

The European Commission's science and knowledge service

Joint Research Centre

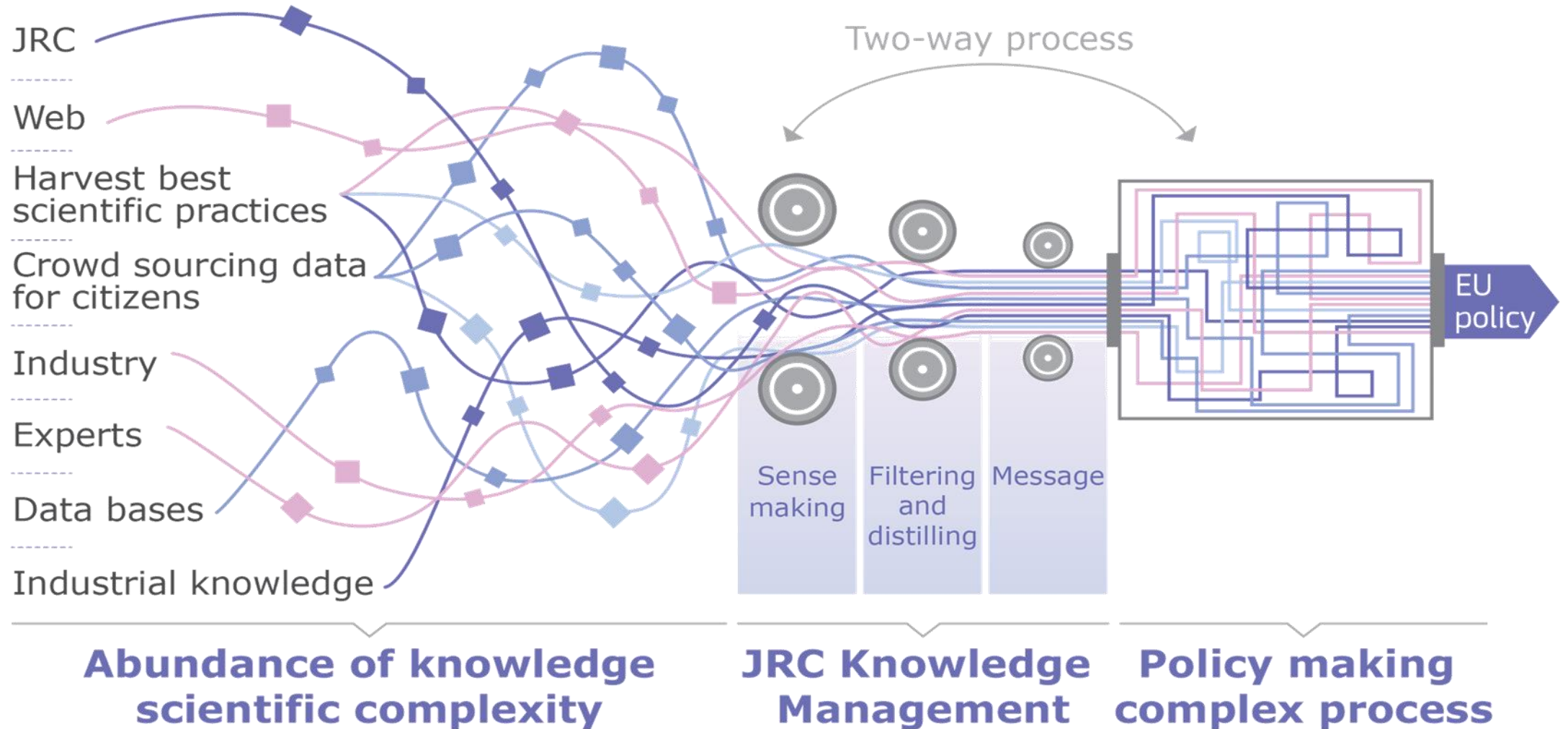


Key JRC databases for energy systems analysis

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ETIP SNET Central & Northern Regions Workshop, Petten, 19-20 September 2019

What do we do?

