InfoShop

Report No AC7

# Integrated Safeguards Data Sheet (Updated)

Date ISDS Prepared/Updated: 03/31/2003

## Section I - Basic Information

### *A. Basic Project Data*

| | |
|---|---|
| Country: BULGARIA | Project ID: P075560 |
| Project. WOOD RESIDUE TO ENERGY | Task Team Leader: Sudipto Sarkar |
| Authorized to Appraise Date April 1, 2003 | IBRD Amount ($m). |
| Bank Approval. May 13, 2003 | IDA Amount ($m). |
| Managing Unit. ECSIE | Sector. Renewable energy (50%), Power (50%) Theme Climate change (P); Pollution management and environmental health (P) |
| Lending Instrument: Specific Investment Loan (SIL) | |
| Status: Other - Prototype Carbon Fund support (preliminary estimate US$1.75 million minimum) | |

I.A.2. Project Objectives:
The overall objective of the project is to reduce emissions of greenhouse gases generated at Svilosa This objective would be achieved through: a) substitution of coal with residual wood as a fuel for power and heat generation resulting in a reduction of greenhouse gas emissions; and b) depletion of a stockpile of wood residue which will reduce methane emissions

Emission Reduction units (ERs) will be sold to the Prototype Carbon Fund (PCF) following annual independent certification of the emission reduction achievements. ERs will be certified under the provisions of the Kyoto Protocol, which is a multilateral agreement to reduce greenhouse gases The Kyoto Protocol is not yet in effect since sufficient countries, representing 55% of Annex B (industrialized country) $CO_2$ emission levels (1990), have not yet ratified the agreement However, with the ratification by Russia, expected in 2003, the Kyoto Protocol would be effective Irrespective of the regulatory risk of the protocol not being effective, PCF has pledged to purchase the ERs. This precludes any risks to Svilosa arising from the delays in effectiveness of the Kyoto Protocol.

I.A.3. Project Description:

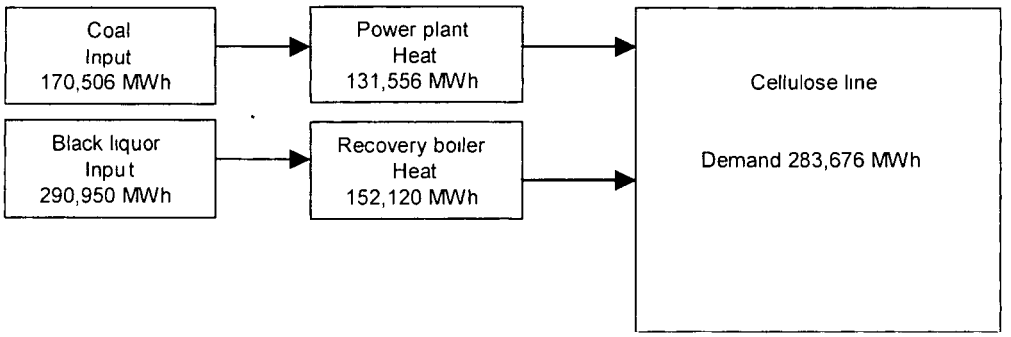
Component A. Biomass Boiler The project will add a 14 MW biomass boiler to the Svilosa plant to generate heat. The biomass boiler will be fueled by wood waste from two sources: (i) waste generated in the production process; and (ii) waste stockpiled on site since 1994 This will reduce the coal consumption at the CHP plant (Figure 1).

A biomass boiler will be built to utilize the wood wastes produced at the plant and supply heat to the cellulose part of the production process. The biomass boiler will displace approximately 13,679 tons/

