Government of Nepal

Ministry of Foreign Affairs of Denmark Netherlands Development Organisation United Nations Development Programme Royal Norwegian Ministry of Foreign Affairs Kreditanstalt für Wiederaufbau Development Bank United Kingdom Department for International Development

NATIONAL RURAL AND RENEWABLE ENERGY PROGRAMME

NEPAL

PROGRAMME DOCUMENT

June 2012

COVER PAGE

Country	: Nepal
Programme	: National Rural and Renewable Energy Programme (NRREP)
Components	: (i) Central Renewable Energy Fund, (ii) Technical Support and (iii)
	Business Development for Renewable Energy and Productive Energy Use
National Agencies	: Alternative Energy Promotion Centre (AEPC) (Executing Agency), Central
	Renewable Energy Fund (CREF)
Starting date	: 16 th July 2012
Duration	: 5 years
Budget	: USD 170 million

The development objective of NRREP is to improve the living standard of rural women and men, increase employment of women and men as well as productivity, reduce dependency on traditional energy and attain sustainable development through integrating the alternative energy with the socioeconomic activities of women and men in rural communities.

The immediate objective of the Central Renewable Energy Fund Component is to institute the CREF as the core financial institution responsible for the effective delivery of subsidies and credit support to the renewable energy sector.

The immediate objective of the Technical Support Component is to accelerate renewable energy service delivery with better quality, comprising various technologies, to remote rural households, enterprises and communities, to benefit men and women from all social groups, leading to more equitable economic growth.

The immediate objective of the Business Development for Renewable Energy and Productive Energy Use Component is to contribute to an increase in income and employment generation potential for micro, small and medium sized enterprises in rural areas, particularly for men and women belonging to socially and economically disadvantaged groups.

COMPONENT	USD	% of total
	Million	
Central Renewable Energy Fund	113.1	66
Technical Support	40.1	24
Business Development for	8.4	5
Renewable Energy and Productive		
Energy Use		
NRREP Management	5.1	3
Studies, audits, reviews	3.4	2
TOTAL	170.1	100

The distribution of the total indicative budget for NRREP is:

EXECUTIVE SUMMARY

Development Objective

1. The development objective of the National Rural and Renewable Energy Programme (NRREP) is to improve the living standard of rural women and men, increase employment of women and men as well as productivity, reduce dependency on traditional energy and attain sustainable development through integrating the alternative energy with the socioeconomic activities of women and men in rural communities.

Strong Poverty Reduction Focus

- 2. NRREP has a clear emphasis on effectively reaching out to the more remote and poorest part of the country, it will apply demand led approaches actively involving beneficiaries in decision making, and support use of energy for productive purposes leading to income and employment increase in rural areas, and it has mainstreamed Gender and Social Inclusion (GESI) into the programme at all levels.
- 3. GESI mainstreaming is done by including it in the development objective, each of the immediate objectives, in relevant outputs and activities, in indicators and targets as well as in monitoring. It is expected that the Government of Nepal (GoN) will mainstream GESI in the energy sector through providing equal access to and control of renewable energy technologies (RET) for increasing contributions to rural women and men towards economic growth. This will be in line with the GoN commitment to mainstream GESI and empowerment of women in the interim 3 year (2010-2013) plan.

Single Programme Modality

4. A distinctive feature of NRREP is that it will be a single programme modality in

which there will no other AEPC executed Development Partner supported renewable energy programmes or projects funded outside the NRREP. This is made to remove inefficiencies, duplication, lack of co-ordination, supply led projects and fragmentation of aid to the rural and renewable energy sector in Nepal.

Central Renewable Energy Fund

- 5. The immediate objective of the Central Renewable Energy Fund (CREF) Component is to institute the CREF as the core financial institution responsible for the effective delivery of subsidies and credit support to the renewable energy sector.
- 6. This objective will be reached through establishing the CREF as an independently resourced and managed organisation with the capacity to effectively deliver subsidies and credit financing support to help implement RET deployment at a household and community levels.

Technical Support

The immediate objective of the Technical 7. Support Component is to accelerate renewable energy service delivery with better quality, comprising various technologies, to remote rural households, enterprises and communities, to benefit men and women from all social groups, leading to more equitable economic growth. Several RETs will be supported, each with their distinctive characteristics and implementation strategies, and institutional building support will be provided to AEPC and the decentralised structures as well as support to income generating and livelihood activities in catchment areas of community electrification schemes.

- 8. Within biomass, better quality Improved Cooking Stoves will be delivered to an increasing number of rural households, in particular to the poor in remote districts. Focus will be on strengthening promotion of biogas in the household market and expanding promotion into the institutional market. Within the area of solar energy, lower cost domestic solar electric systems will be delivered more efficiently to an increasing numbers of rural households, and solar thermal applications will be promoted in a GESI and poverty relevant manner. The financial viability of community electrification schemes will be increased, and it will be sought to maximise availability of productive electricity at the village level. The strategy is to assist the AEPC, through implementation of its Strategic Organisational Development plan, to become an effective, efficient and GESI proactive institution for the promotion and development of the Renewable Energy (RE) sector.
- 9. One of the potential effects of the Technical Support Component will be a strengthened RET supply sector in Nepal. Through the use of the private RET sector, its capability will be increased to supply more and better quality RETs as well as potentially carry out innovation activities. With the substantial support provided to the various RETs and with the high number of beneficiaries of NRREP. this green economy sector will be stronger at the end of the five years NRREP implementation period. This provides opportunities for RET suppliers to have a foundation for increasingly supplying to the non-subsidised markets.

Business Development for Renewable Energy and Productive Energy Use

10. The immediate objective of the Business Development for Renewable Energy and Productive Energy Use (PEU) Component is to contribute to an increase in income generation and employment potential for micro, small and medium sized enterprises (MSME) in rural areas, particularly for men and women belonging to socially and economically disadvantaged groups. This will be reached through three outputs: (i) Capacities of existing MSMEs are enhanced; (ii) New and innovative MSMEs are created and operationalised, with a specific emphasis on integrating women and marginalised section of the population, and (iii) Appropriate Business Development Services are available to MSMEs in renewable energy catchments areas.

Specific measures to address other issues

- 11. The NRREP will have a positive effect on environment and climate change in Nepal. Specific activities of NRREP are addressing opportunities for benefits accruing from the Clean Development Mechanism and other climate finance mechanisms, potentially leading to a stream of income being generated for the CREF. Where introduction and scaling up of RETs have negative environmental consequences (used batteries for solar systems, emissions from MSMEs in areas where micro hydro power is being developed or impact from micro hydro power from events such as flash floods) mitigation measures are part of the NRREP design.
- 12. Democratisation and good governance are addressed across the NRREP in different ways. The use of the local governance system in NRREP in principle addresses democratisation as lower levels of government will be involved. However, consideration should be given to the fact that there have not been held local elections and that there is no timeframe set for such elections. Transparency, as a method to promote good governance and

accountability, will across components penetrate implementation, including the use of a public disclosure system especially where micro-hydro power systems are established.

13. HIV/AIDS are addressed across the NRREP in a number of ways including through capacity development activities among communities exposed to high risks of HIV/AIDS. Activities will include awareness rising on issues of HIV/AIDS, information provision, measures of prevention, and prevention of gender based violence and trafficking.

Budget

14. The total budget available for NRREP is distributed among components as follows:

COMPONENT	USD Million
CREF	113.1
Technical Support	40.1
PEU	8.4
NRREP Management	5.1
Studies, audits, reviews	3.4
TOTAL	170.1

- Of the total budget the Government of Nepal (GoN) contribution is 40%. The GoN contribution to CREF is expected to be 55%.
- 16. The funding made available for NRREP consists of non-earmarked and earmarked funding, including funds earmarked for provision of technical assistance in monetary and in-kind forms.

Management

17. The overall management of NRREP will be carried out by the NRREP Programme Steering Committee. With AEPC being the executing agency, the NRREP Programme Director will be the Executive Director of AEPC. Day-to-day management of the Technical Support and **Business Development for Renewable** Energy and Productive Use of Energy Components will be the responsibility of AEPC Programme Managers. The CREF will be managed by a Chief Executive Officer (CEO). A Senior Adviser as well as national advisers will be contracted for providing advice to AEPC. A Compliance and Quality Assurance Unit will be established for providing oversight and support to financial and procurement management as well as for quality assurance and support to Value for Money audits across NRREP. The Unit will be led be a Senior Fund Management Adviser, being posted in CREF, where the adviser also will provide support to the CEO of CREF. Advisers in NRREP will work across components where relevant in order to complement each other and increase the impact of the programme.

Monitoring and Evaluation

18. As a principle the NRREP Monitoring & Evaluation (M&E) system will be aligned to GoN monitoring requirements. The objective of the M&E system is to provide systematic feed back to NRREP management enable adjustments to be made to implementation strategies and outputs in order to effectively reach the expected outcomes and contribute to realisation of the development objective. Monitoring is in NRREP viewed as a management tool that enable result-based management. At the development and immediate objective levels, where indicators and targets have been defined, the M&E system will regularly make assessments on the degree of progress towards reaching the development impact and outcome. A baseline has been produced in 2011, and cover all the RETs delivered through renewable energy programmes and projects. Focus will be on result based monitoring of energy related climate change impacts and socioeconomic impacts.

19. The design of the NRREP M&E system will benefit from and be done in conjunction with design of the system for monitoring of the Business Development for Renewable Energy and Productive Energy Use Component, which will be developed to be compliant with the "Donor Committee on Enterprise Development" standards on measuring and reporting results.

Key Assumptions

20. Key assumptions of NRREP are:

- Continued high prioritisation given to the rural and renewable energy sector by the GoN;
- High degree of commitment to and cooperation with NRREP from the Ministries of Finance, Environment, Local Development and Energy;
- Continued decentralisation through the local governance system to strengthen the District Development Committees/Village Development Committees and District Environmental and Energy Units which plays an important role in NRREP implementation;
- The agreed financial resources are smoothly forthcoming from GoN and Development Partners to NRREP in order to avoid periodic funding gaps which potentially would lead to disruptions in NRREP implementation, including subsidy provision, and
- AEPC is fully staffed with competent people in all its permanent (core) positions.

Major risks

21. The major risks of NRREP are:

- The inherent GoN bureaucracy including a slow implementation of reforms to make AEPC autonomous;
- Other Development Partner supported renewable energy programmes or projects being implemented;
- The GoN commitment to revise the subsidy system and to provide a larger portion of the subsidies for RETs as an exit strategy for the Development Partner support is not honoured;
- A financially safeguarded CREF is not established, leading to risk of financial mismanagement;
- A slow establishment of an effective CREF will lead to delays and a less effective NRREP;
- The large amount of subsidies and credit to be provided is a driver of the market for RETs, potentially distorting the market and encouraging market inefficiencies, including increasing RET prices;
- Fiduciary risks for Public Financial Management in Ministry of Environment, Ministry of Local Government and AEPC, and risk of corruption, and
- The new constitution of Nepal is yet to be finally decided upon. While Nepal will be a federal state the implications for the institutional set-up within the country will remain unclear for some time. The new constitution could have an influence on the future organisation of AEPC and hence influence NRREP.

