

## GEF EO Terminal Evaluation Review – Project ID 982

1. PROJECT DATA				
		Review date:		03/06/2010
GEF Project ID:	982		<u>at endorsement</u> (Million US\$)	<u>at completion</u> (Million US\$)
IA/EA Project ID:	POL/01/G35/A/1G/99 1508	<b>GEF financing:</b>	0.95	0.94
Project Name:	Integrated Approach to Wood-Waste Combustion for Heat Production in Poland	IA/EA own:		
Country:	Poland	Government:		
		Other*:		
		<b>Total Cofinancing</b>	2.03	0.08
Operational Program:	OP 6	<b>Total Project Cost:</b>	3.00	1.02
IA	UNDP	<u>Dates</u>		
Partners involved:	Polish Environmental Partnership Foundation, Polish Foundation for Energy Efficiency, Academy of Mining and Metallurgy	Effectiveness/ Prodoc Signature (i.e. date project began)		July 2002
		Closing Date	Proposed: June 2005	Actual: June 2006
Prepared by:	Reviewed by:	Duration between effectiveness date and original closing (in months): 36	Duration between effectiveness date and actual closing (in months): 48	Difference between original and actual closing (in months): 12
Rajesh Koirala	Ines Angulo			
Author of TE:		TE completion date:	TE submission date to GEF EO:	Difference between TE completion and submission date (in months):
Ir. M.W. Vis				

\* Other is referred to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries.

### 2. SUMMARY OF PROJECT RATINGS AND KEY FINDINGS

Please refer to document GEF Office of Evaluation Guidelines for terminal evaluation reviews for further definitions of the ratings.

Performance Dimension	Last PIR	IA Terminal Evaluation	IA Evaluation Office evaluations or reviews	GEF EO
2.1a Project outcomes	MS	MS	-	MU
2.1b Sustainability of Outcomes	N/A	--	-	ML
2.1c Monitoring and evaluation	--	S	-	MS
2.1d Quality of implementation and Execution	NA	NA	NA	MS
2.1e Quality of the evaluation report	N/A	N/A	-	S

2.2 Should the terminal evaluation report for this project be considered a good practice? Why?

Yes. The terminal evaluation report contains assessments of project outcomes, level of achievement of project's objectives, lessons learned, and recommendations. The report could be useful reference while designing similar projects in future.

2.3 Are there any evaluation findings that require follow-up, such as corruption, reallocation of GEF funds, mismanagement, etc.?

No such finding is reported in the terminal evaluation. Hence follow-up is not required.

### 3. PROJECT OBJECTIVES

#### 3.1 Project Objectives

**a. What were the Global Environmental Objectives of the project? Were there any changes during implementation?**

According to the project appraisal document, the global environmental objective of the project was “to reduce greenhouse gas emissions in Poland by removing barriers to the creation of a viable wood waste market offering clean energy.”

Based on terminal evaluation, there was no change in the global environmental objective of the project.

**b. What were the Development Objectives of the project? Were there any changes during implementation? (describe and insert tick in appropriate box below, if yes at what level was the change approved (GEFSEC, IA or EA)?)**

As mentioned in the project appraisal document, the project had following five specific objectives:

1. “Promote the use of wood waste, produced locally and in a sustainable way, as fuel for space heating in order to eliminate the existing solid fuel boilers powered by coal;”
2. “Enhance the environmental and economic impact of such replacements and optimize the use of wood waste by integrating fuel conversion investments with energy efficiency improvements on the demand side;”
3. “Provide a replicable and economically viable example of such an approach by creating a local wood waste market operated on a commercial basis by a company buying wood waste and providing thermal comfort to heat consumers;”
4. “Provide an example of inter-municipal and public-private co-operation in managing renewable energy resources by creating an Inter-Municipal Public-Private Partnership company (IMPPP);” and
5. “Assist in removing institutional, financial, and information/ awareness barriers to efficient use of wood waste for heat production.”

According to the terminal evaluation, there was no alteration in specific objectives of the project.

