

Danida

Norway

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**Government of Nepal
Alternative Energy Promotion Centre**

**Energy Sector Assistance Programme
(ESAP II)
Final Annual Progress Report
NFY 2066/67
(July 2009–June 2010)**

July 2010
Kathmandu, Nepal

Abbreviation

AEPC	Alternative Energy Promotion Centre
ADB	Agricultural Development Bank
AWP 09/10	Annual Work Plan 2009-2010
BE	Biomass Energy
BEE	Biomass Energy Engineer
BETs	Biomass Energy Technologies
CBO	Community Based Organisation
CEA	Country Environment Analysis
CTEVT	Council for Technical Education & Vocational Training
Danida	Danish International Development Agency
DDC	District Development Committee
DEEU/S	District Energy and Environment Unit/Section
DEMI	Decentralized Energy Management Initiative
DFID	Department for International Development
DFS	Detail Feasibility Study
DKK	Danish Krone
EDP	External Development Partner
ESAP	Energy Sector Assistance Programme
FI	Financial Institution
FTC	Field Technical Coordinator
GO	Government Organisation
GoN	Government of Nepal
HH	Household
HLF	Himalayan Light Foundation
IAP	Indoor Air Pollution
ICS	Improved Cooking Stove
IEC	Information, Education and Communication
IICS	Institutional Improved Cooking Stove
IIT	Indian Institute of Technology
ISRES	Institutional Strengthening of Rural Energy Sector
IWM	Improved Water Mill
KfW	Kreditanstalt für Wiederaufbau
KKREP	Kailali Kanchanpur Rural Electrification Project
kW	kilo Watt
LFI	Local Financial Institution
LPO	Local Partner Organisation
MFI	Micro Finance Institution
MGRE	Mini Grid Rural Electrification
MHP	Micro Hydro Project
MIS	Management Information System
MW	Mega Watt
NEPQA	Nepal Photo Voltaic Quality Assurance
NFY	Nepali Fiscal Year

NGO	Non Government Organisations
NOK	Norwegian Kroner
NPR	Nepali Rupees
NRB	Nepal Rastra Bank
PO	Partner Organization
PV	Photo Voltaic
QA & M	Quality Assurance and Monitoring
QMS	Quality Management System
R&M	Repair and Maintenance
REF	Rural Energy Fund
REI	Rural Energy Investment
RETS	Renewable Energy Test Station
RRESC	Regional Renewable Energy Service Centre
SAF	Subsidy Application Forms
SE	Solar Energy
SEA	Strategic Environmental Assessment
SE LI	Solar Electrician Level I
SE LII	Solar Electrician Level II
SEMAN	Solar Electric Manufacturer's Association Nepal
SHS	Solar Home Systems
SOD	Strategic and Organisational Development
SSHS	Small Solar Home System
SWAp	Sector Wide Approach
ToR	Terms of Reference
ToT	Training of Trainers
TRC	Technical Review Committee
TSU	Technical Support Unit
UNDP	United Nations Development Programme
VDC	Village Development Committee
WECS	Water and Energy Commission Secretariat

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Annual Progress Report and Financial Report

Programme:	Energy Sector Assistance
National Partner(s): Alternative Energy Promotion Centre	Alternative Energy Promotion Centre Khumaltar Height Phone number: 5543044, 5539390 P.O. Box: 14237
Programme Manager: Niels Juhl Thomsen (Chief Adviser)	Energy Sector Assistance Programme Alternative Energy Promotion Centre Khumaltar Height Phone number: 5539391, 5539390 P.O. Box 6332
Reporting period:	July 2009 – June 2010

Components:	Implementing agency/agencies [name and contact details]:
1. Institutional Strengthening of Rural Energy Sector (ISRES) Component	Energy Sector Assistance Programme (ESAP) along with the national partner Alternative Energy Promotion Centre (AEPC).
1.1 Rural Energy Fund (REF) Component	
2. Technical Supports	
2.1 Biomass Energy (BE) Component	
2.2 Solar Energy (SE) Component	
2.3 Mini Grid Rural Electrification (MGRE) Component	

Programme starting date	15 March 2007
Programme completion date (expected)	14 March 2012
Previous reports	<ol style="list-style-type: none"> 1. Progress report (July 2007 – December 2007) 2. Annual progress report (March 2007 – June 2008) 3. Progress report (July 2008 – December 2008) 4. Annual progress report (July 2008 – June 2009) 5. Progress report (July 2009 – December 2009)

Executive Summary

This is the third Annual Progress Report of ESAP II. The Report has two parts: 1) progress during the period July 2009 to June 2010 and 2) cumulative progress from Programme start (March 2007) to June 2010.

During this year considerable efforts were made by ISRES Component for formulation of bylaws of the Rural Energy Policy 2006 by drafting required legal documents to enforce existing clauses stipulated in the policy. It is envisaged that the effective enforcement of this policy will assist AEPC and Government of Nepal (GoN) in long term perspective/planning of Renewable (Rural) Energy exploitation. Main activities include feasibility study of Sector Wide Approach (SWAp) in R & RE sector, drafting of AEPC SOD Plan, working on the implementation plan of the recommendations made by the Danida-Norad Joint Review Mission, Decentralized Planning of Energy at VDC level in 14 villages through the Decentralized Energy Management Initiative (DEMI), and facilitated capacity building of 14 students by supporting their thesis/research projects. Various training/workshop have been provided to staff of AEPC, ESAP, RRES and private sector. Nepal Rastra Bank in its new Monetary Policy 2067-68 has made provisions to include hydropower up to 500 kW under Deprived Sector and approved the establishment of separate electricity development fund to support small and medium hydropower project in association with banks and financial institutions. A good effort has been placed for the preparation of continuation of ESAP II which will be directly impacting on income-generation, education, health, and access to information thereby promoting good governance. In reporting period, ISRES Component has expended NPR 28.3million out of the budgeted NPR 50.4million.

The Federal Republic of Germany through KfW joined ESAP programme in October 2009 for supporting 100,000 solar home systems, 50,000 small solar home systems and 100 solar PV pumping systems.

During this reporting period, REF has disbursed subsidy of NPR 241.3million for Solar Home Systems (SHSs), NPR 11.7million for Small Solar Home Systems (SSHSs,) and NPR 7.3million for Metallic Improved Cooking Stoves and NPR 345.8million for Micro hydro/Mini Grid. Whereas the status of REF achievement from March 2007 to June 2010 can be observed in the following figure 1.

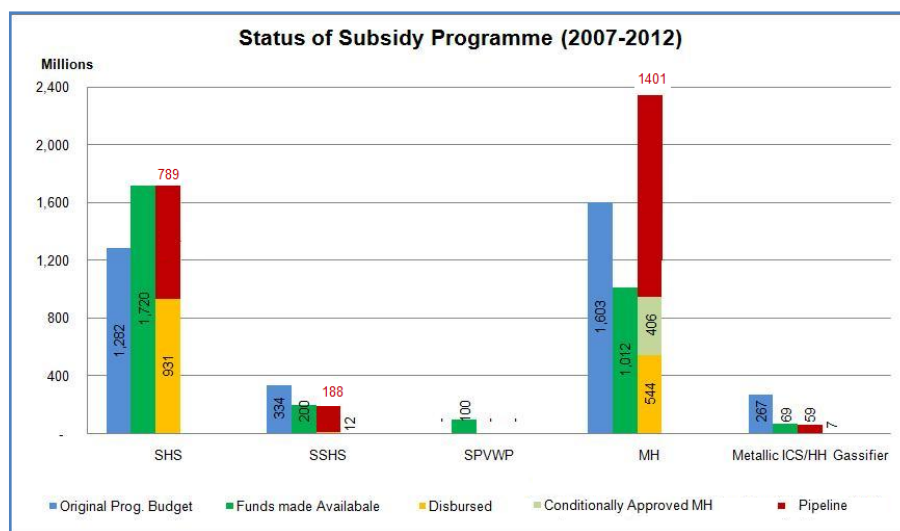


Figure 1: REF Achievements Mar-07 to Jun-10

Considering the existing demands of biomass energy solutions, ESAP Steering Committee Meeting No. 34 approved the revision of the targets and the new target for BEC-ESAP II is 305,000 ICS, 17,000 metallic ICS, 500HH gasifiers, 55 Institutional gasifiers and 2,800 IICS

respectively. Adoption of biomass technology has been increased to 85,142 households against the target of 111,000 households in this reporting period totalling 396,385 households in mid hill districts, and 2,581 households at high altitude areas with coverage of 1,115 VDCs of 49 districts. Among other biomass technologies, one institutional gasifier for tea drying application, 27 HH gasifiers and 30 rocket portable stoves have been installed as pilot project in semi urban areas of Terai. The achievement vs target of Biomass from March 2007 to June 2010 can be observed in figure 2 below. Altogether 138 local partner organisations are working in these areas. These local partner organisations are associated with 10 Regional Renewable Energy Service Centres (RRESCs) for promotion of biomass energy technologies. Similarly, 15 companies have been pre-qualified by AEPC/ESAP for dissemination of metallic ICS. This fiscal year BE Component has spend NPR 74.4 million out of budget NPR 74.3 million.

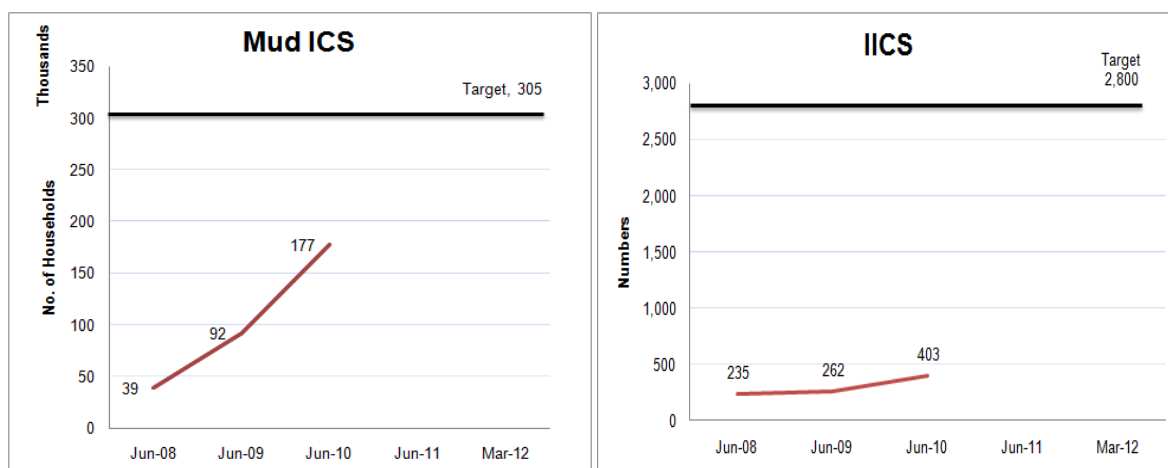


Figure 2: Biomass Achievements Mar-07 to Jun-10 vs Target

Accordingly, ESAP Steering Committee Meeting No. 34 approved the revision of targets for SE Component with 215,000 SHS, 100,000 SSHS and 100 solar PV pump for drinking water. By 30th June 2010, a total of 195,128 SHSs have been installed in 73 districts and 2,494 VDCs with ESAP I and II support. In the reporting period 35,732 SHSs and 6,006 SSHS have been installed against the target of 60,000 SHSs and 40,000 SSHSs respectively. 31 solar companies have been pre-qualified by AEPC/ESAP for SHS dissemination and 36 companies for SSHS dissemination. Modality of used battery collection (Battery return voucher) is under preparation. Five consulting firms, including three new firms are involved to monitor the 5,818 SHSs in the 9th round of QA & M. SE Component has spent in reporting period NPR 21million out of budget NPR 41.7 million for technical support. The achievement vs target of Solar from March 2007 to June 2010 can be observed in figure 3 below.

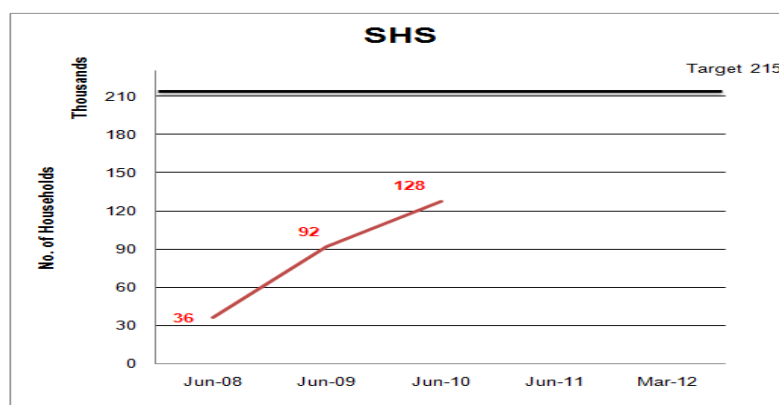


Figure 3: Solar Achievements Mar-07 to Jun-10 vs Target

The GoN has continued expressed its commitment to support rural electrification through the mini-grid installations. The Government announced Ujyalo Nepal Programme in the extension of the last year Rukum Ujyalo Programme. The Government named two more districts – Rolpa and Jajarkot – increasing access of electricity to all households in the districts through the use of mini-grid schemes to the extent possible. In order to relieve the country from the present load shedding, Association of District Development Committee Nepal (ADDCN) and Federation of Nepalese Chamber of Commerce and Industries (FNCCI) together with other organizations signed a Memorandum of Understanding for developing hydropower projects up to 3 MW in public-private-partnership model. It has been stated that project identification will be completed in some districts and these projects are at the stage of further studies. During the reporting period the electricity has been provided to 13,534 households against the target of 25,000 households from Micro Hydro Projects (MHPs) totalling 43,910 households with the effort from ESAP. The achievement vs target of microhydro from March 2007 to June 2010 can be observed in figure 4 below. MGRE Component has spent NPR 45.2million out of budget NPR 68.7 million for technical support during reporting period.

