



Multiconsult – A One-Stop-Shop for Due Diligence and Advisory Services

Service offerings | 2024





Multiconsult Group

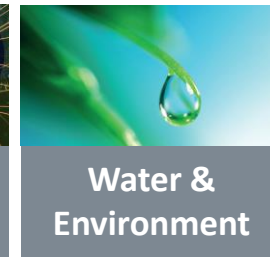
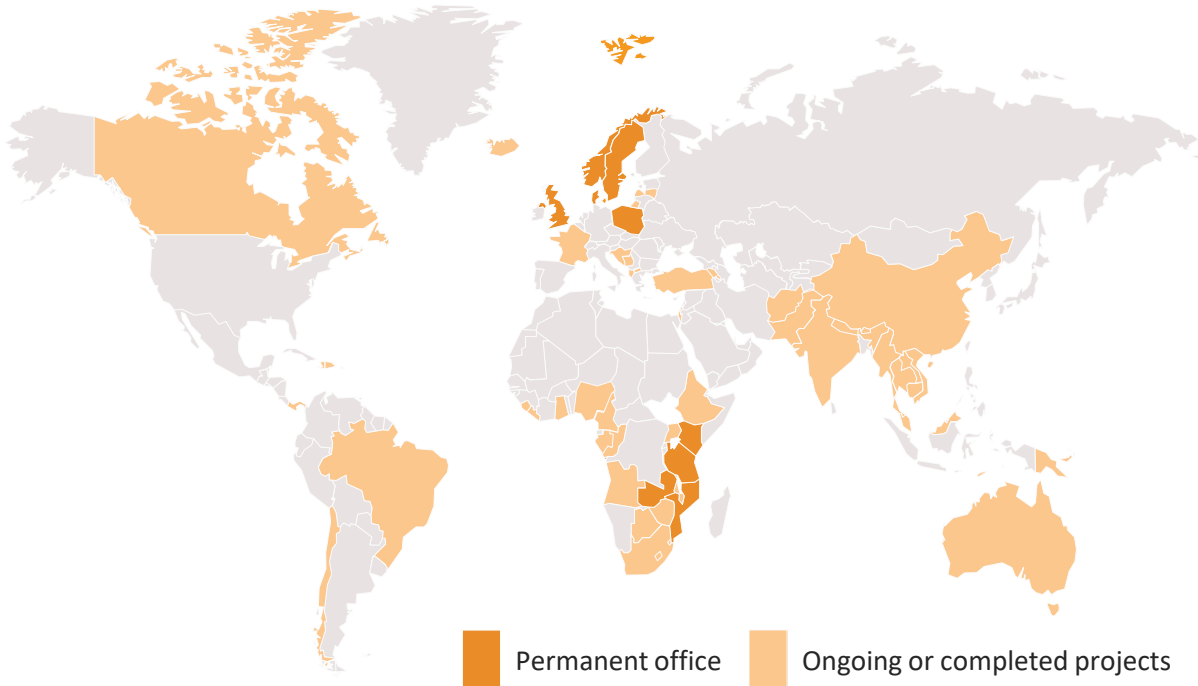
A leading international engineering consultancy firm

■ **1908**
Founding Year

■ **3,700**
Employees

■ **USD 453 million**
Net Operating Revenue (2023)

■ **Oslo**
Headquarter



Delivering multidisciplinary services

Renewables in Multiconsult

A one-stop shop for due diligence and engineering in renewables and power markets

A full-service consulting engineer for power & renewables ...

