Rijksdienst voor Ondernemend Nederland

Introduction to this workshop and the EGRD

Rob Kool

Chair IEA Experts' Group on R&D prioritysetting

The group & previous work (1/3)

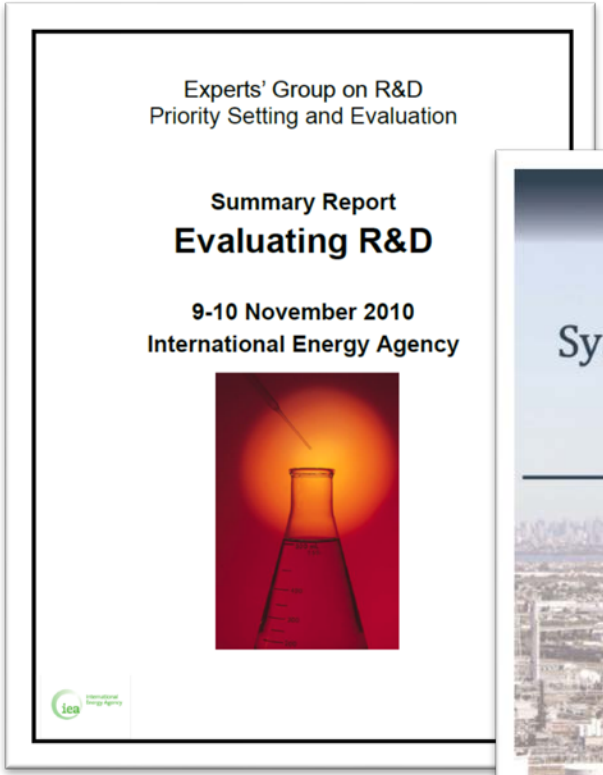
- Experts' Group on R&D Priority Setting & Evaluation
  - Part of the IEA Technology Network.
  - We organise 2 workshops/annum.
  - Our recommendations support the Committee on Energy Research and Technology (CERT), feed into IEA analysis, and enable a broad perspective of energy technology issues.
  - Work based on a 3 year program.

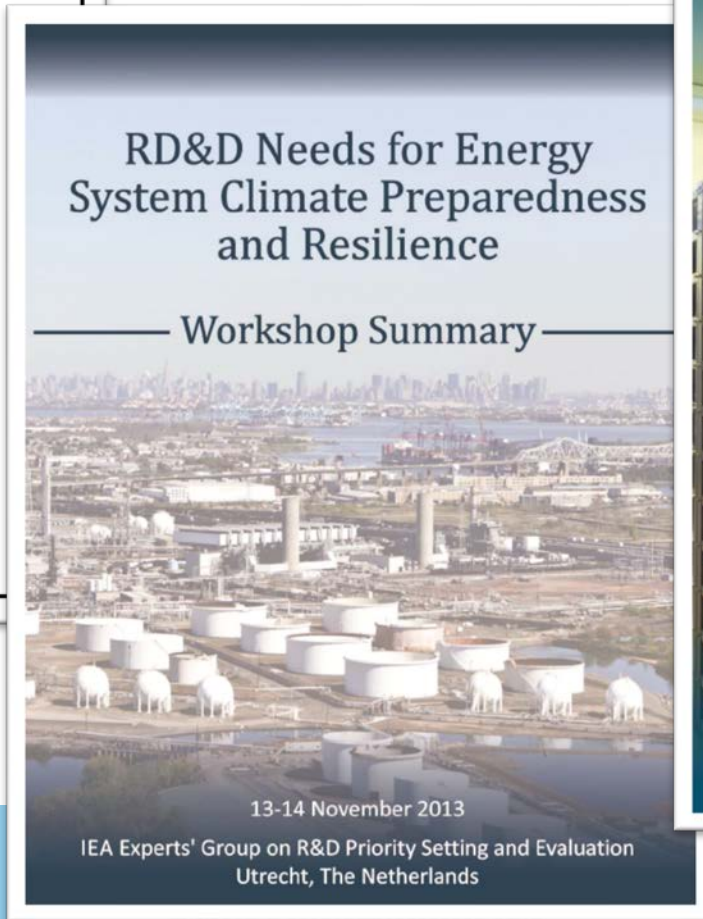
1975 - 2015 iea Energy Technology Network
Accelerating results for 40 years