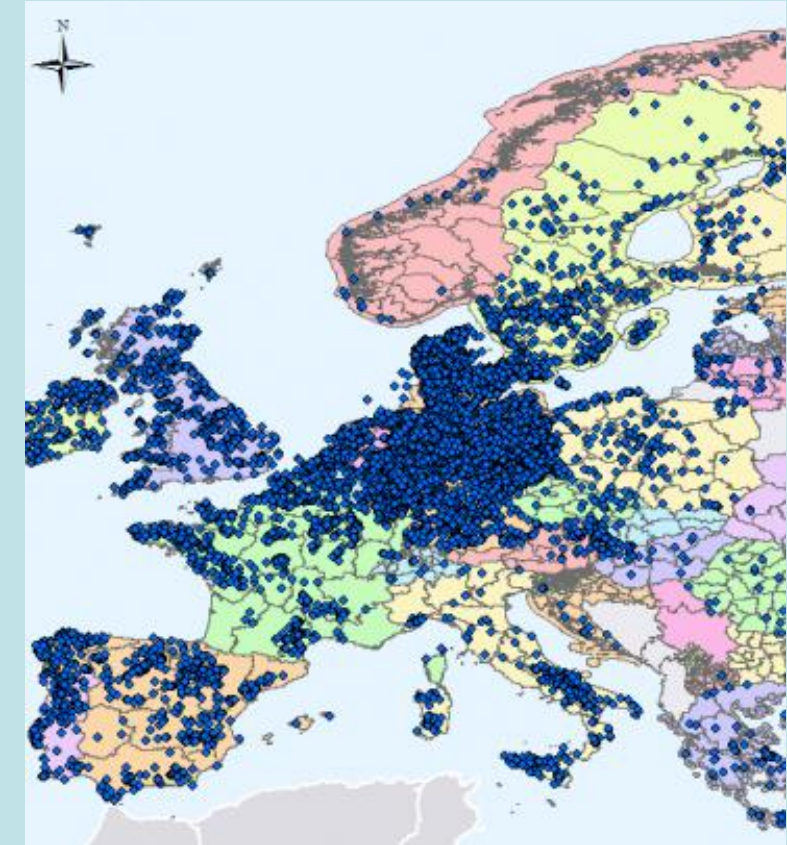
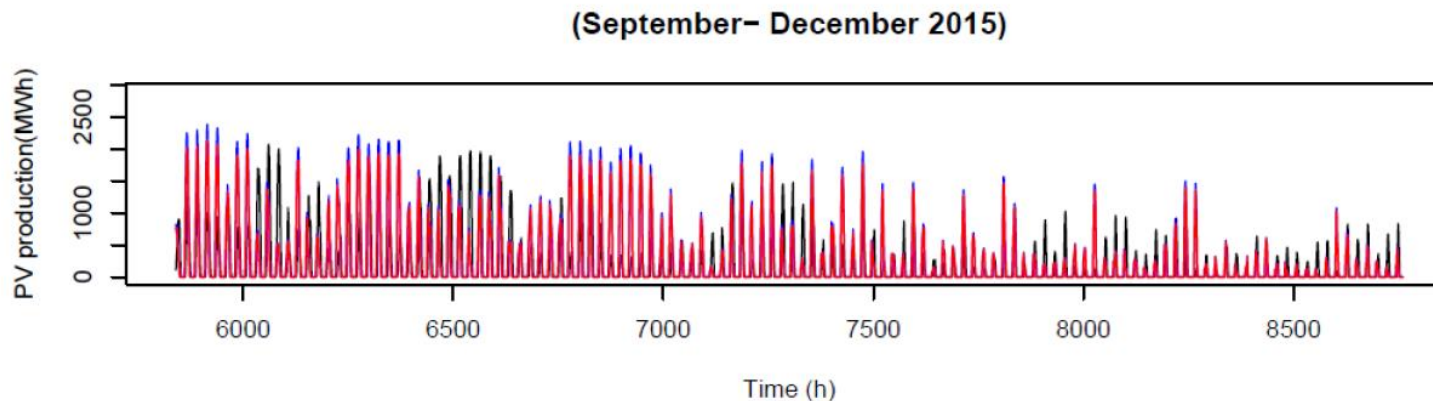


