IEA Technology Collaboration Programmes (TCP)

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Technology Collaboration Programmes (IEA TCP)

- **Enables governments, the private sector, researchers, NGOs and IGOs to:**
  - Share resources
  - Accelerate development of energy technologies
  - Improve efficiency of existing technologies
  - Develop new energy technologies and energy sources
- **80 TCPs have been created - 39 currently operating**
  - 1975 first six IAs created focused on coal
  - 2005 renewable energy deployment, industrial energy efficiency
  - 2008 energy efficient appliances
  - 2011 smart grids
  - 2013 environmental issues of gas and oil exploration

Organisation of IEA TCPs and the role of the IEA

International Energy Agency
Secure Sustainable Together

Governance

- IEA Governing Board
- IEA Committee on Energy Research and technology (CERT)
- IEA Working Parties (end use, fossil fuels, fusion, renewables)
- TCP Executive Committee
- TCP Projects

Instruments

- IEA Framework for International Energy Technology Co-operation
- TCP legal text (Implementing Agreement)

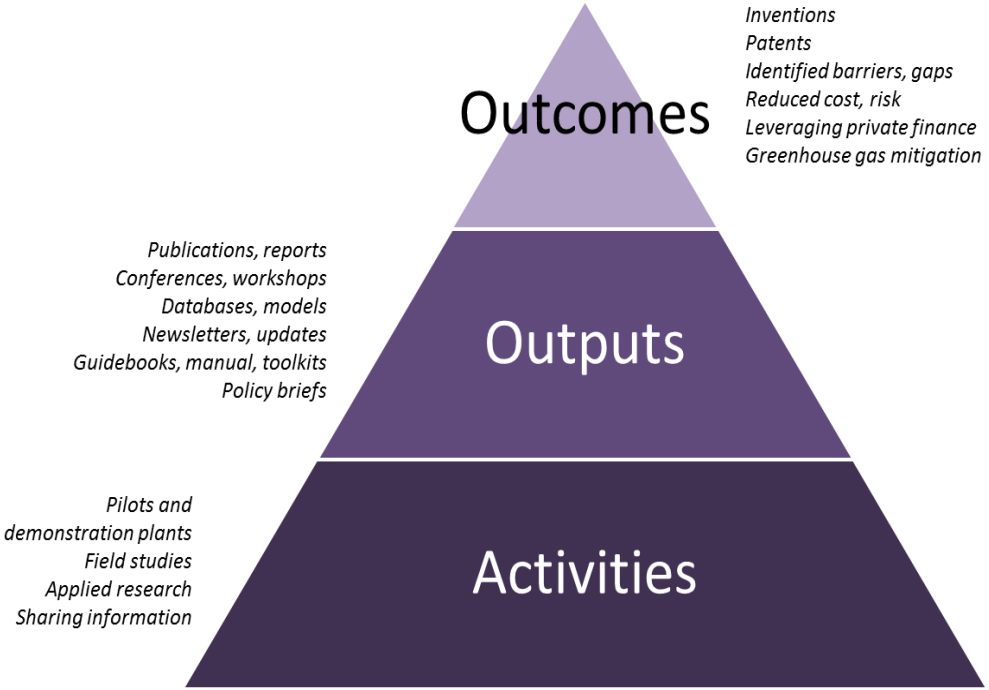
IEA Secretariat

- Supports IEA Committees and Working Parties
- Raises awareness and synthesizes policy messages
- Facilitates membership
- Provides guidance and advice