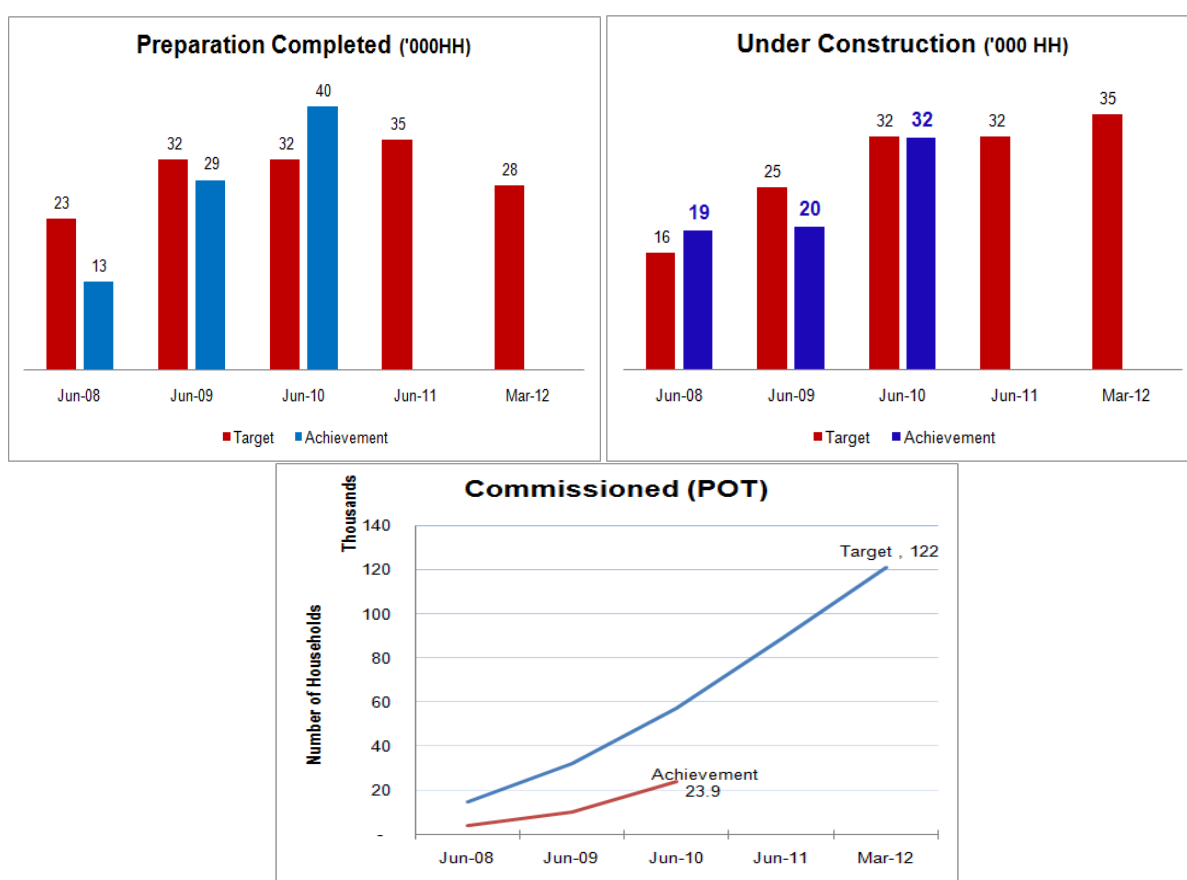


Figure 4: Mini-Hydro Achievements Mar-07 to Jun-10 vs Target

General programme operation support expenses of NPR 44million have been used in the reporting period.

The total programme expenses for the period July 2009 to June 2010 is NPR 827million against the budget NPR 1,560 million while the cumulative programme expenses from March 2007 to June 2010 was 2,042 million. The available budget (March 2007 to March 2012) and expenses in (March 2007 to June 2010) can be observed in Table 1 whereas the status of Disbursed fund (Mar-07 to Jun-10) vs Committed Fund (Mar-07 to Mar-12) can be observed in figure 5.

	Available Budget (Mar-07 to Mar-12)	Expenses (Mar-07 to Jun-10)	Remaining
ISRES	223,685	80,260	64%
REF	2,927,786	1,510,211	48%
BEC	276,845	176,471	36%
SEC	179,305	55,380	69%
MGREC	202,638	101,212	50%
Capital Cost	77,867	22,416	71%
Recurrent Cost	194,911	96,752	50%
Grand Total	4,083,037	2,042,702	50%

Table 1: Total Available Budget and Expenses

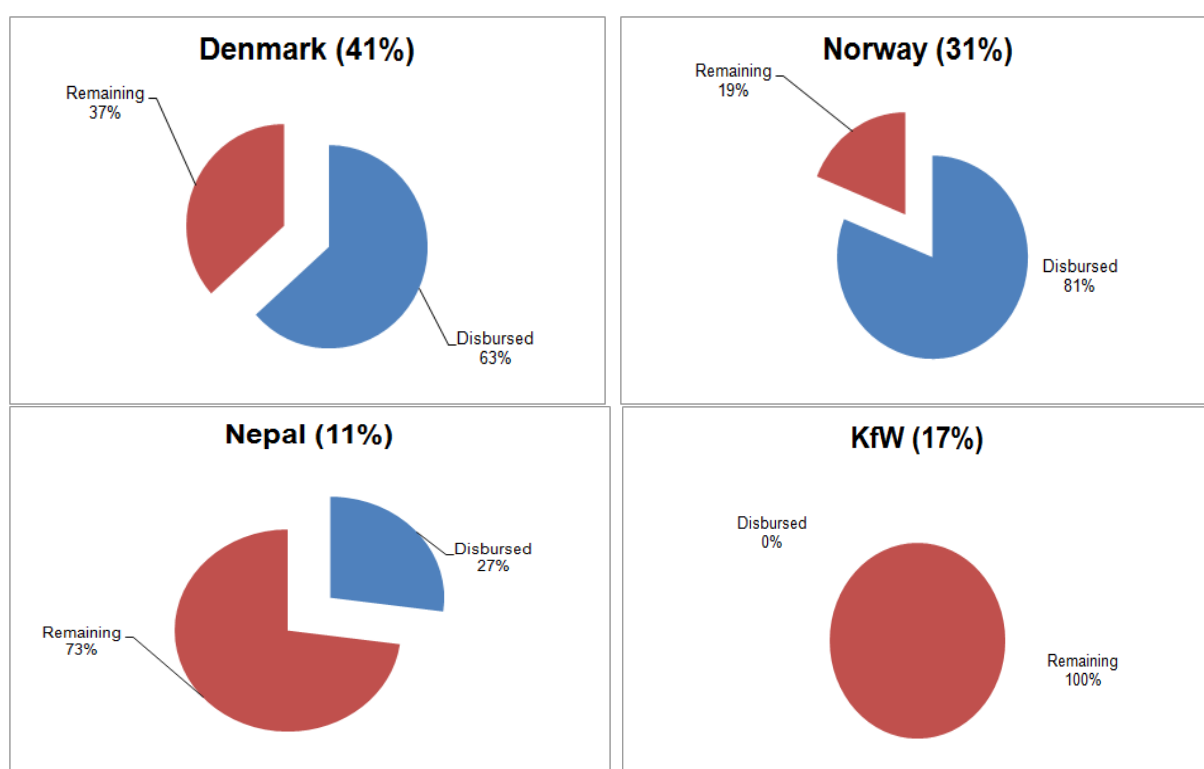


Figure 5: Disbursed Fund (Mar-07 to Jun-10) vs Committed Fund (Mar-07 to Mar-12)

A. Assessment of the development of the national environment, including the strategic framework, since the last report

1. Institutional Strengthening of Rural Energy Sector (ISRES)

ISRES is working towards developing and sustaining effective institutional capacity of AEPC to lead the development of the Rural and Renewable Energy (R & RE) sector. This means striving to achieve efficient resource utilization and quality assurance of services by ensuring proper coordination, networking and facilitation.

During this year considerable efforts were made for enacting the Rural Energy Policy 2006 by drafting required legal documents to enforce existing clauses stipulated in the policy. It is envisaged that the effective enforcement of this policy will assist AEPC and GoN in long term perspective/planning of Renewable (Rural) Energy exploitation.

Other main activities of ISRES carried out in 2009-10 is the feasibility study on possibility of Sector Wide Approach (SWAp) in R & RE sector, drafting of AEPC SOD Plan and working on the implementation of recommendations made by the Danida-Norad Joint Review Mission, supported decentralized planning of energy at VDC level in 14 villages through the DEMI and facilitated capacity building of 14 students by supporting their thesis and research projects. Besides, support for participation of staff of AEPC, ESAP, RRESC and private sectors in various training/workshop has been provided.

A good effort has been placed for the preparation of continuation of ESAP II which will be directly impacting on income-generation, education, health, and access to information thereby promoting good governance.

During reporting period, ISRES component continued its promotional activities related to credit financing in energy sector. As outcome of intensive dialogues with Financial Institutions (FIs), Nepal Rastra Bank in its new Monetary Policy 2067-68 has made provisions to include hydropower up to 500 kW under Deprived Sector and approved the establishment of separate electricity development fund to support small and medium hydropower project in association with banks and financial institutions.

Likewise, recognizing the importance of participation of additional EDP to fill the funding gap of ESAP II, ISRES initiated various activities to mobilise resources from EDP.

2. Rural Energy Fund (REF)

During 2009/10 Danida, Norad and Government of Nepal continued their support in providing subsidy fund through REF. Later in October 2009, the Government of Germany through KfW joined ESAP programme for supporting 100,000 solar home systems, 50,000 small solar home systems and 100 solar PV pumping systems. A total of 33,217 solar home systems in 71 districts has been installed and provided subsidy of NPR 241.3 million. Similarly 5,856 numbers of rural households have been electrified with SSHSs in 23 districts with disbursement of NPR 11.7 million as subsidy. Similarly, 1,844 rural households have installed improved metallic cooking stoves in 12 districts with disbursement of NPR 7.4 million as subsidy.

As of Mini Grid, the MHPs with total capacity of 2,857 kW have been conditional approval with estimation of benefits of 24,698 households of 30 districts. The committed subsidy to these projects is estimated to be NPR 396 million. Similarly the MHPs with total capacity of 2,971.5 kW of 31 districts have given final approval. It is expected that around 28,630 rural HHs will be connected with electricity from these MHPs.

During this reporting period, 986 kW of electricity has been generated in 37 districts with benefiting of 9,566 households.

3. Technical Support

3.1 Biomass Energy

ESAP II started on March 15, 2007 for five years with the target of 434,000 Improved Cooking Stoves (ICS) and 50,000 Metallic Improved Cooking Stoves (MICS) supported through subsidy. Similarly the targets for other technologies are 10,000 HH gasifiers, 1,000 Institutional gasifiers and 5,000 Institutional Improved cooking stoves (IICS). However, considering the existing demands of these products ESAP Steering Committee Meeting No. 34 approved the revision of the targets and the new target for BEC-ESAP II is now 305,000 ICS, 17,000 MICS, 500 HH gasifiers, 55 Institutional gasifiers and 2,800 IICS respectively. By the end of 3rd year of the ESAP II the progress in mud brick ICS has crossed 152,000 whereas in case of MICS it is less than 2,000.

The decentralised implementation strategy of the programme and capacity enhancement of rural organisations has created positive environment among existing partners. This can be measured in terms of partners integrating stove component in other rural development programmes. By 30th June 2010, a total of 396,385 ICSs and 2581 metal stoves were installed in 1,115 VDCs of 49 districts with ESAP I and II support. Altogether 138 local partner organisations are covering these areas. These 138 local partner organisations are associated with 10 Regional Renewable Energy Service Centres (RRESCs) for promotion of biomass energy technologies. Similarly, 15 companies are pre-qualified by AEPC/ESAP for MICS dissemination.

3.2 Solar Energy

Solar PV has become one of the fast growing renewable technologies for energy generation for lighting globally. In Nepal also, there has been a rapid increase in dissemination of SHS and SSHS (Solar Tuki) in rural areas from ESAP support ESAP II started on March 15, 2007 for five years with the target of 150,000 SHS and 250,000 SSHS for next five years. However, considering the existing demands of these two products, ESAP Steering Committee Meeting No. 34 approved the revision of the targets and the new target for SEC-ESAP II is now 215,000 SHS, 100,000 SSHS and 100 drinking water project with PV pumping. By 30th June 2010, a total of 195,128 SHSs were installed in 73 districts and 2,494 VDCs with ESAP I and II support. In the reporting period 35,732 SHSs and 6,006 SSHS were installed. 31 solar companies are pre-qualified by AEPC/ESAP for SHS dissemination and 36 companies for SSHS dissemination. An equal number of not qualified companies have revitalised their management, business network and arranged financing and these are expected to apply for pre-qualification in the future.

From the beginning of this fiscal year, the subsidy fund for SHS in REF has exhausted. SEC-ESAP informed qualified companies, in September 2009, not to install SHS in subsidy so the subsidy was virtually stopped till the KfW fund rolled in. The release of subsidy from KfW fund for the SHS installed after 13th Oct, 2009 started only from March 2010. Thus from September 2009 to March 2010 subsidy is paid for on quota for only 10,000 SHS. Thus in this fiscal year full-fledged subsidy is available for four months only. This is the only reason for not meeting target of 60,000 SHS.

In the reporting period, some of the major initiatives taken in programme like implementation modality for dissemination of SSHS. Implementation of pilot project for credit financing of SHS is under implementation together with ISRES component. Preparation of modality of used battery collection (Battery return voucher). Solar Energy

Component (SEC) is working together with Ministry of Environment in preparation of legal framework for long term management of used lead acid batteries in Nepal.

