



### REPROMO

Renewable Energy Promotional Campaign for the Realisation of Transnational RES Projects, especially in CEEC

# **Project Summary**

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# **REPROMO Idea and Project Objectives**

The EU enlargement process is currently leading to rapidly changing energy markets in Central and Eastern European Countries (CEEC). With the adaptation of the Acquis Communautaire, the monopolies of state utilities in CEEC will be disappearing. Furthermore, the poor technical state of the infrastructure will lead to an overall restructuring of the entire energy sector in CEEC in order to achieve compatibility with EU requirements.

Both developments will bring about new chances for RES actions. The integration process of CEEC, which is of major political importance, has inspired various supporting programmes, not only by the EU, but also through international development banks, on national and bilat-eral level. Under these favourable conditions in CEEC, tailor made RES actions have al-ready reached economical feasibility or will do so in the near future.

Europe's dynamically growing RES market players - manufacturers, engineers and green fi-nancial institutes - are having a big interest in feasible projects and intermediate markets in CEEC which will serve as a stepping stone for entering CEE markets. Investigations among RES actors in EU 15 have shown that a stronger engagement in CEEC is currently hindered by three major barriers:

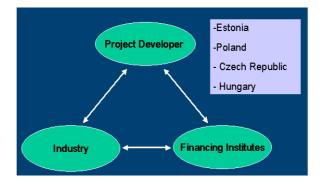
- Lack of information about the technical, economic and legal framework conditions in CEEC;
- Lack of reliable domestic partners;
- Lack of suggestions for feasible RES actions in CEEC.

The REPROMO campaign aimed to significantly contribute to overcoming these barriers and thus accelerate RES market penetration in CEE regions by helping the stake holders to establish contacts and necessary links, thus enabling them to exploit the potential of feasible actions.

The main campaign objective was to forge real consortia for concrete RE actions with the actors which are absolutely necessary for every action implementation, namely

- Site possessors, utilities or companies with concrete ideas for RES actions in CEEC,
- Decision makers of industrial RES manufacturers,
- Financing institutes.

The REPROMO Project Triangle can be highlighted by the following diagram:



# **REPROMO Consortium**

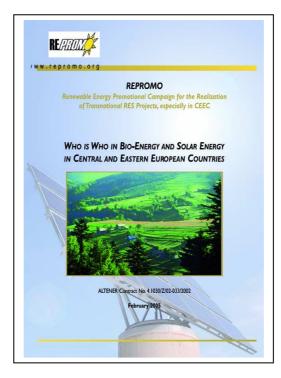
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# **Project Results**

#### Who is Who in Bio-Energy and Solar Energy in CEEC

In the REPROMO Publication "Who is Who in Bio- Energy and Solarenergy in Central and Eastern Europe" important findings of the REPROMO Campaign have been compiled, namely:

- Analysis of the electricity and heat market sectors in the countries of Estonia, Czech Republic, Hungary and Poland
- Description of important manufacturers and financial institutes in CEEC
- Portraits of the REPROMO Best Practice



Through this unique compilation of data the "Who is Who" Publications becomes a main support tool for any RE project development in CEEC. The abstract of the "Who is Who" can be downloaded from this page. The publication itself can be ordered from the REPROMO partners WIP in Munich and ETA in Florence.

#### Creation of a CEEC address database

The project coordinator prepared a questionnaire. This questionnaire addressed stakeholders in the target countries as well as financial institutes and manufacturers. The questionnaire asks for certain criteria:

- The Contact Type (SME, Research Institute, Local Authority etc.)
- The involvement in REPROMO (seminar participant, project developer etc.)
- The source the contact comes from
- Furthermore, the questionnaire gives space to specific comments.

All partners completed the REPROMO questionnaire and sent it back to WIP. It was possible to directly import the data from these MS Excel based questionnaires into the REPROMO database, which was prepared in MS Access. The completed database comprising of more than 550 addresses was distributed to all partners. The database became an important tool of the REPROMO action and was updated regularly.

WIP created with the REPROMO Database a user-friendly tool, which can be easily updated and used by each REPROMO partner.

#### Setting- up of the REPROMO Homepage (www.repromo.org)

The project coordinator created the REPROMO Internet site in a very early project stage. All updated project information was regularly posted on this site, such as all seminar agendas and the seminar abstracts. A certain section was given to the presentation of RES project ideas. Reference to the Internet Page was made on all project seminars. Furthermore, most consortium partners created links from their own homepages to the REPROMO page. Consequently, "repromo.org" became a well-visited page on which researchers, manufacturers and project developers informed themselves about concrete RES ideas and the socio-economic framework conditions. All final project results have been compiled on the REPROMO Homepage.



