

Discussion session: Long-term energy scenarios for the clean energy transition

Fifth RGI future scenario exchange workshop
11 June 2018, Brussels

Why long-term energy scenarios?

- » Fundamental tool for policy making
 - » National policy making
 - » Global policy debates / Forum public opinion

- » What is new?
 - » Clear agreed mandate for the global decarbonization
 - » Massive technology innovation around energy transition

- » Long-term visions for clean energy transition
 - » Avoiding risks of making poor, short-sighted decisions (stranded assets, disruptive innovations)
 - » Represent transformative changes of energy systems (e.g., VRE, disruptive innovations in end-use sectors, digitalization and its impacts etc)

Clean Energy Ministerial (CEM)

- » A partnership of 26 countries
- » Annual high-level Ministerial meeting
- » Year-round technical work through initiatives
- » Time-bound **campaigns** to raise ambition or increase visibility of topics of potential impacts



Australia



Brazil



Canada



Chile



China



Denmark



European Commission



Finland



France



Germany



India



Indonesia



Italy



Japan



Korea



Mexico



Norway



Russia



Saudi Arabia



South Africa



Spain



Sweden



The Netherlands
(observer country)



United Arab Emirates



United Kingdom



United States

A new CEM campaign

Long-term energy scenarios for the clean energy transition (LTES)

- » **Launch:** May 2018 at the 9th CEM meeting, Copenhagen
- » **Duration:** one year (possible extension to multiple years)
- » **Lead countries:** Denmark, Germany
- » **Operating agent:** IRENA



Denmark



Germany

Goal: promote the wider adoption and improved use of long-term energy scenarios for clean energy transition

State participants joining campaign:



Brazil



Mexico



Chile



The Netherlands



Finland



European Commission



United Arab Emirates



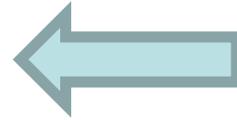
United Kingdom



Japan

Use of scenarios for policy making

- **Government planning team**
- **Policy makers**
- Decision makers
- Civil society



Development of scenarios for clean energy transition

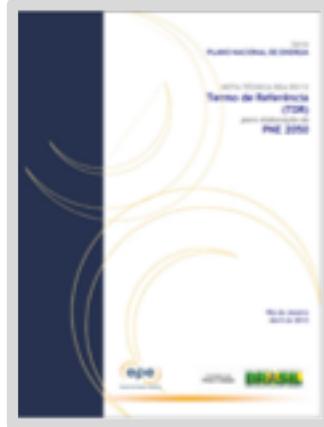
- **Government modelling team**
- Academics and research community
- International organizations
- Private companies

Types of scenarios

National focus

Government institutions

Private institutions



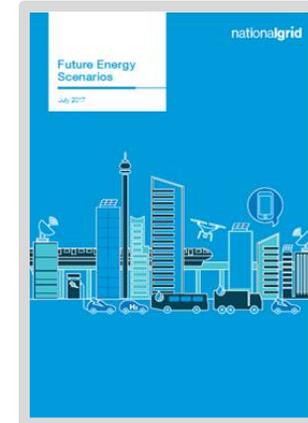
Brasil



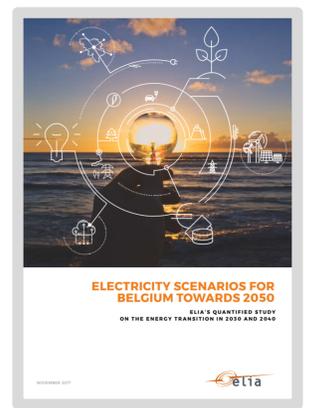
Chile



Mexico



UK – National Grid



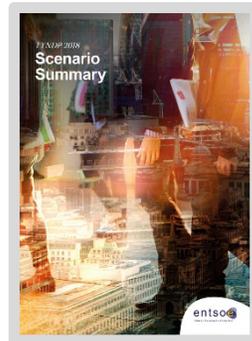
Belgium – Elia Grid

Regional focus

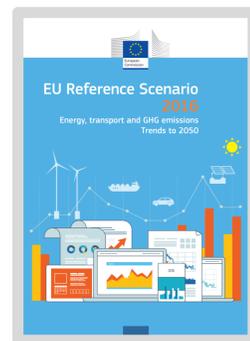
Global scenarios



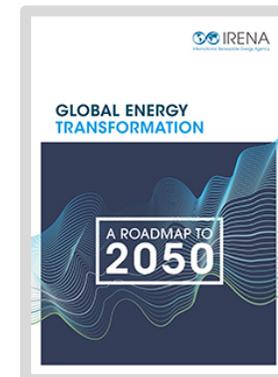
IRENA
REmap EU



ENTSO-E
Scenarios



EC
Scenarios



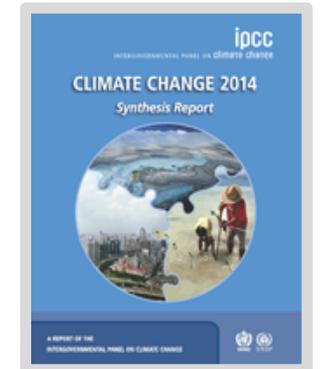
IRENA REmap



IEA WEO



Shell



IPCC

Three focus themes

Use of scenarios for policy making

- » Share experience in the use of energy scenarios for national and regional policy planning
- » Identify ways to make scenarios more relevant to policy and investment decisions

Development of scenarios for clean energy transition

- » Showcase new tools & methods to address new, disruptive elements of the transition
- » Identify modelling gaps around e.g. end-use innovation, sector coupling, and variable renewable energy integration

