

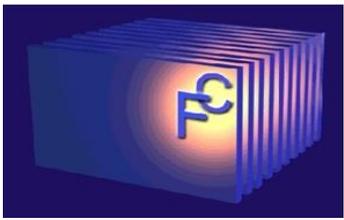
# Outreach Event

50<sup>th</sup> Meeting of the Executive Committee Meeting  
Implementing Agreement Advanced fuel Cells

Detlef Stolten

Zurich

April 23, 2015



# The International Energy Agency

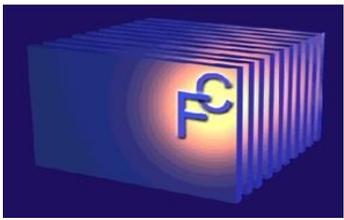


The IEA is

- Autonomous organisation: works to ensure reliable, affordable and clean energy for its 29 member countries and beyond.
- Four main areas of focus are
  - energy security
  - economic development,
  - environmental awareness,
  - engagement worldwide.
- Works with a broad range of groups, committees and advisory bodies, including private sector and IEA non-member country representatives.

Member Countries:

 Australia	 Japan
 Austria	 Republic of Korea
 Belgium	 Luxembourg
 Canada	 The Netherlands
 Czech Republic	 New Zealand
 Denmark	 Norway
 Estonia	 Poland
 Finland	 Portugal
 France	 Slovak Republic
 Germany	 Spain
 Greece	 Sweden
 Hungary	 Switzerland
 Ireland	 Turkey
 Italy	 United Kingdom
	 United States

