

# Nepal Energy Efficiency Programme (NEEP)

## Promotion and Realization of Energy Efficiency

Main Facts	
<b>Objective</b>	Energy efficiency is recognized as an energy resource in Nepal.
<b>Volume of German contribution</b>	Up to EUR 4,750,000
<b>Time</b>	December 2017 – November 2020
<b>Lead Agency</b>	Ministry of Energy, Water Resources and Irrigation, Nepal

### Scenario

The new constitution of Nepal underlines the role of reliable and affordable energy and its sustainable use for the fulfillment of basic needs and the economic growth of the country. Despite continuous endeavors in Nepal's energy supply and demand balance, particularly electricity remains in deficit. According to international energy statistics and by regional comparison Nepal shows a high energy intensity, indicating a generally inefficient use of energy in the country. The Government of Nepal has recognized the problem and as part of its Nationally Determined Contributions (NDCs) committed to adopt a low-carbon development pathway. Nepal intends to develop cross-sectoral approaches for an economy based on low emissions. Hereby, energy efficiency is particularly important for the Government of Nepal. However, so far energy efficiency is not yet recognized as an essential component of energy supply in Nepal.

### Program Description

The Nepal Energy Efficiency Programme (NEEP) has been promoting energy efficiency in Nepal since 2010. NEEP is implemented by the Ministry of Energy, Water Resources and Irrigation (MoEWRI), the

Government of Nepal with technical assistance provided by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ). Having successfully improved the framework conditions for the planning and implementation of energy efficiency measures, NEEP continues with the institutional and regulatory mainstreaming of energy efficiency in national energy policy to establish energy efficiency as a recognized energy resource in Nepal. The program provides direct advice and expertise to the government for the establishment of policy frameworks for implementing energy efficiency and improve energy conservation measures, helps to strengthen the capabilities of Nepal Electricity Authority (NEA) in managing power supply and demand, assists with the establishment of elements of market development for energy efficiency services and efficient products and supports in the initiation process for integrating energy efficiency into university education and vocational training.

### Policy

The component "Policy" aims at further improving the political framework conditions for implementing measures for energy efficiency and saving. Following the adoption of the NEEP supported biomass energy strategy and the policy decision for promoting sugarcane cogeneration, the Government of Nepal recently developed and adopted the National Energy Efficiency Strategy 2018. Recently, the Alternative Energy Promotion Centre (AEPCC) has been designated as the first energy efficiency entity of the Government of Nepal. AEPCC is tasked to promote energy efficiency in Nepal and coordinate with national institutions and stakeholders involved in the field of energy efficiency. As the next steps in institutionalizing energy efficiency in the country, the Nepalese government is preparing a National Energy Efficiency Action Plan (NEEAP) and an energy efficiency and conservation bill.



Energy efficiency measure implemented in a textile industry



National Energy Efficiency Strategy Dissemination Workshop

## Support to the Nepal Electricity Authority (NEA)

This component aims at enabling NEA to develop solutions to the challenges of supply and demand management in the distribution network. On the demand side, NEA is supported in setting up a digital information system to analyze the consumption patterns of its customers, in developing innovative concepts of demand management, and on customer relations towards their purchase of energy-saving electrical appliances and their efficient use. On the electricity supply side, NEA is advised on the introduction of intelligent measurement system in the supply infrastructure (substation, supply lines, transformers) and supported in setting up a digital monitoring system to monitor and mitigate the technical losses of the utility distribution infrastructure.

## Energy Efficiency Market Development

The component aims at establishing necessary elements of market development for energy efficiency services and energy-efficient products to improve the required economic and financial conditions for strengthening energy efficiency and energy conservation in Nepal. In collaboration with Energy Efficiency Centre of Federation of Nepalese Chambers of Commerce and Industry (FNCCI) and Town Development Fund (TDF), energy consumers, businesses, communities and cities are advised on the introduction of standardized operational energy management plans. Furthermore, the current range of services offered by the partners (energy audits, energy management consulting) will be extended to provide investment-related advice for the implementation of energy efficiency measures. On the product side, the project advises on establishing digital customer information platforms to promote energy efficient products. Moreover, economically relevant players on an individual, organizational and societal level will be strengthened through awareness raising campaigns, advice, training, and peer learning in networks for the promotion of energy efficiency.

## EE in Higher Education & Vocational Training

This component aims at initiating the integration of energy efficiency in higher education and vocational training. The development of well-trained professionals and workers will result in an increased and optimized use of modern, energy-efficient products in enterprises and companies and in a better utilization of the existing employment



Towards establishment of Energy Management System

potential in energy-related professions. In vocational training, the Council for Technical Education and Vocational Training (CTEVT) is developing a course on energy efficiency which will be piloted in selected CTEVT institutes, and then rolled-out as a certified course in a second step. The integration of energy efficiency into existing courses will also be examined through a review of existing curricula. The National Skill Testing Board (NSTB) is supported in developing a national occupational skill standard on “Energy Auditor” for assuring the quality of nationally certified energy auditors for the local labor market. Similarly, the Institute of Engineering (IOE) of Tribhuvan University has begun the development of a short course on energy efficiency in buildings and industries for engineering professionals. The Center for Energy Studies (CES), IOE is supported in establishing an elective module on energy efficiency for one of its Bachelor degrees in Engineering and integrating energy efficiency in one of its Master degrees in Engineering courses. An exchange platform is being established to promote dialogue and collaboration between public, private and academia sectors on the topic of energy efficiency.

## Impacts

The improvement in the condition for planning and implementation of measures for efficient use of energy will encourage harnessing of a relatively untapped resource- energy efficiency. The establishment of political, strategic and regulatory framework for planning and implementation of energy efficiency together with the expansion and development of energy efficiency market will not only position the efficient use of energy as an essential component of energy supply in Nepal but also benefit individual households, industries and commerce for having reliable and affordable energy.

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