

POTEnCIA

Scenario design and interactions with MS

Seville, 01/03/2016



Joint Research Centre
the European Commission's
in-house science service



ec.europa.eu/jrc



POTEnCIA:

Policy
Oriented
Tool for
Energy and
Climate change
Impact
Assessment

ANALYSING POLICIES WITH POTENCIA

POTEnCIA is used to perform comparative analysis of scenarios

- The projections do not form forecasts (statements of what will most likely happen)
- They act as an assessment of what might be the impact of a given specific set of assumptions with respect to a plausible central ("reference") scenario
 - *Macroeconomic and demographic*
Linking to the MAGE and GEM-E3 models; taking into account the DG-ECFIN ageing population report
EUROSTAT projections for demographic assumptions
 - *International and/or national context for fuel prices and resources availability*
Linking to POLES model for international fuel prices and depletable resources availability
Renewable potentials and cost curves from GREEN-X, JRC-IET studies, (GLOBIOM, CAPRI)
 - *Technology futures*
Linking to POLES model for power generation technologies
JRC-SETIS technology maps and sectoral roadmaps
 - *Policy assumptions*

Main assumptions are defined in collaboration with the partner policy DGs

ANALYSING POLICIES WITH POTENCIA

The **formulation** and the **methodological characteristics** of the tool also play a significant role

Structure and characteristics of the energy system

- *JRC-IDEES database*

Behavioural parameterisation:

- exogenous market acceptance factors,
 - future of technologies,
 - elasticities of substitution
-
- *Evidence based*
 - *Linked to the development of the central scenario*
 - *Common across EU Member States (with limited exemptions that reflect country specificities)*

These characteristics remain unchanged across scenarios

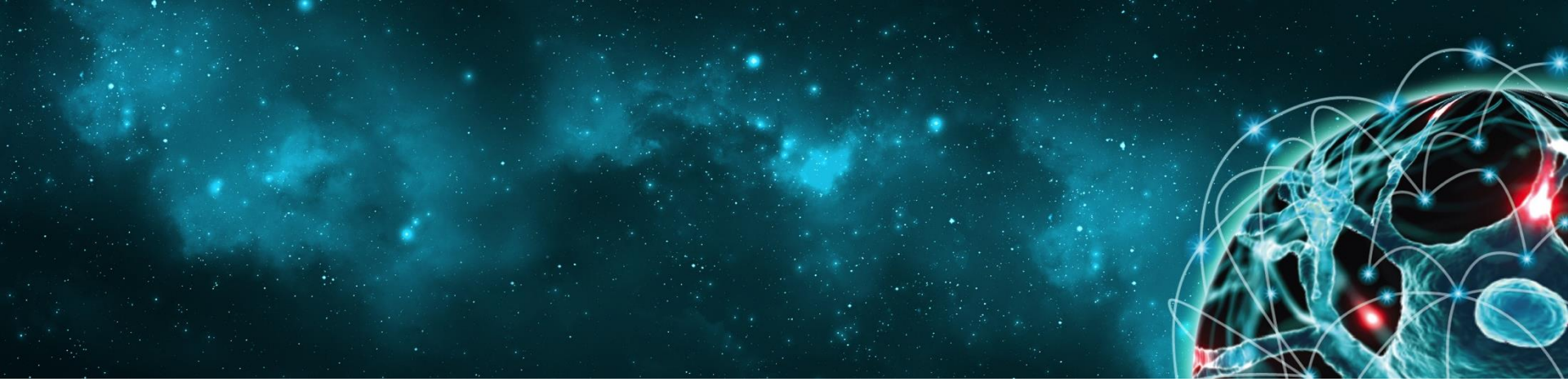
- *However, the model mechanisms ensure possible behavioural responses to prevailing scenario assumptions*

ANALYSING POLICIES WITH POTENCIA

The development of the central scenario involves continuous ***interactions with Member States***

- decomposition of historical data (validation of the JRC-IDEES database)
- incorporation of country specific policies in place
- inclusion of on-going investments
- reflection of envisaged evolution of national energy systems in a European wide context

Partners policy DGs are foreseen to be actively involved in the process.



Thank you for your attention



JRC Science Hub- POTEnCIA:
ec.europa.eu/jrc/POTEnCIA

contact:
Leonidas.Mantzios@ec.europa.eu