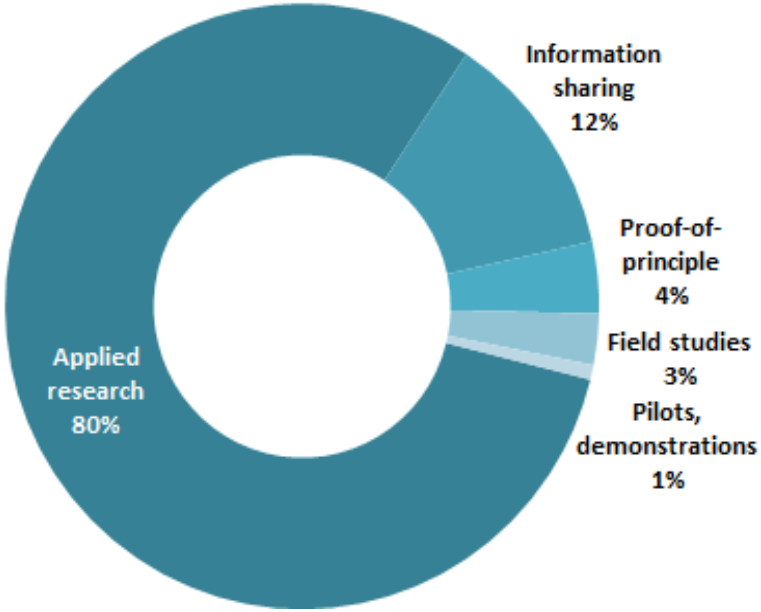
Advantages of the IEA TCP mechanism

1. • **Provides institutional stability using proven model**
2. • **Facilitates cooperation with the IEA Secretariat and other TCPs** (reducing overlap and increase synergies)
3. • **Builds bridges between governments, the private sector and NGOs and between research and policy**
4. • **Offers clear rules for engagement and equitable sharing of rights and obligations**
5. • **… But also flexibility to adjust to evolving needs and interests of the Participants**

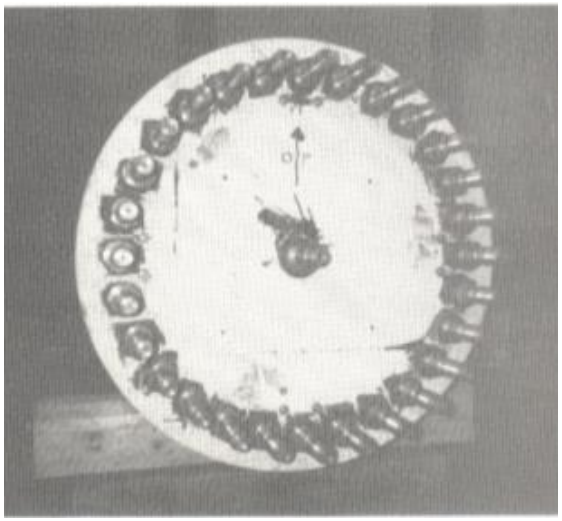
IEA TCP activities, outputs, outcomes 1975-2015

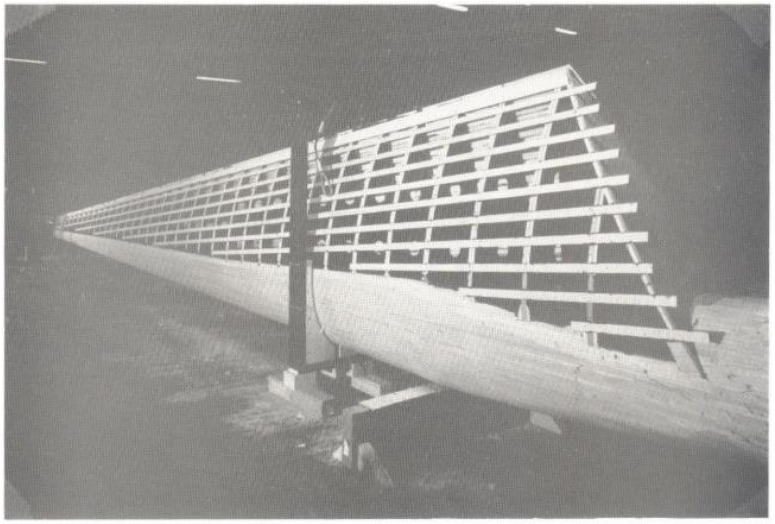


Share of activities by type



Impacts: Technological advancements





Testing Danish wind turbines in the 1980s

Danish wind turbines today

Impacts: Helping build a supportive enabling environment for technology

- E.g., technical advice to influence international remuneration schemes

- E.g., analysis to assist policymakers implement best-practice policy

CLEAN ENERGY MINISTERIAL
Accelerating the Transition to Clean Energy Technologies