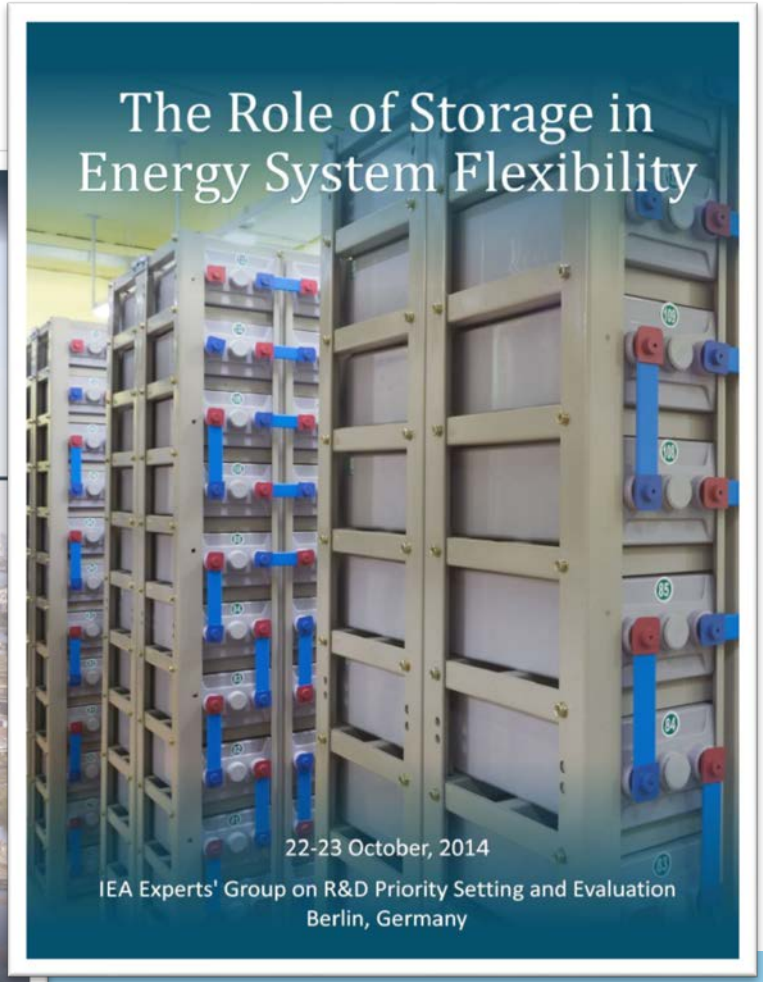
The group & previous work (2/3)

- The EGRD examines analytical approaches to energy technologies, policies and R&D. As such our recommendations can contribute to:
  - Theory: support of the methodology of priority setting & evaluation
  - “Test results”: discuss IEA work with the “practitioners in the field”: roadmaps (always together with IEA secretariat)
  - Cross-cutting: combine fields of expertise to speed up processes or determine blind spots.

The group & previous work (3/3)



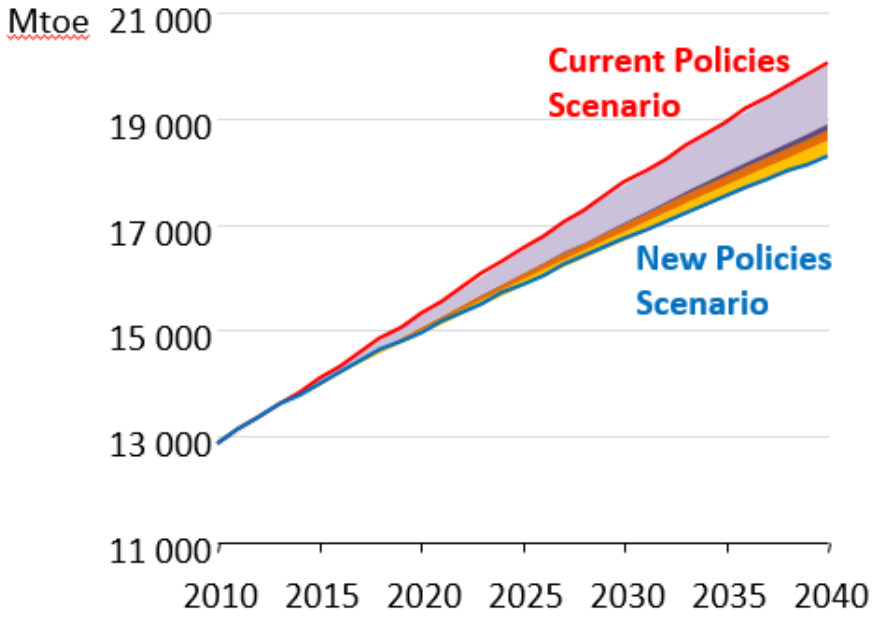




Energy efficiency is crucial to moderate future energy demand growth

World Energy Outlook 2014

Factors contributing to global savings in primary energy demand in the New Policies Scenario relative to the Current Policies Scenario

