



PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Full-sized Project

THE GEF TRUST FUND

Submission Date: 20 November 2008

Date of Resubmission: 2 April 2009

Date of Resubmission: 4 Sep 2009

Date of Resubmission: 06 May 2010

PART I: PROJECT IDENTIFICATION

GEF PROJECT ID¹: 3844 PROJECT DURATION: 36 months

GEF AGENCY PROJECT ID: 4181

COUNTRY(IES): Bhutan

PROJECT TITLE: Promoting Sustainable Rural Biomass Energy

GEF AGENCY(IES): UNDP

OTHER EXECUTING PARTNER(S): Department of Energy, Ministry of Economic Affairs, Royal Government of Bhutan

GEF FOCAL AREA (S)²: Climate Change

GEF-4 STRATEGIC PROGRAM(S): CC-SP4

NAME OF PARENT PROGRAM/UMBRELLA PROJECT: N/A

INDICATIVE CALENDAR*	
Milestones	Expected Dates mm/dd/yyyy
Work Program (for FSP)	June 2010
CEO Endorsement/Approval	Dec. 2011
Agency Approval Date	March 2012
Implementation Start	March 2012
Mid-term Evaluation (if planned)	April 2013
Project Closing Date	March 2015

* See guidelines for definition of milestones.

A. PROJECT FRAMEWORK

Project Objective: Removal of barriers to sustainable utilization of available biomass resources in the country and application of biomass energy technologies that can support economic and social development in the country's rural sector, in order to reduce GHG emissions.

Project Components	Indicate whether Investment, TA, or STA ^b	Expected Outcomes	Expected Outputs	Indicative GEF Financing ^a		Indicative Co-Financing ^a		Total (\$) c = a + b
				(\$) ^a	%	(\$) ^b	%	
1. Mainstreaming Sustainable Biomass Energy Production, Conversions and Utilisation	TA	Implementation of strengthened support policies and regulatory frameworks and institutional capacity for adoption of sustainable practices production, conversion and use of biomass resources in Bhutan.	1.1 Developed and implemented roadmap for the promotion of sustainable biomass production and utilization, using both community-based woodlots and non fuel wood energy resources 1.2 Completed comparative assessments of financing schemes for BET applications and BE-supported projects, including specific recommendations for fiscal incentives to enable market mechanisms 1.3 Biomass energy resource information	230,000	39	315,000	61	545,000

¹ Project ID number will be assigned by GEFSEC.

² Select only those focal areas from which GEF financing is requested.

			<p>system established to facilitate systematic collection, analysis and dissemination</p> <p>1.4 Ongoing implementation of action plan for earmarking areas for sustainable forest wood energy production</p>					
2. Supporting Innovative Practices for Local Sustainable Biomass Energy Technology Development and Promotion	Inv/TA	Implementation of BET applications due to improved confidence in their feasibility, performance, environmental and economic benefits	<p>2.1 Operational locally produced 20,000 energy-efficient cook stoves in rural households and community-based institutions for cooking and space heating needs</p> <p>2.2 Operational locally produced energy efficient industrial stoves for income generating local enterprises, such as lemon grass oil extraction, cardamom drying and processing, and bakery</p> <p>2.3 Implemented and operational BET Full Scale Models on: [1] Wood briquetting/ pelleting technology for the production of bioenergy fuels and [2] Biomass gasification for electricity services and thermal applications</p>	930,000	37	1,550,000	63	2,480,000
3. Capacity Building and Knowledge Management	TA	Improved knowledge, awareness and capacities of policy makers, financiers, suppliers and end-users on benefits and market opportunities for modern biomass energy technologies	<p>3.1 Established and operational Knowledge and Learning Platform for Bhutan</p> <p>3.2 Disseminated documented project lessons and best practices</p> <p>3.3 Rural development planners trained on integrated rural energy planning</p> <p>3.4 Project developers and micro-entrepreneurs trained on BET</p> <p>3.5 Communities and institutions trained on the installation and maintenance of biomass gasifiers, biodigesters</p>	390,000	57	300,000	33	690,000

			and energy-efficient cook stoves/ furnaces					
			3.6 Completed specialized training for 100 trainers on community forestry and sustainable forest wood energy					
4. Project management				153,000	44	195,000	56	348,000
Total project costs				1,703,000		2,360,000		4,063,000

^a List the \$ by project components. The percentage is the share of GEF and Co-financing respectively of the total amount for the component.

