



jade

DRIVEN TO DO MORE



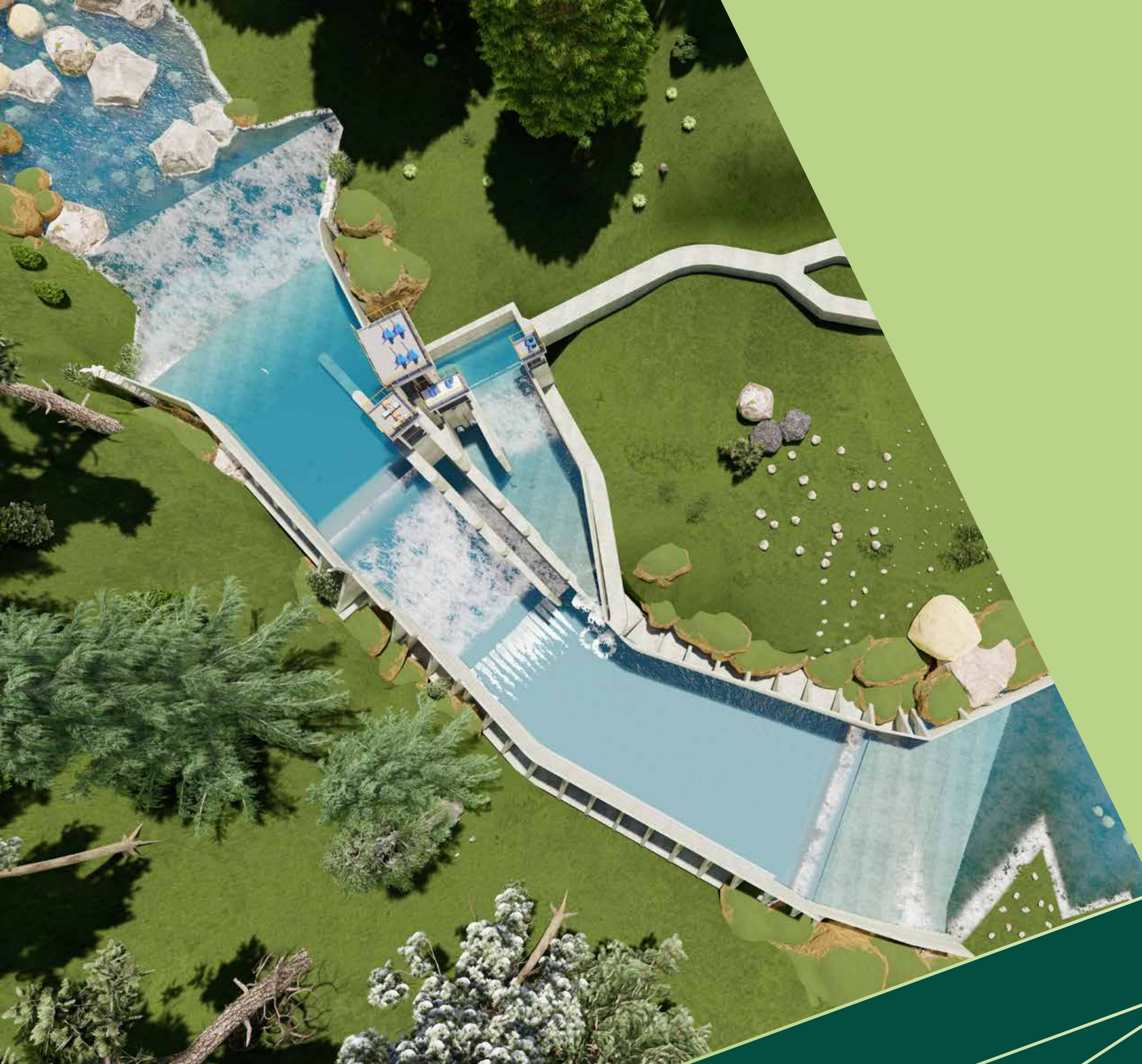


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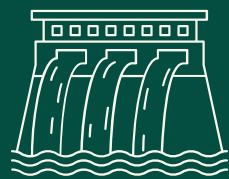
OUR STORY

Excellence in Comprehensive Solutions for Infrastructure Development

Jade Consult was established in 2001 with the aim of providing excellent consulting services for hydropower, transmission lines, roads, irrigation, water resources, and other civil infrastructure projects in the national and international markets.

We deliver comprehensive, integrated consulting solutions across every aspect of infrastructure development, offering our clients unmatched industry expertise and tailored engineering services.

We offer in-depth and on-the-ground insights with alternative solutions to help our clients drive their projects forward. Our team is passionate about tactfully managing challenging projects, going the extra mile, and doing whatever it takes to ensure project success. We are committed to prioritizing the most sustainable and least disruptive approaches in the work we do.



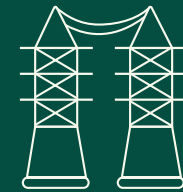
Hydropower Projects
11793 MW



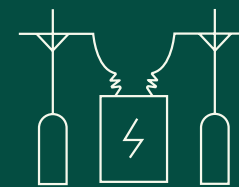
Transmission Line Projects
3923 KM



Distribution Lines
6961 KM



Transmission Substations
64



Distribution Substations
53



Road length
2024.86 KM



Tunnel length
92.29 KM



Tunnel Boring Machine
13.3 KM

We are the Pioneer Consulting firm in Nepal to work in:



› Detailed Design of the Highest Dam (263 m) in Nepal, Budhigandaki HEP

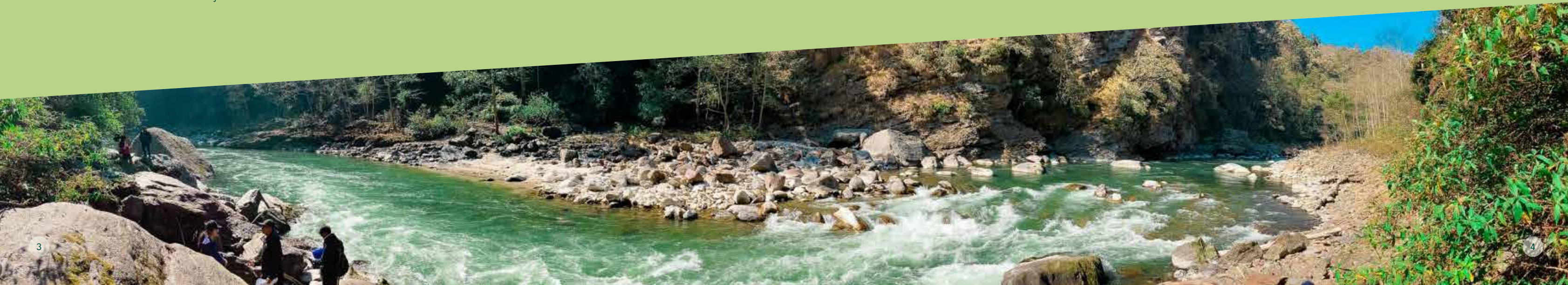
› The First Major Storage-Type Hydroelectric Project, Budhigandaki HEP (1200 MW).



› High Voltage (400 kV) Transmission Line in High Altitude (2,716 m), Tamakoshi (Khimti) – Kathmandu TL Project.

› Largest Foreign Direct Investment (FDI) in hydropower sector in Nepal till date, Upper Trishuli-1 HEP.

- › Tender Design, Preparation of Bidding Document, Construction Supervision and Post Construction Service for Upper Arun Hydro Electric Project (1063 MW)
- › Consultant/Engineer for Design Review and Construction Supervision of Electricity Distribution System - Extension & Upgradation.
- › Design Review, Construction Supervision, Quality Control, Project Management, Contract Management and related works for Construction with TBM, of Sunkoshi Main Diversion Project, a Multi-Sector Project with Hydro (31.07 MW) and Irrigation Components a National Pride Project.
- › Preparation of the Resettlement Action Plan (RAP) of 400 kV TL, SJVN Arun-3 Power Development Company Pvt. Ltd.
- › Feasibility and EIA Study of Kaligandaki Storage Hydropower Project (640 MW- Previously 844 MW)
- › Supervision of Construction of 400 kV Hetauda -Dhalkebar-Inaruwa TL Project.
- › Supervision of Construction and Commissioning of various 132 kV and 220 kV TL and Substation under SASEC Power System Expansion Project.
- › Supervision of Construction and commissioning of 220 kV Power Substation, Dhalkebar Substation and Khimti-Dhalkebar TL project.
- › Independent monitoring of implementation of Social and Environment safeguards during design, construction and operation phases. Review the periodic monitoring reports of Lower Kopili Hydroelectric Project (120 MW) Assam, India
- › Engineering and Supervision of the Construction of 220 kV Chilime-Trishuli TL and, Chilime Hub Substation and Trishuli 3B Hub Substation.
- › International Project, Review and Update of Detailed Project Report and Environmental & Social Impact Assessment of Bunakha Hydropower Project - Bhutan.
- › Environmental Impact Assessment (EIA) Study of Mugu Karnali Hydro Electric Project (1902 MW)



OUR VALUES

Unrelenting Client Commitment

We play a pivotal role in helping our clients to operate more effectively in reaching their goals. We consider our part in their success as a privilege and are willing to provide constant vigilance and unrelenting commitment it requires.



IMPACT DRIVEN VALUE

We are on a journey to devise ways to create positive impact through every decision, required every day to create value for our clients in helping them to navigate risks and opportunities that arise from solving sustainability challenges.

INTEGRITY WITHOUT COMPROMISE

Highest level of integrity in our work is fundamental to who we are. We give utmost importance to our reputation for which we follow ethical principles and are strongly committed to sustainable and responsible business practices.

PURPOSE BEYOND PROFIT

To us, being responsible in our business means managing our operations with ethics and integrity, and recognizing that our responsibilities extend into our value chain. But beyond that - we understand that the most significant societal contribution we make is through the work we do every day. It also means recognizing our responsibilities and opportunities to influence positive change.

OUR QUALITY POLICY

We are committed to provide excellent consultancy services for hydropower, transmission line, road and civil structure projects in national as well as international market, ensuring best quality services, complying with statutory and regulatory norms as well as requirements of our quality management system based on ISO 9001:2015 standard so that we fulfill the expectations of our customers and to increase the satisfaction level our clients.



Giving Back to Society

As part of our Corporate Social Responsibility (CSR), Jade is dedicated to supporting both physical and intellectual infrastructure development in Nepal.

SUPPORT TO EDUCATION

Jade has contributed to improving the physical infrastructure of Bangehide School in Bhaktapur. Additionally, we are supporting the school's educational efforts by funding teachers' salaries, helping ensure continued access to quality education.

PROMOTING RESEARCH & SUSTAINABILITY

Jade has provided financial assistance for the establishment of a Green Hydrogen Laboratory at Kathmandu University, aiming to promote research and innovation in sustainable energy solutions.

INVESTING IN FUTURE PROFESSIONALS

Through a partnership with Khopa Engineering College, Jade offers internship opportunities to two students each semester, equipping them with practical skills and sector-specific knowledge essential for their professional development.

INDUSTRY SPONSORSHIPS

Jade is proud to have sponsored leading professional organizations such as IPPAN (Independent Power Producers' Association, Nepal), Nepal Hydropower Association (NHA), and the Nepal Geological Society, supporting growth and collaboration within the energy and geoscience sectors.

OUR BUSINESS

Sectors We Work In

While Jade's expertise remains rooted in the energy sector, our extensive experience has enabled us to diversify and excel in additional areas of infrastructure development. Thus, we've expanded our ventures into various infrastructure development sectors such as roads, bridges, irrigation, water supply, operation and maintenance, project monitoring, and solar power, reflecting our versatility and commitment to meeting evolving market demands. Our core business revolves around projects related to:



Services We Provide

We are a leading consulting firm specializing in design, construction supervision, and environmental and social services. We enable our clients to identify and deliver value with speed, certainty, and strategic agility. Our team is adaptable, allowing us to provide tailored solutions and collaborate seamlessly with partner firms or within our clients' organizations. Through our integrated spectrum of engineering consulting services, we support clients in creating value and driving transformative change.

HYDROPOWER & DAMS



We are involved in over 80 hydro power projects, at different stages of development and of different range of installed capacity, from small projects of 1.55 MW to large projects of 1200 MW. Our involvement totals up to 11645 MW capacity. We provide all necessary technical support to hydropower developers.

TRANSMISSION LINE



We are the pioneers of transmission line consulting in Nepal, with nearly two decades of experience in high voltage transmission line systems of up to 400 kV. We are involved in transmission line projects ranging 33 kV/ 132 kV/ 220 kV/ 400 kV across the country comprising a total length of about 3923 km and 64 substations and 6196 km of distribution lines of 11 kV and 4 kV and 53 distribution substations.

ENVIRONMENTAL & SOCIAL STUDIES



We have successfully conducted EIA, prepared Land Acquisition and Resettlement & Rehabilitation Action Plan for prestigious projects like Budhigandaki Hydropower Project 1200 MW and Upper Trishuil-I Hydropower Project 216 MW and Resettlement & Rehabilitation Action Plan and supplementary IEE for 400 kV D/C Transmission Line of Arun-3 HPP 900MW.

ROAD & HIGHWAYS



We are involved in Survey, Feasibility Study, Detailed Design and Construction Supervision of several road projects ranging from rural roads to highways in diverse and difficult geographical terrains of Nepal.

PROJECT INCEPTION

PHASE

1

- > Pre-feasibility studies
- > Project Preparation
- > Pre investment studies

PROJECT FEASIBILITY

PHASE

2

- > Feasibility Study
- > Environment Study (EIA, IEE)
- > Social Study (SIA, LRP, IPP)
- > Impact Assessment
- > Geological Investigation
- > Technical Appraisal & evaluation
- > Hydrological, Meteriological and Sediment studies
- > Topographic Survey, Mapping & Allied Works

DESIGN PHASE

PHASE

3

- > Feasibility Study Review
- > Detailed Engineering Design
- > Tender Document Preparation
- > Tender Evaluation
- > Environment and Social Management Plan
- > Indigenous People Plan
- > Resettlement and Indigenous Peoples Plan
- > Biodiversity Action Plan
- > Indigenous Peoples Development Plan
- > Vulnerable Community Development Plan
- > Resettlement Action Plan
- > Land Acquisition and Compensation Plan
- > Stakeholder Engagement Plan

CONSTRUCTION PHASE

PHASE

4

- > Construction Supervision
- > Construction Planning & Cost Studies
- > Contract Management
- > Project Management
- > Due Diligence Audit
- > Bill Verification
- > Civil works or Technical, Environment and Social Monitoring
- > Owners Engineer

POST CONSTRUCTION PHASE

PHASE

5

- > Operation and Maintenance
- > Rehabilitation and Upgradation

OUR CLIENTS

Government/ Semi-Government Entities

- › Nepal Electricity Authority (NEA)
- › Ministry of Energy
- › Department of Electricity Development
- › Department of Water Resources and Irrigation
- › Department of Roads
- › Tamakoshi Jalvidyut Company Limited
- › Remit Hydro Ltd.
- › Budhi Gandaki Hydroelectric Project Development Committee
- › Rastriya Prasaran Grid Company Limited
- › Department of Hydrology and Meteorology (DHM)
- › Dhaubadi Iron Company Limited
- › Vidhyut Utpadan Company Limited
- › Millennium Challenge Account Nepal (MCA-Nepal)

National Private/Public Organizations

- › Nepal Water and Energy Development Company Pvt. Ltd.
- › Worldlink Communications
- › Urja Developers Pvt. Ltd
- › Vision Lumbini Urja Co. Ltd.
- › Paramount Construction Pvt. Ltd.
- › Sita Hydropower Company Pvt. Ltd.
- › Union Mewa Hydro Ltd.
- › Silk Power Private Ltd.
- › Isuwa Energy Pvt. Ltd.
- › Upper Seti Hydro Pvt. Ltd.
- › Chujung Khola Hydropower Co. Ltd.
- › Kabeli HP Dev. Co. P Ltd.
- › Surya Energy
- › Saptang Hydropower Pvt. Ltd.
- › Jhaymolonga Hydropower Company P. Ltd
- › Energy Venture P. Ltd.
- › Dudhkoshi Power Company Pvt. Ltd.
- › Himtal Hydropower Co.Ltd.
- › Hydro Vision Pvt.Ltd
- › Laxmi Bank
- › Global IME Bank
- › Himalayan Bank
- › Sanima Bank
- › Sunrise Bank
- › Bank of Kathmandu
- › Everest Bank
- › Siddhartha Bank
- › Machhapuchchhre Bank Ltd.
- › Super Bagmati Hydropower Pvt. Ltd.
- › Kumari Bank Limited
- › Crystal Hydro
- › Shaileshwari Power Nepal Pvt. Ltd.
- › Nepal Infrastructure Bank Limited
- › Aayu Malun Hydropower Pvt. Ltd
- › Citizens Bank International
- › Balephi Energy Pvt. Ltd.

International Financing Institutions

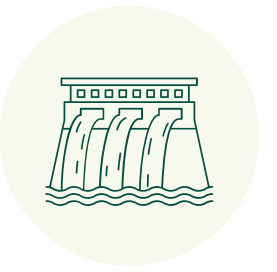
- › Asian Development Bank (ADB)
- › World Bank (WB)
- › Bank aus VerantWortung (KfW)
- › Japan International Cooperation Agency (JICA)
- › European Investment Bank (EIB)
- › International Finance Corporation (IFC)
- › Asian Infrastructure Investment Bank (AIIB)
- › British International Investment (BII)
- › Millennium Challenge Corporation (MCC)
- › Propraco-French Development Agency (AFD)
- › Export-Import Bank of Korea (KEXIM)
- › Korea Trade Insurance Corporation (K-SURE)
- › Dutch Entrepreneurial Development Bank (FMO)

International Organizations

- › Assam Electricity Grid Corporation Limited (AEGCL), India
- › Assam Power Generation Corporation Limited (APGCL), India
- › Electricite De France SA (EDF), France
- › GMR Group, India
- › NEWJEC Inc., Japan
- › Woonsun Energy & Construction Co. Ltd., South Korea
- › Gezhouba Group, China
- › Saman Engineering, Korea
- › Brasspower International, Brazil
- › Satluj Jal Vidyut Nigam (SJVN), India
- › Druk Green Corporation Limited, Bhutan
- › QYEC Construction Pvt. Ltd., China
- › Natinal Hydropower Corporation (NHPC), India
- › Henan Communications Planning & Design Institute Co., Ltd, China
- › Korea South East Power Company, South Korea
- › Daelim Industrial Company, South Korea
- › Kyeryong Construction Industrial Company, South Korea
- › Vensar Constructions Company, India

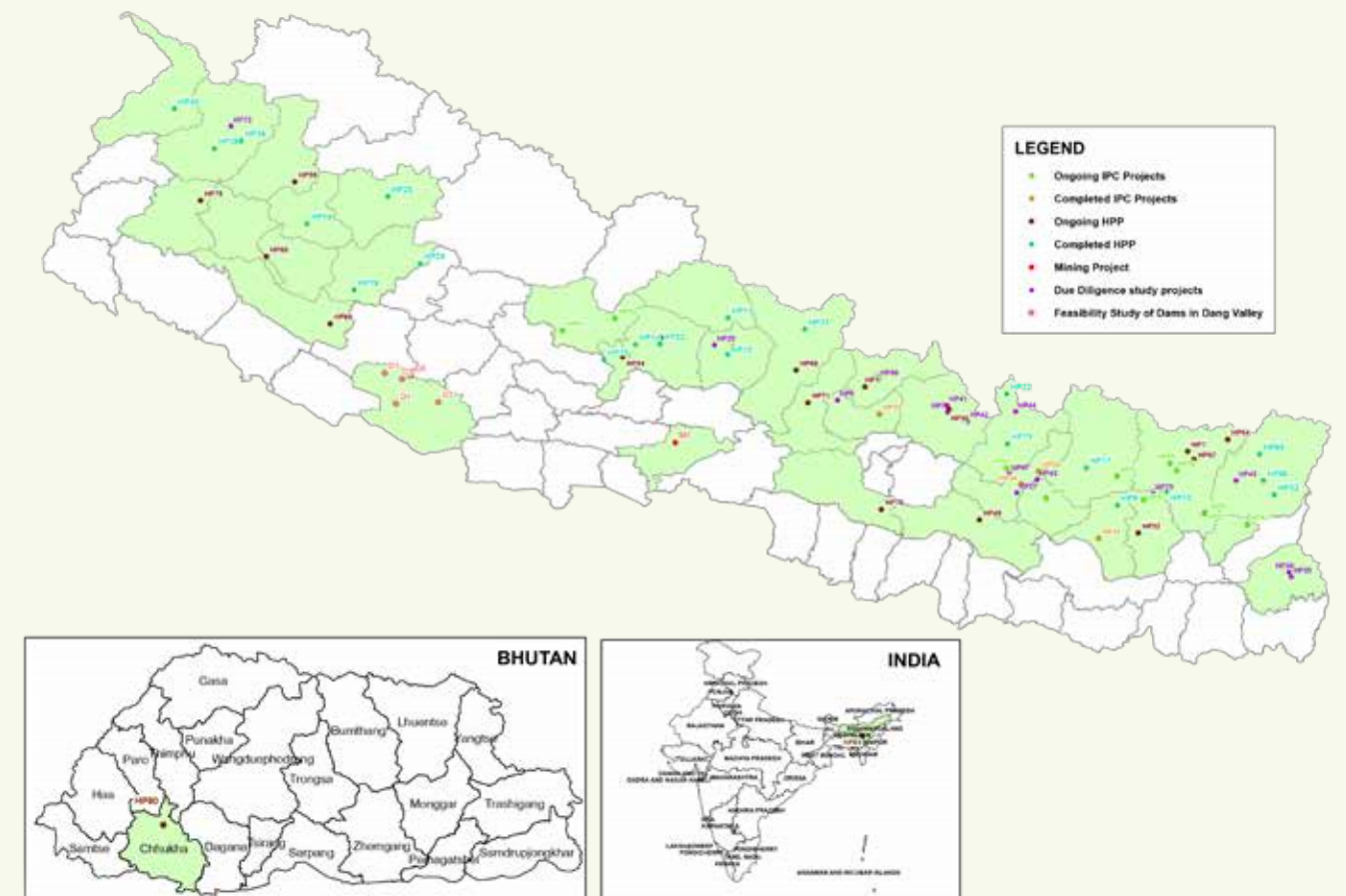
OUR WORK

Hydropower & Dams



We provide a full suite of services for hydropower projects, guiding them from the initial concept through to long-term operation. Our expertise begins with comprehensive pre-feasibility and feasibility studies, which include detailed environmental, social, hydrological, and geotechnical investigations to ensure project viability. We then proceed with meticulous detailed engineering design and tender document preparation, translating conceptual plans

into buildable blueprints. During the construction phase, we offer expert construction supervision, project management, and owner's engineer services to ensure quality, safety, and adherence to timelines. Finally, we provide post-construction support with services in operations and maintenance, as well as rehabilitation and upgrading to enhance performance and extend the asset's lifespan.



