

Danida

Norway

**Government of Nepal
Alternative Energy Promotion Centre**

Energy Sector Assistance Programme

**(ESAP II)
Annual Progress Report
2065/66
(July 2008–June 2009)**

July 2009
Kathmandu, Nepal

Abbreviation

AEPC	Alternative Energy Promotion Centre
ADB	Agricultural Development Bank
AWP 09/10	Annual Work Plan 2009-2010
BE	Biomass Energy
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 Institutions
FTC	Field Technical Coordinator
GMSI	Gender Mainstreaming and Social Inclusion
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
MH	Micro Hydro
MHP	Micro Hydro Project
MIS	Management Information System
MW	Mega Watt
NEPQA	Nepal Photo Voltaic Quality Assurance

NGO	Non Government Organisations
NOK	Norwegian Krone
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

Table of Contents

Abbreviation.....	i
Table of Contents	1
Executive Summary:.....	2
A. Assessment of the development of the national environment, including the strategic framework, since the last report	5
1. Institutional Strengthening of Rural Energy Sector (ISRES)	5
2. Rural Energy Fund (REF)	5
3. Technical Support	6
3.1 Biomass Energy	6
3.2 Solar Energy	6
3.3 Mini Grid Rural Electrification	7
B. Progress compared to objectives since the last report	8
C. Progress compared to objectives since the beginning of the programme	12
D. Progress during the year compared to output targets and budget for the year	15
E. Progress to date compared to output targets and budget for the entire programme period	44
F. Problems encountered and suggested solutions	73
G. Critical issues.....	74
H. Physical Achievement against Target	75
I. Status of outstanding issues and follow-up on decisions made by the Steering Committee (or similar body)	77
Annex 1:	78
Training program carried out in this period.....	78
Annex 2:	80
Reports and working papers prepared in this period	80
Annex 3:	82
Financial Report of Energy Sector Assistance Programme.....	82

Annual Progress Report and Financial Report

Programme:	Energy Sector Assistance
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Programme Manager: Niels Juhl Thomsen (Chief Adviser)	Energy Sector Assistance Programme Alternative Energy Promotion Centre Khumaltar Heights Phone number: 5539391, 5539390 P.O. Box 6332
Reporting period:	July 2008 – June 2009

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)

Executive Summary:

This is the second Annual Progress Report. The Report has two parts: 1) the progress during the period July 2008 to June 2009 and 2) the cumulative progress from Programme start to June 2009.

The total programme expenses for the period July 08 to June 09 were NPR 710 million against the budget NPR 974 million.

To promote renewable energy sector, Government of Nepal (GoN) in its three years Interim Plan (2007/08 – 2009/10) has given special emphasis on the implementation of “alternate and renewable energy technologies”. The first elected Government of Federal Democratic Republic Nepal presented its programme and plan in the Constituent Assembly last year in August 2008 which gave high importance to energy issues. This effort from GoN has had an impact on the ESAP support as demand for services has exceeded expectations.

ISRES has been working on the recommendations made by the Danida-Norad Joint Review Mission carried out in November 2008. It has focused on harmonisation of assistances from External Development Partners (EDPs) to achieve effective fund utilisation, ensuring coherency with respect to the policy goals, and capacity building of the national partners and stakeholders in the rural energy sector for sustainability of the development effort. Its on-going efforts towards updating the AEPC Strategic and Organisational Development (SOD) Plan holds greater significance in the changed context in Nepal, as this will be the guiding document for future key AEPC affairs. Emphasis is being given to human resource development of not only AEPC but also partner organisations, as this is necessary to develop and nurture sectoral capacity. In reporting period ISRES Component has expended NPR 36 million out of the budgeted NPR 43.5 million.

During this reporting period, REF has disbursed subsidy of NPR 424 million for SHSs and NPR 115 million for Mini Grid. With active assistance from ESAP, Kreditanstalt für Wiederaufbau (KfW) has committed to join REF from January 2010.

Likewise, Nepal Rastra Bank’s directive to include investments in Micro Hydro Projects (MHPs) up to 50 kW, Solar Cookers, Solar Dryers, Solar Pumps, Improved Water Mills (IWM), Improved Cooking Stoves (ICS), and Wind Energy under the Deprived Sector lending requirement (with a limit of NPR 60,000 per technology) opened avenues for private sector participation. Likewise tools such as insurance and debt insurance have been established in order to safeguard the investment both from calamities of all kinds and loan default.

Under BE Component 55,229 ICSs has been disseminated in 44 districts during this reporting period. A report on reduction of indoor air pollution has been prepared and it shows that ICSs reduce the content of PM2.5 (Particulate Matters less than 2.5 micron in diameter) by 65% and CO (Carbon Monoxide) by 62%. During this reporting period, 1100 promoters were trained, among which 33% were women. Emphasis was also given on creating awareness of the health benefits among health workers, school teachers, Village Development Committee (VDC) chairmen, and political parties. This fiscal year BE Component has expended NPR 71.6 million out of budget NPR 62 million.

SE Component has taken initiatives in revision of Nepal Interim Photo Voltaic Quality Assurance (NIPQA now Nepal Photo Voltaic Quality Assurance NEPQA) and Quality Assurance and Monitoring (QA & M) (two basic documents to run the programme). Revisions were made to make them clear and updated to include development in the Solar Photo Voltaic (PV) sector and lessons learned. Detail analysis of possible modalities for dissemination of Small Solar Home System (SSHS) and preparation of technical standards has been made. A modality and the technical standard are approved and the dissemination with subsidy has started. Conceptual framework for piloting a model for credit financing of SHS was designed and through a consortium of consultants, a pilot implementation in six districts was successfully carried out. A study on used lead acid battery management has been prepared and final report received. 26 AEPC/ESAP’s pre-qualified solar companies for SHS dissemination and 36 for SSHS dissemination have been qualified to participate in the programme. By 30th June 2009, a total of 161,765 SHSs were installed in 73 districts and 2430 VDCs by the total ESAP I and II support. In the reporting period, it was for 55,629 SHS

(73 districts and 1937 VDCs). During this fiscal year, SE Component was involved in assisting two KfW assessments. KfW is presently finalizing its requirements to join ESAP with support of Euro 8.5 million for the SHS dissemination. SE Component has spent in reporting period NPR 21.3 million out of budget NPR 41.5million for technical support.

Through micro hydro, access of electricity has been increased to 6,537 households in reporting period totaling 30,376 households with the effort from ESAP I and II. 63 (2,228 kW) projects are under construction stage, 115 (3,333 kW) projects are given subsidy approval on conditional basis, 155 (3,921 kW) projects are ready with details studies, and 144 (3,944 kW) project are on-going detailed feasibility studies. 52 private sector installation companies and 45 consulting companies to provide survey and design services are involved in the mini grid sector. The Government's priority to electrify all the households of Rukum district and furthermore the demand for electrification is ever increasing putting tremendous pressure on programme implementation. MGRE Component has spent in reporting period NPR 37.4 million out of budget NPR 53 million for technical support.

In this fiscal year, the shortage of human resources in AEPC/ESAP was also observed. This implied difficulty in effectively and timely reaching targets and demands.

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 has been coordinating relevant activities pertaining to AEPC/ESAP; the key new role it will assume during 2009-10 is to work on the recommendations made by the Danida-Norad Joint Review Mission carried out in November 2008.

The Component has been targeting development of a coherent Rural Energy (RE) Policy, aligned with the National Development Framework, focusing on poverty reduction and social justice. To pursue this overall target, ISRES has specified seven broad outputs and a number of sub-activities supporting achievement of each output. The main activities of ISRES focus on harmonisation of assistances from EDPs, to achieve effective fund utilisation, ensuring coherency with policy goals, capacity building of national partners, and stakeholders in the rural energy sector.

ISRES is working towards developing and sustaining effective institutional leadership of AEPC for rural energy sector development. The means are to strive for achieving efficient resource utilization and quality assurance of services by ensuring proper coordination, networking, and facilitation of activities. AEPC is the organization mandated to promote RE in Nepal, and must do that by promoting accountability and transparency in an improved working environment. ISRES's on-going efforts towards updating the AEPC SOD Plan holds great significance in the changed context in Nepal, as this will be the guiding document for future key organisational issues for AEPC. Emphasis is being given to human resource development, not only for AEPC but for all partner organisations, as this is necessary to develop and nurture sector capacity.

In coordination with all seven Regional Renewable Energy Service Centres (RRESCs), ISRES recently finalized annual work plans for 2009-10, making provisions for undertaking Decentralized Energy Management Initiative (DEMI) in 14 new VDCs.

Recognizing the importance of participation of additional EDP to close the funding gap of ESAP II, during the last reporting period ISRES has initiated the first EDP's coordination meeting.

2. Rural Energy Fund (REF)

During 08/09 Danida, Norad and Government of Nepal continued their support in providing funds to REF. REF has disbursed subsidy amounting to NPR 424 million for the installation of 56,931 SHSs. Likewise, this year showed an increase in MH numbers under construction, with present 54 MH with a total capacity of 842 kW benefiting 8,365 HH in 18 districts and estimated total subsidy of NPR 111 million. Similarly, conditionally approved subsidy amount for MH of total capacity 2,487 kW during this year, is estimated to be NPR 294 million. 35 micro hydro projects have been verified for power output by REF during this reporting period and 18 micro hydro projects (140 kW) covering 1,684 households have successfully completed the one year guarantee check. The total subsidy for these micro hydro projects stand to be NPR 21 million. Along with subsidy disbursement activities, this year, REF continued various capacity building activities to RRESCs on subsidy delivery and book keeping systems. On the monitoring side, REF conducted spot check monitoring on random selection basis of SHS in Sindhuli and Rukum districts. This year, with the strengthening of Management Information System (MIS) and Data Processing Unit at AEPC/ESAP, REF was able to effectively carry out the overall monitoring of regional centres, MHPs during Power Output Verification and places where issues need to be solved.

During this reporting period, Nepal Rastra Bank has issued directives to include investment in MHPs up to 50kW, Solar Cooker, Solar Dryer, Solar Pump, IWM, ICS and Wind Energy under the Deprived Sector lending requirement (with a limit of NPR 60,000 per unit of each technology). This has opened avenues for private sector financial institutions to go for RET financing in rural settings.