^b TA = Technical Assistance; STA = Scientific & Technical Analysis.

B. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE and by NAME (in parenthesis) if available, (\$)

Sources of Co-financing	Type of Co-financing	Project
Project Government Contribution	Grant and in-kind	510,000
UNDP	Grant and in-kind	200,000
Bilateral Aid Agency (USAID SARI/Energy Program)	In-kind	150,000
Private Sector	Cash	500,000
Others (Green Power Development Project)	Grant	1,000,000
Total Co-financing		2,360,000

C. INDICATIVE FINANCING PLAN SUMMARY FOR THE PROJECT (\$)

	Previous Project Preparation Amount (a) ³	Project (b)	Total c = a + b	Agency Fee
GEF financing		1,703,000	1,703,000	170,300
Co-financing		2,360,000	2,360,000	
Total		4,063,000	4,063,000	170,300

D. GEF RESOURCES REQUESTED BY AGENCY (IES), FOCAL AREA(S) AND COUNTRY(IES)¹

N/A

PART II: PROJECT JUSTIFICATION

A. STATE THE ISSUE, HOW THE PROJECT SEEKS TO ADDRESS IT, AND THE EXPECTED GLOBAL ENVIRONMENTAL BENEFITS TO BE DELIVERED:

Bhutan has the highest per capita consumption of fuelwood in the world, at 1.3 tons per person. Fuel wood is the main source of energy for cooking, heating and lighting in the rural areas of Bhutan, where 70% of the population lives. Total wood energy consumption accounts for more than 66% of the total energy use in the country. About 92% of the consumed energy is used to meet cooking demand, 6% for space heating demand and about 2% for lighting [Bhutan Energy Data Directory, 2005, DoE]. While there is a plentiful supply of biomass, its utilization at present is inefficient, particularly through inefficient traditional wood stoves and furnaces. The inefficient fuelwood consumption is contributing to deforestation, indoor air pollution and greenhouse gas emissions.

³ Include project preparation funds that were previously approved³ but exclude PPGs that are awaiting for approval.

Some of the main barriers to sustainable biomass energy development and utilization include: Policy: [1] Absence of a coherent and comprehensive renewable energy policy, [2] Absence of incentives from the government that would facilitate the acceleration of the development and wider scale application of sustainable biomass energy resources, [3] No comprehensive information on renewable energy use in the country; Market & Financial: [1] Lack of enterprises that supply biomass energy system equipment and services, [2] Lack of technical expertise and financial resources for appropriate assessments and packaging of BET applications for productive and social uses; and, Information: [1] Low level of awareness and capacity on sustainable biomass energy technologies.

Access to sustainable modern energy services for all is an important goal that the Royal Government of Bhutan aims to achieve by 2020.

The Government of Bhutan has set a goal of electrifying all rural households by 2020. However, not all rural households can be connected to the national power grid due to their location and associated technical, economic and environmental constraints. According to the Rural Electrification Master Plan, 88% of rural households will be connected to the grid, while 12% of rural households will be provided off-grid access by 2020.. Potential off-grid electrification includes sustainable biomass conversion, mini/micro hydro systems, and solar PV systems.

The proposed project will focus on the promotion and use of biomass energy resources for the provision of energy services in rural areas. The proposed FSP will build on the Government's plan to develop a Comprehensive National Renewable Energy Policy and Strategy. It will involve activities that will overcome/remove barriers to the development and widespread use of biomass energy resources, to contribute to the enhancement of socio-economic growth in the country's rural areas.

The goal of the project is the reduction of GHG emissions through sustainable production and utilization of biomass-based energy in the country, and the promotion of sustainable biomass energy technologies, using market approaches. It will also aim to reduce the amount of biomass energy utilization through the adoption of efficient processes and technologies, which is mainly used for cooking and heating purposes in rural households and local enterprises.

The project objective is the removal of barriers to sustainable production and utilization of biomass resources in the country and application of modern biomass energy technologies (BETs) that can support economic and social development in the country's rural sector. The success of the project is expected to encourage the increased utilization of sustainable biomass energy resources to meet the energy needs for cooking, heating and lighting, as well as productive uses, for rural Bhutan.

