OPENING
1. Agenda

The agenda was adopted as presented.

1. Adoption of the Agenda
2. Adoption of the Minutes of the Meeting of November 6, 1997
3. Annex V
   - Final Report
4. Annex VI
   - Participation
   - Report on 5th Workshop
5. Annex VII - Finances
   Text
6. Pricing of ETSAP tools
7. ETSAP shell
8. Election
9. Next meeting

2. Minutes

The minutes of the meeting of November 6, 1997 were adopted as presented with minor corrections to spelling and affiliation.

The committee took note of the positive Discussant's report on ETSAP presented to the IEA End-Use Working Party in April (attached).
Business arising
The Committee welcomed the participation of Australia in Annex VI in 1997 and 1998, and its plans to share MARKAL with many ASEAN countries during the next four years. Dr. Roger Stuart stressed that the aim is to make MARKAL immediately useful to policy makers.

3. Annex V

Final report
The Operating Agent apologized for delays in production of the final report for Annex V. These have been occasioned by changes in software at ECN and the need to replace some lost figures. The Operating Agent agreed to provide the text of the final report immediately to Japan and others that may require it before it is formally published. Formal publication is now scheduled for June 1998.

4. Annex VI

Participation
The Operating Agent reported that there are 14 participants, with the addition of Turkey and the United States in 1998.

Members decided to approach potential new members who should be interested in the strengthened ability of the ETSAP partnership to deal with issues related to climate change, for example, Denmark, Greece, Austria, Mexico, Finland, France, and Portugal, and invite them to the next ETSAP workshop.

As part of the marketing of Annex VII, it was agreed that a short statement of deliverables for the first 12-18 months of Annex VII will be prepared by the Operating Agent and delivered to members and potential members. This note will complement the general, strategic position laid out in the Annex itself.

Fifth workshop
Members thanked Peter Schaumann and the other German hosts for making excellent arrangements for ETSAP to meet in Berlin in conjunction with the first annual German Forum on Energy Modelling. Particular thanks were expressed to VEAG, the host for the ETSAP workshop, and to IER for setting up a full and highly effective registration on the Internet, which provided welcome relief to the Operating Agent.

Programme of work
The Committee endorsed the program of work which had been discussed in detail during the workshop. The main elements for the balance of Annex VI will be:

- data review
- internet and outreach register
- peer-reviewed publications: papers on stochastic modelling (ECN to lead)
- the theory behind the new TIMES model (Working Group to lead) table of contents for the final report on Annex VI - summary - full report newsletters
- issue ready for printing now - a special issue for COP-4 - a final issue for Annex VI continuing development of - the new TIMES model
- Global MARKAL-MACRO Trade
- multi-regional Markal-Macro for demonstration - Europe, India, Japan, USA - for COP-4?
- contributions to other programs
  - COP-4
  - IPCC Open Process
  - IPCC TAR - recommend nominees
  - IEA Local Energy Planning Program - IEA Fuel Cell Program

Financial report
The Operating Agent presents a current financial report as of 1998 March 31 (attached). Members took note of one outstanding fee owing from 1997 and several not yet paid for 1998. It was suggested that in future the Operating Agent send out invoices at or before the beginning of each calendar year.

Publication
A paper on a multi-country study involving the Netherlands, Sweden, and Switzerland was submitted to Energy Policy in 1998 February.

5. Annex VII

Finances
The Committee decided to set a preliminary common budget for Annex VII of 600,000 DFL a year, based on the expected participation of 12 members. Members also agreed to establish a separate fund through which companies and governments could make special contributions to R&D in which they have a special interest. Levies on the sale of ETSAP models will also flow into this fund (see below).

Text
The Committee adopted in principle the text for Annex VII developed during the ETSAP workshop in Berlin.

6. Pricing of ETSAP tools

The Committee thanked Gary Goldstein and Tom Kram for the discussion paper prepared for their consideration.
The Committee agreed to the attached table of prices to be charged, effective immediately. The Committee will review this matter at its next meeting and other related items, including letters of agreement.

7. ETSAP shell

The Committee agreed to pay an initial agreed fee of US$20,000 and a subsequent annual maintenance fee of $5,000 to the owners of ANSWER to cover its use by each ETSAP Participant during Annex VII, subject to signature of a written agreement between the Operating Agent on behalf of ETSAP and ABARE.

8. Election

The Committee reelected the current bureau on a motion by Germany seconded by Australia.

9. Next meeting

The Committee accepted an invitation from Tanay Uyar to hold the next ETSAP workshop and Executive Committee meeting in southern Turkey the week of October 26. The Operating Agent was asked to work out arrangements for a technical session, workshop and committee meeting with the Turkish hosts.

Members took note of a Trade Show on Energy Technology to be held in Istanbul immediately before the ETSAP workshop, and the interest of the Turkish organizer:s in arranging a one-day conference with the potential participation of speakers drawn from the ETSAP and IEA Local Energy Planning communities.