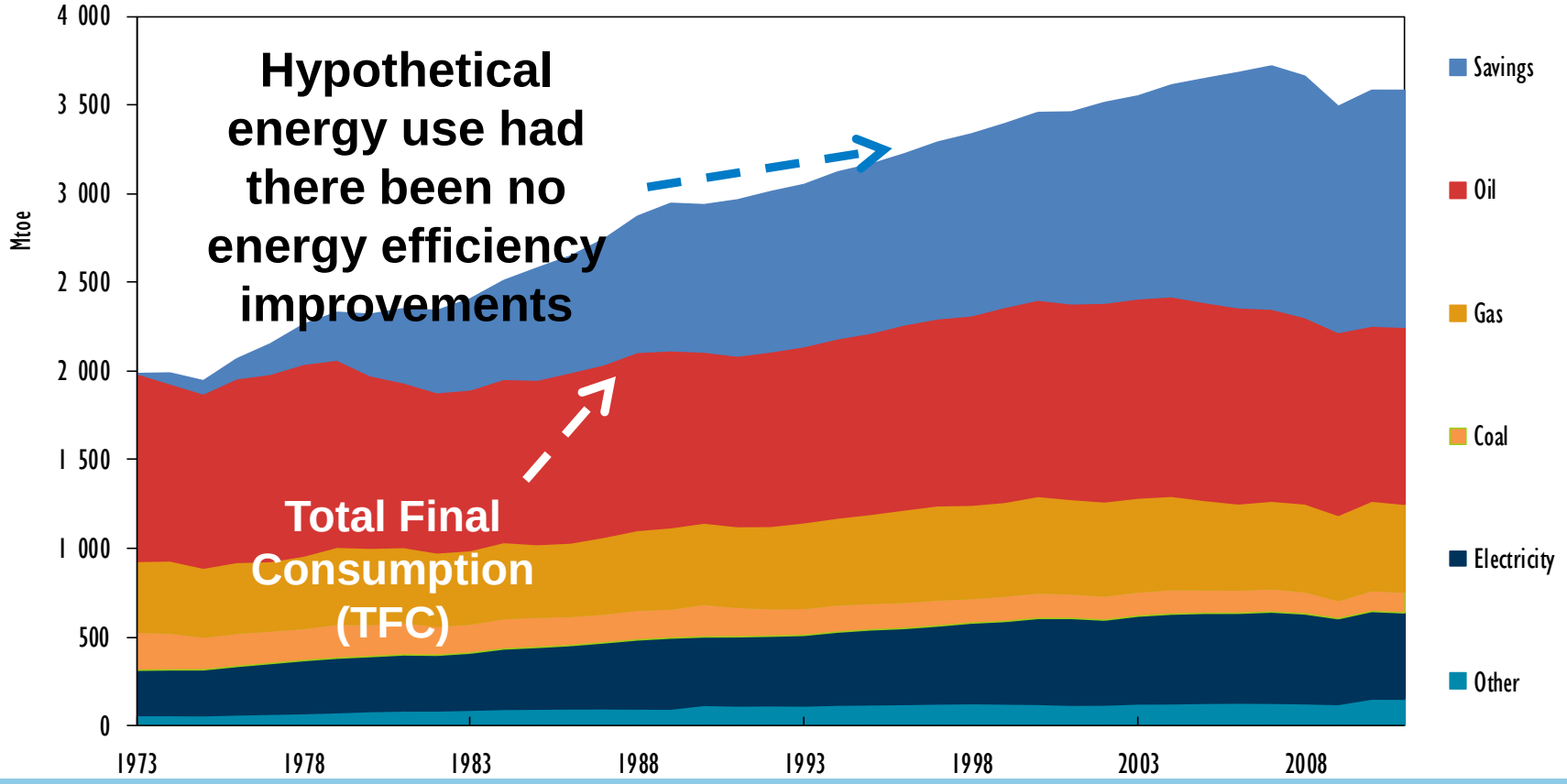


Energy savings in 2040	
Efficiency in end-uses	62%
Efficiency in energy supply	7%
Fuel and technology switching	11%
Reduced energy service demand	21%
Total (Mtoe)	**1 750**

Global efficiency-related energy savings in 2040 are equivalent to about three-quarters of the EU's current energy demand

Output - Energy efficiency: the 'first fuel'

savings larger than the contribution of any other fuel to TFC in 2012



*IEA-11: Australia, Denmark, Finland, France, Germany, Italy, Japan, Netherlands, Sweden, United Kingdom, United States

Rationale of the workshop: ***Space Cooling*** Observations (1/2)

- The demand for space cooling in the built environment is growing rapidly worldwide, especially hot climates.
- In many cooler climates, space cooling energy use in buildings is increasing, as demand for improved (and adjustable) thermal comfort grows.

