



**DG Joint Research Centre  
Institute for Energy and Transport**

*"Il Network Europeo ESEP-N e l'Energy Center di Torino"*  
*Torino, 27 ottobre 2014*

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Direttore**



# 2014 – a year of challenges and opportunities for energy policy (cont.)



January 2014: **2030 framework for climate & energy**, accompanying documents (on ETS, shale gas etc.) and **energy price and costs report**



28<sup>th</sup> May 2014: **EU Energy Security Strategy**  
including in-depth security analysis

23<sup>rd</sup> July: **Energy Efficiency Communication** (and its contribution to energy security and the 2030 Framework)

**AND: 4 EU summit meetings** in 2014  
dealing with energy policy

# 2014 – a year of challenges and opportunities for energy policy



13<sup>th</sup> October 2014: Progress towards  
Completing the Internal Energy Market

16<sup>th</sup> October 2014: The Stress Test Report



22-23 October 2014:  
European Council conclusions  
on the 2030 Climate & Energy Policy Framework

# ***A Resilient Energy Union with a Forward-Looking Climate Change Policy***

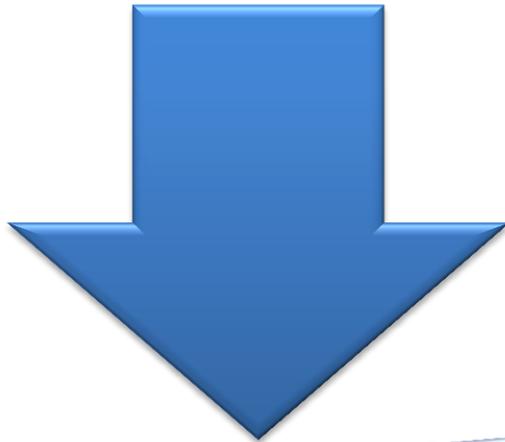


***"I want to reform and reorganise Europe's energy policy into a new European Energy Union.***

*We need to pool our resources, combine our infrastructures and unite our negotiating power vis-à-vis third countries. We need to diversify our energy sources, and reduce the high energy dependency of several of our Member States."*

***Jean-Claude Juncker, President of the European Commission "My priorities"***

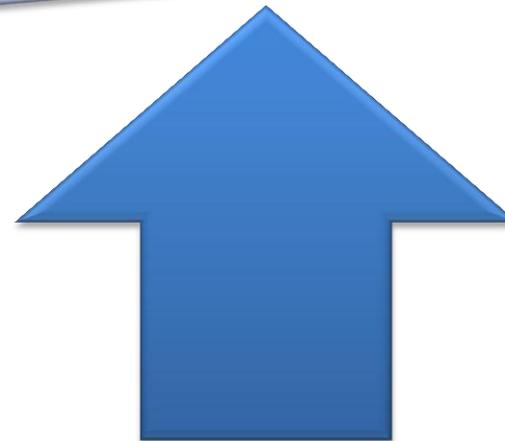
**EEU**



*Top down approach*  
*A political target:*  
*The European Energy*  
*Union*



*Bottom up approach*  
*Shared methodologies to*  
*accompany the EU in its*  
*transition to a low carbon*  
*economy*



**ESEP-N**



- A **European Science for Energy Policy Network (ESEP-N)** is proposed to federate interoperable labs, pooling together available resources and expertise in key European research centres
- Main goals:
  - production of **scientific and technical instruments relevant to policies of the European Commission**, in close contact with the relevant industrial and regulatory actors
  - accompany the EU in its transition towards smarter electricity systems, **providing input to the policy decision-making** and implementing R&D activities, **assessing the emerging systems, technologies and services**

