

## ***What is the 4E Implementing Agreement?***

4E is an International Energy Agency (IEA) Implementing Agreement established in 2008 to support governments to formulate effective policies which increase production and trade in efficient electrical end-use equipment.

Globally, electrical equipment is one of the largest and most rapidly expanding areas of energy consumption which poses considerable challenges in terms of economic development, environmental protection and energy security. As the international trade in appliances grows, many of the reputable multilateral organisations (for example the G8, APEC and the IEA) have highlighted exchanging of information amongst countries as a cost-effective means to further improve policies and maximise energy efficiency.

Ten countries have joined together to form 4E as a forum to cooperate on a mixture of technical and policy issues focussed on increasing the efficiency of electrical equipment. But 4E is more than a forum for sharing information – it initiates projects designed to meet the policy needs of participants.

Participants find that pooling of resources is not only an efficient use of available funds, but results in outcomes which are far more comprehensive and authoritative.

Like all IEA Implementing Agreements, participation is open to all countries.

## ***Why create another forum to improve the efficiency of electrical equipment?***

International collaboration has become increasingly important in the development of energy efficiency policies and there are now several bilateral and multilateral initiatives that are either regional or focus on particular topics of common interest. Some of these flow from high-level national participation in groups such as the G8, APEC and most recently, the International Partnership for Energy Efficiency Community (IPEEC). All of these provide a useful contribution, however there are still gaps which 4E fills.

4E participants believe that that the 4E Implementing Agreement is the only mechanism that focuses on the area of electrical equipment and joins energy efficiency policy makers from Asia with Europe and North America. The focus allows 4E to deal in sufficient detail to be effective in identifying and tackling barriers; while 4E's reach gives it an important role in collaborating and extending existing activities, which is particularly crucial when tackling issues relating to global trade and harmonisation.

For example, 4E has developed some activities are complimentary to ongoing Asia Pacific Partnership on Clean Development and Climate (APP) and Asia Pacific Economic Cooperation (APEC) projects, building on the frameworks and tools that have been established through such projects to engage a wider range of countries. This is an efficient use of resources which avoids duplication of efforts while also stimulating the global alignment of policies.

## ***How is 4E different from IPEEC which also involves the IEA?***

Like 4E, the International Partnership for Energy Efficiency Community (IPEEC) has been established to help increase energy efficiency, with the support of China, India, G8 countries, the European Community and other major economies. IPEEC will be unique in providing a forum for high-level participation on the full range of energy efficiency opportunities; however this does not duplicate the role or activities of 4E. As a more specialised body, 4E is able to provide advice and information to IPEEC on prioritisation, and practical help in delivering the objectives of greater policy harmonisation within the electrical equipment sector. Other organisations may similarly provide assistance in the buildings sector. The complimentary nature of IPEEC and 4E is recognised by both organisations and is reflected by recent discussions between the two organisations on the development of an effective and supportive relationship.

## How is 4E structured?

4E is managed by an Executive Committee (ExCo) comprising one voting delegate from each participating country, which currently includes Austria, Australia, Canada, Denmark, France, Korea, Netherlands, Switzerland, the United Kingdom and the United States.

This executive group meets twice yearly to manage the work programme of 4E, which is laid out within a *Programme of Work* approved on an annual basis, and to promote the activities of 4E. Secretariat functions for the ExCo are provided by the Operating Agent, funded by annual membership fees.

The main collaborative research and development activities under 4E are undertaken within a series of Annexes, each of which have a particular focus and agreed work plan. Each Annex has one or more 'lead country' which establishes the Annex and invites other 4E members to participate. Once approved by the ExCo, Annexes are operated by their participating members who are responsible for agreeing and managing workplans, setting budgets and organising the tasks to be undertaken.

All members of 4E are required to participate in the Mapping and Benchmarking (M&B) Annex, since this is considered to be a central component of the work of 4E. The output of the M&B Annex will enable the ExCo to monitor effectiveness of policies and to identify future priorities for 4E projects.

Membership of all other Annexes is voluntary; depending on the priorities of individual countries.

