CHAMPAWATI HYDROPOWER PVT LTD

Nagarjun-1, Raniban, Kathmandu

COMPANY PROFILE

Champawati Hydropower Company is a private company established in 2010 aiming to develop hydropower projects in Nepal. The company currently has 25 founding and 15 new shareholders, including locals from the Project area. A Board of 6 members are nominated from the existing shareholders. They all are working in senior levels in National and International Organizations.
All Board Members of the company are Engineering Professionals and have long and wide range of experiences in planning, designing, management of business or industries in engineering sectors.

A. COMPANY DETAILS

Name of the firm:	Champawati Hydropower
Type of the firm:	Private Limited
Registration Number:	73532/066/067
Year of establishment:	2010/06/10
Office Address:	Nagarjun -1, Raniban
Contact:	977-1-5103011
Email:	chapawatihydro@gmail.com
Website:	champawati.com.np
Field of work:	Hydropower Projects Development.
Current Project:	Chepe A – Hydropower Project

B. FINANCIAL STANDING OF THE FIRM

Authorized capital :	NRs. 42,00,00,000
Issued capital:	NRs. 40,00,00,000

C. BANK INFORMATION

A/C Name:	Champawati Hydropower Pvt. Ltd
Bank:	Everest Bank Limited
Bank Branch:	Balaju
A/C No.:	02000105200469

A/C Name:	Champawati Hydropower Pvt. Ltd
Bank:	NIC Asia Bank
Bank Branch:	Thapathali
A/C No.:	5441496653524001

D. ABOUT THE BOARD MEMBERS:

Dr. Hari Ram Parajuli: Chairman

Area of Expertise:	Structural /Earthquake Engineering, Risk Management
Years of Experience:	20 years
Current Affiliation:	Member, Executive Committee, National Reconstruction Authority, Signhadurbar, Kathmandu Assoc.Prof. Pulchowk Campus, I.O.E, TU
Email:	hariram.parajuli@gmail.com

Dr. Parajuli is a civil engineer with particular expertise in the preparation of feasibility studies, tender design, construction supervision, structural design and risk management for infrastructure projects. He holds a B.E. (civil engineering) & M. Sc. in Structural Engineering from Tribhuvan University, Nepal, Doctor of Engineering degree from Kyoto University, Japan and Post Doctorate from Ritsumeikan University, Japan. He has wide range of experience in professional practice, academic and research works. He has published numbers of engineering research papers in international publications and proceedings. He is the former Board Member of Rudi Khola Hydropower Project in Bindhyabasini Hydropower Development Company. He is a former Campus Chief of Thapathali Engineering Campus. Currently, he is working in National Reconstruction Authority (NRA) as an Executive Committee Member. He has a wide spectrum knowledge in project, institutional and policy management.

Mr Tuk Prasad Neupane: Managing Director

Area of Expertise:	Mechanical Engineering, Heavy equipment business
Years of Experience:	20 years
Current Affiliation:	Managing Director, Neupane Engineering, Balkhu, Kathmandu
Email:	neupanetp@gmail.com

Mr Neupane has been working in the field of Mechanical Engineering since he got diploma in 1994. After training on sales, supply and services in heavy equipment and machineries from different countries (India, Korea, China and Japan) he became an entrepreneur as the proprietor of Perfect Engineering Concern for 1997-2001. He established a new company called Neupane Engineering Pvt Ltd as a Managing Director of the company. The business of his company is Import / Export of various heavy equipment, spare parts, generator sets, compressor, boiler, other industrial items, hydropower machineries, water treatment plant, solar system, etc. He has better knowledge for managing private firms and organizations. He has received appreciation awards from many organizations like Inland Revenue Tax office, Federation of Contractors Associations of Nepal, Nepal Heavy Equipment Associations of Nepal, Nepal Crusher Associations of Nepal, Jyapu Samaj etc. He is a former Board Member of Rudi Khola Hydropower Project in Bindhyabasini Hydropower Development Company.

Mr Shyam Thapa: Director

Area of Expertise:	Civil/Structural Engineering
Years of Experience:	21 years
Current Affiliation:	Senior Highway Engineer (Full Time Contract) London Borough of Haringey, London, N22 8HQ Structural Design Engineer (Part Time) Exi-Tech Design & Construction Ltd., London, E15 2RQ Director (Structural Design Engineer) Design Team London Limited, Kent, DA5 1NJ, UK
Email:	smthapa@yahoo.com

Mr Thapa is a Civil & Structural Engineer with particular expertise in Structural Design & Maintenance of Buildings (Residential, Commercial, and Tall Buildings) & Bridges (Footbridge, Motorway & Railway Bridges), Analysis and Design of Hydraulic Structures. He worked as a Structural Engineer to review and revise the structural designs and involved in construction supervision of Kudhi Hydropower (4.0 MW). He is currently working as a Senior Highway Engineer for Highways Maintenance in a Council of London, UK. He has work experiences in Nepal, Qatar and UK. He has participated in many Civil, Structural and Highways Engineering trainings and seminars. He holds B.E. (Civil Engineering) and M. Sc. in Structural Engineering from Tribhuvan University in Nepal. He is a member of the Institution of Engineers in Nepal, and UK.

