

Annex 1

STRATEGIC PLAN

**IMPLEMENTING AGREEMENT FOR A CO-OPERATIVE
PROGRAMME ON EFFICIENT ELECTRICAL END-USE EQUIPMENT
(4E)**

Strategic Plan 4E

This strategic plan outlines the background, scope and tasks of the IEA Implementing Agreement for a Co-operative Programme on Efficient Electrical End-use Equipment (4E).

1 INTRODUCTION

At their Gleneagles summit in 2005, G8 leaders addressed the challenges of climate change and securing clean energy and sustainable development. Agreeing to act with resolve and urgency, they adopted a Plan of Action which included energy efficiency in buildings, appliances, transport and industry.

Since then, research and analysis at the International Energy Agency has shown that improving energy efficiency is the most cost-effective concrete action governments can take in the short term to address climate change and energy security concerns and to reduce energy consumption. For example, results of analysis outlined in the IEA publication *Energy Technology Perspectives 2006* identify energy efficiency gains as “the first priority for a more sustainable energy future”.

The residential sector alone currently accounts for 30% of all electricity consumed in OECD countries, corresponding to 21% of energy-related CO₂ emissions. Many countries have implemented energy efficiency policies in many sectors over the years, in some cases for several decades. Such programmes, including combinations of mandatory and voluntary schemes, may be highly effective in raising the market share of the most efficient equipment and appliances, and in paving the way for new efficient technology.

However, the uptake of efficient electrical end-use equipment is hampered by the presence of multiple barriers which isolate consumers from the consequences of their energy choices, including:

- Lack of information on, or the low priority given to the energy performance of appliances, buildings and automobiles.
- Tax incentives and subsidies that promote wasteful energy use (e.g. tax breaks that encourage car use).
- Split incentives between investors and end-users with regard to the performance of energy-using equipments (e.g., for building technology choices).
- Failure to incorporate fully the energy security risks in market prices.

In addition, as electrical equipment is traded globally, international co-operation and coordination will be vital to ensuring coherent, efficient action. The need for further global co-operation and development of energy efficiency policies is widely recognised by the International Energy Agency (IEA), the G8, the Asia-Pacific Partnership (APP) Initiative, the Marrakech Accord, the European Commission (EC) international energy efficiency initiative and in other international context.

The 4E will integrate and continue activities previously undertaken by the Group of Energy Efficient Appliances (GEEA) aiming at promoting the best appliances at the market. The 4E will also build on progress made in CLASP, in the International Task Force for Sustainable Products (ITSFP) and other relevant international co-operative efforts.

Therefore a platform is urgently needed for countries to share expertise, to ensure coordination of international initiatives aimed at implementing efficiency improvements in electrical equipment. The IEA Implementing Agreement for a Co-operative Programme on Efficient Electrical End-use Equipment (4E) is designed to fill this gap.

2 SCOPE, OBJECTIVES AND DELIVERABLES

2.1 Scope

The 4E will specifically focus on electrical end-use equipment. Industrial and commercial equipment as well as equipment mainly used in households is included. The 4E will focus on equipment that contributes most to the total end-use electricity consumption, such as electric motors and lighting, and will include technologies with fast growing markets shares such as set-top boxes. Further the increasing stand-by consumption is a relevant topic for this Implementing Agreement. Electric or hybrid motor vehicles are outside the scope and would be best covered in initiatives dealing with transport.

Consistent with the IEA Framework, this initiative is open to IEA member and non-member countries, sponsors and international organisations.

2.2 Objective

The Programme to be carried out shall consist of international efforts to promote adoption of government policies to encourage the use of efficient electrical end-use equipment. The Programme will provide a forum for countries and other stakeholders to:

- Share expertise and develop their understanding of end-use equipment and policies; and
- Facilitate coordination of international approaches in the area of efficient end-use equipment.

These objectives will be met by collecting and sharing information on end-use equipment technologies and programmes and pooling resources for projects and tasks.

