

FACSIMILE TRANSMISSION



United Nations Development Programme
GLOBAL ENVIRONMENT FACILITY (GEF)



To: Mr. Kenneth King
Assistant Chief Executive Officer
GEF Secretariat

Date: 23 June 1999

Mr. Lars Vidaeus, Chief
Global Environment Div.
World Bank

Mr. Ahmed Djoghlaif
GEF Executive Coordinator
UNEP, Nairobi, Kenya

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Pages: (7 including this sheet)

From: Eduardo Fuentes
Officer-in-Charge

Subject: PDF A Funding – Removal of Barriers to Biomass
Co-Generation from Wood Residues in Thailand

Please find attached for your review a PDF Block A request for funding entitled:
"Removal of Barriers to Biomass Co-Generation from Wood Residues in Thailand".

We would appreciate receiving your comments no later than c.o.b. Tuesday 29
June 1999.

Thank you.

PM

Ms Margie
REC'D JUN 23 1999

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Proposal for PDF Block A Grant

PART I – ELIGIBILITY	
1. Project name: Removal of Barriers to Biomass Co-generation from Wood Residues in Thailand	2. Proposed GEF Implementing Agency: UNDP
3. Country or countries in which the project is being implemented: Thailand	4. Country eligibility: Ratified UNFCCC on December 28, 1994
5. GEF focal area(s): Climate Change	6. Operational program/Short-term measure: OP6- Promoting the Adoption of Renewable Energy by Removing Barriers.
<p>7. Project linkage to national priorities, action plans, and programs:</p> <p>The Government of Thailand attaches great importance to sustainable development and the protection of natural resources. In line with this, the Government has set up a Steering Committee on Implementation of National Action Plan for Sustainable Development (Agenda 21), and is preparing its national communication to the UNFCCC.</p> <p>The recently completed UNDP/GEF project -- Asia Least-Cost GHG Abatement Strategy (ALGAS) – highlighted the important role the energy sector can play in reducing future GHG emissions in Thailand, and the need to accelerate the use of renewable energy sources in the country. The ALGAS project identified biomass fuels as the most promising source of renewable energy, and biomass co-generation technologies as a priority area in the GHG abatement strategies in Thailand.</p> <p>The Government of Thailand has embarked a comprehensive Energy Conservation Program, and adopted the Energy Conservation and Promotion Act, which established the Energy Conservation Fund. The National Energy Policy Office (NEPO) has a New and Renewable Energy Program through its Energy Conservation Fund. This Program focuses on the introduction and dissemination of renewable energy technologies. It provides two types of incentives for renewable energy: 1) incentives to the implementing organization of a program, for introduction and promotion of the technology; and 2) incentives directed to the user of a technology or a service disseminated or demonstrated.</p> <p>The utility regulations with regard to power purchase from renewable power producers in Thailand are ahead of other developing countries in the region, and provided the basic regulatory infrastructure for biomass co-generation development in Thailand. The NEPO and Electricity Generation Authority of Thailand (EGAT) have established regulations to purchase power from Small Power Producers (SPP). SPPs are those power producers under 60 MW, and can be either co-generation plants (efficiency greater than 45%, and steam more than 10%), or renewable energy plants (may use up to 25% conventional energy). The power purchase price of SPPs is based on the avoided cost of EGAT. SPP schemes include non-firm contract and firm contract.</p>	

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8. GEF national operational focal point and date of country endorsement:

Office of Environmental Policy and Planning, Ministry of Science, Technology, and Environment. Endorsed:

9. Project rationale and objectives:

The principal objective of this project is to reduce GHG emissions by removing the major barriers to the development of biomass co-generation to replace current fossil fuel use in Thailand. At the same time, this project also has strong national benefits: 1) reduced dependence on fuel import (75% of the fuel consumption is imported, and 25% is indigenous in Thailand); 2) avoided local air pollution from field burning of wood wastes; and 3) increased job opportunities at local community.

This project has four immediate objectives:

- 1) Building capacity to provide information and services to potential biomass power investors to remove the information barriers;
- 2) Creating easy access to commercial financing for biomass co-generation projects to remove the financing barriers;
- 3) Improving the regulatory framework to provide financial incentives to biomass co-generation development to remove the policy barriers;
- 4) Increasing market demand by supporting a parawood residue co-generation pilot plant in Yala.

10. Expected outcomes:

The successful implementation of the project will promote widespread national replication of large-scale grid-connected biomass co-generation technologies across the country. More specifically,

- 1) The potential biomass co-generation project developers would have easy access to information and services;
- 2) The improved financial incentive policies would provide favorable power buyback tariff for biomass power projects;
- 3) The biomass and power industries would have increased confidence and experience with biomass co-generation from the successful pilot large-scale grid-connected biomass co-generation plants.
- 4) The biomass co-generation project developers would have an easy access to commercial financing, and the financial institutions would offer a risk guarantee financing mechanism.

The project will have global environmental benefits by reducing greenhouse gas emissions (CO₂) and other emissions from fossil fuel combustion, and reduce fuel imports.

