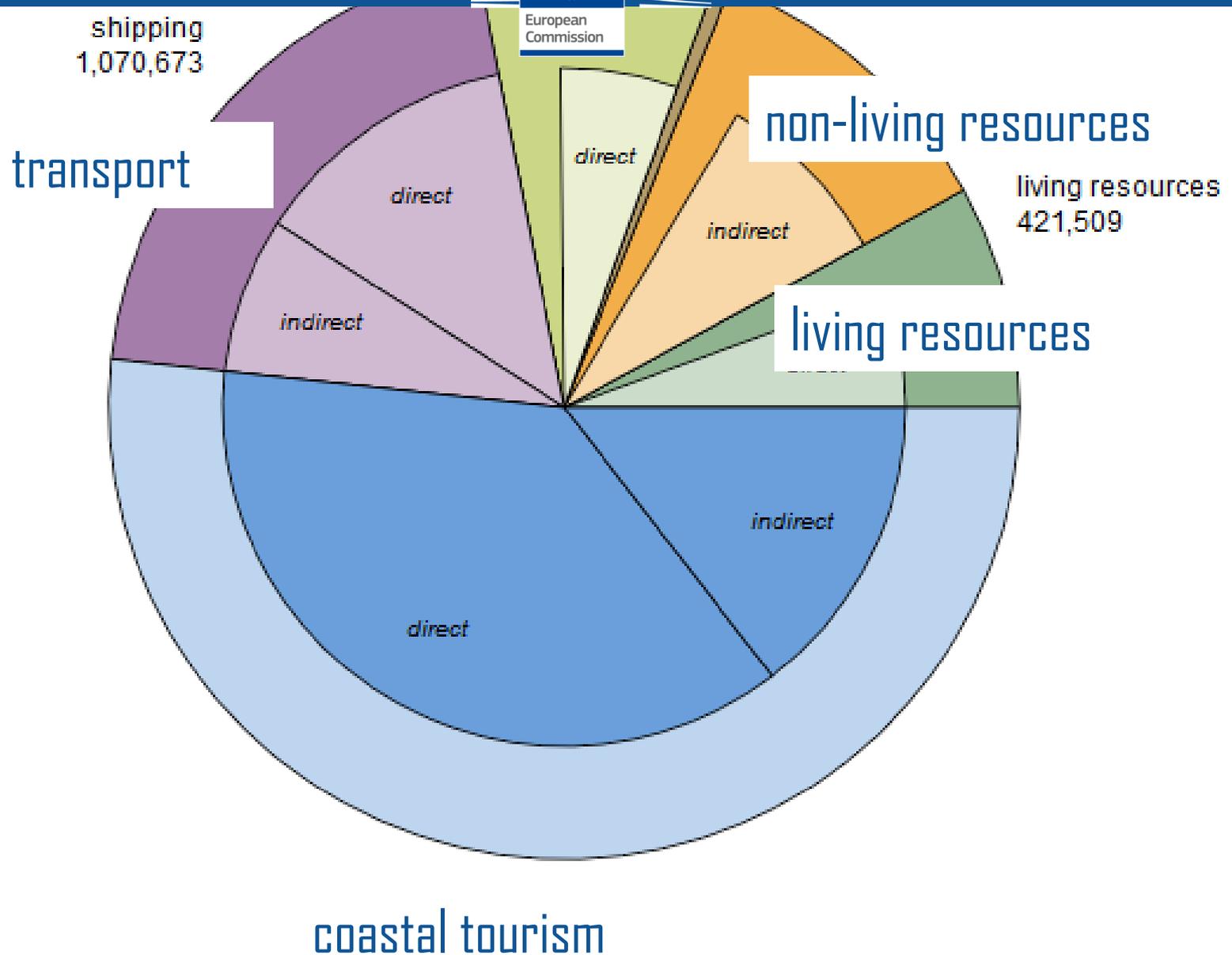
## aquaculture



## employment

shipbuilding

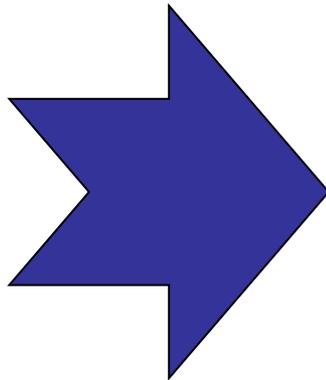
EU employment



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

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

- Eurostat structural business statistics and