■ **300+**
Experts

■ **1 000+**
Assignments in
2023

■ **35+**
Countries



Hydropower



Wind power



Solar



Power systems



Storage & smart grid



Environmental & social



District heating & energy efficient buildings

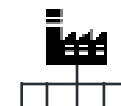
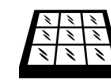
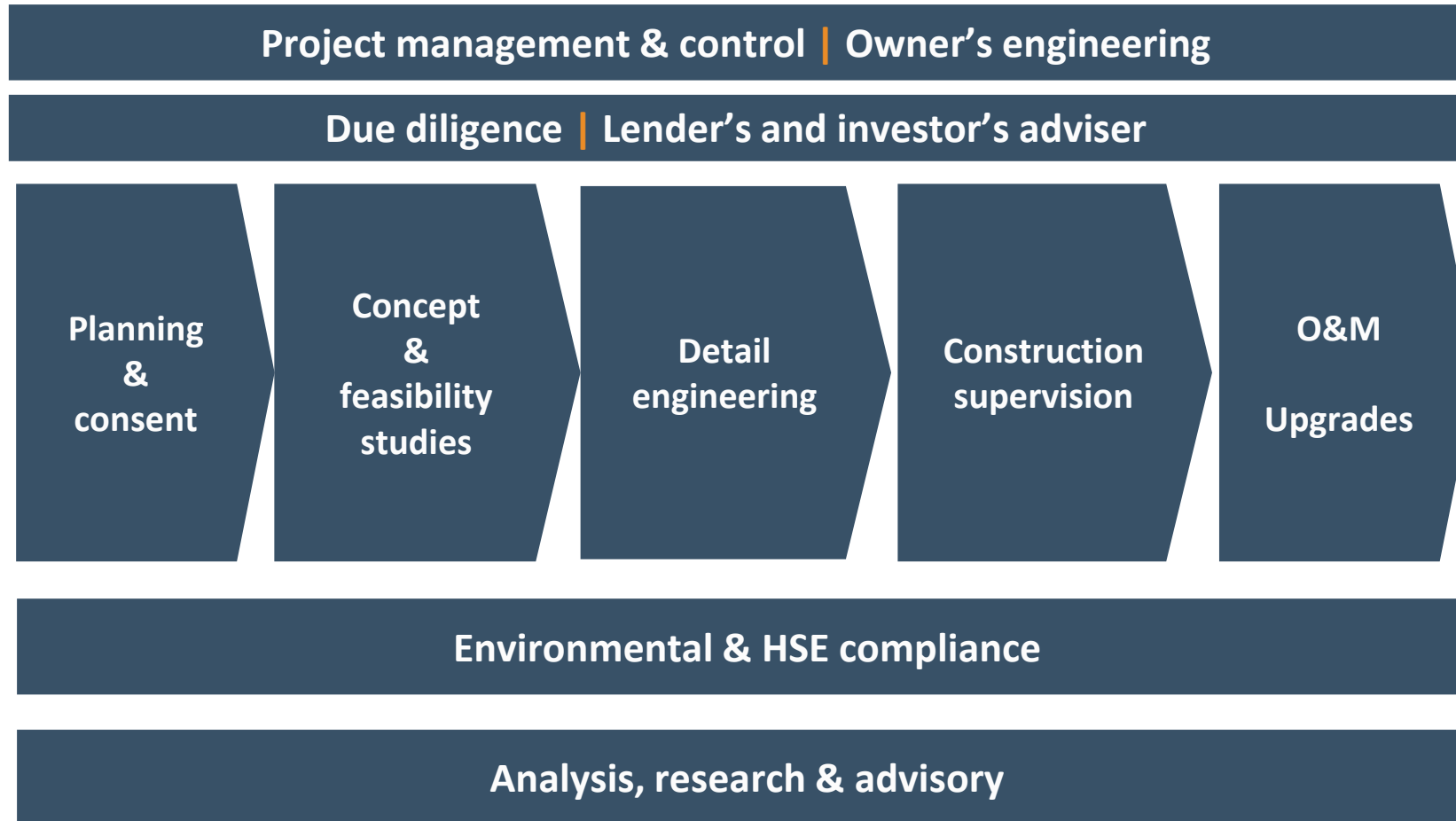
... with a leading DD &
advisory arm

Renewable energy due
diligence and advisory
services

ESG, green finance,
economics, regulatory,
management & financial
expertise

Renewable energy business area

Support throughout the full value chain and covering all project phases





Staff availability | Energy

Field	Staff
Concrete dams/ structural analysis	20
Energy economics, analysis, ESG, green finance	15
Engineering geology, underground design	20
Environmental and social impact analysis (ESIA)	20
Generators, transformers, switchgear	25
Geotechnical engineering	15
Hydrology, power production simulation, hydraulics, sediments	20
Hydropower planning	80
Mechanical engineering, turbines, hydraulic steelworks	25
Rock fill/ embankment dams	10
Solar PV	10
Transmission lines and systems, power system analysis	30
Wind power	10
Total	300



