4E
Efficient Electrical End-Use Equipment
International Energy Agency

BrightSpark

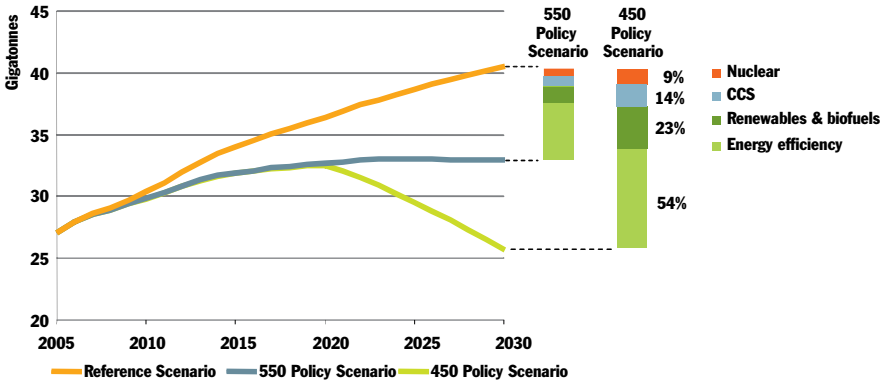
ISSUE 1.OCTOBER 2009

IN THIS ISSUE

"Yet, is the current suite of energy efficiency policies enough to meet the pressing economic, environmental and energy security challenges? It appears the answer to this is no."

PROGRESS WITH IMPLEMENTING ENERGY EFFICIENCY POLICIES IN THE G8, International Energy Agency, 2009

REDUCTIONS IN ENERGY-RELATED CO_2 EMISSIONS IN THE CLIMATE-POLICY SCENARIOS



While technological progress is needed to achieve some emissions reductions, efficiency gains and deployment of existing low-carbon energy accounts for most of the savings

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"Energy efficiency plays the largest role globally in reducing CO_2 emissions. Globally, it represents an enormous 54% of CO_2 reductions to 2030."

Mr. Nobuo Tanaka,
Executive Director,
International Energy Agency
Energy Efficiency and
Renewable Energy –
A key to a better tomorrow
ISO Open Session,
17 September, Cape Town

Welcome to the first edition of 'Bright Spark', the newsletter that provides you with a collection of the latest news stories from the 4E Implementing Agreement.

Bright Spark is a great way to view all the latest 4E developments and news in the one-spot. By subscribing via the 4E website home page you will automatically receive the newsletter each time it is published.

INTRODUCTION

As we head towards COP15, the need to deliver increased investment in energy efficiency has never been greater. As a result, governments are facing pressure to select the best policy mix to stimulate investment in the right technologies, and to do this they need the most comprehensive information and analysis.

Of course, there is already a lot of information available. Where 4E adds value is by looking for the gaps between what policy makers need and what is currently available. In some cases this requires ensuring that there is wider participation in an existing project. In others, it means the collation of regional data to provide a global picture; or increasing harmonisation through the development of common methodologies.

This is the detailed work undertaken by the 4E Annexes, and I am delighted that there is already too much news to be adequately contained in one newsletter, even though 4E is still relatively new. Even more pleasing to me has been the links that have been established with a host of organisations, initiatives and projects working in this field. Joining these together with our government members allows us all to be more effective.

Still there are challenges ahead. We have more projects identified for attention, some of which are described in this newsletter, and we would like the participation of more countries, particularly from outside the OECD. I hope very much to announce some further additions to 4E in the next newsletter!