Open Data Principles @JRC

- JRC data shall be made available for use under the conditions of free, full, open and timely access
- EU policy goals:
 - Ensure availability of publicly funded research data to citizens & access to quality data
 - Contribution to implementation of EU policies
 - Facilitation of re-use for economic growth
 - Support of innovation and further research
 - Reinforcing goals of EU research programs

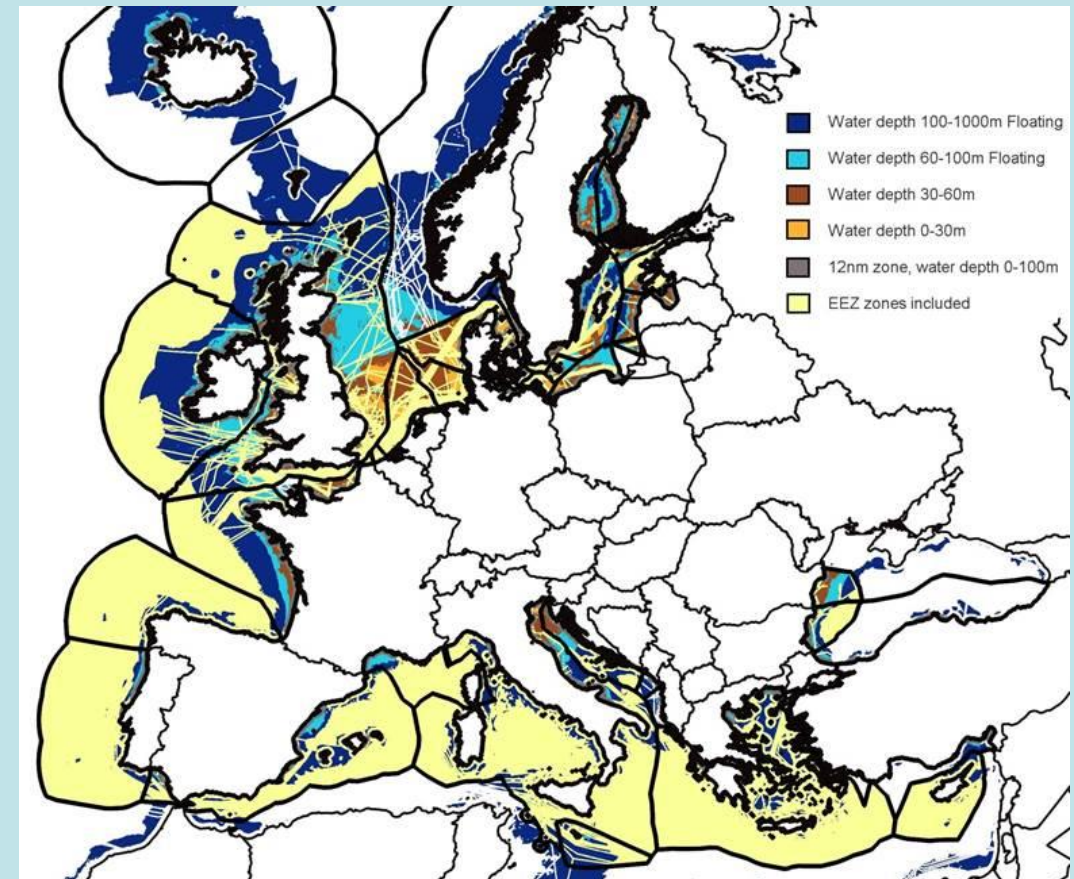
EMHIRES

- European Meteorological derived high resolution RES time series
- Wind & Solar power generation: 30 years hourly-time series at country & NUTS2 level