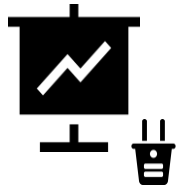
Service offerings

Due diligence and engineering services within power systems and all renewable technologies



Environmental and social services

Deep expertise on environmental and social regulations and safeguard policies



Project acceptance and approval
Environmental and social impact assessments and resettlement planning in compliance with national regulations and international safeguard policies



Mapping, design, mitigation and restoration
Environmental mapping, environmental flow, fish passages, environmental design, ecosystem services and restoration/mitigation



Advisory services
Environmental due diligence, audits, supervision and monitoring. Expertise on E&S safeguard policies of lending institutions.



Management plans
Practical application of industry best practice in environmental and social management, monitoring and design.



Landscaping and mapping
Landscape architecture, 3D-modelling, visualisations, GIS.



Screening and strategic studies
Strategic and cumulative impact assessments, mitigation guidelines.

Environmental and social services

Selected projects

**Nyamaghasani I and II HPP,
Uganda**



E&S document appraisal |
ESMP compliance monitoring
| Lender's adviser

Client: FMO
2018 - 2021

**Climate resilient water
supply project in Simiyu,
Tanzania**



Baseline | Impacts |
Mitigation | Alternatives |
Resettlement | Stakeholder
engagement

Client: KFW
2016 - 2020

**Environmental flows
assessment, Mpatamanga
HPP, Malawi**



Hydraulic modelling |
Bathymetric survey | Sediment
modelling | Biodiversity
Surveys | Aquatic survey |
Social screening

Client: IFC
2018 - ongoing

**Environmental flows
assessment, HPP, Lesotho**



Hydraulic modelling |
Bathymetric survey |
Sediment modelling |
Biodiversity surveys | Aquatic
survey | Social screening

Client: Ihda
2018 - 2020



Hydropower plants and dams

Enabling the sustainable hydropower projects of tomorrow



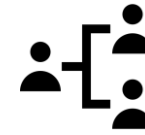
Feasibility studies and hydropower advisory

An experienced and creative team that optimizes the potential of your project and minimizes environmental and social consequences.



Tender and detailed design

Using the newest technology to ensure an optimised and efficient design process.



Owner's engineer/ construction supervision

Following up site works with the contract, including compliance with E&S standards, as the centre point.



Expert assignments

World class experts ready to assist you on all technical, economic and E&S issues related to hydropower.



Operation and maintenance

Continuing to support the owner through operation and maintenance to ensure maximum output including setting up sound ESMS systems.



Independent/ lenders engineer

Long experience working for financiers and governments to follow up project execution.

Hydropower plants and dams

Selected references

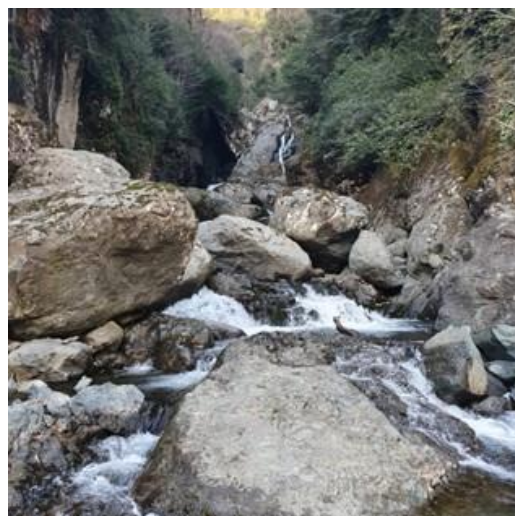
**Floating solar/hydro hybrid
Mt Coffee, Liberia**



Hydro owner's engineer |
Preliminary design | Yield
assessment | Hybridization |
E&S monitoring

Client: Norad, Liberia Electricity
Corporation (LEC), KFW
2010 - 2019

Khobi 2 HPP, Georgia



Owner's engineer

Client: Georgia Investment
Group Energy
2021 - ongoing

**Several hydropower plants,
Sub-Saharan Africa**



Technical, environmental and
social due diligence 9 small
HPPs in development or
operation | ESAP action plan

Client: Gridworks Development
Partners
2021 - ongoing

Rwimi HPP, Uganda



Technical and environmental due
diligence | E&S compliance
monitoring

CLIENT: Belgian Investment
Company for Devl. Countries (BIO)
2016 - 2018



Solar, minigrid and battery energy storage systems

Solar PV and related services to design smart and cost competitive local solutions



Analysis and early phase studies

Technical and commercial analysis. Concept studies and design of solutions both stand alone, and buildings integrated.