The project will draw lessons from and address barriers encountered by the existing GEF-CC projects being executed by the Royal Government of Bhutan and implemented by UNDP Bhutan. The project specifically aims to ensure that biomass energy use is sustainable and does not, in any way, contribute to deforestation, reduced soil fertility or increased GHG emissions beyond project boundaries. In this regard, the Ministry of Agriculture which is responsible for forestry, agriculture and livestock, will be a key partner in this project.

The following are the envisioned components and activities of the proposed project:

Component 1: Mainstreaming Sustainable Biomass Energy - This component will address the institutional and policy-related barriers to the sustainable production, conversion and utilization of biomass energy resources in rural Bhutan. Specifically, it will emphasise the need for an integrated national sustainable energy policy and vision for the country's energy sector; including appropriate legislation, fiscal incentives, guidelines and regulations. The expected outcome from this project component is the implementation of strengthened support policies and regulatory frameworks and institutional capacity for adoption of sustainable practices production, conversion and use of biomass resources in Bhutan. A critical requirement of the proposed project in order to realize this outcome is the harmonization of all stakeholders and institutions working in the promotion of renewable energy and biomass energy, in particular; and, in the establishment of a biomass energy information system that collects, analyses and disseminates data on resources and technologies for sustainable energy production and utilization. This component will involve the provision of technical assistance in the inventory projections, feasibility assessments of specific technologies for the development of targeted financial and fiscal incentives, thereby facilitating widespread application and use of sustainable biomass energy technology as well as certifying the sustainability of the biomass

production.

Among the envisioned activities include those related to: (a) Development and implementation of a roadmap, to operationalise the Renewable Energy Policy, including recommendations for fiscal/financial policy incentives; (b) Technical assistance in economic and financial feasibility assessments for specific biomass energy technology applications, including market development for widespread adoption of such technologies; (c) Technical assistance in the development and implementation of a legal framework for community forestry in designated “production forest”, certification of sustainable fuel wood and targeted initiatives in community tree-planting; and (d) Development and implementation of a central biomass energy resource information system that also provides information on areas earmarked for sustainable forest wood energy production.

Component 2: Innovative Practices for Local Sustainable Biomass Energy Technology Development and Promotion - This component is in line with addressing the technical and market barriers that beset the widespread application of BET and biomass energy-supported projects in Bhutan. The expected outcome from this component is the implementation of BET applications due to improved confidence in their feasibility, performance, environmental and economic benefits. Under this component, the project will provide financial and technical support for the promotion of wood briquetting, biomass gasification, and provision of energy-efficient furnaces/cooking stoves for livelihood enhancement in rural Bhutan.

Among the envisioned activities are: (a) Local production and distribution of 20,000 improved cook stoves in rural households and CBOs; (b) Two pilot biomass gasification demonstrations for power generation and process heating; (c) Custom-made local production of biomass-based energy efficient industrial stoves; (d) One wood briquetting/pelleting demonstration; (e) Technical assistance for the above BET System Demos; and (f) M&E of the above BET demos and other similar projects. For market development, specific activities will include: (a) Conduct of detailed techno-economic feasibility evaluations for local production and marketing of industrial and household energy efficient stove technologies; and (b) development of equipment standards and technical guidelines for project developers and entrepreneurs interested in venturing into BETs.

The target of reaching 20,000 HHs, using a roll-out plan, is necessary to create the critical mass for market mechanisms to kick-in. In order to help local manufacturing development, the project will support the conduct of detailed techno-economic feasibility evaluations for local production and marketing of HH EE cook stoves, the development of standards and technical guidelines for cook stoves production, and training and incentives for entrepreneur development through the Ministry of Economic Affairs. In addition, the project will provide incentives for households to purchase the first energy efficient cook stoves at subsidized rates, based on the experience for the uptake of solar home systems in rural Bhutan. The accompanying marketing programme will include sharing information on health benefits (smoke free kitchens), space heating benefits, reduced fuel wood required, gender equity and empowerment, time saved and cleaner kitchen environment. The techno-economic feasibility studies will also include assessments and recommendations for the phasing out of the non-market incentives once a critical mass of market penetration takes place. Technical standards, certification and guidelines will be developed for the design and manufacture of EE cook stoves during the early stage of the proposed project, and entrepreneurs and regulators will be provided the necessary training. This component will build on the experience and lessons learnt from an earlier attempt to establish a smokeless stoves programme which had suffered from a lack of adequate ownership and M&E, as well as poor perception of its effectiveness and value. These were largely due to a lack of adequate policy and institutional framework and sufficient advocacy of its multi-faceted value. This proposed project will build on these lessons learnt and focus on building the necessary capacities to establish supportive policies and institutions to sustain the programme.