Completed Projects

HP-1 Upper Trishuli - 1 HEP (216 MW)

Client - Nepal Water and Energy Development Company Pvt. Ltd.

Works - Assistance in Preparation of Detailed Design, Drawings & Cost

Estimates Project investigation, Design and Detailed Feasibility Study.

Preparation of EIA, ToR Scoping and EIA report, Survey, Design and Drawing preparation of access road

HP-2 Upper Marshyangdi -2 Hydorelectric Project (125 MW)

Client - Himtal Hydropower Company P. Ltd.

Works - Feasibility Study and preparation of Terms of Reference and Scoping

Document of Environmental Impact Assessment

HP-5 Manang Marsyangdi Hydropower Project (144 MW)

Client - Marsyangdi Power Company P. Ltd.

Works - Design review, Cost review, financial analysis, preparation of construction schedule, Power and Energy calculation for Peaking RoR, Power Evacuation Study, facilitation of Grid Connection Agreement and Power Purchase Agreement

HP-6 Saptang Khola Small Hydropower Project (2.5 MW)

Client - Machhapuchhre Bank Limited

Works - Prepare Due Diligence Study Report, review and independent analysis of hydrology and geological study, review and independent assessment of installed capacity and energy generation, review and independent analysis of transmission plan, review of design parameters and criteria, verification of cost estimates, financial analysis

HP-7 Lower Barun Khola Hydropower Project (132 MW)

Client - Ampik Energy Pvt. Ltd.

Works - Geotechnical investigation that includes 265 m of core drilling and associated laboratory tests.

HP-8 Budhi Gandaki HPP (1200 MW)

Client - Budhigandaki Hydropower Development Committee

Works - Feasibility study, Detailed Design Report & Tender documents preparation and EIA Studies

HP-9 Rawa Khola HEP (6.5 MW)

Client - Dudh Koshi Power Company Pvt. Ltd.

Works - Detailed Engineering Design & Tender Documents Preparation

HP-10 Upper Marsyangadi-III HEP (121 MW)

Client - VA TECH Hydro, Switzerland

Works - Investigation, Detailed Feasibility Study of the project, which includes Topographical survey, Geological mapping & investigation, Hydrological analysis EIA study etc.

HP-11 Upper Marsyangadi-II HEP (125 MW)

Client - Himtal Hydropower Co. Pvt. Ltd

Works - Investigation, Design and Detailed Feasibility Study.

HP-11 Upper Marsyangadi-II HEP, Optimization (250MW)

Client - Himtal Hydropower Co. Pvt. Ltd

Works - Investigation of optimal plant capacity. Detail analysis of the project alternatives. Preparation of optimization study report.

HP-13 Lower Arun HEP (400 MW)

Client - Bras Power International, Brazil

Works - Hydrological gauging station establishment, Land Acquisition, Survey, Design and Drawing preparation for approximately 26 km long access road

HP-14 Upper Modi HEP (14 MW)

Client - GITEC Nepal Pvt. Ltd

Works - Upgrading and Detailed Feasibility Report and ACRP Report.

HP-15 Low Head Kaligandaki HEP (30 MW)

Client - Jade Power Pvt. Ltd.

Works - Inventory study & Preparation of Desk Study report

HP-16 Talkot Seti HEP (75 MW)

Client - H2O Hydropower

Works - Inventory study & Preparation of Desk Study report

HP-17 Deku Khola (3.4 MW)

Client - GCE Group Pvt. Ltd.

Works - Inventory study & Preparation of Desk Study report

HP-18 Tila HEP (500 MW)

Client - Tila Hydropower

Works - Inventory study & Preparation of Desk Study report

HP-19 Chhere Khola (12 MW)

Client - Jade Power Pvt. Ltd.

Works - Inventory study & Preparation of Desk Study report

HP-20 Phukot Karnali HEP (210 MW)

Client - PES Engineers Pvt. Ltd.

Works - Preparation of Desk Study report

HP-21 Upper Seti Hydropower Project (20 MW)

Client - Upper Seti Hydropower Pvt. Ltd.

Works - Feasibility Study including Field Investigation (Hydrological & Sedimentological Study, Geological Mapping, Topographical Survey)

HP-22 Upper Lapche Khola (52 MW)

Client - Energy Venture Pvt. Ltd.

Works - Review of Feasibility Study & Detail Project Report. Detail Engineering Design with reinforcement drawing. Preparation of Tender Documents

HP-23 Karuwa Hydropower Project (36 MW), Kaski

Client - Jhaymolonga Hydropower Company P. Ltd

Works - Detail design of all project structures including 3.5 km HRT, preparation of tender documents, survey and design of access road and transmission line, hydrological and sedimentological studies, geological mapping.

HP-24 Bheri-1 Hydropower Project (270 MW)

Client - Gezhouba Group Power Investment Nepal Pvt. Ltd.

Works - Review of Feasibility Study

HP-25 Jawa Khola HPP (17.2 MW)

Client - Department of Electricity Development

Works - Feasibility Study and IEE Study

HP-26 Tamakoshi V Hydroelectric Project (99.8 MW)

Client - Tamakoshi Jalvidyut Company Limited

Funding Agency - Asian Infrastructure Investment Bank

Works - To conduct and prepare Critical Habitat Assessment, Consultation and Partnership Building Strategy, Mitigation Strategies and Biodiversity Action Plan (BAP)

HP-26 Tamakoshi V Hydroelectric Project (99.8 MW)

Client - Tamakoshi Jalvidyut Company Limited

(Funded by Asian Infrastructure Investment Bank)

Works - Restructure Environmental Management Action Plan (EMAP), Stakeholder Engagement Plan, Monitoring Plan, Cumulative Impacts Assessment, Climate Change Assessment, Pollution control strategy, Public Health and Safety Strategy, Local employment strategy, Land acquisition and Livelihood Restoration Plan, Environmental Flows and Ecosystem Services Assessment, E&S actions to be implemented by the Developer, E&S specifications for the EPC contractor. Supplemental Environmental and Social Documentation (SES D)

HP-27 Lower Likhu HPP (28.1 MW)

Client - Consortium led by Laxmi Bank

Works - Due Diligence Study for Cost Overrun

HP-28 Upper Jeuligad Small Hydroelectric Project (4 MW)

Client - Woonsun Energy & Construction Co. Ltd., Seoul, Korea

Works - Feasibility study

HP-29 Upper Khudi Hydropower project (21.21 MW)

Developer - Super Khudi Hydropower Project

Client - Bank of Kathmandu

Works - Due Diligence Study.

HP-30 Sapsup Khola Small Hydropower Project (6.6 MW)

Developer - Three Star Hydropower Pvt. Ltd.

Client - Himalayan Bank Ltd.

Works - Technical Bill Verification and Progress monitoring

HP-31 Budhi Gandaki Nadi HEP (91.17 MW), Gorkha

Client - Surya Energy

Works - Detail Feasibility including field investigation (hydrological and sedimentological study, geological mapping, topographical survey) & EIA

HP-32 Kabeli-3 HEP (21.93 MW), Taplejung

Client - Kabeli HP Dev. Co. P Ltd

Works - Detail Design of all project structures such as headworks, headrace tunnel, penstock, powerhouse, camp facilities, access road including hydrological & sedimentological studies and geological mapping.

HP-33 Lower Tadi Khola HPP (5 MW)

Client - Consortium led by Siddhartha Bank

Works - Technical Consultant for Bill Verification Work & Progress Monitoring

HP-34 Likhu-IV Hydroelectric Project (52.4 MW)

Client - Consortium led by Laxmi Bank

Works - Technical Consultant for Bill Verification Work & Progress Monitoring

HP-35 Likhu-A Hydropower Project (24.2 MW)

Client - Consortium led by Laxmi Bank

Works - Technical Consultant for Bill Verification Work & Progress Monitoring

HP-36 Nyadi Hydropower Project (30 MW)

Client - Consortium led by Everest Bank

Works - Technical Consultant for Bill Verification Work & Progress Monitoring

HP-37 Mathillo Chujung Khola Hydropower Project (50.5 MW)

Client - Chujung Khola Hydropower Co. Ltd.

Works - Detail Feasibility Study including field investigation (Hydrological and sedimentological study, Geological mapping, Topographical survey) and Detail Engineering Design and Preparation of Tender document.

HP-38 Mai Beni Hydropower Project (9.51 MW) and HP-39 Lower Jogmai Khola Hydropower Project (6.2 MW)

Client - IFC

Works - Independent Engineering Services to Perform the Due Diligence

HP-40 Upper Chamelia HPP (53.85 MW)

Client - Department of Electricity Development

Works - Feasibility and Environmental Impact Assessment (EIA) study

HP-41 Upper Balephi HPP (46 MW)

Client - Laxmi Sunrise Bank Limited

Works - Due Diligence Study

HP-42 Bhotekoshi HPP (44 MW)

Client - Nepal Infrastructure Bank Limited

Works - Due Diligence Study

HP-43 Buku Khola HEP (6 MW)

Client - Himalayan Bank Limited

Works - Due Diligence Study

HP-44 Jum Khola Jalvidhyut Aayojana (56 MW)

Developer - Sanima Jum Hydropower Limited

Client - Nabil Bank Limited

Works - Due Diligence Study of the Jum Khola

HP-45 Middle Mewa (73.5 MW)

Client - IFC

Works - Due Diligence study, a high-level technical appraisal of the 3 hydro projects

HP-46 Irkhuwa Khola B HEP (15 MW)

Client - Laxmi Bank Ltd.

Works - Due Diligence Work

HP-47 Khimti-II HPP (48.8 MW)

Client - Sunrise Bank Ltd

Works - Due Diligence Study

HP-48 Langtang Khola HPP (20 MW)

Client - Sunrise Bank Ltd

Works - Due Diligence Study, Tehnical Consultant for Bill Verification Work & Progress Monitoring

HP-63 Mewa Khola Hydropower Project (24 MW)

Client - Union Mewa Hydro Ltd.

Works - Updated Feasibility Study, Detailed Project Report, Detailed Engineering Design and Preparation of Tender Documents along with 132 kV Transmission Line Study and Design of Project Road

HP-64 Mathillo Chhujung Khola Hydropower Project (50.5 MW)

Client - White Flower Energy Company Pvt. Ltd.

Works - Detail Feasibility Study including field investigation (Hydrological and sedimentological study, Geological mapping, Topographical survey)

HP-65 Super Tamor Khola HEP (166 MW)

Client - Crystal Power Development Limited

Works - Detailed Engineering Design and Preparation of Tender document.

HP-69 Upper Karnali HPP (900 MW), Achham Dailekh, Surkhet

Client - GMR

Works - E&S Baseline Data Collection, Downstream Impact Assessment and E-flow Assessment Study, Rapid Cumulative Impact Assessment (CIA)

HP-70 Sankhuwa Khola HEP (41.06 MW)

Client - Citizen Bank International Ltd.

Works - Due Diligence Study

HP-72 Balephi Khola HEP (40 MW)

Client - Balephi Energy Pvt. Ltd.

Works - Due Diligence Study

HP-73 Bajhang Upper Seti HPP (216 MW)

Client - Kumari Bank Ltd.

Works - Due Delligence Study

HP-75 Miwaje Khola HPP (5MW), Kaski

Client - Maa Durga Kali Hydropower Company Pvt. Ltd.

Works - Detailed Project Report (DPR)

HP-79 Tamakoshi-3 HEP (650 MW), Dolkha

Client - T-3 Hydro Company Pvt. Ltd.

Works - Pre-feasibility Study



Ongoing Projects

HP-1 Upper Trishuli - I Hydroelectric Project (216 MW)

Client - Nepal Water and Energy Development Company Pvt. Ltd

(Funded by IFC, ADB, AIB, K-EXIM, KDB, CDC, FMO, PROPARCO and OFID.)

Works - Owner's Engineer Services, Design Review, Construction Supervision, Contract Administration, Environmental & Social Safeguards Implementation & Compliance Monitoring

HP-7 Lower Barun (132 MW)

Client - Ampik Energy Pvt. Ltd.

Works - Detailed Design Works and Tender Document Preparation

HP-21 Upper Seti Hydropower Project (20 MW)

Client - Upper Seti Hydro Pvt. Ltd.

Works - Detail Design of all project structures including 2.51 km HRT, preparation of Tender Documents, survey & design of access road & Transmission line, hydrological & sedimentological studies, geological mapping.

HP-47 Khimti-2 Hydropower Project (48.8 MW)

Client - Consortium led by Sanima Bank

Works - Technical Consultant for Bill Verification Work & Progress Monitoring

HP-49 Sunkoshi Marin Diversion Multipurpose Project

Client - Department of Water Resources and Irrigation

Funding Agency: Government of Nepal

Works - The work involves design review, construction supervision, quality control, project management, construction and contract management

HP-50 Lower Kopili Hydroelectric Project (120 MW), Assam, India

Client - Assam Power Generation Corporation Limited (Funded by ADB)

Works - Independent monitoring of implementation of Social and Environment safeguards during design, construction and operation phases

HP-51 Mid Hongu Khola - A Hydropower Project (22 MW)

Client - Consortium led by Sanima Bank

Works - Technical Consultant for Bill Verification Work & Construction Monitoring

HP-52 Upper Piluwa Khola 3 Hydropower Project (4.95 MW)

Client - Consortium led by Laxmi Bank Limited

Works - Technical Consultant for Bill Verification Work & Progress Monitoring

HP-53 Rele Khola Hydropower Project (6 MW)

Client - Consortium led by Himalayan Bank

Works - Technical Consultant for Bill Verification Work & Progress Monitoring

HP-54 Kaligandaki Storage Hydropower Project (844 MW), Parbat & Myagdi District

Client - Department of Electricity Development

Works - Feasibility Study and Environmental Impact Assessment Study.

HP-55 Isuwa Khola Hydropower Project (97.2 MW)

Developer - KBNR Isuwa Power Ltd.

Client - Sanima Bank Ltd.

Works - Technical Bill Verification and Progress monitoring

HP-56 Nyasim Khola Hydropower Project (35 MW), Sindhupalchowk

Client - Sita Hydropower Company Pvt. Ltd.

Works - Project Management Consultant Service for Construction Supervision and partial design review.

HP-57 Upper Irkhuwa Khola HPP (14.5 MW)

Client - Consortium Led by Machhapuchchhre Bank Limited

Works - Technical Bill Verification and Progress monitoring

HP-58 Isuwa Khola PROR Cascade HPP (40.1 MW)

Client - Consortium Led by Siddhartha Bank Limited

Works - Technical Consultant for Bill Verification works and Progress Monitoring

HP-59 Mugu Karnali Storage Hydro Electric Project (1902 MW)

Client - Vidhyut Utpadan Company Limited

Works - Environmental Impact Assessment (EIA) Study

HP-60 Babai Mankhola Diversion Project (46.80 MW)

Client - Department of Water Resources and Irrigation

Works - Detail Feasibility Study

HP-61 Upper Myagdi-1 HPP (53.5 MW)

Client - Consortium Led by Sanima Bank Limited

Works - Technical Bill Verification and Progress monitoring

HP-62 Kabeli-A HEP (37.6 MW)

Client - Consortium Led by Kumari Bank Limited

Works - Technical Bill Verification and Progress monitoring

HP-66 Simbuwa Khola Hydroelectric Project, Taplejung District, Nepal (70.3 MW)

Client - Remit Hydro Ltd.

Works - Updating Feasibility Study, Conducting Detailed Engineering Survey & Design and Preparation of Tender Documents

HP-67 Upper Arun HPP (1040 MW)

Client - Upper Arun Hydroelectric Limited

Works - Tender Design, Construction Supervision, Post Construction Services

HP-68 Maccha Khola HPP (16 MW)

Client - Water Energy Development Private Limited

Works - Detail Engineering Design, Preparation of Tender Documents & Construction Drawings

HP-74 Super Lower Bagmati Hydropower Project (41.86 MW)

Client - Super Bagmati Hydropower Limited

Works - Construction Supervision including Design review and update

HP-77 Upper Tamor Hydropower Project (285 MW), Taplejung

Client - Tamor Energy Pvt. Ltd.

Works - Technical document review of underground works

HP-78 Upper Gaddi Gad Hydropower Project (1.55 MW), Doti

Client - Saileshwari Power Nepal Limited

Works - Technical Support

HP-80 Bunakha Hydropower Project (180 MW) - Bhutan

Client - Druk Green Power Corporation Limited (DGPC)

Funding - Agency Asian Development Bank (ADB)

Works - Review and Update of Detailed Project Report and Environmental and Social Impact Assessment

HP-81 Aayu Malun HPP (40 MW)

Client / Developer - Aayu Malun Hydropower Pvt. Ltd.

Works - Progress Monitoring and Bill Verification

HP-82 Upper Piluwa Hills Small Hydropower Project (4.99 MW)

Client / Developer - Milke Jaljale Hydropower Pvt. Ltd. and Laxmi

Sunrise Bank

Works - Progress Monitoring and Bill Verification

HP-83 Lower Hewa Khola HEP (22.1 MW)

Client - Mountain Hydro Nepal Ltd.