- supply and use tables

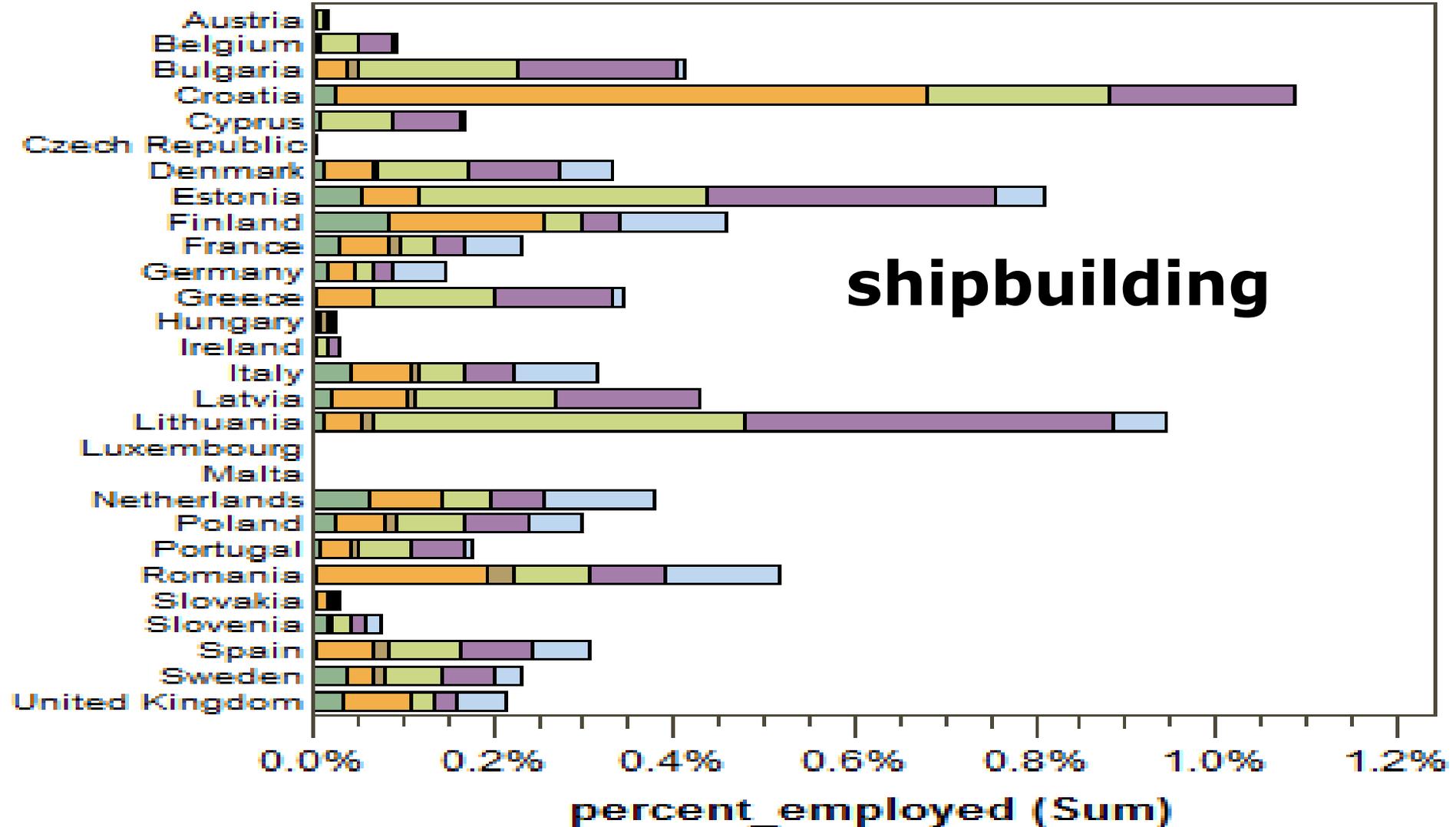


employment in enterprises providing goods and services to primary activities in each Member State



- 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%

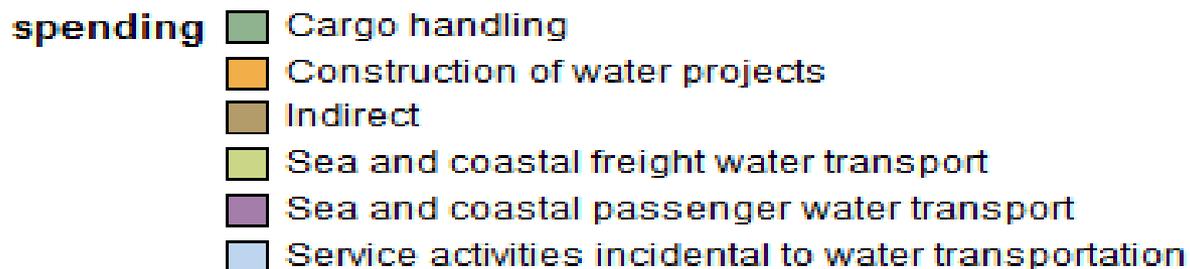
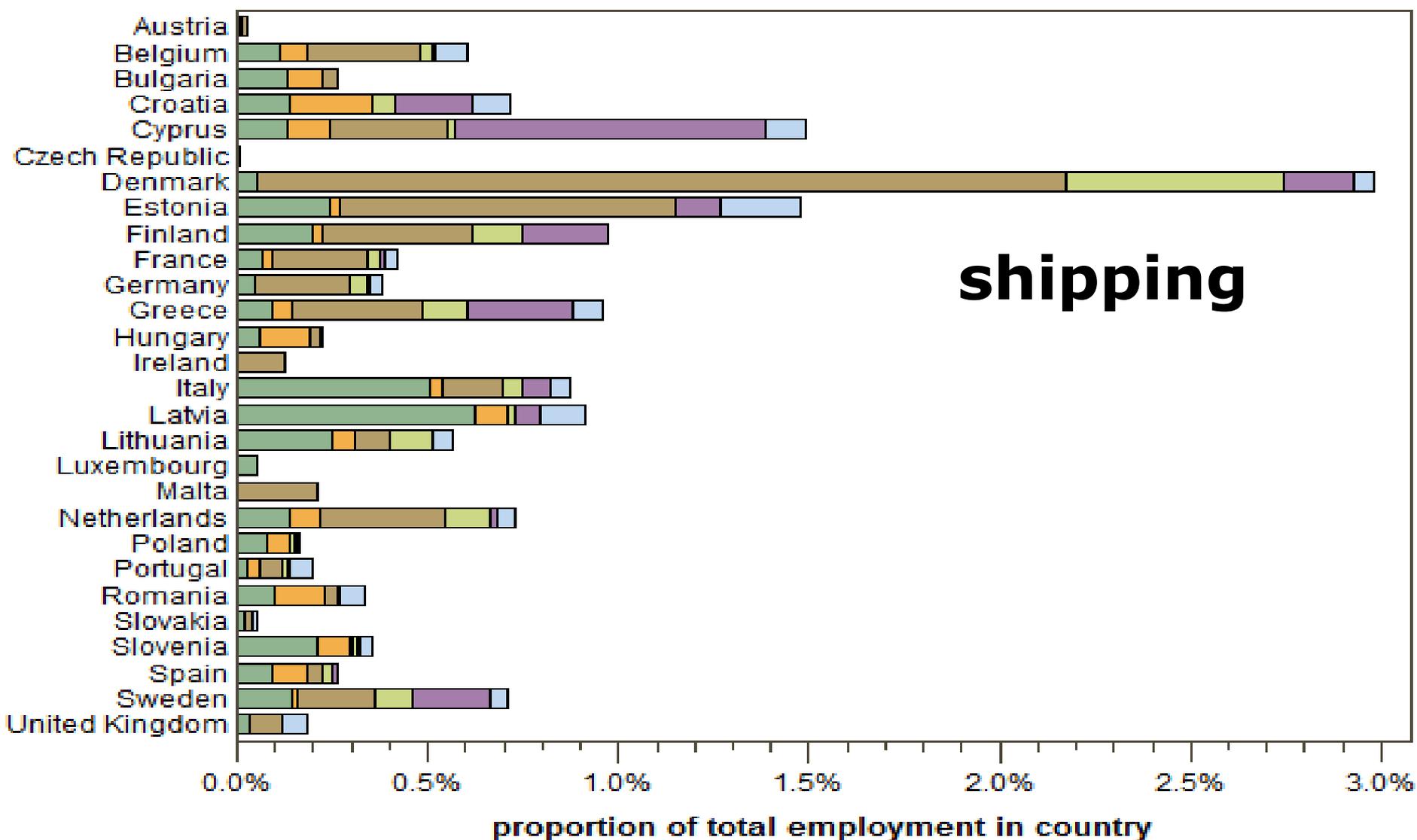
# shipbuilding

