

Summary of discussions during the seminar

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1. Purpose of the Seminar: Building Capacities for Energy Efficiency

The CTI Capacity Building Seminar in Ostritz intended to contribute to the following objectives:

1. Building capacities of local capacity building agents
2. Transfer of experiences gained from energy efficiency demonstration and pilot projects
3. Dissemination of success stories in the field of energy efficiency and renewable energy sources
4. Identification and demonstration of "win-win" solutions
5. Discussing perspectives of the re-applicability of best practice cases
6. Presentation of new tools for project management and planning
7. Experience with East-West partnerships (e.g. twinning arrangements, networking)
8. Identifying promising (physical) networking initiatives and initiating networking
9. Making use of virtual and electronic networking tools (e.g. internet)

10. Discussing the future role of CTI in the field of capacity-building

Capacity building can be understood as a process providing individuals, organisations and other relevant institutions with the capacities that allow them to perform. It is a comprehensive, long-term, and continuous process consisting of three basic elements:

1. Creation of an enabling environment with appropriate policy and legal frameworks
2. Institutional development
3. Human resources development and strengthening of managerial systems

Capacities are knowledge, skills and other faculties in individuals or embedded in procedures and rules, inside and outside sector organisations and institutions. Capacity building has to be combined with capacity utilisation. An erosion of existing capacities has to be prevented. Therefore, the concept should be broadened to capacity building and capacity utilisation.

2. Contents and Progress of the Seminar

The seminar venue was the International Conference Centre IBZ St. Marienthal, (Germany) which is part of the energy-ecological model town Ostritz. Ostritz is located 90 km east of Dresden in the "black triangle" region bordering Poland and the Czech Republic. The key target institutions were capacity building agents: 36 experts representing national, regional and local energy (efficiency) centres and agencies from 15 CEE and FSU countries. Furthermore, 24 energy experts both from OECD/CTI countries and CEE/FSU countries contributed to the seminar.

The seminar started with an informal "warm up" discussion during which the participants were

given the opportunity to introduce themselves and to formulate their expectations to the seminar.

First and foremost, the seminar was meant to be a forum for discussions. Two thirds of the timetable were allotted to six thematic seminar sessions and plenary discussions. The programme included two separate sessions on climate change and energy efficiency policies in OECD and CEE/FSU countries. Further sessions covered project experience in the supply sector, the building and end-use sector, and the industrial/commercial sector. In other sessions promising financing instruments and networking approaches were discussed.

In addition, several climate technology databases were introduced to the seminar participants. This included the CTI web-side (introduced by Dr. Pell, U.S. Department of Energy), CADDET, Green Tie (Dr. van Rossum, Novem, The Netherlands) and GEMIS (Dr. Matthes, Institute for Applied Ecology, Berlin). The programme comprised visits of selected energy facilities in Ostritz (biomass based CHP plant) and Dresden (CHP plant Nossener Brücke).

3. Key Points of the Seminar Discussions

The topic of the first seminar session was climate change and energy efficiency policies in OECD countries. Dr. Glatzel (German Federal Environment Agency) as Chairman of the CTI Working Group on Capacity Building delivered the opening address introducing the idea of CTI and the concept of CTI capacity building as a win-win strategy. Following this introduction, an overview of actual development trends in the field of international climate protection was given by Dr. Pell (U.S. Department of Energy). Mr. Nilsson (International Energy Agency) described energy policy developments for energy efficiency from European perspective focusing on policy approaches directed towards market transformation and dissemination. The session was concluded by Ms. Nussbaum (Natsource, USA) representing a company which is engaged in expert advising and education in the field of emission trading. She derived recommendations for future emission trading based on the existing experiences referring to early action pilot trading programs and crediting legislation in selected OECD countries.

The purpose of the second seminar session was to discuss climate change mitigation and energy efficiency strategies in CEE and FSU countries. The session included a survey of Prof. Riesner (University of Applied Sciences of Zittau/Görlitz, Germany) who provided a cross-country comparison of key economic and energy-ecological data. The core of this session, however, was formed by the

In order to stimulate discussion and learning processes, the seminar participants were asked to prepare country reports following a common structure and containing country-specific information on institutional capacity building and best practice projects. The country reports were made available to all participants in a seminar notebook. The session on climate change and energy efficiency policies in CEE and FSU countries was devoted to the discussion of selected country reports.

presentations of selected country reports (Lithuania, Russia, Romania, Slovakia, Azerbaijan, Ukraine and Armenia).

The respective discussions centred around the Russian country report which was presented by Ms. and Mr. Louppov (Energy Centre Novosibirsk, Russia). Mr. Bashmakov (CENEF Moscow) pronounced the key function of the regions in the area of energy efficiency, referring to the numerous regional energy efficiency centres, industrial energy efficiency centres and networking initiatives among these centres as important achievements regarding capacity building.