3. Technical Support

3.1 Biomass Energy

The Government of Nepal (GoN) in its three years Interim Plan (2007/08 – 2009/10) have given special emphasis on the development of alternate and renewable energy technologies. The target of 300,000 has been set for ICS including other biomass solutions.

Improved Cooking Stoves are considered as an affordable technology to meet the needs of more than 80 percent population.

In the reporting period, the Component made effort on technology development. It took initiative in using academic institutions for developing small scale biomass gasifier based tea drying unit. It is being piloted in the Ilam district. The result of piloting will help developing suitable policy for encouraging this kind of efficient biomass technologies for supporting small scale entrepreneurs in the tea industries. Three models of institutional cooking stoves suitable for road side hotels, army barracks and school hostels are ready for dissemination. Capacity building for relevant staff for massive dissemination completed. Similarly, Component has also initiated the piloting of portable mud rocket stoves suitable for plain terai areas in 30 households of Sunsari, Bardiya and Kailali districts of Nepal. Detail analysis and dissemination strategy will be developed for implementation of portable stoves in Terai districts for consecutive annual work plan period.

The Component has identified the interim metal stove model for subsidy. The detail analysis, technology finalisation, capacity building, company prequalification and delivery modality preparation were carried out in this work plan period.

It has been assumed among the stakeholders that the ICS model disseminated by AEPC/ESAP does not reduce indoor air pollution and benefits health. To verify this assumption BE Component carried out study on effectiveness of ICS. A report showed that ICS reduces the content of PM_{2.5} (Particulate Matters less than 2.5 micron in diameter) by 65% and CO (Carbon Monoxide) by 62% the main pollutant for eye, asthma and lung diseases. The second round of monitoring in same households is initiated for assessing the user ability and understanding of use, repair and maintenance of ICS.

3.2 Solar Energy

Globally Solar PV has become one of the fast growing renewable technologies for energy generation for lighting. In Nepal also, there has been a rapid increase in dissemination of SHS and SSHS (Solar Tuki) as a result of the different interventions undertaken by ESAP. ESAP II started on March 15, 2007 with the target of 150,000 SHS and 250,000 SSHS for next five years. By 30th June 2009, a total of 161,765 SHSs were installed in 73 districts and 2,430 VDCs with ESAP I and II support. In the reporting period 55,629 SHSs were installed with ESAP support in 73 districts and 1,937 VDCs. 26 solar companies have been 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.

In the reporting period, some of the major initiatives taken in programme implementation are: revision of NIPQA (now NEPQA) and QA &M - two basic documents for implementation of ESAP II Solar Support Programme for ESAP II. The revisions were made for clarification of issues and updating to include development in the solar PV sector. This task was carried out by a Task Force formed between AEPC/ESAP and Solar Electric Manufacturer's Association Nepal (SEMAN).

The efficiency of processing Subsidy Application Forms (SAFs) was improved and processing is now faster without duplication of activities, and with improved reliability.

Detail analysis and exercise carried to prepare the technical standard and delivery modality for the dissemination of SSHS got approval from the concerned governmental authority. The dissemination of subsidy for SSHS has started. Information Education and Communication (IEC) materials, like brochures of solar energy are prepared and distributed.

A conceptual framework for piloting a model for credit financing of SHS is designed and pilot implementation is carried out successfully in six districts, through a consortium of consultants. A study on used lead acid battery management is conducted and final report received. SE Component has assisted and made demonstrations for two KfW missions. The one mission was for general assessment for KfW joining ESAP and the second mission was specific for the used battery management. Both the missions were assisted in carrying out their task effectively. Both missions reported positively on ongoing activities and possibilities. The mission reports will serve as background for the final approval of KfW joining ESAP.

3.3 Mini Grid Rural Electrification

The first elected Government of *Federal Democratic Republic Nepal* presented its programme and plan in the Constituent Assembly last year in August 2008. The first budget of the *Federal Democratic Republic Nepal* gave high importance in addressing the energy issues. The Government announced a programme for producing and utilizing 10,000 MW of hydro-power in the next 10 years. Among the provisions supporting implementation of small scale hydro power plants is that the legal provision for requiring licenses hydropower has been changed from 1 MW to 3 MW. The Government announced support for promoting small hydro power plants, up to 1 MW for distributing electricity to all Nepalese citizens. The Government also declared Rukum Ujyalo (Illumination) programme for electrifying all the households in Rukum district giving first priority to the use of mini/micro-hydropower schemes. The present Government continue the support to this programme. Further, the Government has announced that two more districts will be selected for similar programme. This implies an increased demand for ESAP support in those districts, and the supporting structures has been enhanced in Rukum Ujyalo and the new districts will be in need of support at the same level.

The Government also formed a task force for the Formulation of Ten Year Hydropower Development Plan in 2008. The draft plan has been prepared and circulated to all relevant stakeholders including AEPC for final feedback. The alternative energy sources such as mini/micro-hydropower and solar power have been seen to provide electricity to 1,300,000 households in ten years.

The Government Programme and Budget presented for Fiscal Year 2066/67 (corresponding to July 2009- June 2010) highlighted the importance of renewable energy including mini/micro-hydropower.

It has been observed that the mini/micro-hydropower sector is increasingly facing pressure to fulfil the expectations of the Government and the demand from consumers has increased. Due to the Government's high priority and furthermore the needs of the people, demand for electrification is ever increasing, putting tremendous pressure on 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"> • Discussions with WECS and review of documents on National Rural Energy Development Strategic Plan ongoing • Review of Rural Energy Policy, 2006 in view of drafting/adopting the required laws, by-laws, acts etc • Two times inputs to the revised Subsidy Arrangement and Subsidy Delivery Mechanism, 2009
Alignment of national and external development partners to the national rural energy sector policy and institutional framework	<ul style="list-style-type: none"> • Review of existing situation and previous AEPC SOD Plan • EDP coordination meeting on Dec 8, 2008 • Draft Terms of Reference (ToR) for study on Feasibility Study on the Possibility of the SWAp in Rural and Renewable Energy Sector and Identification of Its Indicators prepared • 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 • MGRE and BE Component's MIS Database is operational while SE Component's MIS Database is in design phase. • Second residential workshop on Gender Mainstreaming and Social Inclusion (GMSI) completed in April 2009 • Inputs to documents, conference papers, proposals • Web page development is ongoing • Contract awarded competitively for Capacity building of Kailali Kanchanpur Rural Electrification Project (KKREP) Umbrella Organization
Rural Energy Fund	
Quality rural energy services are affordable nationwide through grants and enhanced access to credit	<ul style="list-style-type: none"> • External development partners have been requested to support the rural energy investment. GTZ and KfW have committed certain funds. Negotiations with Agricultural Development Bank (ADB), Finland and Department for International Development (DFID) are going on.

Key annual outcome and impact indicators	Progress
	<ul style="list-style-type: none"> • REF has been optimally channelling funds in the form of subsidy for the investment in different rural energy solutions. • ToR for calling proposals from interested financial institutions for rural renewable energy projects will be published within July 2009. • REF has been following guidelines, policies and directives to manage funds in a transparent and efficient manner.
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"> • 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 Local Partner Organizations (LPOs) in the districts where promoters' association is established
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"> • Out of total trained promoters 33% 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 • ICS 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 52,229 same numbers of households with clean indoor air quality. • It has reduced the drudgery of women by saving the time of fuel wood collection.
Adoption of biomass energy solutions is popularized in the rural communities	<ul style="list-style-type: none"> • Adoption of biomass technology increased to more than 52,229 households with the effort from ESAP. • IEC 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 recently implemented. • NEPQA and Renewable Energy Test Station (RETS)

Key annual outcome and impact indicators	Progress
	<p>are upgraded and functional.</p> <ul style="list-style-type: none"> • Timely processing of SAFs in SE Component. • Quality Assurance and Monitoring (QA & M) system is revised and made clear and effectively executed. • Capacity building activities of private sector are effectively implemented. • 55,629 SHS 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 prepared implemented to increase the easy access to credit financing in SHS and SSSHS. • Dissemination of SSSHS (Solar Tuki) started targeting poor in rural areas. • Used battery management initiative started. • Planned to established used battery collection and recycling system. • 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 revised, but for the period only upto June 2009! • Emphasis is given for 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 development as Regional Centres covering 49 districts. • A total of 52 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 6,537 households in this reporting period totalling ---30,376 households with the effort from ESAP. • A total of 63 (2228 kW) projects are under construction stage, that will electrify further 19,627 households. • A total of 115 (3333 kW) projects are given subsidy approval on conditional basis, that will electrify further 28,909 households.

Key annual outcome and impact indicators	Progress
	<ul style="list-style-type: none">• A total of 155 (3921 kW) projects are ready with details studies, that will electrify further 37,335 households.• A total of 144 (3944 kW) project are on-going detailed feasibility studies, that will electrify further 33,357 households.• Limited use other than lighting is noticed. However, awareness has increased to find out new end-use applications. The end-use applications are in increasing trend.• Strategy and guideline have been developed to increase end-use applications. This activity has given importance.

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"> • Discussions with WECS and review of documents on National Rural Energy Development Strategic Plan ongoing • Review of Rural Energy Policy, 2006 in view of drafting/adopting the required laws, by-laws, acts etc • Two times inputs to the revised Subsidy Arrangement and Subsidy Delivery Mechanism, 2009
Alignment of national and external development partners to the national rural energy sector policy and institutional framework	<ul style="list-style-type: none"> • Review of existing situation and previous AEPC SOD Plans • EDP coordination meeting on Dec 8, 2008 • Draft Terms of Reference (ToR) for study on Feasibility Study on the Possibility of the SWAp in Rural and Renewable Energy Sector and Identification of Its Indicators prepared • 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 • MGRE and BE Component's MIS Database is operational while SE Component's MIS Database is in design phase. • Second residential workshop on GMSI completed in April 2009 • Inputs to documents, conference papers, proposals • Web page development is ongoing • Contract awarded competitively for Capacity building of KKREP Umbrella Organization
Rural Energy Fund	
Quality rural energy services are affordable nationwide through grants and enhanced access to credit	<ul style="list-style-type: none"> • KfW has committed fund. Negotiations going on with ADB, DFID. • REF has been optimally channelling funds in the form of subsidy for the investment in different rural energy solutions. • Conducive environment for lending is being created. Exposures will be safeguarded via insurance and debt insurance. • REF has been following guidelines, policies and directives to manage funds in a transparent and efficient manner.