Attachments:

ATTACHMENT 2

DISCUSSANT'S REPORT

IMPLEMENTING AGREEMENT PROGRAMME OF ENERGY TECHNOLOGY SYSTEMS ANALYSIS
The IEA Programme of Energy Technology Systems Analysis (ETSAP) began in the late 1970s and was officially established in 1980, specifically to aid the IEA Secretariat in making across-the-board evaluations of the potential energy technologies. Since then it has emerged as a leading research partnership dedicated to enabling its partners and their clients to develop sound energy policy. Its major focus has been the development and refinement of a system of analytical models: MARKAL (MARKet ALlocation) and MARKAL-MACRO. The Agreement develops one Annex at a time, the current on being Annex VI, and the next one, Annex VII is expected to begin in 1999.

Objective and Scope

Each Annex has laid out clear and specific objectives and scopes all concentrated on the development and/or application of MARKAL. ETSAP is characterized as an international network of analysts, with a proven methodology, and a substantial measure of success in providing multinational energy policy analysis. Through the activities of its members the Agreement enjoys worldwide involvement.

Clearly the Agreement covers the development of an adequate range of analytical tools important to energy policy analysts. However, and perhaps not due to the fault of its participants, it is not clear whether or not the Agreement specifically considers those technologies currently under development or researched be way of the IEA program agendas. While its original purpose was to aid the IEA, it is not apparent that the Working Party has made full use of its capabilities.

Strategy/Plan

There is an internal "strategic plan" used by the Executive Committee and its members in planning of each of its Annexes. The Executive Committee has devised a process that works effectively for their use. There is clear evidence that strategies are integrated into the program plans and that the plans are followed through to completion.

Annexes have been particularly relevant to the major issues of their performance periods. For example, the Agreement participants are fully cognizant of recent events surrounding climate change initiatives, including Kyoto accords, and the UN Framework Convention on Climate Change. The tools developed by this Agreement are used by nations to respond to FCCC requirements.

The Working Party should consider how it might make use of the capabilities of this Agreement as it reviews and evaluates its portfolios of agreements.

Program Management

The ETSAP Agreement is managed by its Executive Committee. Its Operating Agent, or project head, is the Netherlands Energy Research Foundation (ECN). Available resources are limited and therefore do not allow the full exploitation of the Agreement's benefits by policy advisors. Nonetheless, ETSAP has made its mark in the national and international energy policy analysis community.

Participation

ETSAP began with a membership of 17 countries. Currently there are 13 DECO countries and the European Commission active in the Agreement. Also, researchers from non-member countries routinely participate in ETSAP activities. Budgetary cutbacks have limited the Agreement's ability to add new members, or to expand its scope. According to ETSAP information the number of users of ETSAP model has grown to 58 institutions in 35 countries.

Information Dissemination

ETSAP information is disseminated through several products, including newsletters, an internet home page, and in a variety of analytical study reports and papers. It is noteworthy that ETSAP was particularly prominent in its involvement at Kyoto. The targeted audiences include nations with developing economies as well as well-developed nations. Customer nations are invited to spend a period of weeks with host member countries to establish their respective models -a very effective method of technology transfer.

It is not apparent, but it would be useful for the Agreement to consider adding the Executive Committees of all active Working Party Agreements. Thus, encouraging more use of ETSAP products as our agreements develop strategies and plans for ongoing and future work.
Coordination

Recalling its original purpose, it was gratifying to learn of ETSAP's involvement with the Implementing Agreement on Buildings and Community Systems, and its active pursuit of other opportunities to coordinate with IEA Agreements. I strongly recommend this effort be expanded, resources permitting. Perhaps, the Working Party can facilitate such an interchange.

Activity

Given the scope of the ETSAP activities and its resource challenges, the level of activity is adequate. With larger budgets, more stakeholders would benefit from the efforts of ETSAP participants. The Agreement holds two meetings a year, with as many as 20 participants each time. Generally, each year there are two workshops and two technical sessions of modeling specialists usually held in conjunction with a seminar or joint meeting with other organizations.

Achievements

This Agreement has led the development and refinement of a system of technically-based computer models which are used by some 40 countries worldwide. ETSAP addresses issues surrounding the identification of opportunities and benefits of joint implementation, uncertainty in environmental requirements, population and economic growth; and development of technology. Already it has demonstrated its potential for making constructive and informed contributions to decisions on energy policy options. IEA member countries such as the United Kingdom and the Netherlands, have used the models in the development of policy and priorities for energy research and development. Most users have focused on environmental issues, starting with acid rain and leading on to greenhouse gases.

Conclusions and Recommendations

Clearly, this Agreement has enjoyed considerable demand and success. Its strengths and challenges are noted in the writing above. It would be good to encourage the IEA activities to consider the benefits of ETSAP tools to their planning and goal setting. The Working Party should evaluate the potential benefit available to its strategy development as well.

Marvin Gunn US DOE
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