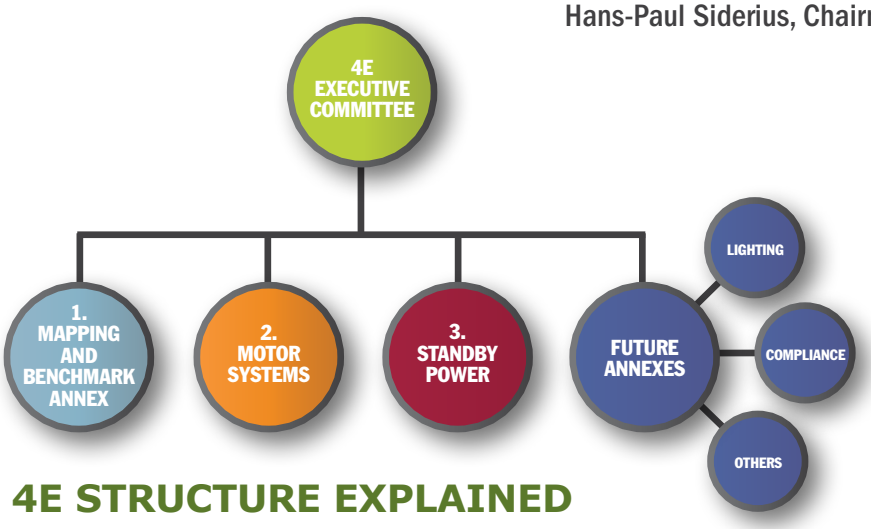
Sincerely,

Hans-Paul Siderius – Chairman 4E

4E Bright Spark

"Providing a forum for countries to work together....., the need for 4E has been evident from the speed in which we are moving forward."

Hans-Paul Siderius, Chairman 4E



4E STRUCTURE EXPLAINED

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. To do this, 4E is managed by an Executive Committee (ExCo) comprising one voting delegate from each participating country.

The main collaborative research and development activities under 4E are undertaken within a series of Annexes, each of which have a particular project focus and agreed work plan. All members of 4E have agreed to participate in the Mapping and Benchmarking (M&B) Annex, since this is a central component to identify policy gaps and potential new Annexes. The outputs 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 subject to the priorities of individual member countries and their decision to participate.

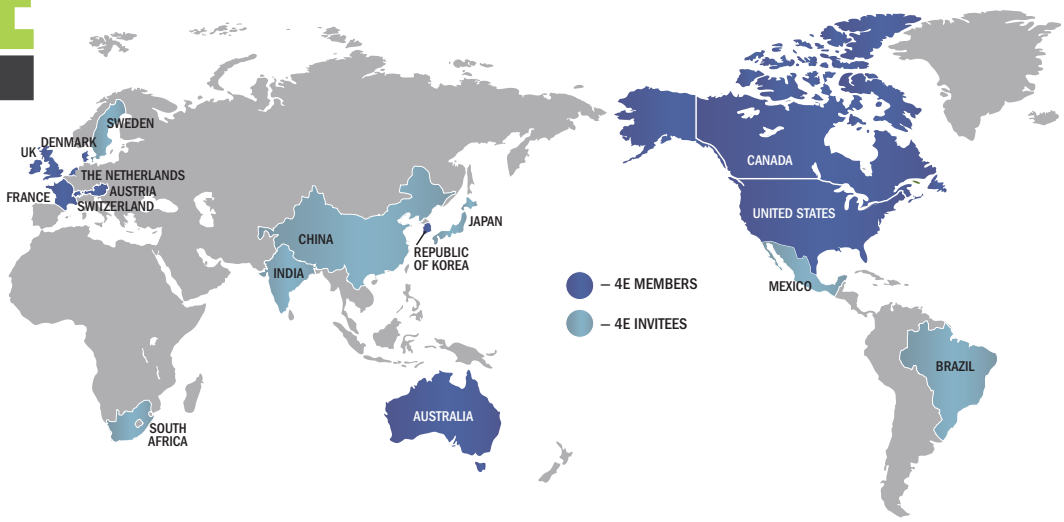
"4E is helping to meet Australia's strategic energy efficiency aims in some very practical ways" says Shane Holt, Director of Australia's Appliance Energy Efficiency Division. "The work of the Mapping & Benchmarking Annex enables us to see how our products perform compared with those available elsewhere, and to assess whether our policies need to be more ambitious. It also tells us which policy approaches have been most effective. Through the Motor Systems Annex we are aligning with policies in countries which supply motors to us, and work collaboratively to extend our program beyond individual motors to the area of greatest savings – motor systems. And in the field of Standby Power, we are working with other countries to identify policies which can tackle some of the emerging issues such as network connected devices."

"For us, it makes sense to undertake these projects collaboratively – it gives us access to the most comprehensive and authoritative information provided by international experts - so the pooling of resources is an efficient use of our limited funds. In addition, 4E provides the forum to bring about greater harmonisation, which is so important for these internationally traded products."

