



**Hydropower  
Sustainability**  
Council

# Activity Report

May 2019 – July 2021



Released July 2021

This Activity Report to the Hydropower Sustainability  
Assessment Council covers the period May 2019 to July 2021.

Council Management Entity:

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The background of the page is split. The top-left portion features a light blue background with several horizontal, wavy lines in shades of green, yellow, and orange. The bottom-right portion is an aerial photograph of a river with a sharp U-turn, bordered by sandy banks and green trees. Overlaid on the entire background are decorative wavy lines in various colors (blue, green, yellow, orange, pink) and dashed lines in light blue.

# Table of Contents

- 1. Foreword by the Chair | 01**
- 2. Hydropower Sustainability Tools | 02**
- 3. Hydropower Sustainability Standard | 06**
- 4. Assessments | 09**
- 5. Accredited Assessors | 15**
- 6. Capacity Building Programmes | 16**
- 7. Training Academy | 20**
- 8. How-to Guides | 22**
- 9. Governance | 24**
- 10. Financial results 2019-2021 | 28**
- 11. Looking ahead | 39**

# 1. Foreword by the Chair

Climate change is the biggest challenge facing humanity. A major part of its solution lies in a massive increase in the contribution of renewables to overall global energy use. In addition to solar and wind, report after report also highlights the need for a major role for hydropower -- for possibly doubling current capacity. Such an increase can only be met if risk avoidance and sustainability are fundamental criteria for the design and implementation of all future plants.

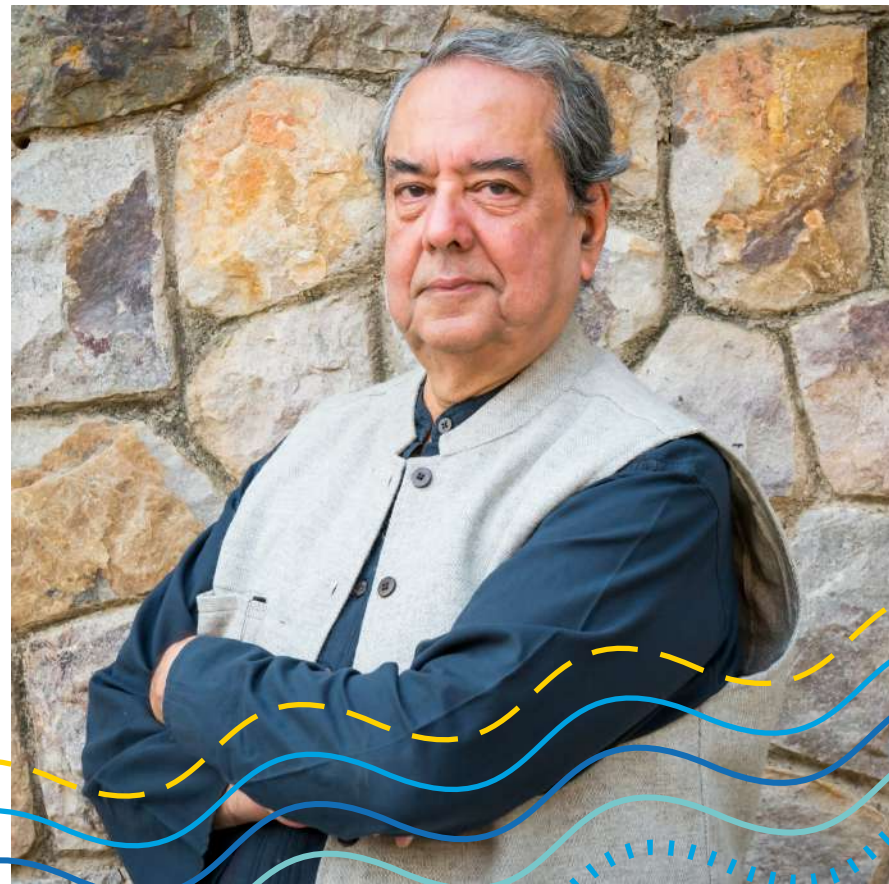
Over the past two years, the Hydropower Sustainability Council invested its time and resources heavily in building a solid platform for good practice in the hydropower sector. We have released guidance to establish good-faith consultation with Indigenous Peoples, aligned our tools with the ESG requirements set by international financial institutions and embedded our tools in the climate bonds market. We have also publicised a number of topic specific How-to Guides to help practitioners enhance sustainability performance in hydropower development and operation.

We are pleased with the work done to expand our sustainability program with new donor funded capacity building activities in Indonesia, Colombia, Albania, Tajikistan, Nepal and Mozambique. We have established our own training hub and now provide virtual and face-to-face certified user, topic specific and assessor trainings. We look towards strengthening the full range of training services in the period ahead. And we greatly appreciate the support from our partners (SECO, Norad and the World Bank) in these endeavours.

Yet there is still much to do. We are in the final stages of development of the Hydropower Sustainability Standard. Over time, we will seek to embed the Standard in the practices of companies, the instruments and procedures of financial institutions and the policies and regulations of governments.

I feel privileged and honoured to be working with a newly elected Hydropower Sustainability Governance Committee. In the field, we are excited to continue working with our Assessors who have so seriously and effectively taken the auditing challenge around the world. As all these efforts begin to bear fruit, I look forward to seeing a significant shift in the paradigms, practices and perceptions towards sustainability in the hydropower sector over the coming years.

**Ashok Khosla**  
**Chair of the Hydropower Sustainability Governance Committee**





## 2. Hydropower Sustainability Tools



The Hydropower Sustainability Tools (HST) define international good and best practice in hydropower development. They provide a common language to allow governments, civil society, financial institutions and the hydropower sector to discuss and evaluate sustainability issues.

# Alignment with World Bank Standards

In May 2020, the Hydropower Sustainability Tools were updated to better align with ESG requirements set by international financial institutions such as IFC and the World Bank. Commissioning an independent assessment using the tools can help developers better understand how their project can achieve the performance standards required by major investment banks for all types of hydropower projects.