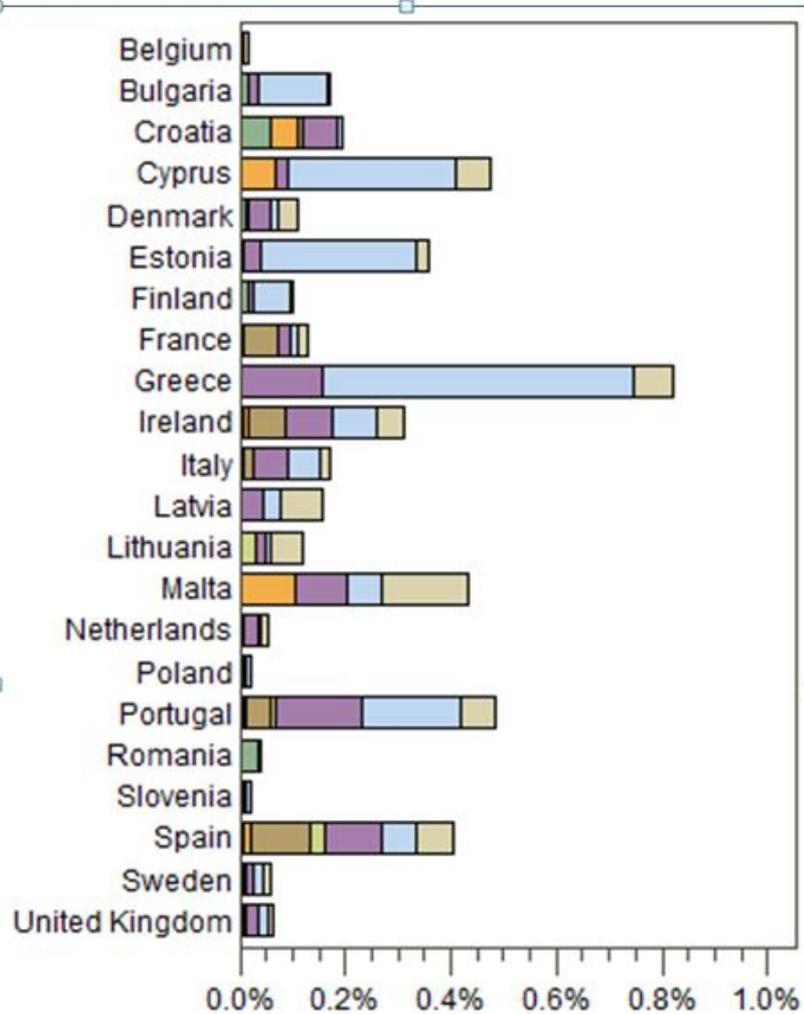


## spending

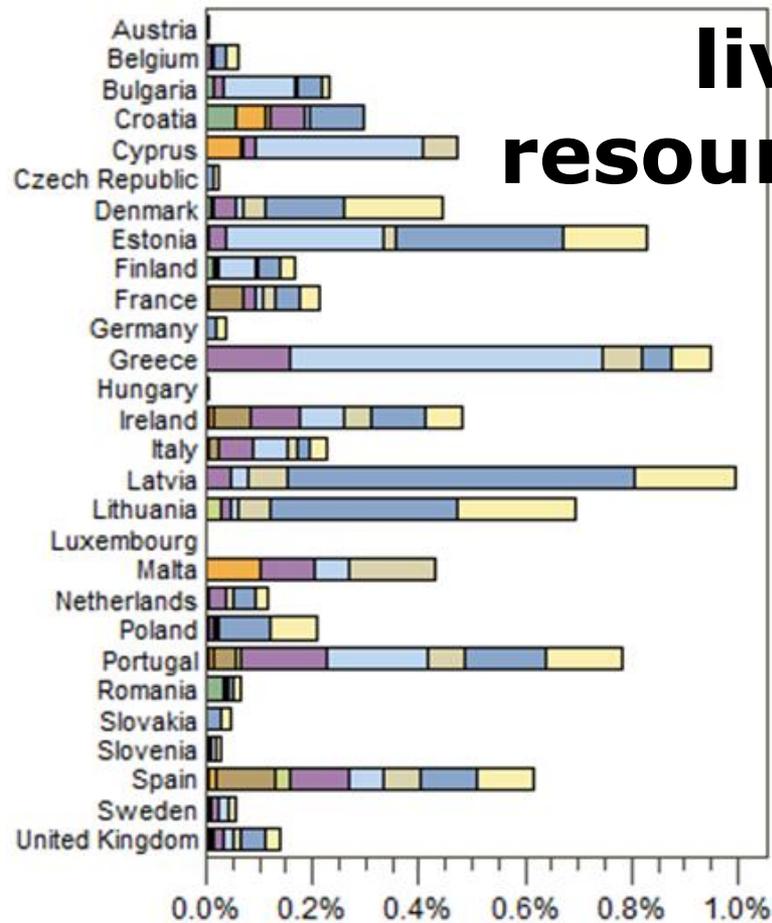
- Building of pleasure and sporting boats
- Building of ships and floating structures
- Dismantling of wrecks
- Repair and maintenance of ships and boats
- supplies to repair
- supplies to shipbuilding

