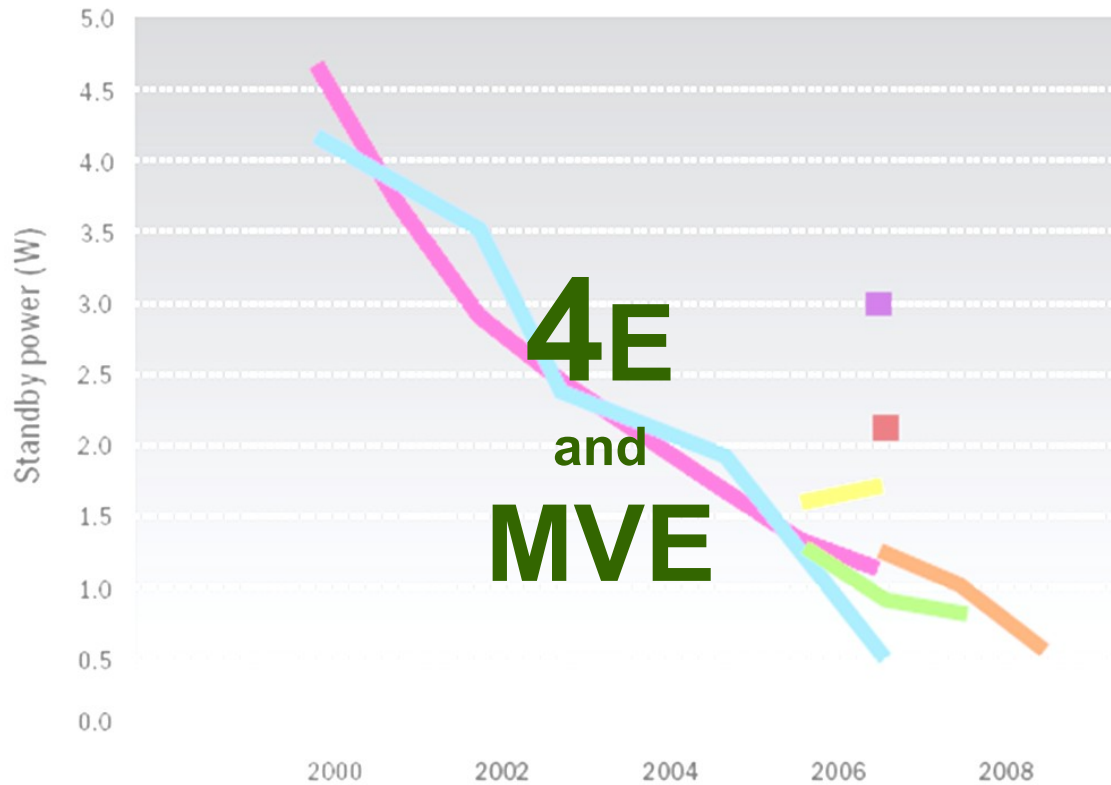




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Hans-Paul Siderius
Chairperson 4E

London, 14 September 2010

IEA Implementing Agreement

Efficient End-use Electrical Equipment



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4E at a glance

- 4E provides an **international forum for governments** and other stakeholders to:
 - Share expertise and develop understanding of electrical end-use equipment and policies
 - Facilitate co-ordination of international approaches in the area of efficient electrical end-use equipment
- 4E seeks to meet the **challenges** for policy makers to **maximize energy efficiency** on all types of non-transport electrical equipment.
- Launched in March 2008, 4E now has **11 member countries** actively participating in collaborative projects.



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Participating countries

Members:

Australia (vice-chair)
Austria
Canada
Denmark
France
Korea
The Netherlands (chair)
Switzerland
South Africa
UK
USA

