

Consulting Assignments, as of October 2021

Assignment: Hydropower sustainability assessments:

- 5 projects in trial phase of Protocol (Sogamoso/Colombia, HidroAysén/Chile, Sinop/Brazil, Waldeck/Germany, Bhillangana/India, 2009-2010)
- Hydro Tasmania (Trevallyn, Australia, 2011)
- E.ON (Walchensee, Germany 2012 and Semla, Sweden 2014)
- ESBR (Jirau, Brazil 2012)
- Manitoba Hydro (Keeyask, Canada 2012)
- Landsvirkjun (Blanda 2013* and Kárahnjúkar 2017*, Iceland)
- WWF (Kaunertal, Austria 2013*)
- ISAGEN (Sogamoso 2013 and Cañafisto 2014*, Colombia)
- EVN/World Bank (Trung Son, Vietnam 2014)
- EPM (San Francisco, Colombia 2014*)
- Itaipu Binacional (Brazil/Paraguay 2014-2015*)
- SECO/Ministry of Energy (Ghana 2015)
- Odebrecht (Chaglla/Peru 2015*)
- Royal Government of Bhutan/ World Bank (Mangdechhu, 2016)
- Tiwag (Kaunertal, Austria 2016)
- Statkraft (Devoll, Albania, 2016)
- Energías Limpias del Yaguala (Arenal I/II, Honduras, 2017-2019*)
- SECO/Bappenas (Pelosika, Indonesia 2017*)
- Infraco Africa Ltd (Ngonye Falls, Zambia 2018*)
- Confidential client (due diligence on two projects in India, 2019)
- NHPC (Teesta-V, India 2019*)
- PLN/WWF (Koto Panjang, Indonesia 2020*)
- REH Renewables (Stortemelk, South Africa 2020*)
- 7 European projects (Portugal, France, Switzerland 2021*) under XFlex program to identify sustainability aspects of introduction of flexible generation technologies
- Pamir Energy (Sebzor, Tajikistan 2021*)
- SEB Sarawak/PT KHN (Mentarang, Indonesia 2021*)
- RP Global (Huamuco, Peru 2021*)

Clients: Contracted through International Hydropower Association, consulting companies, or directly by clients listed above

Main project features: Applied HSAP/HESG to projects of all sizes and project cycle stages

Position: Lead Assessor in assessments marked with *, team member in others

Activities:

- Assessed the sustainability of the above projects, covering all Protocol topics, in particular socio-economic, governance and financial topics

- Conducted introductions and trainings on sustainability of renewable energy in general, and the HSAP/HESG and HST in particular, for multiple audiences (e.g. World Bank staff in 2020)
- Chair of HSAP Governance Committee 2011-2013
- Developed Geothermal Sustainability Assessment Protocol (GSAP) with working group of Icelandic government agencies and power companies, led trials on two geothermal projects (Theistareykir, 2017 and Hellisheidi, 2018), scoped geothermal project in Indonesia (Grafo Nyabu, 2019), and supported International Geothermal Association (IGA) in adoption and roll-out of GSAP

Assignment: Sustainability Training Program

Year: 2021

Location: Nepal

Client: World Bank

Main project features: Capacity building for state-owned power company and power sector institutions

Position: Coordinator and trainer

Activities:

- Developed customized training program in coordination with IHA Training Academy, World Bank ESF teams, and other financial institutions (ADB, EIB etc.)
- Coordinated assisted self-assessment of large new hydropower project

Assignment: Estimation of Reservoir GHG Emissions

Year: 2021

Location: Myanmar

Client: WWF

Main project features: Capacity building on understanding emissions and using emissions data for policy and advocacy purposes

Position: Technical Advisors

Activities:

- Developed briefing paper on methods
- Estimated and validated GHG emissions from 3 reservoirs using G-Res tools

Assignment: Due diligence of multi-purpose reservoir project

Year: 2021

Location: Southern Africa

Client: Confidential

Main project features: Support for stage-gate decision by private developer

Position: Lead Advisor

Activities:

- Led small team of hydropower experts to review existing documentation and identify technical, commercial, and E&S gaps, risks and mitigation options
- Advised client on next steps