Based on the experiences of the SGP projects and cook stove programmes in Nepal, a business development plan will be prepared during the PPG exercise for operationalizing the cook stove programme within this proposed project.

UNDP-Bhutan, through its GEF- Small Grants Programme (SGP) has in the past supported activities related to sustainable energy production through efficient use of biomass resources, particularly targeting schools, religious institutions and health centres. However, due to a lack of policy and institutional support, this work has not expanded beyond the project sites. The proposed project will build on the experience and lessons learnt from the SGP

program to upscale and mainstream BETs into the wider rural economy, through wider understanding and accelerated market growth.

Component 3: Capacity Building and Knowledge Management - This component will specifically address the barriers of low level of public awareness, technical knowledge and market information regarding improved and efficient biomass energy applications; and, general perception of potential project developers and beneficiaries of biomass energy that currently tend to think that biomass energy projects are risky and investment recovery is difficult. Through this project component, more accessible information on modern biomass energy technology applications will be available, stakeholders will become aware of the ecological benefits of biomass energy, and financing institutions will be favourable towards BET application projects as well as productive uses of biomass energy. It is expected that, as a result of the advocacy campaigns, policy makers would appreciate the advantages and practicality of a thriving BET market in the country, and will establish and implement suitable supportive policies and regulations.

The envisioned activities include: (a) capacity building for the relevant government agencies on integrated rural energy planning and implementation; (b) Conduct of biomass energy technology training courses for project developers and entrepreneurs; (c) Capacity building to local community-based organizations and rural youth on installation, maintenance and support services; (d) Specialized training for 100 trainers on community forestry focusing on forest wood energy; and, (e) Setting-up of a Knowledge Exchange on BET applications. These would be vital in ensuring the replication of biomass-based energy project demonstrations that will be carried out under the proposed project, through getting market mechanisms to work for the expansion of energy access.

Overall, the proposed project is expected to result in a reduction in the annual biomass/fuel wood consumption in Bhutan through the gradual utilization of biomass-based energy systems and efficiency improvements in the rural areas of the country as influenced by the project. The project will facilitate the widespread application of biomass-based energy systems in the country, particularly for economic and social uses in the country's rural areas. The reduction of GHG emissions in the country through use of more efficient fuel wood technologies and sustainable biomass energy generation will in turn result in overall global GHG emissions reduction.

B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL/REGIONAL PRIORITIES/PLANS:

The objective of the project is to reduce the total amount of GHG emissions by utilizing the country's biomass energy resources in a more sustainable manner. The proposed project is consistent with Bhutan's policies on: (1) linking new and renewable energy to sustainable development policies and to actions consistent with international agreements; and, (2) attracting investment supporting national development objectives. It is also in line with the agreed strategic area of support under the current United Nations Development Assistance Framework (UNDAF) from 2008-2012 for Bhutan on (1) Capacity of relevant agencies and communities to implement Renewable Energy Program improved; and, (2) Effective and affordable renewable/alternative energy technologies for remote Geogs (a group of villages) supported. The project, while achieving global environmental benefits in terms of CO₂ emissions reductions, will also contribute to the objectives of the country's 10th Five Year Plan, National Poverty Reduction Strategy Program, Renewable Energy Master Plan and the draft Renewable Energy Policy. The project will not only contribute to environmental protection, but it will also support the improvement of the living conditions of people in the rural areas allowing them to contribute more productively to the economy.

C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH [GEF STRATEGIES](#) AND STRATEGIC PROGRAMS:

The proposed project is in line with the GEF Climate Change strategic program objectives (SP-4), which is on the sustainable utilization of biomass for energy services. The proposed project will facilitate the adoption of modern and sustainable practices in biomass-based energy production, conversion and use of energy to support rural development and livelihoods in Bhutan. It will ensure biomass energy use does not contribute to deforestation, reduced soil fertility nor increased GHG emissions beyond the project boundaries.