Ross Carter: First Assistant Secretary
Renewables and Energy Efficiency Division
Department of the Environment, Water, Heritage and the Arts (DEWHA) Australia

ACHIEVEMENTS AT A GLANCE

- Launched in March 2008, 4E now has 10 member countries actively participating in collaborative projects
- An Annex created to select future projects based on transparent criteria to select globally traded products suitable for alignment
- Two other Annexes covering important near-term priorities initiated, and several others under development
- Engagement with many key organisations operating in this field and numerous communication activities:
  - For example, the publication of the Electric Motor MEPS Guide
  - A dedicated website provides the visible face to the work of 4E, a portal to Annex websites and a platform for communication between participants
  - Numerous presentations at relevant events



INTERNATIONAL LINKAGES

IPEEC

IPEEC (the International Partnership for Energy Efficiency Cooperation) held its first executive committee meeting in Paris from the 17-18 September 2009. IPEEC is the result of the Energy Ministers' Declaration on 8 June 2008 while Japan held the presidency of the G8. With the signing by 13 countries at the 2009 G8 Summit in Italy, IPEEC became operational with the International Energy Agency established as host of the Secretariat and Japan and the US as its leaders.

4E has been a keen observer during IPEEC's establishment period, alongside other organizations promoting energy efficiency interested to understand how their role will fit with IPEEC's activities. 4E's view, which has been presented to IPEEC, is that the roles of IPEEC and 4E are complimentary and that both will gain from a close working relationship.

Specifically, 4E believes that its expertise in the electrical equipment field should be used to:

- Provide detailed input on the areas identified by IPEEC of potential high-level co-operation. 4E could also assist IPEEC through implementing practical projects on the ground to give effect to IPEEC's charter.
- 4E could also provide a key conduit to assist governments implement policies that reflect IPEEC priorities as they emerge.

As a result, 4E advocates IPEEC propose how this relationship with 4E will be structured to ensure on-going co-operation and collaboration, maximising the impact of both organisations and delivering energy efficiency.

The Asia Pacific Partnership (APP) and APEC

The areas of future collaboration will be the main topic for discussion at a special joint meeting of standby projects under 4E, the Asia Pacific Partnership on Clean Development and Climate (APP) and the Asia Pacific Economic Cooperation (APEC) to be held in Korea in November 2009. In line with its charter to avoid duplication and widen participation in important energy efficiency initiatives, one aim of the 4E Standby Power Annex is to improve the use of common methodologies for the collection and analysing of information, so as to enhance international comparisons is on Standby Power.

Recognising that APP Standby Power project under the Buildings and Appliances Task Force has developed some excellent tools for collecting and analysing field measurements of a set of electronic devices, 4E will be seeking a joint effort to 'internationalise' these methodologies. Sharing these tools means that countries need not 're-invent the wheel' and will ensure that the results collected by 4E participants can be compared with other regions.

4E and CLASP focus on compliance

Improved compliance with programs promoting energy efficient appliances is the focus of a proposed new joint project between 4E and the Collaborative Labeling and Appliance Standards Program (CLASP) initiated in August 2009.

The project will engage national and regional governments and policy-makers to raise the perceived importance of this issue, increasing the capacity of energy efficiency programs to undertake MV&E activities and thereby achieve further energy and CO_2 savings. The project will develop a better understanding of best practice in the area of establishing effective frameworks and sets of MV&E activities, and encourage the wide-scale adoption of best practice. Key objectives are to build a group of stakeholders around this issue able to share experience and develop expertise, to establish mechanisms to maintain awareness of this issue over a 3-5 year period, and to stimulate the continued transference of expertise and experience amongst interested parties.

This on-going project will be jointly funded and co-ordinated by the 4E Implementing Agreement and CLASP in its role as a ClimateWorks global Best Practice Network (BPN).

"The Mapping and Benchmarking Annex is answering some key questions being asked by policy makers all around the world," said the UK's Davide Minotti, Head of Sustainable Energy Using Products unit at DEFRA who leads this 4E Annex. "As policy makers we aim to devise policies which are well targeted and effective; and to do this we comprehensive and authoritive information presented in a readily accessible form. By drawing together data from different regions on the major energy consuming electrical appliances, the outputs of this Annex will be an invaluable resource."

"By drawing together data from different regions on the major energy consuming electrical appliances, the outputs of this Annex will be an invaluable resource."