TABLE OF CONTENTS

	utive Summary of Abbreviations	Page iii 3
1.	Introduction	4
2.	Justification 2.1 Reduction of Poverty and Provision of Energy Services 2.2 More Effective Implementation Modalities 2.3 Expected Results 2.4 Major Differences NRREP Will Make	5 5 7 7 8
3.	Summary of Design 3.1 Strategies 3.2 Aid Modalities and Component Complementarities 3.2 Exit Strategy	8 8 9 10
4.	Development Objective	11
5.	Immediate Objectives 5.1 Central Renewable Energy Fund 5.2 Technical Support 5.3 Business Development for Renewable Energy and Productive Energy Use	11 11 12 13
6.	Specific measures to address other issues	14
7.	Budget	15
8.	Management and Organisation 8.1 Steering of NRREP 8.2 Day-to-day Management of NRREP	16 16 17
9.	Financial Management and Procurement 9.1 Budgeting and Flow of Funds 9.2 Accounting 9.3 Auditing 9.4 Procurement	21 22 24 25 26
10.	Monitoring, Reporting, Reviews and Evaluations 10.1 Monitoring 10.2 Reporting 10.3 Reviews 10.4 Evaluations	26 26 27 28 28
11.	Key Assumptions and Risks	28

ABBREVIATIONS

AEPC	Alternative Energy Promotion Centre
ADB	Asian Development Bank
AIDS	Acquired Immuno-Deficiency Syndrome
AW&B	Annual Work Plan and Budget
BFI	Banking Financial Institution
CEO	Chief Executive Officer
CREF	Central Renewable Energy Fund
Danida	Danish International Development Assistance
DDC	District Development Committee
DEES	District Environmental and Energy Section
DFID	Department for International Development (UK Aid)
DKK	Danish Kroner
EoD	Embassy of Denmark
ESAP	Energy Sector Assistance Programme
EU	European Union
EUR	Euro
GBD	British Pound
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GoN	Government of Nepal
GPS	Global Positioning System
GESI	Gender and Social Inclusion
HIV	Human Immuno-deficiency Virus
JFA	Joint Financing Agreement
KfW	Kreditanstalt für Wiederaufbau Development Bank
kW	Kilo Watt
M&E	Monitoring and Evaluation
MFI	Micro Finance Institution
MoEnv	Ministry of Environment
MoLD	Ministry of Local Development
MoU	Memorandum of Understanding
NGO	Non Governmental Organisation
NOK	Norwegian Kroner
NPR	Nepalese Rupee
NRREP	National Rural and Renewable Energy Programme
PCR	Programme Completion Report
RET	Renewable Energy Technologies
RSC	Regional Service Centres
SA	Senior Adviser
SNV	Netherlands Development Organisation
SOD	Strategic Organisational Development
SREP	Scaling-up Renewable Energy Programme
TA	Technical Assistance
UNDP	United Nations Development Programme
VDC	Village Development Committee

1. INTRODUCTION

The Government of Nepal (GoN) and a number of Development Partners have for many years supported the rural and renewable energy sector in Nepal. In 1996, the GoN established the Alternative Energy Promotion Centre (AEPC) with the purpose of developing and promoting renewable energy technologies in Nepal. Since then, AEPC has been able to establish itself as a national focal point for coordinating renewable energy related activities in Nepal, and it has been actively promoting the use of these energy technologies through implementation of a number of programmes and projects to meet the rural energy needs. As AEPC addresses an important need of the rural poor, it has been able to attract support from bilateral and multilateral Development Partners, including but not limited to ADB, Danida, DFID, the EU, KfW, the Norwegian Ministry of Foreign Affairs, SNV, UNDP and the World Bank.

The major implementation modality has been that each Development Partner, in some cases together with one or two others, has supported project interventions hosted by AEPC. With especially the second phase of the Energy Sector Assistance Programme (ESAP II) (financed by the GoN, Danida, DfID, the Norwegian Ministry of Foreign Affairs, KfW and SNV) an approach towards a more coherent and coordinated approach has gradually evolved. During the last number of years, a process has taken place towards agreeing among a number of the major Development Partners and the GoN on a joint formulation, support and subsequent implementation of a single programme modality for support to the renewable energy sector. This has resulted in agreeing to a Transition Aide Memoire in 2011 in which the parties (GoN, Danida, DfID, the Norwegian Ministry of Foreign Affairs, KfW, SNV and UNDP) jointly agreed to support formulation of a National Rural and Renewable Energy Programme (NRREP), that it will be a single programme modality in which there will no other programmes or projects funded outside the NRREP and where the GoN has committed itself to reform the subsidy system and finance a higher portion of the subsidies for Renewable Energy Technologies (RET).

The single programme modality implies that the GoN/AEPC will commit to include all future programmes and projects under NRREP where AEPC is the executing partner. The aim is that a number of additional Development Partners (including, but not limited to the World Bank and the Asian Development Bank) can sign up to the NRREP in future in support of the objectives and outputs of NRREP, and follow the overall managerial structure of NRREP in order to avoid parallel implementation structures.

The above process has led to the formulation of the NRREP Programme Document and its three annexed Component Descriptions during 2011 and 2012. The structure of the NRREP including its components was decided in March 2011 with the preparation and approval of the NRREP Concept Note. It was also agreed among Development Partners and the GoN that the Danida Aid Management Guidelines should be used for presenting the NRREP programme documents. A fundamental assumption for the NRREP formulation process has been that while a number of best practises from present programmes and projects will be incorporated, the NRREP will not be a continuation or a new phase of on-going activities, but it will have its own objectives, outputs, management and implementation arrangements.

Following the appraisal of the draft documents during April and May 2012, the process of approval by the respective partners will take place during the remaining part of 2012. A code of conduct ("Compact") for the single programme modality will be developed and signed by all Development

Partners in the sector. Following the signing of the Joint Financing Agreement (JFA) by the GoN and at least one Development Partner, implementation is scheduled to start 16th July 2012. It is expected that Norway will be the first Development Partner to sign the JFA.

2. JUSTIFICATION

2.1 REDUCTION OF POVERTY AND PROVISION OF ENERGY SERVICES

About 85% of the total final energy consumption in Nepal is met by biomass in terms of firewood (75%), agricultural residues (4%) and animal waste (6%). The rest is met by commercial sources, i.e. petroleum products, coal and electricity (around 2%). The low level of commercial energy consumption in the country reflects the very low level of industrial activities. The household sector dominates (approximately 90%) over other sectors in total energy demand. Although there is a strong urbanisation trend, the rural households are accounting for more than 80% of the total households in Nepal. About two thirds of the energy is used for cooking in rural areas and household monetary expenditure on energy is low, partly as they do not have access to RETs, partly due to their small income. However, there are considerable variations in the use of different sources of energy according to the geographical areas, gender and different groups.

Rural electrification has been going on for the past thirty years, but at a relatively slow pace, which has not kept up with population growth. Hence, the number of people without access to electricity in absolute terms was higher by the year 2000 than it was twenty years earlier. The official estimate of the proportion of households in Nepal that have access to electricity is 56%. However, the actual number might be lower as fully reliable statistics are difficult to obtain. In addition, there is a current energy crisis in Nepal with many hours of daily load shedding and the GoN has declared a four year period of Energy Emergency.

Nepal is endowed with good renewable energy potential. The major sources of renewable energy are hydropower, solar energy and various forms of biomass. Despite the important achievements in development of renewable energy technologies in the country, the renewable energy services are not equitably distributed across Nepal. People residing in the remote geographical areas of the country are mostly deprived of such energy services. The reasons behind this include the high cost of development, low income of people, low level of awareness, and low capacity of the institutions involved in the development of renewable energy services at local level.

The majority of people in Nepal live in rural areas and are poor. To reduce rural poverty, it is necessary to increase agricultural productivity and promote more non-farm livelihood activities by increasing the number of micro, small and medium sized enterprises (MSME), and since cost per unit of grid to reach those areas is very high due to the difficult terrain, renewable off grid energy solutions are the obvious answer to this challenge. It is not possible to significantly improve the standard of living of the rural poor if their demand for relevant energy services is not met.

Strategies to reach out to the remote parts of the country in order to effectively address reduction of poverty of the poorest part of the rural population include implementation of a revised subsidy delivery mechanism, contracting of Regional Service Centres by AEPC in the most poverty affected areas and to use a cluster approach to selection of prioritised districts. One of the methods to be used in the prioritisation process will be existing poverty mapping of Nepal as well as the plans for extension of the grid.

Energy is a vital source of people's daily lives and livelihood for cooking, heating, lighting, food production, storage, health, education, industrial production/manufacturing, transportation etc. Energy is, therefore not only an issue of soundness of technology used and installed, but more importantly an issue of democratic use and distribution – with equality in access and control of the technology and bringing about redistributive change in energy sector, and distribution of RE to ensure that control of energy is not concentrated in the hands of a few privileged.

As access to technology is power, it is important that power relationships and ownership be balanced between men and women and between and within different groups of population. The key issue is how to provide equal access to resources and opportunities to women and men in all the population groups as their right to basic needs and livelihood. Nepalese society is characterised by a gender and social system based on gender and cast hierarchy following a patriarchal value system. This determines the roles and relationship between women and men, and between different groups. In the energy distribution, it also influences the share, ownership and benefits accruing to women and men in different ethnic groups and between different disadvantaged groups. NRREP is designed to overcome such gender and social cultural constraints to ensure equal access in the renewable energy sector through mainstreaming of Gender and Social Inclusion (GESI).

A core element of reducing poverty in Nepal is therefore to improve the conditions of living for women and the socially excluded. One of the vehicles for this is to provide relevant renewable energy solutions demanded by women and the socially excluded as well as involving these groups in the mainstream development including in decision making, policy formulation, actual promotion and dissemination of RETs. A number of the renewable energy solutions specifically addresses the needs of women and socially excluded, including Improved Cooking Stoves (ICS), domestic biogas, solar tuki (mobile lamp), small solar water pumping and improved water mills.

A critical reason for providing support to rural and renewable energy is the need to reduce the negative impact on environment and climate change, as Nepal is one of the most vulnerable countries in the world to climate change. The RETs in use do all contribute to climate change mitigation by substituting fossil fuels with electricity from renewable sources, and by reducing the use of firewood and in part oil-based fuels for cooking and other thermal applications. However, adverse impacts cannot be excluded (especially in terms of used lead-acid batteries for solar systems) unless specific counter measures are designed and implemented.

The NRREP will have a strong poverty reduction focus. It will have a clear emphasis on effectively reaching out to the more remote and poorest part of the country, it will apply demand led approaches actively involving beneficiaries in decision making, and support use of energy for productive purposes leading to income and employment increase in rural areas, and it has mainstreaming GESI into the programme at all levels. GESI have been mainstreamed into the NRREP by including it in the development objective, in immediate objectives, in relevant outputs and activities, in indicators and targets as well as in monitoring. It is expected that the GoN will mainstream GESI in the energy sector through providing equal access to and control of RETs for increasing contributions to rural women and men towards economic growth. This will be in line with the GoN commitment to mainstream GESI and empowerment of women in the Interim 3 year plan (2010-2013).

In conclusion, the NRREP is justified on the grounds that an insufficient amount of energy is provided in Nepal, the access is unequally distributed, renewable off-grid energy solutions is the only realistic way to provide energy in parts of the country, the programme has a strong focus on poverty reduction, and provision of these energy solutions has a good potential to increase the living conditions of women and the socially excluded. Further, it reduces the negative impact on the environment and climate change.