# shipping



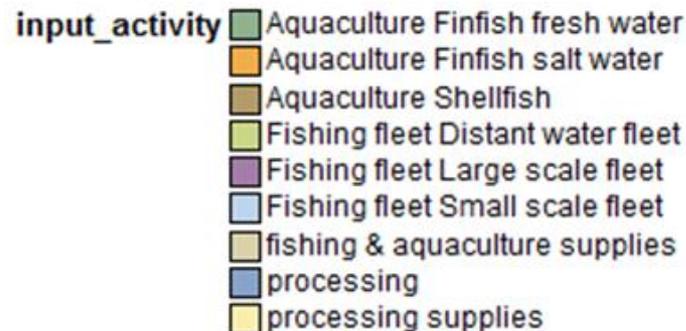


proportion of total employment in country

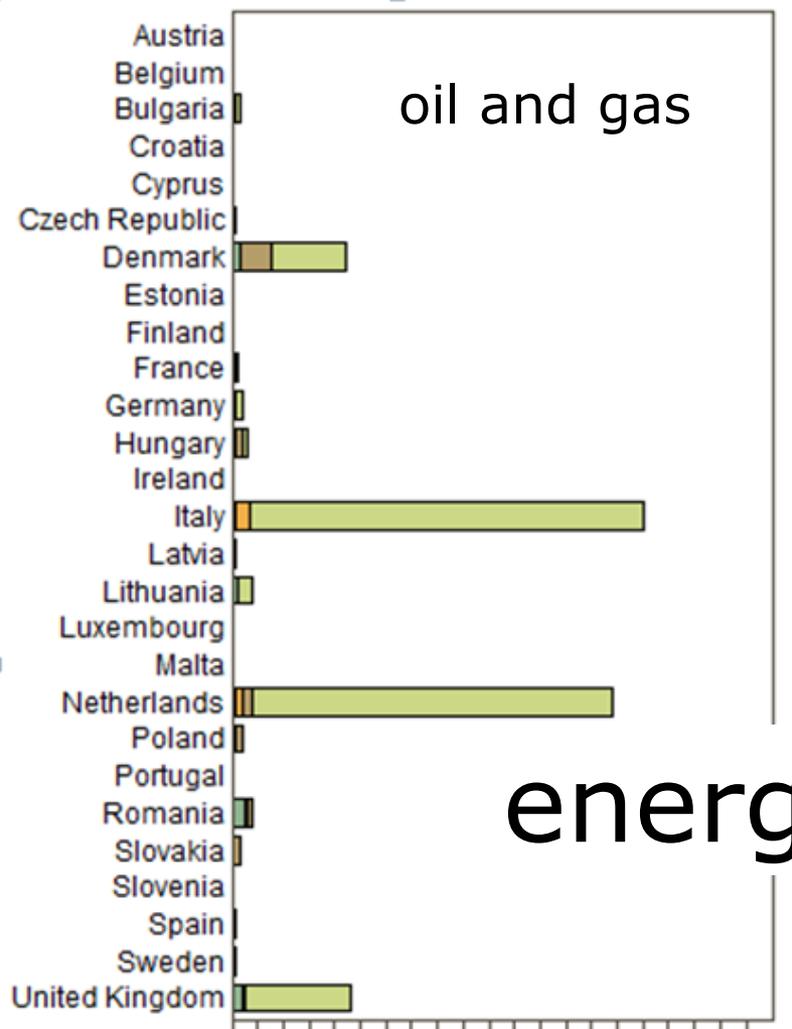


living resources

proportion of total employment in country

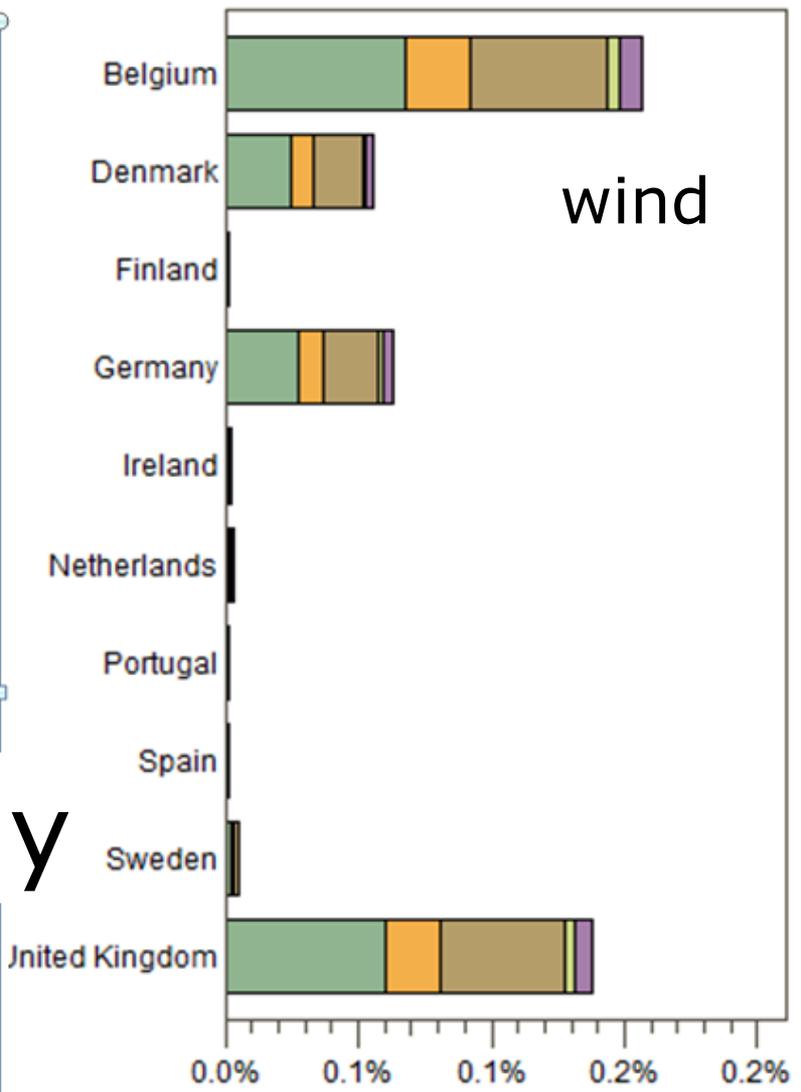


# oil and gas



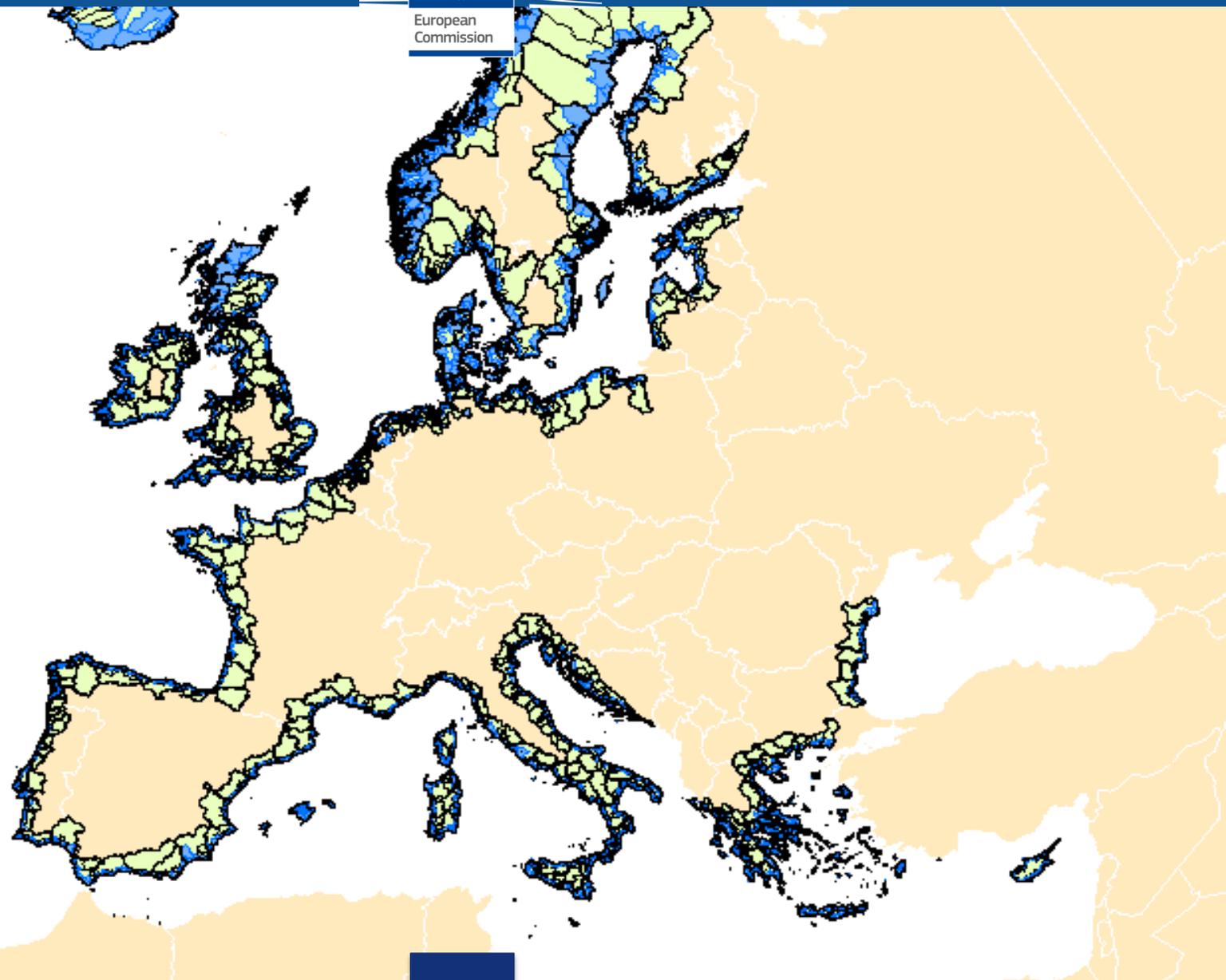