2.3 Deliverables

Deliverables of the 4E Implementing Agreement will include:

- Establishing a forum for information exchange and coordination between participating governments and sponsor organisations
- Specific projects (Annexes) on efficient electrical end-use equipment
- Identifying and promoting opportunities for international action on basis of results from the Annexes.
- Disseminating results, best practice, databases, research

3 ROLE AND ACTIVITIES OF THE EXECUTIVE COMMITTEE

The Executive Committee of 4E is responsible for:

- Managing and leading the Implementing Agreement
- Organising meetings and workshops
- Participating in international fora concerning efficient electrical end use equipment
- Collecting information on end-use equipment, technologies and programmes
- Disseminating information relating to inter alia best practice in the energy performance of end-use electric equipment, new (efficient) technologies in electrical end-use equipment, benchmarking results and innovative policies.

The ExCo constitutes the forum of the 4E, and the forum functions are carried out at the ExCo meetings.

4 ORGANISATION AND BUDGET

4.1 Organisation of the Implementing Agreement

The ExCo will elect a chairperson and one or more vice chairpersons for a period of two years. The chairperson and vice chairpersons can be re-elected. Each contracting party appoints a representative and an alternate representative.

A number of research projects (Annexes) will be established within the framework of the 4E. Ideally, Annexes could be established for all major end-use equipment; however the initial focus should be on sectors where there is the most immediate interest, the largest saving potential and greatest opportunity for international co-ordination. The annexes will seek to establish interfaces with existing networks/initiatives establishing synergies and avoiding duplication of ongoing activities.

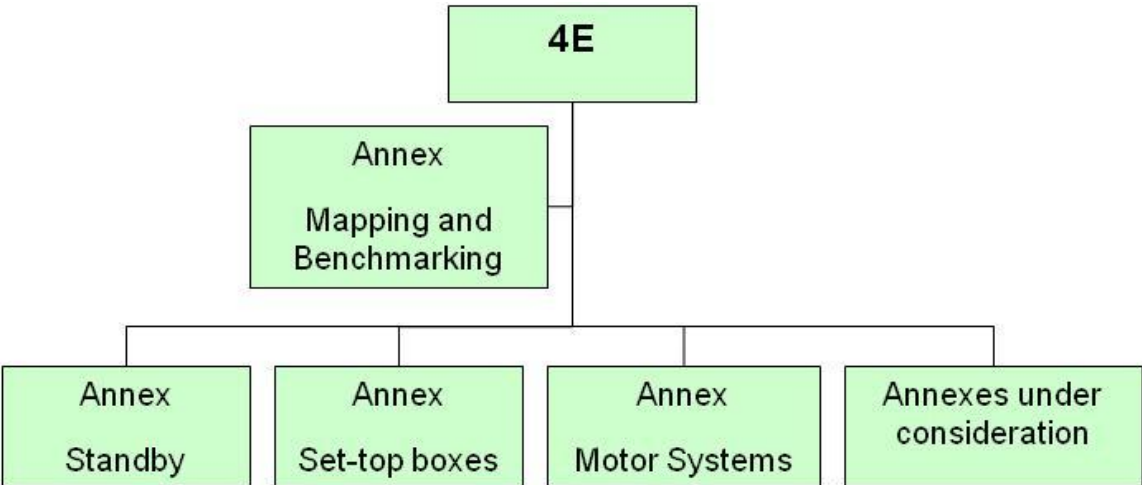
The following annexes are foreseen to be established:

Mapping and Benchmarking: It is planned that all signatories will participate in this annex, which will examine the energy performance of products in the marketplace, including the average and most efficient product, and identify the scope for future improvement. Furthermore, the Benchmarking Annex will elaborate on relevant information, including results of the activities inside the 4E and its Annexes.

Standby Power: This work will assist governments to implement measures to reduce stand power consumption by sharing information on successful approaches and disseminate information on the technological progress.

Set-top Boxes: Participants will consider options for reducing energy use of these products (and the network in which they operate) through a range of tactics to include research regarding technically feasible gains in efficiencies, programmes for service providers, and international cooperation on how to test and achieve efficiency in set-top boxes, for example.

Motor Systems: The goals of this annex will be to promote harmonization of standards and promotion of high-efficiency motors in appliances.