4E Efficient Electrical End-Use Equipment International Energy Agency

ISGAN international smart grid action network

Participation in IEA TCPs

(as of 25 November 2015)

International Energy Agency
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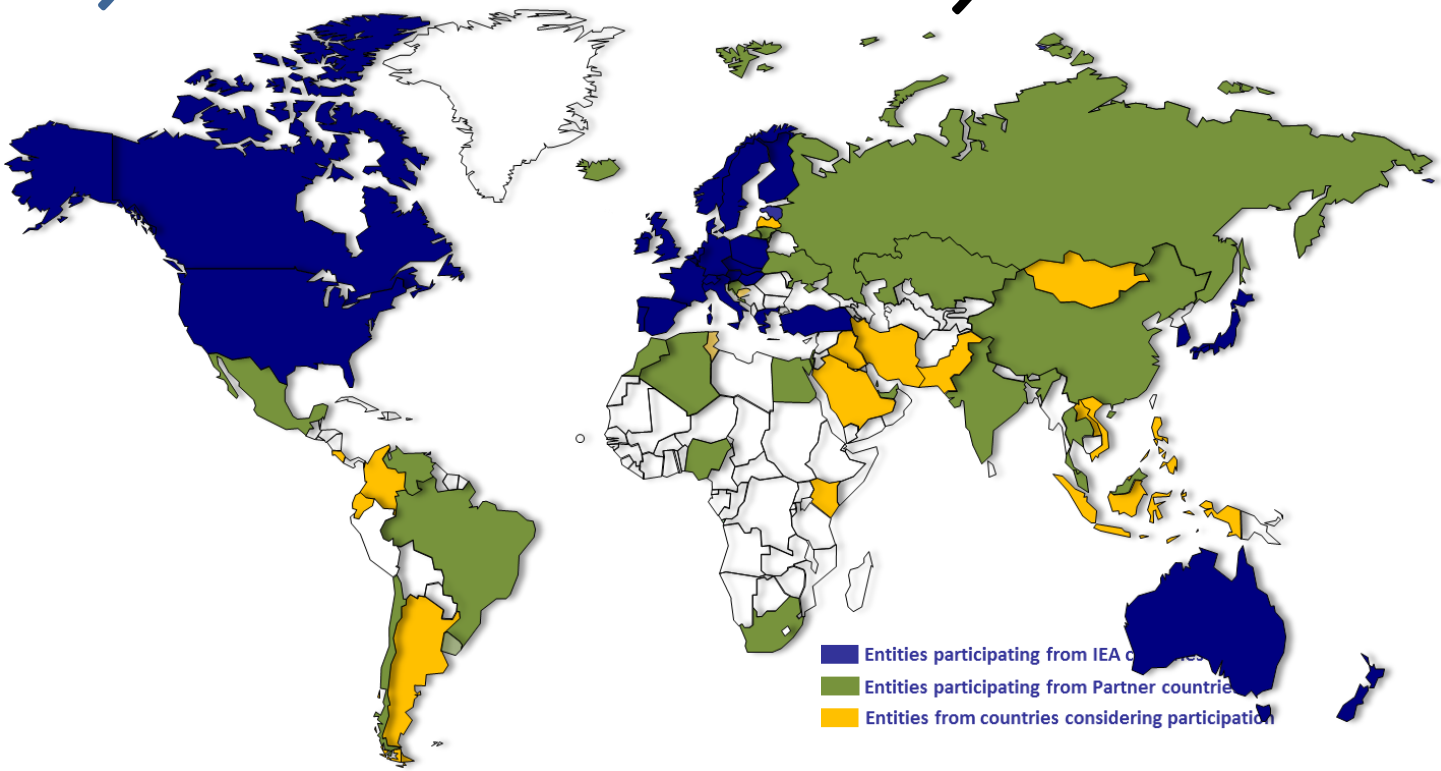
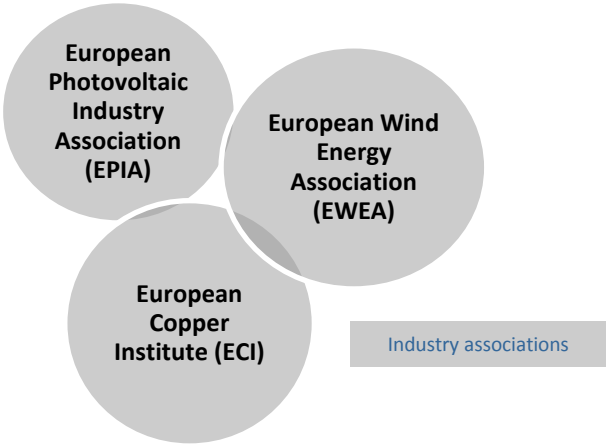
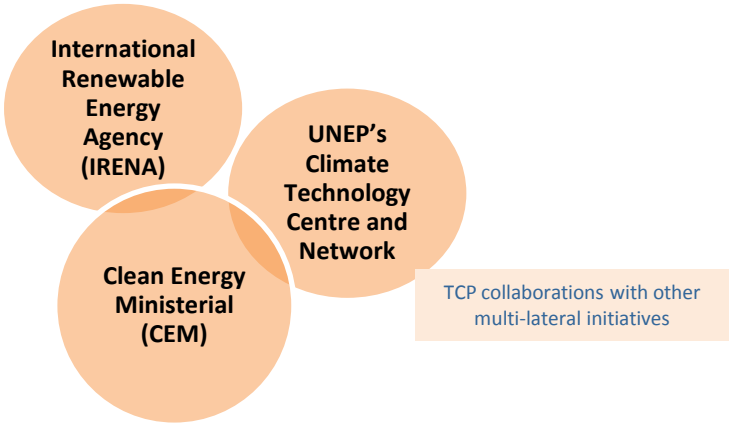
- 6,000 experts
- 1,900 topics to date
- 310 public or private organisations
- 51 countries
- 39 Technology Collaboration Programmes
- 9 regional or international organisations