D. JUSTIFY THE TYPE OF FINANCING SUPPORT PROVIDED WITH THE GEF RESOURCES: The GEF grant will be specifically targeted to provide technical assistance for mainstreaming sustainable biomass energy through strengthening institutional, policy and regulatory frameworks, capacity building, knowledge management and creating an enabling environment for private sector investment and public-private partnerships. The private sector will be

strongly urged to play its critical role in investing into the demonstration projects and in technology development. In the absence of GEF support, the situation is expected to remain the same or worsen in the coming years, in light of the barriers mentioned above and the expected continued growth in energy demand, driven by strong economic growth and an increase in the population. Therefore, it is pertinent that the country harness this energy resource in a sustainable manner. The government's ambitious plans for rural energy development provide an opportunity for GEF to play a catalytic role in addressing systematically these barriers in order to promote modern rural biomass energy services.

E. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES: The project development team will consult and involve the implementers of all ongoing renewable energy projects/programs in the country in the design and development of the proposed project. The team will, in particular, establish relationships and coordinate with the Department of Energy, Department of Agriculture, NGOs/CBOs and the private sector on their ongoing/planned activities and projects that are relevant to the proposed project in order to explore and possibly make use of potential synergies, and ensure complementarity and building on best practices and lessons learned. In the past, a number of government agencies – such as Ministry of Agriculture, Ministry of Economic Affairs, Ministry of Home and Cultural Affairs, Ministry of Finance – and donors and NGOs – such as UNICEF, UNCDF, Government of India, Danida, SNV, UNEP and the Royal Society for the Protection of Nature – have been involved in the provision of renewable energy systems. While most of them have discontinued assistance, some are still active. Most past activities have just focused on the provision of technology and systems and have not considered the sustainability of such systems. Operational aspects and maintenance of the systems were largely ignored. The project will aim at consolidating all past efforts and building upon what has already been accomplished.

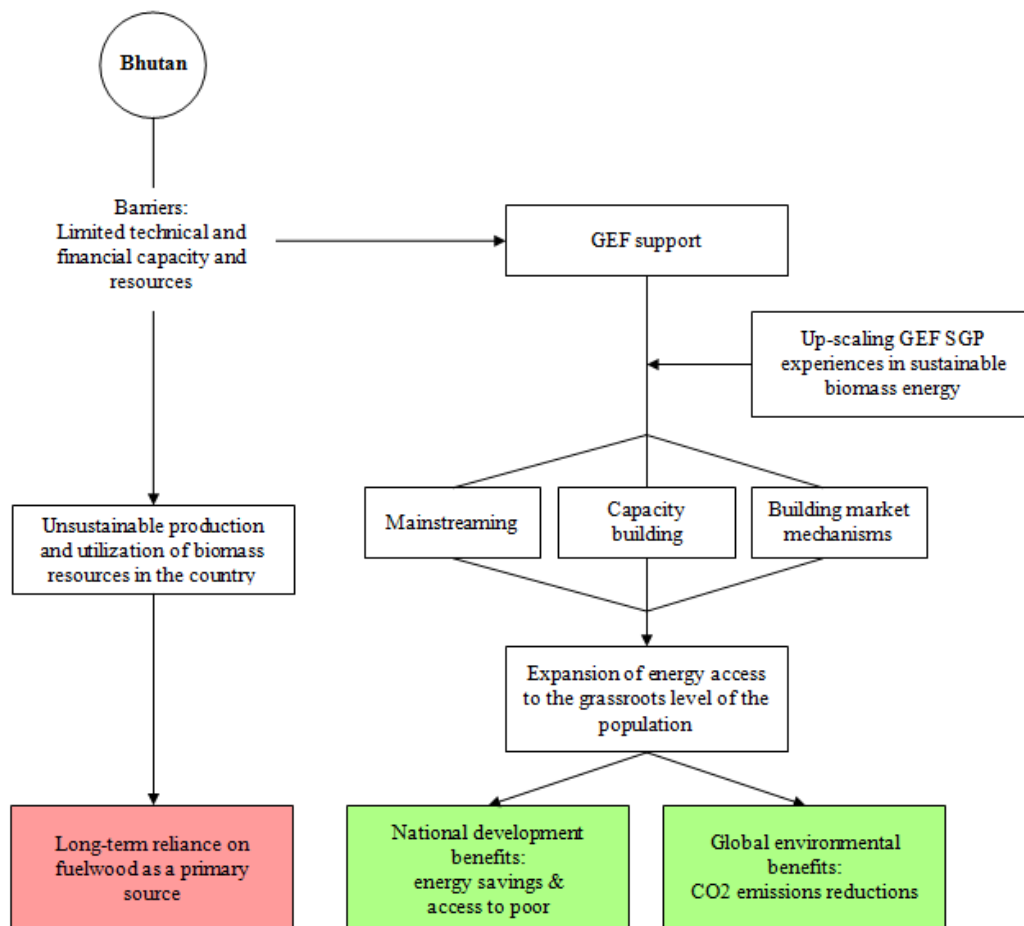
F. DISCUSS THE VALUE-ADDED OF GEF INVOLVEMENT IN THE PROJECT DEMONSTRATED THROUGH INCREMENTAL REASONING : As a least developed country, Bhutan has limited capacity and resources to address its sustainable development needs. While it acknowledges the socio-economic benefits of renewable energy resources such as biomass, it does not have enough technical and financial resources to take advantage of the additional global environmental benefits of biomass energy utilization. Under the business as usual scenario, rural Bhutan, in particular, will continue to rely on fuelwood as its primary source. Inefficient traditional wood stoves and furnaces, coupled with the increasing growth of rural based energy consuming enterprises, will lead to unsustainable production and utilization of the biomass resources in the country.