Key outcome and impact indicators	Progress
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"> • 138 numbers of local partner organisation are implementing improved cooking stove programme in 44 districts • Piloting of implementation through District and Energy and Environment Section at Achham, Bajhang, Bajura, Darchula • Updated MIS database
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"> • Interim national stove testing protocol has been finalised for all relevant stakeholders • Massive campaigns on IAP and ICS in various parts of implementing districts
Adoption of biomass energy solutions is popularized in the rural communities	<ul style="list-style-type: none"> • Piloting of biomass gassifier based tea drying system at Ilam district • Piloting of portable rocket stoves (raw materials: mud, metal, refractory bricks etc) • Subsidy policy recommendation for household gasifier and institution gasifier in subsidy policy review 2066
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. • 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. • Nepal Interim Photo Voltaic Quality Assurance (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. • 91,947 SHS 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.

Key outcome and impact indicators	Progress
	<ul style="list-style-type: none"> • Dissemination of SSHS (Solar Tuki) started targeting poor in rural areas. • Used battery management initiative started. • Planned to established used battery collection and recycling system. • 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 49 districts. • A total of 52 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 30,376 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	Discussions with WECS and review of documents on National Rural Energy Development Strategic Plan ongoing	1,500,000	NIL	In house activities are undergoing	A secretaries' level meeting to be conducted
Output 1.2	Review the present policies governing RE	Review of Rural Energy Policy, 2006 in view of drafting/adopting the required laws, by-laws, acts etc	200,000	NIL	In house activities are undergoing	Hiring the services of the lawyer for drafting required legal documents
Output 1.3	Assist the revision of subsidy policy and integrated credit mechanism	A policy recommendation Subsidy Policy and Subsidy Delivery Mechanism 2009 is submitted to the cabinet for approval.	600,000	NIL	Completed	
Output 1.4	Periodic policy reviews and recommendations for amendments	Policy recommendation	NIL	NIL	In house activities are undergoing	
Output 1.5	Monitor the implementation of policies and strategies	An internal policy/procedure recommendation	NIL	NIL	Completed	

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 1.6	Prepare inputs to the 11th five years development plan	The 11 th Development Plan	NIL	NIL	Not planned for this year	To be done prior to next planning period
Output 1.7	Cooperate with Ministry of Environment ¹ (MoE) in the preparation of Country Environment Analysis (CEA) & Strategic Environment Assessment (SEA)	CEA/SEA Prepared	NIL	NIL	Not planned for this year	
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	250,000	995,325	Completed	
Output 2.2	Conduct a sector wide conference and agree on the sector diagram	Consensus on institutional roles	200,000	186,218	Completed	
Output 2.3	Strengthen the coordination by institutionalising a network of institutions	Inputs for strengthening networking	150,000	3,150	The conference conducted, A study planned as suggested by conference proceeding	Study on the need of further networking planned for 2009-10
Output 2.4	Assist local partners to ensure efficient resource utilization through planning exercise	Decentralized Energy Management at the village level	5,000,000	1,987,434	Agreement being made with all 7 RRESCs to undertake DEMI in 14 new VDCs	Data collection, analysis, plan preparation

¹ From July 6, 2009 AEPC is under the Ministry of Environment

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 2.5	Participate in the Task Forces	Task force consensus	NIL	NIL	Regular activity on need-basis	
Output 3	Sector Wide Approach (SWAp) for rural energy development in place.					
Output 3.1	Ensure transparency in REF administration (ISO Certification)	Proposal call for ISO certification of REF Administration	1,500,000	NIL	On-going activity	
Output 3.2	Promote SWAp for participation by multiple EDPs	Draft ToR for study on Feasibility Study on the Possibility of SWAp in Rural and Renewable Energy Sector and Identification of Its Indicators prepared	600,000	NIL	On-going activity	In house Talk Programme on SWAp Challenges and Opportunities
Output 3.3	Encourage EDPs to sign on to joint financing agreements for rural energy	Willingness to participate in joint funding	500,000	NIL	Discussions with GTZ are ongoing.	Commitment of Euro 500,000 for MHP financing.
Output 3.4	Strengthen the EDPs' coordination by institutionalising the current thematic group on rural electrification co-chaired by ADB	First EDP coordination meeting (19 representatives from donors' community) was conducted on Dec 08, 2008	500,000	NIL	On-going activity	
Output 3.5	Follow up on decisions made in the EDPs coordination meetings	Willingness to participate in joint funding (KfW)	200,000	NIL	On-going activity	At least Two Donors' Coordination meetings

Output target	Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
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	Policies for staff development	1,300,000	856,527	On-going activity
Output 4.2	Organise leadership and mgmt training courses for management in AEPC and partner institutions	Human resource capacity enhanced	500,000	39,826	On-going activity
Output 4.3	Establish a transparent system for dissemination of Management decisions	A data bank concept	600,000	NIL	Ongoing activity. Closely related with 4.5
Output 4.4	Financial management practices and systems	Accounting Training to related RRESC staff	450,000	10,000	On-going activity
Output 4.5	Improve the AEPC Management Information System (MIS) as required	More reliable network and internet services	2,500,000	45,000	New AEPC web site developed. Installation of MIS system completed.
Output 4.6	Improved working environment in AEPC through infrastructure improvement and incentive support	Streamlined modern office facility	5,200,000	4,834,544	On-going activity

Output target	Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action	
Output 5	Conducive working environment in AEPC and partner organizations, including human resource development policy, planning & management					
Output 5.1	Update AEPC SOD plan	Updated AEPC SOD Plan	1,000,000	74,404	Review of the present situation and previous AEPC SOD Plans has been completed; The facilitator for the National Strategic Planning Workshop is selected	National Strategic Planning Workshop; Regional workshops; SOD Plan drafting
Output 5.2	Study and prepare ESAP sustainability and programme staff	ESAP succession plan	3,500,000	NIL	Drafted response to recommendation of Joint Review Mission (November 2008)	To be decided in consultation with management
Output 5.3	Implement the human resource development strategy in AEPC	Documented training programme	NIL	NIL	On-going activity	Based on need, training to be provided
Output 5.4	Analyse institutional gender issues and implement gender mainstreaming in AEPC and other partner institutions	Awareness of AEPC/ESAP staff on gender issues Inclusion of gender indicators in ESAP's AWP 09/10 by all Components	NIL	583,193	Second residential workshop completed in April 2009	Follow-up on action plan
Output 5.5	Conduct capacity building activities of other partner institutions	Partner capacity enhanced	8,900,000	4,547,150	On-going activity	Training for partner agency staff

Output target	Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action	
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	Resource centre strengthened Adobe Acrobat Standard 9 purchased	550,000	44,010	Various activities planned in AWP 09/10 for RC strengthening	Implementation of planned activities
Output 6.2	Establishment of information services (web-site and resources centre)	AEPC's website developed Information flow strengthened	1,050,000	1,458,780	Updated information in AEPC's website required Provision made for RRESCs' AWP 09/10 to support website development/ updating	Follow-up
Output 6.3	Conduct an annual integrated stocktaking exercise of sector developments and for major changes and conduct impact studies, as needed, to this end	Stocktaking exercise completed	NIL	NIL	Not planned for the year	To be undertaken in later years
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)	Cooperative established and functional	NIL	NIL	Cooperatives established	To be decided in consultation with KKREP

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	<ul style="list-style-type: none"> Inception report with situation assessment has been prepared Safety pamphlets distributed Various training activities initiated 	1,500,000	12,995,271	Contract awarded competitively for Output 7.2, 7.3 and 7.4	Follow-up with consultants
Output 7.3	Prepare and disseminate IEC materials		1,000,000	NIL		
Output 7.4	Elaborate and publish guidelines, manuals and planning tools		800,000	NIL		
Output 7.5	Technical Support Unit operation financed 100% in first year.	Support provided to ensure the long-term sustainability of the umbrella organization.	3,500,000	NIL	The support cost is calculated as NPR 4,450,000. The increase in cost is associated with the hike in fuel price. The deficit of NPR 900,000 is planned to be covered next year.	Support provided and activities are on going
GRANT to RRESCs				7,309,392		
Total			43,550,000	35,930,227		
Budget Balance: 18%						

Output target	Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action	
2. Rural Energy Fund						
Output 1	Funds 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.	NRB has suitably modified its policy in RET lending upon AEPC/ESAP's request. Similar approach have been taken with Beema Samiti, Nepal Bankers' Association, etc.	600,000	NIL	Ongoing process	More of all the sectors will be approached to have investment in RET sector.
Output 1.2	Promote REF through dissemination of information on REF achievements and modalities.	ISRES brochure in place. A documentary is also being prepared.	1,200,000	NIL	In-house activities	proposals will be selected for the documentary
Output 1.3	Raise Fund with donors (grants and credits), financial sector and Government matching contributions	Various financial institutions shown interest	NIL	NIL	Ongoing process to motivate financial institutions to extend credit	Financial Institutions will be approached for more lending
Output 2	Financial sector credits available for rural energy investment.					
Output 2.1	Study on Development of modalities for promotion of solar PV technology	Consultation meeting with stakeholders	1,150,000	64,919		

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.	Credit Financing SHS is underway.	NIL	NIL	In-house activities	Credit Financing MHP is under progress.
Output 2.3	Promote and lobby for a financial sector managed long-term credit facility for rural energy investments (Awareness Activity)	More than 15 financial institutions have been approached for rural energy investment, making them aware of the need and the market.	800,000	NIL	In-house activities	Tendering process for choosing the financial institutions underway.
Output 2.4	Conduct capacity building activities in the financial sector for RE investments.	21 cooperatives have been trained	2,000,000	NIL	In-house activities	around 30 new cooperatives will now be capacitated
Output 2.5	Promote rural energy solutions through orientation program	Several districts in rural Nepal have been visited for the promotion of RE	200,000	NIL	In-house activities	more such activities will be conducted
Output 2.6	Facilitate credit line availability with financial institutions	Several financial institutions have been approached for credit line.	1,200,000	1,094,947	Financial institutions are still reluctant	conducive environment needs to be created
Output 3	Funds managed in a transparent and efficient manner					
Output 3.1	Review of Delivery Mechanism	Delivery mechanism under review	600,000	42,907		