Overall Environmental Objectives	Project Development Objectives	Project Components	Any other (specify)		
<b>c. If yes, tick applicable reasons for the change (in global environmental objectives and/or development objectives)</b>					
Original objectives not sufficiently articulated	Exogenous conditions changed, due to which a change in objectives was needed	Project was restructured because original objectives were over ambitious	Project was restructured because of lack of progress	Any other (specify)	

### 4. GEF EVALUATION OFFICE ASSESSMENT OF OUTCOMES AND SUSTAINABILITY

**4.1.1 Outcomes (Relevance can receive either a satisfactory rating or a unsatisfactory rating. For effectiveness and cost efficiency a six point scale 6= HS to 1 = HU will be used)**

**a. Relevance**

**Rating: S**

According to the project appraisal document, the project is consistent with Operational Programme 6 (Promoting the Adoption of Renewable Energy by Removing Barriers and Reducing Implementation Costs). The project outcomes are also relevant to the national priorities. According to the terminal evaluation, renewable energy, energy efficiency and greenhouse gas reductions are Poland’s high priorities and that this project is relevant to the country and to municipalities. Poland ratified the UNFCCC in 1994, and in order to meet its commitments under the UNFCCC, Poland formulated National Environmental Policy aiming at reducing greenhouse gases emission through non-conventional energy sources and energy efficiency. The project also contributed to reducing energy intensity in Poland which is a top national priority to fulfil a pre-requisite to European Union accession.

**b. Effectiveness**

**Rating: MU**

According to the terminal evaluation, the project implanted five biomass boilers and conducted awareness raising activities. However it did not succeed in establishing public private partnership, information centre, the district-heating network, biomass storage facility, and briquetting factory. Formulation of marketing plan and publication of biomass energy guidelines were also unattained.

One of the objectives, establish the inter-municipal public private partnership to manage biomass energy resources at the local level in integrated and optimal manner, was not achieved. Bio-Energia ESP, a private partner, withdrew from the partnership, and only a ‘public - public’ partnership was established between Jordanow and Bystra-Sidzina municipalities. According to the terminal evaluation, this partnership “operated only on paper” as Bystra-Sidzina

discontinued participation. Due to lack of sufficient co-financing, district-heating network and biomass storage facility/briquetting factory were not established. The project was able to develop long-term wood-waste purchase contracts, but it became less relevant as district-heating network and the factory were not established.

A pipeline of five biomass boilers was implemented in Krakow and Jordanow. According to PIR 2006, the total capacity of those plants was 1.07 mega watts. Feasibility studies were carried out to install biomass boilers in some other locations. For increasing awareness, the website www.biomasa.org was developed to provide reliable information on biomass energy, and it became popular as it received 400 000 visits from 2004 to 2006. The project could not achieve two of the proposed activities – establishment of information center and publication of biomass energy guideline. However, following activities were conducted: publication of articles and leaflets, organization of seminars, and energy audit contests for schools. A marketing plan, as expected in the project document, was not formulated.

The project appraisal document intended to achieve CO2 emissions reduction of approximately 14,500 tonnes per year, but the terminal evaluation cites the final report stating that 465 tons of CO2 emission reduction was realized.

**c. Efficiency (cost-effectiveness)**

**Rating: MU**

According to the terminal evaluation, some of project activities were cost effective. However, failed attempts to establish inter-municipal public private partnership took “too much” time, effort and money. Because most of project objectives such as the district heating system, energy guideline publication, wood storage facility and briquetting factory were not achieved, the share of the budget remaining was spent “without sustainable results”. The project completion was also delayed by a year.

**4.1.2 Impacts: summarize the achieved intended or unintended impacts of the project.**

As a result of biomass plants established by the project, new market for wood waste emerged. Prior to the project, illegal dumping of saw dust was a serious problem, according to the terminal evaluation. The survey carried out by the project on wood waste availability could help planning future projects. The project beneficiaries or owner of the installed boilers could obtain cheap energy based on locally available materials. They also gained experience with operation of biomass boilers. The project activities resulted in establishment of the Polish Chamber of Biomass, which deals with lobbying favorable resolutions for alternative energy sources in policy and economic matters.

**4.2 Likelihood of sustainability.** Using the following sustainability criteria, include an assessment of **risks** to sustainability of project outcomes and impacts based on the information presented in the TE. Use a four point scale (4= Likely (no or negligible risk); 3= Moderately Likely (low risk); 2= Moderately Unlikely (substantial risks) to 1= Unlikely (High risk)). The ratings should be given taking into account both the probability of a risk materializing and the anticipated magnitude of its effect on the continuance of project benefits.