Picture 1: Screenshot of the REPROMO Internet Page www.repromo.org

#### Liaison work with CEE project initiators

Through the targeted actions of Phase 1 REPROMO managed to mobilise a significant amount of interesting project developers. The REPROMO seminars turned out to be a very valuable mobilising tool. It was possible to invite interesting contacts for informal talks in the fringe of the seminar or even offer a lecture to the most interesting ones. The more intense dialogue showed that dozens of interesting ideas exist in CEEC, they often however are not strong and far enough developed for raising the interest of manufacturers and financial institutes.

Particular difficulties were found in the field of PV Solar systems. In no target countries the current support schemes are favourable enough to allow commercial plant installations. In spite of the commitment of all new EU members to significantly enhance their share of RES base electricity; the improvement of the legislative framework is much slower than expected. Thus, major hope lies with the creation of domestic PV Solar industries and research capacities in CEEC. The REPROMO consortium decided to focus on this very field for PV Solar project ideas. Consequently, the EPIA and WIP paid a visit in Prague to the only PV manufacturer in CEEC: Solartec lim. in Czech Republic. Wood Pellet developers in Estonia

Particular emphasis will be put on the triangle rounds, which were created around the following concrete project ideas:

- Production of wood pellets from sawdust in Olesko, Poland
- Production of biogas by landfill refurbishment in Tallinn and Riga, the Baltic States
- Bio-energy plant in Hradec, Czech Republic
- Energy crop pelleting in West Poland
- Installing a PV Solar Plant with 250 kW in Portoroz, Slovenia
- Creating a joint venture for Solar Cell production in Otrava, Czech Republic
- Boiler conversation in South East Bohemia

Partly these Triangle Rounds took place during the REPROMO events (Seminars and Market Places), partly by special visit of consortium members in the target countries' capitals or on the project site itself.

The consortium developed the "REPROMO Project Idea Note (PIN)". This tool helped the project developer to compile all relevant information and can be downloaded in the Internet. The PIN proved to be a highly efficient tool and was translated into some CEE languages, e.g. Polish.

#### Involvement of financial institutes

With the help of the project partners WIP performed a complete analysis of financial institutes, which could be interested, to supply funding for RES actions in CEEC either as equity, conventional loans or development loans. Sources for this analysis has been the related work of the "BASE Investment Forum" in Basel and UNEP Financial Programmed. The link to BASE was made possible by a coaching work of this organization in which the project coordinator participated.

To mobilize stakeholders from these institutes the consortium strived to invite them as lecturers to the REPROMO Seminars. Consequently, we were able to welcome some important representatives of financial institutes in the target countries and introduce them to our activities. WIP took the task to mobilize the stakeholders from financial institutes in

EU – 15. The project co-ordinator phoned all 25 financial institutions of the REPROMO database to inform them about the project and invite them to the REPROMO Seminars and Market Places in Rome and Paris. The response of the financial stakeholders was rather reluctant. Most of them were not able to take the long trip to one of the REPROMO Seminars. Also the participation on the REPROMO Market Places in Rome and Paris did not find too much interest - in spite of the excellent opportunity to combine the meeting of project developers with a general insight into latest industry and research developments in the biomass and PV Solar sector.

The consortium learned that it is more appropriate to visit places where the financial world meets and present project ideas there rather then inviting them to own activities. Consequently, the consortium participated on the UNEP Financial Forum in Budapest, 27 September 2004. On this event all main financial organizations from the public sector (WB, EIB, EBRD, KfW, GEF, EC) as well as main financial developers from the private sector were there ranging from consultancies to investment companies. REPROMO arranged several internal meetings with financial institutions and large industries to present the REPROMO project ideas.

#### **Communication with RE manufacturers**

In a very early project phase the consortium took the occasion for presenting our work on the "Renewable energy export forum" on the Hannover Fair in Germany. Jaroslav Jakubes from ENVIROS gave a lecture and made important contacts.

The first REPROMO Market Place took place in parallel to the World Biomass Conference and Exhibition in Rome in May 2004, the second one in parallel to the European PV Solar Conference and exhibition in Paris. Both events were a focus point for industrial manufacturers both as exhibitors and participants:

- On the World Biomass Conference and Exhibition in Rom 110 exhibitors and 1200 delegates from 90 countries were present.
- On the European PV Solar Conference in Paris 233 exhibitors and 1900 delegates from 75 nationalities were present.

Consequently, the consortium focused the communication with the RE manufacturers on these two events. A handout was prepared which explicitly expressed invitation to the Market Place and distributed in the exhibitions in the days prior to the REPROMO event. Furthermore, project developers who came as speakers to the Conferences were introduced to interesting manufacturers having booths on the exhibitions.