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 3.2	Institutional credit facilitating	Bank of Kathmandu has sanctioned NPR 10 Lakhs to one of the cooperatives from Rolpa District for SHS.	NIL	244,809	Additional initiative in MHP financing	more such approach need to be replicated
Output 3.3	Monitoring	Power output and households verification of micro hydro plants. Spot check monitoring of solar home systems in two districts. RRESC activities in facilitation of subsidy delivery and monitoring.	8,100,000	1,278,680		Planned in AWP 09/10
Output 4	Funds 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.	An appraisal of projects is in place	600,000	NIL	In-house activities	
Output 4.2	Approve applications for grant from the REF support for off-grid electrification	In-house activities	NIL	NIL	In-house activities	

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 4.3	Disburse REF grant supports (subsidy)					
Output 4.3.1	SHS-150,000HH (target for this year-40,000HH)	56,931 solar home systems have been installed in 73 districts with a total capacity of 1,331 kW.	320,000,000	423,594,955	Being a demand driven based approach and continuation of the programme, demand of SHS is growing tremendously.	
Output 4.3.2	IWM Electrification	None	4,400,000	NIL	After finalisation of the guidelines, supporting organisation for IWM (CRT) is still working as to recommend for subsidy approval.	Planned in AWP 09/10
Output 4.3.3	MH-150,000HH (target for this year - 30,000HH /3500kW)	2,487 kW/20,628HH/31 districts (NPR 294 million committed) =Conditionally Approved Projects; 842 kW/8,365HH/18 districts=Approved for installation; 443kW/4,421HH/14 districts=Power output tested and verified and 140kW/1,684HH/10 districts=One-year guarantee check completed.	350,000,000	115,457,531	MH developers were awaiting increased new subsidy rate since a long period of time.	

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 4.3.4	Solar Tuki -250,000HH (target for this year - 25,000HH)	None	50,000,000	NIL	Preparation of the guideline/modality took a long time. SAFs have been distributed to qualified private companies for start up installation process.	Planned in AWP 09/10
Output 4.3.5	BE-100,000HH (target for this year- 10,000HH)	None	25,000,000	NIL		
Output 4.4	Facilitate the REF Institutional Credit Network and coordinate with Government institutions, donors, financial sector and private energy service sector	A financial tool ready and on the basis of the tools, the output is likely to be achieved.	8,200,000	NIL		Based on the approved financial tools, call for proposals from financial institutions
GRANT to RRESCs				2,497,496		
Total			774,050,000	544,276,244		
Budget Balance: 30%						

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	1. Orientation and demonstration of ICS technologies conducted in various VDCs 2. Regional Level & District Level Review & Planning Workshop conducted.	19,312,000	5,877,931		
Output 1.2	Provide ToT and other trainings to LPOs for their capacity building	1. 39 new promoter training 2. 32 refresher training 3. 10 ToT for LPOs organised. 4. Field Technical Coordinators (FTCs) were trained on IICS construction & Kitchen Management techniques. 5. Biomass Officers (BOs) trained on Stove Testing Protocol	8,452,000	5,732,742		
Output 1.3	Monitor and supervise LPOs activities and back stop them on time	1. MIS database report 2. Quarterly reports by RRESC 3. Regular Internal staff meeting	11,979,000	4,119,664		

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 1.4	Establish ICS/biomass network	1. Promoters were certified. 2. Monthly meetings of promoters were held. 3. Regional Level and district level LPO gatherings conducted	1,350,000	144,657		
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	District Energy & Environment Unit/ Station (DEEU/S) staffs were oriented regarding the best practice guidelines currently used for ICS promotion	800,000	252,854		
Output 2.2	Awareness for media, key local players, health related organization and medical doctors through orientation demonstration	District Level Information & Awareness Campaign conducted in 11 districts highlighting the importance of Indoor Air Pollution and Kitchen Management. Information on Biomass Energy Technologies (BETs) was disseminated through local medium	2,700,000	1,059,485		

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 2.3	Identify, compile and produce a complete range of appropriate information materials for massive dissemination to the stakeholders	IEC materials on metallic stoves and institutional ICSs were developed.	1,250,000	NIL		
Output 2.4	Workshop for Donor, INGO, Government Organizations (GOs)	Four regional workshops to orient about the metallic stoves and subsidy mechanism were conducted	800,000	21,242		
Output 2.5	Consultative meeting and initiated dialogue with non-formal education	Preliminary work has been initiated	100,000	185,425	In the initial stage	Continued in AWP 09/10
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	National workshop organized to reveal the Interim National Standard Stove Performance Testing Protocol	300,000	416,383	Allocation of RRESC grant of 07/08	
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 	250,000	2,352,246		

Output target	Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action	
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	The adaptive research in other biomass technologies has been initiated with Kathmandu University to identify metallic stoves suitable for high altitudes of Nepal.	500,000	156,126		
Output 4.2	Conduct feasibility studies for other biomass technologies	Piloting of institutional biomass dryer for small scale tea producers is initiated.	3,700,000	146,876		
Output 4.3	Testing of Biomass Technologies	Piloting of mud as well as metallic rocket stoves were conducted in three districts of Terai Region	600,000	1,392,293	Allocation of RRESC grant of 07/08	
Output 4.4	IEC Materials-Orient & Demo	Calendar for 2066 BS has been developed. Metallic Stoves posters, different types of flex were developed	750,000	1,362,655		
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	NIL	NIL		
Output 4.6	Technology Promotion - Dev Org	Information materials has been circulated	1,095,000	26,329		

Output target	Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
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	1,200,000	NIL	In house activities
Output 5.2	Sector Development	Pre-qualification criteria developed. 15 metallic stoves manufacturing companies are pre-qualified. Subsidy delivery mechanism for metallic stoves developed.	400,000	24,078	
Output 6	Awareness among rural people on efficient biomass energy solutions created				
Output 6.1	Development of information materials for biomass technologies	Not planned	2,000,000	NIL	
Output 6.2	Awareness campaign on a range of biomass technologies and training	Not planned	NIL	308,717	Allocation of RRESC grant of 07/08
Output 6.3	Conduct IEC Impact study		NIL	NIL	
Output 6.4	Improvise IEC materials		NIL	NIL	

Output target	Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
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	1,250,000	582,207	
Output 8	Documentation of Biomass stoves installed in the next five years in all ecological zones				
Output 8.1	Conduct impact studies	Health Impact Assessment was conducted along with 2 nd round of IAP study was conducted in the same households of three district of mid hill region.	2,200,000	1,403,503	
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 BOs were trained on the usage of the newly developed MIS database software.	800,000	852,391	
Output 8.3	Other Activities		NIL	NIL	
GRANT to RRESCs				45,411,355	
Total			61,788,000	71,656,166	
Budget Overflow : 16%					

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	99,500 Information booklet and poster prepared and distributed.	1,650,000	161,018	Program guideline publishing is delayed due to review and finalization of the guideline.
Output 1.2	Prepare and distribute training Manuals	1. Revised SE LI and SE LII manuals. 2. Published SE LI (400 copies) and SE LII (150copies) training manuals. 3. Design of and printing of 150 copies of manuals for ToT trainings for SE LI and SE LII.	650,000	272,114	
Output 1.3	Conduct capacity building activities for service providers and support organization (orientation, training, exposure visit etc) in the sub sector	1. 6 SE LI trainings for 200 technicians. 2. SE LII trainings for 60 technicians. 3. 1 ToT training for 30 trainers. 4. One design engineers training in Indian Institute of Technology (IIT) Delhi, India training 28	6,400,000	6,504,788	

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
		<p>engineers.</p> <p>5. Organization of 1 orientation programs for PQ solar companies implementation modality of SSHS.</p> <p>6. Three orientation programs for RRESC staff in SE Component's guidelines and field monitoring of SHS.</p> <p>7. One training field monitors of pre-qualified consulting firms.</p> <p>8. Development and two trainings of PQ solar companies in QMS.</p>				
Output 1.4	Conduct reviews, surveys and other impact studies	Training need assessment for SE LI and SE LII	500,000	404,271		.
Output 2	Improved Quality Assurance Systems					
Output 2.1	Update or revise criteria, mechanisms and standards	Revised NEPQA and QA & M for ESAP II	200,000	16,743		
Output 2.2	Conduct company qualification, performance evaluation, grading, penalty etc	<p>1. The Pre-qualification of three new companies for SHS.</p> <p>2. Prequalification of 36</p>	750,000	119,118		

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
		companies for dissemination of SSHS.				
Output 2.3	Follow up action on RETS test Reports	Reports are received and reviewed.	NIL	NIL	In-house effort	
Output 2.4	Field monitoring of SHS and SSHS	<ol style="list-style-type: none"> 1. Conclusion of 6 and 7th round of QA & M. 2. 8thth round of QA & M of 3,036 random samples monitoring in 56 field trips for QA & M of 2007/08 installation. 3. 5 detail technical monitoring by RETS based on the random samples. 4. Verification of deviated cases of 8th round of QA & M 9 trips. 5. General monitoring by RRESC 1625 samples. Detail technical evaluation by RETS 7 trips. 	10,000,000	7,469,120		
Output 2.5	Provide backstopping to RETS and Council for Technical Education & Vocational Training (CTEVT)	Support to RETS for finalization of the Testing and sampling procedure.	1,800,000	NIL	The discussion to provide financial support to RETS to establish battery life cycle tester remained indecisive.	RETS will try to convince AEPC and it will be taken as separate funding if decided.

