



CASE STUDY 22: THAILAND – BIOMASS GENERATION AND COOPERATION

Barriers	High technical risks
Instrument	Commercial risk guarantees
Application	GEF funds used to reimburse project companies with up to 50% risk guarantee fees as contingent financing
Amount	GEF US\$6.8 million

PROJECT BACKGROUND AND OBJECTIVES

In 1999-2000, electric power generation in Thailand was dominated by fossil fuel, accounting for more than 80% of total electricity supply. The Removal of Barriers to Biomass Power Generation and Cogeneration in Thailand (RBBPGC) aims to reduce GHG emission by accelerating the growth of biomass co-generation and power generation technologies to replace fossil fuel consumption. The project is supported by GEF funds implemented through the UNDP, with Energy for Environment Foundation as the executing agency.

The barriers to biomass power generation was identified as lack of knowledge and skills in developing biomass power generation projects, limited regulatory framework to encourage biomass projects, lack of appropriate financing mechanisms, and uncertainty and lack of knowledge regarding the biomass technologies.

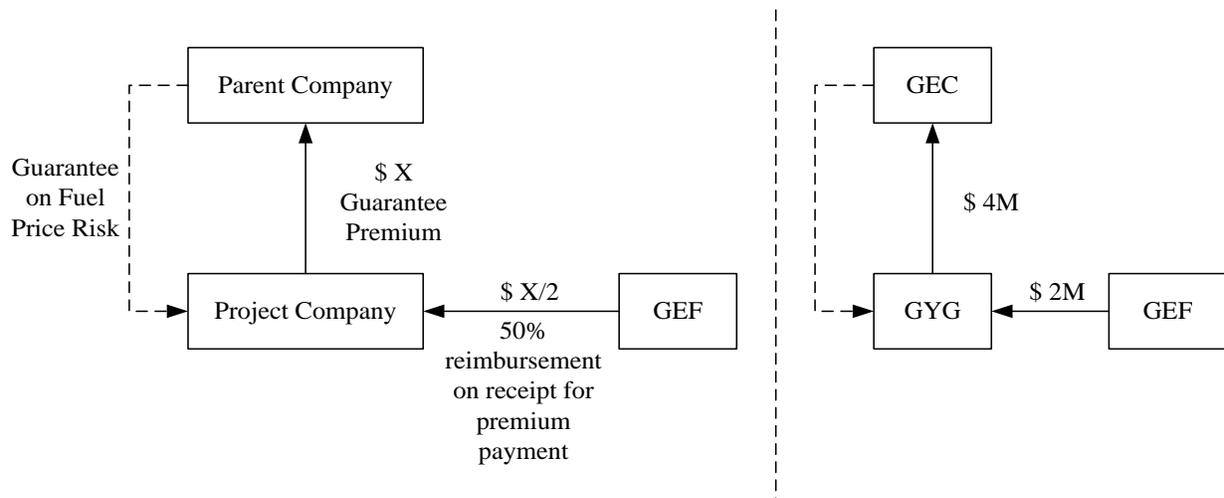
Therefore, to address the lack of appropriate financing mechanism and to reduce technical risks associated with new biomass technology, the project includes a commercial risk guarantee component to facilitate the implementation of two pilot biomass power plants, the Gulf Yala Green and Roi-Et Green.

INSTRUMENTS USED

The financier of the project requested that the parent company of project companies provide a guarantee covering the risks related to biomass fuels and the overall risks including credit, currency, and technology risks. The GEF funds were used to reimburse the project companies with up to 50% of the risk guarantee fees as contingent financing.

INSTITUTIONAL ARRANGEMENTS

The parent company provides guarantee on fuel price risks to the project company for a guarantee fee. GEF fund was then paid to the project companies semi-annually on provision of the invoice and receipt from the project companies for the guarantee fee. (See chart below)



OUTCOMES

The risk guarantee model has served the purpose of attracting project finance for the pilot project.

The overall project has facilitated/influenced the installation of 398 MW of electricity capacity that generates over 358 GWh of electricity annual from biomass power plants.

Further reading

GEF, Thailand - Removal of Barriers to Biomass Power Generation and Co-generation – click [here](#)