In order to carry out the field verification of SHS installed, two assistant programme officers are hired in SEC. Three new consulting firms are added altogether five consulting firms are used to monitor the 5,818 in the 9th round of QA & M. Results 8th round of QA & M are finalised and two companies found defaulter in this round are disqualified from the programme. 200 solar electric the efficiency of processing Subsidy Application Forms (SAFs) was improved and processing is now faster without duplication of activities, and with improved reliability. 250 technicians of different skill levels are trained to improve the quality of installation and repair services. The efficiency of processing of Subsidy Application Forms (SAFs) is improved and processing is now faster without duplication of activities, and with improved reliability. Information Education and Communication (IEC) materials, like brochures of solar energy are prepared and distributed.

3.3 Mini Grid Rural Electrification

The GoN has continued to express its commitment to support rural electrification through the mini-grid installations. The Government announced Ujyalo Nepal Programme in the extension of the last year Rukum Ujyalo Programme. The Government named two more districts – Rolpa and Jajarkot – increasing access of electricity to all households in the districts through the use of mini-grid schemes to the extent possible.

The country is facing a severe load shedding and there is no any possibility to end present load shedding in a near future. Consequently, there is a high demand coming up for implementing mini-grid schemes from the areas which are otherwise would be covered by grid extension.

In order to relieve the country from the present load shedding, Association of District Development Committee (ADDCN) and Federation of Nepalese Chamber of Commerce and Industries (FNCCI) together with other organizations signed a Memorandum of Understanding for developing hydropower projects up to 3 MW in public-private-partnership approach. It has been stated that project identification is completed for some districts and these projects are at the stage of further studies.

ADDCN has conducted a national level convention and other two regional workshops. The convention concluded with a 12-point declaration. The main emphasis of the convention and workshops is advocating for increased role and responsibility of the local government institutions in the hydropower development --generation and rural electrification.

It has been observed that the micro/mini-hydropower sector is increasingly facing pressure to fulfill the expectations of the Government and also of the people. Because of the government high priority and furthermore the needs of the people, demand for electrification is ever increasing, putting tremendous pressure on the programme implementation.

B. Progress compared to objectives since the last report

Key annual outcome and impact indicators	Progress
Institutional Strengthening of Rural Energy Sector	
Coherency in policy and coordination for delivery of rural energy services with focus on decentralisation and private sector	<ul style="list-style-type: none"> • Inputs to the National Rural Energy Strategy, 2010 • Prepared and published ToRs for drafting various legal documents to en-act Rural Energy Policy, 2006. • Drafting of the required rules, act by consultant under Rural Energy Policy, 2006 is ongoing. • Study on Subsidy Rates for Renewable Rural Energy Technologies (RETs) and their Delivery Mechanism by consultant is ongoing • Inputs to the revised Subsidy Arrangement 2009 and Subsidy Delivery Mechanism, 2010
Alignment of national and external development partners to the national rural energy sector policy and institutional framework	<ul style="list-style-type: none"> • Conducted National Workshop on Strategic and Organizational Development Plan of AEPC • Prepared Draft AEPC SOD Plan • Prepared draft report on Feasibility Study on the Possibility of the SWAp in Rural and Renewable Energy Sector and Identification of Its Indicators • Consultant working on ISO certification of REF • Facilitated KfW to join ESAP to provide subsidy to Solar Energy Technologies
Relevant institutions are capable to coordinate, develop, implement, and monitor rural energy policy/programmes	<ul style="list-style-type: none"> • Awarded on the Job Training to four bachelor level Industrial Engineering students at four RRESCs • Support to students in RE related thesis/projects: 4 group projects involving 13 students and 1 individual thesis • AEPC/ESAP, partner institutions staff's participation in training, workshops, etc • 14 VDC-level energy plans preparation • Inputs to documents, papers, proposals, etc • AEPC Web-page development • Web-page support to RRESCs
Rural Energy Fund	
Quality rural energy services are affordable nationwide through grants and enhanced access to credit	<ul style="list-style-type: none"> • KfW joined ESAP programme from October 2009 to support solar home systems, small solar home systems and solar PV pumping systems. Negotiations with external development partners to bridge subsidy fund gap for micro/mini hydro are going on. • REF has been optimally channelling fund in the form of subsidy for the investment in different rural energy solutions. • REF has been following guidelines, policies and

Key annual outcome and impact indicators	Progress
	<p>directives to manage fund in a transparent and efficient manner.</p> <ul style="list-style-type: none"> • The outreach of urban banks has been extended to 14 districts for SHS financing. • An MHP has been financed in Nuwakot and many more are in pipeline in other districts.
Technical Support	
Biomass Energy	
<p>Improve capacity of local organizations to offer affordable biomass energy solutions to the rural communities with quality assurance.</p>	<ul style="list-style-type: none"> • The programme has been implemented in 49 mid and districts with the support of 10 RRESCs and 138 local district based organisation. • Two Regional Renewable Energy Service Centre (RRESCs) were asked to extend adjoining region for involved in BE programme based on performance. • Emphasis is given for making aware to related stakeholders i.e. health workers, school teachers, VDC chairman and political parties on BE technologies. • The registered promoters' association are working as one of the active LPOs in the districts where promoters' association is established • Four District Development Committee are involved in implementing BE programme in four districts in pilot basis • More than 1000 people trained as stove promoters from programme
<p>Gender, health, environment and socio-economic issues, including reduction of women and children's drudgery are addressed through implementation of biomass energy solutions</p>	<ul style="list-style-type: none"> • Out of total trained promoters 35% are women and they are earning cash or kind from users end. • Family members especially male members are supporting during cooking hours due to smoke free and clean environment • Improved Cook Stove has been proved to reduce 65%of PM 2.5 (Particulate Matters less than 2.5 micron in diameter) and 62% of the CO (Carbon Monoxide), the major indoor air pollutants. Hence, it has improved the health conditions of people living in the 85,142 same numbers of households with clean indoor air quality. • Major smoke born diseases i.e. eye irritation, cough, asthma has been reduced drastically by user of ICS • It has reduced the drudgery of women by saving the time of fuel wood collection and cooking.
<p>Adoption of biomass energy solutions is popularized in the rural communities</p>	<ul style="list-style-type: none"> • Adoption of biomass technology increased to 85,142 households. • Information Education and Communication (IEC)

Key annual outcome and impact indicators	Progress
	materials on other biomass energy solutions (Metal Stoves, Gasifiers, institutional improved cooking stoves and Briquetting etc) have been prepared and disseminated for awareness raising and demand collection.
Solar Energy	
Reinforced national framework for dissemination of quality solar energy systems.	<ul style="list-style-type: none"> • A fully functional modality for dissemination of SHS. • A modality for dissemination of SSHS has been implemented and waiting for feedback for improvement. • Nepal Interim Photo Voltaic Quality Assurance (NEPQA) and Renewable Energy Test Station (RETS) are functional. • Timely processing of SAFs in SE Component. • Quality Assurance and Monitoring (QA & M) system is effectively executed. • Capacity building activities of private sector are effectively implemented. • 35,732 SHS and 6,006 SSHS installed with subsidy.
Increased and sustainable access and affordability for the rural poor to solar energy systems.	<ul style="list-style-type: none"> • A capable and competent marketing network of private sector companies, which brings quality products and services closer to the user. • A model of credit financing SHS is under implementation together with ISRES, increase the easy access to credit financing in SHS and SSHS. • Dissemination of SSHS (Solar Tuki) targeting poor in rural areas. • Used battery management initiative started together with Ministry of Environment. • Planned to voucher for the collection of used batteries. • Planned to establish repair and maintenance facilities in the remote areas.
Mini Grid Rural Electrification	
Reinforced sectoral framework for policy formulation, strategy development, planning, programme implementation and harmonizing on- and of-grid rural electrification at national as well as local level.	<ul style="list-style-type: none"> • Subsidy policy and delivery mechanism revised by the Government. • Continued emphasis on mini-grid development in GoN's plan and programmes. Mini-grid schemes are becoming a part of District Development Committees (DDCs) perspective plan. • Seven Non-Governmental Organizations (NGOs) are involved in the sector as Regional Centres covering all 54 potential districts. • A total of 57 private sector installation companies are involved in the sector.

Key annual outcome and impact indicators	Progress
	<ul style="list-style-type: none"> • A total of 45 consulting companies are involved in the sector to provide survey and design services.
Increased and sustainable access to and use of electricity in rural areas.	<ul style="list-style-type: none"> • Access of electricity increased to 13,534 households in this reporting period totalling 43,910 households with the effort from ESAP. • A total of 106 (3,355 kW) projects are under construction stage, that will electrify further 31,761 households. • A total of 145 (3,950 kW) projects are given subsidy approval on conditional basis, that will electrify further 39,998 households. • A total of 129 (4,634 kW) projects are ready with details studies, that will electrify further 39,547 households. • A total of 72 (2,053 kW) project are on-going detailed feasibility studies, that will electrify further 19,859 households.

C. Progress compared to objectives since the beginning of the programme

Key outcome and impact indicators	Progress
Institutional Strengthening of Rural Energy Sector	
Coherency in policy and coordination for delivery of rural energy services with focus on decentralisation and private sector	<ul style="list-style-type: none"> • Inputs to the National Rural Energy Strategy, 2010 • Prepared and published ToRs for drafting various legal documents to en-act Rural Energy Policy, 2006. • Drafting of the required rules, by-laws, act by consultant under Rural Energy Policy, 2006 is ongoing. • Study on Subsidy Rates for Renewable Rural Energy Technologies (RETs) and their Delivery Mechanism by consultant is ongoing • Inputs to the revised Subsidy Delivery Mechanism 2009 • Inputs to the revised Subsidy Arrangement 2009 and Subsidy Delivery Mechanism, 2010
Alignment of national and external development partners to the national rural energy sector policy and institutional framework	<ul style="list-style-type: none"> • Conducted National Workshop on Strategic and Organizational Development Plan of AEPC on Dec 28 & 29, 2009 • Prepared Draft AEPC SOD Plan • Draft report prepared on Feasibility Study on the Possibility of the SWAp in Rural and Renewable Energy Sector and Identification of Its Indicators • Consultant working on ISO certification of REF • Facilitated KfW to join ESAP to provide subsidy to Solar Energy Technologies • EDP coordination meeting on Dec 8, 2008 • Institutional Mapping Study and Workshop completed
Relevant institutions are capable to coordinate, develop, implement, and monitor rural energy policy/programmes	<ul style="list-style-type: none"> • Participation of AEPC/ESAP and RRESC staff in training/conferences/workshops • 20 DEMI reports prepared • BE, SE and MGRE Component's Management Information System (MIS) Database is operational. • Second residential workshop on Gender Mainstreaming and Social Inclusion (GMSI) completed in April 2009 • Inputs to documents, conference papers, proposals • New Web page developed and made online. • First phase of capacity building activities of Kailali Kanchanpur Rural Electrification Project (KKREP) Umbrella Organization
Rural Energy Fund	
Quality rural energy services are	<ul style="list-style-type: none"> • KfW joined ESAP programme from October 2009 to

Key outcome and impact indicators	Progress
affordable nationwide through grants and enhanced access to credit	<p>support solar home systems, small solar home systems and solar PV pumping systems. Negotiations with external development partners to bridge subsidy fund gap for micro/mini hydro are going on.</p> <ul style="list-style-type: none"> • REF has been optimally channelling fund in the form of subsidy for the investment in different rural energy solutions. • REF has been following guidelines, policies and directives to manage fund in a transparent and efficient manner. • The access of credit has been enhanced in RET. Partner banks has financed more than NPR 7.0 million in SHS and NPR 2.5 million in MHPs. Lots of projects are in follow up as banks are studying the projects.
Technical Support	
Biomass Energy	
Improve capacity of local organizations to offer affordable biomass energy solutions to the rural communities with quality assurance.	<ul style="list-style-type: none"> • Capacity development i.e. eight organizations as Regional Renewable Energy Service Centre (RRESC)s are involved in BE programme • More than 3400 people trained by programme as stove promoters • More than 138 numbers of local partner organization were capacitated to implemented BEC activities in 50 mid hill districts as well as 3 high hill districts • The registered promoters' association are working as one of the active LPOs in the districts where promoters' association is established • Four DDCs are involved in implementing BE programme in four districts in pilot basis.
Gender, health, environment and socio-economic issues, including reduction of women and children's drudgery are addressed through implementation of biomass energy solutions	<ul style="list-style-type: none"> • Improved Cook Stove has been proved to reduce 65%of PM 2.5 (Particulate Matters less than 2.5 micron in diameter) and 62% of the CO (Carbon Monoxide), the major indoor air pollutants. Hence, it has improved the health conditions of 1,951,805 people living in the mid hill region in 390,361 numbers of households with clean indoor air quality. • Out of total trained promoters 30% are women and they are earning cash or kind from users end. • Family members especially male members are supporting during cooking hours due to smoke free and clean environment • It has reduced the drudgery of women by saving the time of fuel wood collection.
Adoption of biomass energy solutions is popularized in the	<ul style="list-style-type: none"> • Adoption of biomass technology increased to 390,361 households at mid hill districts 2,300 household at high altitude areas with the effort from ESAP. Other

Key outcome and impact indicators	Progress
rural communities	biomass technologies i.e. gasifier for tea drying, 27 HH gasifier piloting in semi urban areas portable 30 rocket stoves in Terai etc.
Solar Energy	
Reinforced national framework for dissemination of quality solar energy systems.	<ul style="list-style-type: none"> • A fully functional modality for dissemination of SHS and SSHS. • Clear up of the backlog of ESAP I especially in QA & M settlement. • Various trainings conducted to enhance the capacity of private sector are effectively implemented. • Framework of prequalification and evaluation of PQ companies is designed and implemented. • NEPQA and RETS are upgraded and functional. • Timely processing of SAFs in SE Component. • QA & M system is revised and made clear and effectively executed. • 125,310 SHS and 6,006 installed with subsidy.
Increased and sustainable access and affordability for the rural poor to solar energy systems.	<ul style="list-style-type: none"> • Helped to develop a capable and competent marketing network of private sector companies, which brings quality products and services closer to the user. • A model of credit financing SHS is prepared implemented to increase the easy access to credit financing in SHS and SSHS. • Dissemination of SSHS (Solar Tuki) started targeting poor in rural areas. • Used battery management initiative started together with Ministry of Environment. • Planned to established used battery collection stations an design of voucher for used battery collection.. • Planned to establish repair and maintenance facilities in the remote areas.
Mini Grid Rural Electrification	
Reinforced sectoral framework for policy formulation, strategy development, planning, programme implementation and harmonizing on- and of-grid rural electrification at national as well as local level.	<ul style="list-style-type: none"> • Seven NGOs are involved in the sector development as Regional Centres covering 54 districts. • A total of 57 private sector installation companies are involved in the sector. • A total of 45 consulting companies are involved in the sector to provide survey and design services.
Increased and sustainable access to and use of electricity in rural areas.	<ul style="list-style-type: none"> • Access of electricity increased to 43,910 households with the effort from ESAP. • Awareness has increased to find out new end-use applications. The end-use applications are in increasing trend.