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 2.6	Conduct reviews, surveys and other impact studies		600,000	NIL	The guideline for the dealer/agent management was discussed in the Task Force but the issue remains undecided.	Planned as an important task in FY 2008/09.
Output 3	Inputs to Policy Formulation & Review					
Output 3.1	Provide policy as required	<ol style="list-style-type: none"> 1. Prepared the modality for dissemination of SSHS. 2. Input to revised subsidy delivery arrangement. 3. Subsidy delivery mechanism. 4. Revised NEPQA and QA & M for ESAP II. 	200,000	NIL	In-house effort	
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 (FI) & MFIs	Implemented pilot modality in credit financing of SHS in 6 districts (20 MFIs) in eastern and western development region.	4,000,000	4,086,088		
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.	400,000	NIL	In-house effort	

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 4.3	Conduct reviews, surveys and other impact studies	Not planned for this year.	NIL	NIL		
Output 5	Increased Use of SHS and SSHS					
Output 5.1	Administer, appraise and recommend SHS applications to REF	55,629 SHS recommended for subsidy.	1,800,000	842,977		
Output 5.2	Developing new modalities and support through Partner Organizations (POs) for SSHS promotion	Delivery modality and technical standard is finalized but PO support is not carried out.	3,000,000	90,200	PO support delayed due to gesture of clarity of procedure.	
Output 5.3	Conduct reviews, surveys and other impact studies	Not planned for this year.	NIL	NIL		
Output 6	Used Battery Management Initiated					
Output 6.1	Conduct feasibility study for establishing battery collection and recycling within the private sector	1. Study conducted on the environment pollution by used SHS battery. 2. Study carried on the Used Battery Management	3,400,000	290,209		
Output 6.2	Conduct awareness and capacity building activities of solar companies and relevant stakeholders for collection of battery	No activities	200,000	NIL	Delayed due to the delay of the studies conducted in used battery management problem.	
Output 6.3	Support for developing battery collection mechanism	Not planned for this year.	NIL	NIL		

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 6.4	Conduct reviews, surveys and other impact studies	No activity for this year.	NIL	17,724	New initiative for receiving KfW fund	
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), Himalayan Light Foundation (HLF)	300,000	43,900		More activities for co-ordination are planned for FY 2009/10.
Output 7.2	Support for promotion of productive end-use and linkages	The establishment of decentralized Repair and Maintenance (R&M) stations in 10 districts is under finalization using PV panel as source of power.	2,000,000	222,145	It is delayed to find out the best entrepreneurs to establish the R&M centres in local level.	Establishment of decentralized R&M centres planned this year.
Output 7.3	Conduct reviews, surveys and other impact studies	1. Participated in 23 rd European Union PV workshop in Spain 2. CEA workshop in Dhaka.	3,100,000	NIL	In-house effort	
GRANT to RRESCs				748,140		
Total			41,550,000	21,288,557		
Budget Balance: 49%						

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 policy input paper. New subsidy policy and delivery mechanism approved.	NIL	NIL	In-house effort	
Output 1.2	Formulate policy for Mini Grid & Grid Connection	Service delivery modality for mini-grid and grid connection prepared. Demand received for grid connection in one location. Feasibility study conducted.	NIL	19,024	Grid-connection and interconnection are new phenomenon hence feasible demands for them are yet to be identified.	This activity will be continued.
Output 1.3	Advocate for Mini grid and grid connection strategy	AEPC/ESAP supported the national workshop on "up-scaling of micro-hydropower projects" conducted by Nepal Micro-hydropower Development Association. One of the agenda of the discussion was grid connection.	NIL	NIL	In-house effort	
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 VDC/DDC level meetings. All MHPs supported under ESAP are included in DDC plan.	400,000	487,700		This activity will be continued.

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 2.2	Assist DDC on information dissemination and facilitations for local users	District level meetings are organised in 31 districts. DDCs are provided with information for further disseminated.	500,000	25,289		Plan to organise meeting in 40 DDCs in next work plan
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 52 schemes. • Regional Centres are mobilised to monitor 63 under construction staged projects. • One year check of 36 projects completed. 	2,451,000	3,924,164		
Output 3.2	Conduct capacity building activities	<ul style="list-style-type: none"> • Social mobilisation training & Technical training to Regional Centre staff • Training to Micro-hydro Quality Inspector • Training on IWM electrification • Training to consultant • Training on financial book keeping to 56 projects by Regional Centres. • Manager and peltric 	5,700,000	1,045,368	<ul style="list-style-type: none"> • Training to electro-mechanical design engineers delayed because of time taken for organisation. • Training to MH Federation could not organise because there was no demand from the Federation. • Study tour in Asian Countries could not 	None completed activity will be done under next year work plan.

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
		trainings. <ul style="list-style-type: none"> • Training for electro-mechanical design engineer finalised. 			organise because of not identifying the suitable place to visit.	
Output 3.3	Ensure quality assurance of mini-grid implementation	Ensured quality assurance of mini-grid implementation	4,640,000	1,212,400		
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 83 projects. Public hearing completed for 112 projects.	4,200,000	911,278		
Output 4.2	Assist in formation of mini grid cooperatives/users group	7 Regional Centres covers 49 districts. 162 communities assisted for registration.	900,000	299,439		
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. A workshop on investment of MHP was conducted in Kavre.	2,640,000	NIL		
Output 5	Schemes identified, appraised, and forwarded to REF for subsidy approval.					
Output 5.1	Identification of potential schemes	Identification completed in 10 districts (1700 kW, 68	11,900,000	5,396,772		

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
		projects), verification completed in 7 districts (1074 kW, 72 projects). New 181 requests registered in Regional Centres.				
Output 5.2	Prepare project information documents for identified schemes	Verification documents, information updated in GIS.	400,000	NIL		
Output 5.3	Assist detailed feasibility studies of the schemes	<ul style="list-style-type: none"> • Detail Feasibility Study (DFS) completed for 115 projects (3921 kW). • DFS on-going for 144 projects (3944kW). 	11,000,000	1,479,976		
Output 5.4	Forward proposals for schemes to REF	TRC approved 117 projects (2952 kW), 115 projects (3333 kW) conditional approved, 63 projects (2228 kW) under construction, 55 projects (702 kW) completed.	1,200,000	38,939		
Output 6	Increased information about rural mini-grid schemes and electricity end-use possibilities					
Output 6.1	Conduct information awareness campaign	Printed English and Nepali information sheets.	3,800,000	861,900		
Output 6.2	Conduct campaign for the promotion of end uses	Completed training guideline on enhancing economic use of electricity.	2,200,000	89,211		

Output target		Output result	Budget (NPR)	Expenses (NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 6.3	Carry out technical reviews and impact studies addressing the target issues	Technical reviews and impact studies	1,000,000	244,452		
GRANT to RRESCs				21,406,561		
Sub-Total			52,931,000	37,388,802		
Budget Balance: 29%						
Grand Total			974,631,000	710,539,996		
Budget Balance : 27%						

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	Discussions with WECS and review of documents on National Rural Energy Development Strategic Plan ongoing	2,881	NIL	On-going activity	A secretaries' level meeting to be conducted
Output 1.2	Review the present policies governing RE	Review of Rural Energy Policy, 2006 in view of drafting/adopting the required laws, by-laws, acts etc	2,144	NIL	On-going activity	Hiring the services of the lawyer for drafting required legal documents
Output 1.3	Assist the revision of subsidy policy and integrated credit mechanism	A policy recommendation Subsidy Policy and Subsidy Delivery Mechanism 2009 is submitted to the cabinet for approval.	1,072	NIL	Completed	
Output 1.4	Periodic policy reviews and recommendations for amendments	Policy recommendation	1,327	NIL	On-going activity	
Output 1.5	Monitor the implementation of policies and strategies	An internal policy/procedure recommendation	2,050	NIL	Completed	

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 1.6	Prepare inputs to the 11th five years development plan	The 11 th Development Plan	1,206	NIL		To be done prior to next planning period
Output 1.7	Cooperate with MoE in the preparation of CEAs & SEAs	CEA/SEA Prepared	670	NIL		
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	1,206	1,039	Completed	
Output 2.2	Conduct a sector wide conference and agree on the sector diagram	Consensus on institutional roles	1,072	186	Completed	
Output 2.3	Strengthen the coordination by institutionalising a network of institutions	Inputs for strengthening networking	4,891	3	The conference conducted, A study planned as suggested by conference proceeding	Study on the need of further networking planned for 2009-10
Output 2.4	Assist local partners to ensure efficient resource utilization through planning exercise	Decentralized Energy Management at the village level	15,611	2,233	Agreement being made with all 7 RRESCs to undertake DEMI in 14 new VDCs	Data collection, analysis, plan preparation
Output 2.5	Participate in the Task Forces	Task force consensus	2,680	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)	Proposal call for ISO certification of REF Administration	4,288	NIL	On-going activity	

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 3.2	Promote SWAp for participation by multiple EDPs	Draft ToR for study on Feasibility Study on the Possibility of the SWAp in Rural and Renewable Energy Sector and Identification of Its Indicators prepared	2,680	NIL	On-going activity	In house Talk Programme on Swap Challenges and Opportunities to be conducted
Output 3.3	Encourage EDPs to sign on to joint financing agreements for rural energy	Willingness to participate in joint funding	1,340	NIL	Discussions with GTZ are ongoing.	Commitment of Euro 500,000 for MHP financing.
Output 3.4	Strengthen the EDPs' coordination by institutionalising the current thematic group on rural electrification co-chaired by ADB	First EDP coordination meeting (19 representatives from donors' community) was conducted	2,881	NIL	On-going activity	
Output 3.5	Follow up on decisions made in the EDPs coordination meetings	Willingness to participate in joint funding (KfW)	1,206	NIL	On-going activity	At least Two Donors' Coordination meetings planned

Output target	Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action	
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	Policies for staff development	1,474	8,565	On-going activity	
Output 4.2	Organise leadership and management training courses for management in AEPC and partner institutions	Human resource capacity enhanced	2,680	562	On-going activity	
Output 4.3	Establish a transparent system for dissemination of Management decisions	A data bank concept	2,814	NIL	Ongoing activity. Closely related with 4.5	
Output 4.4	Financial management practices and systems	Accounting Training to related RRESC staff	2,948	10	On-going activity	
Output 4.5	Improve the AEPC Management Information System (MIS) as required	More reliable network and internet services	8,442	75	New AEPC web site developed. Installation of MIS system completed.	
Output 4.6	Improved working environment in AEPC through infrastructure improvement and incentive support	Streamlined modern office facility	30,150	13,580	On-going activity	