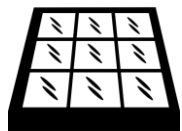
Advisory

Guiding companies and public sector through strategic choices related to positioning in solar, smart and storage



Smart energy development projects

Micro and mini grid developments where an integrated view of solar, smart and storage is crucial to success



Project development

Providing a full suite of services for project developers seeking technical and commercial support



Due diligence

Screening, due diligence and deal structures to optimize value creation



Procurement support

Defining the procurement need and developing the necessary documentation within solar, smart and storage

Utility-scale groundmounted PV

From early phase to implementation

Selected references



GET FiT Uganda:
construction and commissioning supervision of two 10 MW plants



Norway:
FS for innovative Agri-PV and Eco-PV solutions



Suriname:
Site risk assessment for hybrid solar and hydropower



Eight license applications to the Norwegian regulatory authorities in the last year

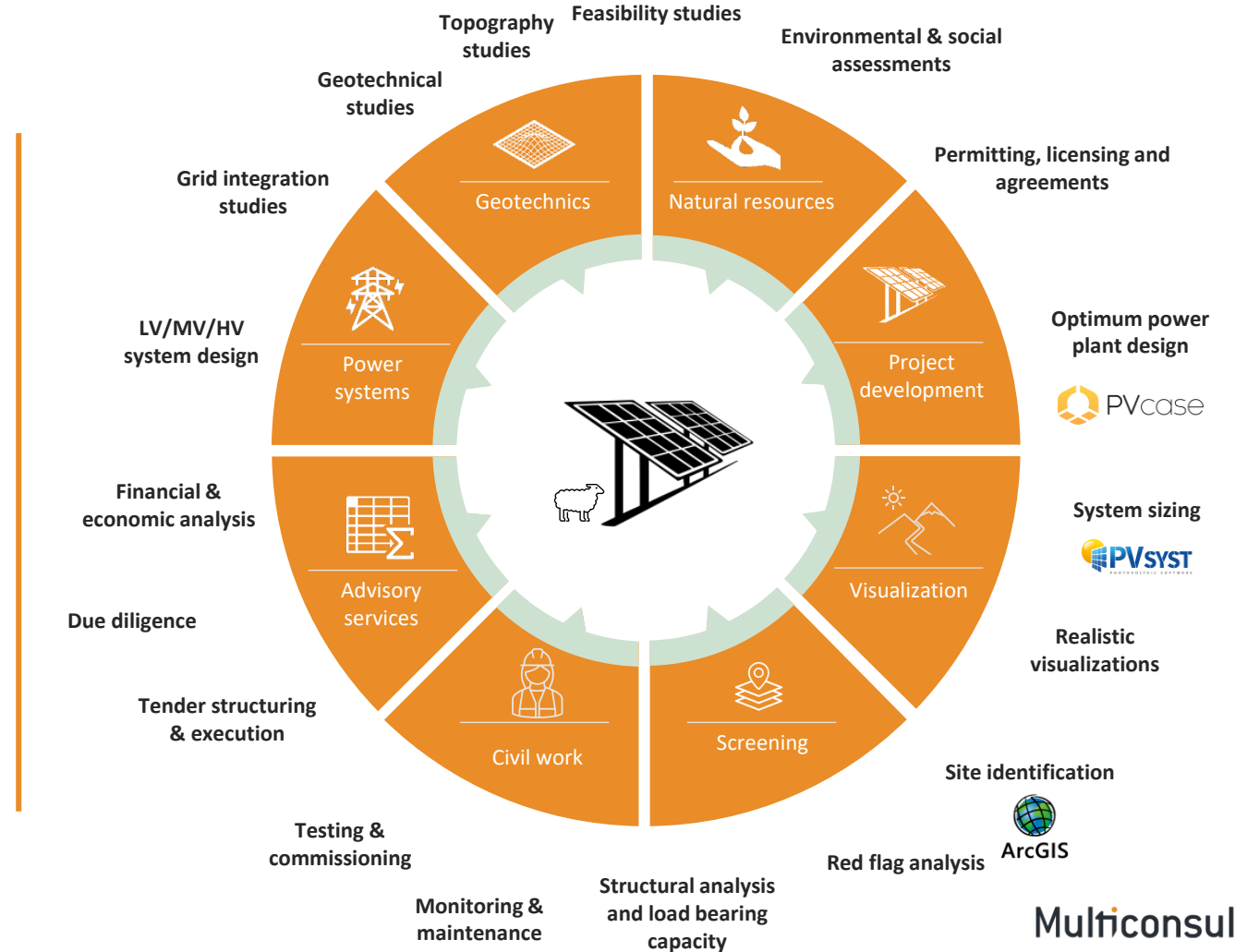


Ethiopia: ESIA for a 100 MWp plant



Ukraine: project development and engineering for a total of 300 MWp (six projects)