D. Progress during the year compared to output targets and budget for the year

Output target	Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action	
1. Institutional Strengthening of Rural Energy Sector						
Output 1	Coherent Rural Energy Policy addressing both on- and off-grid electrification issues, among others					
Output 1.1	Support to prepare a National Rural Energy Development Strategic plan	Review of WECS's National Rural Energy Strategy. Internal discussion held at AEPC.	3,500,000	NIL	In-house on-going activity.	Comments to be forwarded to WECs, NPC. Action plan to be prepared.
Output 1.2	Review the present policies governing RE	1. ToRs for drafting various legal documents to en-act Rural Energy Policy, 2006 prepared. 2. Drafting of the required by-laws, act by consultant under Rural Energy Policy, 2006 ongoing.	2,000,000	67,320	On-going activity.	
Output 1.3	Assist the revision of subsidy policy and integrated credit mechanism	Study on Subsidy Rates for Renewable Rural Energy Technologies (RETs) and their Delivery Mechanism by consultant ongoing.	600,000	NIL	In-house on-going activity.	

Output target	Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action	
Output 2	An institutional basis with clearly defined roles established with focus on decentralization and the private sector					
Output 2.1	Mapping of institutional roles	A policy recommendation	NIL	189,077	Activity completed and expenses are outstanding from last year	
Output 2.3	Strengthen the coordination by institutionalising a network of institutions		800,000	NIL	No Activitiy this year	Study and consultative workshop
Output 2.4	Assist local partners to ensure efficient resource utilization through planning exercise	Decentralized Energy Management Initiatives at the village level	6,000,000	3,557,464	14 reports/VDC level plans expected by end of August 2010	Follow-up with RRESCs
Output 3	Sector Wide Approach (SWAp) for rural energy development in place.					
Output 3.1	Ensure transparency in REF administration (ISO Certification)	1. Three rounds of trainings completed. 2. Draft of Quality Manual completed.	2,500,000	43,750	Quality audit needs to be completed and training on auditing remains to be conducted	The job to be completed within coming three months.
Output 3.2	Promote SWAp for participation by multiple EDPs	1. In-house inception workshop conducted. 2. Received draft report on Feasibility Study on the Possibility of SWAp in R & RE Energy Sector and Identification of Its Indicators.	500,000	950,900	On-going activity.	Stakeholders workshop on draft version.

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 3.3	Encourage EDPs to sign on to joint financing agreements for rural energy	JFA with KfW signed; KfW joined ESAP. Discussions with SNV and Norad ongoing.	500,000	NIL	In-house on-going activity.	
Output 3.4	Strengthen the EDPs' coordination by institutionalising the current thematic group on rural electrification co-chaired by ADB	Donor Group Meeting on Energy Sector held on 23 February 2010 in Kathmandu at Embassy of Denmark. Discussions on ESAP II and its continuation.	500,000	NIL	In-house on-going activity.	
Output 3.5	Follow up on decisions made in the EDPs coordination meetings	KfW joining ESAP. Initiation of ESAP III.	200,000	NIL	In-house on-going activity.	
Output 4	An accountable and effective institutional leadership, especially in AEPC with transparent decision-making process for rural energy policy, planning and management					
Output 4.1	Improve the Mgmt practices of AEPC and partner institutions	Meetings and workshops	2,000,000	1,464,850		
Output 4.2	Organise leadership and mgmt training courses for management in AEPC and partner institutions	On the Job Training Support Thesis Support Capacity building activities for AEPC/ESAP Staff	2,500,000	1,184,031		
Output 4.3 & 4.4	Establish a transparent system for dissemination of Management decisions and financial management practices and systems		200,000	NIL	No activity in this year	

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 4.5	Improve the AEPC MIS as required	Renew of MIS for 2010-2011	1,000,000	15,000		
Output 4.6	Improved working environment in AEPC through infrastructure improvement and incentive support	Improved working environment in AEPC Incentive Support	4,200,000	3,145,669		
Output 5	Conducive working environment in AEPC and partner organizations, including human resource development policy, planning & management					
Output 5.1	Update AEPC SOD plan	1. RE Stakeholder Consultations 2. National Workshop on AEPC SOD Plan 3. Draft AEPC SOD Plan	1,000,000	449,531		Finalize SOD Plan
Output 5.2	Conduct capacity building activities of AEPC and partner institutions	Various capacity building activities for AEPC staff	3,500,000	542,525		
Output 5.3	Implement the human resource development strategy in AEPC	Facilitated all the stages of drafting AEPC SOD Plan	1,000,000	NIL	AEPC SOD Plan is in finalization stage	With Final AEPC SOD Plan facilitate implementation of HRD in AEPC
Output 5.4	Analyse institutional gender issues and implement gender mainstreaming in AEPC and other partner institutions	1. ESAP GESI Action plan prepared. 2. Discussions with SNV on support ongoing.	3,500,000	NIL	In-house on-going activity.	In house training; MIS database revision; reporting.

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 5.5	Conduct capacity building activities of other partner institutions	<ol style="list-style-type: none"> 1. Planning and Coordination training for DEEU Staff 2. Various training for RRESCs Staff 3. Capacity of RRESC and DEEU staff enhanced 	3,500,000	1,821,834		
Output 6	Integrated documentations of the sector development and of major changes in the programme (ESAP II) in place					
Output 6.1	Establishment of a network for knowledge sharing and coordination	<ol style="list-style-type: none"> 1. Magazine Contribution 2. Support in drafting "Strengthening the documentation center at AEPC: Master Plan for AEPC Existing Library" 	1,000,000	306,000		Support to library based on Master Plan.
Output 6.2	Establishment of information services (web-site and resources centre)	<ol style="list-style-type: none"> 1. Updated and redesigned AEPC website 2. Support to Radio Program 3. Internet services 	1,000,000	2,020,504	Expenses also includes outstanding from last year	
Output 7	Coherency among Rural Grid and Off-grid Electrification (Support for Kailali Kanchanpur Rural Electrification Project, KKREP, Umbrella Organisation)					
Output 7.1	Social Mobilisation-Cooperative (Support for KKREP Umbrella Organisation)	Completion of Capacity Building and Institutional Development Support Activity Phase I for KKREP in	1,000,000	7,711,086	Delays in initiating Capacity Building Activity Phase II due to the unsecure	Activity Phase II to be initiated in 10/11.

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 7.2	Conduct capacity building activities with cooperatives	February 2010 by the consultant.	2,000,000		situation in terrain districts.	
Output 7.3	Prepare and disseminate IEC materials	Activity I included various technical trainings, exposure visits, public awareness, demand side management, safety and end-use promotion programs together with training and tools for MIS/GIS, Service Providers and Technical Support Unit (TSU) etc.	500,000			
Output 7.4	Elaborate and publish guidelines, manuals and planning tools		1,000,000			
Output 7.5	Operational Support to Technical Support Unit		Support provided.			
GRANT to RRESCs						
Total			50,400,000	28,284,117		
Budget Balance: 43.9%						

Output target	Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
2. Rural Energy Fund					
Output 1	Fund raised for support to rural energy investment from national and EDPs				
Output 1.1	Network and coordinate with Government institutions, donors, financial sector and private energy service sector.	Pursued relevant institutions, such as NRB, banks NRB issued monetary policy which included MHP financing under the deprived sector lending scheme.	200,000	NIL	In-house ongoing activities
Output 1.2	Promote REF through dissemination of information on REF achievements and modalities.	1. Received script of TV documentary on AEPC/ESAP and its working modalities 2. Completed field works and interviews for TV documentary	900,000	293,195	
Output 1.3	Raise Fund with donors (grants and credits), financial sector and Government matching contributions	Negotiation with external development partners are going on for fulfilling the funding gap of MH subsidy programme.	200,000	NIL	In-house ongoing activities
Output 2	Financial sector credits available for rural energy investment.				
Output 2.1	FI oriented about MH and SHS	Additional 8 districts selected for credit financing SHS	2,000,000	NIL	In-house ongoing activities

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 2.2	Piloting of modalities developed for promotion of micro credit with Micro Finance Institutions (MFIs), NGOs/ Community Based Organisations (CBOs), etc.		10,000,000	35,492		
Output 2.3	Promote and lobby for a financial sector managed long-term credit facility for rural energy investments	Partner banks, insurance companies, etc. have been pursued periodically	200,000	NIL	In-house ongoing activities	
Output 2.4	Conduct capacity building activities in the financial sector for RE investments.	Negotiations going on with Rural Microfinance Development Centre for a long term partnership for building capacity of local financial institutions	3,400,000	2,565,085		
Output 2.5	Promote rural energy solutions through orientation program	Orientation programs in 14 districts, Rukum has been included under Rukum Ujyalo program of AEPC and the GoN.	200,000	NIL		
Output 2.6	Facilitate credit line availability with financial institutions	Facilitation is ongoing	2,800,000	566,693		
Output 3	Fund managed in a transparent and efficient manner					
Output 3.1	Review of Delivery Mechanism	Input to Subsidy Delivery Mechanism 2010	200,000	66,495		

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 3.2	Institutional credit facilitating	Fund such as micro-hydro development fund have been approved for the institutional credit facilitating	NIL	NIL		
Output 3.3	Monitoring	<ol style="list-style-type: none"> 1. Carried power output and household verification of micro hydro plants 2. Monitoring and review of REF activities under RRESCs 	6,900,000	4,722,942		
Output 4	Fund optimally channelled by REF for the investment in different rural energy solutions					
Output 4.1	Sound financial appraisal of projects for subsidy approval and for investment by financial institutions.	Financial appraisal of potential micro hydro plants, SHS, SSHS and metallic improved cooking stoves are in place.	2,000,000	NIL		
Output 4.2	Approve applications for grant from the REF support for off-grid electrification	In-house activities	NIL	NIL		
Output 4.3	Disburse REF grant supports (subsidy)					
Output 4.3.1	MH-150,000HH (target for this year - 34,000HH /4,000kW)	<ol style="list-style-type: none"> 1. 24,698 HHs of 30 districts have received conditional approval of capacity 2,857 kW, committed subsidy for these projects would be NPR 396 million. 2. 99 MHPs having capacity 	580,000,000	345,780,549		

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
		<p>of 2,971.53 kW benefitting 28,630 HHs has been given final approval for initiating construction work.</p> <p>3. 74 MHPs of capacity 986.44 kW benefitting 9,566 HHs are power output tested and verified.</p> <p>4. 25MHPs with capacity of 383kW power output have completed one-year guarantee check period.</p>				
Output 4.3.2	IWM Electrification (target for this year – 1,500 HH/150 kW)	None	11,250,000	NIL	Supporting organisation for IWM is still working as to recommend for subsidy approval.	
Output 4.3.3	SHS-150,000HH (target for this year - 60,000HH)	33,217 solar home systems generating 769 kW power in 71 districts.	480,000,000	241,334,200	Due to fund gap in original subsidy budget, installation process has been slowed down.	KfW joined ESAP for supporting SHS
Output 4.3.4	Solar Tuki -250,000HH (target for this year - 40,000HH)	5,856 rural households of 23 districts have installed SSHS with total capacity of 29.3 kW	80,000,000	11,712,000	Installer companies reluctant in installation of SSHS	

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 4.3.5	BE-100,000HH (target for this year-10,000HH)	1,844 metallic improved cooking stoves in 12 districts have been installed.	40,000,000	7,376,000	due to approval process of the subsidy application forms and difficulties in obtaining recommendation of forms from local authorities. Programme components are going to review the approval process and other hindrances that affect the process.	
Output 4.4	Facilitate the REF Institutional Credit Network and coordinate with Government institutions, donors, financial sector and private energy service sector	<ol style="list-style-type: none"> 1. Seven partner banks, three partner insurance companies, RMDC, DCGC, NRB, NBA pursued for a network development. 2. Partner banks and insurance companies have agreed to sign the MoU 	40,200,000	NIL		
GRANT to RRESCs				NIL		
Total			1,260,450,000	614,452,651		
Budget Balance: 51.3%						

Output target	Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
3.1 Biomass Energy					
Output 1	Capacity development of district based LPOs', specifically in scaling up of ICS				
Output 1.1	Provide technical inputs to LPOs for biomass technologies including ICS in the mid hill districts	<ol style="list-style-type: none"> 1. Altogether 120 LPOs implemented BEC activities in 1,115 VDCs 2. BEC activities were extended to 277 new VDCs of 50 mid-hill districts including 1 new district. 3. More than 26,000 people were orientated about the ICS and BEC programme through 398 orientation & demonstration activity 	19,300,000	605,688	
Output 1.2	Provide ToT and other trainings to LPOs for their capacity building	<ol style="list-style-type: none"> 1. Trained 1,117 new promoters 2. 35 persons were capacitated with partner staff TOT 3. The promoter's refresher training was given to 109 promoters 4. The exposure visit to Field Technical Coordinators was conducted in the region apart from their working area 	10,300,000	31,617	

