



DG Joint Research Centre Institute for Energy and Transport

*“Verso l’Unione energetica europea:
il ruolo della ricerca comunitaria e nazionale”
Roma, 15 settembre 2014*

**Giovanni Federigo De Santi
Director**





2014 – a year of challenges and opportunities for energy policy



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



28th May 2014: EU Energy Security Strategy including in-depth security analysis

23rd July: Energy Efficiency Communication (and its contribution to energy security and the 2030 Framework)

AND: 3 EU summit meetings in 2014 (until now) dealing with energy policy

Next steps

At European level

2014:

Energy security stress tests

Emissions Trading System proposal: co-decision procedure

Review on state of play of the internal energy market

October EU summit to decide on 2030 framework and on energy security

High Level Conference on Energy under the Italian Presidency (Rome, November 2014)

And at international level

2015: Paris UNFCCC conference



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

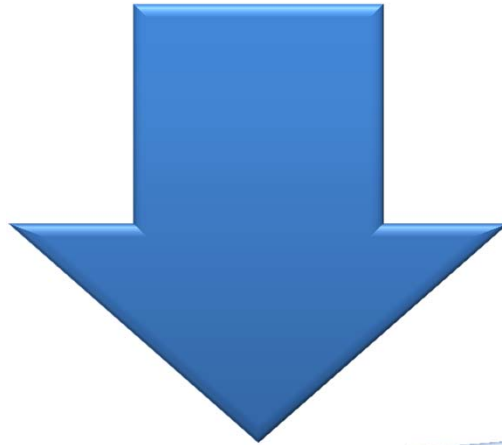


"I want to reform and reorganise Europe's energy policy into a new European Energy Union.

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

ESEP-N:

European Science for Energy Policy - Network



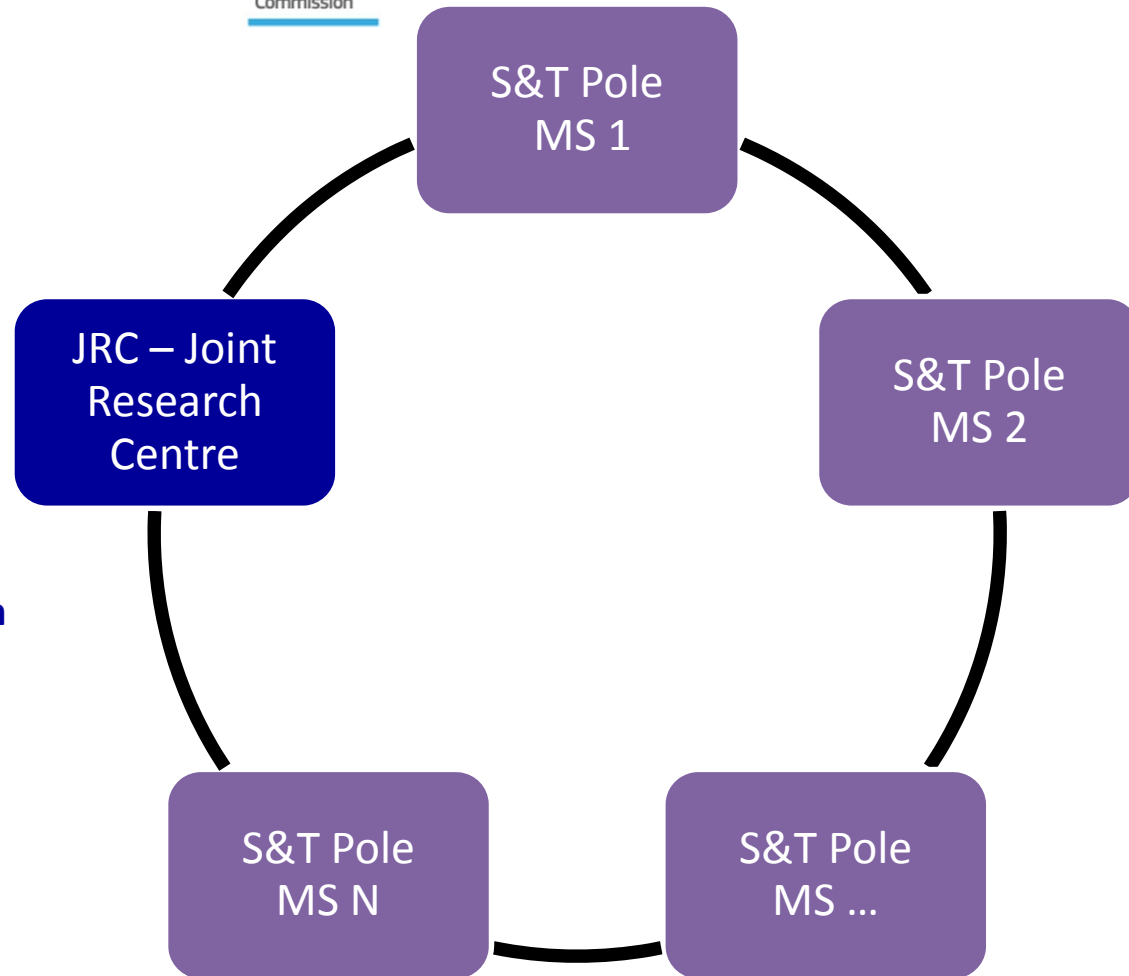
- A **European Science for Energy Policy Network (ESEP-N)** is proposed to federate interoperable labs, pooling together available resources and expertise in key European research centres
- Main goals:
 - production of **scientific and technical instruments relevant to policies of the European Commission**, 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

