



RENEWABLE ENERGY IN THE FEDERALIZED CONTEXT AND THE ROLE OF ALTERNATIVE ENERGY PROMOTION CENTER

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1. Introduction

1.1 Local Government Plan

The Constitution of Nepal promulgated on 2015 has restructured Nepal as a federal democratic republic with three levels of government moving away from unitary system towards federal system. Schedule 5, 6 and 8 in the constitution defined directive principles, policies and responsibilities of federal, provincial and local governments to guarantee good governance by ensuring equal and easy access of services and mobility to economic development. Development plans are a legal requirement for all 7 provinces and 753 local governments in Nepal. Section 6 in the Local Government Operation Act 2017 requires local governments to prepare comprehensive and integrated development plans incorporating plans of all the ward inside its jurisdiction. Local government should prepare annual plan and result based budget estimate by reflecting geographical, social, financial and infrastructure requirement. Selection of the committee for activities planning, fiscal recommendation/estimation and resource allocation including their roles and responsibilities are illustrated in Local Government Planning and Budgeting Guideline 2018. Priorities of plan, activities and regulation should start from ward and aggregated for finalization of municipal/rural municipal plan.

1.2 Renewable Energy in the Constitution

The Constitution of Nepal 2015 has strongly recognized the need of conservation, management and use of natural resources amongst different political structures. It has prioritized sustainable and environmentally friendly way of using resources and distributing fairly amongst the local stakeholders. Section 51. in the constitution of Nepal states that the governments shall pursue a policy of developing and producing renewable energy, ensuring cheap, easily available and dependable supply of energy, and making appropriate use of it to meet the basic needs of the citizens. In the same section, the policy g(4) recognizes the governments to develop a sustainable and dependable irrigation system by controlling water-related natural disasters with the management of the river systems. Schedule 8 of the Constitution of Nepal has mandated local governments for planning, implementing and managing hydropower up to 1 MW and use of renewable energy in irrigation, drinking water, institutions and productive end uses.

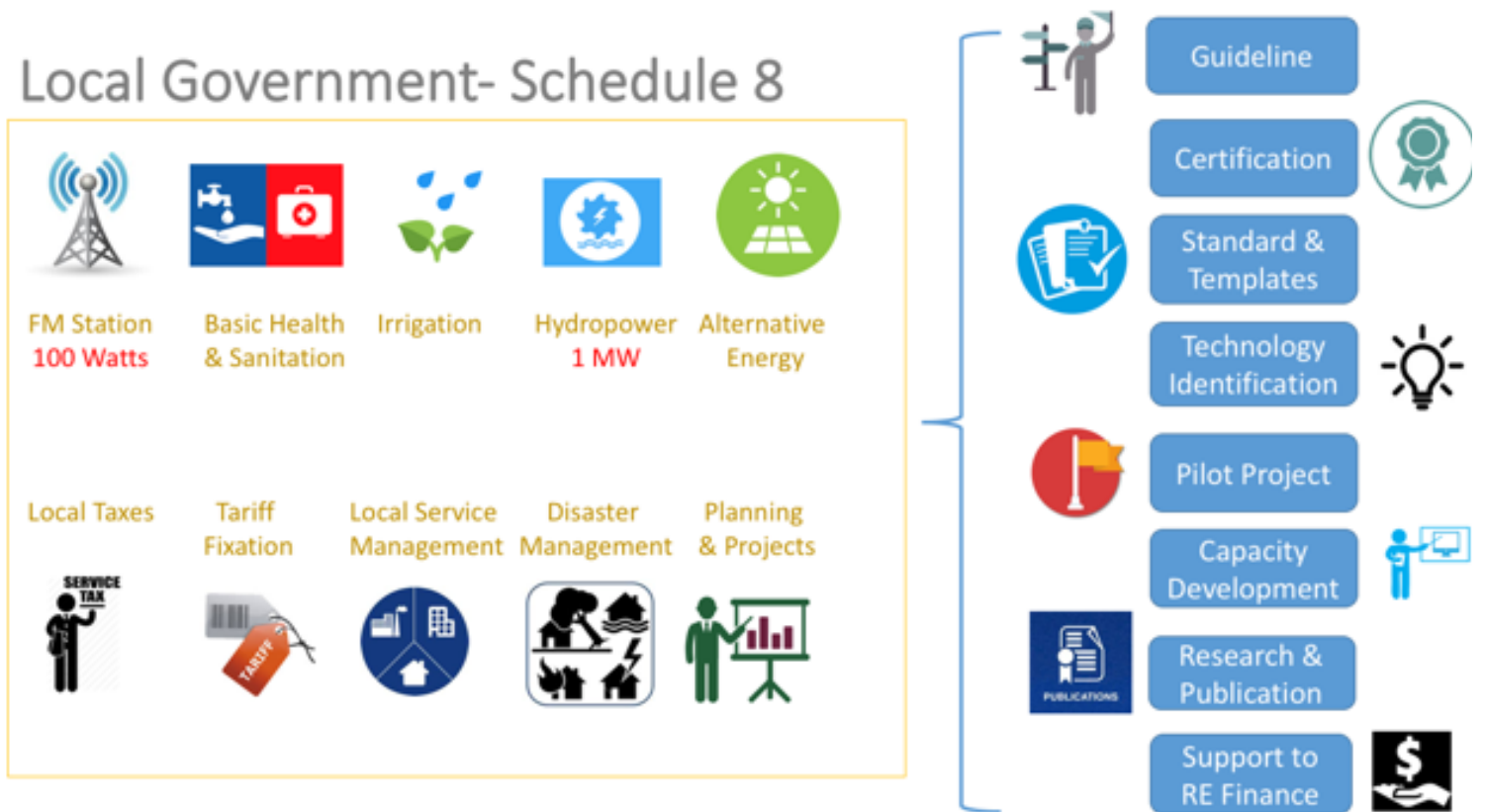
1.3 Sustainable Development Goals in Government Plans