Multidisciplinary support



Microgrids

From programme implementation to design & technical DD

Selected references



Cameroon:
technical DD
microgrid rural
electrification



Zanzibar:
design and
procurement
microgrid island
power system



**Isfjord radio,
Svalbard:** FS,
design,
procurement
and
commissioning

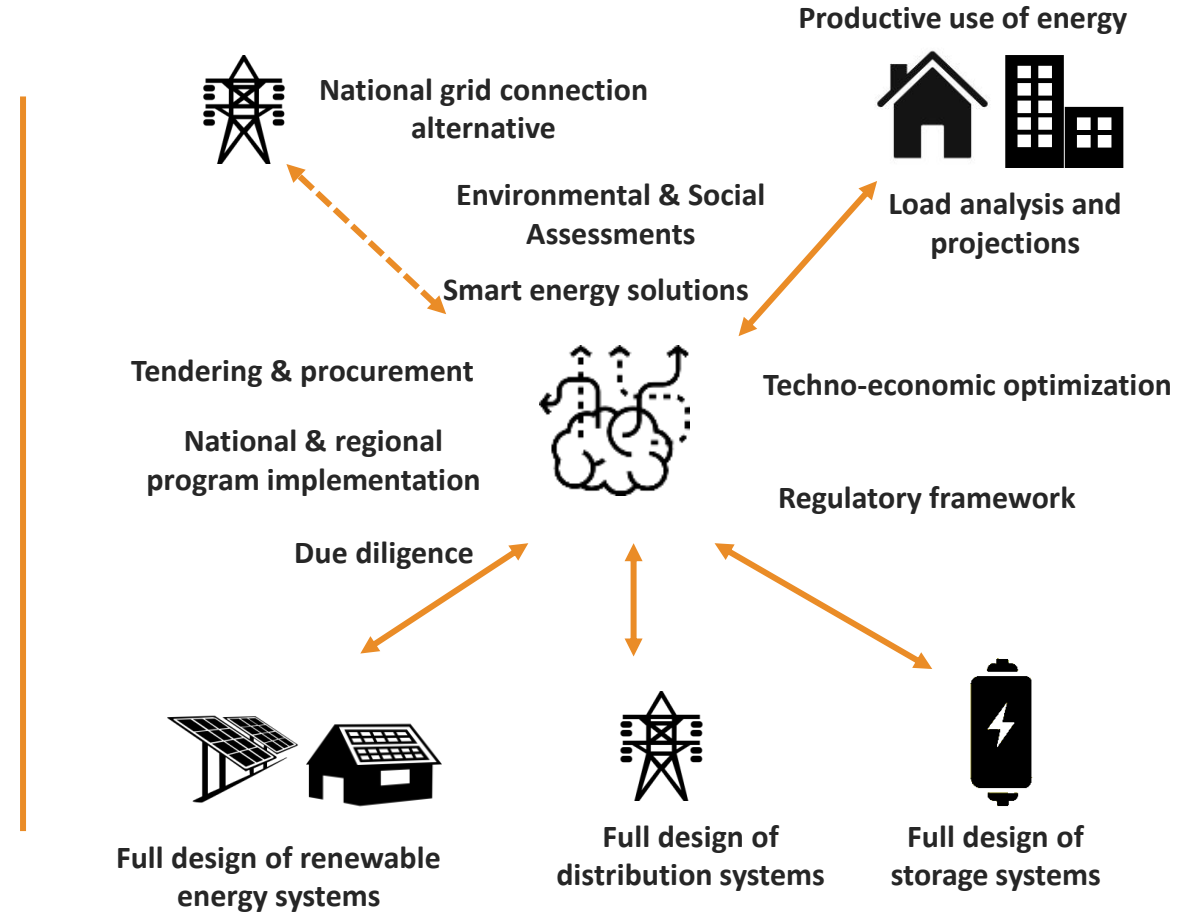


**Green People's
Energy for Africa
– Mozambique
(KfW):**
implementation
consultant for
development of
microgrids



Seychelles:
technical DD
microgrid island
power system

Key value proposition

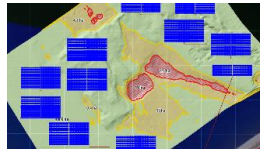




Floating solar PV

One-stop shop, from early phase to implementation

Selected references



Ghana: FS and ESIA, HP reservoir, 50 MW



Brazil: technical support for FPV pilot



Seychelles: tender technical support, 5 MW nearshore



Liberia: Pre-FS hybrid FPV/HP



Vietnam: POC amphibious PV, 1.4 GW



Kenya: feasibility study for 3 HP reservoirs

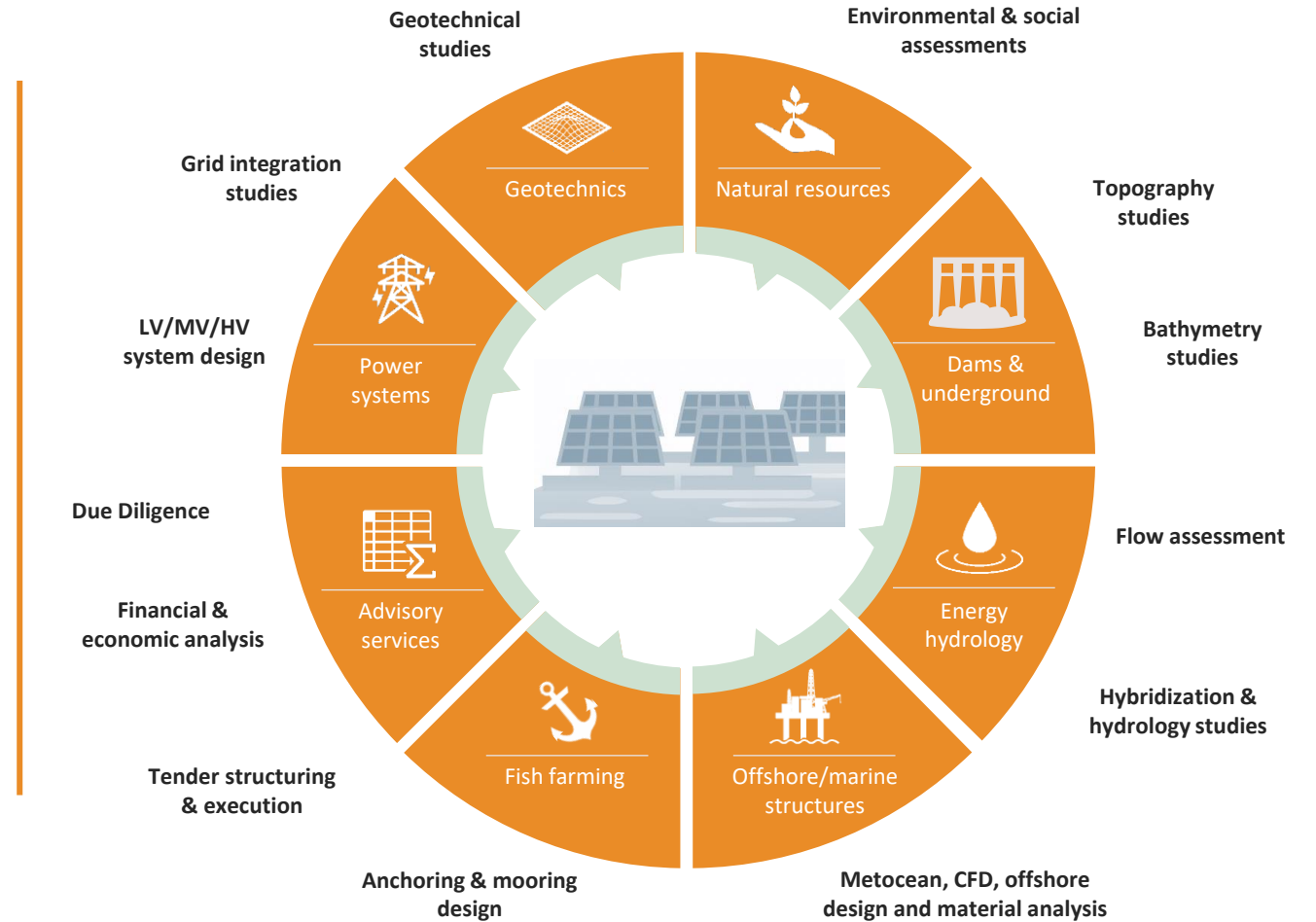


Norway: design nearshore FPV fuel saver



Sri Lanka: assessment of 7 HP reservoirs