Assignment: Guidance for Mekong River Commission (MRC); review of socio-economic transboundary impacts of hydropower projects

Year: 2018-2021

Location: Lower Mekong River Basin

Client: Mekong River Commission, GIZ

Main project features: Framework contract to support MRC's work on mainstream hydropower projects

Position: International Socio-Economic Expert

Activities:

- Drafted socio-economics chapter of updated Design Guidelines for mainstream hydropower projects
- Conducted technical review for prior notification process for Pak Lay, Luang Prabang and Sanakham projects
- Advised implementation of action plan on Pak Beng and Pak Lay projects
- Supported socio-economic modelling and MRC working papers

Assignment: Program for Aquatic Resources Improvement (PAANI)

Year: 2019-2021

Location: Nepal

Client: USAID/WWF

Main project features: Reduce threats to freshwater biodiversity, and increase the ability to adapt to the adverse impacts of climate change through improved water management

Position: Institutional and Policy Specialist

Activities:

- Analysed regulatory, institutional and policy context for hydropower, energy and water management planning and development in Nepal
- Advised on pathways for uptake of system-scale planning analysis
- Advised on strengthening of environmental and social safeguards for hydropower development in Nepal
- Advised on the methodology of the three studies (energy options assessment, high conservation value rivers, Karnali system-scale plan and scenarios)
- Drafted analyses and contributed to final reports and training program

Assignment: Cumulative Impact Assessment of Hydropower in the Myitnge Basin

Year: 2019

Location: Myanmar

Client: IFC/Sweco

Main project features: First cumulative impact assessment in Myanmar, in a sub-basin with several projects under preparation

Position: Socio-Economics Expert

Activities:

- Supported developing methodological approach and baseline studies
- Defined of socio-economic VECs
- Participated in in-country meetings for data acquisition, discussion of results, stakeholder engagement
- Contributed to reports and other deliverables

Assignment: Framework Contracts

Year: 2019-2021

Location: Home office

Client: WWF

Main project features: Research on grid integration of variable renewables; floating solar PV; priority hydropower projects for WWF engagement; individual hydropower projects such as Inga (DRC); financial flows into hydropower

Position: Consultant

Activities:

- Researched and drafted papers and presentations
- Led webinars for WWF staff

Assignment: How-To Guides on Benefit Sharing, Downstream Flow Regimes, Infrastructure Safety and Protected Areas in Hydropower Projects

Year: 2019-2021

Location: Home office

Client: IHA

Main project features: Drafted three and co-drafted one of the first guides, in a series of guides, on achieving good practices in hydropower sustainability

Position: Consultant

Activities:

- Reviewed Protocol assessments
- Interviewed experts and stakeholders
- Drafted guides
- Contributed to Benefit Sharing workshop at IHA Congress 2019 and Protected Areas session at IHA Congress 2021

Assignment: Strategic Advice on Hydropower Engagement

Year: 2018

Location: Home Office

Client: Conservation International

Main project features: Analysis of CI's track strengths, needs, opportunities, and options for next steps

Position: Adviser

Activities:

- Reviewed documents and interviews
- Drafted report, facilitated workshop

Assignment: Cumulative Impact Assessment for Hydropower in the Kuri-Gongri Basin

Year: 2017-2018

Location: Bhutan

Client: Royal Government of Bhutan/World Bank/Sweco

Main project features: First cumulative impact assessment in Bhutan, eastern region

Position: Socio-Economic Specialist

Activities:

- Supported development of methodological approach and baseline studies
- Defined of socio-economic VECs
- Participated in in-country meetings for data acquisition, discussion of results, stakeholder engagement
- Contributed to reports and other deliverables

Assignment: Sustainable Hydropower Guidelines

Year: 2016-2017

Location: Bhutan

Client: Royal Government of Bhutan/World Bank/AF

Main project features: Development of practical guidelines for hydropower development

Position: Socio-Economic Specialist

Activities:

- Reviewed international guidelines and Bhutanese regulations
- Drafted socio-economic guidelines
- Conducted discussions with Bhutanese stakeholders, trained government staff in the use of guidelines
- Contributed to reports and other deliverables

Assignment: Improving Hydropower Outcomes Through System-Scale Planning - An Example from Myanmar