Works - Flood Damage Assessment

HP-84 Harsi Small Hydroelectric Project (2.4 MW)

Client - Vensar Constructions Company

Works - Tender Documents (Civil, HM, EM and TL), Detail Engineering Design, Construction Drawing, Design Review of HM, EM and TL

HP-85 Mohini Small Hydroelectric Project (1.2 MW)

Client - Vensar Constructions Company

Works - Tender Documents (Civil, HM, EM and TL), Detail Engineering Design, Construction Drawing, Design Review of HM, EM and TL



BUNAKHA HYDROELECTRIC PROJECT (120 MW) BUNAKHA/GELING, BHUTAN

The Bunakha HEP is a proposed 180 MW project located near the villages of Bunakha and Geling. The Project is envisioned to be the most-upstream component of a cascade of at least four projects along the Wangchhu River. The four projects are intended to operate in an integrated fashion, with Bunakha HEP serving as the large storage reservoir operating in a peaking fashion but providing more reliable dry season flows so as to increase the power generation of the three downstream projects by a total of 932 GWh per year.

Client : Druk Green Power Corporation Limited

Scope of Works : Review of existing DPR following the Bhutan Hydropower Guideline, Review the requirements for statutory clearances for implementation, Review the status of ancillary or associated infrastructure, Preparation of an ESIA report, Review of land requirement, Tendering processes

Project Info : Location - Bunakha and Geling village, Bhutan



SUNKOSHI MARIN DIVERSION MULTIPURPOSE PROJECT (SMDMP) (31.07 MW) SINDHULI, NEPAL

A National Pride Project of the Government of Nepal, SMDMP aims to generate hydropower and provide irrigation to the southern plains of Madhesh Province. The project includes construction of a barrage on the Sunkoshi River to divert 67 cumecs of water through a 13.1 km concrete-lined tunnel using a Tunnel Boring Machine (TBM). The water will be channeled to a surface powerhouse on the Marin River in Kusumtar, Kamalamai Municipality, Sindhuli District.

Client : Department of Water Resources and Irrigation under the Ministry of Energy, Water Resources and Irrigation, Government of Nepal

Scope of Works : Design review, construction supervision, quality control, project management, construction, and contract management

Project Info : Location - Sindhuli District



Tunnel Boring Machine ↙
Tunnel outlet ↘
Project Location ↓



KALIGANDAKI STORAGE HYDROPOWER PROJECT (844 MW) GULMI/PARBAT/BAGLUNG, WESTERN NEPAL

Located in western Nepal, the proposed Kaligandaki Storage Hydropower Project spans parts of Gulmi, Parbat, and Baglung districts within Lumbini Province and Gandak Province. The project has a catchment area of approximately 6,934.15 km² at its most downstream dam site. The most suitable dam location—allowing for a toe-of-dam power station—is about 2 km upstream of Setibeni, where the Kaligandaki River meets the Seti Khola. The project aims to enhance energy generation through water storage and regulated flow.

Client : Department of Electricity Development (DoED)

Scope of Works : Feasibility and Environmental Impact Assessment Study

Project Info : Location - Gulmi, Parbat, Baglung Districts

Geotechnical investigation (Borehole drill) being carried out at Dam Site →
Discharge measurement work at Purnighat hydrological station ↘
Dam location of Kaligandaki Storage HPP, view from d/s right bank ↓



UPPER TRISHULI-I HEP (216 MW) RASUWA, NEPAL

The project is located in Trishuli River of Rasuwa district having installed capacity of 216 MW with annual energy generation 1533.06 GWh in average year. The project consists of diversion weir with intake facility to withdraw design discharge of 76m³/s. UT-1 HEP is financed by the International Finance Corporation (IFC) along with eight international financing institutions: ADB, AIIB, K-EXIM, KDB, CDC, FMO, PROPARCO, and OFID. The electricity generated will be connected to the national grid via the Trishuli 3B Hub station.

Client : Nepal Water and Energy Development Company Pvt. Ltd.

Scope of Works : Feasibility Study, EIA Study, Detailed Design, Owner's Engineer

Project Info : Location - Rasuwa district Haku, Gogane and VDCs, Nearest highway: Pasang Lahmu Highway

Inspection of Transformer Cavern ↙
Excavated Tailrace trifurcation ↘
UT-1 Stator Lowering ↓



BUDHIGANDAKI HPP (1200 MW) GORKHA/DHADING, NEPAL

The Budhigandaki Hydropower Project is a large seasonal storage-type project located in Dhading and Gorkha Districts. The project features a 263 m high double curvature arch concrete dam with a gross reservoir capacity of 4,467 million m³. Strategically located near the main load center in Central Nepal, the project offers high energy potential and significant storage volume, making it vital for national power regulation. Power will be evacuated via the New Hetauda Substation and the proposed Naubise Substation. Jade Consult Pvt. Ltd., was involved in preparing the Feasibility Study, Detailed Design Report, and Tender Documents.

Client : Budhigandaki Hydropower Development Committee

Scope of works : Feasibility study, Detailed Design Report, EIA Studies - Approved

Project Info : Location - Dhading & Gorkha District, latitude 26° 22' to 30° 22' N & longitude 80° 4' to 88° 12' E, Nearest highway - Prithvi Highway
Reservoir - Gross capacity at FSL: 4467 mm³, Effective/Active storage capacity - 2226 mm³, Surface area at FSL - 63 km²

Bridge Construction at Benighat, Connects Gorkha and Dhading ↙
Total depth of 1836 m were drilled including 300m inside test adits →
Project location ↓



UPPER LAPCHE HPP (52 MW) DOLKHA, BAGMATI, NEPAL

The Upper Lapche Khola Hydropower Project is a 52 MW run-of-river (RoR) project located in Dolakha District. Electricity generated will be evacuated to the Singati Substation, approximately 36 km from the powerhouse. As a medium-sized project, it contributes significantly to Nepal's goal of becoming load-shedding free. Jade was responsible for preparing the project's Detailed Design Report and Tender Documents.

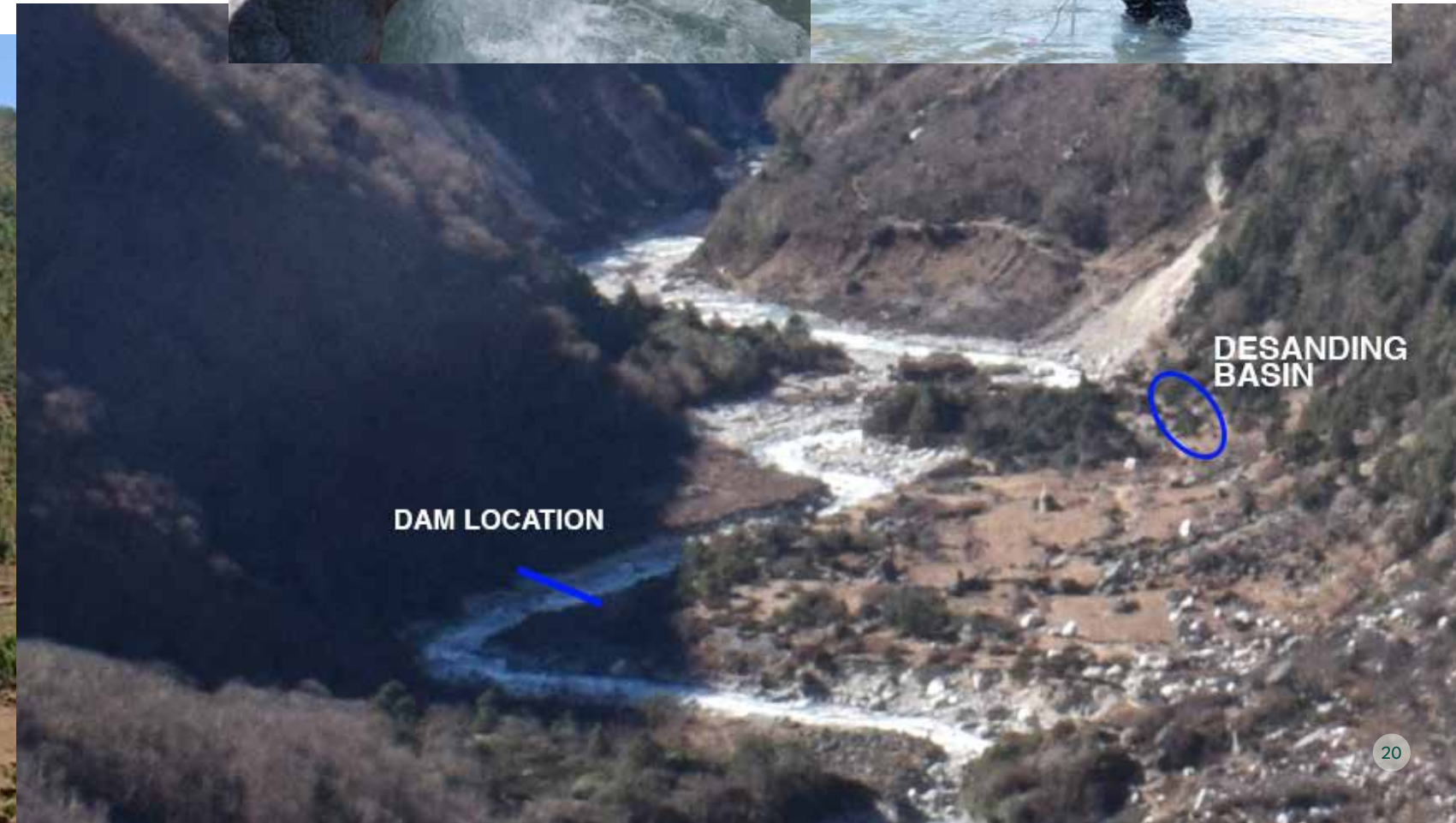
Client : Energy Venture Pvt. Ltd.

Scope of Works : Review of Feasibility Study and detail project report, Detail Engineering Design with reinforcement drawing, Preparation of Tender Documents

Project Info : Location - Dolakha District, Lamabagar VDC, Nearest highway - Kathmandu-Charikot



River confluence ↙
Discharge Measurement ↘
Proposed headworks location ↓



SIMBUWA KHOLA HEP (70.3 MW) TAPLEJUNG, KOSHI, NEPAL

The Simbuwa Khola Hydroelectric Project is a 70.34 MW run-of-river (RoR) project located in Faktanglung Rural Municipality (formerly Lelep and Tapethok VDCs) of Taplejung District, utilizing the flow of the Simbuwa Khola, a tributary of the Tamor River. The project has a gross head of 888.86 meters and a design discharge of 9.24 cumecs at 40% flow exceedance. Major components include a 5-meter-high, 17-meter long weir with two intakes (3.2 m × 2.5 m), an 80-meter-long two-chamber underground desanding basin, a 4.393 km headrace tunnel, and a 26-meter-high underground surge shaft. The design flow is directed towards the underground powerhouse through a 1.8 m diameter pressure shaft with three vertical drop of up to 300 m and 2710.42 m length. The project is expected to generate 378.96 GWh of electricity annually, which will be evacuated through the proposed Koshi Corridor to the Dhunge Sangu substation.

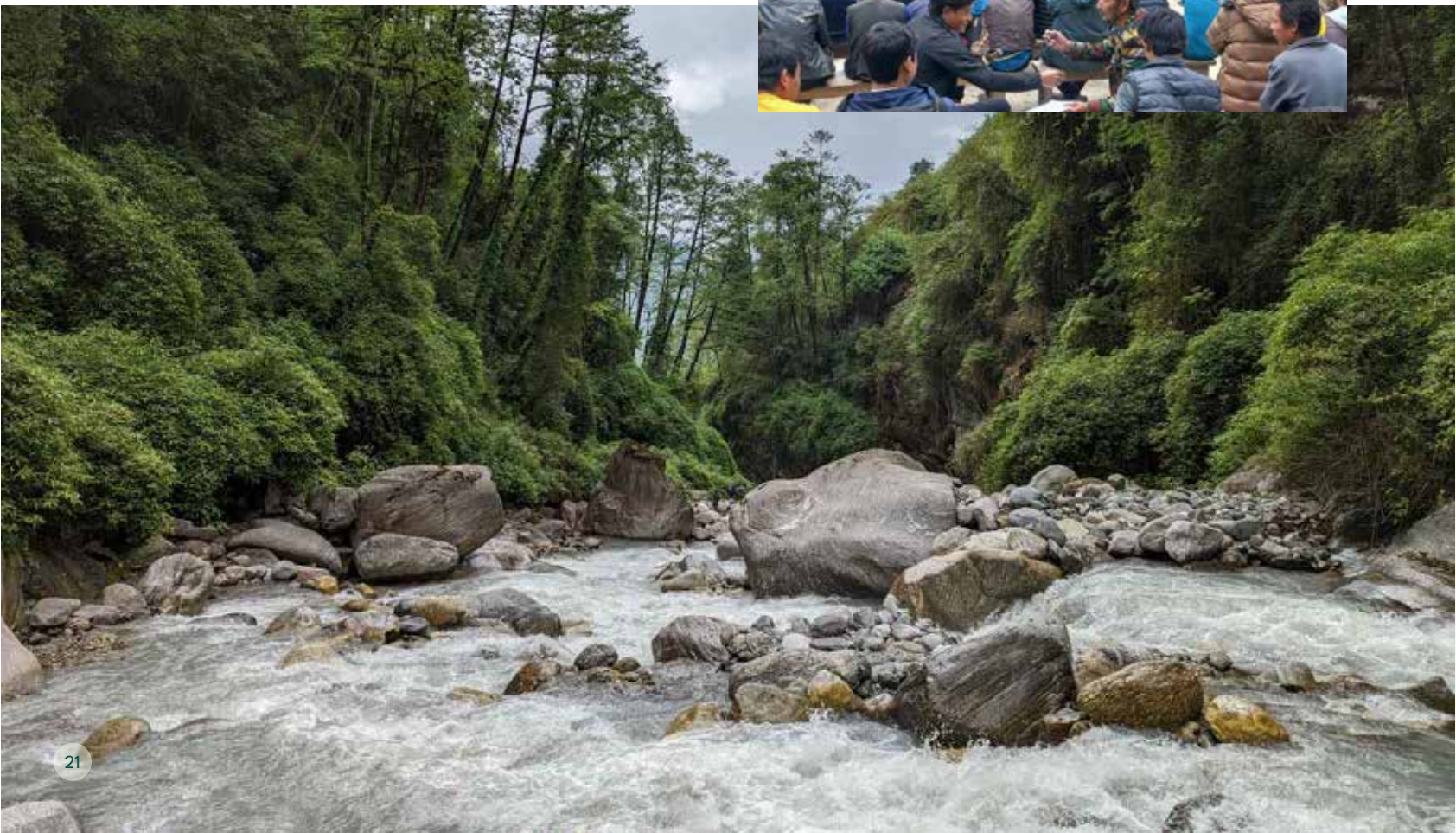
Client : Remit Hydro Ltd.

Scope of Works : Review and update of existing feasibility study, Detailed Engineering Survey & Design, Preparation of tender documents

Project Info : Location - Taplejung District, Nearest highway - Mechi Highway (Charali- Fungling Bazar)

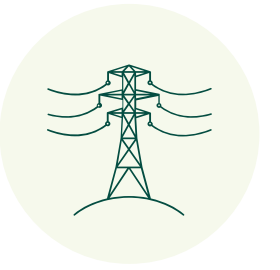


Proposed General Layout of Simbuwa Khola Hydropower Project ↗
Public hearing of SKHEP (70.3 MW) →
Weir axis ↓



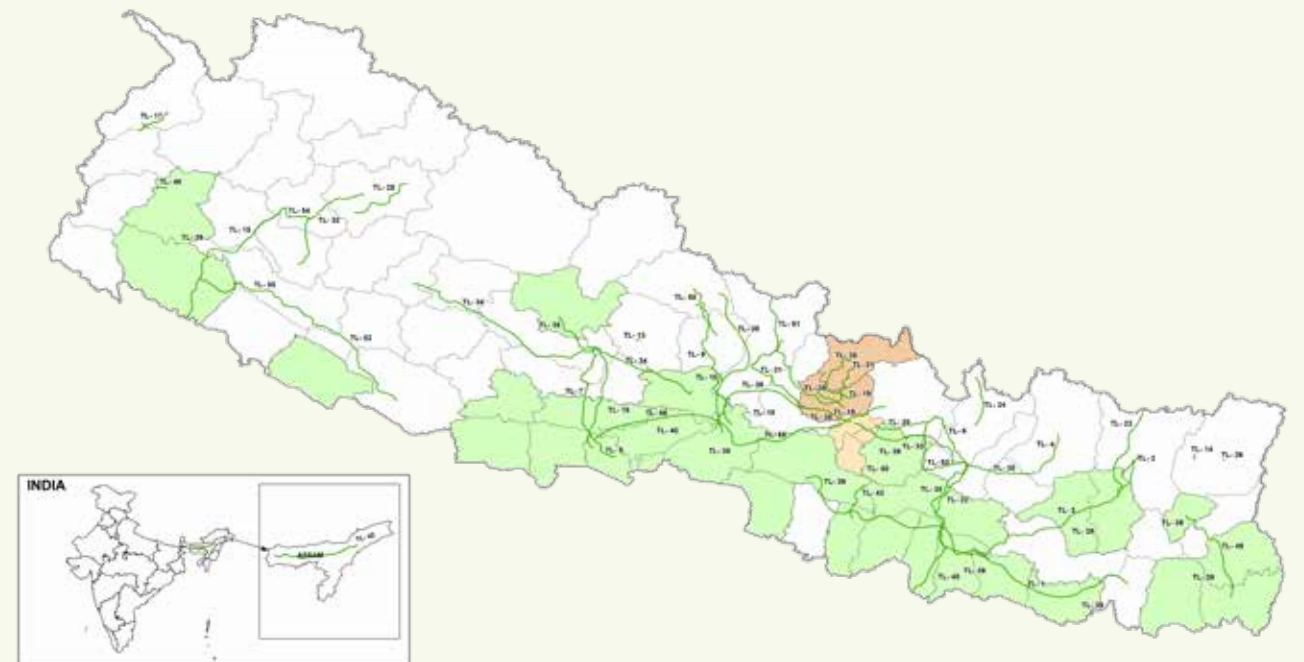
OUR WORK

Transmission Lines



For transmission line projects, we offer specialized services that cover every stage of development to ensure efficient and reliable power evacuation. Our work starts with pre-feasibility and feasibility studies, including route optimization, topographical surveys, and environmental and social impact assessments to identify the most sustainable and cost-effective corridors. We then deliver robust detailed engineering designs for towers, foundations, and line configurations, followed by the preparation of

comprehensive tender documents. Throughout the construction phase, we provide vigilant construction supervision and project management, ensuring that all work meets stringent safety and quality standards. Our services also extend to crucial aspects like land acquisition and compensation planning, and continuous technical, environmental, and social monitoring to guarantee compliance and successful project delivery.



Completed Projects

TL-1 Hetauda – Dhalkebar – Duhabi 400 kV Transmission Line Project

Client - Nepal Electricity Authority (NEA) (World Bank Fund)

Scope - Construction Supervision and Substation Design.

TL-2 220 kV Double Circuit Transmission line from Isuwa Khola PRoR Cascade Hydro Electric Project to 220 kV/132 kV Shitalpati Substation (IKHEP)

Client - Isuwa Energy Pvt. Ltd.

Works - Preparation of Feasibility Study & Tender Documents, Desk Study of Interconnection Point, Tower Spotting and Tower Optimization in PLS-CADD, Check Survey and Preparation of Tender Documents

TL-3 Resettlement and Rehabilitation (R & R) Plan preparation of 400 kV Double Circuit Transmission Line (length – 210 km)

Client - SJVN Arun-3 HPP Power Development Company (SAPDC)

Works - Cadastral Map Verification, Social and Environmental Survey, Preparation of Resettlement and Rehabilitation plan, Supplementary IEE , Detailed Survey & Design of Changed Portion of the 400 kV Transmission Line.

TL-3 Arun-3 HPP-33 kV TL Project

Client - SJVN Arun-3 Power Development Company P. Ltd.

Works - Survey & Investigation for Proposed 33 kV Transmission Line Preparation of IEE Report

TL-4 132 kV Single Circuit Transmission Line from Luja Khola Hydro Electric Project to 132 kV /33 kV Tingla (LJKHEP)

Client - Silk Power Pvt. Ltd.