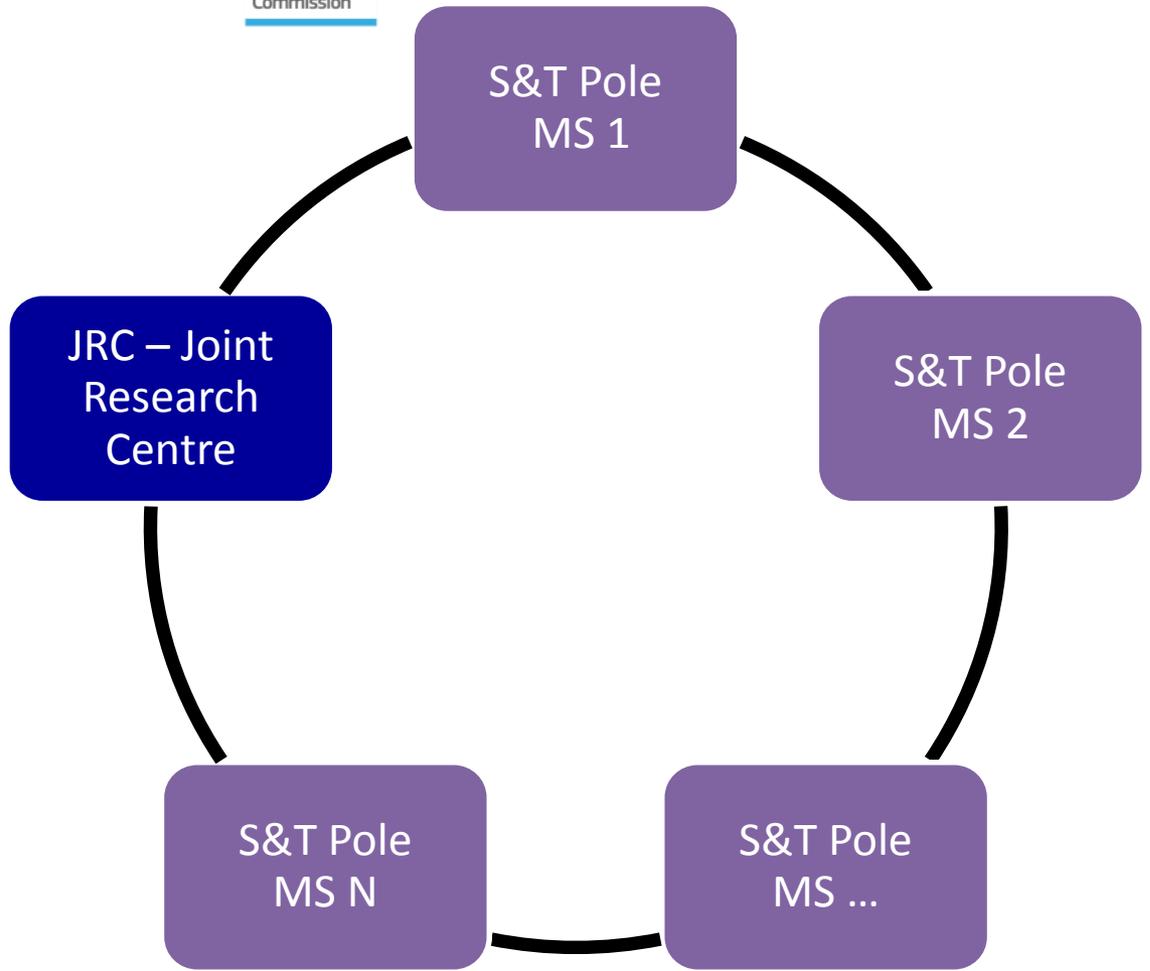
# ESEP-N:

## Main actors & interactions

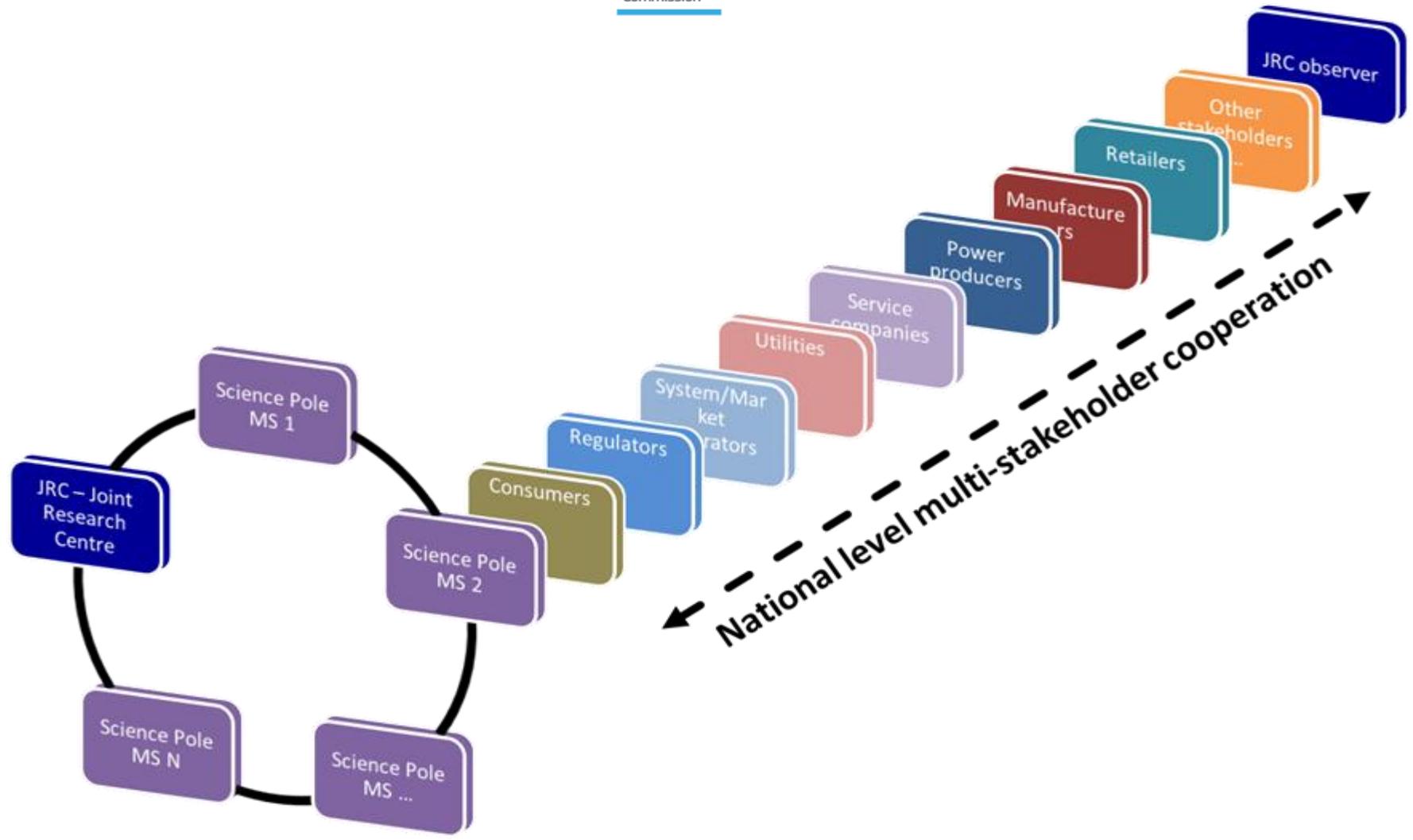


### Directorate-General:

- Energy
- Environment
- Enterprise and Industry
- Research and Innovation
- Mobility and Transport
- Communication
- ...



# ESEP-N: Main actors & interactions





- The coordination by the Institute for Energy and Transport of the **Joint Research Centre - neutral and independent scientific arm** of the EC – is aimed at guaranteeing:
  - the required **confidentiality** clauses to be applied in the gathering and processing of real power system data
  - the direct link with the European **policy making**
- This new scientific network will provide a facility for studying the impact of different **policy options and technical alternatives**, with the capability of analysing the various solutions and dimensions of the problem

# ESEP-N: European first contacts



Politecnico di Torino (IT)

RWTH Aachen University (DE)

Grenoble Institute of Technology - Grenoble INP (FR)

Technical University Delft (NL)

Imperial College London (UK)

...



- **Electricity retail market.** The role of consumers in the power system hides an enormous potential: through ICTs, consumers can be "empowered" and can take part more effectively to the retail market and evolve towards active consumers and prosumers
- **Projects of Common Interest.** With the Regulation on trans-European energy infrastructure coming into force, policy makers are moving towards research questions like "assuming that there are several Smart Grids projects worth to be realised, which among them are also bringing benefits at EU-wide level?"

## Next steps for ESEP-N

**Bilateral discussion JRC- MS** (Berlin, Paris, London, The Hague...)

**Official launch at the High Level Conference on Energy under the Italian Presidency** (Rome, 19 November 2014)

**Thank you for your attention!**



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Institute for Energy and Transport  
Director*