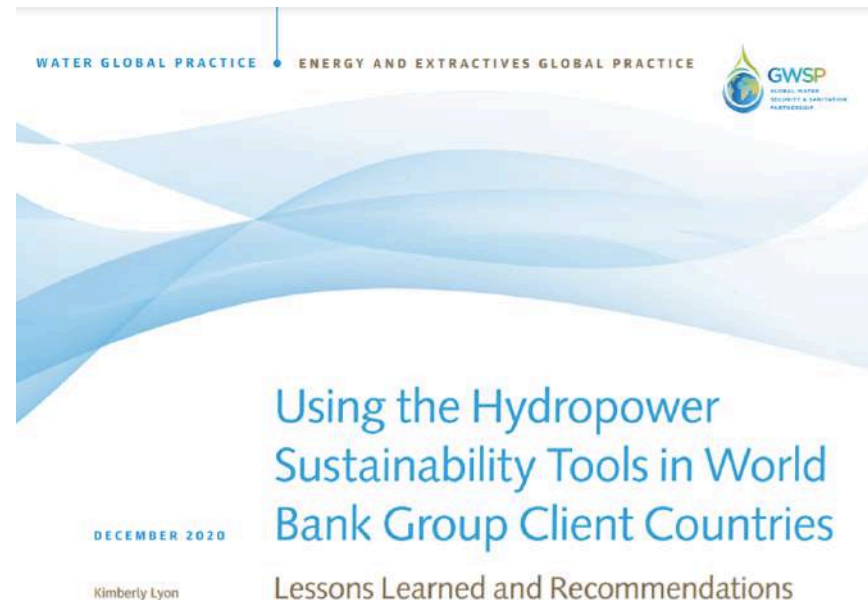
The changes included an update to assessment guidance on consultations with Indigenous Peoples, meaning projects will need to seek the Free, Prior and Informed Consent (FPIC) of affected Indigenous Peoples to achieve international good practice. This brings the assessment tools into line with IFC performance standards and the World Bank's environmental and social standards.

Other changes to the HSAP and HESG related to their structure and section titles. For example, HESG section 4 is now titled Community Impacts and Infrastructure Safety, more closely relating the Word Bank's ESS4 standard on Community Health and Safety.

A report from the World Bank entitled [Using the Hydropower Sustainability Tools in World Bank Group Client Countries](#) recognised the tools as "most powerful existing tool" for improving a hydropower project's sustainability performance and encouraged developers and operators to adopt the tools, undertake training and commission independent assessments.

The report also noted that the Hydropower Sustainability Tools' alignment with the World Bank's Environmental and Social Framework meant they serve as a framework to help the banks' hydropower sector clients meet lending requirements, while supporting bank staff in their due diligence and supervision.

[Read the report.](#)



# Good practice guideline on FPIC

As part of the review of the Hydropower Sustainability Tools in May 2020, a new requirement and guidance was added to the Indigenous Peoples topic. To achieve good practice projects need to show that Free, Prior and Informed Consent (FPIC) has been achieved with respect to the Indigenous Peoples' rights at risk following the principle of proportionality. Developers also need to establish that good-faith consultation with Indigenous Peoples' institutions has been carried out through a culturally appropriate, two-way process, with a mutually-agreed disputes procedure. To achieve best practice, in addition FPIC will need to be demonstrated for directly affected indigenous groups for the entire project.

FPIC is a principle recognised in the UN Declaration on the Rights of Indigenous Peoples and is a condition of performance standards issued by the World Bank and International Finance Corporation.

A hydropower developer is expected to engage in good-faith consultation with Indigenous Peoples' institutions of representation and decision-making, as determined by them. The engagement process shall be appropriately timed, culturally appropriate and two-way. In addition, ongoing processes need to be in place for Indigenous Peoples to raise issues and gain feedback, with a mutually-agreed disputes procedure.

The guidance updates language in the Hydropower Sustainability Tools' Assessment Protocol and ESG Gap Analysis Tool, which previously required no major opposition instead of consent during stakeholder consultation.

The guidance gives increased confidence to local communities, industry and investors that hydropower projects can be successfully developed while respecting Indigenous Peoples' lands, rights and culture.



# Climate Bonds for Hydropower

The Climate Bonds Initiative released its hydropower sector-specific criteria in March 2021. The CBI's Climate Bonds Standard criteria have cleared the way for significant additional investment in sustainable hydropower. Developers, banks, governments and other investors are able to issue certified climate bonds to finance or refinance hydropower projects that comply with strict social, environmental and climate criteria. Projects of all sizes, types (including pumped storage), and in all locations, will be eligible, provided they meet the CBI criteria.

The Climate Bonds Initiative (CBI) is an international investor-focused and not-for-profit organisation working solely to mobilise the US\$100 trillion bond market for climate change solutions. To-date, worldwide green bond issuances have reached over US\$1 trillion.

The Climate Bonds Standard criteria for hydropower stipulates use of the HESG for identifying and addressing gaps against recognised good practice across 12 environmental, social and governance assessment topics; and the G-res Tool for reporting the estimated net greenhouse gas emissions of a reservoir.



Under the CBI criteria, to qualify for a climate bond, a hydropower project must:

- Demonstrate it meets international good practice with an official sustainability assessment using the Hydropower Sustainability ESG Gap Analysis Tool (HESG), one of the Hydropower Sustainability Tools. The assessment must be carried out by an accredited assessor, be publicly available, and show:
  - No more than 10 gaps in total against international good practice.
  - No more than 2 gaps in each section.
  - If gaps are identified, the majority must be closed within 12 months and the remaining within 24 months.
- Demonstrate it has a low carbon footprint: recording either a power density of more than 5 W/m<sup>2</sup> or an emissions intensity of less than 100 gCO<sub>2</sub>e/kWh. For newer projects (in operation from or after the year 2020), the power density should be greater than 10 W/m<sup>2</sup> or the emission intensity should be less than 50 gCO<sub>2</sub>e/kWh. Emissions intensity can be estimated using the G-res Tool.

To learn more about CBI climate bonds and view the eligibility requirements, please visit the CBI website: [climatebonds.net/standard/hydropower](https://climatebonds.net/standard/hydropower)



# 3. Hydropower Sustainability Standard



The Hydropower Sustainability (HS) Standard is a proposed system for assessing and certifying hydropower projects for their sustainability performance.