Works - Tower Spotting & Tower Optimization in PLS-CADD, Check Survey, Preparation of Technical Specifications & Tender Documents

TL-5 132 kV Transmission Line of Langtang Khola Hydroelectric Project (20 MW), Rasuwa District

Client - Multi Energy Development Pvt. Ltd.

Works - Feasibility study and design of about 4.5 km, Single circuit 132 kV transmission line

SASEC (South Asia Sub regional Economic Cooperation) Power System Expansion Project-PPS

TL-6/ TL-7/TL-8 220 kV Kaligandaki Corridor TL Project

TL-9/ TL-10 220 kV Marsyangdi Corridor TL project

TL-11 220 kV Marsyangdi – Kathmandu TL Project

Client - Asian Development Bank (Implementing Agency-NEA)

Works - Assistance to NEA in preparing designs, technical specifications and bidding documents. Assistance to NEA in the bidding process and bid evaluation including preparation of technical and financial evaluation reports. Assistance to NEA in contract negotiation with the contractor until contract awarded and advance payment paid.

TL-15 Karmadev – Phukot 400 kV Double Circuit Karnali Corridor Transmission Line Project

Client - Rastriya Prasaran Grid Company Limited

Works - Detailed Engineering Design and Enviornmental Study of Transmission Line and Substations. Preparation of Technical Specifications and Tender Documents. Karmadev (Indo-Nepal Border – Phukot (Kalikot) is a 130 km double circuit line project, which also includes two 400 kV GIS substations at Phukot and Betan.

TL-17 Makarigad Gaun – Balanch 33 kV Transmission Line Project in Darchula district, Nepal.

Client - Hydro Vision Pvt. Ltd.

Works - Feasibility Study of 27 km, 33 kV Transmission Line including Topographic survey, Cost Estimation, Geographical and Geological Survey, Design and Project Component Optimization.

TL-18 Consulting Services for Detailed Survey and Updated Line Design for 30 km of Changes in 400 kV Transmission Line Route Alignment.

Client - Millennium Challenge Account Nepal (MCA-Nepal)

Works - Inception of the assignment, Detailed Field survey and preliminary engineering design, Geo-technical Investigation, Detailed Environmental and Social Assessment, Pegging activities and Preparation of final survey report.

TL-18 Consultant/Engineer for Design Review and Construction Supervision of Electricity Distribution System- Extension and Upgradation Procurement Ref. Number: MCA-N/ETP/QCBS/012

Client - Mellenium Challenge Account-Nepal (MCA-NEPAL)

Funding Agency - MCC-United States of America

Works - Consultant/Engineer for Design Review and Construction Supervision

TL-20 Consulting Services for Project Supervision Consultant (Phase II) – Electricity Transmission Expansion & Supply Improvement Project for TL 400 kV Tamakoshi (Khimti) – Kathmandu Transmission Line and associated Substations.

Client - NEA | Funding Agency - ADB

Works - Design review, quality monitoring, and construction supervision

TL-20 Tamakoshi (Khimti) – Kathmandu 220 kV/400 kV Transmission Line Project (Khimti-Barhabise 220 kV TL 44 and Barhabise - Kathmandu 400/220 kV TL -60 and associated substations

Client - Nepal Electricity Authority (NEA)

Funding Agency - (World Bank Fund)Works - Preparation of technical specifications and bidding documents, Support in bidding process, Supervision during construction, testing and commissioning, quality monitoring an construction supervision

TL-21 Upper Trishuli-I HEP 220 kV Transmission Line Project

Client - Nepal Water and Energy Development Co. Pvt. Ltd (NWEDC)

Works - Detail TL Survey and Design, and IEE Study

TL-22 Khimti Dhalkebar 220 kV Transmission Line Project

Client - Nepal Electricity Authority (NEA) (World Bank Fund)

Works - Consultancy for planning design, preparation of bidding document with detail specification, bid evaluation and contact negotiation, design review, quality assurance, construction supervision, contract management and knowledge transfer etc.

TL-23 Lower Arun – Dhalkebar 400 kV Transmission Line Project

Client - Lower Arun Hydroelectric Co. P. Ltd

Works - Desk Study

TL-28 Study for Environmental and Social Considerations for “The Project for Construction of Transmission and Distribution Network Development in Nepal”

Client - NEWJEC Inc, Japan (Funded by JICA)

Works - Environmental and social assessment for the construction of 132 kV/ 11 kV Birauta S/S including underground transmission line, preparation of IEE report including RAP.

TL- 40 SASEC (South Asia Sub regional Economic Cooperation) Power System Expansion Project-PSC

TL-6/ TL-7/ TL-8 220 kV Kaligandaki Corridor TL Project

TL-9/ TL-10 220 kV Marsyangdi Corridor TL project

TL-11 220 kV Marsyangdi – Kathmandu TL Project

TL-19 132 kV Samudratar Trishuli 3B Hub TL Project Distribution System Expansion in Eastern, Central, Western Nepal

Client - Asian Development Bank (Implementing Agency-NEA)

Works - Grid Substation Reinforcement Sub Project, Construction Supervision of Transmission Line & Substation

Ongoing Projects

TL-40 SASEC (South Asia Sub Regional Economic Cooperation) Power System Expansion Project-Project Supervision Consultant (PSC) (Phase-II)

TL-6/ TL-7/TL-8 220 kV Kaligandaki Corridor TL Project

TL-9/TL-10 220 kV Marsyangdi Corridor TL project

TL-11 220 kV Marsyangdi – Kathmandu TL Project

TL-19 132 kV Samudratar Trishuli 3B Hub TL Project

TL-39 Distribution System Expansion in Eastern, Central, Western Nepal Grid Substation Reinforcement Sub Project

Client - Asian Development Bank (Implementing Agency-NEA)

Works - Design Review and Construction Supervision of Transmission Line & Substation.

TL-20 Consulting Services for Project Supervision Consultant (Phase II) – Electricity Transmission Expansion & Supply Improvement Project for 400 kV Tamakoshi (Khimti) Kathmandu Transmission Line and associated Substations

Client - NEA

Funding Agency: ADB

Works - Design review, quality monitoring, and construction supervision

TL-30 Tingla Hub – Likhu Hub – New Khimti - Sunkoshi Hub – Dhalkebar 400 kV Transmission Line and Associated Substations

Client - Nepal Electricity Authority (Funded by ADB)

Works - Engineering and Environmental Study

TL-31 Budhigandaki Corridor (Philim-Gumda-Ratamate) 400 kV Transmission Line and 132 kV Dailekh-Kalikot-Jumla and Lam-oshangu-Kavre/Ramechhap Transmission Line and Associated Substations

Client - Nepal Electricity Authority (Funded by ADB)

Works - Engineering and Environmental Study

TL-34 Damauli – Kusma – Burtibang – Bafikot 400 kV Transmission Line and Associated Substations

Client - Nepal Electricity Authority (Funded by ADB)

Works - Engineering and Environmental Study

TL-35 Chilime – Trishuli 220 kV Transmission Line Project

Client - Nepal Electricity Authority (NEA), Nepal, funded by KfW, Germany

TL-29 Assessment for Private Sector Involvement in Power Transmission in The Asia Pacific Region

Client - IFC

Works - Identify specific domestic and cross-border transmission projects that could be considered for possible private sector investment, and prepare and propose amendments to already available tools, documents, and templates for supporting the structuring of these projects.

TL-57 Reconstruction and Improvement of Electricity in Earthquake affected Districts of Rasuwa & Nuwakot.

Client - Nepal Electricity Authority (Funded by KfW and EIB)

Works - Engineering Design, Bidding Document Preparation, Environmental and Social Studies & Construction Supervision

Works - Survey, Geotechnical Investigation, Preparation of technical specifications and bidding documents, Support in bidding process, Supervision during construction, testing and commissioning

TL-42 Assam Intra State Transmission System Enhancement Project

Client - Assam Electricity Grid Corporation Limited (AEGCL), India

Works - Consultancy Services for Project Implementation and Management Support, Design Review and Construction supervision of 1113 circuit km of 400 kV, 220 kV and 132 kV Transmission line, and 400/220 kV, 220/132/33 kV, 220/132 kV, 132/33 kV & 132/11 kV Substation with additional capacity of 5606 MVA.

TL-43 132 kV S/C Transmission Line of Super Lower Bagmati Hydropower Project

Client - Super Bagmati Hydropower Pvt. Ltd.

Works - Walkover survey, Detailed survey, Tower Spotting, Surface Geological Mapping, Bill of Quantity (BoQ), Technical Specification and Tender Document Preparation

TL-44 220 kV D/C Transmission Line of Manang Marsyangdi Hydroelectric Project

Client - Q.Y.E.C Construction Pvt. Ltd

Works - Feasibility study and design of 220 kV Double Circuit Transmission Line and IEE/EIA study of Transmission Line.

TL-51 Power Transmission and Distribution Efficiency Enhancement Project (PTDEEP)

Client - Nepal Electricity Authority (Funded by ADB)

Works - Bidding Document Preparation, Project Management & Construction Supervision of distribution networks and underground cabling works.

TL-52 Project supervision consulting services for the supervision of contracts under Nepal distribution system upgrade and expansion project (DSUEP-EIB)

Client - Nepal Electricity Authority (NEA)

Works - Design Review and Construction supervision in Lumbini and Sudurpaschhim province of Nepal and quality monitoring and implementation of environmental and social safeguards

ASSAM INTRA STATE TRANSMISSION SYSTEM ENHANCEMENT PROJECT

ASSAM, INDIA

We are working in Assam, India as an International Consultant to provide the Consulting Services for the Implementation and Management Support of Assam Intra State Transmission System Enhancement Project.

Client : Assam Electricity Grid Corporation Limited

Scope of Works : Project Implementation and Management Support

Project Info : Location - Assam, India



132 kV AIS to GIS conversion, GIS module erected at Gohpur site →
Gantry structure erection & Transformer installation under progress at
substation under AEGCL project Switchyard →
Equipment erection works under progress for AEGCL project ↓



POWER TRANSMISSION & DISTRIBUTION EFFICIENCY ENHANCEMENT PROJECT (PTDEEP)

Through this project we are providing consulting services aimed at strengthening and modernizing the Nepal's power infrastructure. Our scope of work includes demand forecasting and load flow studies, preparation of tender documents, assistance in tendering and awarding for enhancement of distribution networks in major urban centers of Nepal, as well as project management, construction supervision, and testing and commissioning of the substations and distribution network enhancements across major urban centers. These project span the districts of Kathmandu, Bhaktapur, Lalitpur, Kailali, Banke, Dang, Rupandehi, Kaski, Chitwan, Makwanpur, Parsa, Bara, Dhanusha, Sunsari, and Morang, covering mostly hilly and Terai regions.

Client : Nepal Electricity Authority
Funding Agency : Asian Development Bank

Scope of Works : Preparation of technical specification and bidding documents; support in bidding process; i. ensuring quality in project implementation ii. supervision during construction, testing and commissioning of the different sub projects, capacity Building of the NEA staff.

Project Info ; sub-projects - 220 kV Substation at Lapsipheidi and 132 kV Substation at Changunarayan, 132 kV Substations at Kathmandu Valley Enhancement of Distribution Network in Kathmandu, Delivery of Distribution Transformers, Enhancement of Distribution Networks in Major Urban Centers of Nepal



Site Levelling works on Phutung site →
132 kV GIS Erection at Changunarayan SS ↘
Observation of conformity SPT value at Phutung S-S ↓



CONSULTING SERVICES FOR DETAILED SURVEY AND UPDATED LINE DESIGN FOR 30 KM OF CHANGES IN 400 KV TRANSMISSION LINE ROUTE ALIGNMENT

The 400 kV Quad Moose Double Circuit Transmission Line project spans a total of 315 km, of which 90% of the routing was completed by a former consultant. However, due to stakeholder grievances, a 30 km section of the alignment required to be rerouted. Jade Consult has been engaged to undertake the survey and design of this remaining 10% (30 km), ensuring the development of a technically feasible, environmentally viable, and socially acceptable route that integrates seamlessly with the previously approved segments. The finalized alignment will form part of the complete transmission line corridor to be handed over to the Design and Build Contractor for execution.

Client : Millennium Challenge Account Nepal (MCA-Nepal)
Funding Agency : Millennium Challenge Corporation (MCC)

Scope of Works : Inception of the Assignment, Detailed Field Survey and Preliminary Engineering Design, Geotechnical Investigation, Detailed Environment & Social Assessment including Flood Risk Assessment, Pegging activities, Preparation of final survey report after finalization of route & site verification

Project Info : Length - approx. 33 km, Voltage Level - 400 kV, Circuit - Double Circuit, Tower - Tall and narrow base steel lattice towers, Conductor - ACSR Quad "MOOSE", Province - Bagmati, Gandaki, and Lumbini, District- Dhading, Nuwakot, Makawanpur, Tanahu, Chitwan, & Nawalparasi West

Site visit of Team leader and Civil engineer to supervise the survey work ↘
 Technical and E&S team of MCA-Nepal and JADE during Walkover Survey of change sections of TL ↙



KARMADEV (INDO-NEPAL BORDER) – PHUKOT (KALIKOT) 400 KV DOUBLE CIRCUIT KARNALI CORRIDOR TRANSMISSION LINE

Jade Consult, has successfully completed the Detailed Engineering Design and Environmental Study for a 400 kV transmission line spanning 120 km, along with the design of the 400/132 kV Phukot and Betan Substations. The infrastructure is designed to support a current carrying capacity of 2500 MW, playing a critical role in strengthening regional power transmission and enhancing grid reliability.

Client : Rastriya Prasaran Grid Company Ltd. (RPGCL)
Funding Agency : Government of Nepal (GoN)

Scope of Works : Inception Report, Detail Survey of Transmission Lines, Soil Exploration, Environment and Social Assessment, Detail Design of Transmission Lines, Detail Design of Substation, Preparation of Construction Plan, Bidding Documents & Cost Estimates and Economic/ Financial analysis

Project Info : Length - approx. 120 km, Voltage Level - 400 kV Double Circuit, Tower - Steel lattice towers, Conductor - ACSR Quad "MOOSE", Substations - 2 nos., 400/132 kV GIS Phukot and Betan Substation, Province - Karnali and Sudurpaschim, District - Kalikot, Achham, Surkhet and Kailali

Inset top : Terrain of transmission Line route →
 DGPS Survey Works ↘
 Location of 400/132 kV Phukot Substation ↓



TINGLA - NEW KHIMTI - SUNKOSHI - DHALKEBAR 400 KV TRANSMISSION LINE AND ASSOCIATED SUBSTATIONS (CP-1)

Jade Consult, is engaged in the development of high-capacity transmission infrastructure designed to strengthen the Integrated Nepal Power System (INPS). The transmission lines associated with this project traverse challenging terrain, spanning altitudes from 185.69 m to 2962.86 m, and are engineered to facilitate the evacuation of approximately 7.54 GW of electricity. This includes power generated from major hydropower projects such as Sunkoshi-2 (1110 MW), Khimti Shivalaya Storage HPP (1853 MW), Sunkoshi-3 (536 MW), and Dudhkoshi-2 Jaleswor (240 MW).

The initial scope was expanded to cover Lamahi – Chhinchu 400 kV TL Project, a route spanning altitude range from 249.07 m to 1111.93 m and is aimed at enhancing the capacity of Nepal’s national grid. The new 400 kV line will provide essential infrastructure to evacuate power from upcoming generation projects, supporting the reliable transmission of electricity and strengthening the overall Integrated Nepal Power System (INPS).

Client : Nepal Electricity Authority (NEA)
Funding Agency : Asian Development Bank (ADB)

Scope of Works : Desk Study and Walkover survey, Detail survey of TL & S/S including plan and profiling, tower schedule, tower spotting and optimization, Geotechnical Investigation, Detailed Design of Transmission Line and Substation, Environmental and Social Study, Preparation of Technical Specification, Cost Estimates & Bidding documents, Economic & Financial Analysis, & Preparation of Detailed Project Report

Project Info : CP-1: Length - 135 km (approx.) Location: Solukhumbu, Okhaldhunga, Dolakha, Sindhuli, & Dhanusha Districts. Substations: 400/220 kV Bay Extension Tingla Hub SS, 400 kV Bay Extension at New Khimti SS, 400/132 kV New Sunkoshi Hub SS, 400/132 kV Bay Extension Dhalkebar SS, Transmission Line: Section-1: Line connects Tingla Hub S/S with New Khimti S/S (55 km), Section-2: Line connects New Khimti S/S with Sunkoshi Hub S/S (40 km), Section-3: Line connects Sunkoshi Hub S/S with Dhalkebar S/S (40 km) Project Features under CP-1 Additional Scope : Length: 98.21 km (approx.) Location: Dang, Salyan, and Surkhet Districts Line connects 400 kV Lamahi S/S with 400 kV Chhinchu S/S

Sunkoshi River Crossing by proposed CP-1 TL Route Alignment ↘
132kV Transmission Line Crossing Near Lamahi Substation ↙
Tingla Hub Substation ↘



BUDHIGANDAKI CORRIDOR (PHILIM – GUMDA – RATAMATE) 400 KV TL DAILEKH – KALIKOT – JUMLA AND LAMOSHANGU – KAVRE/RAMECHHAP 132 KV TL AND ASSOCIATED SUBSTATIONS (CP-2)

The 400 kV and 132 kV transmission lines under this project are instrumental in enhancing the reliability and efficiency of Nepal’s power transmission network. They are designed to address the increasing electricity demand in key regions, including the Budhigandaki Basin, Sindhupalchowk, Kavrepalanchok, Ramechhap, as well as the remote districts of Dailekh, Kalikot, and Jumla. Jade Consult is contributing to this effort as part of a broader initiative to strengthen and expand the Integrated Nepal Power System (INPS).

The scope of Consulting Services under the CP-2 Project was expanded through an amendment to the Principal Contract, incorporating several key components. This extension includes the Engineering and Environmental Study for the New Khimti–Rakathum and Phukot–Ranchuli 132 kV Transmission Line Projects. In addition, it covers substation-related works such as the 132 kV bay extensions at New Khimti and Kavre/Ramechhap substations, as well as at Kalikot and Phukot substations. The amended scope also includes the development of new 400 kV substations at Motipur, Lamahi, Chhinchu, and New Attariya, further strengthening the national transmission infrastructure.

Client : Nepal Electricity Authority (NEA)
Funding Agency : Asian Development Bank (ADB)

Scope of Works : Desk study and walkover survey, Detail survey of TL including plan and profiling, tower schedule, Tower spotting and optimization, Geotechnical investigation, Detailed Design of Transmission Line and Substation, Environmental and Social Study, Preparation of Technical Specification, Cost Estimates & Bidding documents, Economic & Financial Analysis, & Preparation of Detailed Project Report

Project Info : CP-2 : Length: 205.4 km (approx.), Location -Sindhupalchowk, Ramechhap, Dhading, Nuwakot, Gorkha, Dailekh, Kalikot, and Jumla Districts, Substations - 400/132/33 kV Pokhatar (Gumda) GIS SS, 132/33/11 kV Kavre/Ramechhap AIS SS, 132/33/11 kV Kalikot GIS SS, 132/33/11 kV Jumla GIS SS, Bay extension at 400 kV Ratamate GIS SS, Bay extension at 132 kV Lamoshangu AIS SS, Bay extension at 132 kV Dailekh AIS SS, Transmission Line: Section-1: 132 kV TL connects Lamoshangu S/S with – Kavre/ Ramechhap S/S (38 km), Section-2: 400 kV TL connects Philim S/S with Gumda /S and with Ratamate S/S (85 km), Section-3: 132 kV TL Line connects Dailekh S/S with Kalikot S/S and with Jumla S/S (82 km)

Project Info : CP-2 Additional Scope: Length- 63 km (approx.) Location- Ramechhap District and Kalikot Districts, Substations: 400 (GIS) /220 (GIS)/132 (AIS) kV new GIS substation at Motipur as upgradation of existing 132/33/11kV Motipur substation, 400/220/132/33/11 kV New GIS substation at Lamahi, Chhinchu and Attariya (Daiji), Transmission Line: Section-1: 132 kV TL connects New Khimti S/S with – Kavre/ Ramechhap (Rakathum) S/S (28 km), Section-2: 132 kV TL Line connects Phukot S/S with Kalikot (Ranchuli) S/S and with Jumla S/S (35 km)

International Expert Visit for the TL Crossing near Lamoshangu SS →
Public Discussion during execution of Walkover Survey ↙



DAMAULI - KUSHMA - BAFIKOT 400 KV TL & ASSOCIATED SUBSTATIONS (CP-3)

The Damauli-Kusma-Bafikot 400 kV double circuit transmission line, spanning a length of 226 km and ranging in altitude from 315 m to 3308 m, is a key infrastructure project aimed at supporting Nepal's sustainable economic development. This line will enable reliable power evacuation from multiple hydropower plants located in the Kaligandaki Basin by enhancing electricity transmission efficiency, improving voltage stability, reducing technical losses, and strengthening the overall reliability of the national grid.