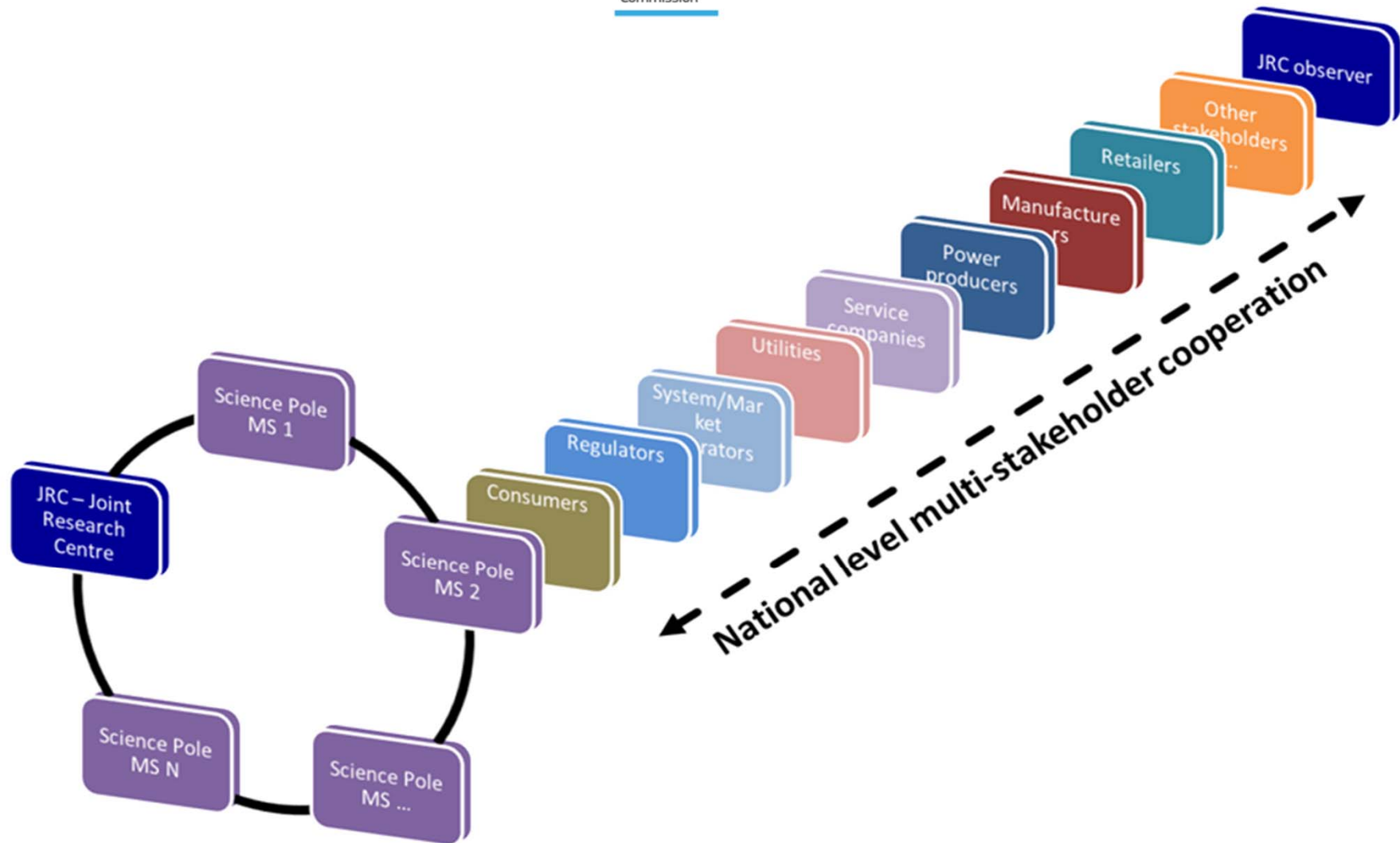


Directorate-General:

- 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



RWTH Aachen University (DE)

Grenoble Institute of Technology - Grenoble INP (FR)

Technical University Delft (NL)

Imperial College London (UK)

Politecnico di Torino (IT)

...

Topics of immediate interest for the activities of the **ESEP Network:**



- **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, November 2014)



Thank you for your attention!



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Institute for Energy and Transport
Director*