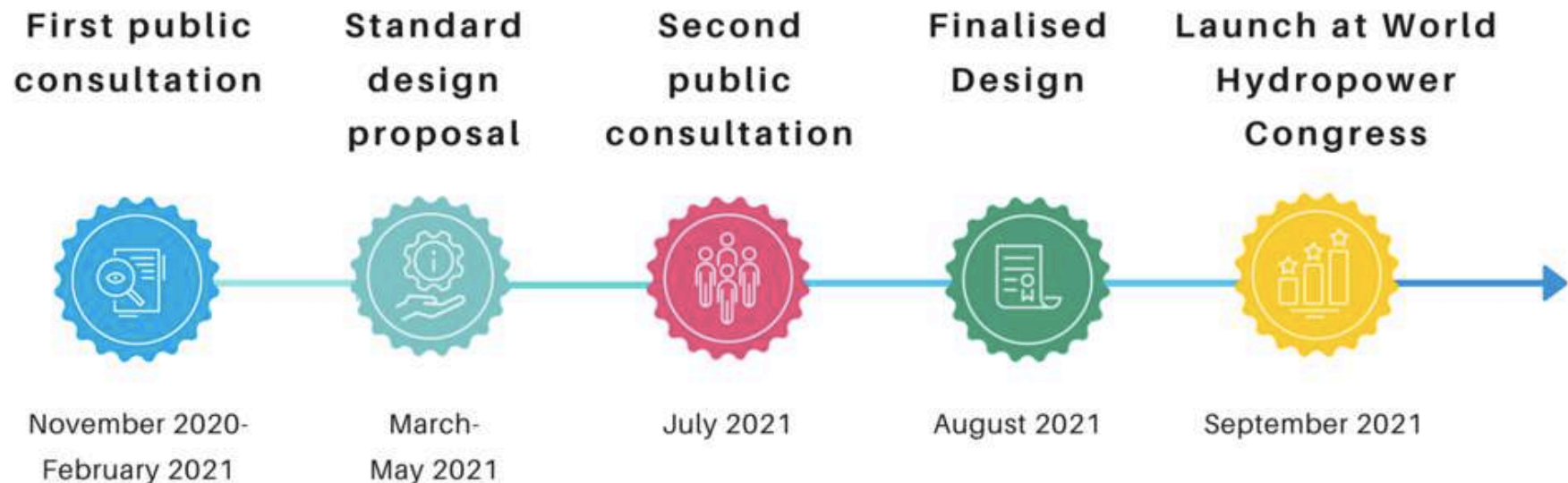
# Standard development

The International Hydropower Association (IHA) and the Hydropower Sustainability Assessment Council, a multi-stakeholder governance body, have been developing a new global sustainability standard for hydropower.

Under the proposal, hydropower projects around the world would be independently rated and certified for their sustainability performance. The new Hydropower Sustainability Standard would build on the Hydropower Sustainability Tools, a set of guidelines and assessment tools used by developers, operators and financiers.

The Standard would incentive and recognise hydropower projects for their environmental, social and governance (ESG) performance, helping to set minimum performance expectations for the sector and publicly acknowledging and rewarding projects for meeting these expectations.

A working group was established by the HSGC to agree on a recommendation for the design of the Standard. The Global Standard Working Group included representatives from governments, environmental and social organisations, financial institutions, hydropower operators, and HST Accredited Assessors. It was chaired by Accredited Lead Assessor Helen Locher. Participants included Debbie Gray (Hydro-Québec), Jian-hua Meng (WWF International), Ruth Tiffer-Sotomayor (World Bank), Lesha Witmer (Women for Water Partnership), Sunil Poudel (Government of Nepal) and Eddie Rich (IHA).





# Standard consultation

The Standard aims to:

- Certify and recognise good practice in hydropower preparation, implementation and operation
- Offer a comprehensive, systematic and simple-to-understand labelling structure
- Encourage and incentivise continuous improvement in addressing sustainability issues, through levels of good and best practice
- Maintain strong credibility of the multi-stakeholder structure of the Hydropower Sustainability Tools
- Ensure transparency and quality of independent assessments



Views and comments were gathered from hydropower stakeholders, including operators and developers, governments, NGOs, civil society, community representatives, and financial institutions.

## First public consultation

The first round of public consultation on the Hydropower Sustainability Standard took place between 12 November 2020 and 8 February 2021. A summary of all comments received from the first consultation and how they were addressed is available for [download](#).

## Second public consultation

A second round of public consultation is taking place from 1 July - 2 August 2021. Feedback is requested on the following documents:

- **HS Standard**, which presents key elements of the Certification Scheme, namely the Theory of Change, the hydropower performance requirements, the scoring methodology and the hydropower sustainability certification levels.
- **HS Assurance System**, which defines all process aspects of the Certification Scheme, including steps towards obtaining certification, assessor accreditation, hydropower assessment processes, claims, renewal, appeals, and other governance processes.

For additional information, please visit the [Standard webpage](#)

# 4. Assessments

## Evidence based



## Transparent



## Independent



The Hydropower Sustainability Tools provide an assessment framework for hydropower projects at various stages of development and operation. Based on objective evidence, assessments give clients a clearer understanding of project strengths and opportunities for improvement across a range of sustainability topics.