2.2 MORE EFFECTIVE IMPLEMENTATION MODALITIES

The fragmentation of projects to support rural and renewable energy in Nepal has not been an effective method in delivering the intended results. This experience has gradually led to a more programmatic approach being developed. With preparation of NRREP a large step has been taken in the direction of a coherent programme to be implemented under a single programme approach, to which both the GoN and Development Partners have agreed.

The NRREP is aligned to the evolving GoN policy framework, a framework a.o. consisting of a draft AEPC Bill, which, when approved will lead to a more autonomous AEPC, a draft Strategic Organisational Development (SOD) plan as well as a number of existing policies.

The assessment of fiduciary risks carried out by DFID concluded that risks associated with Public Financial Management systems of GoN and in particular the financial management systems of Ministry of Local Development (MoLD), Ministry of Environment (MoEnv) and the AEPC are high, and that the risk of corruption in the government system is also assessed to be high. Transfer of financial resources to subsidise delivery of renewable energy solutions to the poorer part of the population therefore requires establishment of a ring fenced financial set-up around the Central Rural Energy Fund (CREF) and implementation of a number of other risk mitigation measures.

Technical assistance is justified to support implementation of NRREP in order advise on effective technical solutions, establishment and operation of proper monitoring systems and quality assurance as well as to develop modalities for a widespread productive use of energy. However, modalities will be different from present projects in that all programme staff will be managed and contracted by AEPC, and only supported by a small group of national and international technical advisers. Based on the experience from present interventions, continued, targeted and result oriented capacity development is also an important element of NRREP, and a prerequisite for reaching set targets.

2.3 EXPECTED RESULTS

The expected major results of the NRREP can be summarised as follows:

- Dissemination of RETs has reached the following targets:
 - Mini and Micro Hydro Power: 25 MW
 - o 150,000 households benefitting from community electrification
 - o Solar Home Systems: 600,000 systems
 - Improved Cooking Stoves: 475,000 stoves
 - o Biogas: 130,000 household systems
- 1,300 new MSMEs have been established and employment increased by 19,000 persons.
- AEPC is by stakeholders recognised as an effective and efficient service institution for development of the Renewable Energy sector;

More details on other targets are found in Component Descriptions. The quantitative targets are based on three main assumptions: GoN targets set for AEPC, funds available and implementation capacity.

The above results of NRREP are the means, which will contribute to reaching the development objective, reduction of poverty of women and men in rural Nepal.

2.4 MAJOR DIFFERENCES NRREP WILL MAKE

One of the major differences the NRREP will make is the provision of additional resources to the rural and renewable energy sector. This is expected to lead to a larger market for RETs, a higher number of poor and remote households getting access to affordable and effective energy solutions, and enable both women and men and socially excluded to improve their standard of living. The structured approach of NRREP to support productive end use of energy will both enable micro hydro power plants to become self-sustainable and increase the livelihood and income generating prospects of poor people. Compared to the present situation with largely uncoordinated projects, the single programme approach to which both the GoN and Development Partners have agreed, will enable higher effectiveness of provided resources, lower transaction costs and more transparency. In addition, through the provided technical assistance for monitoring and quality assurance purposes, a result will be higher quality of the installed RETs.

3. <u>SUMMARY OF DESIGN</u>

3.1 STRATEGIES

The overall strategies of the GoN for supporting renewable energy have most recently been stated in the Three Year Plan Approach Paper (2010/11 - 2012/13). The five major strategies were described as:

- Emphasise the development and expansion of renewable energy under a decentralised energy system;
- Give priority to integrated programmes for improving the socioeconomic standard of rural people and environmental sustainability through alternative energy;
- Promote partnership and coordination with related stakeholders like local bodies, private sector etc. for the development and expansion of alternative energy;
- Develop the rural energy in consideration with sustainability and appropriateness, and
- Give emphasis on research and technology transfer of alternative energy.

This is also in accordance with strategies of NRREP Development Partners of poverty reduction, increasing developing countries access to dependable and sustainable energy and encouragement of the private sector involvement in the development of innovative solutions, strengthening the environmental and climate efforts in developing countries and to seek to enhance women's freedom, rights and economic opportunities in particular.

The strategies of NRREP are as well in accordance with the Energy+ initiative launched by the United Nations in the second half of 2011. The NRREP contributes to securing energy for all in Nepal, supports institution building and reforms of the renewable energy sector, promotes partnerships between the public and private sector and seek to scale up energy access. Likewise, the NRREP is in full accordance with the "International Year of Sustainable Energy for All in 2012", declared by all member states of the United Nations.

Both the GoN and Development Partners of NRREP have signed up to the international alignment and harmonisation agenda as agreed in the Paris Declaration and the Accra Agenda for Action. The NRREP is designed within this framework.

AEPC, with its objective of developing and promoting renewable/alternative energy technologies, is the core national partner of the NRREP. AEPC is the institutional host for a number of projects and programmes all coming to an end during 2012. The NRREP has been designed on the basis of lessons learned from these past and present projects and programmes.

3.2 AID MODALITIES AND COMPONENT COMPLEMENTARITIES

The most distinctive features of NRREP are that it in its support package has a combination of financial resources, technical assistance and capacity building, that it is aligned to the emerging new policy framework for renewable energy, that it is a single programme approach, that GESI is mainstreamed into all levels and components, and that its implementation modalities are adjusted to the realities of high fiduciary risks of Public Financial Management systems in Nepal.

The three components of the NRREP has been selected from the point of view that they should mutually support each other and each should address important and distinctive aspects of providing rural and renewable energy services. Synergies between the components are described in detail in each of the Component Descriptions.

One of the obstacles for higher penetration of RETs to rural poor people is their ability to pay. This will be addressed through the legal establishment of the CREF that is intended to provide both subsidies and facilitate credit access to the rural poor for RETs. The aim of the CREF is that is should be an institutionalisation of the existing project based Rural Energy Fund. One of the aims of the CREF Component is to establish and strengthen the capacity of CREF to effectively deliver financial resources.

The Technical Support Component covers the activities that are needed as a complement to the financial resources provided through CREF for RET subsidies and credit. Technical support covers a long and diverse range of services to be provided to ensure quality of renewable energy services, effective and innovative delivery mechanisms, various forms of support to beneficiaries, suppliers and promoters as well as relevant research and innovation activities, with a focus on promotion of RETs that are particularly supportive of GESI objectives. Technical support will also be provided across various RETs for utilising the possibilities for capturing the market for innovative climate financing mechanisms including the Clean Development Mechanism as well as to monitor installation of RETs and provision of maintenance services. In short, a distinctive feature is that the prime aim of the above mentioned activities is not to strengthen the AEPC and other public sector organisations, but to ensure that RETs of an acceptable quality are effectively delivered to beneficiaries by the private sector. The Component will in parallel cover activities that all aim at strengthening existing public sector institutions enabling these to fulfil their roles in RE sector development. For the executing agency, AEPC, to be able to fully play its roles in the sector there is a need for sector reforms followed by capacity development activities.

Workable linkages between AEPC and the District Development Committees (DDC)/Village Development Committees (VDC) needs to been developed and strengthened through NRREP, taking

into consideration both the roles and responsibilities assigned to the DDCs and VDCs in the Local Self Governance Act, the role of the private sector in delivering renewable energy services and the need for an increased efficiency and effectiveness of the service delivery mechanisms. Involvement of the local government system is in particular relevant in relation to community electrification, both from the point of planning and complementary funding of micro hydro power systems. Strengthening of the District Environment and Energy Sections (DEES) at district level will therefore be expected to increase the sector effectiveness.

The Business Development for Renewable Energy and Productive Energy Use Component is designed to increase the impact of the rural renewable energy intervention, especially by complementing the community electrification activities of the technical Support Component. In many rural renewable energy interventions it has been assumed that the produced energy would automatically be used for value added productive activities (or the focus has just been on providing electricity for lightning) and in that way lead to reduction in poverty among the people in rural areas. As this assumption has often failed to be true, the NRREP will specifically emphasise support to MSME in those villages where in particular community electrification will be supported, with GESI considerations being included where relevant to ensure a practical and acceptable gender balance in the support.

In all components of NRREP there will be capacity development activities addressing specific needs of institutions, private companies, civil society organisations and beneficiaries as a complement to other provided support, with GESI considerations being part of all capacity development activities. The approach of NRREP to capacity development is that it should be based on specific need assessments identified during implementation, that it should be possible to identify and specify which results there will be of the activities and how these will increase the performance of recipients, whether organisations, companies or individuals.

3.3 EXIT STRATEGY

A continued provision of subsidies for RET delivery is not a sustainable solution, and requires an exit strategy. Two important activities address this in NRREP: (i) As a supplement to providing subsidies, credit will be provided in NRREP to enable households obtain RETs. Through repayment, the effect of the credit provision is that a much higher number of RETs can be delivered for the initial injection of funding. With high repayment rates this limit the needs for additional funding for RETs. (ii) Seen from the point of Development Partners an important exit strategy is that the GoN takes the responsibility for funding the largest part of RET subsidies. It was agreed in the Transition Aide Memoire that the GoN will pay a significantly higher amount of subsidies compared to the present situation.

Other elements of the exit strategy are to internalise training that is required in future capacity development in AEPC and other partner institutions, to consolidate all technologies at a workable and sustainable level, including the established quality assurance procedures.

In the context of Business Development for Renewable Energy and Productive Energy Use, the exit strategy is strongly related to the sustainability of the target groups. To ensure appropriation of knowledge and financial sustainability, all activities will strive to work with existing organisations to reinforce their current function or mandate. Regarding MSMEs, the activities carried out need not be sustainable in themselves but their outcomes should contribute to the sustainability of the renewable energy schemes and of the economic activities developed.

4. DEVELOPMENT OBJECTIVE

The development objective of NRREP is equivalent to the objective of alternative energy development in the Three Year Plan Approach Paper (2010/11 - 2012/13, August 2010): To improve the living standard of rural women and men, increase employment of women and men as well as productivity, reduce dependency on traditional energy and attain sustainable development through integrating the alternative energy with the socioeconomic activities of women and men in rural communities.

The statement in the Approach Paper mentions rural people, increased employment and socioeconomic activities of rural communities, but the statement is gender blind. As gender is mainstreamed into the NRREP, the formulation of the NRREP development objective specifically integrates both women and men.

The NRREP development objective is in full accordance with the Millennium Development Goals number one (eradication of poverty and hunger), number three (gender equality) and number seven (environmental sustainability).

5. IMMEDIATE OBJECTIVES

5.1 CENTRAL RENEWABLE ENERGY FUND

The immediate objective of the CREF Component is to institute the CREF as the core financial institution responsible for the effective delivery of subsidies and credit support to the renewable energy sector.

This objective will be reached through a number of specific intervention areas including, establishing the CREF as an independently resourced and managed organisation with the capacity to effectively deliver subsidies and credit financing support to help implement RET deployment at a household and community levels. This will be achieved by enacting legislation to establish the CREF and recruiting a qualified and experienced management team to manage the Fund. The Chief Executive Officer (CEO) and the management team of CREF will validate and approve the final operational rules and procedures of the CREF, as well as its strategy, objectives and targets. These operations will entail delivering an appropriate credit support mechanism as well as a (revised) subsidy programme conducted in close cooperation with the AEPC.