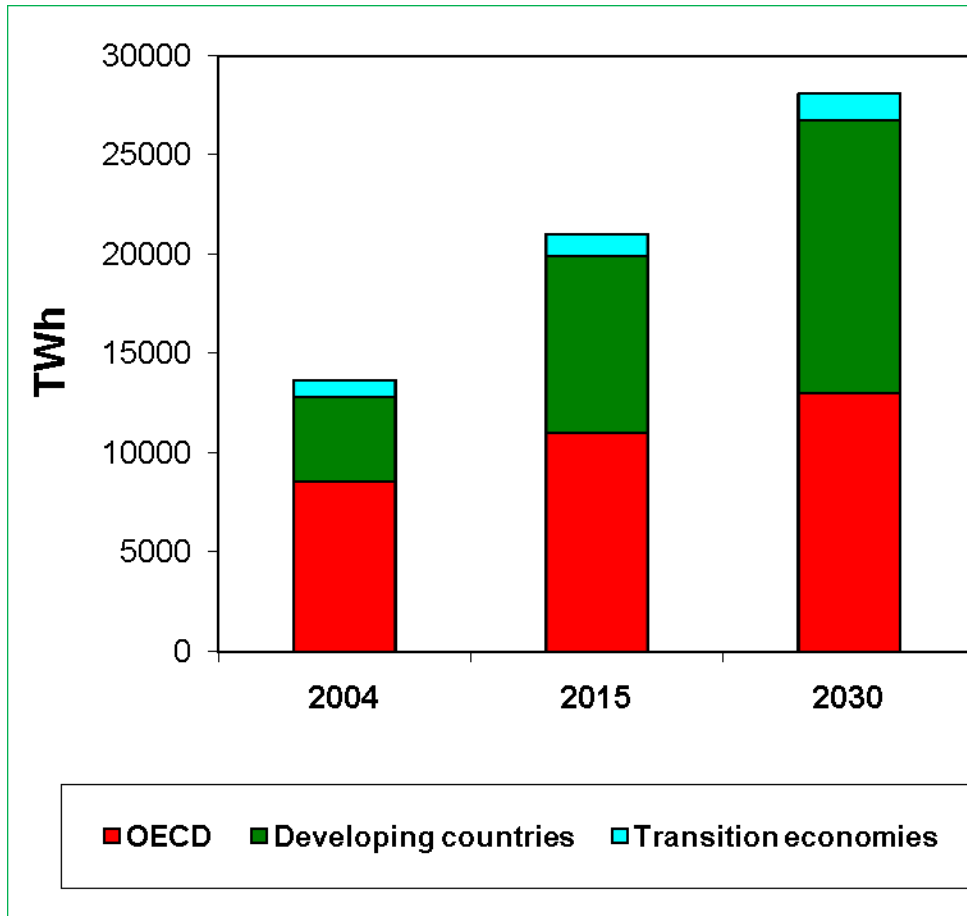
Considering membership:

China
Japan
Mexico
Sweden



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Why is 4E needed

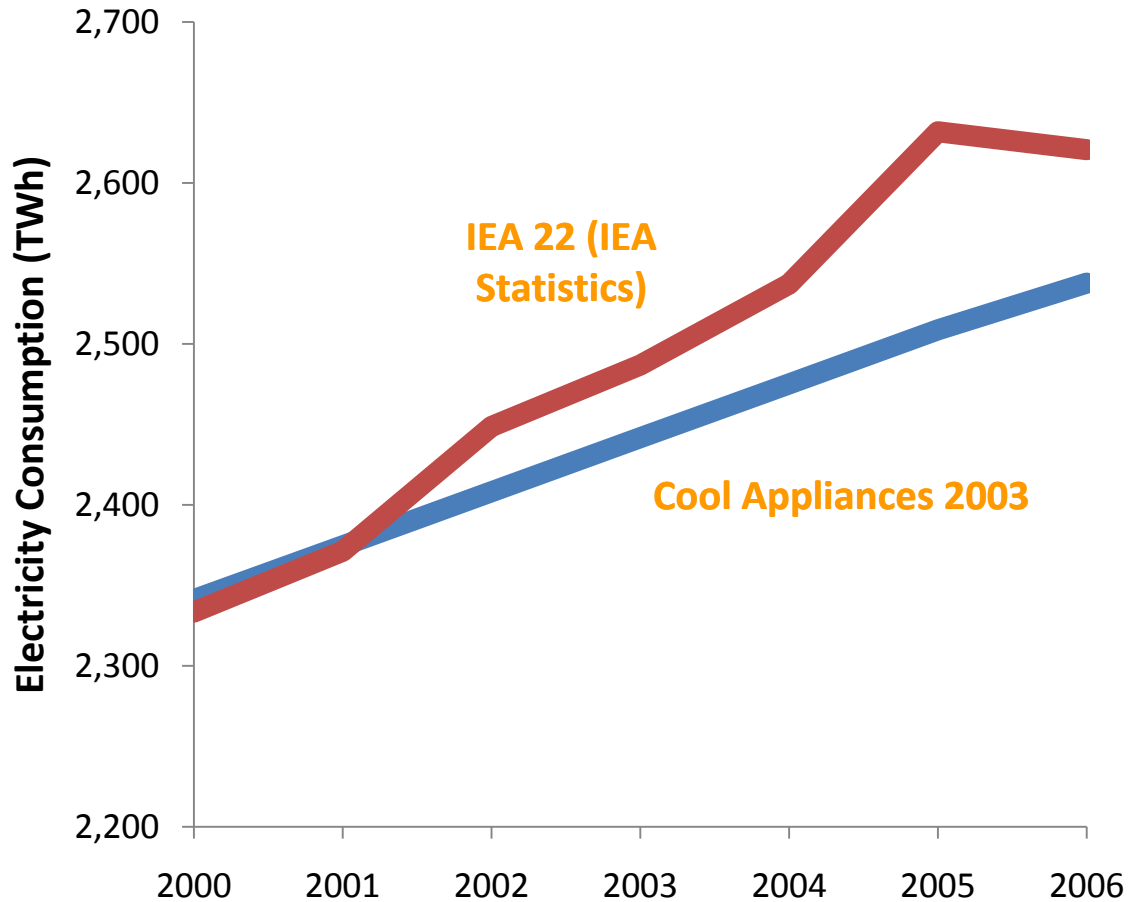


- Global electricity consumption set to double by 2030
- Provides a major driver for greenhouse gas emissions and investment in new generation and T&D infrastructure



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Residential electricity consumption



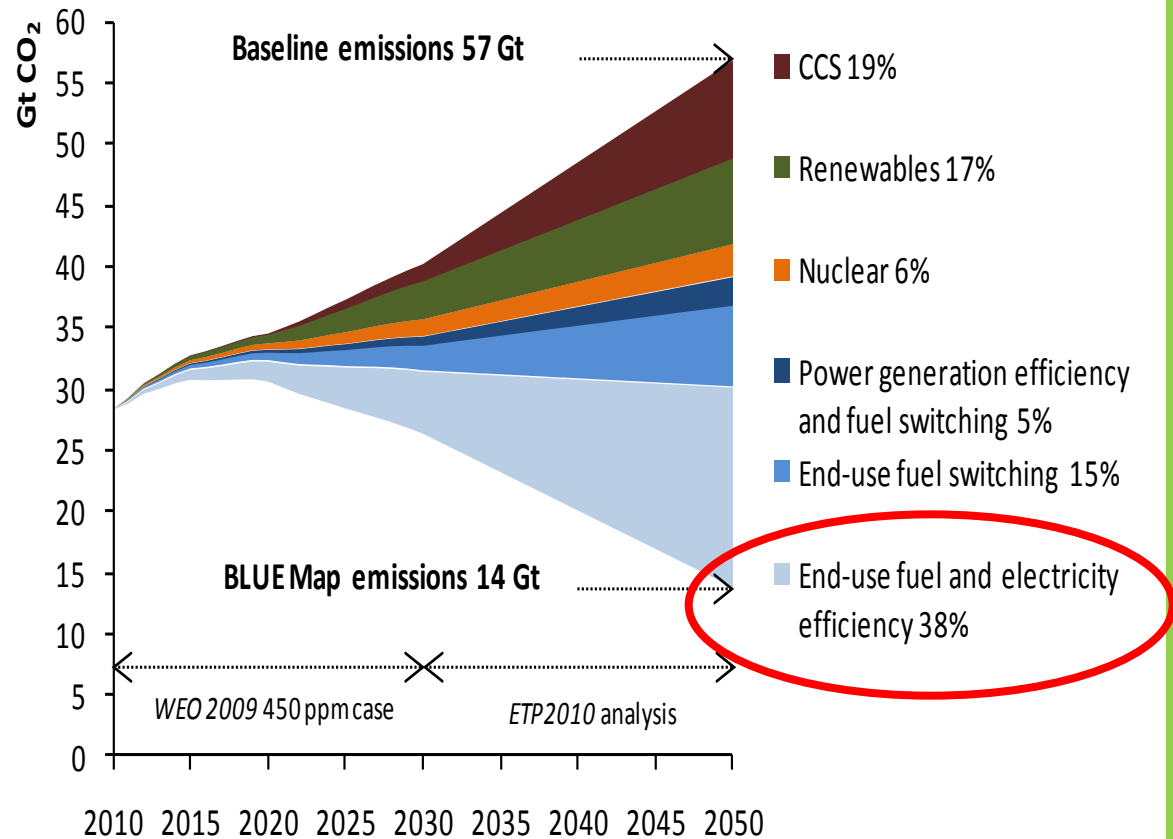
- Despite national efforts, residential electricity consumption is growing at nearly twice the rate estimated in Cool Appliances, 2003
- Driven by changes in consumption patterns in OECD – mainly electronics
- And growth in penetration rates in non-OECD countries