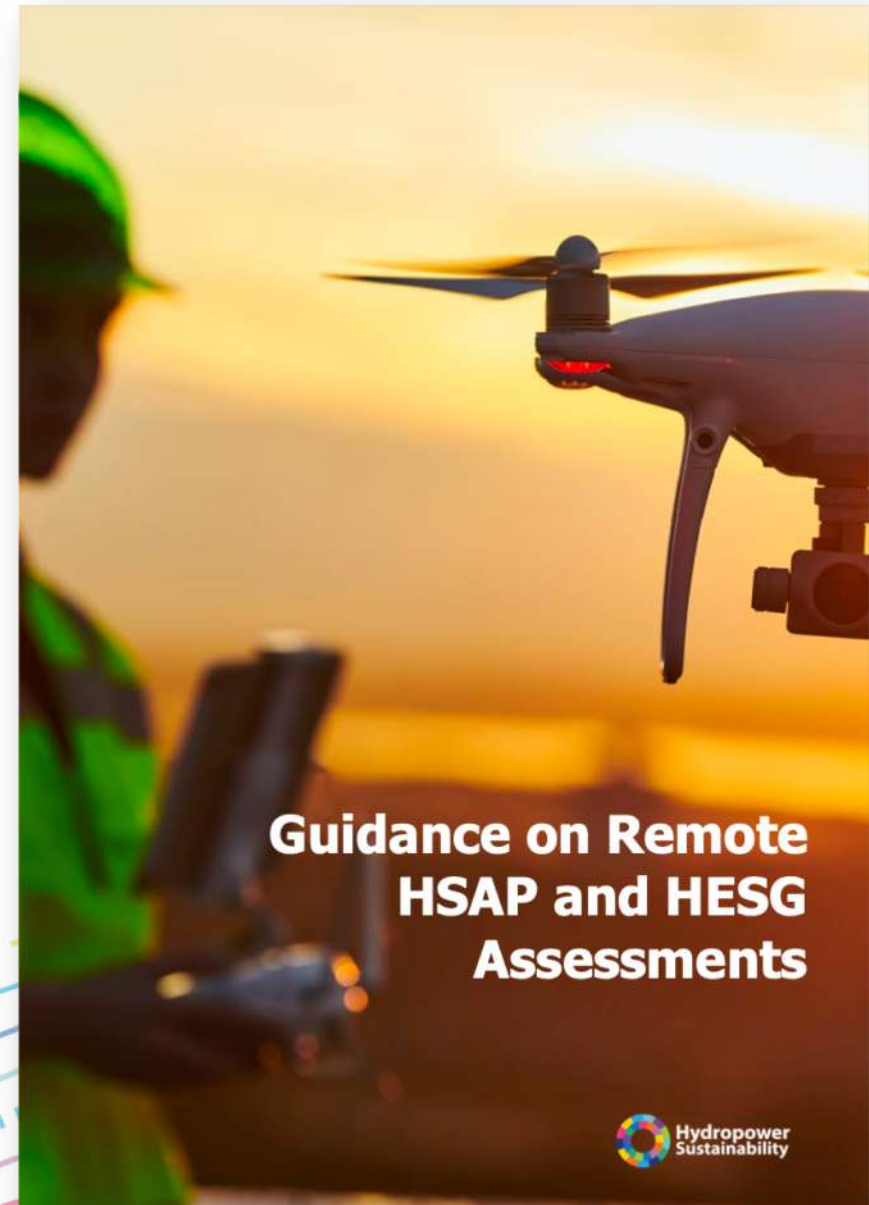


# Remote assessment methodology

In 2019, IHAS developed a guidance for remote HSAP and HESG assessments. The new methodology is aligned with ISO 19011:2018 - Guidelines for auditing management systems and ISO 9001:2020 – Guidance on remote audits.

This guidance outlines the circumstances in which it may be possible to conduct remote HSAP or HESG assessments whilst upholding assessment standards.

It aims to guide assessors and assessees on the suitability of remote assessments, and offers a methodology for their execution.



# Applying the HSAP

## India's Teesta-V hydro station an example of international good practice

The Teesta-V hydropower station, in Sikkim in northern India, has been rated as an example of international good practice in hydropower sustainability. The 510 MW power station, owned and operated by NHPC Limited, was reviewed by a team of accredited assessors using the Hydropower Sustainability Assessment Protocol.

The assessment, the first of its kind in India, was conducted between January and June 2019 and involved two visits to the project area, with stakeholder interviews from 4-13 March.

According to the report, Teesta-V met or exceeded international good practice across all 20 performance criteria. It met proven best practice on its management of asset reliability and efficiency, financial viability, project benefits, cultural heritage, public health, and erosion and sedimentation.

Teesta-V is part of a cascade of hydropower projects along the Teesta River. It was built to supply power to Sikkim's Energy & Power Department and other state-owned distribution companies in India's eastern region and commissioned in 2008 as the first large-scale power station in Sikkim.

The report documents how NHPC, formerly known as the National Hydroelectric Power Corporation, managed impacts on local communities and the environment, and how the project has provided "significant" benefits, including providing low-cost electricity and employment.

[Read the assessment report.](#)

## Upcoming assessments

A HSAP assessment is being conducted remotely in the **Baleh project, Sarawak**, owned by Sarawak Energy Berhad. The 1,285 MW project is one of Sarawak's largest State infrastructure projects and Sarawak Energy's largest hydropower project so far. The assessment is planned to be conducted remotely in the first instance, with a planned verification visit in Q3 2021.

There are two HESG assessments planned for **São Simão project in Brazil**, owned by SPIC Brazil, and **Sebzor project in Tajikistan**, owned by Pamir Energy.





# Using the HESG in Gabon

## Gabon's Dibwangui project achieves global good practice in ESG assessment

The Dibwangui hydropower project in Gabon has been rated as an example of international good practice in sustainability design and planning, following an assessment using the HESG.

Plans for the 15 megawatt plant in the central African country achieved globally recognised good practice across 11 environmental, social and governance (ESG) performance criteria examined in the study.

When completed, the hydroelectric plant in Ngounié province will power the country's south-west region and support local rural communities currently without electricity. The Dibwangui project is being developed by Louetsi Hydro, a special purpose vehicle of [Eranove Group](#) and the Gabonese Strategic Investment Fund (FGIS).

This is the first time a project in Africa has published an assessment using the tool. The assessment between September and October 2019 involved reviewing project plans and interviewing the developer, local community members, national and local government authorities and The Nature Conservancy NGO.

[Read the assessment report.](#)



*Aerial plan of proposed Dibwangui project from the assessment report*

# Using the HESG in South Africa

## Small hydro project leads the way in South Africa on sustainable development

The Stortemelk hydropower project in South Africa has been recognised as an impressive example of sustainable small hydro development using the HESG.

The 4.3 MW run-of-river plant developed by Stortemelk Hydro, a subsidiary of Renewable Energy Holdings (REH), achieved global good practice across 10 environmental, social and governance (ESG) performance criteria in the independent assessment.

Commissioned in 2016, the Stortemelk project has received awards for its architecture and environmental performance. The project's site selection and design have enabled it to avoid significant environmental and social impacts and reduce costs during construction and operation.

The evaluation was supported through the [Hydropower Sustainability ESG Assessment Fund](#) managed by the International Hydropower Association (IHA) and financed by the Switzerland's State Secretariat for Economic Affairs (SECO).