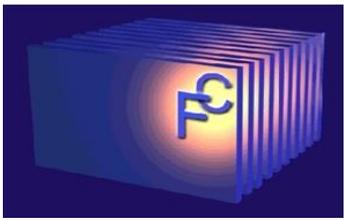


# The International Energy Agency

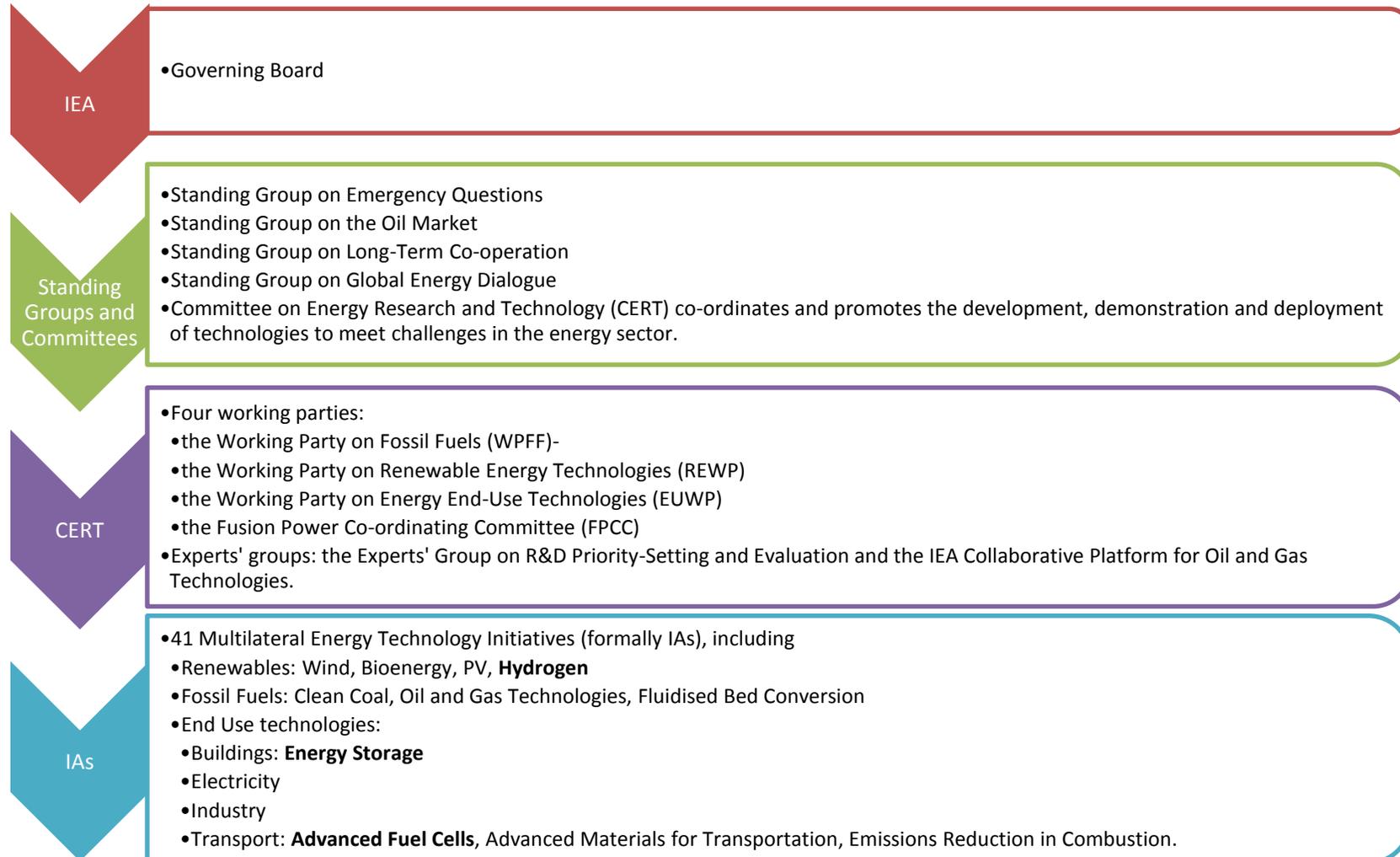


## The IEA's Main objectives are

- maintain and improve systems for coping with oil supply disruptions
- promote rational energy policy
- operate a permanent information system on the international oil market
- improve the world's energy supply and demand structure by developing alternative energy sources, and increasing the efficiency of energy use
- promote international collaboration on energy technology and
- assist in the integration of environmental and energy policies.



# The International Energy Agency



# Working Party on Energy End-Use Technologies (EUWP)



The main objectives of the EUWP are to guide the work of the end-use technology IAs and to identify gaps in technologies and energy end-use systems. The EUWP builds relationships and engages with industry and partner countries through the work of the end-use IAs.

IAs in the end-use sector portfolio include:

## **Buildings**

- Buildings and Communities (EBC IA)
- District Heating and Cooling (DHC IA)
- Energy Efficient Electrical Equipment (4E IA)
- **Energy Storage (ECES IA)**
- Heat Pumps (HPT IA)

## **Electricity**

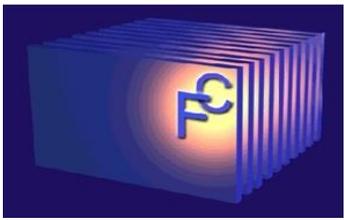
- Demand-Side Management (DSM IA)
- High-Temperature Superconductivity (HTS IA)
- Smart Grids (ISGAN IA)

## **Industry**

- Industrial Technologies and Systems (IETS IA)

## **Transport**

- **Advanced Fuel Cells (AFC IA)**
- Advanced Motor Fuels (AMF IA)
- Advanced Transport Materials (AMT IA)
- Hybrid and Electric Vehicles (HEV IA)

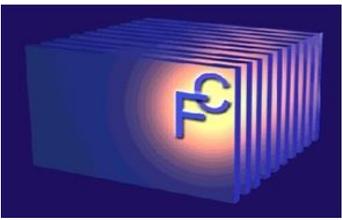


# Energy Technology Network



The IEA energy technology network is an ever-expanding, co-operative group of more than 6 000 experts that support and encourage global technology collaboration. At the head of this network is the Committee on Energy Research and Technology (CERT). Made up of senior experts from IEA member countries, the CERT provides leadership and policy guidance based on expertise provided by four sector-specific working parties and ad-hoc and experts' groups.

At the core of the IEA energy technology network are a number of independent, multilateral energy technology initiatives – the Implementing Agreements (IAs). The IAs encourage technology-related activities that support energy security, economic growth, environmental protection and engagement worldwide. Through a flexible and effective framework, the IA mechanism enables IEA member and non-member countries, businesses, industries, international organisations and non-government organisations to share research and best practice on existing and breakthrough technologies, to fill existing research gaps, to build pilot plants and to carry out deployment or demonstration programmes. To date, more than 1 400 topics have been addressed.



# Advanced Fuel Cells IA



The Implementing Agreement for a programme of research, development and demonstration on advanced fuel cells (AFC IA) began in 1990, and currently has 13 member countries.

## Current Projects:

- Fuel cell systems for stationary applications
- Fuel cells for portable applications
- Fuel cells for transportation
- Molten carbonate fuel cells
- Polymer electrolyte fuel cells
- Solid oxide fuel cells
- Systems analysis of fuel cells
- Modelling for fuel cells
- Electrolysis