Year: 2016

Location: Myanmar

Client: DFID, subcontracted through TNC and WWF

Main project features: Demonstration of how system-scale planning can improve cumulative development outcomes and build awareness of modern planning and assessment methods

Position: Author and Lead Consultant

Activities:

- Drafted background paper for selecting country from among DFID tier-1 countries
- Conducted scoping mission
- Advised on methodology and selection of consultant team, drafted work plan and inception report
- Coordinated technical meeting among TNC, WWF and academic researchers to identify modelling approach and data requirements
- Coordinated three-week in-country mission for stakeholder engagement, data acquisition, generation and visualization of results
- Drafted main report, factsheets, presentations
- Presented approach and results at meetings and conferences, including World Bank Water Week 2016

Assignment: Restoration of Eklutna River

Year: 2018

Location: Alaska, USA

Client: Conservation Fund

Main project features: Ongoing advice to conservation organization that is supporting the restoration of a major salmon river

Position: Consultant

Activities:

- Reviewed legal, ecological, and technical documentation related to removal of dams on Eklutna River and flow requirements which would need to be diverted from Eklutna hydro plant
- Designed cooperative mechanism between stakeholders
- Analysed ratepayer impacts of flow restoration

Assignment: Advice on water resources management in Nepal, Tanzania, Indonesia, and in the Mekong and Amazon basins

Year: 2012-2013, 2018-2019

Location: Nepal, Tanzania, Lower Mekong countries, Amazon countries

Client: WWF

Main project features: Support to regional WWF offices in engagement on water resource issues

Position: Adviser

Activities:

- Reviewed office strategies
- Conducted stakeholder discussions
- Drafted technical and policy papers

Assignment: Review of the changing economics of hydropower

Year: 2018

Location: Home Office

Client: WWF

Main project features: Background paper

Position: Author

Activities:

- Drafted paper detailing recent decline of hydropower investments (except pumped storage projects), reasons behind the decline, potential for extrapolation of trends, and implications for WWF and other conservation organizations

Assignment: Review of Stiegler's Gorge, Sambor and Stung Treng hydropower projects

Year: 2017-2018

Location: Home Office

Client: WWF

Main project features: Support for WWF in their advocacy work

Position: Hydropower Expert

Activities:

- Prepared analyses of risks and alternative options for Tanzania, Cambodia and Vietnam, for publication by WWF

Assignment: Policy briefs on fragmentation and regulation of the Mekong, Irrawaddy and Salween rivers

Year: 2016

Location: Mekong River Basin

Client: WWF Greater Mekong Programme

Main project features: Development of quantitative metrics for cumulative hydropower impacts

Position: Author

Activities:

- Drafted non-technical briefs and presentations to explain policy implications of new methods to decision-makers

Assignment: Training and Advice on Sustainable Energy in Bolivia

Year: 2015, 2020

Location: Bolivia

Client: WWF

Main project features: Support for WWF Bolivia in their policy engagement

Position: Trainer, Adviser

Activities:

- Prepared and delivered two-day training on the HSAP to officials from government, ENDE, and other stakeholders (2015)
- Prepared and participated in three energy policy roundtables (2020)
- Discussed options with ENDE and the Ministry of Energy

Assignment: Review of the economics of the hydropower development program and proposals for strengthening regulatory frameworks in Sarawak, Malaysia

Year: 2013-2015

Location: Malaysia

Client: WWF Malaysia

Main project features: Support for WWF in their policy work and engagement with SEB

Position: Adviser, Author

Activities:

- Drafted two reports on i) economic development implications of Sarawak hydropower program and ii) options for improvement of project selection and assessment process
- Prepared additional briefs and presentations
- Facilitated workshops during four visits to region

Assignment: Study on regional planning for hydropower in Latin America

Year: 2014

Location: Latin America

Client: IDB, subcontracted through TNC

Main project features: Report on “The Next Frontier of Hydropower Sustainability”

Position: Author

Activities:

- Drafted several chapters in report
- Coordinated and assembled other contributions
- Presented results