The scope of Consulting Services for the CP-3 Project was revised through an amendment to the Principal Contract. The extension includes the Engineering and Environmental Study of the Chhinchu-Dododhara-New Attariya 400 kV Double Circuit Transmission Line. This transmission line is designed to facilitate the evacuation of power generated in the Bheri corridor. The alignment spans altitudes ranging from 177.5 m to 1437.36 m.

Client : Nepal Electricity Authority (NEA)
Funding Agency : Asian Development Bank (ADB)

Scope of Works : Desk Study and Walkover survey, Detail survey of TL & S/S including plan and profiling, tower schedule, tower spotting and optimization, Geotechnical Investigation, Detailed Design of Transmission Line and Substation, Environmental and Social Study, Preparation of Technical Specification, Cost Estimates & Bidding documents, Economic & Financial Analysis, & Preparation of Detailed Project Report

Project Info : CP-3 : Length: 226 km (approx.), Location - Tanahun, Syangja, Kaski, Parbat, Baglung, Gulmi, East Rukum and West Rukum. Substations - 400 kV New Kushma SS, 400 kV New Bafikot SS, 400 kV Bay Extension at Damauli SS. Transmission Line: Section-1: Line connects Damauli S/S with Kusma S/S (78 km) Section-2: Line connects Kusma S/S with Bafikot S/S (148 km)

Project Info: CP-3 Additional scope, Length: 190.112 km (approx.), Location: Surkhet, Kailali, Dadeldhura, and Kanchanpur, Transmission Line: Section-1: Line connects Chhinchu S/S with Dododhara, S/S (90.240 km), Section-2: Line connects Dododhara S/S with New Attariya S/S (99.872 km)

Fixation of Bench Mark at Kusma Substation ↓
Surveyors marking location and noting data during survey at CP-3 Additional scope ↙
Public Hearing conducted for CP-3 at Bhume and Bafikot Rural Municipality ↘



HETAUDA-DHALKEBAR-DUHABI (400 KV) TRANSMISSION LINE PROJECT

This is Nepal's first high voltage cross border 400 kV transmission line project to reach the construction phase, marking a major milestone in the country's power sector development. Once commissioned, the line is expected to serve as the backbone of the Integrated Nepal Power System (INPS) for at least the next decade, significantly enhancing the reliability and capacity of the national grid.

Client : Nepal Electricity Authority (NEA)

Scope of Works : Owner's Engineer for Hetauda-Dhalkebar-Duhabi 400 kV TL Project, Design Check and Construction Supervision, Quality assurance and inspection, Supervision of installation, Testing & commissioning of Transmission Line works & Substation works.

Project Info : Route - Hetauda to Inaruwa via Dhalkebar (400 kV line) Length: 285 km, No. of Substations: 3 (220 kV of substations at Hetauda, Dhalkebar & Inaruwa), Highest Voltage Level TL Project of Nepal till date. Route Alignment passes through Makawanpur, Bara, Rautahat, Sarlahi, Mahottari, Dhanusa, Siraha, Saptari, Udayapur and Sunsari Districts. Voltage Level - 400 kV (initially will be charged at 220 kV), Circuit - Double, Total quantity of 400 kV double circuit towers: 792 nos., Conductor - ACSR Moose (Quad)

Tower Erection Work at Koshi River of HDD 400 kV TL →
Overall View of Inaruwa SS →
160 MVA, 220/132 kV Power Transformer Installed at Dhalkebar Substation ↘
Equipment Erection at Inaruwa SS ↓



CHILIME – TRISHULI (220 KV) TRANSMISSION LINE PROJECT

This transmission line passes through a very challenging terrain at a high altitude of 2,635 meters, making it one of the most difficult routes undertaken for a high-voltage transmission project to date. Once commissioned, the line will enable efficient evacuation of substantial power generated from the Trishuli and Chilime river basins, supplying bulk electricity to major load centers across Nepal, including Kathmandu.

Client : Nepal Electricity Authority (NEA), Nepal
Funding Agency: KfW, EIB

Scope of Works : Survey, Geotechnical Investigation, Preparation of technical specifications and bidding documents, Support in bidding process, Supervision during construction, testing and commissioning

Project Info: Chilime - Trishuli 220 kV Double Circuit Transmission Line (26.5 km), Number of Substation: 2 (220 kV Chilime Hub Substation and 220 kV Trishuli 3B Hub Substation), Rural Electrification (Neighborhood Support Program), 33/11 kV Substation at Dhunche VDC and/ or Kaule VDC, 33 kV Line and 11 kV Distribution lines

Proposed location of Trishuli 3B Hub substation and Trishuli River in right side ↘
Tower Erection of Multicircuit-31/2 of Chilime-Trishuli 220 kV TL →
Installation of 132kV GIS Bus-duct at Chilime Substation ↓



CONSULTING SERVICES FOR THE SUPERVISION OF NEPAL DISTRIBUTION SYSTEM UPGRADE AND EXPANSION PROJECT (DSUEP-EIB)

The Distribution System Upgrade and Expansion Project (DSUEP) aims to enhance the reliability, voltage stability, and coverage of electricity supply in Sudhuraschim and Lumbini Provinces. As part of the Government of Nepal's initiative to provide affordable electricity to all households by 2025, DSUEP will extend 33 kV and 11 kV distribution networks across the two provinces. The project includes the construction of 13 new 33/11 kV substations, installation of transformers, and the development of 133 km of 33 kV distribution lines to meet growing local demand and reduce power losses.

Client : Nepal Electricity Authority (NEA)
Funding Agency: European Investment Bank (EIB)

Scope of Works : Design Reviews and Drawings submittal of the Contractors, Construction Supervision and assist in Contract Management and Administration under Contract Packages; Implementation of Environmental & Social requirement in accordance with ESMPF; Capacity Building of NEA Staff

Project Info: Line Length - 109.023 km (33 kV), 1322.33 km (11 kV) and 2237.82 km (400 V), Location - Parasi, Rupandehi, Dang, Rolpa and Rukum East Districts under Lumbini Provinces and Baitadi, Bajura, and Bajhang Districts under Sudurpaschim Province. Substations: 33/11 kV, 3 MVA: Rukumkot, Kankri, Kolti, Budiganga, Kalanga, Bindrawan/Musya, and Sillegadha SS 33/11 kV, 6/8 MVA: Mangalapur, Marchawar, Hakui, Murkuti, and Bhaluwang SS 33/11 kV 12/16 MVA: Magalapur SS

← Landscaping work ongoing at Thabang, Rolpa
↙ Boundary Wall and Canal works ongoing at Mangalapur SS
↓ Proposed Land for Marchawar Substation which is still water logged



TAMAKOSHI (KHIMTI) – KATHMANDU (220 KV/400 KV) TRANSMISSION LINE PROJECT

This is Nepal's second 400 kV transmission line project currently under implementation. Once commissioned, the line will serve as a critical link between Kathmandu and Dhalkebar, a major hub for power import and export between Nepal and India.

Client : Nepal Electricity Authority

Scope of Works: Preparation of technical specifications and bidding documents, Support in bidding process, Supervision during construction, testing and commissioning

Project Info : Khimti – Barhabise –Haledi 400 kV/220 kV Double Circuit transmission line (90 km length), Haledi-Changunarayan 132 kV Double Circuit Transmission Line (10 km Length), Number of Substations: 3 (new 220 kV substations at Barhabise & Haledi), bay extension at Khimti and 1 new 132 kV substation at Changunarayan, LILO (Loop-in Loop-out) arrangement at proposed 132 kV Chagunarayan Substation for 132 kV Bhaktapur - Chapali Line



- ← Transformer installation completed at Barhabise S/S
- ↙ Site visit of Consultant Team Leader along with experts at Barhabise S/S
- ↘ 132 kV GIS hall installation works under progress for Barhabise S-S



SASEC (SOUTH ASIA SUBREGIONAL ECONOMIC COOPERATION) POWER SYSTEM EXPANSION PROJECT

The transmission line under this project will strengthen the Integrated Nepal Power System (INPS) across the Marsyangdi, Kaligandaki, and Trishuli River Basins. Additionally, the associated distribution system expansion initiatives will enhance the reliability and reach of the distribution network nationwide.

Client : Asian Development Bank

Implementing Agency : Nepal Electricity Authority (NEA)

Scope of Works : Assist NEA in preparing designs, technical specifications and bidding documents, Assist NEA in the bidding process and bid evaluation including preparation of technical and financial evaluation reports, Assist NEA in contract negotiation with the contractor until contract awarded and advance payment paid.

Project Info : Dana – Kusma 220 kV transmission line (40 km length), and substations at Dana & Kusma, Kusma – New Butwal 220 kV transmission line (88 km length), and substation at New Butwal, New Butwal – Bardaghat 400 kV transmission line (45 km length), and LILO of 132 kV Double Circuit Butwal- Bardaghat Transmission Line at New Butwal Substation. Markichowk- Matatirtha 220 kV transmission line (82 km length), and associated substation at Markichowk extension at Matatirtha. New Bharatpur- Markichowk- Udipur 220 kV transmission line (64 km length), and substation at Udipur, bay extension at New Bharatpur and Markichowk. Udipur -Khudi-Manang 220 kV transmission line (50 km length), and associated substations at Manang and bay extension at Udipur



- ← Overall view of 220/132 kV Dana Substation
- ↓ 220/132 kV New Bharatpur SS



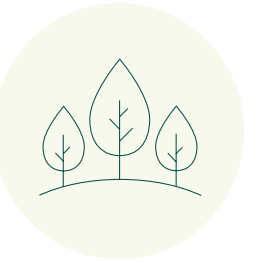
↳ Erected 12 kV VCB Panels at Aurahi SS
 ↳ Erection of GIS Hall and CRB at Markichowk Substation

↳ ADB site visit at Kushma SS
 ↳ GIS Installation work at 220 kV GIS Building at Bharatpur Substation



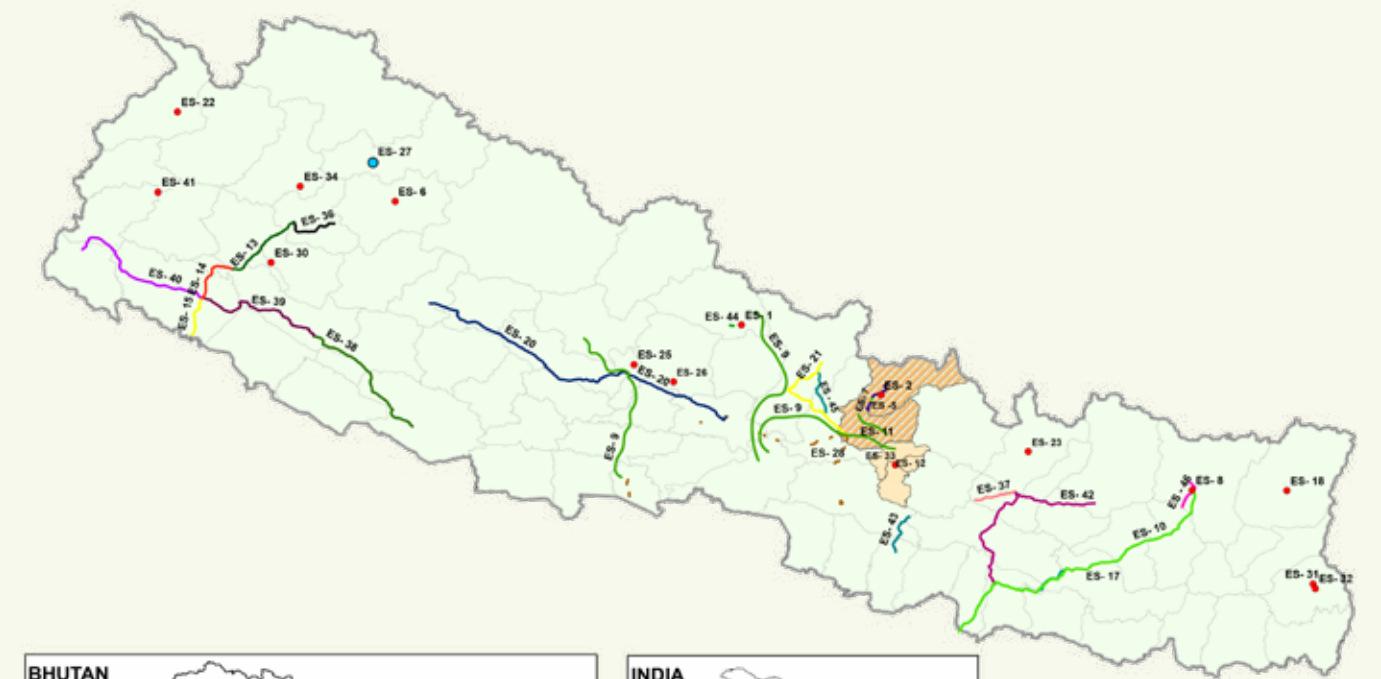
OUR WORK

Environmental & Social Studies



We provide environmental & social services for various infrastructure development projects. We conduct comprehensive environmental and social studies, these include Environmental and Social Impact Assessments (ESIA), Environmental Impact Assessments (EIA), Initial Environmental Examinations (IEE), and the preparation of specialized plans such as Biodiversity Action Plans

(BAP), Indigenous Peoples Development Plans (IPDP), Vulnerable Community Development Plans (VCDP), Resettlement Action Plans (RAP), Land Acquisition and Compensation Plans (LACP), Stakeholder Engagement Plans (SEP), and Environmental and Social Management Plans (ESMP), among others.



Completed Projects

ES-1 Upper Marshyangdi - 2 HEP (125 MW)

Client - Himtal Hydropower Company P. Ltd.

Works - Preparation of scoping document and TOR for Environmental Impact Assessment (EIA) Study.

ES-2 Upper Trishuli-1 HEP (216 MW)

Client - Nepal Water and Energy Development Company Pvt. Ltd

Works - Initial Environment Examination (IEE) Study, Base Line Study, Scoping and TOR documents for EIA, Environment Management Action Plan

ES-3 Budhi Gandaki Hydroelectric Project (1200 MW)

Client - Budhigandaki Hydropower Development Committee

Works - Environmental and Social Impact Assessment (ESIA) Studies

ES-5 Transmission Line of 220 kV for 216 MW Upper Trishuli - 1 HEP

Client - Nepal Water and Energy Development Company Pvt. Ltd

Works - Initial Environment Examination (IEE) Study

ES-6 Jawa Khola HPP (15.25 MW)

Client - Department of Electricity Development

Works - Initial Environment Examination (IEE) Study

ES-8 33 kV Transmission line for Arun -3 HPP (900 MW)

Client - SJVN Arun-3 HPP Power Development Company (SAPDC)

Works - Initial Environment Examination (IEE) Study and approval from GoN

ES-9 SASEC (South Asian Sub Regional Economic Cooperation) Power System Expansion Project (Total Project Cost: USD 440.5 Million)

Client - Asian Development Bank (Implementing Agency-NEA)

Works - Site inspection to monitor compliances (Environmental and Social), Review/update Environmental, Health Safety Plan, Prepare/review of Periodic Safeguard Monitoring Report (monthly, quarterly, semi-annual), Preparation of updated Resettlement and Indigenous Peoples' Plan

ES-10 Nepal Portion of (Diding- Dhalkebar- Indo Nepal border ast Bathana) of 400 kV Double Circuit Diding Nepal - Muzzafarpur India Transmission Line system for evacuation of power from Arun-3 HPP (210 km)

Client - SJVN Arun-3 HPP Power Development Company (SAPDC)

Works - Identification of land ownership detail, Social and Environmental Survey, Preparation of Supplementary Initial Environmental Examination of Changed Portion, Preparation of Resettlement Action Plan for the affected seven districts. Resettlement and Rehabilitation (R & R) Plan

ES-11 Reconstruction and Improvement of Electricity in Earthquake Affected Districts of Rasuwa and Nuwakot

Client - Nepal Electricity Authority

Funding Agency - KfW and EIB

Works - Bidding Document of Social Infrastructure Development Component, Environmental and Social Impact Assessment of transmission line (33 kV) and substation (33/11 kV), Environmental Impact Assessment of 33 kV TL and associated substation 33/11 kV

ES-13 Phukot-Betan 400 kV Double Circuit Transmission Line Project

Client - Rastriya Prasaran Grid Company Limited, Nepal

Works - IEE study of the Transmission Line as well as the Substation area and approval from GoN, Tree Cutting Plan, Cadastral Survey, SIA, Preparation and approval of Forest Clearance

ES-14 Betan-Dododhara 400 kV Double Circuit Transmission Line Project

Client - Rastriya Prasaran Grid Company Limited, Nepal

Works - IEE study of the Transmission Line as well as the Substation area and approval from GoN, Tree Cutting Plan, Cadastral Survey, SIA, Preparation and approval of Forest Clearance

ES-15 Dododhara-Karmadev 400 kV Double Circuit Transmission Line Project

Client - Rastriya Prasaran Grid Company Limited, Nepal

Works - IEE study of the Transmission Line as well as the Substation area and approval from GoN, Tree Cutting Plan, Cadastral Survey, SIA, Preparation and approval of Forest Clearance

ES-16 Consultancy Services for Green and Resilient Strategy for Nepal's Selected Highway Corridors

Client - World Bank

Works - Carry out a comprehensive strategic environmental and social assessment of both East West Highway and North South trade corridors and develop a Green and Resilient Strategy for Selected Highway Corridors in Nepal

ES-17 TA-9461 REG: Protecting and Investing in Natural Capital in Asia and the Pacific - Smart Infrastructure Planning and Design (Nepal)

Client - Asian Development Bank

Works - To conduct comprehensive and in-depth ecological studies in and around the project area for the Narayanghat-Hetauda-Pathlaiya road and to provide technical support and guidance for design and implementation of the wildlife mitigation measures and biodiversity conservation plan for the Narayanghat-Butwal road under the SASEC Road Improvement Project (SRIP) project as necessary.

ES-20 Damauli - Kusma - Burtibang - Bafikot 400 kV Transmission Line and Associated Substations

Client - Nepal Electricity Authority

Funding Agency - ADB

Works - Environmental and Social Study (Initial Environmental Examination, Social Impact Assessment, Resettlement and Indigenous Peoples' Plan, Environmental Management Plan, Tree Cutting Plan)

ES-21 Budhigandaki Corridor (Philim-Gumda-Ratamate) 400 kV Transmission Line and 132 kV Dailekh-Kalikot-Jumla and Lamoshangu- Kavre/Ramechhap Transmission Line and Associated Substations

Client - Nepal Electricity Authority

Funding Agency - ADB

Works - Environmental and Social Study (Initial Environmental Examination, Social Impact Assessment, Resettlement and Indigenous Peoples' Plan, Environmental Management Plan, Tree Cutting Plan)

ES-22 Upper Chameliya Hydropower Project (60 MW), Darchula District

Client - Department of Electricity Development

Works - Feasibility and Environmental Impact Assessment (EIA) study

ES-23 Preparation of Biodiversity Action Plan (BAP) for Tamakoshi Hydroelectric Project (99.8 MW)

Client - Tamakoshi Jalvidyut Company Limited

Funding Agency - Asian Infrastructure Investment Bank

Works - To conduct and prepare Critical Habitat Assessment, Consultation and Partnership Building Strategy, Mitigation Strategies and Biodiversity Action Plan

ES-24 Preparation of Supplemental Environmental and Social Documentation (SESD) for Tamakoshi V HEP (99.8 MW)

Client - Tamakoshi Jalvidyut Company Limited

Funding Agency - Asian Infrastructure Investment Bank

Works - Restructure Environmental Management Action Plan (EMAP), prepare Stakeholder Engagement Plan, prepare Monitoring Plan, conduct Cumulative Impacts Assessment, Climate Change Assessment, develop Pollution control strategy, develop Public Health and Safety Strategy, develop Local employment strategy, prepare Land acquisition and Livelihood Restoration Plan, Environmental Flows and Ecosystem Services Assessment, develop E&S actions to be implemented by the Developer, develop E&S specifications for the EPC contractor.