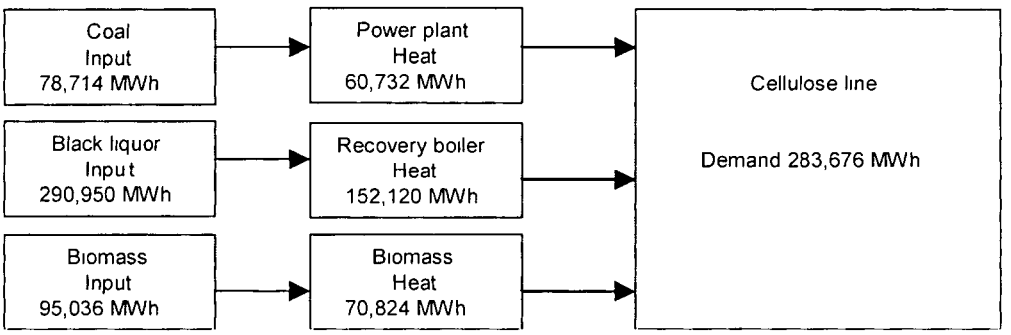
year of coal used in the CHP power plant, reduce greenhouse gas (GHG) emissions associated with using coal in power production, and reduce methane emissions associated with stockpiling waste by using wood wastes as feedstock. Certified greenhouse gas emission reductions will be sold to the PCF

Component B: Emission Reduction Monitoring and Certification A Baseline Study has been conducted and a Monitoring Plan (MP) has been prepared to guide the monitoring and verification process during project implementation The MP includes clearly defined indicators to observe and verify the continued performance of the project. The verification process involves periodic auditing of monitoring results, the assessment of achieved emission reductions and the project's continued conformance with all relevant criteria. Verification will be conducted at regular intervals during the operational phase of the project by a third and independent entity. Verified emission reductions will be certified to provide assurance that, in the verification period, the project has achieved the stated ERs in compliance with all relevant criteria

**Figure 1: Heat and Fuel Requirements for the Svilosa Plant - Minimum ERs Scenario**




*Heat Supply to Cellulose plant before the installation of the biomass boiler*




*Heat Supply to Cellulose plant after the installation of the biomass boiler*

**Emission Reductions**

The actual ERs would be dependent on the biomass produced at Svilosa which is linked to the market and production of the company. The ERs are also dependent on the volume of methane generated from the stockpiled wood wastes In the Term Sheet signed between the PCF and Svilosa, PCF has agreed to purchase a minimum ERs of 500,000 $tCO_2eq$ over the period 2004 to 2012 with an option to purchase up to 1,000,000 $teCO_2eq$ of ERs.

I A.4. Project Location· (Geographic location, information about the key environmental and social characteristics of the area and population likely to be affected, and proximity to any protected areas, or sites or critical natural habitats, or any other culturally or socially sensitive areas.)

The Svilosa Pulp Factory, Svilosa AD, is located in the Shvistov area of Bulgaria This project will be implemented within the grounds of the existing Svilosa pulp and cellulose plant site.

***B. Check Environmental Classification:*** B (Partial Assessment)

*Comments.* The project rating is B since no irreversible environmental damage will occur. In general the environmental benefits of the project are significant. The environmental impacts of the project are minor and related to the construction period.

***C. Safeguard Policies Triggered***

| Policy | Applicability |
|---|---|
| Environmental Assessment (OP/BP/GP 4.01) | ● Yes ○ No |
| | |

| | |
|---|---|
| Natural Habitats (OP/BP/GP 4.04) | ○ Yes ● No |
| Forestry (OP/GP 4 36) | ○ Yes ● No |
| Pest Management (OP 4 09) | ○ Yes ● No |
| Cultural Property (OPN 11 03) | ○ Yes ● No |
| Indigenous Peoples (OD 4.20) | ○ Yes ● No |
| Involuntary Resettlement (OP/BP 4.12) | ○ Yes ● No |
| Safety of Dams (OP/BP 4.37) | ○ Yes ● No |
| Projects in International Waterways (OP/BP/GP 7 50) | ○ Yes ● No |
| Projects in Disputed Areas (OP/BP/GP 7.60)* | ○ Yes ● No |

**By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas*

**Section II - Key Safeguard Issues and Their Management**

***D. Summary of Key Safeguard Issues*** *Please fill in all relevant questions If information is not available, describe steps to be taken to obtain necessary data*

II D.1a. Describe any safeguard issues and impacts associated with the proposed project Identify and describe any potential large scale, significant and/or irreversible impacts.

Svilosa has received confirmation from the MOEW (Decision #2-PR/2003 dated February 3, 2003) that an EIA report is not required for the Biomass Boiler project. An EMP for the biomass boiler project has been prepared in line with Bank requirements

The installation of the biomass boiler has positive environmental benefits Apart from the reduction in greenhouse gases, there will be a reduction in local air pollutants. Further, there will be a reduction in the residual biomass stockpile. In addition, due to less use of coal there will be a reduction of 3,000 tons of ash requiring proper disposal. The characteristics of the ash generated from the biomass boiler will be similar to the ash generated from the CHP As a result, the ash from the biomass plant would be disposed in the ash disposal site for the CHP plant.