Prof. Blumberga (Technical University Riga/Latvia) mentioned the unfavourable economical framework conditions and price subsidies in Russia as a severe disincentive impeding AIJ and energy efficiency and negatively influencing the cost-effectiveness of energy efficiency measures. Responding to this, Mr. Bashmakov, argued that there exist considerable regional differences regarding the price adjustments and consequently the cost-effectiveness of energy efficiency measures.

In general, Joint Implementation, AIJ and emission trading were regarded positive as mutually beneficial win-win strategies (e.g. Dr. Pell, Prof. Tomsic, Mr. Janelidze). Mr. Klemenc (Slovenian E-Forum) suggested to set up effective control mechanisms in order to minimise the problem of corruption in the context of emission trading.

The succeeding seminar sessions dealt with best practice cases and project experience in CEE and FSU countries. The respective session on energy efficiency in the supply sector included presentations on efficiency improvements for electricity generation (Dr. Matthes, Institute for Applied Ecology, Germany), a survey on post-implementation evaluation approaches in the Estonian district-heating sector (Mr. Aro, AX Consulting/Axovaatio Oy, Finland), the utilisation of mine gas in CHP plants (Dr. Roth, Thyssen Energy Systems, Germany), and the application of Starline 2000, a technology for the modernisation of gas distribution systems (Dr. Rose, Karl Weiss GmbH, Germany).

The discussions concentrated mainly on the first two presentations. The potential for increased use of biomass was an important issue touched upon. Dr. Matthes pointed out to the regional peculiarities and the promising biomass potential in Poland and the Baltic countries. Furthermore, he mentioned the potential trade-offs of substitute markets for agricultural farms and the increasing importance of biomass as an export product. Referring to the presentation of Mr. Aro, Mr. Bashmakov underlined the importance of project monitoring and evaluation, which have been fairly neglected areas so far. He further argued that learning from failures should be stimulated as well by systematic dissemination of knowledge about project failure and mismanagement.

The topic of the fourth seminar session was energy efficiency in the building and end-use sector. Mr. Zeman (SEVEn, Czech Republic) reported on the Czech experience with municipal energy project planning. Ms. Coey (KAPE, Poland) gave a portrayal of thermal insulation programmes in Poland and the practical experiences. Two capacity building initiatives in Bulgaria were presented by Dr. Genchev (EnEffect, Bulgaria), who reported on the Energy Efficiency Demonstration Zone in the city of Gabrovo on the one hand, and municipal energy efficiency networks in Bulgaria on the

other. Mr. Koch (Centre for Energy Policy, Moscow) concluded the session by deriving lessons from a project in Dubna (Russia) where heat metering devices were installed.

Energy efficiency in the industrial and commercial sector of OECD and CEE/FSU countries was the topic of the subsequent seminar session. Mr. Tanabe (Energy Conservation Centre, Tokyo) gave a broad survey on respective energy conservation measures in Japan. Dr. Glatzel illustrated best practice cases of energy audits and industrial CHP projects in Germany. Prof. Blumberga (Riga Technical University, Latvia) reported on extremely successful energy conservation projects carried out in selected Latvian bakeries with Dutch assistance resulting in payback times of 1-2 years. The discussions concentrated on the last two presentations.

In order to induce saving activities of other bakeries, Dr. Pell suggested that the achieved cost savings should be made clearly visible as "penalty costs" for those enterprises which do not implement such measures. Mr. Klemenc (Slovenian Energy Forum) suggested to disseminate the project results and to provide for incentives to project beneficiaries if they find imitators. Ms. Blumberga stressed the need of governmental support to promote awareness-raising and networking among enterprises. In addition, she proposed the introduction of economic incentives, e.g. of an energy tax.

The session on financing strategies provoked intense discussions. Selected aspects of (early) Joint Implementation were covered by the presentations of Mr. Koch (Centre for Energy Policy, Moscow) and Ms. Lakomiec (Baltic Renewable Energy Centre, Poland). Dr. Kallaste (Tallinn branch of the Stockholm Environment Institute, Estonia) added some information about the experiences of the Swedish EAES Programme in the Baltic countries, particularly Estonia. Mr. Kis, representing the Raiffeisen Unic-Leasing Bank in Budapest, described the portfolio of financing instruments the bank applies to finance energy efficiency projects

including leasing services, ESCO support schemes and hybrid schemes. Further topics were financing options for municipal utilities in CEE (Dr. Damm, Stadtwerke Leipzig, Germany) and experience of energy performance contracting in the Czech Republic and Poland (Mr. Solfrian, GERTEC GmbH, Germany).

The last two presentations attracted most comments. Ms. Abdrazakova (ICEU Kazakhstan) and Dr. Genchev (EnEffect, Bulgaria) asked about the availability of commercial small-scale loans (300-500 thsd. USD). Such loans are apparently not available in many of the participants' countries. In response several examples of respective banks were mentioned by other participants, such as for instance the German Ausgleichsbank (Werner Solfrian) or the Polish Bank for Environmental Protection (Prof. Gula). A controversial issue was the question about the pre-conditions to find the project funding. Mr. Genchev criticised the view shared by several participants, that the mere availability of a sound and qualified project would be sufficient to find the required funding. Prof. Gula (FEWE Krakow) pointed out to the considerable transaction costs necessary for preparing sound projects.