Mr. Thapa is also the Structural Engineer Member in Nepal & UK. He and his company Design Team London Ltd is covered with Professional Insurance worldwide except America and Canada for Civil and Structural Designs. Mr Thapa is contributing his role as a Project Director from the beginning of the Chepe A Hydropower Project. He is also a board director of Infrastructure Engineering & Resources Consult Pvt Ltd (IERC), Kathmandu.

Mr Tilak Raj Bhattarai: Director

Area of Expertise:	Hydropower Projects Design and Management
Years of Experience:	22 years
Current Affiliation:	Manager for Hydropower and Dams for an International Consulting Firm
Permanent Address:	Tikapur Municipality 9, Tikapur Kailali
Res. Address:	Kuala Lumpur, Malaysia
Contact:	+60 129 700 310
Email:	trbhattarai@yahoo.com

Tilak is a Charted Professional Civil Engineer specialised in hydropower and hydraulics with diverse background in a range of roles including project manager, design team leader, research engineer and construction engineer. He holds a B.Sc. (civil engineering) from Tribhuvan University in Nepal and a Masters in Hydraulic Schemes from the Federal Institute of Technology (EPFL), Switzerland. He is also a member of the Institution of Engineers in Australia and life member of Nepal Engineer's Association.

He brings over twenty years of experience in a wide range of hydropower, dam and pumped storage projects in many countries in Asia (Nepal, Vietnam, Philippines, Malaysia and Indonesia), Pacific Region and Australia. His particular expertise relates to the planning, design and project management of hydropower projects. Technical capability includes a wide range of engineering studies such as feasibility and detailed design, due diligence, energy estimate, financial analysis, project planning/scheduling, contract management and construction supervision of hydropower projects.

Tilak has carried out the hydraulic analysis and design of many hydraulic structures, tunnels and pipelines and is proficient in undertaking complete feasibility studies, tender designs and construction management for small to medium scale hydropower projects. Key hydropower Projects that Tilak has worked in Nepal are Kaligandaki A Hydroelectric Project (144 MW – Headworks Section Engineer/Deputy Resident Engineer); Upper Khimti Hydropower Project, Andhikhola Hydropower Project (Upgrading) and Nyadi Hydropower Project.

Laxman Aryal : Director

Area of Expertise:	Hydraulics Expert – Hydropower Engineer
Years of Experience:	18 years
Current Affiliation:	International Team Leader, NEA Engineering Company Limited
Email:	aryallaxman@hotmail.com

Mr Aryal is a Civil Engineer, specialized in hydraulic design of civil structures. He is well exposed on feasibility and detailed design for hydraulic structures, hydrology and project layout including design management of small to medium scale hydropower projects. He is a competent user of hydraulic modelling using Flow 3D and Hytran. His academic qualification is Master's in Hydraulic Schemes from Swiss Federal Institute of Technology, (EPFL/ETH), Switzerland – 2007 and a Bachelor's Degree in Civil Engineering from IOE, Pulchowk Campus, Tribhuvan University, Nepal – 2000. Currently he is working as a freelancer for different consulting companies in Nepal and Asia Pacific region.

Project Experience includes, Ulu Jelai HEP, 383 MW, Tender Design and Construction Supervision, nominated to design and review hydraulic structures and power waterways peaking plant in underground powerhouse. Verified hydraulic calculations and analysed critical section in CFD hydraulic model. Schematics include two river diversions with de-sanders and 16 km TBM bored transfer tunnels. Wawa Pumped Storage, 600 MW, Feasibility and Tender Design, Lead Hydraulic resource for headworks, spillway, intake structure, diversion tunnel, saddle dam, and reservoir routing design and planning for associated structures including power tunnel transient analysis. Kerian Hydroelectric Project, 6.4 MW and 7.6 MW, Tender Design and Construction, nominated as an international input for design and constructed supervision under SMEC Malaysia. Sibundong HEP, 84 MW, Feasibility Study, works as an expert resource to review the hydraulic design of civil structure. Recent experience in Nepal includes, the hydraulic review and CFD modelling of headworks and Settling basin of Rasuwagadhi HEP, 111MW. Reservoir energy simulation and headworks routing of Budhi Ganga HEP, 22 MW. International Team Leader and Hydraulic Expert for Phukot Karnali HEP, 426 MW, Betan

Karnali HEP, 600 MW; Kimathanka Arun, 550 MW; and Jagdulla HEP, 105 MW, under NEA Engineering Company limited.