CREF is yet to be established. A process for its design and establishment will be carried out during the second half of 2012. This will ensure that its legal basis be clarified, that the activities to be covered by CREF be determined, the managerial set up agreed upon and the fiduciary risks analysed and appropriate risk mitigation measures be instituted. When agreement on the range of outstanding challenges has been reached, funding from Development Partners can be released for the CREF Component. The CREF Component Description provides the overall point of reference for the detailed design of how NRREP can support subsidy and credit provision to acquisition of Renewable Energy Technologies, including determination of appropriate modalities for providing subsidies, a viable model for providing innovative credit facilities on the basis of a wholesale financial institution approach as well as effectively addressing fiduciary risks.

5.2 TECHNICAL SUPPORT

The immediate objective of the Technical Support Component is to accelerate renewable energy service delivery with better quality, comprising various technologies, to remote rural households, enterprises and communities, to benefit men and women from all social groups, leading to more equitable economic growth. Various RETs will be supported, with the main focus being on biomass, solar and community electrification, each with their distinctive characteristics and implementation strategies.

Larger scale implementation, cost reduction and improved quality are the key words. The main subsectors and technologies targeted are: a) Solid biomass with a focus on Improved Cooking Stoves (ICS) and biogas; b) solar energy with a focus on solar PV home systems, and c) village electrification with a focus on micro-and mini hydropower and on improved water mills, mainly providing energy for milling. The emphasis is on scaling up implementation of established RETs and on improving the quality of all technologies, but other promising technologies will also be promoted in appropriate ways. In addition, the component will provide institutional building support to AEPC and the decentralised structures as well as support income generating and livelihood activities in catchment areas of community electrification schemes.

As the scope of the Technical Support Component includes four broad sub-categories, each of a specific nature, separate strategies need to be followed to address specific needs. However, at a more generic and general level, the scope of the overall strategy is defined as follows:

- Technical support is envisaged to include a number of intervention areas, across the technologyand otherwise defined sub-sectors;
- Analysis of the barriers to scaling up deployment;
- Capacity development at different levels to address deficits of managerial and technical skills and capabilities, as well as limited implementation capacity. While management at the central level is important, it is the implementation capacity at the local level that ultimately determines to what extent deployment of RETs can be accelerated. Therefore, it is anticipated that both AEPC, DDC/DEESs and RSCs and existing and new local organisations and companies will require considerable assistance;
- GESI mainstreaming means that specific affirmative action will be planned, implemented and monitored as a matter of course across all Component activities. Empowerment of women and marginalised groups through enhancement of their technical capabilities and assisting them to take up ownership of the technology;
- Activities are open to all ethnic groups and gender and do not take into account political affiliation of any kind. However, in the light of a mainstreamed GESI approach, some implementation modalities are set to increase access to disadvantaged groups;
- Provision of technical assistance inputs to resolve technical challenges that constrain the progress or quality of RET delivery, as well as climate change and carbon market related requirements;
- The approach to increase and maximise carbon market revenue requires that common principles, tools and practices need to be developed and maintained, and adherence to standards and procedures for carbon finance in the compliance (CDM) and voluntary markets;
- Technical innovation and applied research support in the areas of product innovation, design and manufacture, service delivery and administrative processes;
- Study of potentials and feasibility of new technologies, and

• Resources and other support to implement and test promising new technologies on a pilot project level.

One of the potential effects of the Technical Support Component will be a strengthened RET supply sector in Nepal. Through the use of the private RET sector, its capability will be increased to supply more and better quality RETs as well as potentially carry out innovation activities. With the substantial support provided to the various RETs and with the high number of beneficiaries of NRREP, this green economy sector will be stronger at the end of the five years NRREP implementation period. This provides opportunities for RET suppliers to have a foundation for increasingly supplying to the non-subsidised markets.

5.3 BUSINESS DEVELOPMENT FOR RENEWABLE ENERGY AND PRODUCTIVE ENERGY USE

The immediate objective of the Business Development for Renewable Energy and Productive Energy Use Component is to contribute to an increase in income generation potential for micro, small and medium sized enterprises (MSME) in rural areas, particularly for men and women belonging to socially and economically disadvantaged groups. This will be reached through three outputs: (i) Capacities of existing MSMEs are enhanced; (ii) New and innovative MSMEs are created and operationalised, with a specific emphasis on integrating women and marginalised section of the population, and (iii) Appropriate Business Development Services are available to MSMEs in renewable energy catchments areas.

To obtain long lasting and broad impact of community electrification schemes, it is crucial to work towards their financial sustainability. In addition to generating adequate revenues for the operation and maintenance of the schemes, living standards of women and men and socially disadvantaged groups in rural areas will be improved. This implies that renewable rural electrification translates into equitable local economic development in rural and remote areas, a translation that is not automatic and requires specific productive energy use assistance. The Component formulates a broad range of activities that will contribute to increase the income potential of MSMEs in rural areas by removing some of the main barriers to private sector development.

The strategy to reach the immediate objective takes MSMEs as "entry point", i.e. the approach is not structured as per renewable energy supply type, but according to economic growth potentials. The main guiding principles of the strategy include:

- Focus on removing barriers to economic development;
- Activities must strive towards financially sustainable economic development, and implementing modalities will set appropriate level of cost sharing according to the type of actors and their financial capacities;
- To increase sustainability and economic resilience, activities prioritise the use of local materials, local potentials and local resources;
- Emphasis will be on hands-on trainings and coaching for entrepreneurs;
- Activities will be demand-driven in the sense that technical assistance, training and other supporting measures are provided upon request from the target groups;
- Activities will follow a complete cycle of enterprise development integrating all dimensions of enterprise creation and enterprise growth, and
- Provision of targeted financial incentives and insurances for new activities perceived as highrisk and by supporting the promotion of new activities with pilot projects in communities.

6. SPECIFIC MEASURES TO ADDRESS OTHER ISSUES

The NRREP will have a positive effect on environment and responses to climate change in Nepal. The programme is promoting RETs on a large scale in rural areas where it will substitute the use of kerosene and to a certain extend firewood through the introduction of ICS that are more energy efficient than traditional stoves. Where renewable energy is deployed on a large scale there are opportunities for programme benefits accruing from CDM and other climate mitigation market mechanisms in terms of sale of emission reduction units in one form or another. Specific activities of NRREP are addressing these opportunities, potentially leading to a stream of income being generated for the CREF. AEPC has some initial experience in developing CDM projects, but as market mechanisms evolve further, and standards for participation become more rigorous, it is important for AEPC to stay abreast of developments. Where introduction and scaling up of RETs have negative environmental consequences these have been dealt with in the NRREP design. Two areas potentially result in negative environmental consequences: Used lead-acid batteries for solar systems and emissions from MSMEs in areas where micro hydro power is being developed. An output of NRREP specifically addresses battery management and potential negative environmental impact from MSME development will be addressed at business planning stage.

Democratisation and good governance are addressed across the NRREP in different ways. The use of the local governance system in NRREP in principle addresses democratisation as lower levels of government will be involved. However, consideration should be given to the fact that there have not been held local elections and that there is no timeframe set for such elections. Transparency, as a method to promote good governance and accountability, will across components penetrate implementation, including the use of a public disclosure system especially where micro-hydro power systems are established.

HIV/AIDS are addressed across the NRREP in a number of ways. There is in particular risk of spread of HIV/AIDS through construction works, depending on the scale of operation and construction of micro hydro power plants. One remedial activity is through community based health management to undertake capacity development activities among communities exposed to high risks of HIV/AIDS. The activities will include awareness rising on issues of HIV/AIDS, information provision, measures of prevention, and prevention of gender based violence and trafficking. The electricity from renewable energy in addition provides an opportunity for promotion of Information Technology and Communication, which leads to new possibilities for spread of information on HIV/AIDS.

7. BUDGET

Table 1 presents the sources of the total indicative budget available for NRREP implementation.

Source	Currency	Amount	DKK	USD	% of Total	Comment	
Danida	DKK	205	205	34.7	Total 20	Non earmarked, except for long term	
						technical assistance	
Norway	NOK	150	146	24.7	14	Can allocate more. Non earmarked	
DFID	GBP	5	45	7.6	4	Potentially 5-10 million GBD	
						additional. Non earmarked	
GIZ	EUR	5	38	6.4	4	Earmarked TA	
KfW	EUR	2,5	19	3.2	2	For credit through CREF and battery	
						management. Transfer of existing	
						biogas credit fund. Additional	
						funding possible.	
UNDP	USD	5	30	5	3	Earmarked TA	
SNV	EUR	1	8	1.3	1	Earmarked TA	
SREP	USD	20	118	20	12	For credit through CREF	
GoN	NPR	5668	397	67.3	40	Subsidies, AEPC permanent staff,	
						AEPC recurrent costs, and	
						contribution to programme staff and	
						TA.	
TOTAL			1004	170.1	100		

Table 1Total indicative budget for 5 years. Million. Rounded figures.

The detailed assumptions made for the GoN contribution is mentioned in Annex 1.

Table 2 shows the distribution of the total indicative budget among components.

Table 2	Distribution of budget among components. Million.
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COMPONENT	DKK	USD	% of total
CREF	667	113.1	66
Technical Support	237	40.1	24
Business Development for	50	8.4	5
Renewable Energy and			
Productive Energy Use			
NRREP Management	30	5.1	3
Studies, audits, reviews	20	3.4	2
TOTAL	1004	170.1	100

Notes: NRREP Management also includes staff and recurrent costs of AEPC.

The distribution between CREF and that part of the Technical Support Component which deals with the technology defined sub-sectors (mainly biomass, solar and community electrification) is 80% to CREF and 20% to technical support. The distribution in ESAP II in FY 2011/12 is about 80-20, while the ESAP II Programme Document has a distribution of 83-17. It is assumed that the distribution between subsidies and credit of CREF will be 50-50%.

In case more funds will be forthcoming to NRREP, the overall priorities for use are in the CREF Component (non-earmarked) and the related Technical Support Component (non-earmarked or earmarked). These will be used as buffers.

Annex 2 presents detailed budgets according to outputs, year and distribution of component budgets according to source as well as detailed management costs. The annual budgets should be detailed at the level of activities and sub-activities.

8. MANAGEMENT AND ORGANISATION

8.1 STEERING OF NRREP

The overall management of NRREP will be carried out by the NRREP Programme Steering Committee (PSC).

The responsibilities of the PSC will include:

- Approval of Annual Work Plans and Budgets (AW&B) for the NRREP including each of the components as submitted to the PSC, with recommendations from the management of the respective components and sub-components;
- Approval of inception report and semi-annual progress reports;
- Overall monitoring of NRREP implementation, including progress towards reaching development and immediate objectives, based on defined indicators and set targets. This will provide a basis for strategic decision making at PSC level;
- Overseeing that the planned synergies between components are being implemented, based on reporting from components;
- Making decisions on deviations from plans and budgets, including changes in outputs and budget reallocation between components;
- Approval of terms of reference for audits and of audit reports, and monitoring of follow-up on audit recommendations;
- Endorsement of terms of reference for joint reviews and of review recommendations, and
- Approval of Process Action Plan for any new programme support phase.