Output target	Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action	
Output 5	Conducive working environment in AEPC and partner organizations, including human resource development policy, planning & management					
Output 5.1	Update AEPC SOD plan	Updated AEPC SOD Plan	1,876	74	Review of the present situation and previous AEPC SOD Plans has been completed; The facilitator for the National Strategic Planning Workshop is selected	National Strategic Planning Workshop; Regional workshops; SOD Plan drafting
Output 5.2	Study and prepare ESAP sustainability and programme staff	ESAP succession plan	1,943	NIL	Drafted response to recommendation of Joint Review Mission (November 2008)	To be decided in consultation with management
Output 5.3	Implement the human resource development strategy in AEPC	Documented training programme	20,100	NIL	On-going activity	Based on need, training to be provided
Output 5.4	Analyse institutional gender issues and implement gender mainstreaming in AEPC and other partner institutions	Awareness of AEPC/ESAP staff on gender issues Inclusion of gender indicators in ESAP's AWP 09/10 by all Components	3,149	583	Second residential workshop completed in April 2009	Follow-up on action plan
Output 5.5	Conduct capacity building activities of other partner institutions	Partner capacity enhanced	20,100	6,022	On-going activity	Training for partner agency staff

Output target	Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action	
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	Resource centre strengthened Adobe Acrobat Standard 9 purchased	3,216	176	Various activities planned in AWP 09/10 for RC strengthening	Implementation of planned activities
Output 6.2	Establishment of information services (web-site and resources centre)	AEPC's website developed Information flow strengthened	2,412	2,310	Updated information in AEPC's website required Provision made for RRESCs' AWP 09/10 to support website development/ updating	Follow-up
Output 6.3	Conduct an annual integrated stocktaking exercise of sector developments and for major changes and conduct impact studies, as needed, to this end	Stocktaking exercise completed	5,360	NIL	Not planned for the year	To be undertaken in later years
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)	Cooperative established and functional	48,776	NIL	Cooperatives established	To be decided in consultation with KKREP

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 7.2	Conduct capacity building activities with cooperatives	<ul style="list-style-type: none"> Inception report with situation assessment has been prepared Safety pamphlets distributed Various training activities initiated 	17,393	12,955	Contract awarded competitively for Output 7.2, 7.3 and 7.4	Follow-up with consultants
Output 7.3	Prepare and disseminate IEC materials		3,980	NIL		
Output 7.4	Elaborate and publish guidelines, manuals and planning tools		12,998	NIL		
GRANT to RRESCs				11,309		
Total			239,016	59,099		
Budget Balance: 75%						

Output target	Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action	
2. Rural Energy Fund						
Output 1	Funds 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.	It is heading the right direction with NRB recognizing RET lending and Beema Samiti going for micro-insurance	6,030	NIL	More coordination and lobbying will be done.	
Output 1.2	Promote REF through dissemination of information on REF achievements and modalities.	Documentary, brochure and information materials will be ready by FY09/10 to have a proper dissemination	6,030	NIL	Gradual refinement and updating has to be done.	
Output 1.3	Raise Fund with donors (grants and credits), financial sector and Government matching contributions	Negotiations going on with several financial institutions and donors.	2,412	NIL	GTZ has been approached for funds.	
Output 2	Financial sector credits available for rural energy investment.					
Output 2.1	Study on Development of modalities for promotion of solar PV technology		1,233	192	First successfully completed	Renewal under process
Output 2.2	Piloting of modalities developed for promotion of micro credit with MFIs, NGOs/CBOs, etc.	Credit Financing SHS is on its way.	3,310	495	First successfully completed	A piloting for MHP is under process.

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 2.3	Promote and lobby for a financial sector managed long-term credit facility for rural energy investments (Awareness Activity)	Awareness activities going on.	5,293	NIL		More districts and more financial institutions will be added in FY 09/10
Output 2.4	Conduct capacity building activities in the financial sector for RE investments.	Several cooperatives and commercial banks have been trained/oriented about RE investment.	7,611	NIL		More financial institutions will be added in FY 09/10
Output 2.5	Promote rural energy solutions through orientation program	Orientation programs have been going on in several districts.	3,886	NIL		More districts will be added in FY 09/10
Output 2.6	Facilitate credit line availability with financial institutions	Bank of Kathmandu has sanctioned one million rupees to a cooperative in Rolpa.	6,030	1,175		Tendering process underway
Output 3	Funds managed in a transparent and efficient manner					
Output 3.1	Review of Delivery Mechanism	under constant revision	2,680	50		
Output 3.2	Institutional credit facilitating	With the help of approved financial tools, more banks will be attracted towards financing RETs.	6,700	355	Tendering process underway	Selection of FIs
Output 3.3	Monitoring	Power output and households verification of micro hydro plants. Spot check monitoring of	42,947	2,091		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
		SHSs in two districts. RRESC activities in facilitation of subsidy delivery and monitoring.				
Output 4	Funds 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.	An appraisal of projects is in place	4,154	NIL		
Output 4.2	Approve applications for grant from the REF support for off-grid electrification	On going	NIL	NIL		
Output 4.3	Disburse REF grant supports (subsidy)					
Output 4.3.1	SHS-150,000HH	90,698 solar home systems have been installed in 73 districts with a total capacity of 2,150 kW.	1,282,300	689,480	Demand of SHS is growing tremendously.	
Output 4.3.2	Solar Tuki -250,000HH	None	333,928	NIL	With much effort from technical Component, a delivery guidelines/ modality has been prepared. SAFs have been distributed to start up the installation process.	Planned in AWP 09/10

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 4.3.3	MH-150,000HH	2,487 kW/20,628HH/76 districts (Rs. 294 million committed) =Conditionally Approved Projects. Disbursed subsidy for 1,784 kW of MHP during the period of ESAP II. These projects will benefit 17,605 households.	1,602,868	198,396	MH developers were awaiting increased new subsidy rate since a long period of time.	
Output 4.3.4	BE-100,000HH (target for this year-10,000HH)	None	267,142	NIL	As of Output 4.3.2	Planned in AWP 09/10
Output 4.4	Facilitate the REF Institutional Credit Network and coordinate with Government institutions, donors, financial sector and private energy service sector	A financial tool ready and on the basis of the tools, the output is likely to be achieved.	395,300	NIL	Tendering process underway	FIs to be selected.
GRANT to RRESCs				3,668		
Total			3,979,854	895,902		
Budget Balance : 77%						

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 (ten old and 2 new RRESC) 2. Similarly RRESCs also made contract agreement with respective LPOs (138 LPOs under 12 RRESCs) 3. Orientation and demonstration of ICS technologies conducted in various VDCs 4. Regional Level & District Level Review & Planning Workshop conducted. 	63,462	6,608	
Output 1.2	Provide ToT and other trainings to LPOs for their capacity building	<ol style="list-style-type: none"> 1. 71 new promoter training 2. 57 refresher training and 3. 11 ToT for LPOs organised. 4. FTCs were trained on IICS construction & Kitchen Management techniques. 5. BOs trained on Stove Testing Protocol 	15,516	5,732	

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 	9,702	4,439		
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. District Energy & Environment Unit/ Station (DEEU/S) staffs were oriented regarding the best practice guidelines currently used for ICS promotion 2. District Level Information & Awareness Campaign was conducted in 11 districts highlighting the importance of Indoor Air Pollution and Kitchen Management for 	4,154	282		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
		VDC chair persons, VDC secretaries, school teachers, health related personnel and other line agencies of the region.				
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	3,484	1,287		
Output 2.3	Identify, compile and produce a complete range of appropriate information materials for massive dissemination to the stakeholders	IEC materials on metallic stoves and institutional ICSs were developed.	7,156	291		
Output 2.4	Workshop for Donor, INGO, GOs	Four regional workshops to orient about the metallic stoves and subsidy mechanism were conducted	1,876	238		
Output 2.5	Consultative meeting and initiated dialogue with non-formal education	Preliminary work has been initiated	7,826	2,230		
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	1. District level effort is ongoing continuously. 2. Half day National workshop	5,896	416		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
		was organized in AEPC Meeting Hall to reveal the Interim National Standard Stove Performance Testing Protocol				
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 has been updated and made available for Partners in implementation. 2. National standard for stove testing protocol has been developed. 3. Development of training manual has been completed. 	4,824	2,356		
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. Compilation of relevant documents for possible or suitable solutions in the local context. 2. Research institutes contacted on the basis of their experience. 3. Expression of interest called from stove manufacturers / developers for listing of available stoves manufacturers in the market. 4. The adaptive research in 	13,078	188		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
		other biomass technologies has been initiated with Kathmandu University to identify metallic stoves suitable for high altitudes of Nepal.				
Output 4.2	Conduct feasibility studies for other biomass technologies	<ol style="list-style-type: none"> 1. 46 districts covered by 10 Regional Centres and 2 Service Providers. 2. Survey was conducted on other biomass technologies popular/being used in the districts, manufacturers and some potential biomass technologies for intervention. Based on this RRESCs prepared implementation plan for action research. 3. Piloting of institutional biomass dryer for small scale tea producers is initiated. 	9,005	153		
Output 4.3	Testing of Biomass Technologies	<ol style="list-style-type: none"> 1. Metallic stoves have been tested by Kathmandu University. 2. Piloting of mud as well as metallic rocket stoves were conducted in three districts of Terai Region 	17,286	1,651		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 4.4	IEC Materials-Orient & Demo	<ol style="list-style-type: none"> 1. Calendar for 2065 BS and 2066 BS has been developed. 2. Metallic Stoves posters, different types of flex were developed 	8,710	1,362		
Output 4.5	Publicity through Media	<ol style="list-style-type: none"> 1. Information material has been circulated to all relevant stakeholders. 2. Metallic parts of the IICS were fabricated and piloted through RRESCs in the strategic locations of the respective regions 	5,360	NIL		
Output 4.6	Technology Promotion - Dev Org		16,750	70		
Output 5	Policy in place for identified biomass energy solutions i.e. especially gasifiers, briquettes, bio fuels and cogeneration					
Output 5.1	Preparatory phase	Not initiated	4,489			
Output 5.2	Sector Development	Pre-qualification criteria developed. 15 metallic stoves manufacturing companies are pre-qualified. Subsidy delivery mechanism for metallic stoves developed.	12,422	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	Development of information materials on various technologies is in place	7,236	1,712	
Output 6.2	Awareness campaign on a range of biomass technologies and training	Not initiated	7,102	544	
Output 6.3	Conduct IEC Impact study	Not initiated	6,914	NIL	
Output 6.4	Improvise IEC materials	Not initiated	8,844	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	<ol style="list-style-type: none"> 1. Expression of interest called from stove manufactures/ developers 2. Metallic stoves for high altitude area are fabricated by private companies and formed market 	5,561	582	
Output 8	Documentation of Biomass stoves installed in the next five years in all ecological zones				
Output 8.1	Conduct impact studies	<ol style="list-style-type: none"> 1. Report on Indoor Air Pollution study published on May 2008 2. Second round of IAP study was conducted in the same households of three district of mid hill region where 1st 	22,110	1,403	