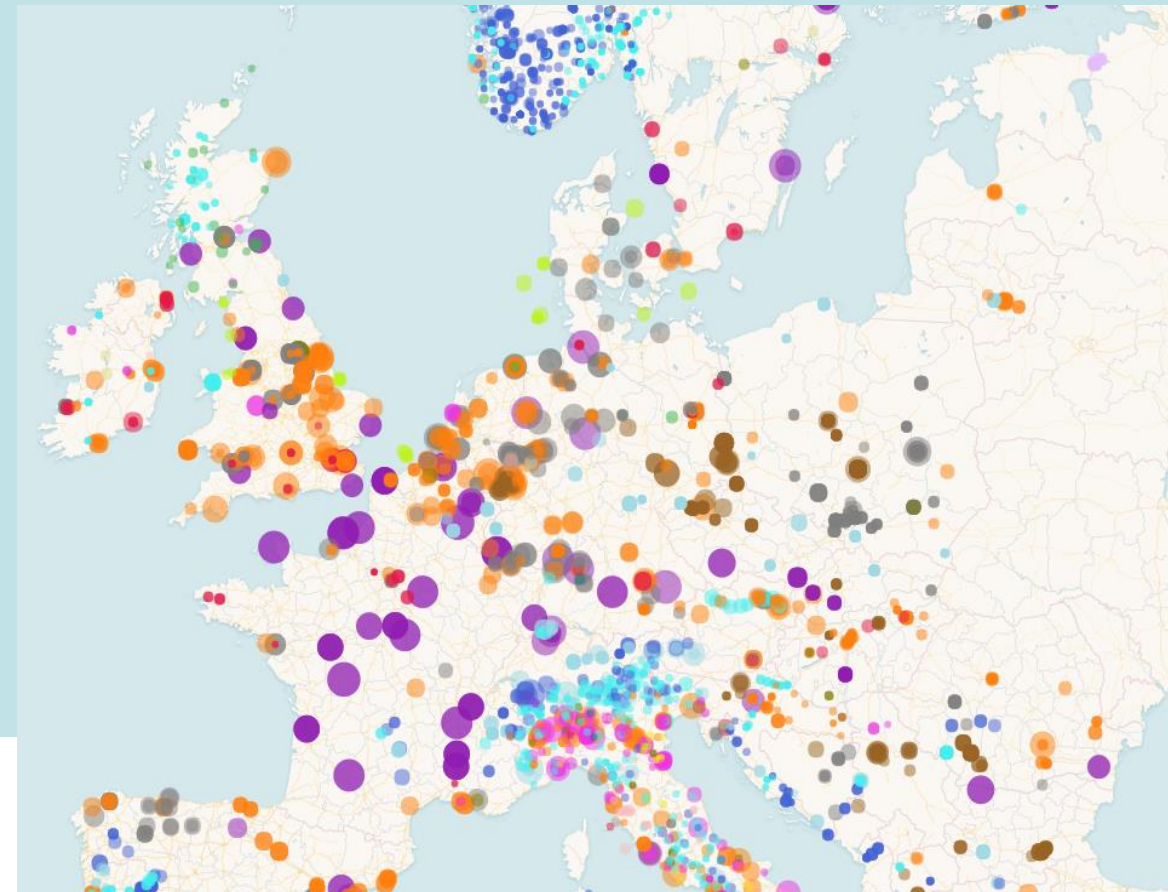
ENSPRESO

- Energy System Potentials for Renewable Energy Sources
- Wind, solar, biomass, (geo)
- NUTS0 and NUTS2 level
- Different levels of exclusion