Key value proposition





Solar, minigrid and battery energy storage systems

Selected references

150 MWp PV plants,
Africa



Due diligence | Technical solar design | Preparation EPC tender documents | Commercial advisory

Client: Empower New Energy
2022 - ongoing

20 MW PV plant,
Botswana



Feasibility study | Site assessment | Detailed design | Business case assessment

Client: Confidential
2016 - 2017

Floating solar,
Ghana



Feasibility studies | ESIA | ESMP | Gender equality and inclusion assessment and action plan

Client: KfW/VRA
2021 - ongoing

Metahara 100 MW PV plant,
Ethiopia



ESIA | Baseline | Impacts | Mitigation | Alternatives | Resettlement

Client: Power Africa/Tetra Tech
2017 - 2019



Power systems

Delivering transmission and distribution solutions for the power system of the future



Feasibility studies and power system analysis

An experienced team that optimizes the potential of projects and minimizes environmental and social consequences.



Procurement and detailed design

Our interdisciplinary approach not only ensures client satisfaction but also aims to exceed quality and safety requirements.



Expert assignments

Experts ready to assist on all technical challenges related to electrical engineering, such as integration and design of large power converter systems (HVDC and FACTS).



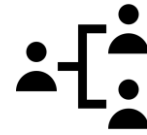
Grid integration of renewable energy

Extensive experience working for government organizations, public utilities and grid owners. Committed to reach the best sustainable solutions.



Electrification, smart-, mini- and off-grid solutions

Accomplished experts in all voltage and system levels, ready to assist you on electrification and grid development.



Owner's engineer/ construction supervision

Successful execution with the contract at the core together with high ethical standards and a strong focus on HSE.



Power systems

Selected references

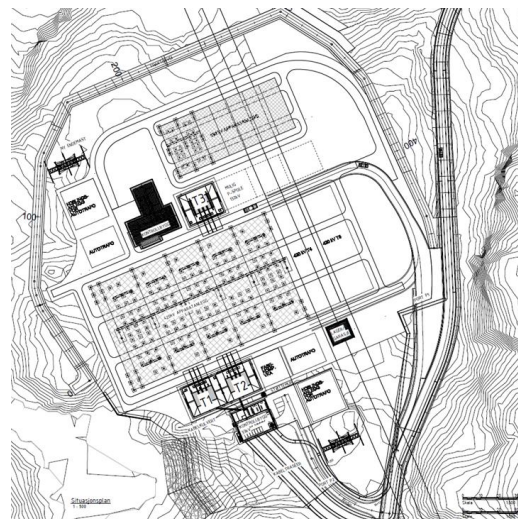
Construction monitoring LV distribution, part of REDP 2b, Tanzania



Construction monitoring | Environmental, social and HSE monitoring | Socio-economic baseline study

