



Nepal Energy Efficiency Programme (NEEP)

Promotion and Realization of Energy Efficiency

Main Facts

Objective:

To improve framework conditions for the planning and implementation of energy efficiency measures in Nepal

Volume of German contribution:

Up to EUR 4,000,000

Time:

July 2014 - June 2017

Lead Agency:

Ministry of Energy, Nepal

Scenario

Understanding the significant role of energy in inclusive economic growth of the country, the Government of Nepal has been reiterating its commitment to energy sector reforms. Despite continuous endeavors together with support from Development Partners, Nepal's energy supply and demand balance, particularly electricity remains in deficit. A comparison to international and regional data demonstrates not only the inadequacies in terms of access to energy and modern energy services in Nepal, but also very high energy intensity resulting from inefficiency in energy consumption patterns. Although there is a tremendous potential for hydropower generation, huge gap exists between demand and supply of electricity in the country. The gap becomes more critical during the dry season with long hours of load shedding affecting households, commerce, industries and the economy as a whole. The sluggish growth of the supply side together with inefficient energy consumption patterns has proven to be one of the major obstacles in the socio-economic development of the country. Dependency on imported fossil fuel as an alternative source for electricity generation has not only negatively affected competitiveness of industries but also worsened the trade balance.

Recognizing such an impasse, the government, recently, has started to put some impetus on the efficient use of energy. However, dearth of strategic and regulatory framework for energy efficiency has hindered the country in reaping the economic and ecological benefits of the untapped resource - energy efficiency. Political frameworks are not available even for the primary source of energy in the country - biomass.

Program Description

Significant international experiences demonstrate that the efficient consumption of energy not only results in tangible savings to end-users but also helps to ensure a stable energy supply while reducing environmental impacts. Recognizing this fact, Nepal Energy Efficiency Programme (NEEP) is being implemented to promote and realize energy efficiency in the country since 2010. The Nepali- German programme NEEP is implemented by the Ministry of Energy with technical assistance by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), acting on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ). After completing its first phase in June 2014, NEEP continues to support improving the efficiency use of energy in Nepal, in its second phase from July 2014 to June 2017. The programme assists with the introduction of market based energy efficiency services for the private and public sector, backs the development and introduction of performance for biomass based improved cooking stoves for rural households and provides direct advice and expertise to the government for the establishment of policy and institutional framework to foster energy efficiency in the country.

Energy Efficiency Market

Along with growing prominence of energy efficiency in the country achieved in the past through NEEP, the second phase of NEEP focuses on horizontal and vertical widening of the energy efficiency market. The Energy Efficiency Center (EEC) under the Federation of Nepalese



Chamber of Commerce and Industry as well as energy efficiency units at District Chamber of Commerce and Industry in various districts continues to provide energy efficiency services not only to industrial sectors but also to energy intensive public infrastructure. In addition to energy intensive industries, the services are provided to small scale industries and municipal infrastructures. For this, NEEP closely collaborates with the Nepal Electricity Authority and the Town Development Fund. Along with raising awareness among the stakeholders, EEC provides trainings on energy efficiency both for energy auditors and energy managers. Efforts are made towards creating conducive financial services with participation of local banks for encouraging investment in energy efficiency measures. Moreover, platforms are created with participation of industries, policy makers and academia for sharing their learning experiences.

Clean Cooking

Three fourth of Nepal's population still depends on biomass as the main source of energy for cooking and heating. The majority of them uses traditionally open fires or so called "3 stone stoves". These are generally inefficient in terms of energy consumption and release harmful emissions affecting both human health and environment. Within the clean cooking component of NEEP, the Alternative Energy



cooking in clean (improved) cook stove

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Promotion Centre (AEPC), together with the Renewable Energy Testing Station is promoting quality improvements for clean cooking stoves. For this purpose, AEPC has established minimum performance benchmarks on fuel

efficiency, emission levels, safety and convenience of stoves. NEEP aims at building up the necessary competencies for testing stoves against these parameters and further facilitating the dissemination of the relevant information at the national and international level.

Policy Advice

The Policy Advice component of the project elaborates the significance of energy efficiency strategies. It is expected that the Energy Efficiency Strategy and Biomass Energy Strategy will be in place and be implemented within the next two years. Following the approval of the two strategies by the cabinet, the implementation, monitoring and evaluation of these strategies will be supported by the programme. The conceptualization and institutional set up of an energy efficiency entity within the Nepalese government structure is envisaged to mainstream the process of promoting energy efficiency in the country and to establish a much needed regulatory framework. The Nepal Energy Information System will be strengthened for establishing an energy information and management system that will support analysis and decision making in energy related initiatives. Additionally, the NEEP will emphasize on integrating Nepal's energy efficiency interventions into the general framework of Sustainable Energy for all (SE4ALL).

Impacts

The improvement in the condition for planning and implementation of measures for efficient energy use will encourage harnessing the untapped resource – energy efficiency. The establishment of a political, strategic and regulatory framework for planning and implementation of energy efficiency together with enhancing the institutional capacity for the issue and the development of an energy efficiency market will not only position the efficient use of energy as an integral part of sector reforms but also benefit individual households, industries and commerce by mitigating the energy crisis. The rural population depending on biomass cooking stoves will benefit from improved quality of clean and efficient cooking stoves. Accordingly, NEEP will be contributing towards the global initiative of SE4All in achieving its objective – *energy efficiency – through increasing productivity of resources that will foster economic growth, improve energy security and reduce costs for all citizens.*

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