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 1.3	Monitor and supervise LPOs activities and back stop them on time	<ol style="list-style-type: none"> 1. 20% of the installed ICS were monitored technically. 2. Conduct control cooking test, tool for visible demonstration and orientation. 3. The MIS database is updated regularly 4. Quarterly as well as annual reports are timely submitted by partners 5. Central monitoring is conducted as per the requirement in the respective regions/districts 	17,500,000	179,937		
Output 1.4	Establish ICS/biomass network	<ol style="list-style-type: none"> 1. Around 600 best promoters were certified 2. Regular support to promoters association is provided 3. Regular promoters meeting for sharing and problem solving on ICS technology 	2,400,000	91,124		
Output 2	ICS dissemination scaled up and integrated in other rural development programme					
Output 2.1	Ensure integration of inclusion of ICS / Biomass energy programme in DDC periodic plan	DDC representative including VDC secretaries were orientated about the Metallic ICS in the targeted districts.	800,000	72,811		

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 2.2	Awareness for media, key local players, health related organization and medical doctors through orientation demonstration	1. Various VDC level activities were organized to aware the people regarding the importance & benefits of ICS 2. Different mediums were used for the information dissemination like wall painting, hoarding boards, local FM radios etc.	1,800,000	NIL	Activities being carried out by RRESCs	
Output 2.3	Identify, compile and produce a complete range of appropriate information materials for massive dissemination to the stakeholders	The promoters manual and informative brochure were developed and printed	500,000	5,692		
Output 2.4	Workshop for Donor, INGO, Government Organizations (GOs)	No Activity	400,000	NIL		
Output 2.5	Consultative meeting and initiated dialogue with non-formal education	Meeting with the representatives of GoN's Curriculum Development Centre	1,000,000	NIL		
Output 3	All development organization have adopted uniform approach in dissemination of biomass technologies					
Output 3.1	Advocacy, Lobbying and Networking for Integration of ICS	MoU signed with Nepal Red Cross Society (NRCS) for adopting implementation	900,000	NIL	In-house ongoing activities	

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
		modality NRCS supported VDCs				
Output 3.2	Improve and update best practices manual, including standard of testing in order to get quality technologies	Continuous activity	950,000	236,060		
Output 4	Identification of other biomass energy solutions					
Output 4.1	Conduct adaptive research and development works and design stove options for high altitudes and tropical areas	Called expression of interest from manufacturers, research institutes, suppliers, etc. for the two pot hole metallic stoves dissemination	1,000,000	61,821		
Output 4.2	Conduct feasibility studies for other biomass technologies	<ol style="list-style-type: none"> 1. An institutional gasification unit for tea drying was identified and piloted in a tea drying industry 2. A consultative meeting for development of dissemination strategy for Terai district was organized 3. Terai stove selection workshop was organized with related stakeholders as well as potential partners of the region 	3,000,000	160,350		
Output 4.3	Testing of Biomass Technologies	1. Supported 165 sets of IICS to pilot in the strategic	4,000,000	452,829		

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
		locations through RRESCs 2. Design and testing of rocket stoves using local available materials through RRESCs				
Output 4.4	IEC Materials-Orient & Demo	1. Updated promoters as well as user's manual 2. Developed Calendar for BS 2067	2,000,000	3,562,547		
Output 4.5	Publicity through Media	1. Prepared Nepali video documentary 2. Regular Local FM broadcasting through RRESCs	1,500,000	32,314		
Output 5	Policy in place for identified biomass energy solutions i.e. especially gasifiers, briquettes, bio fuels and cogeneration					
Output 5.1	Preparatory phase	1. Subsidy recommendation for two pot hole metal stove, HH and Institutional gasifiers 2. Identification and Study HH gasifier for semi urban areas	500,000	NIL	In-house ongoing activities	
Output 5.2	Sector Development	1. Visit for metallic stove manufacturers support 2. Meeting with the representatives of the pre-qualified MICS	400,000	NIL	In-house ongoing activities	

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
		manufacturing companies 3. Discussion with manufactures for improved demand and shortening process of subsidy delivery				
Output 5.3	Addressing policy on biomass briquetting sector	No Activity	400,000	NIL		
Output 5.4	Standardization of the quality of different technologies through AEPC/ESAP	Initiated testing of stoves through KU	500,000	NIL	In-house ongoing activities	
Output 6	Awareness among rural people on efficient biomass energy solutions created					
Output 6.1	Development of information materials for biomass technologies	Proposal called for the development of Biomass Status Book	500,000	1,757,661	Expenses also includes outstanding from last year	
Output 6.2	Conduct IEC Impact study	Stock checking of IEC, demand collection, usefulness and efficient use	600,000	NIL	In-house ongoing activities	
Output 7	Commercialize other biomass energy technologies with private sector involvement					
Output 7.1	Identify private companies /organization for involvement in other Biomass energy technologies	1. Organized training on metallic stove installation to master installers from the PQ manufacturing companies 2. Concept development for next EOI call for additional manufacturers in sector	1,000,000	118,404		

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 8	Documentation of Biomass stoves installed in the next five years in all ecological zones					
Output 8.1	Conduct impact studies	Initiated random sample survey for ICS as well as MICS	2,500,000	523,676		
Output 8.2	Support MIS	Developed MIS database and is in operation	600,000	125,047		
GRANT to RRESCs				66,371,343		
Total			74,350,000	74,388,923		
Budget overflow: 0.05%						

Output target	Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
3.2 Solar Energy					
Output 1	Efficient & Effective Service Providers				
Output 1.1	Disseminate information and build awareness	<ol style="list-style-type: none"> 100,000 Information booklet and poster prepared 10,000 programme brochures in Nepali language printed and distributed. Annual contract is signed with Ujyalo Network (FM Radio Network) for the year round announcement of PSAs on Solar Energy Component's information. 	2,100,000	250,579	
Output 1.2	Prepare and distribute training Manuals	<ol style="list-style-type: none"> Revised SE LI and SE LII manuals. Published SE LI (300 copies) and SE LII (150copies) training manuals. Printing of 100 copies Solar Design Engineers Manual. 	200,000	353,959	
Output 1.3	Conduct capacity building activities for service providers and support organization (orientation, training, exposure visit etc)	<ol style="list-style-type: none"> Five SE LI trainings for 204 technicians. Two SE LII trainings for 49 technicians. One ToT training for 32 	7,800,000	4,105,318	

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
	in the sub sector	<p>trainers.</p> <p>4. Organization of 1 orientation programs for PQ solar companies subsidy processing.</p> <p>5. One training field monitors (110) of pre-qualified consulting firms.</p> <p>6. Follow up trainings of PQ solar companies in QMS and GESI.</p>				
Output 2	Improved Quality Assurance Systems					
Output 2.1	Update or revise criteria, mechanisms and standards	Printed NEPQA and QA & M for ESAP II	700,000	39,800		
Output 2.2	Conduct company qualification, performance evaluation, grading, penalty etc	<p>1. The PQ of eight new companies for SHS.</p> <p>2. Evaluation of 25 PQ companies for SHS and of 36 companies for dissemination of SSHS.</p>	300,000	151,371		
Output 2.3	Follow up action on RETS test Reports	Reports are received and reviewed.	NIL	NIL		
Output 2.4	Field monitoring of SHS and SSHS	<p>1. Verification of deviated cases of 8th round of QA</p> <p>2. Conclusion of 8th round of</p>	14,600,000	9,724,317		

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
		QA & M. 3. Implementation of 9th round of QA & M of 5,818, random samples monitoring in 106 field trips for QA & M of 2008/09 installation. 4. Detail technical monitoring by RETS based on random samples.				
Output 2.5	Provide backstopping to RETS and Council for Technical Education & Vocational Training (CTEVT)	Support to RETS on various issues.	1,300,000	NIL		
Output 3	Inputs to Policy Formulation & Review					
Output 3.1	Provide policy as required	1. Input to revised subsidy delivery arrangement. 2. Input to the urban solar issue.	100,000	NIL	In-house ongoing activities	
Output 4	Credit Delivery Modalities for Easy Access & Wider Availability					
Output 4.1	Support development of promotion of credit modality and institutional arrangement with commercial banks, Local Financial Institution (LFI) & MFIs	Supported ISRES for renewable of contract with Winrock International and implementation of year two programme.	1,400,000	1,140,968		

Output target	Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 5	Increased Use of SHS and SSHS				
Output 5.1	Administer, appraise and recommend SHS applications to REF	1. Printed 100,000 SHS and 20,000 SSHS SAF. 2. 35,732 SHS and 6,006 recommended for subsidy.	2,900,000	1,076,453	
Output 5.2	Developing new modalities and support through Partner Organizations (POs) for SSHS promotion	Delivery modality is implemented and feedback of the results received. PO support is not carried out.	3,600,000	931,926	
Output 6	Used Battery Management Initiated				
Output 6.1	Conduct feasibility study for establishing battery collection and recycling within the private sector	1. Supported KfW battery mission on the study to manage ULAB in Nepal. 2. Task force formed in MoE for long term settlement of ULAB.	2,800,000	566,250	
Output 6.2	Conduct awareness and capacity building activities of solar companies and relevant stakeholders for collection of battery	No activities	2,00,000	17,626	
Output 6.3	Support for developing battery collection mechanism	Voucher for collection of used battery is drafted and under finalisation.	NIL	34,595	

Output target	Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action	
Output 7	Increased Cooperation for Complementarities and Synergies					
Output 7.1	Interact with GOs/NGOs, programmes and projects for increased use of SHS and SSHS	1. One consultative meeting is with PQ companies. 2. Meeting with Winrock, Renewable Energy Project (REP) project, United Nations Development Programme (UNDP), Commercial Banks, Regional Banks etc.	2,00,000	28,193		
Output 7.2	Support for promotion of productive end-use and linkages	The modality for the establishment of decentralized Repair and Maintenance (R&M) stations in remote areas is under finalization using PV panel as source of power.	1,400,000	1,424,295		
Output 7.3	Conduct reviews, surveys and other impact studies	'Solar PV status 2010' is under preparation.	2,100,000	278,034		
GRANT to RRESCs				921,277		
Total			41,700,000	21,044,962		
Budget Balance: 49.5%						

Output target	Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
3.3 Mini-Grid Rural Electrification					
Output 1	Inputs to various rural energy related policies and their updates.				
Output 1.1	Provide inputs for the updating of various rural energy policies	Subsidy revision and delivery revision input papers	100,000	16,622	
Output 1.3	Advocate for Mini grid and grid connection strategy		800,000	6161	Need of formal advocacy activity not seen.
Output 2	Rural electrification activities are integrated into local planning activities.				
Output 2.1	Assist integration of electrification plan on VDC/DDC planning	Regional Centres participated in district level coordination meetings. All the MHPs supported by ESAP are in DDC annual plan.	2,200,000	601,555	
Output 2.2	Assist DDC on information dissemination and facilitations for local users	Information delivered to all DDCs. All schemes are put into DDC planning process.	1,600,000	114,746	
Output 3	Efficient and competitive service delivery mechanisms.				
Output 3.1	Monitoring project cycle duration annually	<ul style="list-style-type: none"> • MIS developed. • Post construction visit to 84 schemes. • Regional Centres are mobilised to monitor 133 under construction staged projects. 	2,200,000	1,732,921	

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
		<ul style="list-style-type: none"> One year check of 27 projects completed. 				
Output 3.2	Conduct capacity building activities	<ul style="list-style-type: none"> A total of 14 central level trainings conducted. Regional Centres conducted a total of 40 trainings at the field level. 	17,850,000	6,820,576		
Output 3.3	Ensure quality assurance of mini-grid implementation	<ul style="list-style-type: none"> Ensured quality assurance of implemented projects. Monitoring visits conducted for 133 projects. Participated in commissioning of 107 projects. Pico-hydro process reviewed. Final report waiting from the consultant. 	5,500,000	1,210,184		
Output 4	Institutionalized local ownership and use of electricity in rural areas not covered by national grid					
Output 4.1	Conduct social facilitation activities with rural communities	Social mobilisation guideline in place. Business plan prepared for 93 projects. Public hearing completed for 111 projects.	4,400,000	2,759,005		

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 4.2	Assist in formation of mini grid cooperatives/users group	7 Regional Centres covers 54 districts. 125 communities assisted for registration.	1,000,000	1,317,980		
Output 4.3	Coordinate and interact with other programmes at local and national level	Regional Centres involved in coordination with others partners. Regional Centres have organised coordination meeting in their respective districts. An interaction programme was organised with Poverty Alleviation Fund (PAF) in Kathmandu in February 2010.	1,840,000	871,402		
Output 5	Schemes identified, appraised, and forwarded to REF for subsidy approval.					
Output 5.1	Identification of potential schemes	Identification completed (3,030 kW, 116 projects), verification completed (7,487 kW, 125 projects). New 115 requests registered in Regional Centres.	4,600,000	1,028,086		
Output 5.2	Prepare project information documents for identified schemes	Verification documents, information updated in GIS.	400,000	1,862,654		
Output 5.3	Assist detailed feasibility studies of the schemes	<ul style="list-style-type: none"> Detail Feasibility Study (DFS) completed for 129 projects (4,634 kW). 	11,000,000	10,035,684		

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
		<ul style="list-style-type: none"> DFS on-going for 72 projects (2,053 kW). 				
Output 5.4	Forward proposals for schemes to REF	TRC approved 138 projects (3,980 kW), 145 projects (3,950 kW) conditional approved, 106 projects (3,355 kW) under construction, 107 projects (1,360 kW) completed.	1,200,000	495,323		
Output 6	Increased information about rural mini-grid schemes and electricity end-use possibilities					
Output 6.1	Conduct information awareness campaign	<ul style="list-style-type: none"> Printed English and Nepali information sheets. Public hearing in 111 projects completed. 	1,000,000	520,952		
Output 6.2	Conduct campaign for the promotion of end uses	Training organised for Regional Centre staff, business plan prepared for 93 projects.	11,400,000	168,547		
Output 6.3	Carry out technical reviews and impact studies addressing the target issues	ToR prepared and proposal invited for conducting Impact Study.	1,000,000	190,121		
GRANT to RRESCs				15,456,959		
Sub-Total			68,690,000	45,209,478		
Budget Balance: 34.2%						

Output target	Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Capital cost					
Electrical Vehicle	REVA Electric Car	NIL	155,000	Outstanding expense	
Field Equipment		3,100,000	1,174,640		
Furniture and Furnishers		4,150,000	213,845		
Office Equipement		1,250,000	4,938,300		
Sub-Total		8,500,000	6,481,785		
Recurrent Cost					
Component Staff Expenses		31,700,000	30,546,482		
Administrative Expenses		2,000,000	1,572,555		
Operational Expenses		7,500,000	5,317,465		
Sub-Total		41,200,000	37,436,502		
Grand Total		1,545,290,000	827,298,418		
Total Budget Balance : 46.5%					

Note: The figures under Expenses heading does not cover the advance, fund balance booked for expenses for the programme activities.