Mr Rameshwar Lamichhane: Director

Area of Expertise:	Procurement / Contract Management, Project Management, Claims/disputes Assessment & determination
Years of Experience:	25 years
Current Job:	Senior Procurement Specialist (Consultant), National Reconstruction Authority, Singhadurbar, Kathmandu
Email:	rlamichhane10@hotmail.com

Mr Lamichhane is a Civil Engineer with Bachelor degree in Civil Engineering and Master degree with distinction in Integrated Urban Infrastructure Engineering (specialization in Transportation). He has experiences in different Infrastructure Sectors as Procurement/Contract Specialist/Expert and Resident/Asst. Resident Engineer at national and International level. He has experiences as Procurement /Contract management Specialist in many projects in Nepal and abroad with works especially in Identifying bottlenecks in the procurement process and recommending approaches to expedite the procurement process, building capacity of implementing agencies in procurement, Bid documents preparation for procurement of goods and works for ICB and NCB contracts, EOI and RFP documents preparation for procurement of services, Bids and Proposals Evaluation & Processing, Providing trainings on Procurement Procedures, Construction Supervision & Management, Development of Infrastructure Investment Programs, Contract Administration of Infrastructure projects including Hydropower as per FIDIC Condition of Contract (Red, Silver & Yellow book) and World Bank's Guideline, Progress Monitoring & Reporting, etc. Most of the projects in which he worked were funded by ADB and World Bank and some other financing agencies.

Presently, he is working as Senior Procurement Specialist in Earthquake Housing Reconstruction Project (EHRP) funded by World Bank under National Reconstruction Authority, Nepal. He has also worked as International Procurement/Contract Specialist/ADB Consultant with Ministry of Education, Cambodia.

E. CURRENTLY UNDER CONSTRUCTION PROJECT FEATURES:

1.	**Name**	**:**	**Chepe A Hydropower Project (7 MW)**
2.	**Project Details**		
	Development Region	:	Western Development Region
	District	:	Gorkha and Lamjung District
	Water Source	:	Chepe Khola
	Type of Scheme	:	RoR
	Access Road	:	Dumre-Paluntar (22 km black topped) Earthen - Borangkhola to Kuyele
	Gross Head	:	91 m

Design Discharge	:	10.0 m^3/s
Install Capacity	:	7 MW
Annual Energy	:	39.3 GWh (Dry-11.8, Wet–27.5)

3. Hydrology

River	:	Chepe Khola
Catchment Area at Intake	:	212.00 km^2
Design flood at Intake (100 years)	:	674 m^3/s
Environmental Flow	:	0.28 m^3/s

4. Headworks

Diversion structure	:	Free flow weir
Length of weir	:	43 m
Weir crest elevation	:	EL 727 m amsl
Height of weir	:	6.85 m
Undersluice	:	2 Vertical gates
Intake Type	:	Side Intakes, 3 openings

5. Connecting Canal

Canal Type	:	Rectangular RCC closed conduit
Length of Canal	:	155 m

6. Desilting Basin

Type	:	RCC Rectangular, 4 bays
Dimension (width * height)	:	5 m x 5 m
Length of effective basin	:	45 m
Bed Slope	:	1 in 50
Particle to settle	:	0.25 mm
Trap Efficiency	:	85%

7. Headrace Pipe

Conveyance Length	:	3300 m
Type	:	Mild Steel E250BR
Diameter	:	2.3 m internal dia.
Thickness of Pipe	:	6 mm thick pipe with 6mm thick stiffener rings @0.85m c/c

8. Surge Tank

Type	:	Simple Circular
Construction	:	Concrete Lined
Diameter	:	12 m
Height of the tank from Invert level	:	15 m

9. Penstock Pipe

Type	:	Welded Surface Penstock
Length	:	400 m
Diameter	:	1.9 m internal dia.
Pipe Material	:	Mild steel E250BR
Thickness of Pipe	:	8-12 mm

10. Powerhouse

Type	:	Surface with outdoor substation
PH dimension (L * W)	:	32 m * 9 m

	Height of PH building	:	8 m
	PH Floor level	:	EL. 636.5 m amsl
11.	**Tail race**		
	Type	:	Rectangular RCC canal
	Size	:	4 x 3.5 m
	Length	:	35 m
12.	**Turbine**		
	Number of Units	:	2
	Type	:	Francis
13.	**Generator**		
	Number of Units	:	2
	Type	:	Synchronous, 3-phase
14.	**Transmission Line & Substation**		
	Transmission length	:	12 km
	Capacity	:	33 KV
	Substation	:	Palungtar Substation
	Alternate connection (@5 km)	:	Chipleti, Siranchowk (under process)
15.	**Financial Analysis (Updated Feasibility study)**		
	Project Cost with IDC (NRs)	:	1,330,000,000
	Loan Interest Rate	:	12%
	Internal Rate of Return	:	15%
	Return on Equity	:	20%
	Simple Payback Period	:	6 yrs
	Discounted Payback Period	:	10 yrs
	B/C ratio	:	1.5
	Debt. Service coverage ratio	:	1.7
	Cost per kilowatt (1 USD =NRS 115)	:	1652.00

Photo:PPA signing with NEA