The geographical and product coverage for the Annex is outlined in a framework document. In general, the Annex will target those electrical appliances which are responsible for significant energy consumption across most regions, with the following products identified for analysis during the first year:

- Domestic cold appliances
- Televisions
- Domestic laundry appliances
- Domestic air conditioners
- Laptop computers
- Integrated home networks (to be defined)
- Waterheaters (to be defined)
- Domestic lighting
- Computer displays
- AC motors (if not addressed directly by the Motor Annex)

FOR MORE DETAILED INFORMATION:

Annex website

The Mapping and Benchmarking Annex dedicated website, which provides access to all the information regarding the Annex, is now live and can be visited via this link **http://mappingandbenchmarking.iea-4e.org**

The individual country mapping data sheets for all the products investigated, and the associated benchmarking analysis reports, will be available here, along with all the non-confidential, supporting source material submitted by the participants.

Mapping and Benchmarking Newsletters

Subscribing to the M&B newsletter is an easy way to stay in touch as the Annex progresses, and gain an insight into the outputs to date. The second issue of the Mapping and Benchmarking Annex newsletter is now available to read. To register for future copies of the newsletter, go to **http://mappingandbenchmarking.iea-4e.org/newsletter**

Product Definitions

These documents define exactly what will be mapped in the Annex, and specifically the ways in which the technological and functional characteristics of the products will be grouped to create an appropriate and consistent set of results for policy makers to review.

Definitions for Domestic Cold Appliances and Televisions have already been agreed and the first country profile (mapping) reports will be available shortly.

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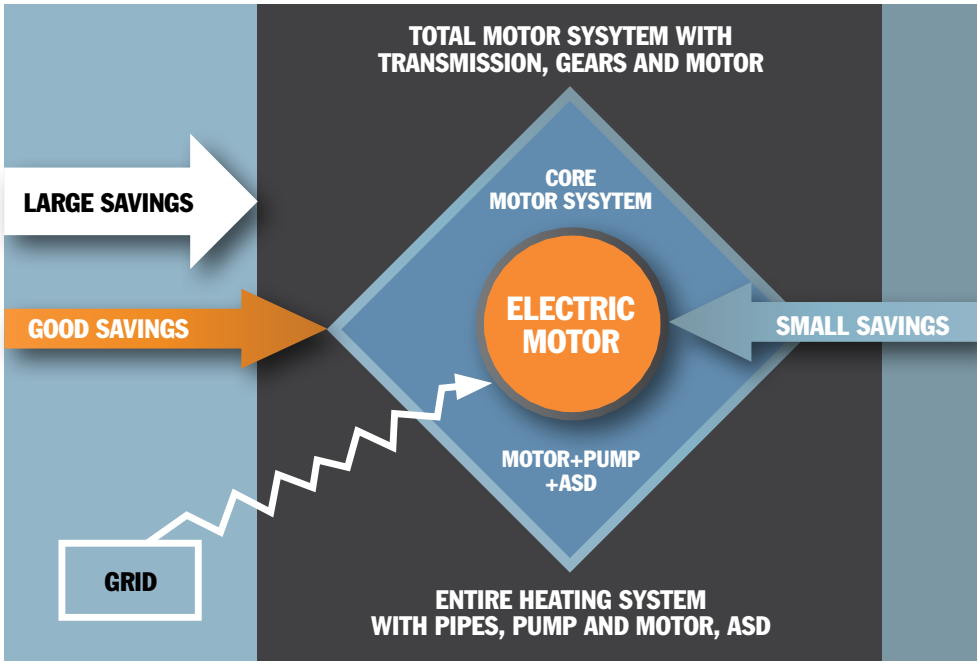

Evolving from the SEEEM project, EMSA was volving from the SEEM project, EMSA was launched in November 2008 under the leadership of Switzerland, to focus on motor systems - responsible for 40% of global electricity demand.

"We know from experience that industrial efficiency programs can cut consumption by 20% to 30%" says Roland Bruniger, Swiss representative, "but despite the large quantities of electricity and CO_2 savings available many countries still don't have effective policies targeted at motor systems."

"Through EMSA we are building a Global Motor Systems Network in industrialized and developing countries to stimulate knowledge, technology and policy in the field of efficient motor systems. The contribution of EMSA will be in technical and policy advice, harmonization of standards and the distribution of best practice experience."

Already EMSA is proving to be highly effective. In February 2009 it published the Electric Motor MEPS Guide, detailing the current state of play in test methods and national policy initiatives worldwide, helping to move countries towards greater harmonisation. EMSA has also been actively involved in the process of developing new and improved test procedures through the IEC: see IEC Motor Guide below.