# energy

# wind



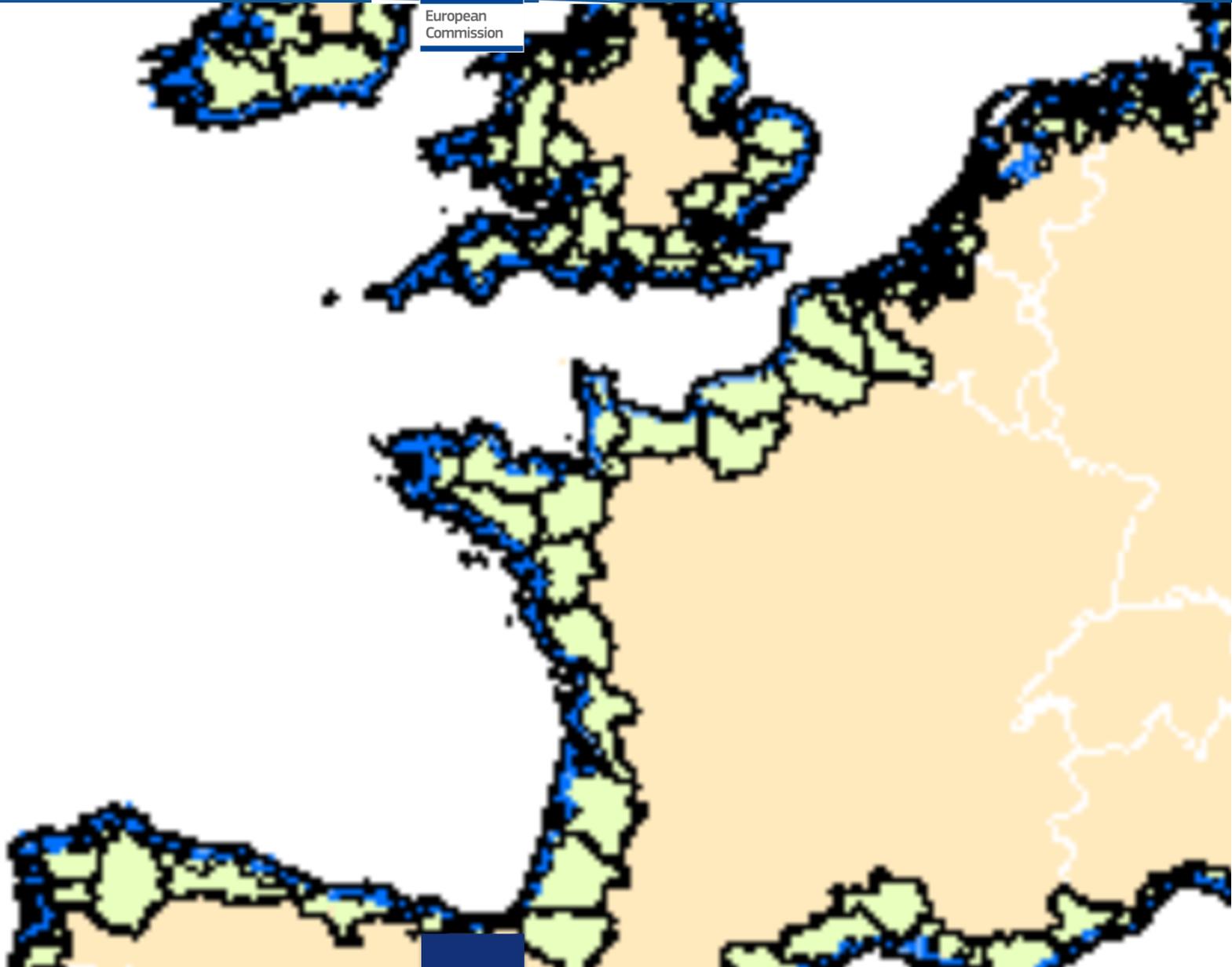
- spending**
- Extraction of crude petroleum
  - Extraction of natural gas
  - Support for oil and gas
  - indirect

- spending**
- wind - indirect
  - wind - installation
  - wind - manufacturing
  - wind - other
  - wind - utilities