To ensure a high degree of efficiency in the decision making mechanism there will be six members of the PSC. The members of the PSC will be the Secretary of Ministry of Environment (MoEnv) (Chair person of the PSC), a representative from the Ministry of Finance, the Ministry of Local Development, the Ministry of Energy, a representative from Development Partners as well as the Executive Director of AEPC (Member Secretary, Ex officio). The Ministries of Finance, Local Development and Energy should be represented at Joint Secretary level. Through the Chairperson of the PSC, there is established a direct link to the AEPC Board. The Development Partners signing the Joint Financing Agreement (JFA) will identify a lead partner, who on behalf of all Development Partners will maintain the contact to the GoN for all aspects of NRREP.

The PSC will meet at least twice a year, but can meet up to four times on an annual basis. It may be needed to have more than two annual PSC meetings e.g. in case a progress report would not be approved or there is need for follow up on audit recommendations. The PSC will meet at least in June and December each year. The PSC forms a quorum if half the members are present. The Development Partner representative must be present in PSC meetings for it to make decisions.

Decisions will be taken on consensus basis by the PSC. The secretariat function including preparation of and conducting PSC meetings will be carried out by AEPC. AEPC will at least two weeks before a PSC meeting forward to all PSC members a suggested agenda, in which it is clearly indicated which items are for decisions and which for information. Necessary background material for all items on which a decision should be taken must be forwarded together with the suggested agenda.

For decision making the NRREP has a PSC. As there must not be conflict of interest between decision making according to the tasks of the PSC and the various interest groups and other stakeholders, a NRREP Coordination Committee will instead be established to provide advice to the NRREP management. The NRREP Coordination Committee will comprise of the Ministry of Environment, the National Planning Commission, the Ministries of Finance, Energy, Local Development and Women and Social Affairs, a representative from each of the associations supplying Renewable Energy Technologies (Micro Hydro Power, Solar and Biogas), a representative from an organisation of women and socially excluded, a representative from the association of Village Development Committees, a representative from the private financial sector, a representative from the private sector with extensive knowledge on MSME development as well as a representative from each of the Development Partners supporting NRREP. The Senior Adviser and the Chief Executive Officer of CREF will be observers in the NRREP Coordination Committee. The AEPC Executive Director will be Member Secretary.

The secretariat function including preparation of and conducting NRREP Coordination Committee meetings will be carried out by AEPC. There should be an agreed gender balance in the Coordination Committee. The NRREP Coordination Committee will meet twice a year and through the Ministries of Environment, Finance, Local Development and Energy as well as a Development Partner representative, the link with the PSC will be secured. The NRREP Coordination Committee will meet one month in advance of the PSC meetings being held in June and December, and can suggest issues to be discussed at the PSC meetings. AEPC will at least two weeks before a NRREP Coordination Committee meeting forward to all members a suggested agenda and relevant background information. The Coordination Committee will receive an update of NRREP progress at each meeting.

8.2 DAY-TO DAY MANAGEMENT OF NRREP

The day-to-day management of NRREP will be carried out by using different methodologies depending on the specific component.

With AEPC being the executing agency, the NRREP Programme Director will be the Executive Director of AEPC.

The main structure of day-to-day management of NRREP is illustrated in the figure on page 19.

8.2.1 Management of CREF

CREF, a financial type of institution that will handle a large fund to be used for both subsidies and credit, will be established as one of the outputs of NRREP. This does require that the requisite expertise be put in place in CREF for the full duration of NRREP. Considering that this will be the main funding mechanism in the sector, the management arrangement of CREF must continuously induce sufficient trust into CREF funders that both subsidies and innovative credit mechanisms to

be established are of international standard and that fiduciary risks are minimised. An open, competitive and transparent selection of a CEO for CREF who has extensive experience working in a financial institution in a lending / financing role at a senior level and who has a demonstrated track record of establishing innovative credit mechanisms is a requirement for a successful CREF component. The CEO of CREF will be supported by a Senior Fund Management Adviser (see section 8.2.4). An interim Senior Fund Management Adviser will be contracted for the period between the start of NRREP by 16th of July 2012 and until the Senior Fund Management Adviser is in place.

8.2.2 <u>Management of the Technical Support Component</u>

The management arrangement for the Technical Support Component build on some fundamental principles: (i) It should be a streamlined structure, (ii) the managerial responsibility should effectively be vested within AEPC, (iii) high quality advise should be provided to AEPC, and (iv) AEPC should at the end of the five years implementation period not be responsible for carrying the costs of additional staff specifically needed for NRREP execution.

The responsibility for day-to-day management will be vested with Programme Managers, who are core (permanent) senior staff of AEPC. The Programme Managers will be the decision makers under the responsibility to the Programme Director and the NRREP governance structure.

AEPC will, as the executing agency, and with NRREP being implemented under a single programme approach, provide its full staff contingency to work with NRREP.

In addition to the core (permanent) staff of AEPC, AEPC will contract for the period of NRREP implementation a number of Programme Staff. There will be an agreed gender balance within the group of contracted Programme Staff. The contracted Programme Staff is expected employed under UNDP national execution conditions of service and paid from GoN and Development Partner contributions to the TA budget.

To support implementation of the Technical Support Component, an international and national advisers will be contracted for the 5 years programme period. There will be one international Senior Adviser, with the overall responsibility of advising the Executive Director of AEPC on implementation of NRREP. There will be a number of national advisers potentially covering: (i) Biogas, (ii) ICS, (iii) Solar, (iv) Community Electrification and Improved Water Mills, (v) institutional support, (vi) GESI, (vii) Carbon and (viii) Monitoring. There can be less or more national advisers, but the ones for GESI and Monitoring are mandatory. There should be an agreed gender balance within the adviser group.

The advisers will be advising their respective AEPC managers, with the managerial responsibility remaining solely with AEPC management. The national advisers will be paid from the TA budget. The international Senior Adviser will be contracted by Danida and paid from a Danida earmarked and managed TA funding.

As a condition for funding to flow into NRREP, and as an interim measure there will for the period between the start of NRREP by 16th of July 2012 and until the NRREP Senior Adviser is in place be recruited an international interim Senior Adviser.



<u>Management of innovation, research and development in NRREP</u>. One of the mandates of AEPC is to undertake research on Renewable Energy Technologies. As part of the outputs of the Technical

Support Component it will in a number of cases be relevant to adapt and test new technology options as well as the technology transfer process. This can be carried out with existing renewable technology institutions (including the Renewable Energy Testing Station (RETS), the National Academy of Science and Technology and technical universities) and with private entrepreneurs. The research can also target specific GESI needs (e.g. affordability, reliability of technology and costs). The activities can be carried out in collaboration with and facilitation of private sector support facilities of Development Partners as relevant.

A critical criterion for support to proposals for innovation, research and development is that they be directly relevant for the programme activities and can complement these. In order to manage these activities as simple as possible, requests will on a competitive basis be publicly called twice a year, and their relevance and complementarily assessed in relation to activities of the Technical Support Component, which will fund these activities from relevant outputs. A committee consisting of the ED of AEPC, the Senior Adviser of NRREP and one or two representatives from the research society will make the assessment of proposals according to a number of established criteria. The assessment will be completed in time to enable the recommended proposals be incorporated as activities into the work plans and budgets of the relevant outputs of the Technical Support Component. This will ensure a high degree of coherence and relevance between supported proposals and Component outputs, and at the same time provide room for incorporation of innovative proposals from e.g. the private sector.

8.2.3 <u>Management of the Business Development for Renewable Energy and Productive Energy</u> <u>Use Component</u>

AEPC will be the executing agency for the PEU component. AEPC will be responsible for coordinating the business development support, the ex-post monitoring, reporting and coordination with other components. At regional level, the PEU Component will employ the business officers located in the RSCs contracted by AEPC. At local level, local economic development (LED) committees will be set up. AEPC will nominate one of its senior staff members as PEU Programme Manager. PEU Programme Staff will be employed in the same way as under the Technical Support Component. A PEU national adviser will be contracted and paid from the TA budget.

8.2.4 Management of Finance and Procurement in NRREP

To support the CREF as well as internal audit function of AEPC, a Compliance and Quality Assurance Unit (the "Unit") will be established in NRREP with the overall purpose to provide oversight of financial and procurement activities as well as provide quality assurance support to all elements of NRREP. The Unit will also provide capacity building support in Public Financial Management in AEPC and other public sector institutions receiving support from NRREP, as needed. The Unit will also play a role in oversight of procurement of technical assistance to ensure that there continuously be sufficient competition among consultants. The Unit will function as a NRREP internal audit section, and be led by s Senior Fund Management Adviser, being posted in CREF, where the adviser also will provide support to the CEO of CREF. The Unit will also have a national assistant adviser to the Senior Fund Management Adviser. Development Partners will fund the Unit.

Advisers in all components of NRREP will work across components where relevant in order to complement each other and increase the impact of the programme.

8.2.5 Management of Technical Assistance Inputs

There will as part of implementation of NRREP be a significant contracting of technical assistance, including of long-term international and national advisers, and short-term international and national consultants. The costs of technical assistance will be funded both by the GoN and the Development Partners, based on an agreement reached on the proportionate funding by the two parties. It will be possible for Development Partners to provide earmarked funding and contracting (in monetary terms or in-kind) for technical assistance inputs. The cost of all provided technical assistance should be budgeted in the AW&B in order to ensure full transparency, irrespective of the technical assistance input being earmarked or non-earmarked, or being in monetary or in-kind form. The Development Partners providing earmarked technical assistance should as a start provide a brief on the type and quantity of technical assistance they can provide, the thematic areas and describe the procedures on how the NRREP can access this technical assistance.

Modalities for engagement of technical assistance input should be developed and agreed upon, including a workable and efficient decision making mechanism, so delays are avoided in fielding required short-term technical assistance. It will be the responsibility of the Executive Director of AEPC, with the assistance of the Senior Adviser, and in consultation with the GoN and Development Partners to prepare a guideline for management of technical assistance. The guideline will be approved by the PSC. The guideline can a.o. include governance of technical assistance, funding mechanism, reporting and Monitoring and Evaluation. All contracting of technical assistance, funding mechanism reporting and Monitoring and Evaluation. All contracted technical assistance, the optimal selection method should utilised, the terms of reference should clearly determine the inputs to be used and the outputs to be produced, and in a number of cases a fixed budget selection method should be used so quality of consultants is the sole criterion for selection. Interviews of both team leaders and other consultants should be used where deemed pertinent. The NRREP Programme Director and the Senior Adviser will be responsible for selecting non-earmarked technical assistance.

Only technical assistance (whether earmarked or non-earmarked) that is directly relevant for NRREP objectives, outputs and activities will be supported and has to be planned for (specifically mentioned) in the PSC approved AW&B. All technical assistance provided in the Technical Support and Business Development for Renewable Energy and Productive Use Components will refer directly to the respective AEPC Programme Managers. Technical assistance provided under the CREF Component will refer to the CREF CEO.

9. FINANCIAL MANAGEMENT AND PROCUREMENT

The main conclusion of the Fiduciary Risk Assessment carried out by DFID is that the "risk associated with Public Financial Management systems of GoN and in particular the financial management systems of MoLD, MoEnv and AEPC are high, and that the risk of corruption in the government system is also assessed to be high". Development Partners supporting NRREP have a zero-tolerance corruption policy, implying that any form of misuse of entrusted power for private gain is totally unacceptable. Considering the size of the NRREP in terms of financial contributions as well as the large amount of procurement involved, effective risk mitigation measures will be instituted.