Without GEF support, the potential global environmental benefits in terms of CO₂ emissions reductions from the sustainable use of energy in rural areas for power generation, household applications for cooking and heating, and for the operation of rural industries by renewable energy resources, biomass in particular, will not be realized. If current barriers that hinder the widespread sustainable and efficient use of biomass in rural areas persist, the potential CO₂ emissions avoidance will not be realized. The country would have limited success in promoting renewable energy as an effective policy and institutional instrument for achieving the country's energy development and utilization objectives. The anticipated increase in fuel wood consumption presents an opportunity to improve the efficiency of using wood biomass fuels and at the same time improve the energy utilization performance in the country's rural areas.

By expanding and mainstreaming the coverage of previous work done in the field of biomass energy production and utilization by the government or by other donor agencies, the magnitude of national development benefits (energy savings) and global environmental benefits (CO₂ emissions reductions) will become more significant. With GEF support for the incremental costs needed to create the much needed policy and regulatory regimes, as well as the market mechanisms that will support widespread applications of BETs, the anticipated energy savings in rural areas can be achieved. In this regard, GEF support will ultimately help achieve GHG emissions reductions in Bhutan's rural sector, which comprises about 70% of the total population. This will help expand energy access to the grassroots level of the population, building on the earlier GEF SGP projects that primarily targeted educational and religious institutions.

While Bhutan is known for its well-preserved natural environment, it is also known to have some of the highest per capital domestic fuelwood consumption in the world, at almost 1.3 tonnes per person per year. With a population growing at 2.5 percent and 70 percent living in rural Bhutan, there is constant and increasing

pressure on the forests of Bhutan. The focus of this project is on rural households. The current fuelwood extraction allocation of 8 cu meters per HH per year for all rural households (and 16 cu meters for HHs in remote areas) is argued as barely sufficient for basic HH needs, and this has led to illegal logging. In addition, urban households are increasingly opting for fuelwood for space heating due to the high electricity tariffs. Proposals are currently in the pipeline for a further increase in electricity rates later this year. These are leading to unsustainable extraction from the forests. There is increasing concern that quality wood is being extracted leaving low quality wood which in the medium to long term will affect Bhutan's ability to sustain its committed forest cover and consequently the carbon stock. Whilst protected areas have increased in the past due to constitutional mandate and national policy to increase ecological diversity and create biological corridors, there is continuous pressure on the forests, particularly in the buffer zones of protected areas, and this project proposal aims to contribute towards a reduction of this pressure.



G. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED, AND IF POSSIBLE INCLUDING RISK MITIGATION MEASURES THAT WILL BE TAKEN:

Based on preliminary discussions with stakeholders and the Department of Energy, it is expected that the overall project risk will be moderate. The potential risks, which could hinder the successful project implementation and/or reduce project effectiveness, are in the aspects of: (1) Availability of adequate technical support; (2) Level of support and cooperation of national and local stakeholders; (3) Level of economic and technical opportunities of BETs to compete on a level playing field with locally used as well as potential export of other types of energy to replace diesel oil like hydropower based electricity, etc.; (4) Cooperation of energy consumers and biomass energy suppliers and local government agencies, on the provision and monitoring of energy data; (5) Cooperation and interest of the financing institutions in supporting BET's in support of rural development initiatives; and, (6) Willingness of the private sector and the NGOs to participate in the project.

To address these anticipated risks, the project will be designed to include an effective means to monitor and to the extent possible mitigate these risks. A project monitoring & evaluation plan will be prepared to track not only the project milestones, but also the indicators that will show that the identified risks are, if not eliminated – at least mitigated. Mitigation measures will include a strong emphasis on hands-on project management and conducting some capacity development activities for the project staff; enhanced participation of the stakeholders in the rural communities; continuous dialogue and coordination with the private sector, especially the local businesses; and, constant dialogue between the projects implementing partner and project stakeholders. Stakeholders will be engaged from the project design stage.

H. DESCRIBE, IF POSSIBLE, THE EXPECTED COST-EFFECTIVENESS OF THE PROJECT:

Building on the cost-effective approaches piloted through SGP, the proposed project targets the realization of a substantial increase in the sustainable and efficient use of biomass energy resources for the provision of energy services in Bhutan’s rural sector (i.e., for household, community and rural industry uses) facilitated through the barrier removal activities focussing on institutional strengthening, regulatory framework, capacity building, market development and other technical assistance activities that will be implemented. During the project preparation phase, targeted consultations will be held with local entrepreneurs to participate in the demonstrations projects, investing in the land, premises and hardware of the projects. Also, Component 1 of the proposed project focuses strongly on specific development and implementation of a roadmap for sustainable bioenergy promotion, to be complemented with recommendations for fiscal incentives from the Ministry of Finance, as well as earmarked areas for sustainable bioenergy production.

Approximately 83,000 tonnes of CO2 emissions will be avoided directly through this project alone, through the demonstration projects, biomass gasifier, improved cookstoves and energy efficient industrial stoves. Through the development of market mechanisms for sustainable bioenergy technologies, this figure is expected to be at least three times more, giving a cost of slightly less than USD 7 of GEF resources/tonne of CO2 emissions avoided. This preliminary figure will be re-evaluated and updated during the project preparation phase particularly in quantifying the potential energy savings from the confirmed project sites and projected replications and in coming up with the CO2 emissions reduction estimates. The updated CO2 emission figures will be indicated in the project document that will be submitted later for CEO endorsement. The project’s cost effectiveness will be tracked using a monitoring and evaluation system that the proposed project will develop.

I. JUSTIFY THE COMPARATIVE ADVANTAGE OF GEF AGENCY: The proposed project is aligned with UNDP’s comparative advantage, as articulated in the GEF Council Paper C.31.5 “Comparative Advantages of GEF Agencies”, in the area of capacity building, providing technical and policy support as well as expertise in project design and implementation. UNDP’s comparative advantage for the proposed project lies in its continuous in-country presence and experience working with the Royal Government of Bhutan on various climate change and environment projects.

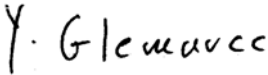
PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):
(Please attach the [country endorsement letter\(s\)](#) or [regional endorsement letter\(s\)](#) with this template).

NAME	POSITION	MINISTRY	DATE (<i>Month, day, year</i>)
Mr. Karma Tshiteem	Secretary	GNH COMMISSION	March 6, 2009

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for project identification and preparation.

Agency Coordinator, Agency name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Yannick Glemarec, UNDP/GEF Executive Coordinator		May 6, 2010	Faris Khader, Regional Technical Specialist for Climate Change	+66 2288 2756	faris.khader@undp.org