

# Renewable Energy and Energy Efficiency Programme - Green Recovery and Empowerment with Energy in Nepal (REEEP-GREEN)

Project name	Renewable Energy and Energy Efficiency Programme - Green Recovery and Empowerment with Energy in Nepal (REEEP-GREEN)
Objective	The regulatory, institutional, and private-sector conditions for disseminating renewable energy and raising energy efficiency are created.
Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)
Co-financed by	European Union (EU)
Country	Nepal
Lead executing agency	Ministry of Energy, Water Resources, and Irrigation (MoEWRI)
Contribution	EUR 9.8 million (including EUR 4 million from the EU)
Duration	06/2021-09/2024

## Scenario

The Government of Nepal (GoN) emphasizes the role of reliable, affordable energy and its sustainable use for the fulfillment of basic needs and the economic growth of the country. The current Five-Year Development Plan highlights the crucial role of the energy sector for the realization of Nepal's development goals.

Nepal has a huge potential for hydropower generation however the country still suffers from an energy deficit with almost two million people not having access to modern and clean energy services. The energy supply – demand gap and the inefficient use of available energy has put the energy intensity of the country at very high level compelling the country to be highly dependent on imports of coal-fired power and fossil fuels from India, thereby increasing its trade deficit and increasing Green House Gas (GHG) emissions. To address this, the government emphasizes on significance of diversified renewable energies and energy efficiency for socio-economic and sustainable development. The lack of regulatory, institutional, and private-sector structures constitutes a central challenge for the long-term

and unassisted promotion of renewable energy (RE) and energy efficiency (EE) in the country.

## Project Description

REEEP-GREEN is a technical cooperation project agreed between the GoN and the Federal Republic of Germany. With support of GIZ on behalf of the BMZ and co-financed by the EU, REEEP-GREEN is executed by MoEWRI and sets out to improve the preconditions for planning and implementation of measures for the promotion of renewable energies and the efficient use of energy in Nepal. The main objective of REEEP-GREEN is to create regulatory, institutional, and private-sector conditions for disseminating RE and improving EE in Nepal. REEEP-GREEN uses a multi-level approach consisting of the following five output areas:

## Outputs

### Institutional Framework at National Level

The output improves the institutional and regulatory framework for RE and EE promotion at national level. A clear and conducive legal framework together with a functioning market mechanism is essential for national and sub-national actors (provinces and municipalities) to execute their responsibilities in ensuring the provision of sustainable energy to their respective constituents. Moreover, there is a need for a strong national institution to further develop this framework and provide the actors in this sector with professional support. Accordingly, support is provided for the creation of key regulatory and institutional structures for RE and EE dissemination. This includes activities such as coordination and support to multi-stakeholder processes for the adoption of the energy efficiency and conservation law, the development of implementing rules, regulations, as well as standards and benchmarks, the National Energy Efficiency Action Plan (NEEAP), and the recognition of energy efficiency professions like Energy Auditor and Energy Manager.



From Left to Right:

1. Deputy Mayor presenting Municipal Energy Plan of Mai Municipality, Illam that promotes renewable energy technologies to increase their citizens enhanced access to modern energy services

2. Industrialist sharing experiences and benefits of adopting energy efficient technologies

## Institutional Frameworks at Sub-National Level

In Nepal's federal system, the provincial and local governments have a key role to play in the provision of energy related services, in development planning, and in providing financial support like subsidies. In this regard, the provincial and local governments are supported through capacity development, documentation, energy planning, budgeting, and setting up of energy planning units and committees. Further, technical support is provided to subnational governments in the implementation and dissemination of "best practices" e.g., in Municipal Energy Planning. The support is provided with particular focus on the socio-economic development of women, minority groups and disadvantaged population. The institutional structures are promoted to sustainably anchor participatory RE and EE promotion in the provinces and local governments.

## Sustainable Market Development for RE

Improved market conditions for an increasing private sector participation in the promotion of RE, will reduce the dependency on government subsidies in the sector. To achieve this, the project provides support on both the supply and demand side.

On the one hand, the project enables technical and financial access to the private sector in introducing innovative RE business models and technologies through government managed market-based incentive mechanism. On the other hand, the project supports Local and Micro Finance Institutions (LFIs/ MFIs) and cooperatives in developing loan products, to increase the ability of rural end-users to afford the technologies, and thereby to increase private investment from consumer-side.

Additionally, to assure benefits for women, women-led households, marginalized groups, RE technology and loan products targeting women and disadvantaged groups are prioritized.

## Knowledge Management and Exchange

The project follows a dual approach for sharing knowledge, upskilling, accessing advice and exchanging experience in the RE and EE sector. Firstly, the project develops and anchors digital tools and platforms for knowledge dissemination and facilitates learning within the partner structure and systems. Secondly, the project prioritizes enhancing the capacity of partners and other key stakeholders to effectively use these tools. The project portfolio comprises a range of

digital instruments and tools including a GIS-based Municipal Energy Planning tool that enables local governments to prepare energy development plans and set up targeted support programmes. In parallel, the project supports in further development of the web-based learning platforms for knowledge dissemination and upskilling on RE and EE. Furthermore, these knowledge platforms will serve as a repository of documented experiences pertaining to successful applications of RE and EE which will grant stakeholders with valuable knowledge and insights.

## Energy Efficiency in Industries and Enterprises

Energy efficient practices in industries and enterprises can reduce the carbon footprint of energy and contribute to green growth in Nepal. Accordingly, under this output, the project aims at promoting energy efficiency and decent work practices in industries and enterprises in the country. In this regard, industries and enterprises are supported to identify energy conservation potential in their work process/ technologies and implement energy efficiency measures with significant savings potential, following a circular economy and decent work approach. The benefits of the grant supported measures serve as demonstration of concept to develop business cases for creating financing mechanism incorporating loan and blended financing options for facilitating industries and enterprises to scale up their investment in EE.

## Expected Results

The establishment of political, strategic, and regulatory frameworks allows for a planned dissemination of RE and EE in the country. Federal, provincial, local government agencies and other energy sector actors are enabled to fulfil their mandates and envisioned roles in the development of the sector systematically. As a result, households, industries, and commerce benefit through improved access to reliable and affordable energy thus contributing to the socio-economic development of the country. A responsible and sustainable use of energy is practiced and leads to the reduction of national energy intensity and GHG emissions/GDP unit.

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Co-funded by European Union  
NTNC Complex, Khumaltar  
P.O. Box 1457, Kathmandu/Nepal  
T + 977 01 5538 129  
E reep@giz.de  
I www.giz.de/nepal

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Addresses of BMZ Offices

BMZ Bonn  
Dahlmannstraße 4  
53113 Bonn  
Germany  
T +49 (0)228 99 535-0  
F +49 (0)228 99 535-3500

BMZ Berlin  
Stresemannstraße 94  
10963 Berlin  
Germany  
T +49 (0)30 18 535-0  
F +49 (0)30 18 535-2501

[poststelle@bmz.bund.de](mailto:poststelle@bmz.bund.de)  
[www.bmz.de](http://www.bmz.de)