At recent times, there is an increasing awareness that access to modern energy services is fundamental to sustainable development. The realization underpins the formulation of Sustainable Development Goal (SDG); Goal 7.1, which calls for achieving universal access to reliable, affordable and modern energy services by 2030 including Sustainable Energy for All (SEforAll) initiative. Nepal members of United Nations in adopting Sustainable Development Goals (SDGs), also referred as Agenda 2030. The Government of Nepal (GoN) established an institutional framework and reinforced its commitment towards attaining SDGs by integrating it into 14th Periodic Plan. National Planning Commission has set national targets for each of the 17 SDGs including SDG 7. Moreover, GoN accords high priority for the promotion of

Renewable Energy Technologies (RETs) in its periodic development plans as access to, and use of, RE is a national priority. In its Rural Energy Policy, the GoN envisages decentralized development of renewable energy for rural electrification and improvement of livelihood. The current constitution has kept “Renewable Energy” with high priority.

1.4 Local Government in Renewable Energy

Under the federal context, responsibilities of local government have increased as they will be directly involved in preparation of policy, plans, implementation, management and monitoring of renewable energy projects. This new decentralized process requires extensive support for newly elected ward and municipal members and chairs to realize short, medium and long term goals to continue increasing access to clean energy for its citizens.



Based on the roles and responsibilities as guaranteed by the constitution, local governments will be able to influence and develop their own policy, law and regulation, standards, planning and evaluation, implementation, resource allocation and mobilization, monitoring and database. The principle of collaboration, coordination and cooperation have opened avenue for inter local, provincial, federal along with arrangement for private sector partnership in developing renewable energy projects.

Table 1 elaborates areas of support for successful implementation of decentralized decision making process and increased access to clean energy as envisaged by the Constitution.

