

PEEREA IN-DEPTH ENERGY EFFICIENCY REVIEWS AND ENVIRONMENTAL MONITORING

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***Abstract:** In April 1998, the Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects (PEEREA) came into force. The Protocol includes specific commitments, which are essential in improving energy efficiency and reducing harmful environmental impacts.*

Energy efficiency has become more important than ever as it is seen as one of the major elements of a comprehensive energy policy. Energy policy cannot be developed in isolation from the rest of society and the economy and the same is true for energy efficiency. Energy efficiency policies and measures can bring important benefits to all sectors.

A major emphasis under PEEREA has been on improving energy efficiency in order to tackle environmental concerns, many of which have been exacerbated because of emissions resulting from the energy sector. Energy efficiency is seen to be particularly important in reducing GHG emissions in the strategy to deal with global climate change. The title of the protocol, Protocol on Energy Efficiency and Related Environmental Aspects, reflects the importance given to energy-related environmental issues.

As for any national or international obligation, it is important to follow the progress that is being made. For PEEREA this is done through various means, one of which will be the theme of this paper - the in-depth review of energy efficiency policies and programmes. In the context of the environment, it is useful to look at how the in-depth review process is effective in monitoring the progress of energy efficiency policies in addressing environmental concerns, particularly those related to climate change.

THE IN-DEPT REVIEW PROCESS

One of the major on-going activities of the PEEREA Working Group is the undertaking of in-depth energy efficiency reviews. These reviews are undertaken on a peer basis in order to enhance the level of co-operation amongst contracting parties (Article 3.1). The

in-depth reviews complement regular reviews that are also undertaken in the process to monitor the progress in implementing PEEREA.

The in-depth reviews are used to provide a deeper understanding of the context in which energy efficiency policy is developed in a country because it allows the review team to meet and discuss with a wide range of government, industry and non-government representatives over a period ranging up to three or four days. The in-depth reviews assess progress, promote continuous dialogue and transfer information. One of the strengths of these in-depth reviews is that they are peer reviews, so that experts from several countries assess the progress in the country being reviewed. The actual review mission is designed to not be confrontational and it attempts to develop a dialogue among experts from the participating countries. Review members are a mix of representatives from so-called western countries and transition economies. This provides a range of views and experience that enhance the quality of the reviews. Thus, the reviews are seen as a learning process for all participants.

To date there have been in-depth reviews on Bulgaria, Hungary, Lithuania, Poland and the Slovak Republic. On average about 2-3 in-depth reviews can be undertaken annually. Once the reviews are completed, there is a discussion of the report and its recommendations at the Working Group, before it is recommended for endorsement by the Charter Conference. Thus, the recommendations to the host Government come under the authority of the entire Energy Charter Conference and not only of the Working Group. In the discussion on the recommendations, usually the reviewed country will explain how it will address the recommendations.

The protocol aims to reduce adverse environmental impacts of energy systems. To ensure such impacts are reduced, it is important to have insights in the current role of energy efficiency in addressing environmental consequences of energy use. This is enhanced through the in-depth reviews. A major focus of the in-depth reviews is the environment as it relates to energy use. These are also reflected in the questionnaire format, which, inter alia, asks respondents to provide information and data on:

- CO₂ emissions and other greenhouse gas emissions (how the Kyoto targets are addressed, flexible mechanisms, etc.); and
- Other relevant energy-environment aspects (e.g. when was the last communication to UNFCCC and when is the next one planned).

HOW THE ENVIRONMENT IS DEALT WITH IN THE REVIEWS

There are many elements in the in-depth reviews that directly and indirectly pertain to environmental issues. Issues discussed include energy pricing and taxation (which include environmental taxes), legal obligations such as under the UNFCCC and the Kyoto Protocol, how environmental policies and programmes are organised within government, and a review of relevant environmental measures (including legislative, financial, voluntary, information). As well, considerable attention is given to the institutional arrangements and how energy efficiency is integrated into the range of

government priorities, including the environment. Included are environmental indicators, normally related to carbon dioxide emissions.

SOME ENVIRONMENTAL FINDINGS FROM THE IN-DEPTH REVIEWS

As the previous section showed, the in-depth reviews give considerable attention to energy-related environmental issues. The assessments and recommendations of the reviews are particularly important.

Concerning recommendations, the Lithuanian review provided three directly related to the environment. One concerned the need for the national strategy to meet the country's Kyoto Protocol obligation to more adequately define and promote the role of energy efficiency as one of the most cost-effective areas. Second, the recommendation for a policy for the use of Joint Implementation to meet the Kyoto Protocol obligation needed to be better defined and promoted. Third, that energy prices should be further developed to ensure that energy and environment policy objectives are met and are especially encouraging improvements in energy efficiency. The other country reviews also addressed how energy efficiency could be better integrated into the flexible mechanisms under the Kyoto Protocol.