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Energy efficiency – the largest resource

- Analysis suggests that energy efficiency has the greatest opportunity to cut CO₂ emissions and one of the quickest
- End-use appliances and equipment are the largest contributor



Source: IEA ETP 2010

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End-use efficiency – the cheapest, most available resource

- In equipment, large cost-effective opportunities are already available.
- But, the opportunities are widely dispersed and impeded by market barriers.
- Policies aimed at overcoming these barriers have proved highly successful.



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Why international cooperation is the way forward

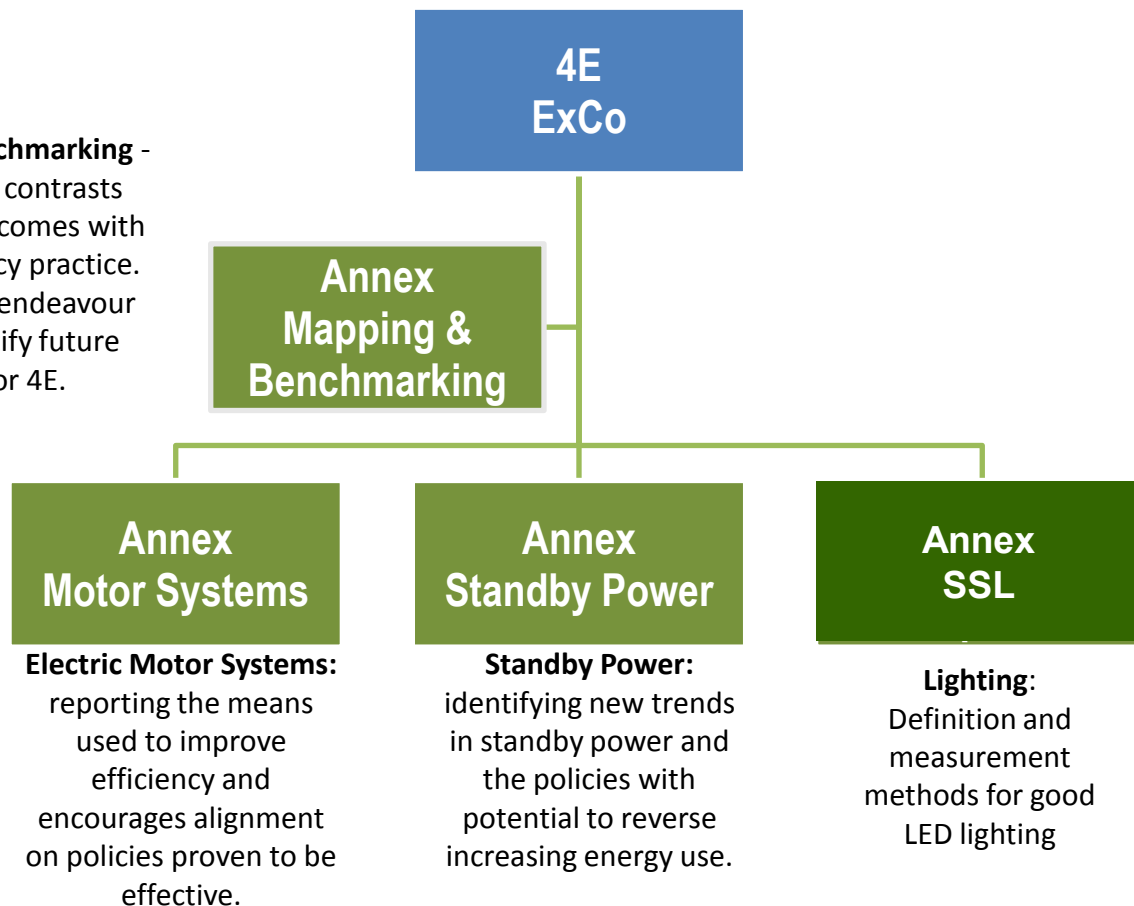
- Many policy makers are seeking answers to **similar questions**:
 - How do appliances compare in different countries?
 - What have been the most effective policies?
 - What targets could we use?
- **New challenges** regarding appliances:
 - Proliferation of types of electrical equipment
 - Growing complexity
 - Increased international trade
- **Opportunities** in international co-operation:
 - Clear goals and road maps: policies *better predictable* for industry,
 - *Shared costs make policies cheaper* to develop and implement (by countries and industry),
 - and *more effective*