ES-26 Construction of the 132/11 kV Birauta Substation and 600 m underground cable line in Kaligandaki-Pokhara (Lekhnath) 132 kV Transmission Line Project

Client - NEA

Funding Agency - NEWJEC Inc, Japan JICA

Works - Environmental and social assessment for the construction of 132/11 kV Birauta S/S including underground transmission line, Preparation of IEE report including RAP

ES-27 Bathymetric and Topographic Survey of Rara Lake

Client - Department of Hydrology and Meteorology (DHM)

Works - The main objectives of this assignment are to carry out a detailed investigation of Rara Lake including its bathymetric survey, topographical survey, hydrological studies, sediment studies and water quality studies

ES-28 Consulting Services for Detailed Survey and updated Line Design for 30 km of Changes in 400 kV Transmission Line Route Alignment

Client - Millennium Challenge Account Nepal (MCA-Nepal)

Works - Detailed Environmental and Social Assessment including flood risk assessment.

ES-30 Upper Karnali Hydropower Project (HPP), Nepal

Client - EDF/GMR

Works - E&S Baseline Data Collection, Downstream Impact Assessment and E-flow Assessment Study, Rapid Cumulative Impact Assessment (CIA) for Collection of environmental and social baseline data, on Karnali River

ES-31 Mai Beni Hydropower Project (9.51 MW) and Lower Jogmai Khola Hydropower Project (6.2 MW)

Client - Urja Developers Pvt. Ltd

Works - Social Assessment and Biodiversity Assessment

ES-32 Lower Jogmai Khola Hydropower Project (6.2 MW)

Client - Urja Developers Pvt. Ltd

Works - Social Assessment and Biodiversity Assessment

ES-35 Mewa Khola Hydropower Project 23 MW

Client - Union Mewa Hydro Limited

Works - Initial Environment Examination (IEE)

ES-42 Tingla Hub - Likhu Hub - New Khimti - Sunkoshi Hub - Dhalkebar 400 kV Transmission Line and Associated Substations

Client - Nepal Electricity Authority

Funding Agency - ADB

Works - Environmental and Social Study (Initial Environmental Examination, Social Impact Assessment, Resettlement and Indigenous Peoples' Plan, Environmental Management Plan, Tree Cutting Plan)



Ongoing Projects

ES-2 Owner's Engineer Services for Upper Trishuli - I Hydroelectric Project (216 MW)

Client - Nepal Water and Energy Development Company Pvt. Ltd
Funding Agency - IFC, ADB, AIIB, K-EXIM, KDB, CDC, FMO, PROPARCO and OFID

Works - Environmental and Social Safeguards Implementation and Compliance Monitoring

ES-7 Chilime - Trishuli Transmission System Project (220 kV)

Client - Nepal Electricity Authority (NEA), Nepal,

Funding Agency - KfW, Germany

Works - Prepare updated Land Acquisition and Compensation Plan LACP, Environmental and Social Impact Assessment for Neighborhood Electrification Component, Updated Stakeholder Engagement Plan for 220 kV Chilime-Trishuli Transmission Line Project, Environmental and Social Management Plan for 220 kV Chilime-Trishuli Transmission Line Project

ES-12 Power Transmission and Distribution Efficiency Enhancement Project

Client - Nepal Electricity Authority

Funding Agency - ADB

Works - Preparation of Environmental Management Plan, Updated Resettlement Plan Report, Social Impact Assessment, and Indigenous People Plan, Periodic Safeguard Monitoring Report (semi-annual)

ES-18 Simbuwa Khola Hydroelectric Project (70.3 MW)

Client - Simbuwa Remit Hydro Limited

Works - Supplementary Environmental Impact Assessment, Land Acquisition and Compensation Plan

ES-25 Kaligandaki Storage Hydropower Project (844 MW)

Client - Department of Electricity Development (DoED)

Works - Environmental Impact Assessment (EIA) study

ES-29 Lower Kopili Hydroelectric Project (120 MW), Assam, India

Client - Assam Power Generation Corporation Limited

Funding Agency - ADB

Works - Independent monitoring of implementation of Social and Environment safeguards during design, construction and operation phases.

ES-33 Environment, Health & Safety (EHS) Specialist for Worldlink Communication Ltd.

Client - British International Investment (BII)

Works - The overall objective of the assignment is to provide support towards providing Environmental, Health & Safety and Social (EHSS) Specialist Advisory to WorldLink's (WL's) team in developing and implementing an EHSS Management System (EHSS MS), Preparing EHSS report, provide training related to health and safety, monthly monitoring of implementation of EHSS

ES-34 Mugu Karnali Storage Hydro Electric Project (MKHEP) (1902 MW)

Client - Vidhyut Utpadan Company Limited

Works - Environmental Impact Assessment (EIA) Study

ES-36 Phukot Rachuli 132 kV Transmission Line Project

Client - Nepal Electricity Authority

Funding Agency - ADB

Works - Environmental and Social Study (Initial Environmental Examination,

Social Impact Assessment, Resettlement and Indigenous Peoples' Plan, Environmental Management Plan, Tree Cutting Plan)

ES-37 New Khimti-Rakathum 132 kV Transmission Line Project

Client - Nepal Electricity Authority

Funding Agency - ADB

Works - Environmental and Social Study (Initial Environmental Examination, Social Impact Assessment, Resettlement and Indigenous Peoples' Plan, Environmental Management Plan, Tree Cutting Plan)

ES-38 Lamahi -Chhinchu 400 kV Transmission Line Project

Client - Nepal Electricity Authority

Funding Agency - ADB

Works - Environmental and Social Study (Initial Environmental Examination, Social Impact Assessment, Resettlement and Indigenous Peoples' Plan, Environmental Management Plan, Tree Cutting Plan)

ES-39 Chhinchu-Dododhara 400 kV Transmission Line Project

Client - Nepal Electricity Authority

Funding Agency - ADB

Works - Environmental and Social Study (Initial Environmental Examination, Social Impact Assessment, Resettlement and Indigenous Peoples' Plan, Environmental Management Plan, Tree Cutting Plan)

ES-40 Dododhara-New Atariya 400 kV Transmission Line Project

Client - Nepal Electricity Authority

Funding Agency - ADB

Works - Environmental and Social Study (Initial Environmental Examination, Social Impact Assessment, Resettlement and Indigenous Peoples' Plan, Environmental Management Plan, Tree Cutting Plan)

ES-41 West Seti Hydro Electric Project (WSHEP) (750 MW)

Client - NHPC Ltd.

Works - Environmental Impact Assessment (EIA) study

ES-43 132 kV TLP of Super Tallo Bagmati HEP

Client - Super Bagmati Hydropower Limited

Works - Initial Environment Examination (IEE) study for 132 kV TL

ES-44 220 kV Power Transmission Line project of Manang Marsyangdi Hydro Electric Project

Client - Manang Marsyangdi Hydropower Company Pvt. Ltd.

Works - Initial Environment Examination (IEE) study for 220 kV TL

ES-45 220 kV Transmission Line from Switchyard of Budhigandaki Ka HEP - Switch yard of Budhigandaki Kha HEP to Lapang SS

Client - Naulo Nepal Hydroelectric Pvt. Ltd.

Works - Initial Environment Examination (IEE) study for 220 kV TL

ES-46 Upper Apsuwa Khola HP - Sitalpati Substation 132 kV TLP

Client - Ram Janaki Hydropower Pvt. Ltd

Works - Initial Environment Examination (IEE) study for 132 kV TL

ES-47 Bunakha Hydropower Project (180 MW)

Client - Druk Green Power Corporation Limited (DGPC)

Funding agency - ADB

Works: Review and update of Detailed Project Report and Environment and Social Impact Assessment (ESIA)

MUGU KARNALI STORAGE HYDRO ELECTRIC PROJECT (MKHEP) (1902 MW) KARNALI, NEPAL

The Mugu Karnali Storage Hydroelectric Project (MKHEP), with a capacity of 1902 MW, is located in the upper reaches of the Karnali River. As the second-largest storage hydropower project among Nepal's six mega projects, MKHEP is poised to significantly boost the country's electricity generation capacity, thereby contributing to Nepal's social and economic development.

Client : Vidhyut Utpadan Company Limited

Scope of Works : Preparation of Environmental Impact Assessment (EIA) Study, Environmental Management Plan (EMP), Social Management Plan (SMP), Vulnerable Community Development Plan (VCDP), Indigenous Peoples Development Plan (IPDP), Gender Action Plan (GAP), Resettlement Action Plan (RAP)

Project Info : Construction of storage type 1902 MW capacity Hydropower, Rockfill dam with height 280 m, Crest level 1355 masl, FSL 1350 masl, Back water length 44 km



← Lab analysis of water samples



↙ District Level Consultation during Scoping Stage

↓ Noise Level Monitoring



LOWER KOPILI HYDROELECTRIC PROJECT

(120 MW) ASSAM, INDIA

The project harnesses the hydropower potential of the Kopili River, a southern tributary of the Brahmaputra River. The proposed Lower Kopili Hydroelectric Project (LKHEP) is a downstream development of the existing Kopili Hydroelectric Project. Situated in the Karbi Anglong and Dima Hasao districts of Assam. The project aims to utilize the regulated discharge from the Kopili HEP, spill flows from the Khandong and Umrong Dams, as well as runoff from the intermediate catchment area to optimize power generation.

Client : Assam Power Generation Corporation Limited (Funded by ADB)

Scope of Works : Independent monitoring of implementation of Social and Environment safeguards during design, construction and operation phases. Review the periodic monitoring reports

Project Info : Construction of Run-of-River Type 120 MW capacity Hydropower, Comprises a main plant rated at 110 MW (2X55 MW) and an auxiliary plant rated at 10 MW (1x5 MW+2x2.5 MW) at the toe of the dam

Plantation Area by the project ↙
 Consultation Meeting with ADB representatives and client ↘
 Nursery Development by the project ↓



BUDHI GANDAKI HYDROELECTRIC PROJECT (BGHPP)

(1200 MW) GORKHA/DHADING, NEPAL

The Budhi Gandaki Hydroelectric Project (BGHPP) is designed to address Nepal's peak energy demands, especially during the dry season when power shortages are most severe. As a storage-type facility, it optimizes electricity production to meet peak load requirements by coordinating water flows and power generation. This strategic operation targets peak demand periods on the Nepal Interconnected Network System (NINS), effectively mitigating the country's growing power deficit.

Client : Budhi Gandaki Hydroelectric Project Development Committee (funded by - Nepal Government)

Scope of Works : Preparation of Environmental and Social Impact Assessment Report, Preparation of Land Acquisition, Resettlement & Rehabilitation Action Plan, Preparation of Environmental Management Plan

Project Info : The BGHPP is the largest reservoir-based hydropower project ever planned and designed for construction in Nepal. A dam height of 263 m will create massive reservoir with a total area (including buffer zone) of 6639.29 ha with a storage capacity of 4467 Mm³ at FSL. In addition to the reservoir and dam, other major structural components of the project are a diversion tunnel, spillways, mid-level and low-level outlets, powerhouse and waterways, transmission lines and access roads to different facilities.

Environmenta & Social Impact →
 EIA-Public hearing ↓



UPPER CHAMELIYA HYDROPOWER PROJECT (UCHPP) (53.85 MW) DARCHULA, SUDURPASCHIM, NEPAL

The Upper Chameliya Hydropower Project (UCHPP) is a run-of-the-river (ROR) project situated in the Darchula District of Nepal. Its main goal is to help meet the country's increasing electricity demand, which has led to a rise in power imports from India over the past 15 years. The Department of Electricity Development, Government of Nepal, is spearheading the project's implementation and seeks to attract private sector investment due to financial constraints faced by entities such as the Nepal Electricity Authority (NEA) and the government.

Client : Department of Electricity Development (funded by - Nepal Government)

Scope of Works: Preparation of Environmental Impact Assessment Report

Project Info : Location Api Himnal Rural Municipality of Darchula District in Sudurpaschim Province of Nepal. The area is included within Api Nampa Conservation Area. The project boundary is at latitude 29°51'30" N to 29°54'30" N and longitude 80°53'43" E with elevation ranging from 2046 to 5077 masl. The total catchment area has been calculated as 194.21 km² with average annual precipitation of 2000 mm. Major structures of the project are Diversion Dam & Intake, Basin, Headrace Pipe, Surge Tank, Penstock Pipe, Powerhouse and Tailrace Canal. The powerhouse site is proposed at Lama Bagar of Lattinath VDC, Darchula district just on the confluence of Odkhet Khola and Chameliya River. The whole alignment runs along the left bank of the river.

KALIGANDAKI STORAGE HYDROPOWER PROJECT (KGSHP) (844 MW) GULMI/PARBAT/BAGLUNG, WESTERN NEPAL

The Kaligandaki Storage Hydropower Project (KGSHP) is designed to address Nepal's power crisis. Initiated in line with government initiatives such as the "National Electricity Crisis Resolution Action Plan" and the "10-Year Hydropower Development Task Force" established in 2008, the Department of Electricity Development (DoED) is assessing the feasibility of constructing storage-type power plants on the Kaligandaki River. The project also explores opportunities for multipurpose water use from the reservoir to maximize its benefits.

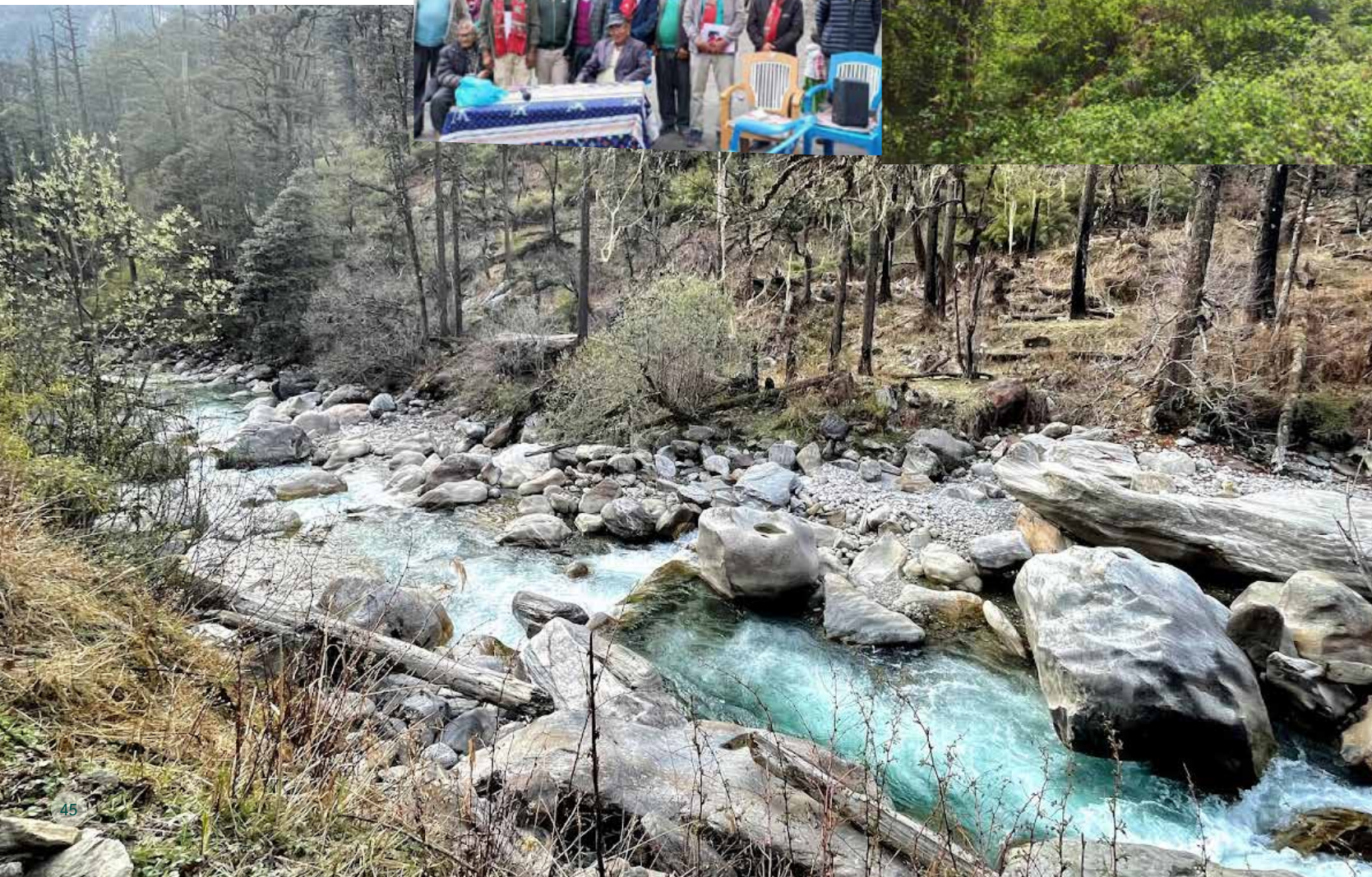
Client : Department of Electricity Development (funded by - GoN)

Scope of Works : Preparation of Environmental Impact Assessment Report

Project Info: The BGHPP is the largest reservoir-based hydropower project ever planned and designed for construction in Nepal. A dam height of 263 m will create a massive reservoir with a total area (including buffer zone) of 6639.29 ha with a storage capacity of 4467 Mm³ at FSL. In addition to the reservoir and dam, other major structural components of the project are a diversion tunnel, spillways, mid-level and low-level outlets, powerhouse and waterways, transmission lines and access roads to different facilities.

- ↘ Experts consultation with locals regarding use of medical plants in the project area
- ↙ Tree Sampling
- ↓ Experts terrestrial ecological survey at project affected Area

- Public Hearing ↘
- Adit area →
- Plantation Area by the project ↓



SIMBUWA KHOLA HYDROELECTRIC PROJECT (SKHEP)
(70.3 MW) TAPLEJUNG, KOSHI, NEPAL

The Simbuwa Khola Hydroelectric Project (SKHEP) is a 70.3 MW run-of-river project located in Taplejung District, Koshi Province, Nepal. Developed by Simbuwa Remit Hydro Limited (SRHL), the project harnesses the flow of the Simbuwa Khola and benefits from a high head due to the region's favorable topography. SRHL is a subsidiary of Hydroelectricity Investment Company Limited (HIDCL), a government-owned entity dedicated to advancing hydropower development in Nepal. The company's unique investment model focuses on channeling remittances from Nepali workers abroad into national hydroelectric projects.

Client : Simbuwa Remit Hydro Limited (funded by - Nepal Government)

Scope of Works : Preparation of Supplementary Environmental Impact Assessment, Preparation of Land Acquisition, Compensation Plan

Project Info : The major structures of the project are located on the left bank of Simbuwa Khola. It comprises a weir, under-sluice and appurtenant structures, river diversion tunnel (located on the right bank of Simbuwa Khola), side intake, approach tunnel, a 105 m long underground desanding basin with two chambers hopper type, a headrace tunnel of 4.41 km length, which will lead to a 37.5 m high surge tank. The design flow from the surge shaft will be directed towards the underground powerhouse through a 2.68 km long underground - penstock and pressure shaft. The powerhouse is underground, and is equipped with three Pelton units. Water will be released back to the Tamor river through a 287-m-long tailrace tunnel.