On 16 and 17 October 2003 the European Commission organised in Budapest the Workshop "Bioenergy – Enlarged Perspectives". This workshop was dedicated to recent R&D progress and concrete project ideas in the field of biomass with special focus on the situation in CEEC. The project consortium was very aware of this great possibility to inform the international renewable energy sector about the REPROMO actions and create valuable contacts. Consequently, it was decided to organize the **first REPROMO Seminar in Budapest** parallel to this event. Fortunately, the Hungarian seminar organizer GEONARDO was able to book a room in the congress hotel for 18 October 2004. Furthermore, the EC desk officer supported our event by sending the invitation for the REPROMO Seminar to all participants of the EC workshop prior to the event. Furthermore, GEONARDO sent an invitation by email to more than 7.000 Hungarian individuals out of their own co-operation network.

# Organisation of four regional seminars in Czech Republic, Estonia, Hungary, Poland

The seminar program focused on a comprehensive presentation of the legislative and economic framework conditions for RES action in Hungary. Furthermore, concrete project ideas were highlighted.

The seminar was a main success. The proximity to the EC workshop ensured a high presence of international stakeholders, which engaged themselves in intense debates after the concrete presentations and in the coffee breaks.



Picture 2: REPROMO Seminar in Budapest

For all presentations abstracts were prepared in English language, which were then disseminated on the REPROMO Internet Page together with the Powerpoint Slides.

The **second REPROMO Seminar took place on 16 January 2005 in Prague**. It was organized by ENVIROS acting as subcontractor of the consortium member ETA. Following the evaluation on the previous project meeting the seminar targeted particularly towards project developers, representatives of utilities and companies from Czech Republic. Consequently, the event was organized with a simultaneous translation. Due to the excellent contacts of ENVIROS it was possible to mobilize more than 50 participants.

In respect to the new renewable energy legislation that is under discussion in Czech Republic the interest for the presentations on this issue was very high. The respective lectures were followed by intense debate in the plenary as well as in the corridors. The range of the highly committed participants went from the Czech Biomass Association, over environmental NGOs, to private consultancies and CEZ, the national energy utility. After the event several participants expressed their strong satisfaction with the event.

The **third REPROMO seminar took place in Estonia** in parallel to the international energy fair "ENEREX" on 12 March 2004. The event was organized by the Estonian Biomass Association acting as subcontractor of WIP. This successful fair attracted many stakeholders from the energy sector, which are not directly involved in renewable energies. The workshop organizer EBA was able to inform all exhibitors prior to the event about the REPROMO seminar. Furthermore, EBA was having a booth on the fair itself what gave many possibilities for inviting people to our event, which took place on the last day of the fair. In respect to the good experiences on the Prague seminar, the Estonian event provided simultaneous translation as well. More than 40 participants listened to the lecturers highlighting various RES actions in the framework of the legislative and economic situation in Estonia.

The **final REPROMO seminar took place in Warsaw** in Hotel METROPOL. The consortium partner KAPE organized it. The meeting was attended by 60 participants mainly representatives of municipality and regional authorities – potential investors. The qualified 8 lecturers highlighted technological aspects, development of biomass utilisation as well as financial support and financing of RES projects possibilities.



Picture 3: REPROMO Seminar in Warsaw

Potential projects were also presented and discussed in detail. The media was represented by editor-in-chief of "Clean Energy" the most popular and nationally disseminated monthly newspaper.

#### Identify catalogue of criteria for successful RES action development

On the project meetings a first list of criteria for successful RES action development was elaborated. Identification of good practice projects. The intense efforts of the consortium accomplished a significant amount of interesting project ideas for selecting a good and representative presentation on the two REPROMO Market Places. The REPROMO Project Idea Note (PIN) helped to create a common platform, which allowed a just and transparent selection of project ideas, which were invited to the two Market Places.

These extensive experiences were brought together in the "Catalogue for Good Practice RES Projects". It became clear that the first and most important criteria is that the project is placed in a favourable market sector. Based from the REPROMO Best Practice the following suitable market sectors have been selected.

- Biomass co-firing in conventional power plants
- Production of biomass commodities
- Landfill refurbishment for methane gas combustion
- Conversion of boiler houses to biomass feedstock (possibly with co-generation)

In the field of PV Solar systems most favourable market sectors have been found in:

- Stand- alone applications for telecommunication, parking metering and holiday cabins
- Manufacturing of PV Solar systems or parts of PV Solar Systems
- Research and demonstration projects.

The definition of market sectors went in parallel with an intense discussion about how to select successful projects. From this it only was a smaller step to comprise the project

deliverable: "Catalogue for "Good Practice RES Actions in CEEC". Based on this dialogue the following additional criteria for success of RE Planning were defined:

- Feasibility funds or strong own knowledge resources are available
- Public entities for support and communication are available
- Access to public and private funding sources
- Economic strength of the system operator
- Good cooperation scheme between strong partners