Table 1: Elaboration of Roles and the required Support Arrangements

| S.N. | Roles and Responsibilities | Elaboration | Requirements |
|------|----------------------------|---|--|
| 1 | Policy | <ul style="list-style-type: none"> Municipal/Rural Municipal Energy Policy Collaboration with National Natural Resource and Fiscal Commission, Ministry of Finance and Alternative Energy Promotion Centre | <ul style="list-style-type: none"> Guideline for Formulation of Policy (incl. Subsidy/Grant/Credit and GESI) Draft Generic Policy Specific Policy Design (local potential, Technology penetration, etc.) |
| 2 | Law and Regulation | <ul style="list-style-type: none"> Water-Use Rights Licensing (Survey, Generation, Distribution, Sale-Tariff Fixation) Contracts and Agreements (ownership, management, leasing out) Registration of PEU (under local SME office) Conflict Resolution | <ul style="list-style-type: none"> Water-use Rights registration mechanism (Policy, F&F) Licensing (F&F) Templates and Guideline for Contracts and Agreements Registration of PEU mechanism Conflict Resolution Mechanisms |
| | Standards | <ul style="list-style-type: none"> Quality Assurance of Technology and Services | <ul style="list-style-type: none"> Technical Standard of 1 MW hydropower and Alternative Energy Technical Standard of PVPS, ISPS, Mini-grid, Grid connection, Biomass, Biogas, Wind, Hybrid, PEU Technologies Technical Guideline for Feasibility Study, Project Design, Implementation, Testing, Commissioning and Verification Quality Assurance Plan (QAP) and control mechanism of project, program, product and process Updated list of products and services (online) Updated list of applicable product (RE) for Customs Complaints and Feedback mechanism |
| | Planning | <ul style="list-style-type: none"> Municipal Energy Plan (Need, resource assessment, BAT, prioritization, resource allocation, timeframe Inventory of Energy Resources) Rapid Assessment (resource, technology, skills and cost assessment) Environment and Social Safeguard (ESS) | <ul style="list-style-type: none"> Guideline for MEP, Feasibility Study, BAT, ESS and Resource Assessment Forms and Formats GIS based Software |

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|--|----------------|---|--|
| | | <ul style="list-style-type: none"> • Inter-LG Planning, Resource Allocation, Project Development, etc. | |
| | Implementation | <ul style="list-style-type: none"> • Implementation Plan for 1 MW Hydropower and Alternative Energy (Project Identification, GESI Engagement Plan, Detailed Feasibility (Demand & Supply incl. PEU), Detailed Engineering Design, Resource Mobilization, Procurement, Construction, Installation, Testing & Commissioning) • Partnership Models (PPP, IPP, Inter-government (LG-LG and LG-PG and LG-PG-AEPC) • Financial Closure • Ensure Environmental and Social Safeguard | <ul style="list-style-type: none"> • Manual for Project Implementation [PEU Manual (Business Opportunity Assessment & Business Plan Preparation), Guideline GESI & ESS] • Strategic Guideline for Partnership • List of products and services applicable for TAX/VAT Exemption • Provision of Subsidy/Grant/Credit/Loan • Guideline for Budgeting and Finance |
| | Financing | <ul style="list-style-type: none"> • Technical and legal process of getting resources from government, community, financing institutions and other agencies • Development of financial and operating plan • Mapping community assets, income generation activities and business ventures • Safeguarding of resources raised, including adequate financial controls • Improvement of credibility and attract, create and sustain new resources • Development of Municipal Energy Fund and Access Mechanism | <ul style="list-style-type: none"> • Guideline to develop financial and operating plan (online) • Guideline to develop business plan (online) • Resource Mapping Template • Guideline to develop, operate and access MEF |
| | Monitoring | <ul style="list-style-type: none"> • Monitoring, Evaluation, Tracking and Reporting Progress • Management of project, program and operations • Validation and management of data • Progress against target | <ul style="list-style-type: none"> • Manual for M&E |
| | Database | <ul style="list-style-type: none"> • Establishment of Database System • Exchange of information, progress, initiatives and schemes through online portal • Storage of local level information related to renewable energy • Online decision making, quality control and tracking of activities • Online approval of project, budget and financing. | <ul style="list-style-type: none"> • Software and Troubleshooting guideline (online) • Guideline for validation of inputs and results (online) • Downloadable software and updates |

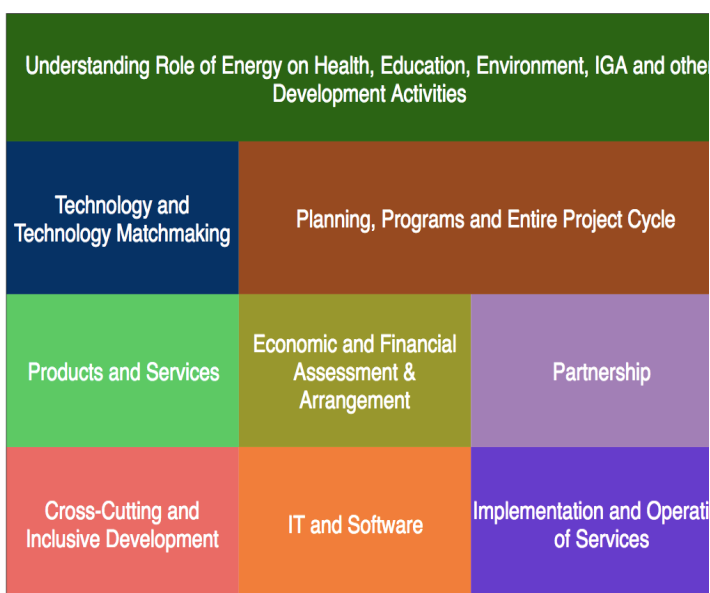
2. Alternative Energy Promotion Centre in the Federalized Context