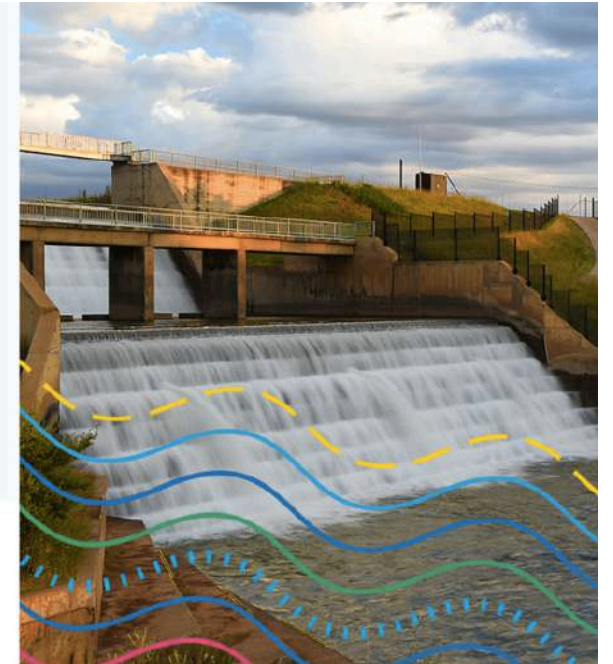
The independent assessment found substantial benefits for the local community through job creation and an ongoing socio-economic development programme. The plant generates enough electricity for around 3,000 households annually.

The assessment was the first to be done remotely following the release of [guidance on remote assessments](#).

[Read the assessment report.](#)

**"Applying the Hydropower Sustainability ESG Gap Analysis Tool at Stortemelk has demonstrated the high sustainability performance of this hydro plant against the leading global standard"**

Anton-Louis Olivier, CEO of REH Group





# Provide comments on Gabonese project

## Gabonese hydropower project exhibits high sustainability performance

The 83 MW Ngoulmendjim hydropower project achieved international good practice on 9 out of 12 sustainability topics following an assessment using the Hydropower Sustainability ESG Gap Analysis Tool (HESG).

Located in Gabon on the Komo river in the Estuaire province, the plant is being developed by [Asokh Energy](#), a joint venture between [Eranove Group](#) and the [Gabonese Strategic Investment Fund \(FGIS\)](#).

Ngoulmendjim is part of Gabon's energy policy called "Vision 2020 Gabon Emergent" which aims to satisfy on-grid electricity needs in the capital Libreville and its surroundings through competitive, sustainable and job-creating electricity supply projects.

The project reached international good practice in 9 out of the 12 environmental, social and governance sustainability topics. Identified gaps will be solved within 24 months after the assessment.

The project is undergoing a **60-day period of public comments** until 14 August 2021. To submit comments, please email [sustainability@hydropower.org](mailto:sustainability@hydropower.org).

[Read the assessment report.](#)





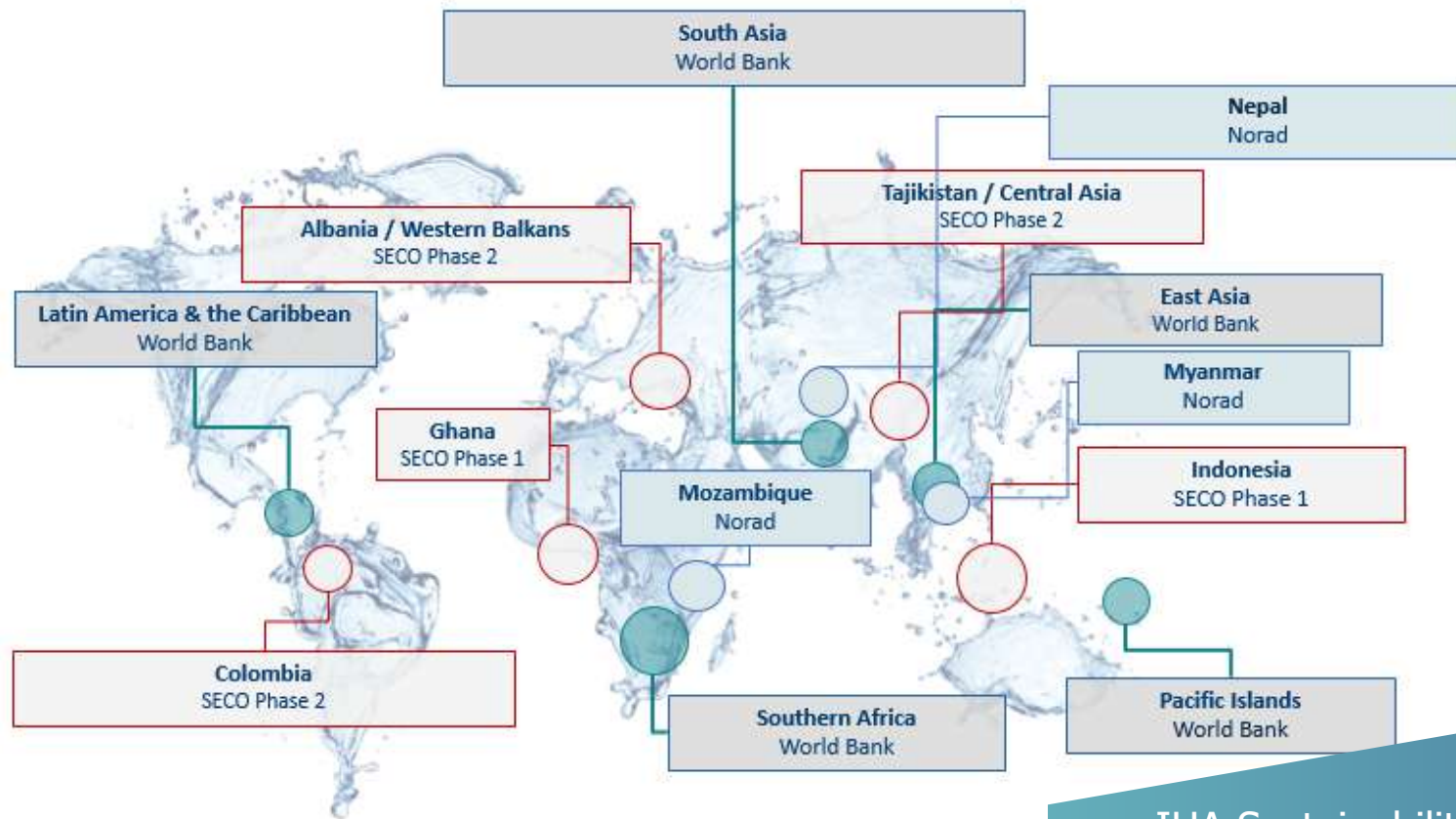
# 5. Accredited Assessors

List of Accredited Assessors:

Name	Status	Country
Helen Locher	Lead Assessor	Tasmania
Joerg Hartmann	Lead Assessor	USA
Eleni Taylor-Wood	Lead Assessor	Australia
Douglas Smith	Lead Assessor	United Kingdom
Bernt Rydgren	Lead Assessor	Sweden
Donal O'Leary	Assessor	USA
Juan Quintero	Assessor	USA
Margaret Trias	Assessor	Canada
Simon Howard	Assessor	United Kingdom
Zaglul Kahndkar	Assessor	Australia
Jorn Stave	Assessor	Norway
Mohamad Irwan Aman	Provisional Assessor	Malaysia
Pablo Baranao	Provisional Assessor	Chile
Michael Clarke	Provisional Assessor	Australia
Antonio Fonseca dos Santos	Provisional Assessor	Brazil

Name	Status	Country
Joan Blandoi	Provisional Assessor	Malaysia
Karen Lee Suan Ping	Provisional Assessor	Malaysia
Mohammad Erwan Ezaruddyn Bin Mahmud	Provisional Assessor	Malaysia
Mohd. Firdaus Ibrahim	Provisional Assessor	Malaysia
Azrul Hisham Hajon	Provisional Assessor	Malaysia
Andrew Harwood	Provisional Assessor	Canada
Darylynn Chung Yiu Li	Provisional Assessor	Malaysia
Prabhakar Kale	Provisional Assessor	Zambia
Serafina Lazaridou	Provisional Assessor	Greece
Cathryn MacCullum	Provisional Assessor	United Kingdom
Dayang Zanariah Abang Kashim	Provisional Assessor	Malaysia
Orlando San Martin	Provisional Assessor	Norway
Andrew Scanlon	Provisional Assessor	Australia
Georgia Chin	Provisional Assessor	Malaysia
Jaynsen Sibat	Provisional Assessor	Malaysia
Miles Scott-Brown	Provisional Assessor	Canada
Jaynsen Patrick Sibat	Provisional Assessor	Malaysia
Susanne Koch	Provisional Assessor	Germany
Zaimie Zainal Abidin	Provisional Assessor	Malaysia

# 6. Capacity Building Programmes



IHA Sustainability has played a leading role in promoting good practices in hydropower development through our donor-funded capacity building programmes. The intended impact is that more sustainable hydropower is planned and developed thanks to strengthened institutional capacity, enhanced skills to manage ESG issues, and increased access to climate finance investments.

# Partnership with SECO – Capacity building

IHAS and the Swiss State Secretariat for Economic Affairs (SECO) have launched a long-term initiative to promote sustainable hydropower development in partner countries. The work is delivered through a capacity building programme and a fund for the realisation of sustainability assessments for promising hydropower projects.

The capacity building programme is delivered from 2020 to 2024 across four countries: **Indonesia, Albania and the Western Balkans, Tajikistan and Central Asia, and Colombia.** The programme aims to strengthen in-country resources and improve ownership of good practice in sustainable hydropower among national and regional stakeholders.

The work is built on the previous engagement with stakeholders in Ghana and Indonesia, which resulted in an increased local expertise, project assessments and creation of new tools and guidance documents.

IHAS has launched the programme in Indonesia in partnership with the Indonesian Ministry of National Planning (Bappenas). IHAS has delivered a Certified User training to Indonesian stakeholders in September 2020 and a training course on Sustainable Finance and Benefit Sharing in April 2021. Over 150 participants from local hydropower operators, government agencies, financial institutions and environmental and social NGOs received the trainings.

In Albania and the Western Balkans, IHAS has organised a kick-off webinar in March 2021 and the first Certified User training in May-June 2021. In collaboration with SECO, KESH and Statkraft, IHAS invited 30 participants from the industry, academia, research, as well as NGOs and local country government representatives who attended the webinar and the training.

IHAS has organised a session and presented the Tajikistan and Central Asia work programme at the Central Asia and Mongolia Energy Week on 29 April. The session also included a presentation from Pamir Energy, the local partner in Tajikistan. The work programme is envisioned to begin in January 2022.

In Colombia, IHAS has engaged with the Colombian Ministry of Mines and Energy and EPM, one of the largest Colombian utilities and hydropower developers. The workplan with the Ministry includes collaboration in the development of a national policy for sustainable hydropower. A cooperation agreement with these entities will be signed in 2021 and kick-off the programme in 2022/2023.

For more information, please visit the [capacity building page](#).





# Partnership with SECO – HESG Fund

The Hydropower Sustainability ESG Assessment Fund was launched in February 2020. The Fund provides a total of 1 million Swiss Francs (USD 1.02m) to 40 or more hydropower projects between 2020 and 2024. The initiative is managed by the International Hydropower Association's sustainability division and funded by Switzerland's State Secretariat for Economic Affairs (SECO).

Successful recipients receive a grant to part-finance the cost of commissioning an independent project assessment using the HESG. The grant part covers the cost of independent assessors to carry out an assessment using the HESG gap analysis tool. This involves a site visit and interviews with stakeholders and produces a concluding report and gap management plan.

Projects under preparation and development, as well as those already in operation, are all eligible for the grant. Applicants will need to demonstrate a strong track record or commitment to sustainability and show that their project aligns with national or regional development policies.

Eligible countries include Afghanistan, Albania, Armenia, Azerbaijan, Bangladesh, Bolivia, Bosnia-Herzegovina, Burundi, Cambodia, Colombia, Democratic Republic of Congo, Egypt, Ethiopia, Georgia, Ghana, Haiti, Honduras, Indonesia, Kenya, Kosovo, Kyrgyz Republic, Lao People's Democratic Republic, Malawi, Moldova, Mongolia, Morocco, Mozambique, Nepal, Nicaragua, North Macedonia, Pakistan, Peru, Rwanda, Serbia, South Africa, Tajikistan, Tanzania, Tunisia, Ukraine, Uzbekistan, Vietnam, Zambia and Zimbabwe.

For more information, please visit our [website](#).



# Partnership with Norad & the World Bank

IHAS has previously worked with the **Norwegian Agency for Development Cooperation (Norad)** under a capacity building programme in Nepal and Myanmar.