To give an indication of the assessments made, the Hungarian review is particularly illustrative. It states:

Under the headline “energy sector”, the NEP (National Environmental Programme 1997-2002) presents nine specific programmes, dealing with subjects like: air quality, development of “environmentally-friendly energy structure”, modernisation of thermal power plants, least cost planning, subsidies for renewable energy sources, incentives for energy savings, energy efficiency labelling of appliances, switching to environmentally friendly fuels, etc. Various programmes proposed in the NEP have already been implemented, like the National Energy Saving and Energy Efficiency Programme (1995).

In general, however, the integration of energy and environmental policy has proved to be difficult in practice: this may be due to the fact that environmental regulations are mainly related to emissions from energy conversion.

And in another section of the report on Hungary:

Attempts to adjust the VAT rate for gas and electricity, and to introduce an energy tax (the “energy penny”) have failed in the past. Apparently such initiatives need to be part of a more general taxation reform, which hopefully will include ecological elements. Implementation of the proposed Environmental Emission Fee would definitely have a positive impact on the objectives of expanded financing of the Energy Saving and Energy Efficiency Action Programme and on the institutional stability of the Energy Centre.

These examples illustrate the importance given to environmental issues in the in-depth reviews.

HOW THE IN-DEPTH REVIEWS ARE USED

Understandably, the reviews are designed to help the reviewed country in improving its energy efficiency policies and programmes and in complying with international obligations it has in this area. There is no pre-determined way these reviews are expected to be used.

The in-depth reviews are published and made available throughout the region, but primarily in the country reviewed. The reviews are also available on the Energy Charter's website (www.encharter.org). They can be tabled in parliament, discussed in government or the main findings published in the press to promote discussion within the larger community.

The informations gathered in the meetings are used by members of review teams to take back lessons to their own countries.

It is hoped that government administrations as well as organisations such as the International Energy Agency, the European Union or the UNFCCC will see the worth of the reviews and use them for their own purposes.

The process does not end with the distribution of the reviews. Regularly, the reviewed countries are asked to report to the Working Group on progress made in addressing the recommendations.

RELATED FINDINGS FROM PEEREA MONITORING

PEEREA monitoring as a whole, and not simply the in-depth reviews, is quite comprehensive and currently a report is being prepared that will assess what progress has been made since PEEREA came into force three years ago. This report will be made public in December.

Two results that will be explained in our report are particularly important in the context of the environment.

Concerning energy efficiency strategies:

In 1997 several countries did not have energy efficiency strategies. Most countries have prepared or revised plans in the recent years. Many of these strategies are incorporated into environmental strategies, often related to climate change. Especially the EU-accession countries have been particularly active in developing programmes to meet the requirements under the *acquis communautaire*. But still a number of countries have weak or a very limited range of programmes available in part because their strategies and legal framework are not in place.

Concerning energy pricing:

Progress is being made. Many countries have now independent pricing commissions, making price setting transparent. There has been a major struggle to balance the need to remove subsidies and have prices reflect costs with the consumers ability to pay. This has often led to cross-subsidies which are now, more and more being reduced. There is still much more to do to internalise the cost of externalities such as the environment. There is a core group of IEA countries with 'carbon' taxes and the UK with its climate change levy.

CONCLUSIONS

The in-depth reviews and PEEREA monitoring will form the basis for a major report on energy efficiency that will be presented to the next Conference of European Environment Ministers in Kiev in 2003. The report will focus on the progress of the countries in meeting the energy efficiency obligations under the *Aarhus Declaration*, from the last environment ministers conference.

To date the focus has been on reviewing transition countries but the plan in the future is to also include OECD countries. This is important because it will allow review members from transition countries to assess, from their perspective, the policies, programmes and institutional arrangements in those countries. This can enhance dialogue and the transfer of experience and knowledge.

The in-depth reviews provide a wealth of information that all interested parties should take advantage of. They have been well received by all PEEREA countries and now there is a backlog of countries waiting to be reviewed next.

When this process started, we felt confident the reviews would succeed but these are always "experiments" and we could not be certain how they would be received. After five reviews and more in the pipeline, our initial concerns have only raised our confidence. It is particularly gratifying to see how enthusiastically the reviews are discussed in great detail in our Working Group. I trust that you will take advantage of our work and appreciate from our perspective how energy efficiency fits in the climate change challenge that confronts us all.

ⁱ *In this context, it is stipulated that Governments shall:*

- *establish energy efficiency policies (art 3.2) and have policy aims and strategies adapted to their specific circumstances and transparent to all contracting parties (art. 5);*
- *create the legal and regulatory environment (art 3.2) necessary to promote energy efficiency;*
- *develop, implement, update programmes (art 8.1); programmes may include among others such activities as: economic and environmental assessment of action taken, definition of standards, innovative approaches to financing energy efficiency, development of databases, support of cogeneration;*
- *ensure adequate institutional and legal infrastructures (art 8.3); and co-operate/assist internationally (art 3.1).*