Alternative Energy Promotion Centre (AEPC) is the nodal agency of the Government of Nepal (GoN) that was established in 1996 through formation order with a mandate to promote renewable energy in the country. The Centre is headquartered in Kathmandu with seven Regional Technical Service Providers covering all the province and local governments of Nepal. AEPC has dedicated components for planning, technology, finance, outreach, carbon, monitoring, gender equality and social inclusion to support implementation of renewable energy projects and improve the livelihood of marginalized and climate vulnerable communities by guaranteeing environment and social safeguard.

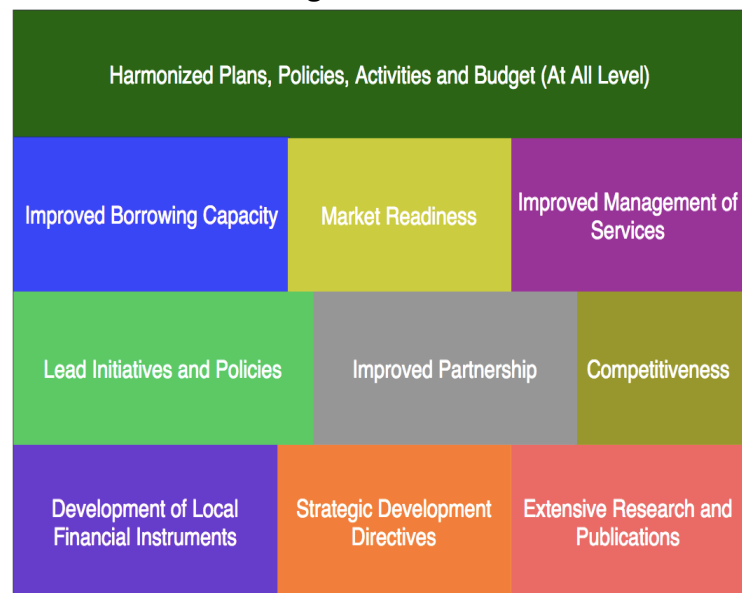
So far, AEPC has been instrumental in providing clean energy access to over 3.6 million households from over 55 MW electricity and 1.7 million clean cooking installations from distributed renewable energy technologies contributing to nearly 3.2 % of the national energy mix. The Centre played a vital role in upscaling renewable energy projects such as commercial level biogas bottling plants of size over 4000 m³ from 2 m³, utility scale grid connected 1 MWp Solar PV from 10 Wp, mini hydro projects of 1 MW from 30 kW, grid interconnection of distributed generation systems and large scale irrigation projects. The public private partnership arrangement resulted into growth of over 100 companies giving direct employment to 30,000 individuals.

With the new federal structure under implementation, Alternative Energy Promotion Centre (AEPC) is re-orienting its own structure and implementation modality to provide short term and long term planning to continue its effort in improve the access of energy for rural Nepal. AEPC has established its outreach in Province 1 and 7. The institution will primarily support development of capacity of institution at all level of government and ultimately support towards functioning and sustaining implementing bodies at provincial and local level to contribute overall development of renewable energy sector in Nepal.

Short Term Goals



Long Term Goals



3. Transition of Alternative Energy Promotion Centre

Under this changed context, AEPC needs to reform and re-orient its approaches and strengthen the institution and make it capable of supporting national, sub-national governments, private sector, research institutions, communities and individuals of all economic shapes and sizes. AEPC should continue finalizing Renewable Energy Development Board Act and Alternative Energy Promotion Center Act and elaborate its function to deliver the roles and responsibilities assigned by the Constitution of Nepal. With the formation of Nepal Electricity Regulatory Commission (NERC), AEPC should continue playing its role in improving the regulation mechanism and standardization of its approaches and practices to make NERC functioning and contributing towards development of renewable energy throughout the country.