**a. Financial resources**

**Rating: ML**

According to the terminal evaluation, municipalities provide funding for some of the established biomass plants. But no funding mechanism is presented for maintaining website created by the project.

**b. Socio political**

**Rating: ML**

As described in the terminal evaluation, municipalities were “very passive” toward the project, and hence they have minimal support to project outcomes.

**c. Institutional framework and governance**

**Rating: UA**

The terminal evaluation provides no information about institutional and governance framework of project outcomes.

**d. Environmental**

**Rating: L**

There is no environmental risk. Wood waste from the factory which had dumping issue is used up by biomass plants established by the project.

**4.3 Catalytic role**

**a. Production of a public good**

A website created by the project provides free, reliable information on biomass and renewable energy. Personnel involved in the project increased knowledge, skills and experience on renewable energy which contributes to job security elsewhere. Similarly, institutions like FEWE, which performed short term specific assignments on contract basis, got opportunity to hone their expertise. Because of the pipeline projects developed, wood waste producers are able to sell their waste. According to the PIR 2006, project activities reduced 465 metric tons of CO<sub>2</sub> emission since the beginning of the project. Similarly energy saving throughout the project period was 20 tons of energy equivalents per year.

**b. Demonstration**

According to the terminal evaluation, the project prepared a visualization of the wood storage facility for promotion and demonstration purposes.

**c. Replication**

No example of replication is presented in the terminal evaluation.

**d. Scaling up**

No example of scaling up is included in the terminal evaluation.

#### 4.4 Assessment of processes and factors affecting attainment of project outcomes and sustainability.

<p><b>a. Co-financing.</b> To what extent was the reported cofinancing (or proposed cofinancing) essential to achievement of GEF objectives? Were components supported by cofinancing well integrated into the project? If there was a difference in the level of expected co-financing and actual co-financing, then what were the reasons for it? Did the extent of materialization of co-financing affect project's outcomes and/or sustainability? If it did, then in what ways and through what causal linkages?</p>
<p>According to the terminal evaluation, co-financing for this project did not materialize at the same level as envisioned in the project document. A condition was set up so that if the municipality of Jordanow would generate 274 kPLN (approx. 88,000 USD) funding, Ecofund would contribute 1.629 kPLN (approximately 524,000 USD) to the project. As Jordanow could not arrange the funding, the agreement did not come into effect. Because co-financing could not be achieved, the district-heating network and biomass storage facility/briquetting factory could not be established.</p>
<p><b>b. Delays.</b> If there were delays in project implementation and completion, then what were the reasons for it? Did the delay affect the project's outcomes and/or sustainability? If it did, then in what ways and through what causal linkages?</p>
<p>According to the terminal evaluation, the project concept was discussed in 1996, but actual implementation began only in 2002. Part of the delay was in identifying the executing agency due to lack of country ownership. This delay caused loss of interest of the municipalities. There was delay in project completion too. The project was initially designed to be finished in 36 months, but it took 12 more months to complete.</p>
<p><b>c. Country Ownership.</b> Assess the extent to which country ownership has affected project outcomes and sustainability? Describe the ways in which it affected outcomes and sustainability highlighting the causal links.</p>
<p>According to the terminal evaluation, delay in identifying executing agency occurred due to lack of country ownership. The participation of the municipalities as project beneficiaries was "very passive". Because of change in a mayor after election in Bystra-Sidzina municipality, "many issues" agreed on with the previous mayor needed to be discussed again. Establishment of the inter-municipal public private partnership, one of the objectives of the project, became "very hard" because of "complex" Polish legislation introduced after project approval. Similarly, due to lack of interest of Bystra-Sidzina municipality, the briquetting plant suffered problems with the permits.</p>