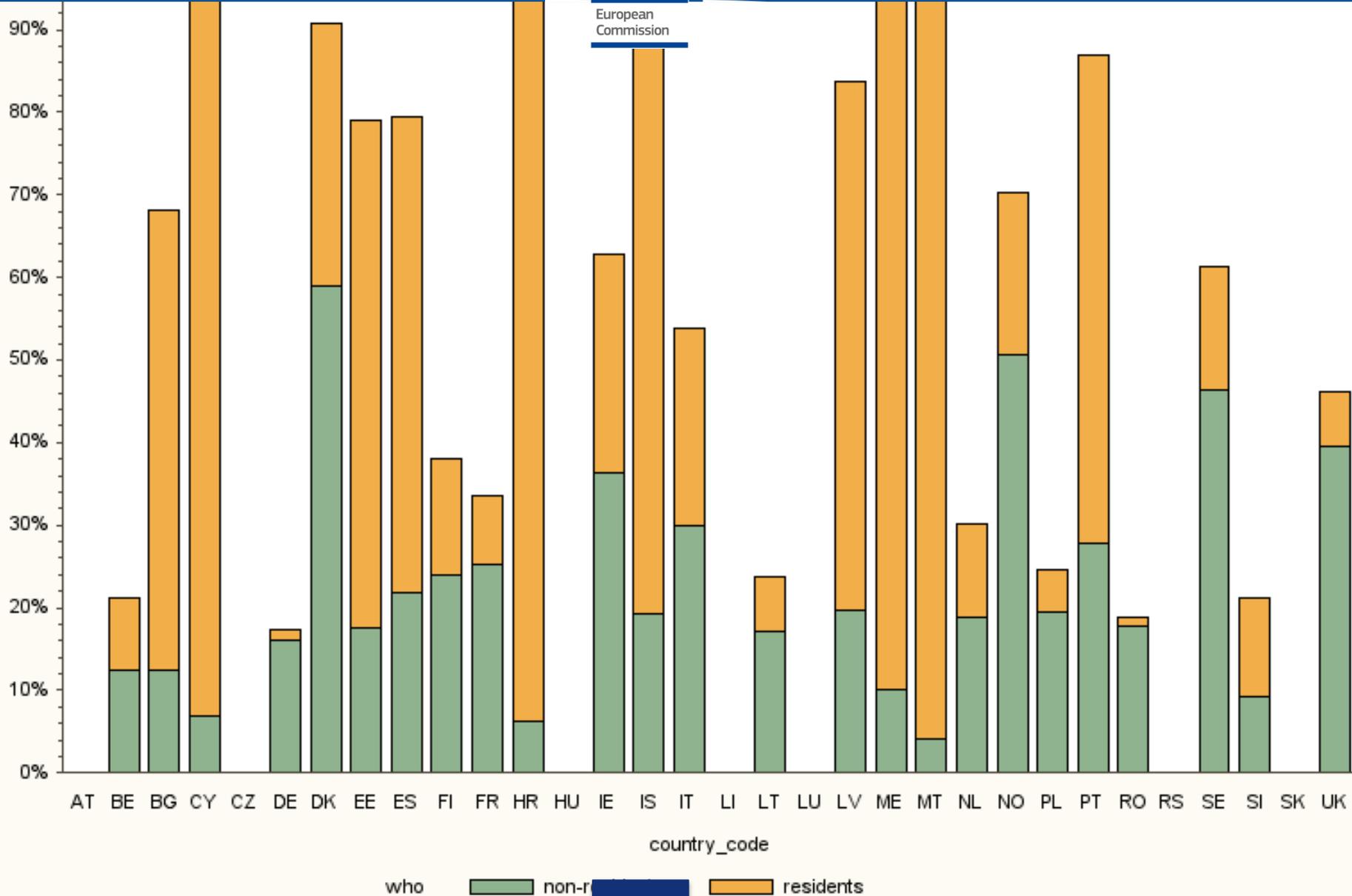
European  
Commission



# how much tourism is coastal?



European  
Commission





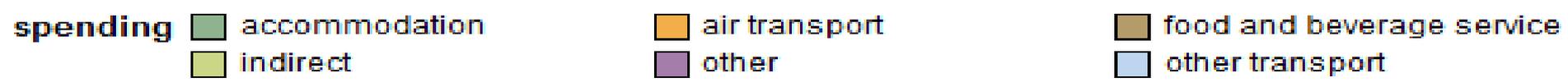
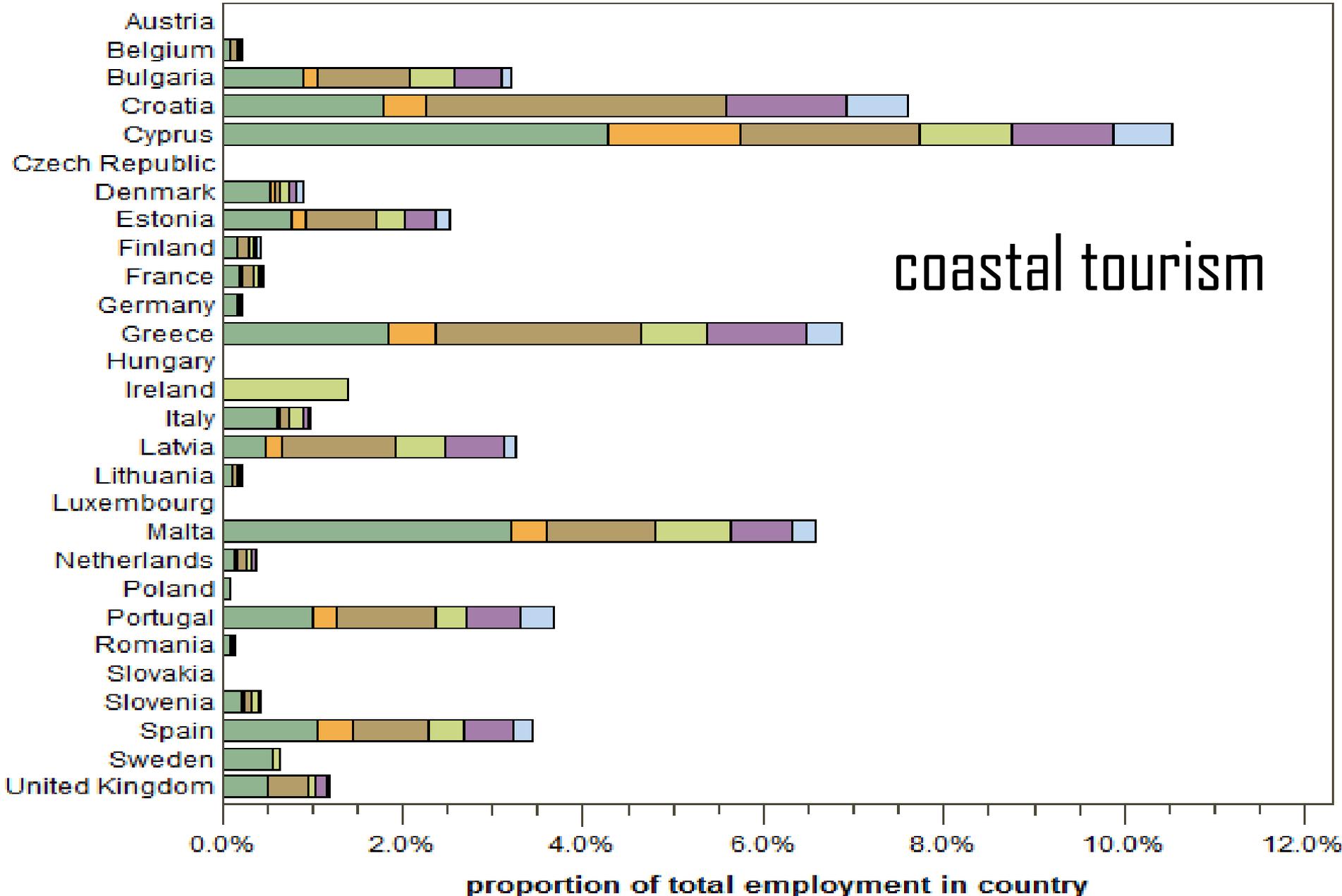
- **accommodation**
  - night spent from surveys of tourism destinations.
  - turnover and employment assumes same characteristics as non-coastal
- **transport, food and beverage services and "other"**
  - from surveys of tourist spending
  - turnover to employed ratios.
  - "retail activities" used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

