



www.repromo.org

REPROMO

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

WHO IS WHO IN BIO-ENERGY AND SOLAR ENERGY IN CENTRAL AND EASTERN EUROPEAN COUNTRIES



ALTENER Contract No. 4.1030/Z/02-033/2002

February 2005

Project co-ordinated by

WIP - Renewable Energies Sylvensteinstr. 2 81369 Munich, Germany wip@wip-munich.de

Project Partners

WIP - Renewable Energies, Sylvensteinstr. 2, 81369 Munich, Germany ETA - Renewable Energies, Piazza Savonarola 10, 50132 Florence, Italy KAPE, Nowogrodzka 35/41, 00-691 Warsaw, Poland EPIA, Avenue Charles Quint 124, 1083 Brussels, Belgium EUBIA, Rond Point Schuman 6, 1040 Brussels, Belgium GEONARDO, Keve u. 17, 1031 Budapest, Hungary

Acknowledgments

The editors would like to thank all those who have put time and effort into the preparation of this brochure.

The editors are also grateful to the Directorate General for Transport and Energy for the support in undertaking this publication.

Allocation of tasks:

Overall Project Coordination: Dr. Christian Epp, WIP Scientific Project Management: Corinna Altenburg, WIP Graphic Design and Layout: Valentina Davitti, ETA Scientific collaboration:

Roland Hartiyani, Attila Uderzky, GEONARDO Jaroslav Jakubes, Enviros Maria Habicht, EBA Norbert Vasen, ETA Thomas Sluszard, Marie Latour, EPIA Ryszard Wnuk, KAPE

This publication is supported by the European Commission. The project "Renewable Energy Promotion Campaign for the Realisation of Transational RES Projects in CEEC" is co-funded by the European Commission in the framework of the ALTENER programme under the contract number 41030/Z/02-033/2002.

Legal Notice

Neither the European Commission nor any person action on behalf of the Commission is responsible for the use which might be made of the information contained in this publication.

The views given in this publication do not necessarily represent the views of the European Commission.

Copyright by WIP - Renewable Energies and ETA - Renewable Energies, 2005

Reproduction is authorised provided the source is acknowledged. Printed in Italy by Mani srl

ISBN Number WIP - Renewable Energies 3 - 936338 - 18 - 3 ISBN Number ETA - Renewable Energies 88-89407-08-5

Who is who in Bio-energy and Solar-energy in Central and Eastern European Countries

	Introduction	1
	Background: REPROMO Campaign	
	2 General Situation for RE in CEEC	
	RES project development in CEEC	
	REPROMO Best Practice	
	5 Methodology	4
1.6	REPROMO Consortium partners	5
_		_
	Czech Republic	7
2.1	Who is Who in Bio-Energy	
	2.1.1 Bio-electricity	
	2.1.2 Bio-heat	
2	2.1.3 Bio-fuels	
	2 Who is Who in Solar-Energy	
۷.٠	2.3.1 National Institutions	
	2.3.2 Commercial Banks	
	2.3.3 European Institutions	
	2.3.4 Worldwide Funds	
	2.3.5 Bilateral Funds	
2 4	Who is Who in Energy Policies	
	2.4.1 State Actors	
	2.4.2 Industrial Associations	
	2.4.3 Environmental NGOs	
	2.4.4 Research Institutes	
	2.4.5 Legal Framework	
	2.4.6 Financial Instruments for RES promotion	
3	Estonia	
3.1	Who is Who in Bio-Energy	
	3.1.1 Bio-electricity	
	3.1.2 Bio-heat	
o 6	3.1.3 Bio-fuels	
პ.2 ე.2	2 Who is Who in Solar-Energy 3 Who is Who in the Financial Sector	31
ა.:	3.3.1 National Institutions	
	3.3.2 Banks	_
	3.3.3 European Institutions	
	3.3.4 Worldwide Funds	
	3.3.5 Bilateral Funds	
3 /	Who is Who in Energy Policies	
J	3.4.1 State Actors	
	3.4.2 Industrial Associations	
	3.4.3 Environmental NGOs	43
	3.4.4 Research Institutes	.44
	3.4.5 Legal Framework	4-
	3.4.6 Financial Instruments for RES promotion	
	1	