Ms. Groseva (EnEffect, Bulgaria) criticised that commercial loans for energy efficiency measures are often available only for one year periods and stressed the importance to create a

market for energy efficiency. Dr. Glatzel suggested to develop proposals for organising funding schemes for international financing corporations. Responding to that, Mr. Vares (FEMOPET Estonia) presented a financing scheme developed by the Nordic Investment Bank which offers soft loans through local (intermediary) distributing foundations and funds as a possible example.

Further seminar sessions were dedicated to the exchange of experiences among energy centres and networking initiatives as a tool for capacity building. Two best practice cases from Poland were presented by Prof. Gula (FEWE Krakow): the case of the Polish Network of Energy Cities and an integrated project approach to wood-waste utilisation for heat production. The strategic role of the municipal level for capacity-building and innovation, the importance of small-scale and low-cost projects based on low technology inputs and the use of local expertise and training were identified as crucial success factors (Dr. Glatzel, Dr. Genchev). Further contributions were made on the OPET/FEMOPET network (Mr. Lautenschläger, ZREU, Germany)), the Baltic CHAIN project (Baltic Clearing-House and Information Network) by Mr. Hammar (Danish Energy Agency) and the scope and experiences of the Dutch SCORE-Programme (Mr. Dictus, Novem, The Netherlands).

4. Brainstorming Session: CTI Eastern European Programme

A cornerstone of the seminar was a brainstorming session on the future role of CTI regarding Eastern Europe and the Former Soviet Union. This discussion has been initiated, structured and moderated by Mr. Rucker (International Energy Agency, Paris).

In order to make maximum use of synergies, Mr. Tantareanu (FEMOPET Romania ENERO) suggested to co-operate closely with already existing networks, such as the OPET network. Ms. Groseva proposed to concentrate on the assessment of markets for energy efficiency rather than on pure technologies. Prof.

Blumberga stressed the need to develop a common methodology for evaluating success stories by means of a common guideline to energy efficiency projects and suggested to create an "academy" or "institute of success stories". Mr. Rucker mentioned the internet as a core medium for capacity building and networking. He further presented some "ideas on a fast track" (e.g. developing a project clearinghouse, standardised procurement specifications and common methodologies for data assessment). In order to overcome differences in project assessments, Dr. Pell

suggested to elaborate model legislation, model instruments, and model standards.

A further proposal was to link CTI activities oriented towards Eastern Europe with other regional initiatives (e.g. WEC Regional Energy Forum). Mr. Rucker suggested to create a financing forum including international financing organisations and commercial banks. Prof. Gula and Mr. Dictus (NOVEM, The Netherlands) stressed the strategic importance of the municipal level as a potential target group. They suggested that CTI might concentrate its future activities more on the grass-root and local level and to co-ordinate the already existing 20-30 municipal and regional networks.

5. Seminar Conclusions

The final seminar session included a summary of the seminar discussions by Dr. Mez, (Environmental Policy Research Unit, Berlin). Mr. Bashmakov (CENef Moscow) delivered a co-presentation addressing major shortcomings in the field of energy efficiency and deriving recommendations for further capacity building from an Eastern European perspective. Following the results of the first brainstorming session, Dr. Glatzel initiated a concluding round-table discussion in order to explore the ground for additional CTI capacity building workshops in Eastern Europe.

Both open round discussions showed that one of the preferred approaches to continue and effectuate capacity building activities is to develop flexible multi-modal education and training packages fostering and facilitating partnerships between energy sector

Another proposal supported by several seminar participants was to provide for training courses on energy audits (e.g. Dr. Vares, Dr. Pell, Dr. Genchev, Prof. Gula). In this context, Prof. Gula reminded to utilise the experience of research institutions and universities, such as the University of Tennessee. Ms. Piening representing the Environmental Policy Research Unit (Free University of Berlin) mentioned the experience and respective capabilities of her institute with organising such training courses. Mr. Bashmakov proposed to make the results of energy audits accessible via the internet.

Another field which has been identified crucial for future CTI support was project monitoring and evaluation (Mr. Klemenc, Mr. Bashmakov).

organisations, universities and training institutes. Particularly, training for energy audits crystallised as one of the priority areas. A further proposal formulated was to systematically develop distance learning systems and tools and to facilitate electronic learning via the Internet.

Among the subjects which were regarded to be relevant for future workshops, priority was given to energy audits (possible workshops in Estonia, Ukraine), utilisation of wood (Slovenia), climate protection in municipalities (Poland, Denmark), and energy efficiency in the building sector (Bulgaria, Poland, Georgia). Based on the respective proposals, Dr. Glatzel developed an inventory of potential topics for single subject and cross-sectional workshops which has been included into the proceedings.