9.1 BUDGETING AND FLOW OF FUNDS

The general principles for planning, budgeting, accounting, auditing and procurement in NRREP are that these activities will be aligned with and fully integrated with the partner institutions procedures where possible in order to avoid parallel processes. In practise this means that the processes and procedures of AEPC will be used for the Technical Support and Business Development for Renewable Energy and Productive Energy Use Components. In the case of CREF, the CEO will establish these procedures for endorsement by the CREF Board. In both these cases, the planning, budgeting, accounting, auditing and procurement procedures will have to be endorsed by the PSC before Development Partner funding can be transferred to the respective implementers.

The Development Partners reserve the right to examine and assess the procedures of any partner institution at any time in order to secure that these are acceptable.

The Development Partners providing funding to NRREP will make funds available to NRREP through a Special Treasury Foreign Currency Account, to be used exclusively to finance the programme. Funds for technical assistance will in some cases be earmarked and will be paid directly (e.g. for long term international technical assistance administered by Danida), i.e. without the funds being transferred to the Special Treasure Foreign Currency Account, from the Development Partner to the technical assistance provider, whether for long or short-term technical assistance provision. Funds will be released in tranches according to the approved AW&B and financial reporting. The NRREP will be on budget. The overall flow of funds within NRREP is shown in figure 2. Component Descriptions provide more detailed descriptions of funds flow and financial reporting lines.

Figure 2: NRREP Flow of Funds



Notes:

CREF: Central Renewable Energy Fund

PEU: Business Development for Renewable Energy and Productive Use of Energy Component

BFI: Banking Financial Institutions (Credit provision)

MFI: Micro Finance Institutions (Credit provision)

DDF: District Development Funds (Subsidy provision)

RET: Renewable Energy Technology (Subsidy provision)

Before funds can be released from a NRREP account in AEPC, the payment must be vetted and endorsed by the Senior Adviser. Following this it is the responsibility of the Executive Director of AEPC or his/her designate to authorise the payment. The CREF will have its own internal financial management and procurement procedures, as approved by the CREF Board.

The activities of NRREP will be integrated into plans of AEPC and incorporated into the AEPC budget. There will be a mixture of earmarked and non-earmarked funding, depending on the specific Development Partner.

A single AW&B for the entire AEPC, encompassing all external funding sources of NRREP for AEPC managed activities and own contributions, will be made for AEPC. CREF will establish its own AW&B as required by the CREF Board.

Work planning and budgeting in all components must be consistent with the budget items of the appropriations.

Work planning and budgeting at activity level for day-to-day implementation is the task of AEPC. The Development Partners will focus on outputs and outcomes in both planning and reporting, as work plans, budgets and progress reports at output level is being submitted for approval in the PSC, following the agreed terms of reference for the PSC.

All components will produce semi annual work plans and budgets as well as semi-annual progress and financial reporting.

9.2 ACCOUNTING

AEPC procedures for financial management are used insofar as they comply with International Financial Reporting Standards. In cases of shortcomings, the AEPC procedures must be strengthened as needed to ensure acceptable fiduciary standards. The CREF procedures for financial management must be approved by the CREF Board as well as by the PSC.

This implies that accounts must be kept in accordance with international standards, ensuring that:

- The grants are entered into the accounts as income;
- Reporting on expenditures is of at least the same level of detail as in the grants budget;
- All expenditures are documented by vouchers, original invoices and original, signed receipts;
- A register is maintained of equipment and other assets financed from the grants;
- Acceptable control procedures are put in place, and accounts are signed by the responsible management, and
- The administration adheres to established written procedures.

The executing partner's accounting period will be followed for financial reporting.

Accounting as well as financial reporting will be conducted in NPR. Any payments made in other currencies will be converted into NPR in the accounts at the time of transaction. As the appropriations from Development Partners are in various currencies, the respective Development Partner representations will monitor currency fluctuations' influence on commitments and disbursements insofar these are made in other currencies.

In the case of non-earmarked funding, funds from Development Partners are pooled in one bank account. In the case of partners providing ear-marked funding, these will be kept in separate bank accounts.

The JFA between the GoN and NRREP Development Partners will specify the conditions under which funds will be transferred.

The conditions for transfer will at least be:

- Satisfactory financial reporting has been submitted on previous periods;
- No other accounts are unsettled with the same partner, and
- There is an approved work plan and budget for the period to be financed.

The transfer of funds to the components will be carried out on the basis of a written request from the relevant component to the Compliance and Quality Assurance Unit, which will submit the request to Development Partners. The transfer can cover foreseen expenditures for up to six months. The transfer request must include information on the amount and the bank account into which the money is to be deposited. A copy of the bank statement with a reconciliation of the bank account must be attached to the request. A receipt should be submitted to the Compliance and Quality Assurance Unit as soon as the funds have been received.

The accounting documents and records must be kept for five years after the completion of NRREP. The documents and records shall be made available for control purposes to the Auditor Generals and/or to the Headquarter of Development Partners or their representatives, upon request.

9.3 AUDITING

The accounts must be audited annually in accordance with International Standards of Auditing. The final annual audit report, including a financial statement for the period audited and a memorandum of examination must be forwarded by the implementing partner to the PSC no later than six months following the end of the accounting period. In addition to auditing by the Office of the Auditor General, a private sector auditor selected by the PSC can undertake an annual audit as well as special (e.g. compliance audits or Value for Money audits) audits. Terms of reference for audits, including the audit reports must be approved by the PSC.

The annual audit must encompass – but not be limited to – inspection of accounting records, including examination of supporting documentation of the transactions, confirmation of cash and bank holdings, checking of bank reconciliation, direct confirmation of accounts receivables, and verification of physical inventories and fixed assets. The audit will also test compliance with the accounting manual and examine the procurement function.

The Development Partners are entitled to request from NRREP all information relevant to the implementation and progress of activities, and have the right to carry out inspection at any time during the period of the agreement.

To further support the NRREP implementation process including the regular auditing activities, there will at the end of year one, three and five of NRREP be undertaken a Value for Money audit. The Value for Money audit will include, but not be limited to a thorough review of actual procurement and procurement procedures, quality of delivered installations and services,

independent national and international price comparisons of RETs and maintenance of delivered systems. The Value for Money audit will be carried out in the name of the Office of the Auditor General. It will be competitively tendered internationally to Value for Money experienced auditors that will provide both financial, procurement and technical expertise. The tender procedure will be carried out under the supervision of the Compliance and Quality Assurance Unit. Terms of reference for the Value for Money audit will be approved by the PSC. The Value for Money audit report will a.o. provide recommendations to improvement and changes in procedures as deemed required. The PSC will supervise implementation of Value for Money audit recommendations. Likewise, the Compliance and Quality Assurance Unit can also initiate risk based procurement audits to check compliance with systems, rules and procedures and make recommendations on improvement of the same, check procurement quality etc., also in relation to contracting short-term technical assistance.

As a method to ensure a high degree of transparency and accountability, a public disclosure system will be implemented at all locations/VDCs where micro hydro power systems are established. The system will include but not be limited to posting of information at relevant public places (DDC, VDC etc.) but also at the specific site. The disclosed information will include the main features of the project, including but not limited to financial and procurement information (sources of funding and costs, contractors). Information on subsidies and credit delivered by CREF and technical assistance contracted by NRREP will continuously be updated on the web. Likewise, approved AW&B, progress and all audit reports will be posted on the internet.

9.4 **PROCUREMENT**

Procurement in NRREP will as a principle be carried out through the use of GoN procurement systems as far as the Technical Support Component and Business Development for Renewable Energy and Productive Energy Use are concerned. A procurement (as well as financial management) system in the CREF will be established by the CREF CEO, with the assistance of the Senior Fund Management Adviser.

<u>10.</u> <u>MONITORING, REPORTING, REVIEWS AND EVALUATIONS</u>

10.1 MONITORING

As a principle the NRREP M&E system will be aligned to GoN (National Planning Commission and Ministry of Finance) monitoring requirements. The National Planning Commission is responsible for monitoring outcomes of 3 Year Interim Plan implementation, including of the renewable energy sector. The NRREP will use monitoring data from the endeavours of the National Planning Commission and supplement these M&E data with additional and specific impact and outcome assessments where required. The result based monitoring of activities of both AEPC and CREF will also provide relevant monitoring on energy related climate change impacts as well as socio-economic impacts including GESI. When designing the NRREP results based M&E system, the operation of the feedback mechanism will be detailed, including how it will provide management information to the different levels of NRREP management. The NRREP result based monitoring system will be maintained at the web, where it will be accessible to the public and all NRREP stakeholders. The NRREP M&E system will where relevant build on already initiated M&E system activities of AEPC. Monitoring is in NRREP viewed as a management tool that enable result-based management. Managing for results include planning for results, implementation, performance review and evaluation assessments to track long-term impact. The results from the monitoring feed back into implementation, based on management corrective action.

At the development and immediate objective levels, where indicators and targets have been defined, the M&E system will regularly make assessments on the degree of progress towards reaching the development impact and outcome. A baseline has been produced in 2011, and cover all the RETs delivered through renewable energy programmes and projects. Although it is made on the basis of secondary data, it is a proper starting point for the NRREP. GESI baseline data from a.o. the Labour Force Survey from 2008/9 are as well available. It might be needed to provide an update including data from 2011/2 and complete institutional baseline data from a.o. DEESs and RSCs, an exercise that can be carried out by the AEPC M&E section. As data on socioeconomic, income and business activities have not been gathered in catchment areas where productive energy use will be promoted, additional baseline assessments will be made for the Business Development for Renewable Energy and Productive Energy Use Component as an integrated part of the approach. During the inception period of NRREP (see section 10.2 below), consideration will be given to preparation of additional baseline studies. To balance the costs and benefits of baseline studies, any baseline study to be conducted will use standard statistical sampling methods to provide statistically significant results as least cost. In addition to baseline studies it is an option to include parallel control sites for future evaluations, i.e. baselines including locations, communities or households who are not receiving similar support.

It will be the responsibility of the AEPC M&E staff under the guidance of the National Monitoring Adviser to establish the NRREP results based M&E system. The design of the system will include the relationships to all three components of NRREP and also to monitoring at lower levels of the logical framework hierarchy. The design of the NRREP result based M&E system will benefit from and be done in conjunction with design of the system for monitoring of the Business Development for Renewable Energy and Productive Energy Use Component, which will be developed to be compliant with the "Donor Committee on Enterprise Development" standards on measuring and reporting results.

10.2 REPORTING

The following reports will be produced:

- Inception report after 6 months of start of implementation. The inception report replaces the first progress report;
- Half yearly progress reports, including rolling AW&B, monitoring results and progress on reaching synergetic effects between NRREP components;
- Half yearly financial reports;
- Draft Final Report 6 months before completion of NRREP.

The reports will follow an agreed format so they will be useful for both AEPC, other government organisations as well as for the group of Development Partners. While the reporting should ideally follow GoN formats, there needs to be a clear focus especially on outputs, outcomes and development impact. With CREF being a financial organisation there will be special needs to its reporting as will be requested by the Board of CREF.