#### 4.5 Assessment of the project's monitoring and evaluation system based on the information in the TE

<p><b>a. M&amp;E design at Entry</b> <span style="float: right;"><b>Rating (six point scale): MS</b></span></p>
<p>In the project appraisal document, the project objectives, outcomes and activities have indicators, but the indicators do not have quantitative targets to measure the project performance. Baseline information is also lacking. The project steering committee has been identified as a main responsible body to implement M&amp;E, but specific M&amp;E plan is absent. The project appraisal document states that the project team "will identify" an appropriate, cost-effective mix of direct and indirect measurements appropriate for monitoring activities.</p>
<p><b>b. M&amp;E plan Implementation</b> <span style="float: right;"><b>Rating (six point scale): MS</b></span></p>
<p>As stated in the terminal evaluation, the mid-term evaluation was carried out contracting Eco. Ltd. in 2004. Although the final evaluation was conducted after 1.5 years of project completion, relevant information was available for the evaluation. M&amp;E of project's performance was mainly executed by the project steering committee, and the project manager provided regular updates about project's achievement to the Steering Committee, EA, and UNDP. Because this project was unable to achieve most of its objectives, M&amp;E system could have provided continuous feed back to prevent it from failure. No availability of such evidence indicates usefulness of M&amp;E.</p>
<p>b.1 Was sufficient funding provided for M&amp;E in the budget included in the project document? The project document included US\$35,000 for M&amp;E activities.</p>
<p>b.2a Was sufficient and timely funding provided for M&amp;E during project implementation? The terminal evaluation mentions that US\$27,261 was used for "Travel for Monitoring". No further information is available.</p>
<p>b.2b To what extent did the project monitoring system provided real time feed back? Was the information that was provided used effectively? What factors affected the use of information provided by the project monitoring system? From the terminal evaluation, it is not evident if monitoring system provided real time feed back to the project.</p>
<p>b.3 Can the project M&amp;E system (or an aspect of the project M&amp;E system) be considered a good practice? If so, explain why. No. Based on information presented in available materials for this review, it appears that M&amp;E system did not contribute to improve project's performance.</p>

#### 4.6 Assessment of Quality of Implementation and Execution

##### a. Overall Quality of Implementation and Execution (on a six point scale): MS

##### b. Overall Quality of Implementation – for IA (on a six point scale): MS

Briefly describe and assess performance on issues such as quality of the project design, focus on results, adequacy of supervision inputs and processes, quality of risk management, candor and realism in supervision reporting, and suitability of the chosen executing agencies for project execution.

According to the terminal evaluation, the role of UNDP was mainly monitoring and evaluation of the project's progress and financial administration, such as payments to the executing agency. Although baseline information and quantitative targets for indicators were missing, overall project design was "good". Due to UNDP staff change, monitoring did not take place actively. Although UNDP provided close supervision, the project could not improve its performance. It suggested the project team about possible location for a biomass plant, and requested the executing agency to publish an energy guideline (but the EA did not follow up on this). As stated in the terminal evaluation, selection of Polish Environmental Partnership Foundation (PEPF) as an executing agency was "appropriate" since the staff members were motivated and seasoned. However, not giving responsibility of executing the project to Polish Foundation for Energy Efficiency (FEWE), which proposed the project, appeared to be a mistake of UNDP because it caused delays in starting the project and bad institutional relationships among project partners during implementation. PIRs were prepared, and they provided justified ratings, strengths and weaknesses of the project.

##### c. Quality of Execution – for Executing Agencies<sup>1</sup> (rating on a 6 point scale) MS

Briefly describe and assess performance on issues such as focus on results, adequacy of management inputs and processes, quality of risk management, and candor and realism in reporting by the executive agency.

Polish Environmental Partnership Foundation (PEPF) executed the project. Its institutional relationship with other partners remained poor. The project was proposed by FEWE, but it was not selected as an EA. A feasibility study was carried out by ESP, and the report was not given to the EA. According to the terminal evaluation, almost a whole year of negotiations took place about purchasing the feasibility report from ESP or doing the feasibility study again. Because the PEFE was not involved in project design, the Academy of Mining and Metallurgy and FEWE did not appreciate PEPF as an executing agency. An agreement was made between the Academy and the project that the project would install a boiler for the Academy, and the Academy would set up an information center. However the Academy did not fulfill the commitment. The project document proposed that the project would be executed by a team of seven people, which was reduced to three during implementation. The terminal evaluation considers this as "appropriate". While hiring consultants to carry out some specific assignments, PEPF chose them "effectively" and subcontracted the "right experts". Executing agency generally followed recommendations provided by the Steering Committee. Quarterly reports were clear and timely submitted to UNDP; Project manager regularly provided updates about project results to UNDP. Although UNDP repeatedly requested to publish energy guidelines, the executing agency did not implement it. During project implementation, the EA made some changes in logical framework with approval from the project steering committee. For example, waste wood was converted into chips, briquettes or pellets before feeding into biomass boilers, which also helped to reduce storage space and transportation cost of raw wood materials.