E. Progress to date compared to output targets and budget for the entire programme period

Output target	Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
1. Institutional Strengthening of Rural Energy Sector					
Output 1	Coherent Rural Energy Policy addressing both on- and off-grid electrification issues, among others				
Output 1.1	Support to prepare a National Rural Energy Development Strategic plan	Review of WECS's National Rural Energy Strategy. Internal discussion held at AEPC.	2,696	NIL	In-house ongoing activities
Output 1.2	Review the present policies governing RE	<ol style="list-style-type: none"> 1. Review of Rural Energy Policy, 2006 in view of drafting/adopting the required rules, laws, by-laws, acts etc 2. ToRs for drafting various legal documents to en-act Rural Energy Policy, 2006 prepared. 3. Drafting of the required by-laws, act by consultant under Rural Energy Policy, 2006 ongoing. 	2,006	67	
Output 1.3	Assist the revision of subsidy policy and integrated credit mechanism	<ol style="list-style-type: none"> 1. Input to Subsidy Arrangement 2009 and Subsidy Delivery Mechanism 2010. 2. Study on Subsidy Rates for Renewable Rural Energy Technologies (RETs) and 	1,003	NIL	In-house & ongoing activities

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
		their Delivery Mechanism by consultant ongoing.				
Output 1.4	Periodic policy reviews and recommendations for amendments	Policy recommendation	1,241	NIL	In-house ongoing activities	
Output 1.5	Monitor the implementation of policies and strategies	An internal policy/procedure recommendation	1,923	NIL	In-house ongoing activities	
Output 1.6	Prepare inputs to the five years development plan	Input to ToR preparation for support to preparing 3-year National Development Plan (2010/11 -2012/13): Alternative Energy	1,128	NIL	In-house ongoing activities	
Output 1.7	Cooperate with MoE in the preparation of CEAs & SEAs	CEA/SEA Prepared	627	NIL	In-house ongoing activities	
Output 2	An institutional basis with clearly defined roles established with focus on decentralization and the private sector					
Output 2.1	Mapping of institutional roles	A policy recommendation	2,128	1,228	Completed	
Output 2.2	Conduct a sector wide conference and agree on the sector diagram	Consensus on institutional roles	1,003	186	Completed	
Output 2.3	Strengthen the coordination by institutionalising a network of institutions	Inputs for strengthening networking	4,577	3	In-house ongoing activities	Study and consultative workshop

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 2.4	Assist local partners to ensure efficient resource utilization through planning exercise	Decentralized Energy Management Initiatives at the village level	14,609	5,545		
Output 2.5	Participate in the Task Forces	Task force consensus	1,508	NIL	Regular activity	
Output 3	Sector Wide Approach (SWAp) for rural energy development in place.					
Output 3.1	Ensure transparency in REF administration (ISO Certification)	1. Three rounds of trainings completed on ISO Certification Procedures. 2. Draft of Quality Manual completed.	4,013	44	Preparation of quality manual need to be completed	
Output 3.2	Promote SWAp for participation by multiple EDPs	1. In-house inception workshop conducted. 2. Received draft report on Feasibility Study on the Possibility of SWAp in R & RE Energy Sector and Identification of Its Indicators.	2,508	951		
Output 3.3	Encourage EDPs to sign on to joint financing agreements for rural energy	JFA with KfW signed; KfW joined ESAP. Discussions with SNV and Norad ongoing. Initiating ESAP III activities.	1,254	NIL	In-house ongoing activities	

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 3.4	Strengthen the EDPs' coordination by institutionalising the current thematic group on rural electrification co-chaired by ADB	<ol style="list-style-type: none"> 1. Conducted First EDP Coordination meeting (19 representatives from donors' community) 2. Donor Group Meeting on Energy Sector held on 23 February 2010 in Kathmandu at Embassy of Denmark. 3. Discussions on ESAP II and its continuation. 	2,696	NIL	In-house ongoing activities	
Output 3.5	Follow up on decisions made in the EDPs coordination meetings	<ol style="list-style-type: none"> 1. KfW joined ESAP. 2. Initiation of ESAP III. 	1,128	NIL	In-house ongoing activities	
Output 4	An accountable and effective institutional leadership, especially in AEPC with transparent decision-making process for rural energy policy, planning and management					
Output 4.1	Improve the Management practices of AEPC and partner institutions	<ol style="list-style-type: none"> 1. Policies for staff development 2. Meetings and workshops 	3,379	1,465		
Output 4.2	Organise leadership and management training courses for management in AEPC and partner institutions	<ol style="list-style-type: none"> 1. On the Job Training Support 2. Thesis Support 3. Capacity building activities for AEPC/ESAP Staff 	2,508	1,706		
Output 4.3	Establish a transparent system for dissemination of Management decisions	A data bank concept	2,633	NIL		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 4.4	Financial management practices and systems	Accounting Training to related RRESC staff	2,759	10		
Output 4.5	Improve the AEPC Management Information System (MIS) as required	1. Installation of MIS system 2. Renew of MIS system	5,900	90		
Output 4.6	Improved working environment in AEPC through infrastructure improvement and incentive support	1. Streamlined modern office facility 2. Improved working environment in AEPC 3. Incentive Support	28,215	16,602		
Output 5	Conducive working environment in AEPC and partner organizations, including human resource development policy, planning & management					
Output 5.1	Update AEPC SOD plan	1. RE Stakeholder Consultations 2. National Workshop on AEPC SOD Plan 3. Draft AEPC SOD Plan	1,755	524	Draft SOD Plan under review	Finalize SOD Plan
Output 5.2	Conduct capacity building activities of AEPC and partner institutions	Various capacity building activities for AEPC staff	1,818	543		
Output 5.3	Implement the human resource development strategy in AEPC	1. Facilitated all the stages of drafting AEPC SOD Plan 2. Documented training programme	18,810	NIL	In-house ongoing activities	

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 5.4	Analyse institutional gender issues and implement gender mainstreaming in AEPC and other partner institutions	<ol style="list-style-type: none"> 1. Awareness of AEPC/ESAP staff on gender issues 2. Inclusion of gender indicators in ESAP's AWP 09/10 in all Components 3. ESAP GESI Action plan prepared. 4. Discussions with SNV on support ongoing. 	2,946	583		
Output 5.5	Conduct capacity building activities of other partner institutions	<ol style="list-style-type: none"> 1. Planning and Coordination training for DEEU's Staff 2. Various training for RRESCs Staff 3. Partner capacity enhanced 	18,810	7,844		
Output 6	Integrated documentations of the sector development and of major changes in the programme (ESAP II) in place					
Output 6.1	Establishment of a network for knowledge sharing and coordination	<ol style="list-style-type: none"> 1. Computer Software contribution 2. Magazine Contribution 3. Support in drafting "Strengthening the documentation centre at AEPC: Master Plan for AEPC Existing Library" 	3,009	455		
Output 6.2	Establishment of information services (web-site and resources centre)	<ol style="list-style-type: none"> 1. Updated and redesigned AEPC website 2. Support to Radio Program 3. Internet services and 	5,257	4,331		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
		Information flow strengthened				
Output 6.3	Conduct an annual integrated stocktaking exercise of sector developments and for major changes and conduct impact studies	1. Stocktaking exercise completed 2. Impact study of technologies by respective components	2,016	NIL	In-house ongoing activities	
Output 7	Coherency among Rural Grid and Off-grid Electrification (Support for Kailali Kanchanpur Rural Electrification Project, KKREP, Umbrella cooperative)					
Output 7.1	Social Mobilisation-Cooperative (Support for KKREP Umbrella cooperative)	1. Cooperative established and functional 2. Completion of Capacity Building and Institutional Development Support Activity Phase I for KKREP in February 2010. 3. Activity I included various technical trainings, exposure visits, public awareness, demand side management, safety and end-use promotion programs together with training and tools for MIS/GIS, Service Providers and Technical Support Unit (TSU).	45,645	20,706		
Output 7.2	Conduct capacity building activities with cooperatives		21,277			
Output 7.3	Prepare and disseminate IEC materials		3,724			
Output 7.4	Elaborate and publish guidelines, manuals and planning tools		7,169			
GRANT to RRESCs				16,124		
Total			223,685	80,260		
Budget Balance: 64%						

Output target	Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
2. Rural Energy Fund					
Output 1	Fund raised for support to rural energy investment from national and EDPs				
Output 1.1	Network and coordinate with Government institutions, donors, financial sector and private energy service sector.	1. Pursued relevant institutions, such as NRB, banks 2. NRB issued monetary policy which included MHP financing under the deprived sector lending scheme.	5,643	NIL	
Output 1.2	Promote REF through dissemination of information on REF achievements and modalities.	1. Received script of TV documentary on AEPC/ESAP and its working modalities 2. Completed field works and interviews for TV documentary	5,643	293	
Output 1.3	Raise Fund with donors (grants and credits), financial sector and Government matching contributions	Negotiation with external development partners are going on for fulfilling the funding gap of MH subsidy programme.	2,257	NIL	
Output 2	Financial sector credits available for rural energy investment.				
Output 2.1	Study on Development of modalities for promotion of solar PV technology	Additional eight districts selected for credit financing SHS	1,149	192	

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 2.2	Piloting of modalities developed for promotion of micro credit with MFIs, NGOs/CBOs, etc.		3,093	530		
Output 2.3	Promote and lobby for a financial sector managed long-term credit facility for rural energy investments (Awareness Activity)	Partner banks, insurance companies, etc. have been pursued periodically	8,684	NIL		
Output 2.4	Conduct capacity building activities in the financial sector for RE investments.	Negotiations going on with Rural Microfinance Development Centre for a long term partnership for building capacity of local financial institutions	7,123	2,565		
Output 2.5	Promote rural energy solutions through orientation program	Orientation programs have been going on in 14 districts, Rukum has been included under Rukum Ujyalo program of AEPC and the Government of Nepal.	3,636	NIL		
Output 2.6	Facilitate credit line availability with financial institutions	Facilitation is ongoing	5,643	1,742		
Output 3	Fund managed in a transparent and efficient manner					
Output 3.1	Review of Delivery Mechanism	New subsidy delivery mechanism is in place. On-going process.	2,508	116		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 3.2	Institutional credit facilitating	Fund such as micro-hydro development fund have been approved for the institutional credit facilitating	6,270	355		
Output 3.3	Monitoring	1. Carried power output and household verification of micro hydro plants 2. Monitoring and review of REF activities under RRESCs	40,191	6,814		
Output 4	Fund optimally channelled by REF for the investment in different rural energy solutions					
Output 4.1	Sound financial appraisal of projects for subsidy approval and for investment by financial institutions.	Financial appraisal of potential micro hydro plants, SHS, SSHS and metallic improved cooking stoves are in place.	3,887	NIL		
Output 4.2	Approve applications for grant from the REF support for off-grid electrification		NIL	NIL	In-house ongoing activity	
Output 4.3	Disburse REF grant supports (subsidy)					
Output 4.3.1	SHS-150,000HH	123,915 HHs have installed solar home systems in 73 districts. These systems are generating 2.9 MW power in the rural areas.	1,472,243	930,814		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 4.3.2	Solar Tuki -250,000HH	5,856 rural households of 23 districts have installed small solar home systems. 29.3 kW power generating from these systems.	66,626	11,712	Installer companies reluctant in installation of SSHS due to approval process of the subsidy application forms and difficulties in obtaining recommendation of forms from local authorities. Programme components are going to review the approval process and other hindrances that affect the process.	
Output 4.3.3	MH-150,000HH	2,857 kW/24,698 HH/30 districts (NPR 395.6 million committed for Conditionally Approved MHPs) Disbursed subsidy for 4,258 kW micro hydro plants during the period of ESAP II.	847,803	544,177		
Output 4.3.4	BE-100,000HH	1,844 metallic improved cooking stoves in 12 districts have been installed.	141,300	7,376	Similar type of problem as with Solar Tuki (SSHS).	
Output 4.3.5	PV Pumping System	No system installed yet.	95,000	NIL		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 4.4	Facilitate the REF Institutional Credit Network and coordinate with Government institutions, donors, financial sector and private energy service sector	<ol style="list-style-type: none"> 1. Seven partner banks, three partner insurance companies, RMDC, DCGC, NRB, NBA have been pursued for a network development. 2. Partner banks and insurance companies have agreed to sign the MoU 	209,085	NIL		MoUs need to be finalized as early as possible.
GRANT to RRESCs				3,524		
Total			2,927,786	1,510,211		
Budget Balance : 48%						