In particular, the progress reports should:

- Describe actual outputs ("targets") compared to planned outputs ("targets") (as defined in the work plans) for the period covered by the progress report, aggregated, as well as for the whole NRREP period;
- Include an assessment of whether the targets for the whole NRREP period will be achieved;
- Provide a summary of the use of funds compared to budget (for CREF both conditional subsidy approvals and actual disbursements should be reported on);
- Provide an assessment of the efficiency of the NRREP (how efficiently resources/ inputs are converted into outputs);
- Explain major deviations from plans;
- Assess challenges and risks and risk management that may affect the NRREP success;
- Assess the need for adjustments to activity plans and/or inputs and outputs, and
- Provide a description of the undertaken procurement.

10.3 REVIEWS

An inception review will be undertaken during the first half year of 2013 in order to provide recommendations to draft inception report. The inception report will among other things provide the following:

- Refined indicators, targets and means of verification at the development objective, immediate objective and output levels.
- An annex with the required baseline studies undertaken during the inception phase as applicable, and
- AWP&B for 2013/14.

A mid term technical review of NRREP will be carried out in the second half of 2014. A joint NRREP sector review will be undertaken in beginning of 2016, among others to assess the relevance of continued support to the sector.

Should it be decided by the JFA signatories that there is a need for further reviews, terms of reference for these will be prepared for PSC approval.

All reviews are joint, and coordinated by the lead Development Partner in cooperation with the GoN.

Value for Money audits will be carried out at the end of the first, third and fifth year of NRREP implementation.

10.4 EVALUATIONS

A joint GoN Development Partner evaluation will be carried out of the NRREP at the end 2016.

11. KEY ASSUMPTIONS AND RISKS

Key assumptions of NRREP are:

• Continued high prioritisation given to the rural and renewable energy sector. The energy crisis in Nepal resulted in 2011 in the setting up of a high powered Energy Crisis Mitigation

Commission to steer the development of the energy sector, including the renewable energy sector;

- High degree of commitment to and cooperation with NRREP from the MoEnv, MoE, MoLD and MoF. As these four ministries are essential for a successful NRREP, they are members of the six person NRREP PSC;
- Continued decentralisation through the local governance system to strengthen the DDC/VDC and DEES system which plays an important role in NRREP implementation;
- The agreed financial resources are smoothly forthcoming from GoN and Development Partners to NRREP in order to avoid periodic funding gaps which potentially would lead to disruptions in NRREP implementation, including subsidy provision, and
- AEPC is fully staffed with competent people in all its permanent (core) positions. A number of positions in AEPC were not filled during implementation of previous projects and programmes, hampering implementation. A new organisational structure of AEPC might result in need for new positions to be established and filled.

The major risks of NRREP are:

- The inherent GoN bureaucracy including a slow implementation of reforms to make AEPC autonomous as well as to provide the AEPC Programme Staff for NRREP. This will hamper the effectiveness of AEPC and make capacity building within the framework of an autonomous AEPC ineffective. This is rated as a medium risk with medium impact. The risk mitigation measure is to only begin capacity building of AEPC when the organisation has obtained its autonomous status;
- Expansion of AEPC mandate to cover small hydropower up to 10 MW will direct attention away from community electrification. This is rated as a medium risk with medium impact. As the expanded mandate will have consequences for the SOD, the organisational structure and staffing and will put new and additional demands on the organisation in order for it to perform, the risk mitigation measure is for the AEPC Board to revise the draft SOD, and on this basis redesign the organisational structure and negotiate with the Ministry of Finance and the Public Service Commission to employ additional staff;
- The GoN has in the Transition Aide Memoire agreed that NRREP will be the only programme to support rural renewable energy solutions. If agreements are made for other rural and renewable energy projects or programmes to be implemented this will result in continued coordination issues, risk of overlapping as well as ineffective utilisation of funds. Any funding from the Scaling Up Renewable Energy Programme (SREP) to activities also covered by NRREP is therefore assumed to be provided as co-funding to NRREP with no separate implementation modalities being established by SREP for support to micro hydro, biogas and solar. While ideally the SREP partners should sign the JFA, it is primarily important that their funding is provided through the CREF. The principle of non-establishment of parallel implementation structures would also be in accordance with the policies of bilateral Development Partners that provide funding to both SREP and NRREP. This is rated as a medium risk with high impact. The risk mitigation measures are negotiations between GoN and signatories to the JFA and the signing of a Code of Conduct between GoN, JFA signatories and non-JFA Development Partners. Development Partners reserve the right to reduce their contribution to NRREP if this risk materialise;
- The GoN has committed itself to revise the subsidy system and to provide a larger portion of the subsidies for RETs as an exit strategy for the Development Partner support. The objectives of NRREP can only be reached if these commitments are fulfilled. The risk is rated as low, but with a high impact. The risk mitigation measure is negotiations between the GoN and

Development Partners with a possible reduction in Development Partner funding should the agreed GoN funding not be forthcoming;

- A financially safeguarded CREF is not established, leading to risk of financial mismanagement. This risk is rated as high with a high impact. The risk mitigation measure will be to establish strong fiduciary risk minimisation measures before CREF management is contracted;
- A slow establishment of an effective CREF will lead to delays and a less effective NRREP. This will potentially also influence coordination among Development Partners, as some Development Partners (e.g. SREP) might choose to establish a temporary credit mechanism that risk evolving into a parallel mechanism. This risk is rated as medium with a high impact. The risk mitigation measure will be to establish an alternative but preliminary project based subsidy delivery mechanism or continue the present Rural Energy Fund;
- The large amount of subsidies and credit to be provided is a driver of the market for RETs, potentially distorting the market and encouraging market inefficiencies, including increasing RET prices and provide less incentive for suppliers to expand the commercial RET market. This risk is rated as medium with medium impact. Risk mitigation measures include implementation of increased competition among suppliers of RETs and a revised Subsidy Delivery Mechanism including revised subsidy rates to change incentives;
- Fiduciary risks for Public Financial Management in MoEnv, MoLD and AEPC, and risk of corruption. Both these risks are rated as a high with high impact. A number of risk mitigation measures including ring-fencing, financial and procurement oversight and Value for Money audits are design features of NRREP, and
- The new constitution of Nepal is yet to be finally decided upon. While Nepal will be a federal state the implications for the institutional set-up within the country will remain unclear for some time. The new constitution could have an influence on the future organisation of AEPC and hence influence NRREP. This risk is rated as low with low impact. Following a review, the risk mitigation measure is to adjust NRREP to a changed institutional set-up.

ANNEXES

- Annex 1 Assumptions for GoN Budget Contribution
- Annex 2 NRREP Budget
- Annex 3 Central Renewable Energy Fund Component Description
- Annex 4 Technical Support Component Description
- Annex 5 Business Development for Renewable Energy and Productive Energy Use Component Description
- Annex 6 Assessment according to ten budget support principles
- Annex 7 Gender Equality Rolling Plan
- Annex 8 Environmental Screening Note
- Annex 9 Updated Road Map for formulation of NRREP
- Annex 10 Draft job description for international Senior Adviser
- Annex 11 Draft job description for international Senior Fund Management Adviser
DETAILED BUDGET ASSUMPTIONS FOR GoN CONTRIBUTION

GoN contribution to subsidies:

The total budgeted GoN contribution to subsidies for RETs in FY 2011/12 is NPR 679 million, equivalent to USD 8.04 million. This amount is assumed to increase significantly by 15% on an annual basis starting from the FY 2012/13.

GoN contribution to salaries:

The salary contribution from GoN will cover the total annual salary costs of AEPC staff (in FY 2011/12 NPR 21 million, equivalent to USD 0.25 million) of <u>USD 1.25 million</u> for 5 years.

In addition, AEPC will contract all NRREP Programme Staff to support the AEPC Programme Managers for the duration of NRREP. The GoN contribution to Programme Staff is budgeted as NPR 37,500,000 (equivalent to USD 0.45 million) for the five years NRREP period.

GoN contribution to recurrent costs:

Annual recurrent costs of AEPC of NPR 11.5 million (FY 2011/12 budget figure) (equivalent to USD 0.68 million for a 5 years period) will also be contributed by the GoN.

The total GoN contribution to salaries and recurrent costs, inclusive salaries of core (permanent) AEPC staff, recurrent costs of AEPC and NRREP Programme Staff is equivalent to USD 2.38 million (rounded to USD 2.4 million) for the five years period.

GoN contribution to Technical Cooperation:

On average the GoN will annually contribute NPR 42 million to procurement of Technical Assistance, equivalent to USD 2.5 million during the 5 years duration of NRREP.

NRREP BUDGET

OUTPUTS	USD Million
CREF Component	
Output 1.1	112.20
Output 1.2	0.90
Sub-total	113.10
Technical Support Component	
Output 2.1	1.00
Output 2.2	1.90
Output 2.3	4.90
Output 2.4	2.10
Output 2.5	0.80
Output 2.6	2.50
Output 2.7	1.30
Output 2.8	2.00
Output 2.9	0.80
Output 2.10	3.20
Output 2.11	1.30
Output 2.12	5.70
Output 2.13	0.60
Output 2.14	3.30
Output 2.15	4.40
Output 2.16	2.50
Output 2.17	1.80
Sub-total	40.10
Business Development for Renewable	
Energy and Productive Energy Use	
Output 3.1	3.20
Output 3.2	3.00
Output 3.3	1.05
Technical Assistance	1.15
Sub-total	8.40
NRREP Management	5.10
Studies, Audits, Reviews	3.40
Total	170.10

Table 2.1 Budget distribution according to component outputs. USD Million

Note: The output based budgets for the Technical Support Component is an indicative budget, as the specific annual budgets will be determined based on a prioritisation of activities. The annual budgets will be determined in conjunction with preparation of annual work plans, and be approved by the PSC. Taking into account the need to reach the immediate objective, there is thus a high degree of flexibility in determining the budgets for each output.

ANNEX 2

Table 2.2Budget distribution according to year. USD Million

Component	Total	2012/3	2013/4	2014/5	2015/6	2016/7
CREF	113.1	13.1	25.0	25.0	25.0	25.0
Technical Support	40.1	7.7	8.1	8.1	8.2	8.0
Business Development for	8.4	0.6	1.3	2.0	2.6	1.9
Renewable Energy and						
Productive Energy Use						
NRREP Management	5.1	1.0	1.0	1.0	1.0	1.1
Studies, Audits, Reviews	3.4	0.6	0.7	0.7	0.7	0.7
Total	170.1	23.0	36.1	36.8	37.5	36.7

Table 2.3Indicative budget distribution according to source. USD Million.

Component	Danida	Norway	DFID	TA	KfW	SREP	GoN	Total
		-		Providers				
1. CREF	11.0	9.9	7.6		2.2	20	62.4	113.1
2. Technical Support	16.5	8.8		11.3	1.0		2.5	40.1
3. Productive Energy End Use	4.2	4.2						8.4
NRREP Management	1.7	1.0					2.4	5.1
Studies, audits, reviews	1.3	0.8		1.3				3.4
Total	34.7	24.7	7.6	12.6	3.2	20	67.3	170.1

Notes:

Technical Support/GoN: GoN contribution to short term Technical Assistance

Studies, audits, reviews: Include Value for Money special audits at the end of year 1, 3 and 5.