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Structure of 4E

Mapping & Benchmarking - compares and contrasts policies and outcomes with global best policy practice. This long-term endeavour will help identify future projects for 4E.

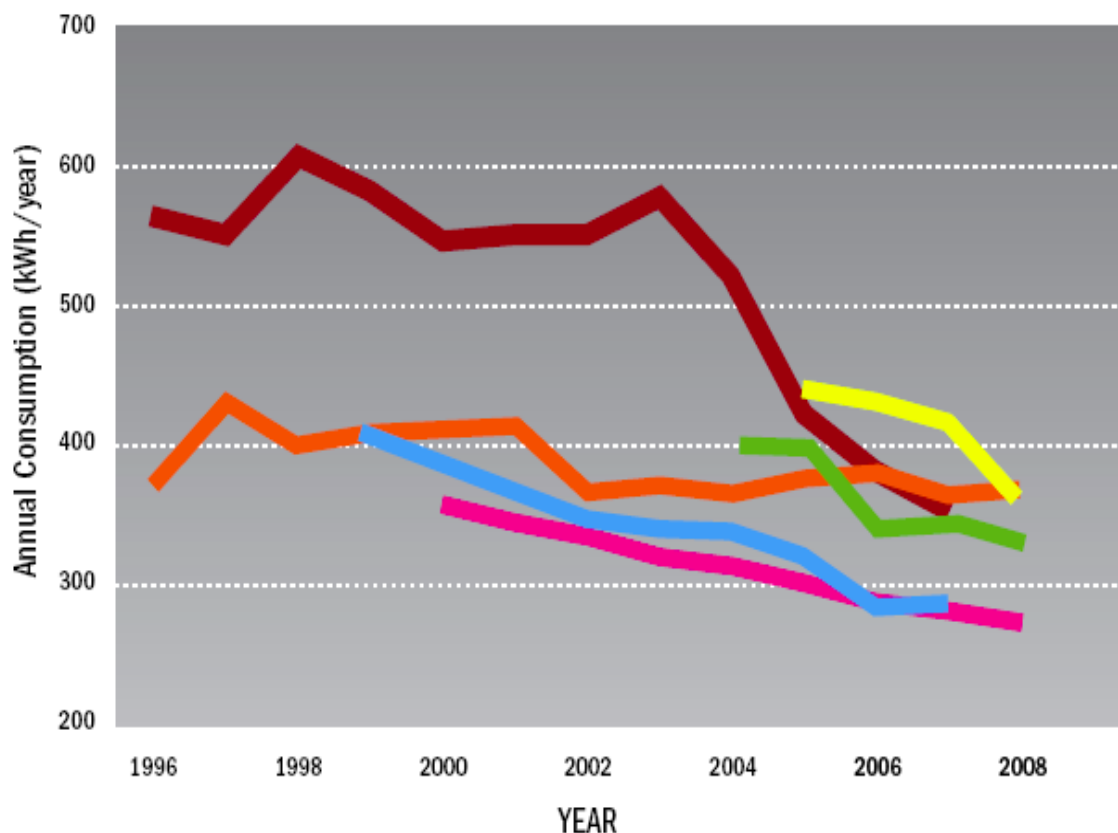




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Why benchmarking across countries is valuable