Approaches to capacity enhancement

- » Identify various institutional relationships between the use and development communities
- » Share experience in building capacity within your country (in-house vs out sourcing approaches for scenario development)

- » **Dedicated CEM campaign events**, for best practice exchanges among partners and the development of proposals to enhance long-term energy scenarios (first major event tentatively scheduled Spring 2019)
- » Participation by IRENA and partners in **other relevant events** to both inform the campaign and to promote the best practice use of scenarios
- » Production of **reports** and recommendations, informed by events and by additional analytical work by IRENA and partners
- » Reporting to the next CEM Ministerial meeting in May 2019

- » Rare opportunity for the CEM campaign to engage with the NGO community
 - » Get feedbacks on NGO's views on the use and development of scenarios for clean energy transition
 - » Identify lessons learnt from the ENTSO-E's scenario development process

- » The feedback is reflected to the recommendations to the CEM ministerial meeting as well as IRENA's global engagement with countries on the topic

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Expected partner contributions

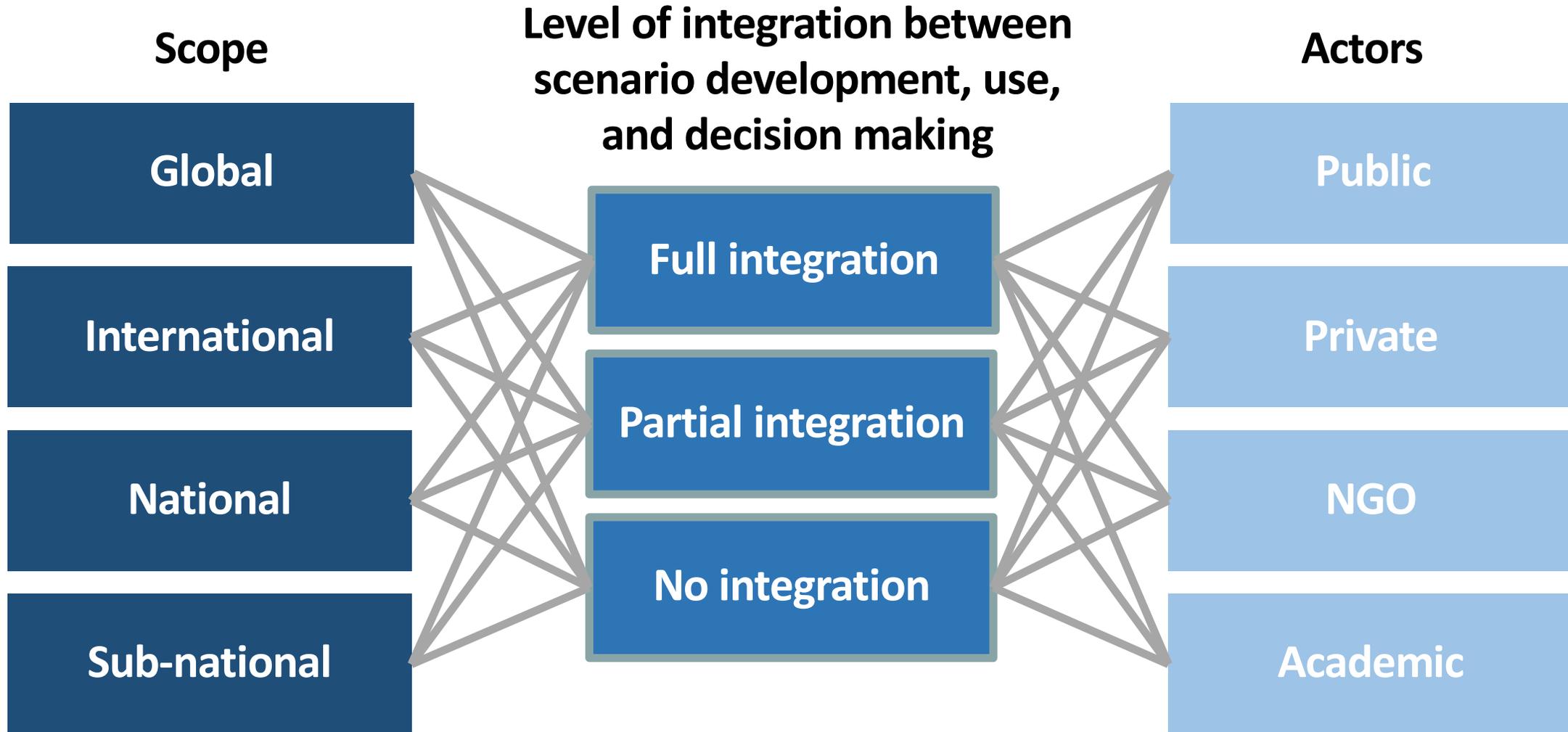
- » To attend one or more CEM campaign workshops
- » To provide best practice experience in the indicated areas of interests (use of scenarios, development of scenarios, and capacity building)
- » To contribute to discussions and debate to inform recommendations

Potential additional partner contributions

- » To represent the Campaign in other events
- » To host/offer support to organize a workshop
- » To support analytical work done jointly with IRENA

- » Gain insights into how other countries and private-sector bodies are using scenarios for decision making and how to improve your own
- » Compare and contrast your own approaches with others and discuss strengths and weaknesses with fellow experts
- » Share details of how your country or organisation has built planning capacity and explore ways to share that expertise with those with less experience
- » Discuss your needs for improved modelling tools and develop shared recommendations that can influence further work and collaborations.

LTES: a range of scopes and actors



LTES: a range of frameworks