Assignment: Study on forest management for hydrological services in Sabah

Year: 2014

Location: Sabah, Malaysia

Client: WWF Malaysia

Main project features: Support for WWF’s engagement with the Forestry Department and forest concessionaires

Position: Adviser

Activities:

- Conducted field research on the influence of forest management on the value of hydrological services for downstream water users
- Performed stakeholder engagement on options to modify concession agreements
- Drafted report and discussion

Assignment: Study on hydropower investments, and planning and regulatory frameworks in the southern Caucasus region

Year: 2014

Location: Caucasus region

Client: NORAD, subcontracted through WWF Caucasus

Main project features: Support for WWF in their policy work and engagement with developers

Position: Author, Adviser

Activities:

- Drafted two reports on i) overview of hydropower potential, investment interest, and framework conditions in Georgia, Armenia, Azerbaijan; ii) options for improvement of project selection and assessment
- Advised WWF on their engagement strategy
- Presented and facilitated various workshops during three visits to region

Assignment: Review of client experiences with Hydropower Sustainability Assessment Protocol

Year: 2014

Location: Home office

Client: World Bank

Main project features: Contribution to World Bank publication on Protocol

Position: Interviewer, Author

Activities:

- Interviewed all developers who applied the Protocol to better understand strengths, weaknesses, costs, benefits, market potential and promotion strategies for Protocol
- Drafted report for Bank

Assignment: TNC framework contract

Year: 2013-2020

Location: US, home office, various

Client: The Nature Conservancy

Main project features: Framework contract with TNC

Position: Adviser

Activities:

- Advised on hydropower engagement strategy
- Supported financial innovations for sustainable hydropower project (Goldman Sachs funding)
- Supported country offices Peru, Mexico, Colombia and Gabon on hydropower
- Lead author on hydropower-related publications
- Trained, coached, facilitated workshop

Assignment: Review of environmental and social safeguards of South-East Asian banks

Year: 2012

Location: Thailand and home office

Client: WWF Greater Mekong Programme

Main project features: Contribute to WWF's engagement work with finance sector

Position: Author, Adviser

Activities:

- Wrote background report on contribution of regional banks to infrastructure finance; interviewed Thai commercial banks, ex-im banks, IFC and DEG about their lending processes
- Drafted recommendations; co-organised and facilitated workshop

Assignment: Review of the ADB safeguards for hydropower and compatibility with the Hydropower Sustainability Protocol

Year: 2014

Location: Home office

Client: WWF International

Main project features: Support to WWF-ADB partnership's hydropower discussions

Position: Author, Adviser

Activities:

- Conducted desktop comparison of safeguards with Protocol; recommended applicability of Protocol to ADB operations
- Conducted compliance review of documentation for two projects in Nepal and Bhutan

Assignment: Review of the Chinese hydropower sector's global investments and options to influence them

Year: 2013

Location: US, China, home office

Client: WWF/TNC; International Hydropower Association

Main project features: Contributions to WWF China Fund and to IHA's congress in Beijing

Position: Lead author

Activities:

- Conducted comprehensive research of Chinese hydropower industry and its global engagement
- Coordinated drafting of background paper and funding proposal; facilitated workshop

Assignment: Training manuals and book chapters on climate change and hydropower

Year: 2013-2014, 2019

Location: Home office, Laos, Ecuador

Client: GIZ 2013, ADB 2014, Condesan 2019

Main project features: Publications on climate change and hydropower for the Mekong region, Asia and the Andean Region

Position: Author, Trainer

Activities:

- Drafted training manuals and book chapters
- Delivered trainings

Assignment: Member of Advisory Board on hydropower

Year: 2014 - Present

Location: Home office

Client: Global Engagement Services

Main project features: Support to GES for screening of hydropower projects

Position: Board Member

Activities:

- Developed internal screening guide

Assignment: Adviser and expert panel member on new hydropower developments in Papua New Guinea and Chile

Year: 2012-2014

Location: PNG, Chile, Australia

Client: Origin Energy

Main project features: Preparation of approx. 3,000 MW of new investments

Position: Adviser

Activities:

- Advised on sustainability and risk management aspects over two years, for Purari project in PNG and Energía Austral project in Chile
- Consulted on EIA methods and permitting strategies
- Formed and member of expert panel in Chile