Lab analysis of water sample ↵
Water sampling monitoring at confluence point of Simbuwa River and Tamor River ←
Public hearing of SKHEP (70.3 MW) ↓



TINGLA HUB – LIKHU HUB – NEW K HIMTI – SUNKOSHI HUB – DHALKEBAR
400 KV TL AND ASSOCIATED SUBSTATION PROJECT (CP-1 AND CP-01)

The Tingla Hub – Likhu Hub – New Khimti – Sunkoshi Hub – Dhalkebar 400 kV Transmission Line and associated Substation Project represents the original scope of Consulting Package 1 (CP-1). An additional scope under the same consulting package includes the Lamahi–Chhinchu 400 kV Transmission Line and associated Substation Project, which forms part of the larger New Butwal–Lamahi–Kohalpur–New Attariya 400 kV Transmission Line Project.

Client : Nepal Electricity Authority (funded by - ADB)

Scope of Works : Preparation of Initial Environmental Examination of all transmission sections as per National Legislation, Preparation of Resettlement and Indigenous Peoples' Plan of all transmission sections as per ADB Requirement, Preparation of Environmental Management Plan of all transmission sections as per ADB Requirement, Preparation of Social Impact Assessment of all transmission sections as per ADB Requirement, Preparation of Tree Cutting Plan of all transmission sections

Project Info : TL - Tingla hub - New Khimti-Sunkoshi hub - Dhalkebar 400 kV Transmission Line and associated SS Project Length: 135 km, Voltage Level - 400 kV, Affected Districts: 5 (Solukhumbu, Okhaldhunga, Ramechhap, Sindhuli and Dhanusha) RoW of TL - 46 m (23 m right and 23 m left from center line), SS to be constructed under this project: Sunkoshi Hub SS

Additional scope TL - Lamahi-Chhinchhu 400kV Transmission line and associated SS Project Length: 98 km, Voltage Level: 400 kV, Affected Districts - 3 (Dang, Salyan and Surkhet), Right of Way - 46 m (23 m right and 23 m left from center line), SS to be constructed - Chhinchhu Substation.

Public hearing at Likhu-Tamakoshi RM ↵
Tree girth measurement ↵
Public hearing at Manthali, Ramechhap ↓



DAMAULI-KUSHMA-BAFIKOT 400KV TL & ASSOCIATED SUBSTATION PROJECT CP-3 (DKJ TLP) AND CP-01 (CD TLP & DNA TLP)

The Damauli-Kushma-Bafikot 400 kV Transmission Line and associated Substation Project constitutes the original scope of Consulting Package 3 (CP-3). The additional scope under CP-3 includes the Chhinchu-Dododhara and Dododhara-New Attariya 400 kV Transmission Lines and associated Substation Projects, which fall under the broader New Butwal-Lamahi-Kohalpur-New Attariya 400 kV Transmission Line Project.

Client : Nepal Electricity Authority (funded by - ADB)

Scope of Works : Preparation of Initial Environmental Examination of all transmission sections as per National Legislation, Preparation of Resettlement and Indigenous Peoples' Plan of all transmission sections as per ADB Requirement, Preparation of Environmental Management Plan of all transmission sections as per ADB Requirement, Preparation of Social Impact Assessment of all transmission sections as per ADB Requirement, Preparation of Tree Cutting Plan of all transmission sections

Project Info : Voltage level for all section - 400 kV, RoW for TL - 46 m (23 m right and 23 m left from center line), TL - Damauli-Kushma-Bafikot 400 kV TL and associated SS Project, Length: 226 km, Affected Districts: 8 (Tanahu, Kaski, Syangja, Parbat, Baglung, Gulmi, East and West Rukum), SS to be constructed - Kushma SS and Bafikot SS, Additional TL1 - Chhichhu-Dododhara 400 kV TLP Length - 100 km, Affected Districts - 3 (Surkhet and Kailali)

Additional TL 2 - Dododhara-New Atariya 400 kV TL and associated Substation Project, Length - 100 km, Affected Districts - 3 (Kailali, Dadeldhura and Kanchanpur) SS to be constructed - New Atariya SS

← Consultation Meeting with ADB representatives and client
 ↙ Plantation Area by the project
 ↓ Plantation Area by the project



BUDHIGANDAKI CORRIDOR (PHILIM-GUMDA-RATAMATE) 400 KV TL DAILEKH-KALIKOT-JUMLA AND LAMOSHANGU-KAVRE/RAMECHHAP 132 KV TL AND ASSOCIATED SUBSTATIONS PROJECT

The Budhigandaki Corridor (Philim-Gumda-Ratamate) 400 kV Transmission Line, the 132 kV Dailekh-Kalikot-Jumla Line, and the Lamosangu-Kavre/Ramechhap Transmission Line and associated Substation Projects form the original scope of Consulting Package 2 (CP-2). The additional scope under CP-2 includes the New Khimti-Rakathum and Phukot-Rachuli 132 kV Transmission Line Projects, further enhancing the transmission infrastructure in support of Nepal's expanding power network.

Client : Nepal Electricity Authority (funded by - ADB)

Scope of Works : Preparation of Initial Environmental Examination of all transmission sections as per National Legislation, Preparation of Resettlement and Indigenous Peoples' Plan of all transmission sections as per ADB Requirement, Preparation of Environmental Management Plan of all transmission sections as per ADB Requirement, Preparation of Social Impact Assessment of all transmission sections as per ADB Requirement, Preparation of Tree Cutting Plan of all transmission sections

Project Info : TL Section 1 - Budhigandaki Corridor (Philim-Gumda-Ratamate) 400 kV Transmission Line and associated Substation Project, Length - 85.06 km, Voltage Level - 400 kV, Affected Districts - 3 (Gorkha, Dhading and Nuwakot), RoW for TL - 46 m (23 m right and 23 m left from center line), SS to be constructed: Philim and Gumda SS, Voltage Level for all sections - 132 kV, RoW of TL - 18 m (9 m right and 9 m left from center line),

TL Section 2 - Lamosangu-Ramechhap/Kavre 132 kV TL and associated SS Project, Length: 38.267 km, Affected Districts: 3 (Sindhupalchowk, Kavrepalanchowk and Ramechhap) SS to be constructed under this project - Rakathum SS, TL Line Section 3: Dailekh-Kalikot-Jumla 132 kV TL and associated SS Project, Length - 82.14 km Affected Districts: 3 (Dailekh, Kalikot and Jumla), SS Jumla and Kalikot Substations,

Additional TL Section 1 - New Khimti-Rakathum 132 kV Transmission line Project, Length - 27.99 km, Affected Districts - 1 (Ramechhap),

Additional TL Section 2 - Phukot-Rachuli 132 kV Transmission line Project, Length - 34.68 km, Affected Districts - 1 (Kalikot)

↓ Dbh measurement
 ↙ Public hearing at Ward 03 of Tarkeshwar RM



KARMADEV (INDO-NEPAL BORDER)-PHUKOT (KALIKOT) 400KV DOUBLE CIRCUIT KARNALI CORRIDOR TL & ASSOCIATED SUBSTATIONS

The Karmadev (Indo-Nepal Border) – Phukot (Kalikot) 400 kV Double Circuit Karnali Corridor Transmission Line and associated Substations Project is designed to evacuate power generated in the Karnali River Basin. The line originates from the Phukot Substation in Kalikot District, passes through the Betan Substation in Surkhet District and the Dododhara Substation in Kailali District, and terminates at Karmadev, where a cross-border connection with India is proposed. This transmission line will play a crucial role in integrating Karnali Basin hydropower into the national grid and facilitating power export through the Indo-Nepal border.

Client :Rastriya Prasaran Grid Company Limited (funded by – Nepal Govt.)

Scope of Works :- Preparation of Initial Environmental Examination of all TL sections as per National Legislation, Preparation of Social Impact Assessment of all transmission sections as per ADB Requirement, Preparation of Tree Cutting Plan of all transmission sections

Project Info : Voltage Level for all sections - 400 kV, Right of Way of Transmission Line - 46 m (23 m right and 23 m left from center line),

TL Section 1 - Phukot-Betan 400 kV TL and associated Substation Project Length - 53.73 km, Affected Districts - 2 (Kalikot and Surkhet), SS to be constructed: Phukot Substation,

TL Section 2 - Betan-Dododhara 400 kV Transmission Line and associated SS Project, Length - 36.71 km, Affected Districts - 2 (Surkhet and Kailali), SS to be constructed - Betan Substation

TL Section 3 - Dododhara-Karmadev 400 kV Transmission Line and associated Substation Project, Length: 29.6 km, Affected Districts: 1(Kailali), SS to be constructed under this project: Dododhara SS

- ↖ Plantation Area by the project
- ↙ Public hearing at Ward no. 04 of Turmakhad RM
- ↓ Public hearing at Simal Khet, Ward No. 03 of Chaukune RM



CONSTRUCTION OF 132 KV BIRAUTA SUBSTATION AND 600 M UNDERGROUND CABLE LINE IN KALIGANDKI-POKHARA (LEKHNATH) 132 KV TL PROJECT

The project involves the construction of the 132/11 kV Birauta Substation and a 600-meter 132 kV underground transmission line. The Birauta Substation is planned to address the growing electricity demand of Pokhara City and will be energized through the existing Kaligandaki–Lekhnath 132 kV transmission line. As part of the assignment, an Initial Environmental Examination (IEE) report will be prepared in accordance with the prevailing laws of the Government of Nepal, specifically the Environment Protection Act, 2019 (EPA 2019) and the Environment Protection Regulation, 2020 (EPR 2020).

Client : NEWJEC/NEA (funded by – JICA)

Scope of Works : Preparation of Initial Environmental Examination Report as per National Legislation, Preparation of Resettlement Action Plan

Project Info : TL section - Construction of Birauta Substation and 600 m Underground cable line in Kaligandki-Lekhnath 132 kV Transmission Line Project, Length - 600 m 132 kV underground cable, Voltage Level - 132 kV, Affected Districts - 1 (Kaski), SS to be constructed - Birauta Substation

- ↙ Consultation
- ↘ Public Consultation in Birauta substation
- ↓ Ward Level Photo



RECONSTRUCTION AND IMPROVEMENT OF ELECTRICITY IN EARTHQUAKE AFFECTED DISTRICTS OF RASUWA AND NUWAKOT (RIEADRN) (5KM)

This project involves the construction of the 33/11 kV Kalikasthan Substation and a 5 km long 33 kV transmission line, implemented under the “Reconstruction and Improvement of Electricity in Earthquake Affected Districts of Rasuwa and Nuwakot” initiative. It serves as a subsidiary project of the Chilime–Trishuli 220 kV Transmission Line Project, aiming to electrify rural areas affected by the main project through the development of high-tension (HT) and low-tension (LT) distribution lines along with the substation. The assignment includes the preparation of an Initial Environmental Examination (IEE) Report in accordance with the Government of Nepal’s environmental regulations—specifically, the Environment Protection Act, 2019 (EPA 2019) and the Environment Protection Regulation, 2020 (EPR 2020).

Client : Nepal Electricity Authority (funded by – KfW Bank)

Scope of Works : Preparation of Initial Environmental Examination Report as per National Legislation, Preparation of Environmental and Social Management Plan as per funding agency requirements

Project Info : TL section - Trishuli 3B-Kalikasthan 33 kV Transmission Line Project, Length - 5 km, Voltage Level - 33 kV, Affected Districts - 2 (Rasuwa and Nuwakot), SS to be constructed - Kalikasthan Substation

Workshop ↘



OUR WORK

Roads & Highways



Jade Consult has extensive experience in survey, feasibility study, detailed design and construction supervision of road projects ranging from rural roads to highways in diverse and challenging geographical terrain across Nepal, including mountainous, hilly, and Terai regions.



Completed Projects

RO-1 Feasibility Study of Access Road (12 km) for Upper Marsyangdi-2 HEP, Manang and Lamjung Districts

Client - Himtal Hydropower Co.Ltd.

Works - Detailed survey, design, quantity and cost estimate, drawings.

RO-2 Feasibility Study of Access Road (18.8 km) for Upper Trishuli-1 HEP (216 MW)

Client - Nepal Water and Energy Development Company Pvt. Ltd.

Works - Detailed Survey, Design, Quality and Cost Estimation, Drawings

Ro-3 Detailed Design of Road in Sankhuwasabha District, Nepal

Road Length: 26 km

Works - Survey and Design,

RO-4 Detail Design of Access Road (15.3 km) for Upper Trishuli-1 HEP

Client- Saman Engineering, Korea

Works- Detail Design: Review of Basic Design which includes alignment study, standards and specifications, conduct engineering design of the permanent road and other facilities, carry out hydrological studies and cross drainage works, preparation of engineering drawings and reports, including necessary calculations and specifications, preparation of quantity estimation, recommendations for construction materials and disposal site

RO-5 Detailed Design of Road in Dolakha District, Nepal

Road Length: 32 km

Works - Detailed Designing

RO-6 Detailed Design and Survey of access road (12 km) for Kabeli -3 HEP

Client - Kabeli Hydropower Development. Co. P. Ltd.

Works - Detailed survey, preparation of detailed engineering design, quantity and cost estimate, drawings.

RO-7 Feasibility Study of Access Road (12.7 km) for Upper Seti Hydropower Project, Kaski District

Client - Upper Seti Hydro Pvt. Ltd.

Works - Detailed survey, design, quantity and cost estimate, drawings.

RO-8 Detailed Design of Road in Kaski District, Nepal

Road Length: 10.8 km

Works - Detailed Design

RO-10 Detailed Design and Survey of access road of about 14 km length from Jumla Khalanga Bazar to proposed headworks site of Jawa Khola Hydropower Project, Jumla District

Client - Department of Electricity Development

Works - Detailed survey, preparation of detailed engineering design, quantity and cost estimate, drawings.

RO-11 TA-9461 REG: Protecting & Investing in Natural Capital in Asia & the Pacific - Smart Infrastructure Planning & Design (Nepal)

Client - Asian Development Bank

Works - To conduct comprehensive and in-depth ecological studies in and around the project area for the Narayanghat-Hetauda-Pathlaiya road and to provide technical support and guidance for design and implementation

of the wildlife mitigation measures and biodiversity conservation plan for the Narayanghat-Butwal road under the SASEC Road Improvement Project (SRIP) project as necessary.

RO-12 Detailed Design of Access Road (29 km) for Simbuwa Khola Hydropower Project

Client - Remit Hydro Limited

Works - Detailed survey, preparation of detailed engineering design, quantity and cost estimate, drawings.

RO-14 Consultancy Services for Green and Resilient Strategy for Nepal's Selected Highway Corridors

Client - World Bank

Works - Carry out a comprehensive strategic environmental and social assessment of both East West Highway and North South trade corridors and develop a Green and Resilient Strategy for Selected Highway Corridors in Nepal.

RO-15 Feasibility Study of Tathali-Rabiopi Road Tunnel, Bhaktapur

Client - Department of Roads

Works - Feasibility Study

RO-18 Detailed Engineering Survey, DPR of Road Section/s under Contract Identification No. : PME/33701123/081/82/DPR-02

Client - Department of Roads, Planning and Monitoring Branch, Planning, Monitoring and Evaluation Section (PMES)

Works - Detailed Engineering Survey, Design and Report Preparation (DPR)

RO-19 Consulting Service of Mewa Khola Hydropower Project (23 MW) for Updated Feasibility Study, Detailed Project Report and Preparation of Tender Documents along with 132 kV Transmission Line Study and design of project road

Client - Union Mewa Hydro Limited

Works - Updated Feasibility Study, Detailed Project Report and Preparation of Tender Documents

RO-20 Access Road (11 km) for Budhi Gandaki Hydropower Project (1200 MW)

Client - Budhigandaki Hydroelectric Project Development Committee

Works - Feasibility Study Report, Detailed Engineering Design

RO-21 Access Road (13.46 km) for Super Tamor Hydroelectric Project (166 MW)

Client - Crytal Power Development Pvt Ltd

Works - Detailed Engineering Design

RO-22 Access Road (16 km) for Mathillo Chhujung Khola Hydropower Project in Sankhuwasabha

Client - White Flower Energy Company Private Limited

Works - Updated Feasibility Study Report, Detailed Engineering Design

RO-24 Access Road (6 km) for Miwaje Khola Hydropower Project (4.95 MW)

Client - Maa Durga Kali Hydropower Company Pvt Ltd

Works - Detailed Project Report



Ongoing Projects

RO-9 Detail Design of Access Road (8 km) for Upper Seti Hydropower Project (20 MW)

Client-Department of Roads, Nepal

Works-Detailed Survey, preparation of detailed engineering design, quantity and cost estimate, drawings

RO-13 Feasibility study of Access Road (26 km) for Kaligandaki Storage Hydropower Project

Client - Department of Electricity Development

Works - Detailed survey, design, quantity and cost estimate, drawings.

RO-17 Upgradation of Narayanghat-Butwal Road (115 km) under ADB SASEC Road Improvement Project (SRIP)

Client - GCE

Funding Agency - Asian Development Bank (ADB)

Works - Technical, legal, environmental and social advisory services

RO-23 Access Road (3.4 km) for Machha Khola Hydropower Project Gorkha

Client - Water Energy Development Pvt Ltd

Works - Detailed Project Report

RO-25 Access Road (4.5 km) for Pikhuwa Khola Hydropower Project (8.64 MW)

Client - Aspire Power Company Pvt Ltd

Works - Detailed Project Report, Detailed Engineering Design

RO-26 Access Road (6 km) for Gurja Khola Hydropower Project (8.46 MW)

Client - Abdhi Urja Pvt Ltd

Works - Feasibility Study Report, Detailed Project Report, Detailed Engineering Design, IEE

RO-27 Access Road (2.42 km) for Middle Gaddi Gad Hydropower Project (1.99 MW)

Client - Echo Tech Power Pvt Ltd

Works - Feasibility Study Report, Detailed Engineering Design, IEE, Construction Supervision

RO-29 Access Road (21.5 km) for Sunkoshi Marin Diversion Project (31MW)

Client - GoN

Works - Construction Supervision

RO-30 Access Road (38.2 km) for Upper Arun Hydropower Project (1040 MW)

Client - Upper Arun Hydroelectric Limited (UAHEL)

Works - "Tender Design, Preparation of Bidding Document, Construction Supervision and Post Construction Services"

RO-31 Access Road (6.2 km) for Super Bagmati PRoR HEP (19.25 MW)

Client - Alite Power Pvt Ltd

Works - Feasibility Study Report

FEASIBILITY STUDY OF TATHALI-RABIOPI ROAD TUNNEL

The Thathali-Rabiopi Road Tunnel is proposed for construction in Bhaktapur District, Bagmati Province, with the primary objective of enhancing connectivity for the people of Bhaktapur, Nuwakot, Sindhupalchowk, Kavrepalanchowk, and Kathmandu districts. The tunnel is expected to contribute to balanced urban development by promoting the growth of Panchkhal as a secondary urban center, potentially easing population pressure in the densely populated Kathmandu Valley. Additionally, the tunnel will significantly reduce travel distance along the Araniko Highway toward the China border at Kodari, as well as improve access to the Mid-Hill Highway from the Kathmandu Valley.

