

BETAN KARNALI SANCHAYAKARTA HYDROPOWER COMPANY LIMITED

COMPANY AND PROJECT BRIEF

[AS ON JANUARY, 2020]

COMPANY	PROJECT
TYPE: Public Limited Company	NAME: Betan Karnali PROR HEP
ESTABLISHED: 2074/1/24 B.S (7/5/2017)	RIVER: Karnali
CAPITAL:	FEASIBILITY LICENSE: 688 MW (license being updated to 443 MW)
1. Authorized - NRs. 20 Billion	TYPE: Peaking Run of the River (4-6 Hours Daily Peaking)
2. Paid-up Capital - NRs. 10 Billion	LOCATION: Accham District, Sudurpashcim Province and Surkhet District, Karnali Province
SHAREHOLDERS	TOTAL PROJECT COST: Rs.76 Billion
1. Karmachari Sanchaya Kosh (KSK) 15%	TOTAL PROJECT DURATION: 2 Study Years+1.5+ Pre-Construction Years + 5 Construction Years
2. Nepal Electricity Authority (NEA) 10%	TARGETED
3. Vidhyut Utpadan Company Limited (VUCL) 10%	1. Completion of Feasibility Study: 2019
4. 600,000 Contributors of KSK 40%	2. Pre-Construction Activities Start: 2019
5. General Public 15%	3. Project Construction Start Year: 2021
6. Project Affected Local 8%	4. Project Operation Start Year: 2026
7. Ati Bipanna Parivar (Deprived Family) 2%	CURRENT ACTIVITIES: Detail Engineering Study, Environment Impact Assessment Study, Pre-Construction Activities
PS: Province governments of Sudur Paschim and Karnali provinces offered 3-5% equity by divesting from existing institutional promoter shareholding (1-3 above).	

COMPANY AND PROJECT STANDING GROUNDS

The company and the project are implementation vehicle to further retirement benefits of the contributors of KSK and aid in their social security. The objective of the company is also to extend the said anticipated project benefits of KSK contributors to the general public at large and provide good returns to its other shareholders

DETAIL ENGINEERING STUDY

START: DECEMBER 2017

TARGET FINISH: MARCH, 2020

CONSULTANT: NEA Engineering Company Limited (Subsidiary of NEA)

ENGINEERING/DETAIL STUDIES: Drone Study, Topographical Survey, Bathymetric Study, ERT, SRT, MASW, Drilling Investigation, Access Road and Transportation Study and Design, Construction Power, Camp Facilities, Material Survey, Hydrology and Sediment Study, Power Market and Evacuation, Lab Tests (Permeability, UCS, DCPT, SPT etc.), Financial and Sensitivity Analysis, Construction Planning, Hydraulic Study and Numerical Modelling, Reservoir Regulation Study, Cost Estimation, Tender Documents and Drawings, Land Demarcation

STATUS OF STUDY:

- | | |
|-----------------------------|-----------------------------------|
| a. Interim Design Report | Concluded in August, 2019 |
| b. Feasibility Study Report | Concluded in December, 2019 |
| c. Detail Project Report | Targeted Completion – March, 2020 |

CONFIGURATION AS PER FSR

- | | |
|-----------|---|
| a. Layout | Dam (88m from River Bed), Tunnel (3 #s of ~2.4KM Length), |
|-----------|---|

- b. Capacity Surface/Underground Power House, Design Discharge -
Wet/Dry: 580 m3/s and 536 m3/s
- c. Energy 443 MW (including 8.6MW Env. Discharge)
- d. Dry Total: 2319 GWh (Wet: 1624 GWh, Dry: 695 GWh)
- e. Transmission Line(s) 463 GWh (4-6 Hours Peaking), 232 GWh
400 KV Double Circuit Phukot - Dododhara (Betan Station, RPGCL). From Dododhara – a number of domestic and cross border options

FINANCING

- a. Total Project Cost Rs.76 Billion (excluding IDC) (1 USD = Nepali Rs.114)
- b. Financing type Domestic/Commercial
- c. Debt/Equity Ratio 70:30
- d. Equity Rs.23 Billion
- e. Debt and Instruments Rs.53 Billion

REVENUE

- a. PPA Pricing Rs.4.8 (Wet), Rs.10.55 (Dry for 4-6 Hours Peaking), Rs.8.4 (Dry Regular), Eight Escalations
- b. Annual Revenue Rs.14.61 Billion (1st Year), Rs.18.53 Billion (9th Year after 8 Escalations)
- c. Others Wet power can be exported on a better pricing regime
> ((Rs.4.8+Wheeling Charges + Transmission Losses) + Margins)

ONGOING ACTIVITIES

- a. Detail Engineering Study Targeted Completion – March, 2020
- b. Environment Impact Study Targeted Completion – December, 2020
- c. Power Purchase Agreement With NEA. Application made in December, 2020
- d. Financing Domestic (a mix of Equity, Debt and Instruments)
Lead and Co-Lead Bank Finalization – March, 2020
- e. Land Acquisition Complete land requirement identified. Preliminary Officer nominated by the Government of Nepal, Land acquisition process initiated.
Targeted Completion – December, 2020
- f. Construction Power Requirement identified (~6 MW)
Feasibility License for 33KV transmission line obtained. EIA of the transmission line is in progress.
Targeted Completion – December, 2020
Design of 11 KV internal transmission line for linking all components of the project completed. Bidding Targeted for February, 2020
- g. Access Road Requirement identified (21 KM of which new track opening is only 13 KM). Design Completed.
Targeted Completion – December, 2020
- h. Camp House + Office Design Completed, Bidding in Progress
Targeted Completion – December, 2020
- i. Test Adit1 Bidding in Progress
Targeted Completion – December, 2020
- j. Test Adit2 Targeted Completion – June, 2021
- k. Project Construction Bidding Targeted Date – July, 2020
Contractor Selection and Mobilization – July 2021
Project Completion and Electricity Generation – July, 2026