Client: Rural Energy Agency 2023 - ongoing

Transmission lines reinforcement between southern and eastern Norway



External quality assurance | Planning | Analysis

Client: Statnett FS 2023

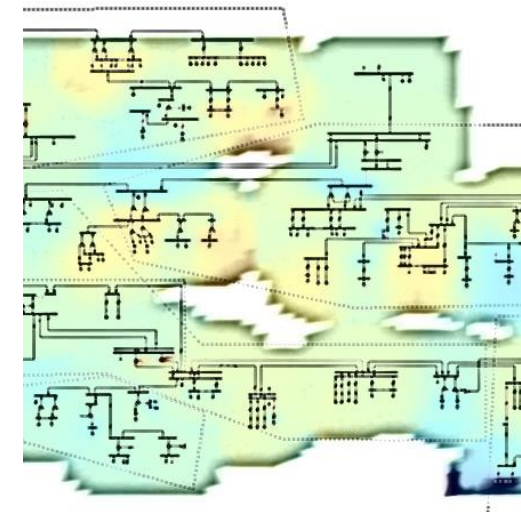
Independent technical due diligence of grid assets, Norway



Technical due diligence | Merger preparations | Asset valuation | Lifetime assessment

Client: Agder energi nett and Glitre energi nett 2021

Preparation of Rural Energy Master Plan (REMP), Tanzania



Load and demand forecast | Electro-technical assessment | Environmental and social assessment | Geospatial mapping | Economic assessment

Client: Rural Energy Agency 2017 - 2022



Wind power

Multiconsult is a leading consultancy in the Scandinavian wind power industry



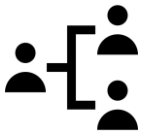
Feasibility studies and wind power advisory

An experienced and creative team that optimizes the potential of your project. Micro siting, aesthetics landscaping and energy yield assessment. E&S compliance.



Tender and procurement

Defining the procurement strategy and developing the necessary tenders, negotiations and contracting.



Owner's engineer

Construction supervision and management, discipline lead and site management. Landscape planning and restoration.



Due diligence

Screening, due diligence and deal structures to optimize value creation and environmental compliance.



Wind power

Selected references

Technical and environmental studies, Makambako wind farm, Tanzania



Feasibility study | ESIA | Asset inventories | Resettlement evaluation | Grid studies

CLIENT: Sino-Tan Renewable Energy Ltd
2008 - 2020

Due diligence of Adali's hydro, wind and solar power assets, Turkey



Technical due diligence | IPO preparations | Asset valuation | Long-term production estimates

Client: Adali holding
Partners: Pareto Securities and Strand Hanson
2015 - 2016

Evaluation of 15 offshore wind zones, Norway



Technical and economic feasibility studies | Employment effect calculations | Stakeholder engagement

Client: The Norwegian Water Resources and Energy Directorate
2012

Owner's engineer Stokkfjellet 311 MWp wind farm, Norway

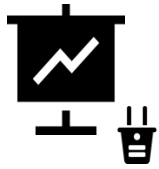


Owner's engineer | Environmental monitoring and capacity building | Design review

Client: Trønderenergi kraft AS
2019 - 2021

Green finance

Helping clients enabling sustainable transition



Market insight

Necessary insight on local, national and international markets and understanding of risk.



Taxonomies and regulations

Practical approaches based on science, market and technical and regulatory insight, international taxonomies and regulations.



Green bonds

Climate bonds initiative approved verifier. Providing banks with criteria and assessments of green bonds



Climate risk exposure

Understanding climate risk. Establishing credible plans to mitigate climate risk exposure.



Environment, social and governance

Integrate ESG in strategy development, risk assessment, investment decisions, and operations for clients.



Due diligence and social and green loans verification

Second opinion on green bonds, and social and green loans compliance review for banks , ECAs and investors.



Green finance

Multiconsult gives insight and has a profound understanding of risk



Energy and climate performance of potentially sustainable financial activities

- Baseline establishment
- Setting qualification criteria based on international standards (IFC, EP, SBTi, EU and CBI) and justifying these in investor presentations



Annual portfolio analysis

- Identifying qualifying volume and related avoided energy use and climate gas emissions connected to GSS+ bonds
- Total loan book assessment



Verification, DD and second-party opinion

- Climate Bonds Initiative approved verifier
- SPO and assessments on asset level



Green and social loan advisory

- Setting sound and practical qualification criteria
- Digital web-tools



Capacity building

- Preparing for client discussions on financing sustainable activities
- Impact of green finance on municipalities activities



Green finance

Selected reference

Lenders' independent adviser for a water supply project in Ghana



Environmental and social due diligence | Social and green loan compliance review | EU Taxonomy gap analysis

Client: Confidential
2023

Partners and clients