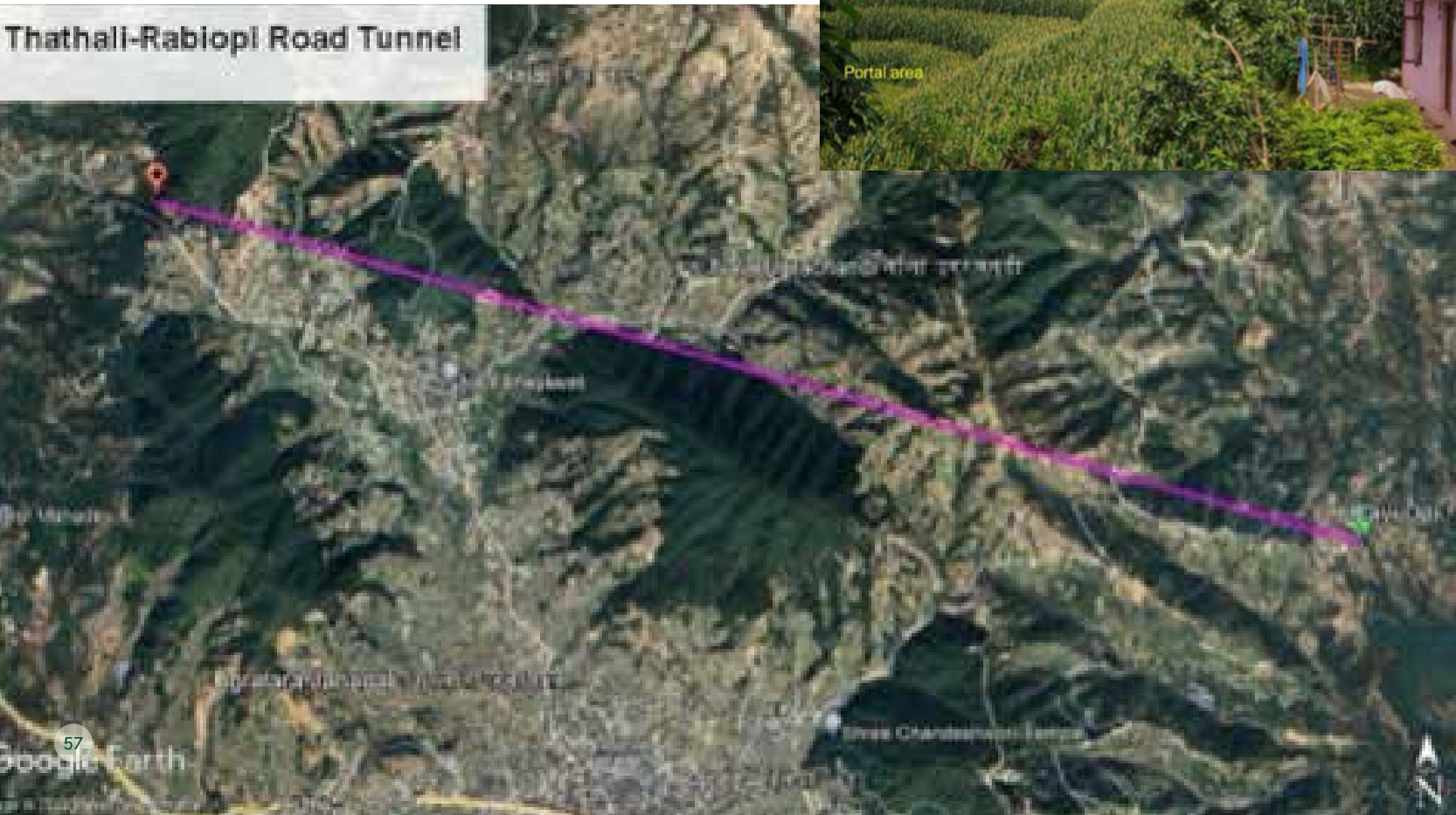
Client : Department of Roads (DOR), Nepal

Scope of Works : Conduct the feasibility study of the Thathali-Rabiopi Road Tunnel to be constructed under DB or EPC Model.

Google Earth image of proposed Thathali-Rabiopi Road Tunnel ↓
Kholasi area at Rabiopi →



Thathali-Rabiopi Road Tunnel



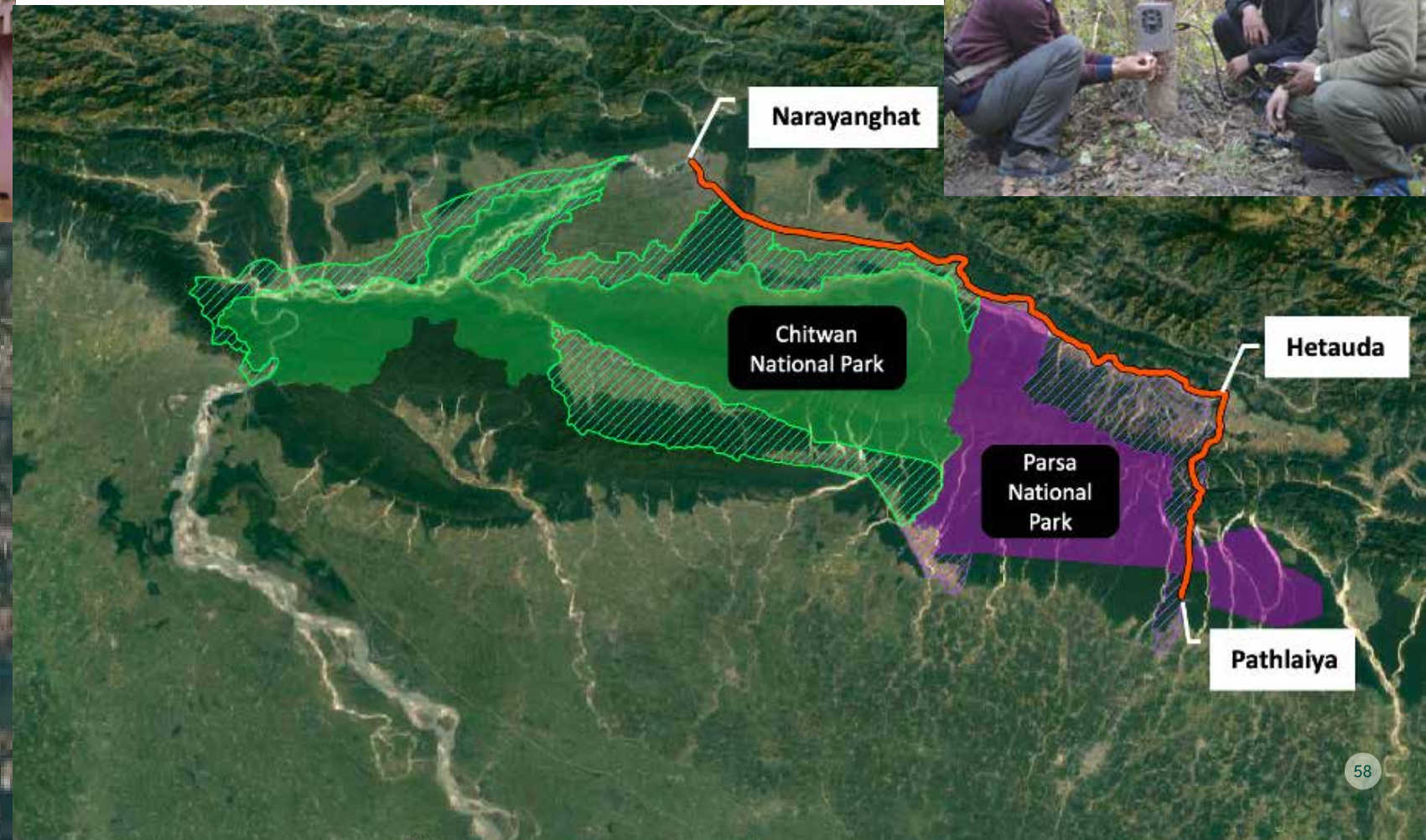
TA-9461 REG: PROTECTING AND INVESTING IN NATURAL CAPITAL IN ASIA & THE PACIFIC – SMART INFRASTRUCTURE PLANNING AND DESIGN, NEPAL

The Nepal South Asia Subregional Economic Cooperation (SASEC) Road Improvement Project (SRIP) aims to upgrade the Narayanghat-Hetauda-Pathlaiya (NHP) road from two to four lanes along a 106 km stretch. The road's close proximity to significant protected areas, including the buffer zones of Chitwan and Parsa National Parks, raises environmental concerns. Both Chitwan National Park (CNP) and Parsa National Park (PNP) are flagship conservation sites in Nepal, serving as vital habitats and ecological corridors for wildlife species of high conservation importance. The consulting service is a part of the regional technical assistance initiative Protecting and Investing in Natural Capital in Asia and the Pacific, will support the road improvement project by integrating measures to safeguard natural habitats and biodiversity. Ultimately, the project will equip the Executing and Implementing Agencies with science-based solutions to better understand and mitigate the impacts of the road on local biodiversity, thereby enhancing the sustainability of their investments.

Client : Asian Development Bank (ADB)

Scope of Works : (i) To conduct comprehensive and in-depth ecological studies in and around the project area for the NHP road. The study will be used as a key component of the EIA for the road; and (ii) To provide technical support and guidance for design and implementation of the wildlife mitigation measures and biodiversity conservation plan for the NB road under the SRIP project as necessary

Road Kill Survey ↗
Camera Trapping →
Project location map ↓



CONSULTING SERVICE FOR GREEN AND RESILIENT STRATEGY FOR NEPAL'S SELECTED HIGHWAY CORRIDORS

This consulting service is part of a Technical Assistance (TA) initiative aimed at enhancing the performance of key highway corridors in Nepal. Under this TA, the consultancy focuses on preparing a Strategic Environmental and Social Assessment (SESA) and developing a Green and Resilient Strategy for upgrading selected road corridors, which the Department of Roads (DoR) can adopt and implement. The consultant will conduct a comprehensive SESA for both the East-West Highway and North-South trade corridors. The primary objective is to create a Green and Resilient Strategy that supports DoR in making informed decisions for managing and optimizing these road corridors. Additionally, the SESA will guide the prioritization of maintenance and improvement interventions by addressing environmental and social challenges along the corridors.

Client : World Bank Group

Scope of Works : 1: Scoping and Identification of Key Strategic Issues and Social/Environmental Impacts, 2: Strategic-level Assessment of Options and Cost Benefit Analysis, 3: Develop A Green and Resilient Strategy for Key Preferred Corridor(s)



Map showing study road/corridors

OUR WORK

Other Sectors

Besides our main sector of work, we also provide advanced consulting and surveying services tailored to diverse infrastructure development and natural resource management projects. We deliver actionable insights for complex projects in water resources, mining, environmental management and other infrastructure projects with a commitment to technical precision and sustainable design.

Completed Projects

IWR-1 Mega Dang valley irrigation Project Five Dams in Dang Valley

Client - Mega Dang Valley Irrigation Project

Works - Feasibility Study, IEE & Detailed Design of 5 Dams:

1. Dam at Vutiya Tal- 15 m (Earthen Dam)
2. Dam at Ranighat Khola- 43 m (Earthen Dam)
3. Dam at Balim Khola-70 m (Clay Core Rockfill Dam)
4. Dam at Vitri Khola- 29 m (Earthen Dam)
5. Dam at Gwar Khola- 125 m (Clay Core Rockfill Dam)

IWR-2 Contract Management and Related Works for Sunkoshi Marin Diversion Multipurpose Project (SMDMP)

Client - Department of Water Resources and Irrigation under the Ministry of Energy, Water Resources and Irrigation, Government of Nepal

Works - Design review, construction supervision, quality control, project management, construction and contract management.

ES-27 Bathymetric and Topographic Survey of Rara Lake

Client - Department of Hydrology and Meteorology (DHM)

Works - Detailed investigation of Rara Lake including its bathymetric survey, topographical survey, hydrological studies, sediment studies & water quality studies.

MN-1 Iron and Steel Plant Based in Dhaubadi Iron Ore Deposit, East Nawalparasi, Gandaki Province, Nepal

Client - Government of Nepal

Works - Detailed Feasibility Study

Ongoing Projects

IWR-3 Detail Feasibility Study of Babai Mankhola Diversion Project

Client - Department of Water Resources and Irrigation, Bheri Babai Diversion Multipurpose Project

Works - Review the pre-feasibility and other reports, Selection of the site for all project components, Study additional benefit of the project, Prepare topographic/ digital maps of the project area, Conduct geological and geotechnical studies, Carryout hydrological, sedimentological and seismic studies; Conduct preliminary Environmental and Social studies related to EIA of the project development including draft scoping document; Conduct power system analysis; Prepare detailed feasibility study report Prepare design drawings of the project; Prepare cost estimates; Prepare economic and financial analysis



DHAUBADI IRON ORE DEPOSIT, EAST NAWALPARASI, GANDAKI PROVINCE, NEPAL

This project offers a fully integrated value chain — from mine to finished steel — strategically located within Gandaki Province, Nepal. Over a decade of systematic exploration has identified a significant hematite iron deposit in the Dhaubadi-Pokhari area, approximately 20 km north of the East-West Highway. With an estimated geological reserve of 108 million tons and iron grades (TFe) ranging from 24% to 58%, the deposit presents a compelling opportunity for large-scale iron and steel production. Diamond drilling conducted in 2016 confirmed the deposit's depth and extent, while metallurgical testing of average-grade ore (TFe 35%) has demonstrated strong potential for commercial steel manufacturing.



Client - Government of Nepal

Scope of Works - Detailed Feasibility Study

Project Info: Mining Area - Hupsekot Rural Municipality, East Nawalparasi, Ore Processing Plant - Two identified sites at Pangreghat or east of Hattikhori, Kawaswoti Municipality, Steel Manufacturing Plant - Kawaswoti area, East Nawalparasi



FEASIBILITY STUDY OF DAMS IN DANG VALLEY

The Dang Valley, one of Nepal's largest valleys, holds immense agricultural potential with a total irrigable area of approximately 43,000 ha — part of a broader irrigable landscape of 65,950 ha encompassing the Deukhuri Valley and Tuls-Dang. Despite this potential, year-round irrigation currently covers only a limited portion of the valley, served by farmer-managed systems and deep tube wells. To unlock this potential, a feasibility study was undertaken for the construction of 5 dams designed to impound water for reliable, year-round irrigation. The project also assessed the broader socio-economic impact on local communities — recognizing that sustainable water access is a catalyst for regional development.

As a pioneering study in irrigation engineering in Nepal, this project marks a significant milestone in the country's water resource management, laying the groundwork for large-scale infrastructure that can transform agricultural productivity across the valley.

Client - Mega Dang Valley Irrigation Project

Scope of Works - Feasibility Study, IEE & Detailed Design

Project Info: Infrastructure - 5 proposed dams for irrigation impoundment at Vutiya Tal- 15 m (Earthen Dam), Ranighat Khola- 43 m (Earthen Dam), Balim Khola-70 m (Clay Core Rockfill Dam), Vitri Khola- 29 m (Earthen Dam) and Gwar Khola- 125 m (Clay Core Rockfill Dam), Total Irrigable Area - 43,000 ha (Dang Valley proper), Broader Coverage - 65,950 ha including Deukhuri Valley and Tuls-Dang, Total Project Cost - NPR 13,157,720,000



OUR WORK

Beyond Borders

In recent years, Jade has expanded its business into neighbouring countries, marking the start of its international journey. Starting with small-scale projects that focus on consultancy and technical services, helping the firm build regional partnerships and adapt to new markets. A key focus has been on supporting sustainable energy development in Southeast Asia, particularly in areas like energy efficiency and renewable integration. With this foundation, Jade is steadily growing its presence and impact across the region.

Our international Projects:

Assam Intra State Transmission System Enhancement Project

Client - Assam Electricity Grid Corporation Limited (AEGCL), India
Funding Agency - Asian Infrastructure Investment Bank (AIIB)

Works - Consultancy Services for Project Implementation and Management Support, Design Review and Construction supervision of 1113 circuit km of 400 kV, 220 kV and 132 kV Transmission line, and 400/220 kV, 220/132/33 kV, 220/132 kV, 132/33 kV & 132/11 kV Substation with additional capacity of 5606 MVA.

Lower Kopili Hydroelectric Project (120 MW), Assam, India

Client - Assam Power Generation Corporation Limited
Funding Agency - ADB

Works - Independent monitoring of implementation of Social and Environment safeguards during design, construction and operation phases

Bunakha Hydropower Project (180 MW)

Client - Druk Green Power Corporation Limited (DGPC)
Funding agency - ADB

Works - Review and update of Detailed Project Report and Environment and Social Impact Assessment (ESIA)

Harsi Small Hydroelectric Project (2.4 MW)

Client/ Developer - Vensar Constructions Company
Works - Tender Documents (Civil, HM, EM and TL), Detail Engineering Design, Construction Drawing, Design Review of HM, EM and TL

Mohini Small Hydroelectric Project (1.2 MW)

Client/ Developer - Vensar Constructions Company
Works - Tender Documents (Civil, HM, EM and TL), Detail Engineering Design, Construction Drawing, Design Review of HM, EM and TL

Memberships

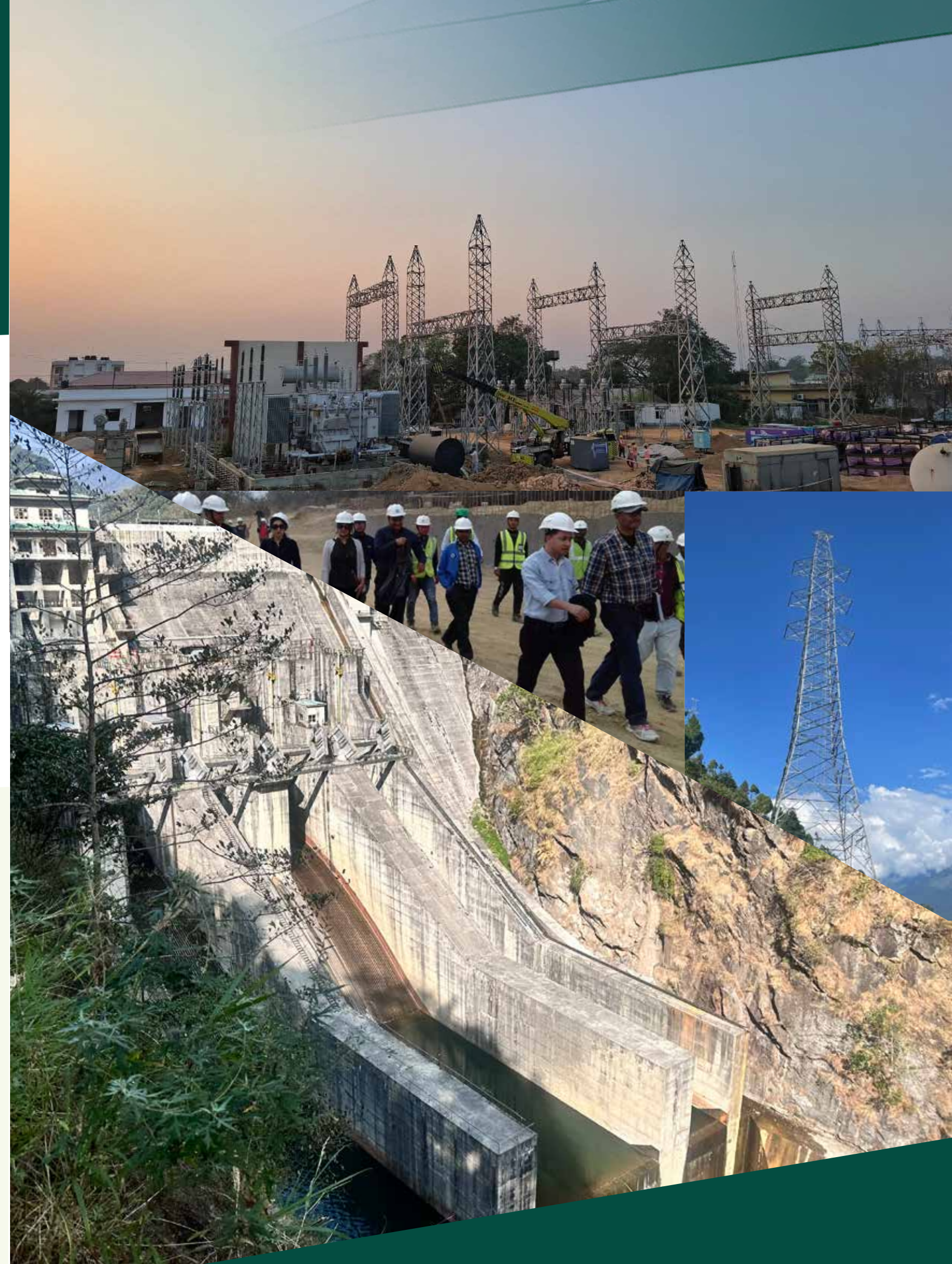


IPPAN: Jade has been an associate member of IPPAN since 2012. The Independent Power Producers Association of Nepal (IPPAN) works in promoting the development and growth of Nepal's energy sector through active participation of the private sector.



International Centre for Hydropower

ICH Norway: Jade became a member of the International Centre for Hydropower Norway (ICH) in November 2024. ICH is an international association of companies and organisations that are active in all aspects of hydropower generation and supply.



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