In these context, AEPC should prioritize its goals on a time horizon from short, medium to long. The transition has been recommended for three critical layers of support as follows:

- I. Provincial and Local Government Support
- II. Technology and Quality Standard
- III. Resource Mobilization

I. Provincial and Local Government Support

1.1 Short Term

Summary:

Immediate orientation to Local and Provincial governments on procedures, practices, mechanisms and other information relevant to roles and responsibilities defined for each governments and the activities that AEPC has been directly involved in the past in providing these support to the community, Village Development Committees (VDCs) and District Development Committees (DDCs). AEPC should develop support package that will enable Local and Provincial governments to achieve their goals in renewable energy.

These includes capacity building through orientation, training, awareness and kits for

- Orientation on roles and responsibilities of Local and Provincial Government on Renewable Energy and introduce AEPC support package and mechanism
 - Orientation on Provincial and Municipal Energy Plans
 - Energy solutions and services for residential uses, community and production services, education, health, sanitation, small and micro enterprises, employment and overall development of rural community
 - Cost effective solutions for Energy Planning including introduction to need assessment, resource analysis, technology matchmaking and cost analysis
 - Exchange of lesson learns, policy, law, regulation and programs
 - Development of Renewable Energy Project Pipeline
 - Operations and Administration for renewable energy development
 - Human resource assessment, expertise requirement, office expenses and estimation of budget to include the resource requirement for Annual Plan
 - Training to focal person/group for technology and resource mobilization
 - Institutional Development
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- Institutional arrangement/setup for operation and management of projects
 - Support for promotion of small RE technologies (solar homes system, institutional level solar PV, solar street light, biogas, ICS and other household technologies) to local government
 - Orientation on Project Financing
 - Orientation on financing institutions, financing strategies and terms of conditions organizations and government agencies including MoF and Central Renewable Energy Fund (CREF)
 - Subsidy Administration- support local government for administration of subsidies and grants
 - Matchmaking event between local governments and private companies for development of renewable energy projects and hence prepare bankable projects
 - Management of data and exchange between federal, province and local government
 - Memorandum of Agreement/Understanding (MoA/U) reflecting the roles and responsibilities of Local Government, Provincial Government and AEPC

1.2 Medium Term

Summary:

AEPC will provide and extended support to Local Government through Provincial Government to establish new mechanisms for technical assistance and resource mobilization. AEPC will have a strategic linkage with National Natural Resource and Fiscal Commission (NNRFC) along with Ministry of Finance (MoF) for improving efficiency of renewable energy expansion at local and provincial level. AEPC will develop and use key indicators for providing advisory support to NNRFC and assist MoF in formulating fund transferred to Local and Provincial Government through fiscal transfer reflecting change in need for energy finance. During this term, AEPC will institutionalize systems, functions and mechanisms in Provincial Government in providing technical assistance and resource mobilization to the local government and provincial level projects.

The medium term activities also include:

- Institutionalization of Financing Mechanism
 - Development of renewable energy financing mechanism and instruments in Provinces
 - Linkage of central renewable energy fund with provincial energy fund and local energy fund
 - Enabling provincial and local level LFIs, private sector and community to access these funds
 - Institutionalization of Monitoring System and Practices
 - Support to provincial government in monitoring progress in renewable energy through development of province specific indicators, priorities and targets
 - Monitoring mechanism to verify project progress, standards and procedures, effectiveness of programs, efficiency of resource sharing amongst local government, conflict between stakeholders and reporting to federal government
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- Governance
 - Identification of gaps in policy, law, regulation, implementation strategies and other activities related to renewable energy and identify mechanism to reduce or eliminate the gaps
- Capacity Building for Project Implementation
 - Improve capacity of province government in providing local government with support for identified and projects under pipeline and establishment of technical backstopping mechanism from the federal government
 - Technical assistance to province level projects by AEPC
 - Technical Assistance to local government whenever required, preferentially through provincial government
- Fully functional database and capacity to rectify technical issues

1.3 Long Term

Summary:

On a long term, AEPC will enable local and provincial government to self-administer the overall cycle of project, with local government fully responsible for project identification and implementation and provincial government monitoring progress of each local government against the target set by local and provincial government. AEPC will intervene in the cycle either upon request received from any of these governments or through its own initiative for improvement through new technologies, mechanism and synergies. The Centre will also be responsible for piloting of technologies, innovative mechanisms, new instruments and collaboration with private sector and other institutions. AEPC will be responsible for tracking, analyzing and publishing recommendations for NNRFC, MoF and other relevant stakeholders through a comprehensive renewable energy framework for efficient delivery of renewable energy at local and provincial level.