NRREP Management: Include a.o. 2 international long term adviser positions funded by Danida.

Table 2.4Annual GoN contribution to NRREP. USD Million

Item paid	Total	2012/3	2013/4	2014/5	2015/6	2016/7
CREF	62.4	9.3	10.6	12.2	14.1	16.2
Technical cooperation –	2.5	0.5	0.5	0.5	0.5	0.5
Technical Support						
NRREP Management of	2.4	0.48	0.48	0.48	0.48	0.48
which:						
- Salaries of AEPC staff	1.25	0.25	0.25	0.25	0.25	0.25
- Salaries of NRREP	0.5	0.1	0.1	0.1	0.1	0.1
Programme Staff						
- Recurrent costs of AEPC	0.65	0.13	0.13	0.13	0.13	0.13
Total	67.3	10.28	11.58	13.18	15.08	17.18

CENTRAL RENEWABLE ENERFY FUND COMPONENT DESCRIPTION

TECHNICAL SUPPORT COMPONENT DESCRIPTION

BUSINESS DEVELOPMENT FOR RENEWABLE ENERGY AND PRODUCTIVE ENERGY USE COMPONENT DESCRIPTION

ASSESSMENT ACCORDING TO TEN BUDGET SUPPORT PRINCIPLES

GENDER EQUALITY ROLLING PLAN

ENVIRONMENTAL SCREENING NOTE

UPDATED ROAD MAP FOR FORMULATION OF NRREP

Activity	Output / Milestone	Date	Responsible
ESAP II terminated	ESAP accounts reconciled and assets transferred to AEPC.	15 July 2012	Embassy of Denmark (and other Development Partners in ESAP) with AEPC
NRREP launch	Work Plan 2012/13 and budget for interim NRREP (Interim CREF and AEPC) approved by the NRREP PSC	Work plans and budget: 15 June 2012 Launch of NRREP: 16 July 2012	AEPC prepares work plan and budget
Danida Board and Danida Finance committee approval	Danida Board approval (minutes) Finance Committee Approval	September 2012	Danida
Announcement of international Technical Assistance positions (Senior Adviser and Senior Fund Management Adviser)	Positions advertised; Selected and contracted, Mobilised.	October 2012 November 2012 January 2013	AEPC and Danida
CREF established as a legal entity	CREF legally formalised (e.g. by AEPC Bill or a formation order by MoEnv). Selection and employment of CEO for CREF.	December 2012 January 2013	MoEnv / AEPC / CREF
Joint Inception review	Inception review report with recommendations	Before May 2012	AEPC with Development Partners
AEPC Bill promulgated	AEPC Bill published and formation order by MoEnv	By July 2013	GoN / Parliament for publishing. MoEnv for the formation order.

DRAFT JOB DESCRIPTION FOR INTERNATIONAL SENIOR ADVISER

Job title	: Senior Adviser (SA)
Programme	: National Rural and Renewable Energy Programme (NRREP)
Duty station	: Kathmandu, Nepal
Responsible to	: Executive Director of the Alternative Energy Promotion Centre (AEPC)
Duration	: Five years

The development objective of the NRREP is to improve the living standard of rural women and men, increase employment of women and men as well as productivity, reduce dependency on traditional energy and attain sustainable development through integrating the alternative energy with the socioeconomic activities of women and men in rural communities. Gender and social inclusion is mainstreamed into all levels of the NRREP.

The NRREP contains three components: Central Renewable Energy Fund, Technical Support and Business Development for Renewable Energy and Productive Energy Use. The SA will have a role in advising the management of all three components. The NRREP is designed as a single programme approach in the rural and renewable energy sector and is supported by the Government of Nepal as well as a number of Development Partners. The day-to-day managerial responsibility for NRREP is vested with the Executive Director of AEPC, under the guidance and responsibility to the NRREP Programme Steering Committee. The support is guided by a Joint Financing Agreement.

The main tasks of the SA are:

- Provide advice to the NRREP Programme Director (the Executive Director of AEPC) in his/her management of NRREP;
- Advise on sector reforms, subsidy delivery mechanisms and new and innovative methods to deliver renewable energy services;
- Support and advise on methods to effectively integrate gender and social inclusion into activities at all levels of NRREP;
- Support AEPC in effectively cooperating with the Central Renewable Energy Fund;
- Advise on methods to establish standard Power Purchase Agreements and grid connection of micro hydro power plants;
- Support and guide the contracted national advisers;
- Support AEPC in preparation of job descriptions for national advisers and terms of reference for short term consultancies;
- Participate in selection of national advisers, short term international and national technical assistance;
- Provide support to review missions as required;
- Vetting of payments before these are approved by the NRREP Programme Director;
- Provide back-up to the Compliance and Quality Assurance Unit as required, and
- Any other activity as agreed upon during implementation.

Qualifications: At least 15 years of practical experience from a management or senior adviser position of multifaceted development programme, experience from involvement of government, civil society and private sector in provision of services to the rural population, demonstrated

experience in integration of gender and social aspects into rural development, and fluency in written and spoken English. The successful candidate could have an educational background from the social or natural sciences, but should have experience from rural development and gender mainstreaming. Knowledge on renewable energy is an added advantage. Working experience from Asia/South-East Asia.

ANNEX 11 DRAFT JOB DESCRIPTION FOR INTERNATIONAL SENIOR FUND MANAGEMENT ADVISER

Job title	: Senior Fund Management Adviser
Programme	: National Rural and Renewable Energy Programme (NRREP)
Duty station	: Kathmandu, Nepal
Responsible to	: Chief Executive Officer of the Central Renewable Energy Fund (CREF)
Duration	: Five years

The development objective of the NRREP is to improve the living standard of rural women and men, increase employment of women and men as well as productivity, reduce dependency on traditional energy and attain sustainable development through integrating the alternative energy with the socioeconomic activities of women and men in rural communities. Gender and social inclusion is mainstreamed into all levels of the NRREP.

The NRREP contains three components: CREF, Technical Support and Business Development for Renewable Energy and Productive Energy Use. The NRREP is designed as a single programme approach in the rural and renewable energy sector and is supported by the Government of Nepal as well as a number of Development Partners. The day-to-day managerial responsibility for NRREP is vested with the Executive Director of AEPC, under the guidance and responsibility to the NRREP Programme Steering Committee. The support is guided by a Joint Financing Agreement. A Compliance and Quality Assurance Unit will be established in NRREP to provide financial and procurement oversight as well as quality assurance to all elements of the programme. The Unit will be based in CREF but the compliance and quality assurance activities will be carried out in al NRREP components.

The main tasks of the International Senior Fund Management Adviser are:

- Provide support and advice to the Chief Executive Officer of CREF in all matters related to financial and procurement management of CREF;
- Provide advice and support to all elements of NRREP on procurement procedures and assess compliance of actual procurement to established procedures;
- Support financial management functions of NRREP including preparation of budgets, accounting, financial reporting and auditing;
- Provide capacity development support in financial management to staff of AEPC and other institutions as needed and relevant;
- Prepare terms of reference for, supervise selection of contractor and manage regular Value for Money Audits;
- Facilitate follow-up on regular, special and procurement audits including improvement of NRREP systems and procedures,
- Facilitate that all approved workplans and budgets, progress and all audit reports will be posted on the internet;
- Support preparation by AEPC of regular RET price analysis;
- Provide support to the monitoring including quality assurance functions of AEPC and CREF as supported by NRREP;
- Prepare job description for, select and provide support to the national NRREP Assistant Adviser to the Senior Fund Management Adviser;
- Provide support to review missions as required;

- Support preparation of Financial Management and Procure Manuals of NRREP including CREF;
- Managing requests to Development Partners for transfer of funds, and
- Any other activity as agreed upon during implementation.

Qualifications: At least 15 years of practical experience from similar position, extensive experience in procurement and financial management, quality assurance, monitoring as well as value for money analysis. Working experience from Asia/South East Asia. Fluency in written and spoken English.

Annex Changes in the NRREP, Programme Document, May 2012

1. Programme Document, May 2012

1.1 Coverage - Page ii

- Budget USD 184 Million (and subsequent changes in other page as well)
- Central Renewable Energy Fund USD 127 Million (subsequent changes in other pages as well)

1.2 Executive Summary - Page V

- Point 15: Of the total budget, the Government of Nepal (GoN) contribution is around 35%. The GoN contribution to CREF will be 40% in the 1st FY, and then will increase by 2% annually.
- Point 20, 21 and subsequent pages: Ministry of Environment, Science and Technology(MoEST)

1.3 Budget - Page 15

- Table 1						(In Millions)
Source	Currency	Amount	DKK	USD	% of	Comment
					Total	
KfW	Euro	15	114	19.2	10	Earmarked. For subsidy/credit
						through CREF and battery
						management. Transfer of existing
						biogas credit fund. Additional
						funding possible.
GoN	NPR	5474	383	65	35	Subsidies (40% in the 1 st year and
						will increase by 2% annually),
						AEPC permanent staff, AEPC
						recurrent costs, and contribution to
						programme staff and TA.
Total			1087	184	100	

- Table 2 Distribution of budget among components. Million.

Component	DKK	USD	% of Total
CREF	749	127	69
Total	1087	184	100

Notes: NRREP Management also includes staff and recurrent costs of AEPC including performance based allowances (medical, transportation, books/stationery, child education etc.) to AEPC permanent staff involved in NRREP to be covered from TA pool.

1.4 Steering of NRREP - Page 16

- Among others, the members of the PSC will be a representative from National Planning Commission

1.5 <u>Annex 1- Page 33</u>

- GoN contribution to salaries: Part of GoN salary contribution to Programme Staff in TA pool.

1.6 Annex 2 NRREP Budget – Page 34 & 35

- Table 2.2: Total budget for CREF is 127 M USD
- Table 2.3: KfW total contribution is 18.2 M USD in CREF
- Table 2.4: GoN total contribution is 60 M USD in CREF

2. COMPONENT DESCRIPTION - CREF COMPONENT- NRREP, May 2012

2.1 Coverage - Page ii

- Budget USD 127 Million (and subsequent changes in other page as well)

2.2 <u>Executive Summary - Page iii</u>

- Budget: Output 1.1: 126.1 M USD & Output 1.2: 0.9 M USD

3. FUND DISBURSEMENT, INTERNAL AUDITING AND ACCOUNTING

5.1 <u>CENTRAL RENEWABLE ENERGY FUND- Page 11</u>

-Since the CREF has not yet been established, the flow of fund, disbursement mechanism etc. will be agreed upon between GoN and Development Partners.

8.2.4 Management of Finance and Procurement in NRREP- Page 20

- The concerned District Treasury and Comptroller Office will also carry out the internal audit of the NRREP fund

9.1 BUDGETING AND FLOW OF FUNDS- Page 22

-The NRREP flow of funds as mentioned in Figure 2 will apply in case of the direct funding, which will also be mentioned in the Redbook of the Government of Nepal.

9.2 ACCOUNTING- Page 24

-The Government procedure for financial management will be used insofar as they meet with International Financial Reporting Standards.

9.3 AUDITING-Page 25

- The accounts will be also audited annually by Office of the Auditor General (OAG) of Nepal in accordance with International Standards of Auditing.