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
		round of IAP study was conducted. Health Impact Assessment was conducted along with 2nd round of IAP study				
Output 8.2	Support MIS	<ol style="list-style-type: none"> 1. New MIS database software is developed and installed in centre as well as regional centres. 2. Biomass Energy's central staffs as well as BOs were trained on the usage of the newly developed MIS database software. 	17,648	982		
GRANT to RRESCs				69,578		
Total			283,410	102,082		
Budget Balance : 64%						

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"> 144, 500 Information booklet and poster prepared and distributed. Two Public Service Announcements (PSAs) are designed and broadcast through Ujjyalo FM radio network. 	3,819	406	
Output 1.2	Prepare and distribute training Manuals	<ol style="list-style-type: none"> Revised SE LI and SE LII manuals. Published SE LI (550 copies) and SE LII (250copies) training manuals. Design of and printing of 250 copies of manuals for ToT trainings for SE LI and SE LII. Designed and printed 100 copies of manuals for Solar design engineers. 	3,360	345	
Output 1.3	Conduct capacity building activities for service providers and support organization (orientation, training, exposure visit etc)	<ol style="list-style-type: none"> 11 SE LI trainings for 200 technicians 4 SE LII trainings for 60 technicians. 	14,204	10,355	

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
	in the sub sector	3. 3 ToT training for 30 trainers. 4. One design engineers training in IIT Delhi, India training 28 engineers. 5. Organization of 3 orientation programs for PQ solar companies implementation modality of SSSH. 6. 5 orientation programs for RRESC staff in SE Component's guidelines and field monitoring of SHS. 7. 2 trainings field monitors of pre-qualified consulting firms. 8. Development and two trainings of PQ solar companies in QMS.				
Output 1.4	Conduct reviews, surveys and other impact studies	Carried out study on capacity gap identification of private sector in PV system dissemination (AEPC budget).	1,072	404		.
Output 2	Improved Quality Assurance Systems					
Output 2.1	Update or revise criteria, mechanisms and standards	Revised NEPQA and QA & M for ESAP II	871	16		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 2.2	Conduct company qualification, performance evaluation, grading, penalty etc	<ol style="list-style-type: none"> 1. Evaluation of 25 PQ companies completed. 2. The Pre-qualification of three new companies for SHS. 3. Prequalification of 36 companies for dissemination of SSHS. 	670	162		
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 2006/06) 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 for QA & M of 2007/08 installation. 5. Detail technical monitoring by RETS based on the random samples. 6. Verification of deviated 	62,096	12,483		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
		cases of 8 th round of QA & M 9 trips. 7. General monitoring by RRESC 1625 samples. Detail technical evaluation by RETS 7 trips.				
Output 2.5	Provide backstopping to RETS and CTEVT	Support to RETS for finalization of the Testing and sampling procedure.	4,154	NIL		
Output 2.6	Conduct reviews, surveys and other impact studies		1,340	NIL		
Output 3	Inputs to Policy Formulation & Review					
Output 3.1	Provide policy as required	1. Prepared the modality for dissemination of SSHS. 2. Input to revised subsidy delivery arrangement. 3. Subsidy delivery mechanism. 4. Revised NEPQA and QA & M for ESAP II.	2,010	NIL		
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	1. Designed a conceptual framework for piloting credit financing of SHS/SSHS. 2. Implemented pilot modality in credit financing of SHS in	6,432	4,819		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
	& MFIs	6 districts (20 MFIs) in eastern and western development region.				
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.	2,010	NIL		
Output 4.3	Conduct reviews, surveys and other impact studies	Not planned for this year.	NIL	NIL		
Output 5	Increased Use of SHS and SSHS					
Output 5.1	Administer, appraise and recommend SHS applications to REF	91,947 SHS recommended for subsidy.	3,618	2,664		
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.	15,075	116		
Output 5.3	Conduct reviews, surveys and other impact studies	Not planned for this year.	3,350			
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 	1,340	290		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
		Management. 3. Assisted KfW mission in accessing the situation of used lead acid batteries in Nepal.				
Output 6.2	Conduct awareness and capacity building activities of solar companies and relevant stakeholders for collection of battery	No activities	12,730	NIL		
Output 6.3	Support for developing battery collection mechanism	Not planned for this year.	322	NIL		
Output 6.4	Conduct reviews, surveys and other impact studies	No activity for this year.	1,340	17		
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. Consultative meeting is organized with PQ companies. 2. Meeting with Winrock, REP project, UNDP, HLF etc	2,814	85		
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.	27,912	222		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 7.3	Conduct reviews, surveys and other impact studies	<ol style="list-style-type: none"> 1. Completed the study 'Solar Status 2006' 2. Participated in various solar PV conferences and shared information and experiences. 	2,010	NIL		
GRANT to RRESCs				1,945		
Total			174,548	34,335		
Budget Balance : 80%						

Output target	Output result	Budget ('000 NPR)	Expenses ('000 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 policy and delivery mechanism revised.	1,219	65	
Output 1.2	Formulate policy for Mini Grid & Grid Connection		657	NIL	
Output 1.3	Advocate for Mini grid and grid connection strategy	National level awareness has increased.	3,484	NIL	
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.	14,271	488	
Output 2.2	Assist DDC on information dissemination and facilitations for local users	Sufficient demands received.	4,288	60	
Output 3	Efficient and competitive service delivery mechanisms.				
Output 3.1	Monitoring project cycle duration annually	Sufficient projects in the pipeline.	4,127	4,216	
Output 3.2	Conduct capacity building activities	Various trainings conducted.	46,900	2,209	
Output 3.3	Ensure quality assurance of mini-grid implementation	Down time and failure rate have been decreased.	16,750	1,495	

Output target	Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action	
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 49 districts for project facilitations.	19,296	1,657		
Output 4.2	Assist in formation of mini grid cooperatives/users group	More than 250 communities are already registered.	15,182	299		
Output 4.3	Coordinate and interact with other programmes at local and national level	DDC/VDC and other organisation also support Mini-Grid projects.	8,563	29		
Output 5	Schemes identified, appraised, and forwarded to REF for subsidy approval.					
Output 5.1	Identification of potential schemes	Identification completed in 80% areas.	8,268	7,358		
Output 5.2	Prepare project information documents for identified schemes	Projects' information is updated in GIS.	7,946	2		
Output 5.3	Assist detailed feasibility studies of the schemes	Close to 400 DFS completed.	35,121	2,843		
Output 5.4	Forward proposals for schemes to REF	TRC approved 173 projects proposals.	1,072	346		
Output 6	Increased information about rural mini-grid schemes and electricity end-use possibilities					
Output 6.1	Conduct information awareness campaign	Information sheets.	7,182	1,187		

Output target		Output result	Budget ('000 NPR)	Expenses ('000 NPR)	Comments (incl. reasons for possible delays)	Proposed action
Output 6.2	Conduct campaign for the promotion of end uses	Strategy prepared and being implemented.	13,400	131		
Output 6.3	Carry out technical reviews and impact studies addressing the target issues	Technical reviews and impact studies	8,804	297		
GRANT to RRESCs				33,320		
Sub-Total			216,531	56,002		
Budget Balance: 74%						
Total			4,923,359	1,147,420		
Budget Balance: 77%						

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 1: Though considerable efforts are made to speed up the updating of the AEPC SOD, due to the various reasons this activity is still in initiating phase.

Suggested Solution 1: High priority status should be given to this activity with required leadership from AEPC

2. Rural Energy Fund

Problem 1: The flow of SAFs for SHS is increasing day by day. In the near future, ESAP programmes plans to subsidize other rural alternative energy technologies, such as, metallic ICS, IWM mill and SSSHS (solar tuki). The present human resources of REF might not be sufficient for disbursing subsidy in time.

Suggested Solution 1: Create new position for subsidy form processing.

3. Technical Support

3.1 Biomass Energy

Problem 1: Interest to include DEEU/S in implementation of Component activities but no clear specification of contribution.

Suggested Solution: Specification of possible role of DEEU/S and clear instructions to DEEU/S on responsibilities.

Problem 2: Difficulties in coordination with other donors working within the field.

Suggested Solution 2: Call for more coordination meetings among donors providing funds for similar technology.

Problem 3: Difficulties in getting stove data in RRESC terminated districts viz Udaypur, Khotang, Sindhuli, Okhaldhunga.

Suggested Solution 3: Through ESAP II support, trained LPOs and promoters are already available in the districts, so the service of the dedicated RRESCs near to those districts should be used to continue the programme.

3.2 Solar Energy

Problem 1: QA & M for field monitoring and verification of the SHS installed involves and demands huge human and financial resources.

Suggested Solution 1: In order to carry out the field monitoring and verification in time inhouse field monitors are required within the Component.

Problem 2: KfW mission report along with other reports, points that awareness on subsidy and delivery modality among users is very low.

Suggested Solution 3: It is recommended to intensify awareness campaigns using FM radio broadcast and other means to convey the message to the target groups.

3.3 Mini Grid Rural Electrification

Problem 1: Policy (subsidy) change with short perspective.

The Government made public increase of subsidy rate in last year's budget in October, 2008. The new subsidy rate endorsed in February 2009 will only to remain valid till July 15th 2009. MH developers were eagerly waiting for the approval of the subsidy which hampered the project implementation process. Because of the subsidy rate clause, the anticipated target in MH numbers is not met. The same may happen in future as people have showed the tendency to wait for rates to be changed.