Additionally, AEPC's long term responsibility also includes

- A quarterly publication of progress towards targets with standard methodology and indicators formally endorsed by the government
- Improve effectiveness of energy financing through Energy Funds at all level of government and track fund utilization at local and provincial level
- Increase intensity of research in technology, policies, law, regulations and modalities through lesson learned from short and medium term and improve all aspects of these research by using national and international experts
- Establish AEPC as a Center of Excellence in Renewable Energy by disseminating awareness, lesson learned and strategies through workshops, training and convention at a regional level.
- Monitor progress of carbon market and develop strategies for making the market attractive for both national and international participants

II. Technology and Quality Standard

2.1 Short Term

Summary:

AEPC will collate, compile, amended (wherever required) and share through orientation, training and web based links the available manuals, procedures, guidelines and standards to the local and provincial government. AEPC will also devise and formulate document related to law, policies, planning and strategies pertaining renewable energy development and as required by the Constitution 2015 and Local Governance Operational Act 2017. The Centre will also develop guidelines and strategies for up to 1 MW of hydropower plants for local government and 10 MW for provincial government to be developed and connected to the grid through resource mapping and energy planning. AEPC will prepare the institution through collaboration with relevant agencies such as Ministry of Industry, Commerce and Supplies and Ministry of Physical Infrastructure and Transport for energy efficiency and electric vehicle. APEC will also strengthen formation and implementation of Nepal Electricity Regulatory Commission.

The following points highlights specific task to be achieved during the short term:

- Standards, Guidelines, Quality Control and Certification
 - Share existing manuals, procedures, guidelines, technical standards and develop new wherever required
 - Support local governments to verify and to approve RE products and services based on developed standards.
 - Develop quality control manuals and guidelines for various technological options for affordable and sustainable energy services.
 - Conduct orientations to local governments on quality assurance, monitoring, evaluation and impact and renewable energy systems.
 - Development of Green Label, Star Rating and certification for green economy and market
 - Develop implementation plan and guideline for Energy Efficiency and Electric Vehicle
 - Certification of skills for renewable energy
 - Integrate quality assurance, monitoring and regulating mechanism with NERC
 - Preparation of Energy Plan for Province and Local
 - Formulate and implement renewable energy policy and programs related to renewable energy, Energy efficiency and climate change
 - Support local and provincial governments to conduct renewable energy resource mapping
 - Coordinate with local and provincial governments to achieve national including international renewable energy targets and commitment through the concept of energy mix
 - Project Implementation
 - Project identification, feasibility studies, financial closure, procurement, construction and supervision and monitoring
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- Assist local government to co implement large scale renewable energy projects including 1 MW of hydropower plants for local government and 10 MW for Province Government
- Develop and showcase best technological options
- Online Application
 - Provide basis to utilize online application tool including subsidies, grants, credits or schemes promoted by local, provincial and federal government along with support for subsidy processing, administration, monitoring and evaluation

2.2 Medium Term

Summary:

AEPC, in coordination with provincial government, will track progress against sub-national, national and international targets and commitments. An extensive level of research, in collaboration of national and international agencies, will be conducted at the Centre for improving indicators for monitoring progress and identify new technologies and strategies to make planning and implementation effective. During the mid-term, quality assurance and standard shall be inherently built within the provincial government with AEPC providing support in areas that require higher level of expertise. By this stage, AEPC will be a focal agency in providing technical support to all level of governments and an advisory agency for renewable energy across the country.