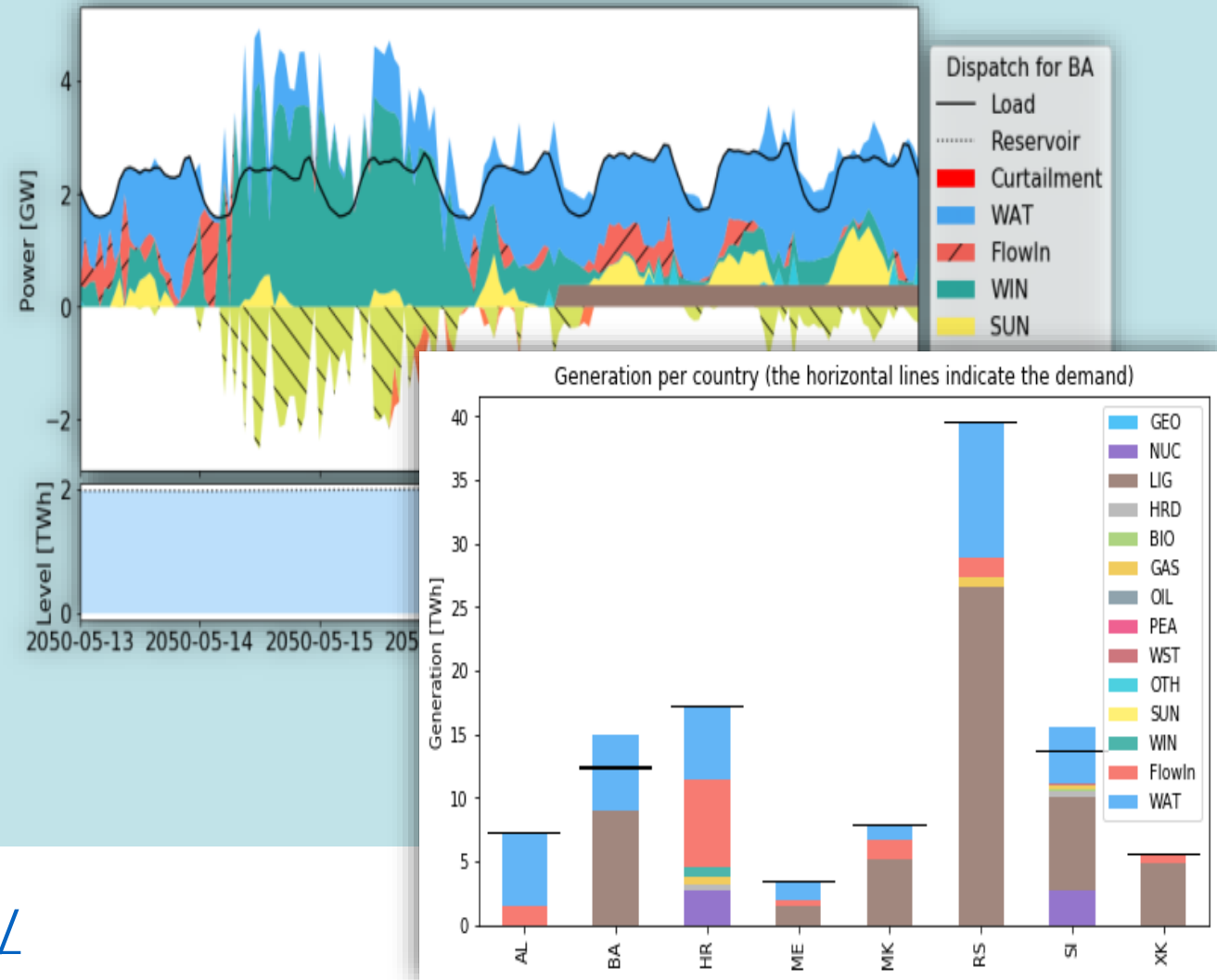
JRC Open Power Plants Database (JRC-PPDB)

- Primarily based on ENTSO-E data on European power plants at unit level
- Using information of other open datasets (e.g. WRI Powerwatch)
- First attempt towards a more detailed and coherent dataset of European power plants



Power model simulation (Dispa-SET)

- Unit commitment and dispatch model
- Optimises short-term scheduling of power stations in large-scale power systems
- Assess system adequacy and flexibility needs
- Fully open source