II.D.1b. Describe any potential cumulative impacts due to application of more than one safeguard policy or due to multiple project component.

There are no cumulative impacts associated with the application of more than one safeguard policy. There is only a single project component.

II D.1c Describe any potential long term impacts due to anticipated future activities in the project area

No future activities are expected to impact this project

II.D.2 In light of 1, describe the proposed treatment of alternatives (if required)

Not applicable

II.D 3 Describe arrangement for the borrower to address safeguard issues

The Environmental Management Plan has been prepared for the installation of the biomass boiler on Svilosa's site and covers both construction-related issues and operating impacts. Design of the boiler provides for control of particulate emissions within the required levels by Bulgaria's environmental regulations Provisions are made to minimize dust, noise and water pollution during construction. During operation, particulates, sulphur dioxide and NOx from the boiler will be monitored and ash will be disposed as per Bulgaria's environmental regulations. Wood supply sustainability will be ensured

through compliance with Bulgaria's National Forestry Management Plan.

II.D.4. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

Following Bank's environmental guidelines, a public discussion was held on December 11, 2002 regarding the Draft Environmental Management Plan (EMP) for the Biomass Boiler Project at Svilosa During the hearing the EMP was presented and comments were solicited. Questions were raised on the rationale for the project and the boiler design. No specific environmental issues were raised. Minutes of this meeting are included in the EMP.

***E. Safeguards Classification*** Category is determined by the highest impact in any policy Or on basis of cumulative impacts from multiple safeguards Whenever an individual safeguard policy is triggered the provisions of that policy apply.

[ ] S1. – Significant, cumulative and/or irreversible impacts; or significant technical and institutional risks in management of one or more safeguard areas
[X] S2. – One or more safeguard policies are triggered, but effects are limited in their impact and are technically and institutionally manageable
[ ] S3 – No safeguard issues
[ ] SF – Financial intermediary projects, social development funds, community driven development or similar projects which require a safeguard framework or programmatic approach to address safeguard issues.

***F. Disclosure Requirements***

| *Environmental Assessment/Analysis/Management Plan.* | *Expected* | *Actual* |
|---|---|---|
| Date of receipt by the Bank | 10/1/2002 | 12/1/2002 |
| Date of "in-country" disclosure | 10/31/2002 | 12/11/2002 |
| Date of submission to InfoShop | 10/31/2002 | 3/25/2003 |
| Date of distributing the Exec. Summary of the EA to the ED *(For category A projects)* | Not Applicable | Not Applicable |
| *Resettlement Action Plan/Framework* | *Expected* | *Actual* |
| Date of receipt by the Bank | Not Applicable | Not Applicable |
| Date of "in-country" disclosure | | |
| Date of submission to InfoShop | | |
| *Indigenous Peoples Development Plan/Framework* | *Expected* | *Actual* |
| Date of receipt by the Bank | Not Applicable | Not Applicable |
| Date of "in-country" disclosure | | |
| Date of submission to InfoShop | | |
| *Pest Management Plan:* | *Expected* | *Actual* |
| Date of receipt by the Bank | Not Applicable | Not Applicable |
| Date of "in-country" disclosure | | |
| Date of submission to InfoShop | | |
| *Dam Safety Management Plan:* | *Expected* | *Actual* |
| Date of receipt by the Bank | Not Applicable | Not Applicable |
| Date of "in-country" disclosure | | |
| Date of submission to InfoShop | | |

If in-country disclosure of any of the above documents is not expected, please explain why

| **Signed and submitted by** | **Name** | **Date** |
|---|---|---|
| Task Team Leader. | Sudipto Sarkar | 03/31/2003 |
| Project Safeguards Specialists 1 | Stratos Tavoulareas | 03/31/2003 |
| Project Safeguards Specialists 2 | | |
| Project Safeguards Specialists 3 | | |

| **Approved by:** | **Name** | **Date** |
|---|---|---|
| Regional Safeguards Coordinator: | Jane E Holt | 03/31/2003 |
| Sector Manager/Director: | Henk Busz | 03/31/2003 |