

# Kali Gandaki 2 Storage Hydropower Project (650 MW)





#### **Background**

The Kali Gandaki 2 is a storage scheme hydropower project designed to harness the energy potential of Kaligandaki River. The Kali Gandaki 2 Storage Hydropower Project lies in Tanhau, Papla, Nawalpur and Syangja district of Gandaki and Lumbini Province with installed capacity of 650 MW and total annual generation of 3294.6 GWh. The proposed dam site area is about 180 Km away from Kathmandu and 30 km away from the nearest airport Bharatpur Airport, Chitwan. The project would attract religious tourists and other recreational activities since the Kali Gandaki River is a religious river for Hindus. This project has multiple benefits such as hydropower, irrigation, and tourism and will provide multifaceted benefits to the local community and wider economic landscape. At present the study of this project is in Interim Draft Report phase.



Sector: Hydropower



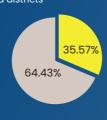
Tanahu, Palpa, Nawalpur and Syangja districts



Land Required: 10.934 hectares

#### **Salient Feature:**

- Scheme: Storage
- Installed Capacity: 650 MW
- Contribution of 3294.60 GWh energy annually



Wet Energy: 2122.51 GWh
Dry Energy: 1172.11 GWh

## Features/Components

- Catchment area: 11767.56 km<sup>2</sup>
- Concrete Face Rockfill Dam (CFRD) with height 150 m
- Design Discharge: 583.84 m³/s
- Net Head: 127.04 m
- Horseshoe shaped concrete lined tunnels.
- Four number of type Gated Spillway gate; 15m \* 11m
- Reservoir of live storage capacity 1544.76 Mm<sup>3</sup>
- Six Multi-Level Power Intake with vertical slide gate.
- Horseshoe tunnels with embedded penstock pipes with 8 waterways of 8.6 m diameter.
- Six units surface type powerhouse of length 152.70m, width 24.6 m, and height 45m.
- Francis type turbine
- 400 KV 18 Km transmission line at New Damauli Substation

\*Based on interim design report of January 2024

#### **Project Outcome**



Increased electricity generation capacity



Enhanced regional connectivity and access to remote areas



Revenue generation and job creation during construction and operation



Promote Tourism and Recreation



Contribution to sustainable development and environmental conservation



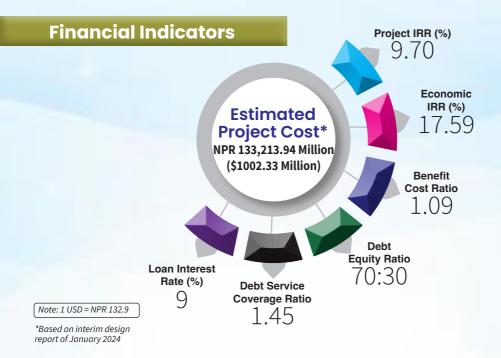
Support for water resource management including flood control



Improved irrigation infrastructure for enhanced agricultural productivity



Fisheries Enhancement



# **Project Implementation Modality**



## **Project Implementation Timeline**



#### **Additional Information**

The power generated from the project can be evacuated to the INPS through under construction New Damauli 400/220kV Substation (Under MCC Compact) in Tanahau district.



Pic 1: Project Layout

# **Relevant Agencies**

- Investment Board Nepal (IBN)
- Ministry of Energy, Water Resources and Irrigation (MoEWRI)
- Department of Electricity Development (DOED)

### **About the Agency**

#### **Agency Name: Investment Board Nepal**

Investment Board Nepal is a high-powered agency chaired by Rt. Hon. Prime Minister established as a nodal agency for Public Private Partnership (PPP) and investment promotion in Nepal. Since its establishment, IBN has played an instrumental role in implementing transformative infrastructure projects fundamental to bolstering socio-economic development of the country. IBN has provided investment approvals. Being guided by the Long-term Vision (2043), the 15<sup>th</sup> Plan and other subsequent policies of the Government of Nepal; and international commitments such as Sustainable Development Goals, IBN has been developing credible and bankable projects to garner investment.

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