In collaboration with the Ministry of Energy, Water Resources and Irrigation of Nepal, IHAS has delivered an In-depth workshop on the Hydropower Sustainability Tools in Nepal on 13-14 July 2021. The aim is for participants to become familiar with the background, content, applicability and impact of the HSTs. With interactive quizzes and moderated discussions, participants will have the chance to ask questions and exchange ideas about the use of the HST in harmony with Nepal's national regulations and MDB's safeguards.

Talks are underway to start engagement in **Nepal**, with the Ministry of Energy, Water Resources and Irrigation, and in **Mozambique**, with the Ministry of Mineral Resources and Energy.

The **World Bank** has been a guiding force in the development of the Hydropower Sustainability Tools since their creation. The Bank was an observer to the forum that drafted the Hydropower Sustainability Assessment Protocol between 2007 and 2010, and currently sits on the tools' governance committee. The Bank has applied the Hydropower Sustainability Assessment Protocol to eight of its projects across four regions and worked to increase institutional knowledge among governments.

In collaboration with the World Bank, IHAS has successfully [strengthened cooperative management and development within the Zambezi Basin.](#)



*Online IHAS training for World Bank staff in July 2020*

# 7. Training Academy

IHAS has launched a training academy for hydropower specialists to expand and improve knowledge in hydropower sustainability.

The [Hydropower Sustainability Training Academy](#) builds on IHA's 25 years of experience in developing guidance on hydropower development, as well as its expertise in delivering training and capacity building. The courses are based on the Hydropower Sustainability Tools.

The Training Academy currently offers three professional [training courses](#). Two of these courses are designed to help participants develop the skills and knowledge to become either a [certified user](#) or [accredited assessor](#) of the Hydropower Sustainability Tools.

The third course caters to practitioners who want to know how to accurately estimate greenhouse gas (GHG) emissions from hydropower projects using the [G-res Tool](#). The courses will soon be available in a variety of languages with plans to expand the courses on offer in 2022.

The training courses are targeted at professionals working with both the public and private sectors, including but not limited to programme managers, operations, energy, environmental, social, legal and dam specialists, and compliance officers.

IHAS has a strong track record in providing in-person and online training to industry, multilateral institutions and governments. In the past year, IHAS has provided virtual training to 140 employees of the World Bank, IFC and the Indonesian government as well as private sector stakeholders.





# Key trainings and conference proceedings

## Certified User Trainings

- Sarawak Energy, Sarawak, Malaysia, 10-12 July 2019
- Inter-American Development Bank, Washington DC, USA, 2-4 October 2019
- Agence Française de Développement (AFD) and African Development Bank (AfDB), Abidjan, Cote d'Ivoire, 3-6 February 2020
- World Bank, virtual, 25 June-9 July 2020
- IHAS-SECO programme, Indonesia, virtual, 2-4 September 2020
- Training Academy, virtual, 10-24 November 2020
- Training Academy, virtual, 26 January-9 February 2021
- Training Academy, virtual, 4-18 May 2021
- IHAS-SECO programme, Western Balkans, virtual, 20 May-3 June 2021

## G-res Tool Trainings

- Public, London, UK, 25-27 November 2019
- Public, Montreal, Canada, 27-29 January 2020
- Training Academy, virtual, 26-28 May 2020
- World Bank, virtual, 17-19 June 2020
- Training Academy, virtual, 21-23 September 2020
- North South Power, virtual, 14-16 October 2020
- Training Academy, virtual, February 1-5 2021

## Other Trainings

- Accredited Assessors, Sarawak Energy, 11-15 February 2019
- Sustainable Finance and Benefit Sharing, IHAS-SECO programme, Indonesia, virtual, 27-29 April 2021

## Global conferences on the Hydropower Sustainability Tools

- World Water Week in Stockholm, Sweden, Hydropower Sustainability Tools Workshop, August 2019
- Africa High Level Roundtable on Sustainable Hydropower in Abidjan, Ivory Coast, February 2020
- First International Seminar on Small Hydropower Project (Mexico), Good International Practice in collaboration with Mexico, Speaker, October 2020
- Central Asia and Mongolia Energy Week, Advancing sustainable hydropower workshop, virtual, April 2021
- Power of Water Canada Conference, Waterpower Leadership in a Sustainable Economic Recovery, May 2021

## Workshops on the Hydropower Sustainability Tools

- World Bank, Hydropower Sustainability Tools: Use and Value Added for Financial Institutions, virtual, July 2020
- Asian Development Bank, Hydropower Sustainability Tools: Use and Value Added for Financial Institutions, virtual, July 2021
- Nepal Ministry of Energy, Water Resources and Irrigation, In-Depth Workshop on the Hydropower Sustainability Tools in Nepal, July 2021

## 8. How-to Guides



IHA Sustainability is developing How-to Guides to enhance knowledge of the processes and substance required to meet good international industry practice, as defined in the Hydropower Sustainability Tools. The publications are developed with the support of the Swiss State Secretariat for Economic Affairs (SECO).

# Published How-to Guides

## Benefit Sharing

The How-to Guide helps decision-makers identify and deliver socio-economic benefits to communities, while assisting companies to avoid business risks and improve project viability. [Download the Guide.](#)

## Erosion and Sedimentation

The How-to Guide provides an overview of current knowledge and effective practices from across the sector in managing risks associated with erosion and sedimentation. The publication helps hydropower developers and operators manage potential impacts arising from erosion and sedimentation in a river basin, allowing decision-makers to avoid business risks and act responsibly towards the environment and local communities. [Download the Guide.](#)

## Resettlement

The How-to Guide supports hydropower developers to identify, manage and avoid risks associated with resettlement. It provides a strategic overview and guiding principles to help inform the steps of the resettlement process at each stage of the project development cycle. [Download the Guide.](#)

## Downstream Flow Regimes

The How-to Guide helps practitioners identify and manage downstream flow regime issues throughout a project's life cycle. It supports developers and operators make informed design and operational decisions with an awareness of downstream impacts. [Download the Guide.](#)

## Biodiversity and Invasive Species

This How-to Guide helps hydropower developers and operators conserve river system biodiversity while generating renewable energy. It details methodologies and technologies that developers and operators can use for basin-level planning, identifying project boundaries and areas of influence, understanding the distribution and value of biodiversity, mitigation and compensation measures, as well as monitoring and reporting, throughout hydropower development and operation. [Download the Guide.](#)

## Environmental and Social Assessment and Management

The How-to Guide will help hydropower stakeholders plan and assess projects strategically, prepare and conduct ESIA's, deal with third-party stakeholders, budget, establish environmental and social management systems, monitor and improve performance, as well as engage with stakeholders throughout the project life cycle. [Download the Guide.](#)

## Labour and Working Conditions

The How-to Guide helps hydropower developers, operators, contractors and sub-contractors manage labour and working conditions. The guide covers human resource policies, recruitment, occupational health and safety, non-discrimination and gender, workers' accommodation, staff training and capacity building and grievance redressal mechanisms among other themes. [Download the Guide.](#)



# 9. Governance



The governing body includes representatives of social, community and environmental organisations, governments, commercial and development banks and the hydropower sector. This inclusive approach to governance ensures that all stakeholder voices are heard in the shaping of the use of the Tools and the Standard.