**does not include**

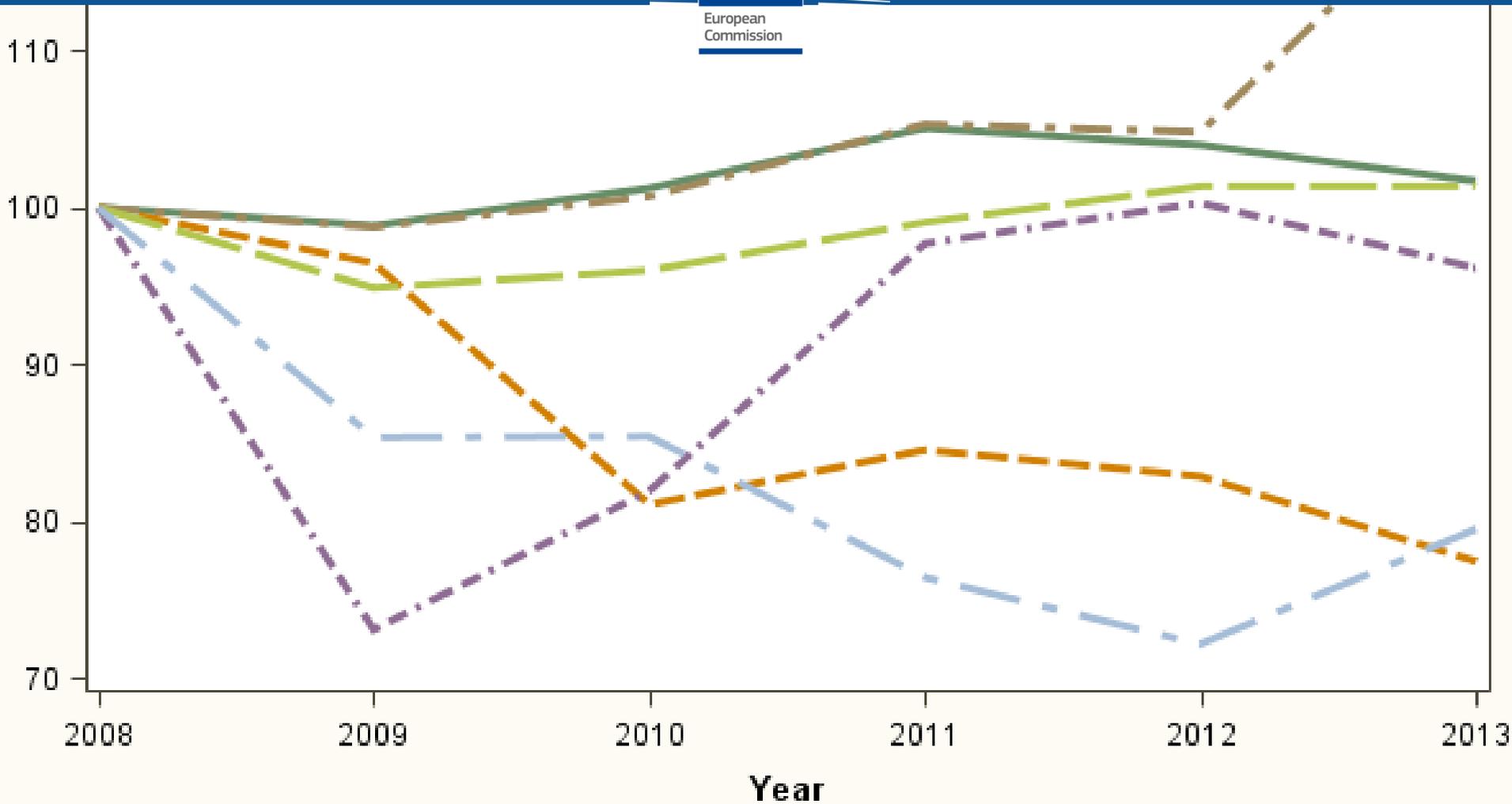


- **business trips (would add less than 10%)**
- **construction., maintenance and management of second homes**
- **day trips**

# coastal tourism



<b>activity</b>	<b>indicator</b>	<b>Value (€ billions)</b>
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





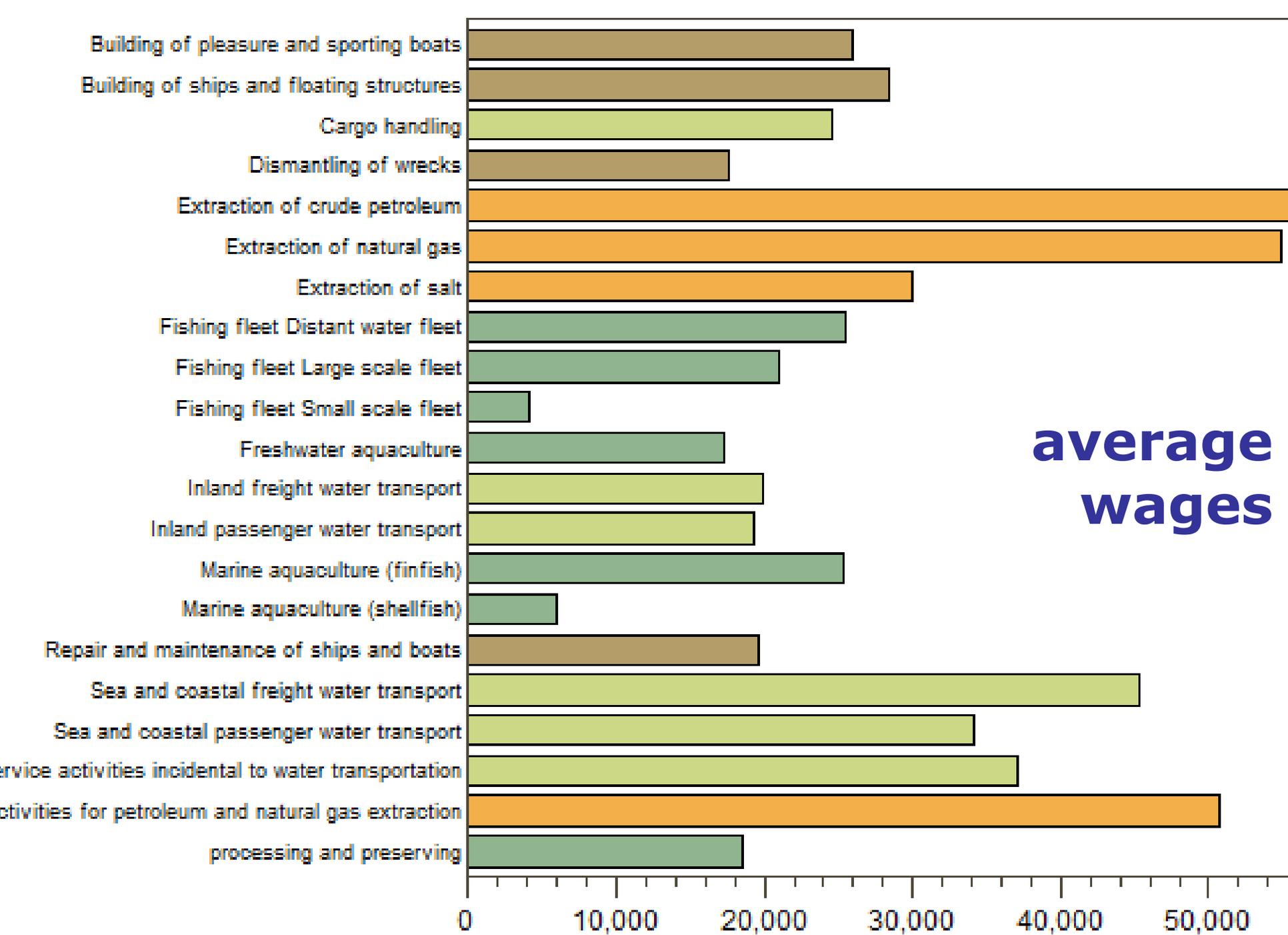
year	Total employment	Onshore jobs	Offshore jobs
2007	163,744	152,170	11,571
2008	158,627	143,840	14,783
2009	194,691	170,990	23,698
2010	202,278	162,864	39,414
2011	203,835	162,536	41,298
2012	254,497	195,616	58,881
2013	252,807	174,966	77,841
2014	262,061	187,035	75,026

