

Municipal Energy Plan: RERL is supporting municipalities to prepare Municipal Energy Plan (MEP) aimed to achieve sustainable and integrated planning for clean energy solutions for households, communities and productive activities. MEP focuses on clean cooking and lighting solutions and operating household appliances and electricity for community centers, schools, health centers and economic activities. Palungtar Municipality, Gorkha and Mahankal Rural Municipality, Lalitpur have finalized their MEPS.

As a result, the RERL has been receiving lots of demand from different provinces and municipalities. Based on the request received from Municipalities/Rural Municipalities, in 2019, RERL has initiated technical assistance to prepare 5 Municipal Energy Plans for the following municipalities.

1. Bagmati Rural Municipality, South Lalitpur
2. Konjyosom Rural Municipality, South Lalitpur
3. Fikkal Rural Municipality, Sindhuli,
4. Laxmaniya Rural Municipality, Dhanusha and
5. Paterwasugali Rural Municipality, Parsa

Testing of Simrutu Khola Mini Hydro Project:

The 200 kW Simrutu Khola Mini Hydro Project was successfully tested on 2 March 2019. It will take several months to complete the project and carry out commissioning. It is expected that after the completion of this project more than 1380 households will have electricity access. The project is built with financial support of SASEC/AEPC/ADB, community equity and loan from Civil Bank. RERL is providing assistance to build, operate and manage the project.



Grid Interconnection of Medim Khola MHP:



RERL provided technical assistance to interconnect the 100kW Medim Khola Micro Hydropower Plant with the national grid. AEPC provided necessary financial support for grid interconnection. This is the fourth grid connected MHP supported by AEPC and RERL. Interconnection of MHP with the grid will help generate additional revenue for the communities and avoid transmission losses of NEA. In addition, having generation systems at the end of the line helps improve both voltage quality and system reliability. AEPC has allocated budget to carry out feasibility study of grid interconnection of 24 more MHPs.

The Chief Minister of Gandaki Pradesh Mr. Prithivi Subba Gurung inaugurated Medim Khola MHP on 31 January 2019.

Energy Hackathon: Institute of Engineering (IOE), Tribhuban University hosted Energy Hackathon on 28 January 2019 to provide a platform for solving challenges related to distributed generation, demand-side management, renewable energy and energy efficiency. The event brought together students and amateurs to solve the energy problems of Nepal through collaborative efforts. Eighteen teams of Electrical and Civil Engineering students from all over Nepal were engaged in finding solutions to practical problems given by AEPC/RERL.



UNDP’S Additional Fund: Based on remarkable impacts of solar PV back up system in health centers, supported by RERL under “Energy for Health”, UNDP provided additional financial assistance to install 3kWp solar PV back up system in 6 Snake Bite Treatment Centers operated by the Nepal Army. The solar back up system in Snake Bite Treatment Centers provide uninterrupted power supply to operate refrigerated storage for anti-snake venom vaccines

Similarly, UNDP fund was utilized to provide the solar PV systems to 4 Birthing and 3 Health Centers established by UNICEF in Mugu district. These fully equipped birthing/health centers were unable to provide services due to lack of power supply.

Solar Mini Grids for Marginalized Communities: The testing and commissioning of 3 Solar Mini Grid Projects funded by UNDP, rural municipalities and the community was carried out on 25 December 2019. RERL provided technical assistance to install 2 solar mini grids of 5kWp and 8 kWp capacity in Jahada Rural Municipality, Morang and a 5kWp in Jagarnathpur Rural Municipality, Parsa. These provide electricity access to 80 households for lighting, mobile phone charging, fan and income generating activities. In addition to household services, there are street lights for better ambience and safety during night time. The beneficiaries are Santhal, Dom and Musahar people, the most marginalized communities of the Terai.



The Honorable Minister of State Mr. Saroj Yadav, Ministry of Health and Mr. Renaud Meyer, Resident Representative, UNDP Nepal jointly inaugurated 2 solar mini grid projects in Jahada Rural Municipality on 25 February, 2019.

A Case Study of Community Private Partnership Model: “There are more than 40 enterprises using electricity”, informed Mr. Moti Ram Roka, who leased the 29kW Simli Khola MHP, Rukum from the community. He added that only 12 of them received government subsidy and rest were established by entrepreneurs themselves. He further informed that most of the electricity used by eateries, lodges, tailoring shops, jewelry stores, beauty parlor, etc. In addition, there is 1 off set press, automobile repair workshop and health post powered by the MHP. In addition, more than 60 different enterprises are also benefiting from better lighting. According to Mr. Roka, 78 men and 24 women are employed by these enterprises. Currently, Mr. Roka makes NPR 75,000 a month from electricity sales and gives NPR 7,000 to the community per the lease agreement. Now, he is fully aware that his income is directly tied up with reliable electricity supply and is looking for opportunity to increase his plant capacity or build a new one.

Training for Field Coordinators: The training cum workshop on operation and management mini hydro and large scale solar projects for field coordinator was held from 8 to 14 January 2019 in Nepalgunj. Issues, challenges and way forward of mini hydro and large scale solar projects were discussed in the workshop. Altogether 15 field coordinators including 1 woman participated.

Solar House Wiring Training: RERL organized a 6 days’ long house wiring training for local technician from AEPC supported Solar Wind Mini Grid Projects in the Far Western Region. The training helped to develop technical manpower to undertake house wiring in the project sites. After the training, some of the participants are already engaged in house wiring in their villages.

Orientation on Solar Water Pumping (SWP): RERL and Winrock International jointly organized a Knowledge Exchange Workshop on Solar Water Pumping on 20 and 21 January 2019 in Ratanpur, Bharatpur. The main objective of the orientation was to enhance knowledge of members of Small Farmer Agricultural Cooperative Limited and representatives of rural municipalities on Solar PV Pumping technology. The workshop focused on working principle, advantages, disadvantages, impacts and business models and financial models to install SWP system. In addition, farmers who have already installed SWP systems shared their experiences. All together 53 participants including 21 women attended.



January – March 2019

Training on Management and Leadership Development of Cooperative:

To build capacity of women members of Darna Micro Hydro Cooperative, Achham, on financial management, including account keeping, RERL organized a training from 4 to 11 February 2019. The training focused on operation of sustainable micro finance. During the training 54 women from 24 women groups were participated. Likewise, in order to enhance capacity on operation and management of cooperative of members of Sugarkhal Solar Energy Electricity Cooperative, RERL organized a 3 days' long training in Sugarkhal, Kailali.



Webinar on Resilient and Reliable Energy Projects in Nepal: Smart Village, the UK Low Carbon Energy for Development Network and the Hydro Empower Network- HPNET jointly organized webinar on 2 February 2019. The webinar focused on academic research and policy level interventions related to resilient and reliable energy projects. There were three speakers in the webinar. Dr. Long Seng from Loughborouh University, UK focused on improving community energy resilience. She is in Kathmandu, Nepal to understand opportunities to enhance community energy resilience in grid, mini grid and stand alone electricity system. The second speaker Mr. Joe Butchers, University of Bristol, UK presented result from a study investigating the reliability of 24 micro hydropower projects in Nepal about the findings. He informed that the reliability of community energy projects is variable, transient and dependent on interconnection of social, technical and economic factors. Finally, Mr. Jiwan Kumar Mallik, Renewable Energy for Rural Livelihood Progamme, Kathmandu, Nepal presented on progress and planned activities of RERL in improving the reliability and resilience of new and existing community energy projects in Nepal. [Webinar: Resilience and reliability of energy projects in Nepal](#)