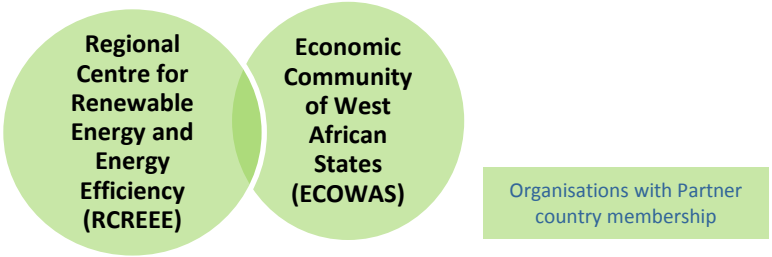


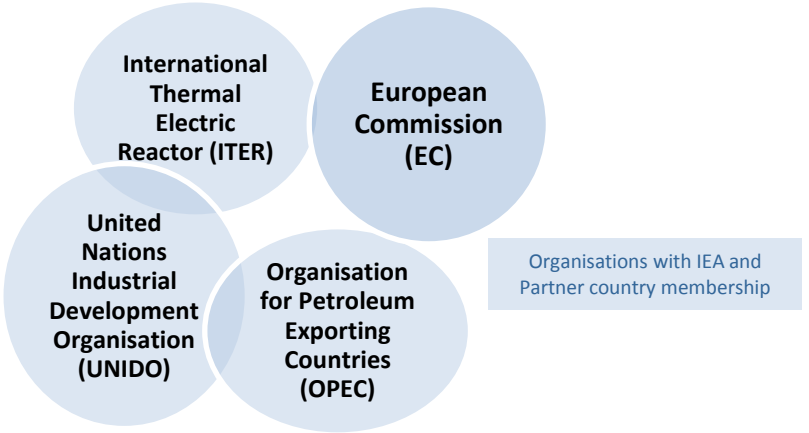
This map is without prejudice to the status of sovereignty over any territory, to the delimitation of international frontiers and boundaries, and to the name of any territory, city or area. Experts from countries shown above participate in activities of the energy technology initiatives.