Community: <http://www.dispaset.eu/>

SETIS – Research & Innovation Data

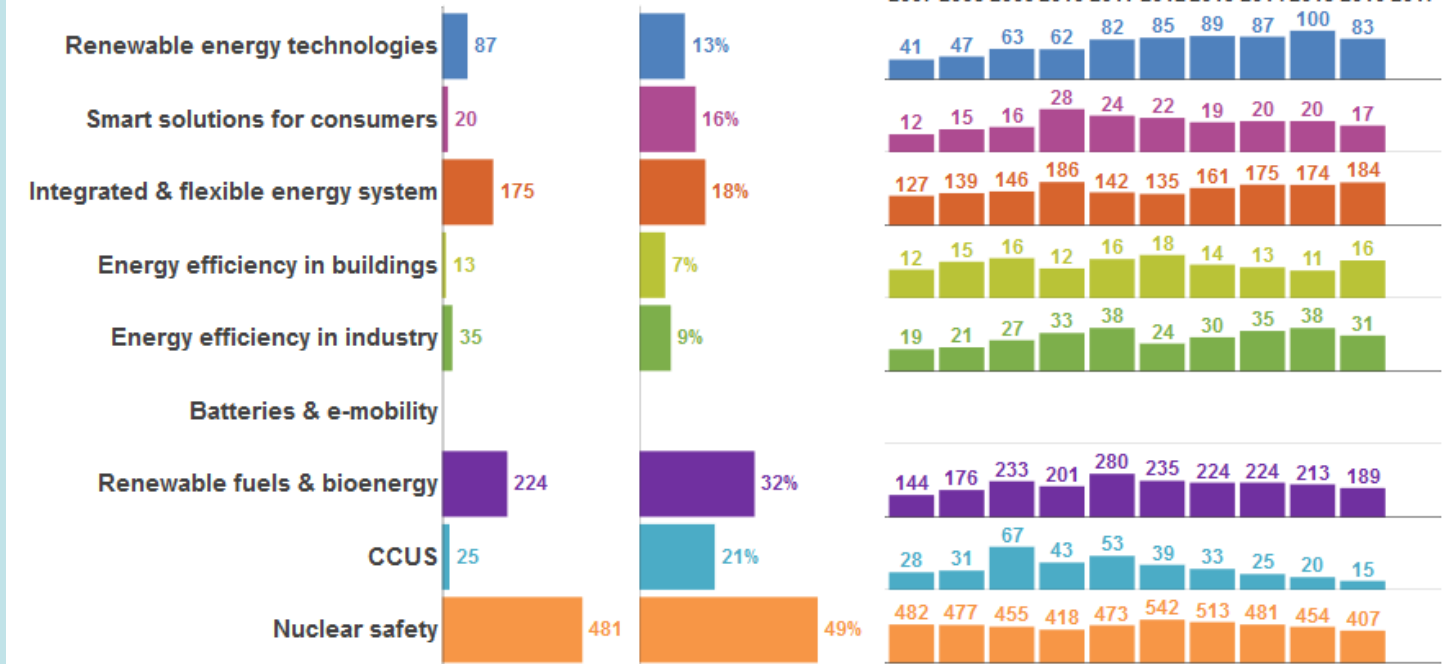
- Public and private investment in R&I
- Patenting trends
- Trade data
- Dashboard on SETIS but also customised analysis

Public R&I investment in energy technologies

Investment in 2014
(EUR million)

Share in EU
(2014)

Annual investment
(EUR million)



JRC-IDEES

- Open source complete database of the energy system and all associated factors for the EU
- EUROSTAT compliant
- 2000-latest statistical year
- 2017 update on-going
- >350 registered users



Contact: JRC-C6-JRC-IDEES@ec.europa.eu

The next steps

- Following the EC & JRC Open Data principles, an increasing amount of data will be made available
- Data can be accessed through the JRC Data Catalogue: <https://data.jrc.ec.europa.eu/>
- Now setting up a GIS-based energy geography lab that will host and visualise our energy-related databases
- Always open to collaborations and common projects



Any questions?

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