Freezers: Normalized New Product Weighted Energy Consumption (kWh/year)



- Data collected and normalised
- Presented to show policy implications
- Least efficient – most efficient = 43% improvement



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Motor Systems Annex

- Motor systems - responsible for 40% of global electricity demand.
- Strengthening alignment amongst national programmes through EEMODS conferences.
- Participation in International Electrotechnical Commission (IEC) process.
- Published "*Guide for the selection and application of energy-efficient motors*".
- Co-ordination and training of test laboratories to increase capacity.





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Standby Annex

- 4 Tasks:
 - Data collection
 - Evaluation of policies
 - Horizontal policies
 - Network Standby
- Co-operation with other international projects on standby (APP, SELINA, Ecodesign Lot 26).
- Network standby scoping study summarizes developments and highlights technical and policy options to reduce network standby consumption.





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SSL Annex

Goal: to provide governments with the tools to assess the performance of SSL:

- Definition of key performance characteristics.
- Suite of minimum performance levels.
- International specification for LED replacement lamp equivalency claims.
- Test methods for testing performance characteristics.
- Assess possibilities to coordinate international accreditation of test labs.





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4E and MVE

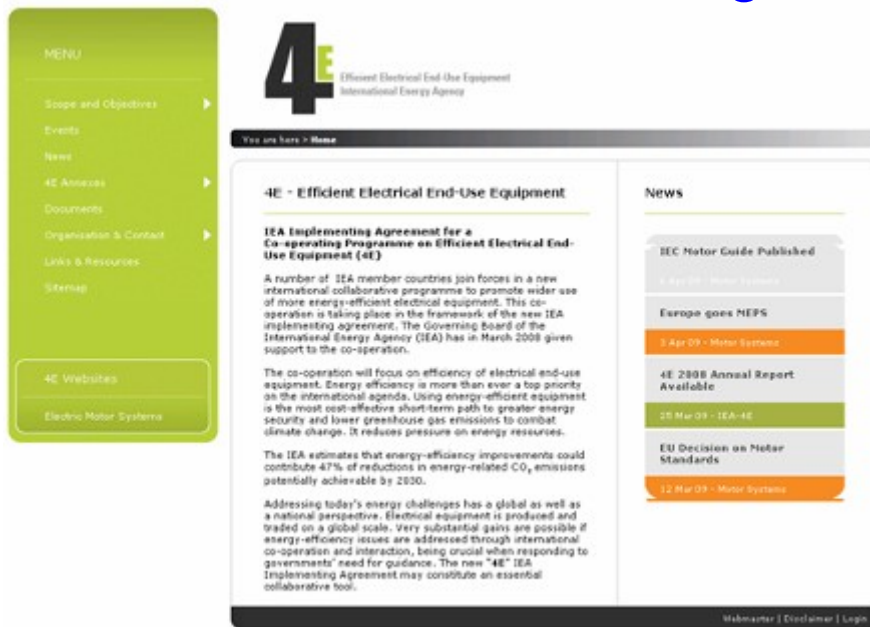
- 4E provides a mechanism for
 - the co-operation between governments on policies,
 - sharing resources to tackle emerging issues and
 - investigating opportunities for closer policy alignment.
- Regarding MVE procedures:
 - Exchange best practices
 - Find interfaces between procedures
 - Align procedures
- Product level:
 - Experiences with product testing.
 - Share test results.
 - Brand reputation



More information on 4E

www.iea-4E.org

- 4E and Annex newsletters
- 4E website: www.iea-4E.org



- Operating agent: Mark Ellis
(mark@energyellis.com)



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I hope this conference will be the start of
many (**4E**) MVE activities

Thank you for your attention