Collaboration with other multi-lateral initiatives and organisations



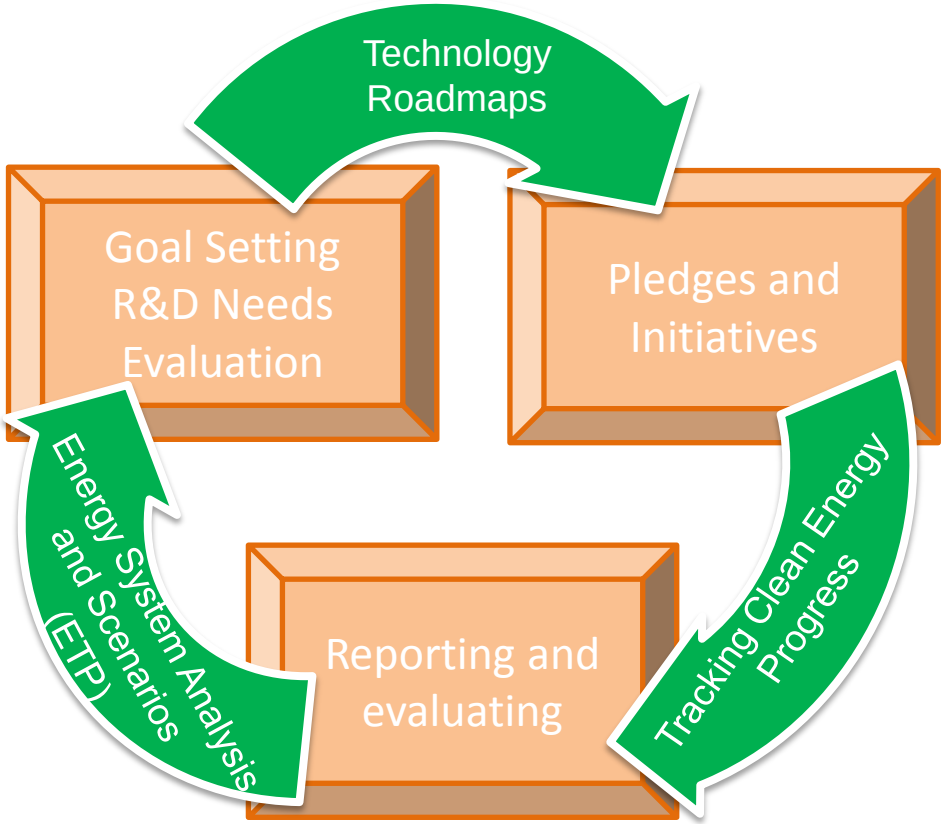






IEA TCPs feed into and benefit from participations of regional and international organisations as well as collaboration with other multi-lateral mechanisms

Multilateral Collaboration: Linking the pieces together



Governments
Academia
Industry

International Energy Agency
Secure
Sustainable
Together

Thank you

IEA messages to COP21

International Energy Agency
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To shift the energy sector onto a low-carbon path that supports economic growth and energy access:

1. Take five key actions, led by energy efficiency and renewables, to peak then reduce global energy emissions.
2. Use the Paris Agreement to drive short-term actions consistent with long-term emission goals.
3. Accelerate energy technology innovation to make decarbonisation easier and even more affordable.
4. Enhance energy security by making the energy sector more resilient to climate change impacts.