4	Hungary	47
4.1	Who is Who in Bio-Energy	
	4.1.1 Bio-electricity	
	4.1.2 Bio-heat	50
	4.1.3 Bio-fuels	51
4.2	Who is Who in Solar-Energy	51
4.3	Who is Who in the Financial Sector	
	4.3.1 Banks	
	4.3.2 European Institutions	
	4.3.3 Worldwide Institutions	
4.4	Who is Who in Energy Policies	
	4.4.1 State Actors	
	4.4.2 Industrial Associations	
	4.4.3 Environmental NGOs	
	4.4.4 Research Institutes	
	4.4.5 Legal Framework	
	4.4.6 Financial Instruments for RES promotion	58
5	Poland	59
5.1	Who is Who in Bio-energy	59
	5.1.1 Bio-Electricity in Poland	59
	5.1.2 Bio-heat	65
	5.1.3 Bio-fuels	67
	Who is Who in Solar-Energy	
5.3	Who is Who in the Financial Sector	
	5.3.1 National Institutions	
	5.3.2 Banks	71
	5.3.3 European Institutions	
	5.3.4 Worldwide Funds	
- 1	5.3.5 Bilateral Funds	
5.4	Who is Who in Energy Policies	70
	5.4.1 State Actors	
	5.4.2 Industrial Associations	
	5.4.3 Environmental NGOs	
	5.4.4 Research Institutes	
	5.4.5 Legal Framework 5.4.6 Financial Instruments for RES promotion	
	5.4.6 Financial instruments for RES promotion	19
6	Contact Details	81
7 I	Energy-related Fairs in REPROMO Countries	81
8 (Conclusions	83
Ref	erences	85



8 Conclusions

The "Who is Who" Analysis shows a wide spectrum of actors in Central and Eastern Europe (CEE) in the field of RE project development, manufacturing, and financial engineering. The awareness and support of the public sector is growing to exploit the abundant renewable energy sources of the region. A surprising amount of projects are under preparation. Various "Best Practice" have been successfully implemented.

At the same time, the analysis clearly shows the complexity of CEEC energy markets. Central and Eastern Europe is a region in quick transition what is particularly the case for the energy markets. The monopoly structures of the former Socialist period are transferred into a more market driven approach. A main driving force in the transformation process is the region's new membership in the European Union that enforces the complete liberalisation of the energy markets. Consequently, new private actors start to emerge particularly Energy Service Companies (ESCOs) and Independent Power Production (IPP). Western European energy companies use the chances of the transition period for massive investments in the privatised national and local energy utilities. Also the dynamic RE industries from Western Europe strive to develop markets for their products and technologies in the New Member States.

The complexity of CEEC energy market structures requires to differentiate the analysis between four main markets for energy supply: bio-electricity, bio-heat, bio-fuels, and solar energy. The publication shows very successful actors in the fields of **bio-heat** which are based on long traditions and strong domestic technological knowledge. New and quickly expanding market players can be found within the production of **bio-fuels** particularly pellets and bio-gas. These commodities are primarily produced for export to Western European Countries. Less success can be found in the sector of **bio-electricity**. Electricity prices in CEEC are rather low and the legislation still comprises many constraints for IPPs. Often, the political support for bio-electricity is not strong enough to overcome these barriers. Thus, bio-electricity actors are primarily found between the large energy utilities initiating projects for co-firing in conventional energy plants. The **solar energy sector** is still underdeveloped in CEEC. Only very small niche markets for solar applications exist e.g. in the field of telecommunication and leisure huts. Consequently, most successful solar energy actors are found in the field of research and in the industrial production of PV Solar systems. The economic incentives of the New EU Member States attracts economic activities from Western European companies to further develop the existing competences and resources.

The **financial sector** is often seen as the most critical "actor group" for renewable energy development in CEEC. The long and expensive project preparation, small project sizes and lack of securities and transparent market conditions reduce the attractiveness of RE investment in CEEC. The "Who is Who" shows a wide spectrum of public funding sources ranging from International Development Money down to National Environmental Funds. Also commercial credits are available in all CEEC for energy investment. Only few private investment organisations and institutes have been found with focus on renewable energy investment in CEEC.



"Who is Who" also addresses public actors in CEEC like Non Governmental Organisations (NGOs), Local and National Energy Agencies as well as independent research organisations. The analysis shows that these organisations are still not present in many CEE regions and where present they are still limited in size and strength. Western European experiences confirm the importance of the public sector for RE promotion particularly in the field of awareness raising, information exchange and project initiation. Thus, the deficits in this sector contribute to the insufficient transparency for energy market structures and the lack of objective and reliable information sources. In this respect, initiatives like the EU funded REPROMO project are highly important to close the remaining information gaps and help creating vital and transparent renewable energy markets in Central and Eastern Europe.



WIP-Renewable Energies Sylvensteinstr. 2 81369 Munich, Germany Tel. +49 89 720 12735 Fax +49 89 720 12791 wip@wip-munich.de www.wip-munich.de

ISBN 3-936338-18-3

ETA-Renewable Energies Piazza Savonarola, 10 50132 Florence, Italy Tel. +39 055 500 21 74 Fax +39 055 57 34 25 eta.fi@etaflorence.it www.etaflorence.it

ISBN 88-89407-08-5