#### 5. LESSONS AND RECOMMENDATIONS

Assess the project lessons and recommendations as described in the TE

##### a. Briefly describe the key lessons, good practice or approaches mentioned in the terminal evaluation report that could have application for other GEF projects

As presented in the terminal evaluation, following are the lessons learned from this project:

1. The project proposal was prepared in 1998, but it was implemented only in 2002. This long gap led to the decreased relevance of project outcomes; hence the gap is suggested not to exceed four months.
2. The project design needs to be initiated by its beneficiaries or they need to be involved while developing the project. Top-down approach could make actual beneficiaries passive toward the project.
3. Projects based on municipalities need to take into account municipality resources, priorities and duration of the mayor's administration.
4. For effective implementation, the institution that proposed a project should be given opportunity to execute it, if possible.
5. Attempts to establish the inter-municipal public private partnership did not provide real added value to the project, although all parties involved had fully cooperated in the process.
6. The successful implementation of the project depended on the obtaining co-financing successfully.

<sup>1</sup> Executing Agencies for this section would mean those agencies that are executing the project in the field. For any given project this will exclude Executing Agencies that are implementing the project under expanded opportunities – for projects approved under the expanded opportunities procedure the respective executing agency will be treated as an implementing agency.

**b. Briefly describe the recommendations given in the terminal evaluation**

Recommendations mentioned in the terminal evaluation are summarized below:

1. As agreed with UNDP, the project manager needs to ensure the publication of energy guidelines.
2. The project manager, the Polish Biomass Chamber of Commerce, and the publisher of the Polish edition of the Bioenergy International magazine are suggested that they maintain and update the website, and use it to promote the project results online.
3. Because the official energy audits overestimate the energy demand leading to the installation of higher-capacity plants, some assumptions in the national standard need to be adjusted.
4. As biomass for heat production is highly relevant to attaining the renewable energy targets of Poland, it (biomass) should be actively promoted.
5. Partial funding for development of the biomass heat sector in Poland should be obtained from the Green Investment Scheme.
6. Biomass project developers should be supported in preparing applications for EU funding, and biomass heating systems should be made easily available to smaller communities.

**6. QUALITY OF THE TERMINAL EVALUATION REPORT**

**6.1 Comments on the summary of project ratings and terminal evaluation findings based on other information sources such as GEF EO field visits, other evaluations, etc.**

NA

Provide a number rating 1-6 to each criteria based on: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, and Highly Unsatisfactory = 1. Please refer to document GEF Office of Evaluation Guidelines for terminal evaluations review for further definitions of the ratings. Please briefly explain each rating.

<b>6.2 Quality of the terminal evaluation report</b>	<b>Ratings</b>
<p><b>a. To what extent does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?</b> The report adequately assesses project outcomes and achievement of objectives.</p>	S
<p><b>b. To what extent the report is internally consistent, the evidence is complete/convincing and the IA ratings have been substantiated? Are there any major evidence gaps?</b> The report is consistent, and the ratings have been substantiated.</p>	S
<p><b>c. To what extent does the report properly assess project sustainability and /or a project exit strategy?</b> The report provides inadequate information to assess project sustainability.</p>	MS
<p><b>d. To what extent are the lessons learned supported by the evidence presented and are they comprehensive?</b> Lessons learned are supported by evidence, but some of the recommendations are beyond the scope of the project.</p>	MS
<p><b>e. Does the report include the actual project costs (total and per activity) and actual co-financing used?</b> The report includes actual project costs (total and per activity), but per activity co-financing is not provided.</p>	S
<p><b>f. Assess the quality of the reports evaluation of project M&amp;E systems?</b> The terminal evaluation mentions that project monitoring was carried by the steering committee, but it does not give information to what extent M&amp;E system was useful and how the recommendations were implemented.</p>	MS

**7. SOURCES OF INFORMATION FOR THE PRERATATION OF THE TERMINAL EVALUTION REVIEW REPORT EXCLUDING PIRs, TERMINAL EVALUATIONS, PAD.**

NA