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%

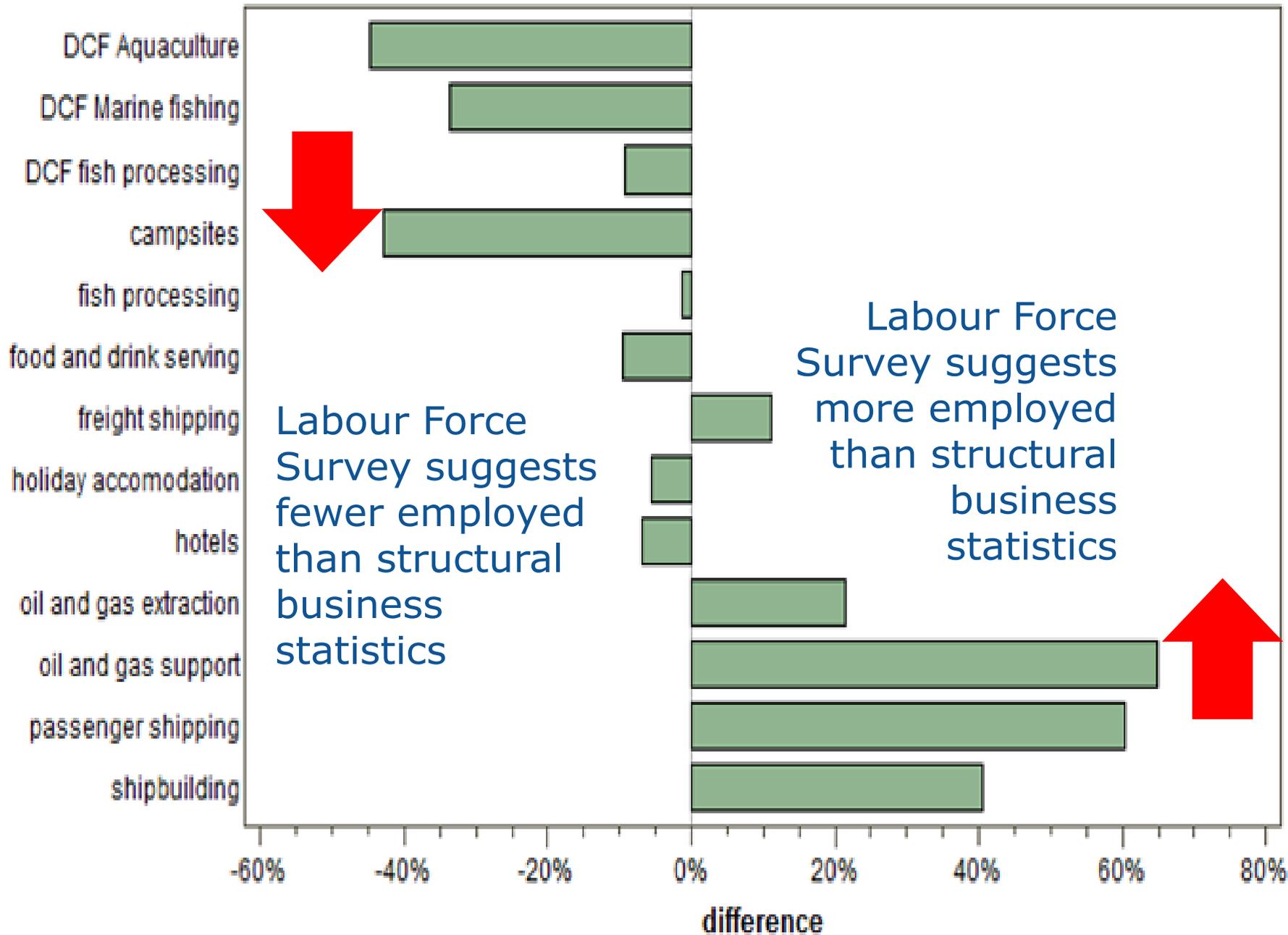


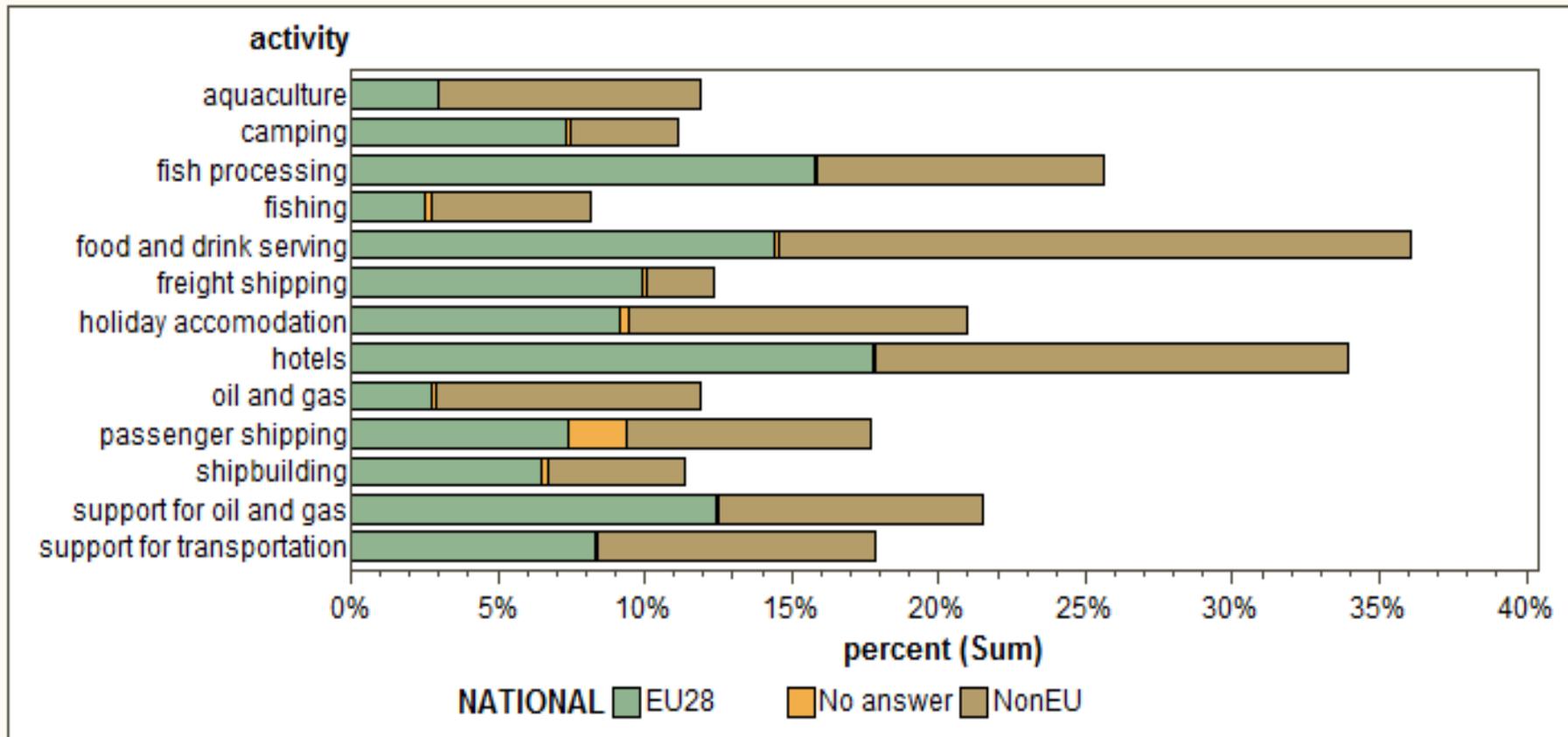
**EWEA**

THE EUROPEAN WIND ENERGY ASSOCIATION



activity







- Basins
- Maritime policy
- Finance
- Governance
- Marine and maritime knowledge
- Maritime spatial planning and coastal zone management
- Maritime surveillance
- Size of blue economy ▶
- EU policy areas
- Countries

### Size of blue economy



- ongoing process with Member States to refine analysis
- study to fill gaps
- all information on Maritime Forum
- comments and criticism welcome