Output target	Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
3.1 Biomass Energy					
Output 1	Capacity development of district based LPOs', specifically in scaling up of ICS				
Output 1.1	Provide technical inputs to LPOs for biomass technologies including ICS in the mid hill districts	<ol style="list-style-type: none"> 1. Contract agreement made with all RRESC (11 old and 2 new RRESC) 2. Similarly RRESCs also made contract agreement with respective LPOs (140 LPOs under 13 RRESCs) 3. Orientation and demonstration of ICS technologies conducted in various VDCs 4. Regional Level & District Level Review & Planning Workshop conducted. 	58,389	7,214	
Output 1.2	Provide ToT and other trainings to LPOs for their capacity building	<ol style="list-style-type: none"> 1. 140 new promoter training 2. 76 refresher training and 14 ToT for LPOs organised. 3. FTCs were trained on IICS construction & Kitchen Management techniques. 4. BEEs trained on MICS quality monitoring, Stove Performance Testing Protocol, MIS Database 	11,712	5,764	

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 1.3	Monitor and supervise LPOs activities and back stop them on time	<ol style="list-style-type: none"> 1. MIS database report is made available regularly. 2. Quarterly report submitted by all RRESC. 3. Internal staff meeting is being held regularly every Sunday. 4. Training on integrated monitoring of biomass and solar technologies 5. Quarterly coordination meeting with LPOs. 6. Participatory monitoring visits in programme districts/VDCs 	9,079	4,476		
Output 1.4	Establish ICS/biomass network	<ol style="list-style-type: none"> 1. Around 600 best promoters were certified 2. Regular support to promoters association is provided 3. Regular promoters meeting for sharing and problem solving on ICS technology 	1,000	236		
Output 2	ICS dissemination scaled up and integrated in other rural development programme					
Output 2.1	Ensure integration of inclusion of ICS / Biomass energy programme in DDC periodic plan	<ol style="list-style-type: none"> 1. DEEU/S staff were oriented regarding the best practice guidelines currently used for ICS promotion 2. District Level Information & 	3,887	355		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
		<p>Awareness Campaign was conducted in 11 districts highlighting the importance of Indoor Air Pollution and Kitchen Management for district officers, school teachers, district health related personnel and other line agencies of the region.</p> <p>3. VDC level Information & Awareness Campaign was conducted highlighting the importance of Indoor Air Pollution & Kitchen Management for VDC secretaries, VDC health related personal, school teachers and other line agencies of the region.</p>				
Output 2.2	Awareness for media, key local players, health related organization and medical doctors through orientation demonstration	Information on BETs was disseminated through various local medium	3,260	1,288		
Output 2.3	Identify, compile and produce a complete range of appropriate information materials for massive dissemination to the stakeholders	IEC materials on mud ICS, metallic stoves and institutional ICS were developed.	6,696	298		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 2.4	Workshop for Donor, INGO, GOs	Four regional workshops to orient about the metallic stoves and subsidy mechanism were conducted	1,755	239		
Output 2.5	Consultative meeting and initiated dialogue with non-formal education	Meeting with the representatives of GoN's Curriculum Development Centre	7,323	2,231		
Output 3	All development organization have adopted uniform approach in dissemination of biomass technologies					
Output 3.1	Advocacy, Lobbying and Networking for Integration of ICS	<ol style="list-style-type: none"> 1. District level effort is ongoing continuously. 2. Half day National workshop was organized in AEPC Meeting Hall to reveal the Interim National Standard Stove Performance Testing Protocol 3. Half day National workshop was organized in AEPC Meeting Hall to reveal Results of 2nd round of IAP study 4. Continues Activity. MoU signed with Nepal Red Cross Society (NRCS) for adopting implementation modality NRCS supported VDCs 	5,517	416		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 3.2	Improve and update best practices manual, including standard of testing in order to get quality technologies	<ol style="list-style-type: none"> 1. Best practice guideline updated & made available to partners for implementation 2. Developed National standard for stove testing protocol 3. Completed training manual 	4,514	2,593		
Output 4	Identification of other biomass energy solutions					
Output 4.1	Conduct adaptive research and development works and design stove options for high altitudes and tropical areas	<ol style="list-style-type: none"> 1. The adaptive research in other biomass technologies has been initiated with Kathmandu University to identify metallic stoves suitable for high altitudes of Nepal. 2. The adaptive research has been completed with Institute of Engineering (IOE), Pulchowk Campus, to identify Tea Drying Unit through biomass gasification 	12,239	250		
Output 4.2	Conduct feasibility studies for other biomass technologies	Piloting of Tea Drying Unit through biomass gasification	8,427	314		
Output 4.3	Testing of Biomass Technologies	Piloting of mud as well as metallic rocket stoves were conducted in three districts of	16,176	2,104		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
		Terai Region				
Output 4.4	IEC Materials-Orient & Demo	<ol style="list-style-type: none"> 1. Developed calendar for 2065 BS, 2066 BS & 2067 BS 2. Developed posters and different types of flex of metallic stoves 	8,151	4,925		
Output 4.5	Publicity through Media	Metallic parts of the IICS were fabricated and piloted through RRESCs in the strategic locations of the respective regions	5,016	32		
Output 4.6	Technology Promotion - Dev Org	Circulated information materials	15,675	71		
Output 5	Policy in place for identified biomass energy solutions i.e. especially gasifiers, briquettes, bio fuels and cogeneration					
Output 5.1	Preparatory phase	Identification of household level gasifier is initiated through AEPC	4,201	NIL		
Output 5.2	Sector Development	<ol style="list-style-type: none"> 1. Pre-qualification criteria developed. 2. 15 metallic stoves manufacturing companies are pre-qualified. Subsidy delivery mechanism for metallic stoves developed. 	11,624	24		

Output target	Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 6	Awareness among rural people on efficient biomass energy solutions created				
Output 6.1	Development of information materials for biomass technologies	Proposal called for the development of Biomass Status Book	6,771	3,470	
Output 6.2	Awareness campaign on a range of biomass technologies and training		6,646	545	
Output 6.3	Conduct IEC Impact study	Stock checking of IEC, demand collection, usefulness and efficient use started from RRESCs	6,470	NIL	
Output 6.4	Improvise IEC materials	1. Users Manual updated 2. Promoters Manual Updated	8,276	NIL	
Output 7	Commercialize other biomass energy technologies with private sector involvement				
Output 7.1	Identify private companies /organization for involvement in other Biomass energy technologies	Metallic stoves for high altitude area are fabricated by private companies and formed market	5,204	701	
Output 8	Documentation of Biomass stoves installed in the next five years in all ecological zones				
Output 8.1	Conduct impact studies	1. Report on Indoor Air Pollution study published on May 2008 2. Report on Health Impact	32,315	1,778	

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
		Assessment was conducted along with 2 nd round of IAP study was conducted in the same households of three district of mid hill region published on 2009.				
Output 8.2	Support MIS	New MIS database software is developed and installed in centre as well as in regional centres. Biomass Energy's central staffs and BEEs were trained on the usage of the newly developed MIS database software.	16,515	1,198		
GRANT to RRESCs				135,950		
Total			276,845	176,471		
Budget Balance : 36%						

Output target	Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
3.2 Solar Energy					
Output 1	Efficient & Effective Service Providers				
Output 1.1	Disseminate information and build awareness	<ol style="list-style-type: none"> 244, 500 Information booklet (SAF) & posters 70,000 SAF for SSSHS prepared and distributed. Annual contract is signed with Ujjyalo Network (FM Radio Network) for the year round announcement of PSAs on Solar Energy Component's information 	3,574	657	
Output 1.2	Prepare and distribute training Manuals	<ol style="list-style-type: none"> Revised SE LI and SE LII manuals. Published SE LI (850 copies) and SE LII (400copies) training manuals. Design of and printing of 350 copies of manuals for ToT trainings for SE LI and SE LII. Designed and printed 200 copies of manuals for Solar design engineers. 	5,016	700	

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 1.3	Conduct capacity building activities for service providers and support organization (orientation, training, exposure visit etc) in the sub sector	<ol style="list-style-type: none"> 1. 16 SE LI trainings for 450 technicians 2. 6 SE LII trainings for 109 technicians. 3. 4 ToT training for 90 trainers. 4. One design engineers training in IIT Delhi, India training 28 engineers. 5. Organization of 4 orientation programs for PQ solar companies implementation modality of SSHS. 6. 5 orientation programs for RRESC staff in SE Component's guidelines and field monitoring of SHS. 7. 3 trainings field monitors of pre-qualified consulting firms. 8. Development and two trainings of in QMS and one training on the orientation of GESI for PQ solar companies. 	13,292	14,460		
Output 1.4	Conduct reviews, surveys and other impact studies	Carried out study on capacity gap identification of private sector in PV system	1,003	404		.

Output target	Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
	dissemination (AEPC budget).				
Output 2	Improved Quality Assurance Systems				
Output 2.1	Update or revise criteria, mechanisms and standards	Revised NEPQA and QA & M for ESAP II	815	57	
Output 2.2	Conduct company qualification, performance evaluation, grading, penalty etc	<ol style="list-style-type: none"> 1. Two rounds of evaluation of PQ companies completed. 2. Three rounds of Pre-qualification of three new companies for SHS. 3. One round of requalification of companies for dissemination of SSHS. 	627	314	
Output 2.3	Follow up action on RETS test Reports	Reports are received and reviewed.	NIL	NIL	
Output 2.4	Field monitoring of SHS and SSHS	<ol style="list-style-type: none"> 1. Task force formed and settled the QA& M results of 3-5 rounds of monitoring. 2. Sixth round of Q A and M carried out for 1,128 samples (7.4% of the installation in FY 2006/07) in 36 field trips. 3. Conclusion of 6 and 7th round of QA & M. 4. 8th round of QA & M of 3,036 random samples monitoring in 56 field trips 	86,606	22,208	

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
		<p>for QA & M of 2007/08 installation.</p> <p>5. Ninth round of QA & M ongoing for 106 trips.</p> <p>6. Detail technical monitoring by RETS based on the random samples.</p> <p>7. Verification of deviated cases of 8th round of QA & M 9 trips.</p> <p>8. General monitoring by RRESC 1625 samples. Detail technical evaluation by RETS 7 trips.</p> <p>9. Detail technical investigation of systems to measure power degradation of the system.</p>				
Output 2.5	Provide backstopping to RETS and CTEVT	Support to RETS for finalization of the Testing and sampling procedure.	3,887	NIL		
Output 2.6	Conduct reviews, surveys and other impact studies	No Activities	1,254	NIL		
Output 3	Inputs to Policy Formulation & Review					
Output 3.1	Provide policy as required	<p>1. Prepared the modality for dissemination of SSHS.</p> <p>2. Input to revised Subsidy</p>	1,881	NIL		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
		arrangement and Subsidy delivery mechanism. 3. Revised NEPQA and QA & M for ESAP II.				
Output 4	Credit Delivery Modalities for Easy Access & Wider Availability					
Output 4.1	Support development of promotion of credit modality and institutional arrangement with commercial banks, local FI & MFIs	1. Designed a conceptual framework for piloting credit financing of SHS/SSHS. 2. Implemented pilot modality in credit financing of SHS in (40 MFIs) in 14 districts in eastern and western development region.	6,019	5,961		
Output 4.2	Concept awareness and capacity building MFIs in consultation with ISRES and REF Components	Various meeting and discussions with banks, solar companies and other stakeholders.	1,881	NIL		
Output 5	Increased Use of SHS and SSHS					
Output 5.1	Administer, appraise and recommend SHS applications to REF	125,310 SHS and 6,006 SSHS recommended for subsidy.	7,386	3,741		
Output 5.2	Developing new modalities and support through POs for SSHS promotion	Delivery modality and technical standard is finalized but PO support is not carried out.	10,107	116		
Output 5.3	Conduct reviews, surveys and other impact studies	No Activities	3,135	932		

Output target	Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action	
Output 6	Used Battery Management Initiated					
Output 6.1	Conduct feasibility study for establishing battery collection and recycling within the private sector	<ol style="list-style-type: none"> 1. Study conducted by Jhyanghee Kharel on the environment pollution by used SHS battery. 2. Study carried by NESS on the Used Battery Management. 3. Assisted KfW mission in accessing the situation of used lead acid batteries in Nepal. 	1,254	856		
Output 6.2	Conduct awareness and capacity building activities of solar companies and relevant stakeholders for collection of battery	Stakeholders meeting on the information, awareness and for future action to move forward in future.	11,913	35		
Output 6.3	Support for developing battery collection mechanism	No Activities	300	NIL		
Output 6.4	Conduct reviews, surveys and other impact studies	No Activities	1,254	35		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 7	Increased Cooperation for Complementarities and Synergies					
Output 7.1	Interact with GOs/NGOs, programmes and projects for increased use of SHS and SSHS	<ol style="list-style-type: none"> 1. Consultative meeting is organized with PQ companies. 2. Meeting with Winrock, REP project, UNDP, HLF etc 	2,633	113		
Output 7.2	Support for promotion of productive end-use and linkages	The establishment of decentralized repair and maintenance stations in 10 districts, for SHS users, is under finalization using PV panel as source of power.	13,585	1,646		
Output 7.3	Conduct reviews, surveys and other impact studies	<ol style="list-style-type: none"> 1. Completed the study 'Solar PV Status 2006' 2. "Solar PV Status 2010" is under preparation. 3. Participated in various solar PV conferences and shared information and experiences. 	1,881	278		
GRANT to RRESCs				2,867		
Total			179,305	55,380		
Budget Balance : 69%						