The following highlights the medium term activities:

- Integrated and Harmonized Energy Plan
 - Coordinate with local and provincial governments to achieve national including international RE targets and commitment
- Update Standards, Guidelines, Quality Control and Certification
 - Establish AEPC outreach in providing technology support services and quality assurance mechanisms mobilizing service providers and private sectors.
 - Incorporate Quality Assurance System in the AEPC act
 - Update standards and guidelines
 - Create capacity at the local and provincial level in providing technical solutions and quality services with regular exposure, training and workshops.
 - Increase strength of regulation with support from NERC
- Continued Support in Project Implementation
 - Assist local government to implement large scale renewable energy projects (1 MW scale)
 - Support for technology information forecasting and data bank management
 - Implement special demonstration project in collaboration with local and provincial government
 - Pilot Programs, Schemes and Policies for Energy Efficiency and Electric Vehicle
- Initiation of large scale Research and Publication
 - Inputs from local and provincial governments on constraints, challenges and issues related to need, services and technologies

- Identify new renewable energy and productive end uses technologies and collaborate with international, national and sub-national research institutions and agencies on adaptation of technologies, products and services in Nepal
- Advisory support to the Ministry/Departments relating to renewable energy, including advice about the following
 - Improving the competitiveness of renewable energy technologies
 - Increasing the supply of renewable energy in Nepal
 - Improving the development of skills in renewable energy sector
 - Increasing the use of renewable energy technologies in the energy mix to improve energy security

2.3 Long Term

Summary:

In the long term, the institution will be a fully functional RE Center of Excellence involved with sub-national, national and international cross cutting research agency with a strong relationship with all three level of governments, research institutions, private sector and other stakeholder that will support renewable energy market expansion, enabler of conducive financing environment and the lead agency to publish and recommend NERC, NNRFC, MoF and other departments/sections/units regarding progress, opportunities, barriers and solutions for overall renewable energy development in Nepal.

Following point also specifies the long term activities that AEPC shall perform:

- Standard, Guideline and Quality Control
 - Develop AEPC capacity as “One Stop Shop” for providing technological and quality assurance system functioning it as a center of excellence.
 - Support Nepal Bureau of Standards and Meteorology (NBSM) in development and implementation of national standard for renewable energy technologies.
 - Support RETS to expand its services to new technologies
 - Support ministries, federations and agencies in establishing programs and schemes for energy efficiency and electric vehicle
- Center of Excellence
 - Develop strong partnership and knowledge exchange with ministries, universities, research institutions, private sector, civil society on implementing various innovations for technological options (e.g. integrating to grid, research, management, quality check etc.) both nationally and internationally
 - Development of demonstration for knowledge and experience sharing for energy efficiency, green buildings, electric vehicle and charging stations
 - Technology information forecasting and data bank
 - International focal institute for development collaboration in renewable energy sector

3. Resource Mobilization

3.1 Short Term

Summary:

AEPC should immediately propose the most efficient mechanism to re-route the existing services by defining new process and procedure based on the National Natural Resources and Fiscal Commission Act 2074 and Inter-Governmental Fiscal Management Act 2074. Based on these mechanism, AEPC can re-evaluate the functions of CREF and develop procedure to establish PEF and MEF. The Centre should identify potential synergies and avenue for internal revenue collection through fee-for-service, wherever possible, and explore Carbon Tax, Carbon market, international funds as well as route to receive through fiscal transfer.

The following also briefly highlights the short term need:

- Self-sustaining AEPC
 - Develop mechanism to use revenue collected from carbon tax on imported fossil fuels for project financing, including project viability gap funding (subsidy, grant, soft credit) and operation of AEPC itself
 - Set conditions and criteria for local and provincial governments to access these financing
 - Use fee-for-service mechanism to charge local and provincial governments along with project developers to access both technical (including testing and certification) and financial assistance from AEPC
 - Use fee-for-service for technical assistance globally
 - Generate financial resources from Carbon Tax/Imported Fossil fuel and Royalty from Hydropower projects for development of renewable energy for:
 - Special subsidy/grant
 - Soft Credit
 - Technical Assistance
 - CREF, PEF and MEF
 - Research and Development, Innovative approaches and piloting of business model
 - Establish Mechanism for Accessing finance and Institutionalize inside CREF
 - Criteria and Conditions for accessing energy finance for all (project developers, PEF, MEF, Local and Provincial Governments, communities, SPV etc)
 - Criteria and Conditions for R&D and pilot projects
 - Criteria and Conditions set to approve loans for working capital
 - Coordination with the National Natural Resources and Fiscal Commission for Fiscal Transfer- (The Constitution has provisioned four pathways for fund transfer: Fiscal equalization grant, conditional grant, matching grant and special grant). AEPC needs to immediately formulate strategies and guidelines for transfer of grant through fiscal transfer:
 - Fiscal equalization grants: Communication linkage with NNRF and formulation of indicators to provide key inputs for formula-based calculation of this grant to accommodate renewable and alternative energy at local and provincial level
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- Conditional grant: Devise criteria and procedure for due diligence to provide technical assistance to NNRF
 - Complimentary/Matching grant: Carry out technical assistance in carrying out due diligence of project pipeline for accessing matching grant of the government as the Intern Governmental Fiscal Management Act 2074 to establish feasibility, cost, return on benefits, financial and physical or personnel capacity for implementation of project for matching grant
 - Special grant: Identification and development of special renewable and alternative energy programs and packages to develop and supply basic energy services targeting women, children and socio-culturally disadvantaged communities based on available information
 - Develop funding strategies for Federal, Province and Local governments and provide it to MoF for approval
 - Establishment of Provincial and Municipal Energy Fund
 - Self-sustaining source of funds, investing in local level renewable energy project, including solar PV based traffic light, street light, etc
 - The Fund will be administered by the Province's Energy Unit/Section/Department for Province Government and Local's Energy Unit/Section for Local Government, who will approve funding, implementing and managing the project
 - The fund reviews all applications and makes final decisions on what project to fund each year
 - Financing mechanism for topping-off additional funding or channeling new funding from National Treasury to the Province's prioritized initiatives, local governments, partnership modality or targets/initiatives led by the provincial government at province level and local government at local level
 - Liaise with Province and Local governments and other authorities for the purpose of facilitating renewable energy projects for which financial assistance is required
 - Accessing international funds and supports
 - Identify and initiate process for channeling international funds in situations that renewable energy projects be directed to sub-national level
 - Development of administrative body at AEPC in regulating, coordinating, facilitation and providing technical support to establish this channel
 - Linking international finance with the priorities of the government (infrastructure development and restoration, health, human development, domestic production, energy security, disaster management, environment protection, partnerships and employment) by reflecting renewable energy
 - Database management
 - Support development of database at local level and mechanism to share and generate report at provincial and federal level
 - National renewable energy database compilation, generation, management along with data depository for activities, projects and funds
 - Sharing and distribution of available data on Fee-Based Modality, currently practiced by DHM, Survey Department and CBS.
 - Courses and Curriculum
 - Develop courses and organize training
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3.2 Medium Term

Summary:

During this stage, AEPC will extensively focused on creating a self-sustaining renewable energy market and work with LFI and international financing schemes/institutions in making all scale of renewable energy services commercially viable all across the country. Through continuous improvement in capacity of local and national banks, AEPC will try to de-risk investment in renewable energy by developing market based adaptive instruments, piloting partnerships and triggering market through schemes. The Centre will continuously seek to support areas requiring financial assistance.

Following point also highlights the activities proposed for the medium term:

- Establish market-led approach to attract private investment into the sector including credit mobilization from banks and financing institutions
- Identification of constraints and measures to make renewable energy projects bankable
- Identify risk and potential arrangement to minimize risk perceived by private sector
- Restructure setup of AEPC with CREF at an arm's length of the federal agency to initiate resource mobilization into the sector as a financial intermediary for federal subsidy administration and credit mobilization
- Continuously research and seek arrangement to support financial assistance to socio-economically deprived communities in the country.

3.3 Long Term

Summary:

On a long term, AEPC will reach national and international institution to attract global finance and investment inside the country by demonstrating a functioning market driven endorsed by all level of government and led by private sector with cross cutting technologies and polices researches. AEPC will also work with NNRFC, NERC and other agencies in evaluating conflicts and proposing solutions. AEPC will also be an income generating institution through fees collected from services to other governments and agencies using research benefits through Center of Excellence.

The following highlights the long term activities:

- CREF as endowment fund manager for longer sustainability with the institution to access national and global funds to finance of renewable energy projects
- A knowledge service wing of AEPC to provide necessary service to provincial and local governments for the entire project cycle whenever required
- Address issues on 'conflict of interest' and strategic relationship among the stakeholders including all three level of governments, private sector and communities