> **"Despite the large quantities of electricity and CO_2 savings available many countries still don't have effective policies targeted at motor systems."**

Annex website

The EMSA dedicated website, which provides access to all the information regarding the Annex, is now live and can be visited via this link **http://www.motorsystems.org/**

Newsletter

The Global Motor Systems Newsletter appears four times per year providing up-to-date information on the world of motor energy efficiency, including those events where EMSA will be presenting. To subscribe go to: **www.motorsystems.org/emsa-newsletter**

IEC Motor Guide Published

On 3 April 2009, the IEC has published IEC 60034-31: *Guide for the selection and application of energy-efficient motors*. The review draft is open for comments and can be downloaded from the EMSA site.

4E Standby Power

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The consumption of electricity by electronic products in low power modes (often called Standby power) has increased over recent years due to the growing number and role of electronics in most households and offices.

Since the "standby problem" became apparent more than a decade ago, the area has attracted significant attention and the issue is now highlighted in most national policies for appliances. However, the nature of standby is changing rapidly and this continues to hamper effective policy development.

> **"Our job is to ensure that there is more effective communication on a technical and policy level between all the stakeholders involved"**

"As devices evolve rapidly and become more complex, there has been a growth in the number of potential low power modes, and individual products are harder to define," says Lloyd Harrington, Operating Agent of this Annex. "Traditional product policy approaches which target individual products therefore struggle to remain effective."

"Under the Standby Power Annex we are aiming to establish some key methodologies so that all countries can easily track standby energy consumption on a uniform basis to determine the trends, and better understand whether policies are being effective. We are also drawing on research undertaken by participating countries to identify the types of policies which will deliver solutions which are technically feasible and practical to implement."

"Of course" Lloyd Harrington added, "there are many groups working on some of these issues already, and part of our job is to ensure that there is more effective communication on a technical and policy level between all the stakeholders involved. This is particularly important since many of the products incorporating standby are globally traded, yet policies for standby management are normally developed on a national basis."

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SNIPPETS

WEEKLY ENERGY EFFICIENCY AND CLIMATE CHANGE PRESS CLIPPINGS

The latest issue of the weekly Energy Efficiency and Climate Change News can be viewed online at **http://www.iea.org/newsletters/ee_cc/index.html**

4E FAQ AVAILABLE NOW

4E receives many queries about the nature of our work, what our organisational structure is and how to join. This **FAQ sheet** provides answers to many of these questions.

4TH 4E EXCO MEETING, SEOUL, KOREA - 2-5 NOVEMBER 2009

The 4TH 4E Exco meeting will take place at the Shilla Hotel in Seoul Korea from the 2nd to the 5th of November, and we are grateful to the Ministry of Knowledge Economy Korea for hosting the ExCo and separate meetings for the Mapping & Benchmarking and Standby Power Annexes.

IEA ASSESSMENT OF ENERGY EFFICIENCY POLICY IMPLEMENTATION

Are IEA member countries doing enough to capture the full potential benefits from energy efficiency policy? The IEA's new book, *Implementing Energy Efficiency Policies: are IEA member countries on track?* answers this question.

See **http://www.iea.org/publications/free_new_Desc.asp?PUBS_ID=2139**

More information on 4E can be found at on **www.iea-4E.org**.

Exco Member Profile 5 Minutes with Yungrae Kim Korean 4E Delegate

Where do you live? I live in Seoul.

Who do you currently work for and how long have you been with this organisation? I work at Korea Energy Management Corporation since 1996. I am in charge of Korea's Energy Efficiency Label and Standard Program and e-Standby Program.

How did you get involved with the world of energy efficiency Energy Efficiency? I hosted International Standby Power Conference in Seoul on 2005 with International Energy Agency.

You took your last vacation at.....? I took vacation at Jirisan with my familiy on August. Jirisan is one of Korea's most celebrated mountain ranges.

Outside work, your interests include.....? I like ABBA music very well. I always enjoy to listen ABBA music all the time.

If you had more time in the day you would.....? I would like to visit Sweden if ABBA museum is opened at Stockholm.

One book every person should read is.....? I like to read book about history. I recommend "*Genghis Khan*" written by Harold Lamb.

Which do you prefer, chess or scrabble or neither? Neither.

Complete this sentence "If I could do one thing to make the world more energy efficient I would..... ". I would like to provide Korea's experience of energy standard and labeling. I think that Korea can be a good model for developing countries.

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