Output target	Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
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3.3 Mini-Grid Rural Electrification					
Output 1	Inputs to various rural energy related policies and their updates.				
Output 1.1	Provide inputs for the updating of various rural energy policies	Subsidy policy and delivery mechanism is in place.	1,144	17	
Output 1.2	Formulate policy for Mini Grid & Grid Connection		618	46	
Output 1.3	Advocate for Mini grid and grid connection strategy	National level awareness has increased.	3,260	25	
Output 2	Rural electrification activities are integrated into local planning activities.				
Output 2.1	Assist integration of electrification plan on VDC/DDC planning	All the MHs are included in annual DDC plans.	13,355	1,089	
Output 2.2	Assist DDC on information dissemination and facilitations for local users	Sufficient demands received. Most of the DDCs are allocating a part of fund in support mini-grid activities.	4,013	175	
Output 3	Efficient and competitive service delivery mechanisms.				
Output 3.1	Monitoring project cycle duration annually	Sufficient projects in the pipeline. Number of projects in the pipeline is in the increasing trend.	8,866	5,949	
Output 3.2	Conduct capacity building	Sector capacity has increased	38,890	9,029	

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
	activities	to implement around 2 MW projects in a year.				
Output 3.3	Ensure quality assurance of mini-grid implementation	Down time and failure rate have been decreased. Installation quality is increased.	15,675	2,706		
Output 4	Institutionalized local ownership and use of electricity in rural areas not covered by national grid					
Output 4.1	Conduct social facilitation activities with rural communities	Seven Regional Centres covers 54 districts for project facilitations. Role of social mobilise enhanced to support the project implementation.	18,057	4,416		
Output 4.2	Assist in formation of mini grid cooperatives/users group	Around 275 communities are already registered.	14,202	1,617		
Output 4.3	Coordinate and interact with other programmes at local and national level	DDC/VDC and other organisation have better understanding of the programme approach.	8,011	901		
Output 5	Schemes identified, appraised, and forwarded to REF for subsidy approval.					
Output 5.1	Identification of potential schemes	Identification completed in 90% areas in micro-hydro range.	13,733	8,386		
Output 5.2	Prepare project information documents for identified schemes	Projects' information is updated in GIS.	7,439	1,865		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 5.3	Assist detailed feasibility studies of the schemes	Close to 500 DFS completed.	26,872	12,879		
Output 5.4	Forward proposals for schemes to REF	REF received sufficient project proposals for subsidy. REF requires more fund to provide subsidy in coming years.	1,003	841		
Output 6	Increased information about rural mini-grid schemes and electricity end-use possibilities					
Output 6.1	Conduct information awareness campaign	Overwhelming demands have been created.	6,721	1,708		
Output 6.2	Conduct campaign for the promotion of end uses	Awareness has increased remarkably.	12,540	300		
Output 6.3	Carry out technical reviews and impact studies addressing the target issues	Need based studies, reviews conducted.	8,234	488		
GRANT to RRESCs				48,777		
Sub-Total			202,637	101,212		
Budget Balance: 50%						

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Capital cost						
AEPC Infrastructure (Building)			31,350	NIL		
Electrical Vehicle		REVA Electric Car	2,006	1,143		
Field Equipment			12,314	3,402		
Furniture and Furnishers			2,758	2,459		
Office Equipment			29,438	15,412		
Sub-Total			77,867	22,416		
Recurrent Cost						
Component Staff Expenses			159,060	77,585		
Administrative Expenses			14,355	2,956		
Operational Expenses			21,495	16,211		
Sub-Total			194,911	96,752		
Grand Total			4,083,037	2,042,702		
Total Budget Balance: 50%						

Note: The figures under Expenses heading does not cover the advance, fund balance booked for expenses for the programme activities.

F. Problems encountered and suggested solutions

1. Institutional Strengthening of Rural Energy Sector

Problem: Lack of competent consulting firms to perform specialised tasks and studies, assessments and research according to ESAP standards.

Suggested Solution: Providing intensified guidance by ESAP staff during implementation. This might require additional staff.

2. Rural Energy Fund

None

3. Technical Support

1.1 Biomass Energy

None

1.2 Solar Energy

Problem 1: KfW, Germany mission report along with other reports, points that awareness on subsidy and delivery modality among users is low.

Suggested Solution 3: Increase of awareness campaigns using FM radio broadcast and other means to disseminate the information to the target groups.

1.3 Mini Grid Rural Electrification

Problem: Inadequate skilled human resources with installation companies; resulting in delayed project commissioning.

Suggested Solution: Private sector companies will be called for specification on how AEPC/ESAP can support them in finding and retaining sufficient human resources.

G. Critical issues

1. Institutional Strengthening of Rural Energy Sector/Rural Energy Fund

Partner banks concerns about AEPC/ESAP's support after March, 2012.

2. Rural Energy Fund

None

3. Technical Support

2.1 Biomass Energy

None

2.2 Solar Energy

The lead acid batteries used in the SHS have negative environmental impact if not managed properly. Out of the total lead acid batteries used in Nepal, only 5 to 10% comes from solar PV sector. This creates difficulty to address the issues at the national level by Solar PV stakeholders only. AEPC/ESAP is working with MoEnv to formulate legal framework to solve the issue.

2.3 Mini Grid Rural Electrification

Subsidy to mini-grid development has been disbursed through many channels. There is an increased risk of provision for more fund than needed by the communities, resulting in (i) delayed project commissioning because of more time needed to arrange the fund from different sources, (ii) conflict among communities regarding the use of fund, and (iii) increased chances of irregularities in fund use.

H. Physical Achievement against Target

Components	Achievement	Target	Remark (Main cause for not achieving the target)
Institutional Strengthening of Rural Energy Sector			
		N/A	No physical target
Rural Energy Fund			
Micro Hydro (including conditionally approved MHPs)	42,043 HH 4,342 kW	34,000HH 4,000kW	Projects with 2,857 kW power have been given conditional approval that will serve approx. 25,000 households
IWM Electrification	NIL	1,500HH 150kW	Supporting organisation for IWM is still working for recommendation for subsidy approval.
SHS	33,217 HH	60,000HH	Due to fund gap in original subsidy budget, installation process has been slowed down, resulting less progress in this reporting period.
SSHS	5,856 HH	40,000HH	Installer companies reluctant to install SSHS and metallic improved cooking stoves due to approval process of the subsidy application forms and difficulties in obtaining recommendation of forms from local authorities. Programme components are reviewing the approval process and other hindrances that affect the process.
Biomass Metallic Stoves	1,844 HH	10,000HH	
Technical Support			
Biomass Energy			
Mud Brick ICS	85,254 HHs	100,000HHs	<ul style="list-style-type: none"> Due to lack of HR and political situation, programme at terai was

Components	Achievement	Target	Remark (Main cause for not achieving the target)
Institutional ICS (IICS)	141	1,000	only started in September 2010. <ul style="list-style-type: none"> High cost of IICS including local and non local materials. Targeted roadside hotels are of temporary nature and the IICS are of fixed type of stove.
Metal improved stove	2,300 HHs	10,000HHs	<ul style="list-style-type: none"> The entire process of dissemination has been late due to late approval on revision on subsidy amount, as well as lack of HR in the component and slow process in subsidy form processing before received by ESAP.
Solar Energy			
SHS	35,732	60,000HH	The demand for SHS was high but due to shortage of fund before the eligibility of KfW fund, AEPC/ESAP could not pay subsidy.
SSHS	6,006	40,000HH	SSHS dissemination has started this year but progress is slow and discussion on review of modality is ongoing.
Mini Grid Rural Electrification			
Project preparation at various stages Identification/ verification DFS studies	Identification and new request, 5.7 MW (61,159 HH); Verification, 6.3 MW (17,199 HH) DFS on-going, 1.4 MW (12,918 HH) DFS completed, 4.4 MW (37,776 HH)	16.0MW (91,000HH)	
Project preparation completed – Recommended to REF	3.98 MW (39,998HH)	4.0MW (32,000HH)	

Components	Achievement	Target	Remark (Main cause for not achieving the target)
Project under construction	3.355 MW (31,761 HH)	3.5MW (32,000HH)	
Projects commissioned	1.4 MW (13,534 HH)	2.5MW (25,000HH)	

I. Status of outstanding issues and follow-up on decisions made by the Steering Committee (or similar body)

Issue	Decision (incl. timeframe agreed for follow-up)	Responsible	Status on follow-up
Approval and implementation of Voucher system for used battery collection	Decision will be made in AEPC/ESAP but waiting for KfW clearance	ED/CA-KfW	

Annex 1:

Training programs carried out in this period

1. Institutional Strengthening of Rural Energy Sector

- a. Participatory Project Monitoring and Evaluation Training for RRESC staff
- b. Review and Planning Workshop for DEEU staff
- c. MS Word Training for ESAP/AEPC staff
- d. Professional Writing Training for RRESC staff
- e. Advanced MS Excel Training for ESAP/AEPC staff
- f. Facilitation and presentation Skill Training for RRESC staff
- g. Support to other individual AEPC/ESAP staff for various capacity building activities

2. Rural Energy Fund

- a. Training provided to 21 LFI in Rukum, Rolpa, Dailekh, Sankhuwasabha and Bhojpur on various aspect of governance, book keeping, credit financing, etc.
- b. Training on going to 23 LFI in Doti, Achham, Kalikot, Surkhet, Bajura, Dadeldhura, Makwanpur and Dhading.
- c. Partner banks have been continuously oriented about RET financing, cash flow analyses and about financing an MHP

3. Technical Support

3.1 Biomass Energy

- a. New promoters training
- b. Promoters refreshers training
- c. Partner staff TOT
- d. Master MICS installer training

3.2 Solar Energy

- a. 5 SE LI trainings for 204 technicians.
- b. 2 SE LII trainings for 50 technicians.
- c. 1 ToT training for 32 trainers.
- d. Refresher training to PQ companies on subsidy processing.
- e. One training field monitors (110) of pre-qualified consulting firms.
- f. Follow up trainings of PQ solar companies in QMS and GESI.

3.3 Mini Grid Rural Electrification

- a. Training for electro-mechanical design engineers of micro/mini hydropower. Aug 24, 2009- Sep 12, 2009. Alternate Hydro Energy Centre (AHEC)/Indian Institute of Technology Roorkee (IITR), India. Participants 27.

- b. Micro-Hydro Operators' Training (6 batches). Dec.13- Jan. 04; Jan. 04- Jan. 25; June 06 – June 27; and June 28 – July 19, 2010 (2 batches). Total participants 154.
- c. Micro-Hydro Managers' Training (6 batches). Nov.17 -23; Nov. 25 – Dec. 1, 2009; May 18-24; Many 31 – June 6; June 8 – 14; June 21 – 29; 2010. Participants 130.
- d. Economic use of electricity of MHP. Dec 13-15, 2009. Participants 19.
- e. Orientation training for Local Social Mobilisers of RRESC. Jan 12-14, 2010. Participants 34.
- f. Other 40 trainings at local level through Regional Centres targeting to the communities.

Annex 2:

Reports and working papers prepared in this period

1. Institutional Strengthening of Rural Energy Sector

- a. Draft AEPC SOD Plan
- b. Draft SWAp Report
- c. Concept Notes and ToRs for Enacting Rural Energy Policy 2006
- d. Concept Notes and ToRs for Student Thesis support
- e. Subsidy Arrangement 2009 - Unofficial English version
- f. Subsidy Delivery Mechanism 2010 – Unofficial English version
- g. Concept Notes and ToRs for on-the-job Training for Students
- h. VDC-level energy plans
- i. Concept Note for DFID AMS Initiative
- j. Process Action Plan: Preparation of Programme for Renewable and Rural Energy Sector (PRRES) (Continuation of Energy Sector Assistance Programme)
- k. Quarterly E-Newsletters

2. Rural Energy Fund

- a. “An experience of Credit Financing SHS”, paper presented on Micro Finance Summit, 2010.

3. Technical Support

3.1 Biomass Energy

- a. Final Report on “Piloting of Mud Rocket Stoves for three Terai districts of Nepal”
- b. Final Report on “Design, Fabrication and Testing of Gasifier Based Small Scale Orthodox Tea Drying System.”
- c. Report on “Piloting of Gasifier based Small Scale Orthodox Tea Drying System”

3.2 Solar Energy

- a. Report on “Used Lead Acid Battery Management in Nepal” study conducted by NESS.
- b. Report on “Socio-economic Impact of SHS”, study conducted by Samuhik Abhiyan, Nepal.
- c. Report “Solar PV Status 2010”, under preparation by Samuhik Abhiyan, Nepal.

3.3 Mini Grid Rural Electrification

None

Annex 3:**Financial Report of Energy Sector Assistance Programme**

Programme Period: 15 March 2007 – 14 March 2012

National Implementing Agency: Alternative Energy Promotion Centre (AEPC)

Financial Year: 2009/10 (NFY 2066/67)

Status as at: 30 June 2010

Figures in '000

Component / Outputs			Original Grant			Disbursement till date			Grant Balance		
			Danida	Norway	Nepal*	Danida	Norway	Nepal	Danida	Norway	Nepal
			DKK	NOK	NPR	DKK	NOK	NPR	DKK	NOK	NPR
1		ISRES	28,300	-		12,271			16,029		
2		REF/REI	86,700	92,543	554,000	57,046	70,576	150,511	29,654	21,967	403,489
3		Technical Support									
3	1	BE	12,270	13,057		7,707	12,579		4,563	478	
3	2	SE	8,129	8,651		7,570	8,648		559	3	
3	3	MGRE	10,101	10,749		7,515	9,597		2,586	1,152	
		Advisory Assistance	4,500	-		3000	-		1,500	-	
		Grand Total ----->	150,000	125,000	554,000	95,109	101,400	150,511	54,891	23,600	403,489
Percentage						63%	81%	27%	37%	19%	73%

*Note: GoN will provide matching fund based on disbursement of subsidy to the service providers.