Rationale of the workshop: ***Space Coolingn*** Observations (1/2)

- Space cooling accounts for ca. 5% of final energy consumption in the buildings sector
- it is the fastest growing end use in buildings (ETP modelling estimates).
- Global urbanisation has an impact on cooling demand.
- Urban environments with multi-story buildings have higher space cooling demand.
- Urban heat island effects can also significantly raise temperatures – and cooling demand – in cities.

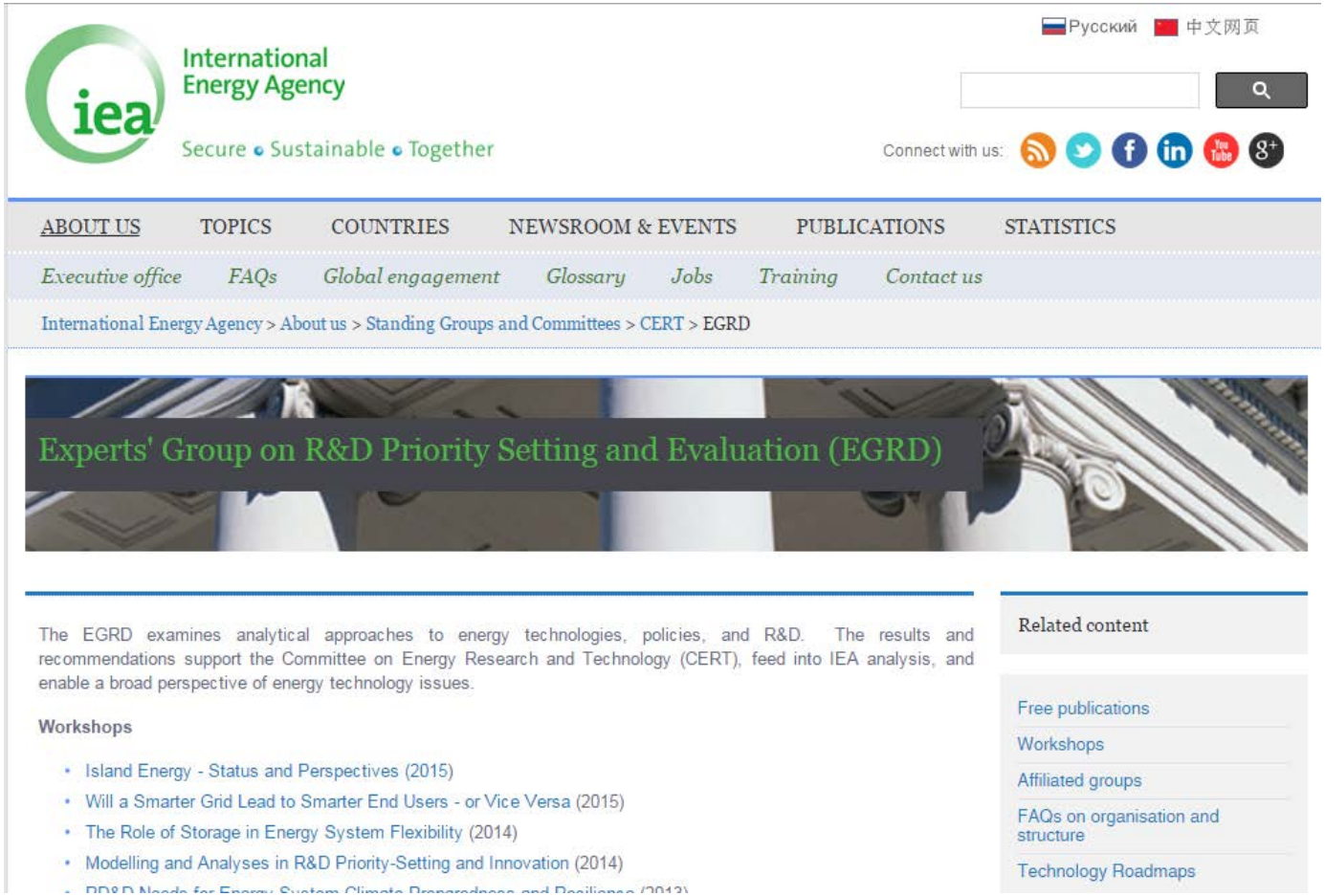
Key topics for this workshop:

- *Future Demand for Space Cooling*
- *Technological Options to Reduce Energy Demand for Space Cooling*
- *Barriers to and Supporting Factors for Low Energy Demand for Space Cooling*
- *Public Policies Toward Space Cooling*

This is how we work..

- We challenge you to answer & debate the questions in the rational during:
  - the presentations
  - the summery
- The results will be presented on the IEA website: www.iea.org/aboutus/standinggroupsandcommittees/cert/egrd/ (just google: IEA EGRD)

Q&A



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