Suggested Solution 1: The time gap between declaring coming subsidy rates and actual implementation should be shortened. Further, Subsidy Policy should be approved for longer time periods.

Problem 2: Coordination with other organizations.

Micro-hydro communities are getting supports from DDCs, VDCs, Poverty Alleviation Fund, and others. The terms of conditions and payment modalities differ from REF creating delays in projects execution.

Suggested Solution 2: The mini grid Component will assist AEPC in organizing coordination meetings with other partner organizations.

Problem 3: Projects in mini-range, grid connection, and inter-connection.

Potential demands for the projects in mini-hydropower range, grid connection and inter-connection are insignificant.

Suggested Solution 3: The present demand driven model of Mini Grid Component is not effective in facilitating connections. In general projects in 100 to 1000 kW are found to be least financial viable considering the number of households to be connected. AEPC and ESAP should consider extending the project technical support limit from 1 MW to 3 (or 5 MW), for economics of scale to be effective.

G. Critical issues

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

With foreseen financial gap in REF, it is imperative for AEPC to secure additional financial resources among the vast donors' community. To seek and ensure the donors' interest, a series of activities should immediately be initiated by AEPC. Foremost, AEPC should begin a comprehensive and continuous dialogue between all the stakeholders involved. This should include: 1) Coordination meetings between all Government agencies working directly and indirectly in the energy sector to update on status, ongoing activities, and future perspectives. 2) Similar interaction with the donors' community on issues, approaches, modalities of potential partnerships. This should be followed by AEPC's exploration of the possibility of the SWAp in Rural and Renewable Energy Sector. In the context, for AEPC, SWAp would mean more emphasis on coordinating and resource mobilization.

2. Technical Support

2.1 Biomass Energy

In ESAP II the LPOs/promoters have to penetrate in more remote areas to reach poor rural people for marketing of their products. With limited numbers of trained LPOs, strong support from ESAP to the regional centres is needed. To motivate and retain trained human resources, ESAP needs to modify motivational packages for persons involved in this sector/programme.

During this period, ESAP has also introduced a new modality of implementing Biomass Activity through DEES in four districts (Achham, Bajhang, Bajura and Darchula) of far western region as a pilot case. The human resources were hired accordingly. However, shortly they resigned. This has affected achieving the expected target. More effective method/model should be formulated for the involvement of local bodies.

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 will continue to convince MoE to make a national framework to solve the issue.

2.3 Mini Grid Rural Electrification

None

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)	35,098HH 3.9MW	30,000HH 3,500kW	
IWM Electrification	Nil	1,100HH 110kW	Supporting NGO: CRT working for materialising IWM electrification soon.
SHS	56,931HH	40,000HH	
SSHS	Nil	25,000HH	Finalisation of the procedural guidelines/modality took time. SAFs are distributed to qualified private companies for start up the activity.
Biomass Metallic Stoves	Nil	10,000HH	Finalisation of the procedural guidelines/modality took time. SAFs

Components	Achievement	Target	Remark (Main cause for not achieving the target)
			are distributed to qualified private companies for start up the activity
Technical Support			
Biomass Energy			
Mud Brick ICS	52,229 HH	100,000 HH	<ul style="list-style-type: none"> Lack of trained promoters due to high dropout rate and migration of trained promoters during bridging period Lack of quick and visionary decision about DEEU/DEES from AEPC/ESAP management. Revision of subsidy policy and deliver mechanism was delayed
Institutional ICS (IICS)	27	650	
Metal improved stove	25 HH	10,000 HH	
Solar Energy			
SHS	55,629	40,000	SSHS dissemination modality is finalised in May hence SAF has not yet received.
SSHS	0	25,000	
Mini Grid Rural Electrification			
Project preparation at various stages	Identification, 1.7 MW (3,513 HH)	4.0 MW (35,000 HH)	
Identification/ verification	Verification, 1.1 MW (8,200 HH)		
DFS studies	DFS on-going, 3.9 MW (33,357 HH)		
	DFS completed, 3.9 MW (37,335 HH)		
Project preparation completed – Recommended to REF	3.3 MW (28,909)	3.5 MW (32,000 HH)	
Project under construction	2.2 MW (19,627 HH)	2.5 MW (25,000 HH)	
Projects commissioned	702 kW (6537 HH)	1.7 MW (17,000 HH)	

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 proposed action plan on Joint Review Team missions' recommendations	Decision will be made in upcoming steering committee mission (tentatively 22 September 2009)	ED/CA	

Annex 1:**Training program carried out in this period****1. Institutional Strengthening of Rural Energy Sector**

- a. DEMI II Training for RRESC Staff
- b. DEMI III Training for RRESC Staff
- c. English Language Training for AEPC/ESAP Staff
- d. Supported AEPC/ESAP Staff to participate in other capacity building activities

2. Rural Energy Fund

- a. Training on account facilitation and subsidy delivery mechanism for the Accountants of all RRESCs
- b. Training on corporate governance and business planning, to 21 cooperatives from Rukum, Rolpa, Dailekh, Panchthar, Sankhuwasabha and Bhojpur

3. Technical Support**3.1 Biomass Energy**

- a. Trainings from AEPC/ESAP

S.N.	Title of the training	Date and the Venue	Days	Number of Participants
1	Hands on Training for metal stove Manufacturers	Kathmandu University, Dhulikhel 7 th – 11 th September 2008 & Nepalgunj Industrial Area, Nepalgunj, 10 th – 14 th September 2008	5	Two batch
2	Orientation Training for BOs on Metal Stove	Kathmandu University, Dhulikhel 7 th – 10 th September 2008	4	
3	Upgrading Trainings on Kitchen Management, Indoor Air Quality and Institutional Improved Cooking Stove (IICS) for Field Technical Coordinators of RRESCs	Banepa Village Resort, Banepa 17 th to 23 rd Oct 2008-I Batch and 1 st week of Nov 2008-II Batch	7	46(two batch)
4	Training on Interim National Stove Performance Testing Protocol for BOs.	Godavari Village Resort, Godavari. 8th-9th Jan 2009	2	13
5	Training on Navision Software	Godavari Village Resort, Godavari. 10th-12th Jan 2009	2	19

b. Trainings conducted through RRESCs

S.N.	Title of Training	Numbers of Training Conducted	Total Participants Trained
1.	Local partners Training of Trainers (LPO-ToT)	10	49
2	New Promoters Training	45	1042
3	Promoters Refresher Training	32	480

3.2 Solar Energy

- a. 6 SE LI trainings for 200 technicians.
- b. 2 SE LII trainings for 60 technicians.
- c. 1 ToT training for 30 trainers.
- d. One design engineers training in IIT Delhi, India training 28 engineers.
- e. Organization of 1 orientation programs for PQ solar companies implementation modality of SSHS.
- f. Three orientation programs for RRESC staff in SE Component's guidelines and field monitoring of SHS.
- g. One training field monitors of pre-qualified consulting firms.
- h. Development and two trainings of PQ solar companies in QMS

3.3 Mini Grid Rural Electrification

- a. Social mobilization training to Regional Centre staff, July 2008.
- b. Technical training to Regional Centre engineers, August 2008.
- c. Training to Micro-hydropower Quality Inspectors, October 2008.
- d. Training to consulting companies, October 2008.
- e. Training to IWM Stakeholders, March 2009.

Annex 2:

Reports and working papers prepared in this period

1. Institutional Strengthening of Rural Energy Sector

- a. Unofficial English Version of Subsidy Delivery Mechanism
- b. ToR for facilitation of National Workshop for AEPC SOD Plan
- c. ToR for AEPC/ESAP Documentary
- d. ToR for ISO Certification
- e. ToR for capacity building of KKREP Umbrella Organization
- f. Action Plan for Gender Mainstreaming
- g. DEMI Manual I
- h. DEMI Manual II
- i. DEMI Manual III
- j. Quarterly Newsletters
- k. DEMI Plan for Kalipal VDC

2. Rural Energy Fund

- a. Spot check monitoring of solar home systems in Sindhuli and Rukum districts.
- b. ToR for inviting banks/financial institutions for financing rural renewable energy projects, which will be published within July 2009.
- c. Agreement between AEPC/ESAP and commercial banks for rural renewable energy projects financing.
- d. Agreement between AEPC/ESAP and insurance companies for insuring renewable energy projects.
- e. Evaluation of proposals from insurance companies for insuring RET projects.

3. Technical Support

3.1 Biomass Energy

- a. Final report on "Interim Testing Protocol for Improved Cook Stoves."
- b. Draft Report on "Piloting of Portable Rocket Stoves for Terai districts."
- c. Final report on "Action Research on Identification of Improved Metallic Stove Model for High Hills"
- d. Final report on Improvements on Institutional Improved Cook Stoves (IICS).
- e. Report on "Design, Fabrication and Testing of Gasifier Based Small Scale Orthodox Tea Drying System."

3.2 Solar Energy

- a. Revised NEPQA and QA & M for ESAP II.
- b. Technical Standard for SSHS
- c. Dissemination modality for SSHS.
- d. Testing Procedure for SSHS components.
- e. Draft Dissemination Modality for SSHS.
- f. Report on the QMS system development.
- g. Quality Management Manual for PQ solar companies.
- h. Final report on Used Battery Management study.
- i. Training Manual for the ToT for SE LI and SE LII.

3.3 Mini Grid Rural Electrification

- a. Training guideline in enhancing economic use of electricity, June 2009.

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: 2065/66

Status as at: 30 June 2009

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	-		10,521			17,779		
2		REF/REI	86,700	92,543	554,000	30,714	42,076	35,563	55,986	50,467	518,437
3		Technical Support									
3	1	BE	12,270	13,057		2,944	4,179		9,326	8,878	
3	2	SE	8,129	8,651		3,495	4,548		4,634	4,102	
3	3	MGRE	10,101	10,749		3,243	4,497		6,858	6,253	
		Advisory Assistance	4,500	-		448	-		4,052	-	
		Grand Total ----->	150,000	125,000	554,000	51,365	55,300	35,563	98,635	69,700	518,437
		Percentage				34%	44%	6%	66%	56%	94%