An Operating Agent will be appointed for the ExCo as well as for each of the initial Annexes. Further annexes under consideration include:

Lighting: The goal will be to assist policy makers in designing comprehensive lighting energy efficiency portfolios to address all important savings opportunities. This work will build on results of Annex 45 (Lighting) of the Energy Conservation in Buildings and Community Systems Implementing Agreement.

Supply Chain Agreements: This annex will map and support the uptake of initiatives to engage the supply chain, especially retailers, in raising the market share of the most efficient equipment. This annex may also be integrated in the Mapping and Benchmarking Annex.

Energy Efficient Product/Service Systems: This work will include analysing the opportunities of optimising the design of energy service systems, including aspects of product as well as service design, and considering behavioural aspects.

4.2 Liaison with other Implementing Agreements and initiatives

Liaison with other Implementing Agreements

The 4E is related to other electricity implementing agreements under end-use technologies inside the IEA.

Coordination will be ensured, especially to the Demand Side Management programme (DSM IA), which has been operating since 1993 to provide member states with information and guidance on forming and implementing demand side policies and measures as well as technologies and applications that facilitate the transformation of the energy system and market. Further, coordination will also be ensured with the Energy Conservation and Building and Community Systems IA (ECBCS IA).

Liaison with other initiatives

Furthermore, the 4E will be coordinated with other relevant international initiatives concerning energy using products, both on-going and possible new initiatives. Relevant initiatives, existing at the beginning of the 4E, are e.g.:

- ENERGY STAR is an international endorsement programme for efficient products, buildings, and homes, run by the U.S. Environmental Protection Agency and U.S. Department of Energy. This programme has agreements with the EC, Japan, Australia, New Zealand, Canada, Taiwan, China, and other countries. Energy Star has an international implementation agreement with the EU on office equipment.
- Asian Pacific Partnership on Clean Development and Climate (APP) is an innovative new initiative to accelerate the development and deployment of clean energy technologies. The partners (Australia, China, India, Japan, Republic of Korea, and the United States) are working in together with private sector partners to help each country meet nationally designed strategies for improving energy security, reducing pollution, and addressing the long term challenge of climate change. Eight public-private sector task forces are approved; one of them covers buildings and appliances, including workgroups focused on harmonization of test procedures, and standby power.
- The EC international energy efficiency initiative (Platform for international cooperation) was announced in the Action Plan for Energy Efficiency (COM (2006) 545). 4E could support this initiative through the ExCo's forum activities.

- The European Directive on the Eco-design of Energy-using Products (EuP) was adopted in 2005 and covers electrical and electronic devices or heating equipment, and provides coherent EU-wide rules for eco-design and ensures that disparities among national regulations do not become obstacles to intra-EU trade.
- The European Energy Network (EnR) is a voluntary association of European organisations having a responsibility for the planning, management or review of national research, development, demonstration or dissemination programmes in the fields of energy efficiency and renewable energy at the national level. The GEEA group is linked to this network.
- The International Task Force for Sustainable products (ITFSP). ITFSP was established by the Department of Environment, Food and Rural Affairs (Defra) in November 2005 to encourage more environmentally sustainable, energy efficient products. ITFSP is led by the United Kingdom with participants from 13 countries, the IEA and the UN.

The liaison with these initiatives will be provided by designated ExCo members, who will be assigned the task to liaise with each initiative and to provide reports at ExCo meetings.

4.3 Budget

A common fund will be established for the Executive Committee and for each of the Annexes.

Executive Committee

The budget for the ExCo mainly consists of costs for secretarial support, organising two ExCo meetings per year and establishing and maintaining a web site. The budget for these activities is settled by the ExCo¹.

Regarding the financing of the budget, it was agreed that costs related to preparation and participation in the ExCo meetings and travel costs are covered by each ExCo member.

Annexes

Each Annex sets up its own budget and arranges the financing of the budget (within the framework of the rules of the Implementing Agreement).

¹ With 10-15 signatories, the fee is estimated to be of the magnitude of 10-15,000 EUR annually per participating country.