## What is an Annex?

Annexes are in effect working groups formed by a group of countries that decide to work collaboratively together on a specific technology or topic. The activities of 4E are entirely determined by the members that participate. Any member of 4E can bring forward suggestions and ideas, and are encouraged to do so. The ExCo will consider any reasonable proposal, so long as it can demonstrate that it has support from other participants, is well thought through and is viable.

As at June 2009, the approved Annexes are: *Electric Motor Systems*, *Mapping and Benchmarking*, and *Standby Power*. Two further possible Annexes for *Lighting* and *Monitoring, Verification and Enforcement* are under development in 2009.

Although an Annex must be approved by the ExCo before it can be launched, Annexes have their own workplan, budget and activities, all determined by participants.

In many cases, the people actually involved in an Annex are different to the country delegates to the ExCo, and may include national experts, consultants or researchers who have been nominated by their country.

## What is the relationship between the 4E implementing Agreement, the Executive Committee and Operating Agents?

The Executive Committee (ExCo) is the management group of 4E comprising one voting member from each participating country. Members of the ExCo are government officials responsible for energy efficiency policy.

Operating Agents are paid staff (usually independent consultants) that act as the secretariat for the ExCo and Annexes. In some cases they are also contracted to undertake analysis and promotional activities.

## How frequently do meetings occur?

The ExCo meets twice each year and alternates between Europe and other participating countries. ExCo meetings typically last for one day and are timed to coincide with other events relevant to electrical equipment policy makers. Participants unable to attend are usually able to participate through audio-visual conference facilities.

Annexes have their own meeting schedule, and often include teleconferences to keep participants up-to-date. Some Annex meetings occur around the ExCo meeting so that delegates can attend both.

## ***How much does it cost to join 4E and the Annexes, and who decides how this money is spent?***

The work of 4E involves a high degree of co-ordination amongst participants and significant amounts of new analysis, and therefore some financial contribution is required. However, the ExCo and Annexes are mindful of the need to keep contributions to a minimum in order to encourage wide participation. At the same time, because members are pooling their resources, they are able to achieve far more from their expenditure than they could if acting alone.

The annual joining fee for the 4E is €10,000 per country, and covers the cost of the Operating Agent in providing secretariat services for the ExCo, publications and promotional activities such as the website. The Operating Agent provides a financial report to each ExCo meeting, which approves an annual budget.

The annual fee for joining the Mapping and Benchmarking Annex is currently €15,000 per country, and all countries are required to participate in this Annex.

The fee structure for the other Annexes varies depending upon the task undertaken by each group, and the degree to which in-kind contributions can be used.

## ***Are there any other costs?***

Members of the ExCo and Annexes are required to cover their own travel expenses for meetings, as well as the time needed for these meetings and in reviewing documents and other management functions.

In the work undertaken within Annexes there is usually a component requiring input from participants, which is clearly identified within the Annex proposal. This may involve only the time taken for meetings, or in identifying local sources of information, or in providing contacts. Some countries allocate these tasks to specialist staff or to consultants; however this is a matter to be determined by individual participants.

## ***What is the involvement of industry in 4E***

Although there is currently no formal participation by Industry in the management of 4E, Annexes have used information from industry groups in their analysis and there are many informal links. Industry participation in 4E workshops and informational events is also welcomed and encouraged.

## ***How is the IEA involved in 4E?***

4E is one of 41 IEA Implementing Agreements active in 2007, spanning a wide range of energy technologies. Implementing Agreements were established by the IEA to allow interested member and non-member governments to pool resources and research the development and deployment of particular technologies.

As well as creating a legal contract and a system of standard rules and regulations, the IEA Committee on Energy Research and Technology (CERT) and Governing Board have a formal responsibility to approve new applications for Implementing Agreements. The IEA Secretariat also provides legal advice and support, and reports on energy technology collaboration activities through the IEA Web pages, the *OPEN Bulletin* and the publication *Energy Technologies at the Cutting Edge*.

## ***How long will 4E last?***

4E was established for an initial five year period with an option to extend subject to agreement by the participants and the IEA CERT. Any extension will be subject to a thorough review of 4E's effectiveness and achievements over the first five years.