11. Planned activities to achieve outcomes:

This project relies on a market-based approach, and aims to remove the information, financing, market, and regulatory barriers to increase market demand, which will lead to an increased supply. This project will establish the institutional and regulatory framework to remove the key barriers, through establishing a "One-Stop Information Service Center" to remove the information barriers; setting up a financing mechanism for biomass power to remove the financing barriers; and improving financial incentive policies to remove the policy barriers. It will then support a Pilot Plant of parawood residues co-generation in Yala, to demonstrate the technical and commercial viability as well as the project development model for large-scale efficient biomass co-generation systems to the potential investors in Thailand, thus to increase the market demand for biomass co-generation systems. These activities together will facilitate the widespread, national replication of biomass co-generation deployment in Thailand.

The specific activities are:

- Establish a "one-stop" information service center for biomass co-generation in Thailand;
- Improve financial incentive policies to biomass co-generation projects;
- Support the parawood pilot-plant in Yala;
- Establish a financing mechanism for biomass co-generation in Thailand.

12. Stakeholders involved in project:

EGCO, EC-ASEAN COGEN, IFCT, EGAT, NEPO, OEPP, wood and agro-industries, bilateral funds, research institutes, and NGOs.

PART II – INFORMATION ON BLOCK A PDF ACTIVITIES

13. Activities to be financed by the PDF A:

The objective of this PDF A is to assist the Government of Thailand in formulating and finalizing a GEF Full Project Brief and project document to submit for GEF financing in developing its biomass co-generation technologies. This PDF A will be completed under the guidance of the RBAP/GEF Regional Coordinator for Climate Change and in collaboration with the GEF Technical Consultant for Climate Change. The PDF A will cover the costs for

- 1) Travel to Thailand for the GEF Technical Consultant;
- 2) Travel to Thailand for an international financing consultant to work with the GEF Technical Consultant, to provide essential support to design the risk guarantee financing mechanisms for biomass co-generation in Thailand, and review as well as assist in finalizing a GEF Full Project brief and project document to submit for GEF financing;
- 3) Holding a project formulation workshop with all stakeholders involved;
- 4) Hiring one national financing consultant to assist the GEF Technical Consultant and the international financing consultant in the project brief development activities, particularly help design the financing mechanisms, and organizing the project formulation workshop.

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**TERMS OF REFERENCE
UNDP/GEF MISSION TO THAILAND TO DEVELOP
PROPOSAL FOR BIOELECTRICITY USING BIOMASS**

UNDP/GEF Technical Consultant for Climate Change

BACKGROUND:

1. The GEF has been designated as the funding mechanism for both the Climate Change and the Biodiversity Conventions. It will also continue to assist developing countries in three additional areas: (a) prevention of pollution of international waters; (b) prevention of the destruction of the stratospheric ozone layer; and (c) prevention of land degradation, primarily desertification and deforestation as they relate to the existing GEF objectives. The responsibility of the GEF is shared between three multi-lateral agencies: the United Nations Development Programme (UNDP); the United Nations Environment Programme (UNEP); and the World Bank (WB).

2. The UNDP is responsible for technical assistance, training, capacity building and other pre-investment activities related to the GEF. In this regard, UNDP works in close coordination with its member countries and with the support of its resident missions to identify, define and implement all aspects of technical assistance, training, capacity building and pre-investment activities that are necessary to achieve the objectives of the Environmental Conventions. This includes the United Nations Framework Convention on Climate Change (UNFCCC) which Thailand ratified on 28/12/94.

3. The overall objective of the mission will be to prepare and finalize a GEF full project brief for the proposed project entitled "Bioelectricity Using Biomass from Parawood, City of Yala, Southern Thailand" for submission of possible GEF funding. The objective of the proposed project is aimed to reduce greenhouse gas emissions through removing barriers to commercial utilization of renewable and indigenous biomass co-generation in Thailand.

SCOPE OF WORK

4. The mission will be undertaken jointly by the UNDP/GEF Technical Consultant for Climate Change, an international financing consultant, and a national financing consultant. UNDP/GEF technical consultant's assignment will include a 12 working day mission to Thailand to finalize GEF "full" project brief and draft UNDP project document in standard UNDP format within the guidance of the GEF Operational Strategy under Operational Programme # 6 related to "barrier removal". The team will be responsible to the UNDP Resident Representative and the RBAP/GEF Regional Coordinator for Climate Change and upon the start of mission, will meet with the UNDP Resident Representative. The UNDP Country Office will determine and arrange for meetings with the relevant Ministries and local counterpart agencies.

5. The role of the consultant will include :

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To: Ms. Mandita Mongia,
Regional Coordinator
UNDP GEF/RBAP.



No. 0806/ 033

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URGENT

21 June B.E. 2542 (1999)

Dear Ms. Sirisupa,

Subject : project for GEF funding

Based on previous discussion with UNDP and GEF Team, we wish to confirm our request for GEF financial support to the project "Bioelectricity using biomass from parawood, city of Yula, Southern Thailand".

Thank you for your kind cooperation.

Yours sincerely,

Orapin Wongchumpit.

Mrs. Sirisupa Kulthanan
United Nations Development Programme
United Nations Building
Rajdamnern Nok Avenue
Bangkok 10200

MRS. ORAPIN WONGCHUMPIIT
DIRECTOR
INTERNATIONAL ENVIRONMENTAL AFFAIRS DIVISION

Ms Mongia
REC'D JUN 21 1999

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