TCP on Energy Efficient End-Use Equipment (4E TCP)

The aims of the 4E TCP are to promote energy efficiency as the key to ensuring safe, reliable, affordable and sustainable energy systems. As an international platform for collaboration between governments, the 4E TCP provides policy guidance to its members and other governments concerning energy using equipment and systems. The 4E TCP prioritises technologies and applications with significant energy consumption and energy saving potential within the residential, commercial and industrial sectors (not including transport). To meet its aims, the 4E TCP harnesses the expertise of governments, industry, experts and other TCPs for joint research related to the development and deployment of energy efficient equipment.

Main areas of work

- o Electric Motor Systems (EMSA)
- o Solid State Lighting (SSL)
- o Electronic Devices and Networks (EDNA)
- o Power Electronic Conversion Technology (PECTA)
- o Monitoring, Verification and Enforcement (MV&E)

Key activities and accomplishments (2017-2018)

- Interlaboratory Comparison Programme for solid state lighting which includes 42 laboratories from 17 countries that support national and regional quality assurance programmes, vital to realising major energy savings.

- Round robin testing programme for motor system converters in co-operation with the International Electrotechnical Commission.

Priorities and projects (2019 – 2020)

- Product Energy Efficiency Trends (PEET) will undertake research into global energy efficiency trends for major appliances and equipment and potential for future technologies.

- Energy-using Systems: defining terminology and scope; and investigation of the most promising policy approaches to unlock the large savings potential.

- Network Zero Devices: mapping a technology and policy pathway towards "network zero" connected devices i.e. devices that do not rely on the grid for energy to remain connected to a communications network.

End-use: Buildings

Utilising network connectivity to manage and automate services such as lighting, heating/cooling and washing in order to reduce energy consumption and operating costs (graphic courtesy of the 4E TCP).

Multilateral collaborations

- G20 Networked Devices: the 4E Electronic Devices and Networks Annex (EDNA) provides the Secretariat and collaborates with the Connected Devices Alliance (CDA), one of six initiatives under the G20 Energy Efficiency Action Plan.

- The 4E TCP works with international standradisation bodies to create high quality technical standards able to be referenced by national energy efficiency programmes.

- The 4E TCP provides input to many IEA publications, including the 'Energy Efficiency Market Report', 'Digitalization & Energy' and 'Tracking Clean Energy Progress'.

- The 4E TCP collaborates with the Super-efficient Equipment and Appliance Deployment (SEAD) initiative, the UN Environment Programme unitiative United for Efficiency (U4E) and other TCPs.

End-use: Buildings

Membership

| Australia | Austria | Canada | China | Denmark | France | Japan | Korea |

| Netherlands | New Zealand | Sweden | Switzerland | United Kingdom | United States | European Commission |

Why should your organisation become a member of the 4E TCP?

Members of the 4E TCP gain access to information and expertise to support their own policy development processes for energy efficient end-use technologies. Through collaboration with countries, the 4E TCP is able to provide authoritative global assessments and push forward standardisation, capacity building and new policy agendas.

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The 4E TCP is organised under the auspices of the International Energy Agency (IEA) but is functionally and legally autonomous. Views, findings and publications of the 4E TCP do not necessarily represent the views or policies of the IEA Secretariat or its individual member countries.