The Council consists of a series of Chambers, each representing a different segment of hydropower stakeholders. These are:

- Hydropower consultants, contractors or equipment suppliers
- Hydropower operators or developers
- Environment or conservation organisations
- Social impacts, project affected communities, and indigenous peoples' organisations
- Development, public or commercial banks, financial organisations, and private investors/ investment funds
- Emerging and developing economy country governments (as classified according to the International Monetary Fund World Economic Outlook)
- Advanced economy country governments (as classified according to the International Monetary Fund World Economic Outlook)

To date, the Council includes 120 members. Below is a list of new council members who joined from 2019-2021.

Name	Chamber	Country
Xiao Jianliang	Financial	China
Ruth Tiffer-Sotomayor	Financial	USA
Kimberly Lyon	Financial	Jamaica
Aida Khalil	Financial	Philippines

Name	Chamber	Country
Shafiq Ahmad	Social	China
Xu Zhao	Social	China
Catherine Garcia	Operators	Czechia
Debbie Gray	Operators	Canada
Nick Wright	Operators	Malaysia
Pedro Sirgado	Operators	Portugal
Phil Shantz	Consultants	Canada
Craig Scott	Consultants	United Kingdom
Venkat Kolluru	Consultants	United States
Michael Clarke	Environmental	Australia
Bin Xu	Emerging countries	China
Saiyu Yuan	Emerging countries	China
Jesse Nyokabi	Emerging countries	Kenya
Mwewa Chikonkolo Mwewa	Emerging countries	Zambia

# Governance Committee 2019-2021

On behalf of the Hydropower Sustainability Assessment Council, we would like to thank the HSGC members of 2019-2021 for their contribution.

HSGC member	Position
Dr Jian-hua Meng	Chair, Environmental aspects
Dr James Dalton	Alternate, Environment aspects
Ms Lesha Witmer	Vice Chair, HSGC and Chair, Social aspects
Mr Jiwari Abdullah	Alternate, Social aspects
Prof Shi Guoqing	Chair, Emerging economy country governments
Mr Sunil Poudel	Alternate, Emerging economy country governments
Mr Daniel Menebhi	Chair, Advanced economy country governments
Mr Geir Yngve Hermansen	Alternate, Advanced economy country governments
Ms Ruth Tiffer-Sotomayor	Chair, Financial institutions
Ms Xiao (Jianliang) Elisa	Alternate, Financial institutions
Mr Roger Gill	Chair, HSGC and Chair, Hydropower owners, operators
Mr Pedro Sirgado	Alternate, Hydropower owners, operators
Mr Richard Taylor	Chair, Hydropower consultants, suppliers
Dr Jürgen Schuol	Alternate, Hydropower consultants, suppliers



# Governance Committee 2021-2023

The HSGC is composed by the chair and alternate of each HSAC chamber representing interests and opportunities of the chambers. Below is a list of the elected Chamber Chairs and Alternate Chairs that will be representing the chambers on the Governance Committee for 2021-2023:

HSGC member	Position
Dr Ashok Khosla	Chair, HSGC
Dr Jian-hua Meng	Chair, Environmental aspects
Dr James Dalton	Alternate, Environment aspects
Mr Jiwari Abdullah	Chair, Social aspects
Mr Stéphane Brabant	Alternate, Social aspects
Mr Mwape Chikonkolo Mwewa	Chair, Emerging economy country governments
Prof Shi Guoqing	Alternate, Emerging economy country governments
Mr Daniel Menebhi	Chair, Advanced economy country governments
Mr Geir Yngve Hermansen	Alternate, Advanced economy country governments
Ms Kimberly Lyon	Chair, Financial institutions and Vice Chair, HSGC
Ms Xiao (Jianliang) Elisa	Alternate, Financial institutions
Ms Debbie Gray	Chair, Hydropower owners, operators
Mr Pedro Sirgado	Alternate, Hydropower owners, operators
Dr Jürgen Schuol	Chair, Hydropower consultants, suppliers
Mr Knut Sierotzki	Alternate, Hydropower consultants, suppliers
Mr Sunil Poudel	Observer

# 10. Financial Results 2019-2021

## IHA Sustainability Limited Financial results - May 2019 to April 2021

Income	Actual	Budget	Variance
SECO	332,700	353,270	(20,570)
NORAD	18,532	189,870	(171,338)
Training/Assessments	109,557	100,000	9,557
Royalties/Licence fees	19,060	112,225	(93,165)
Other	55,389	78,000	(22,611)
<b>Total Net Income</b>	<b>535,237</b>	<b>833,365</b>	<b>(298,128)</b>
<b>Expenditure</b>			
Staff	(543,270)	(656,143)	112,872
Travel & Subsistence	(11,056)	(10,750)	(306)
Administrative	(69,175)	(177,959)	108,784
Communications	(13,621)	0	(13,621)
Legal & Professional	(11,616)	(15,525)	3,909
Finance	(36,497)	(975)	(35,522)
<b>Total Expenditure</b>	<b>(685,235)</b>	<b>(861,352)</b>	<b>176,117</b>
<b>Operating Results</b>	<b>(149,997)</b>	<b>(27,987)</b>	<b>(122,010)</b>
Interest received	53	0	53
<b>Surplus/(deficit)</b>	<b>(149,944)</b>	<b>(27,987)</b>	<b>(121,957)</b>

## Budget breakdown

During the period 1 May 2019 to 30 April 2021, IHA Sustainability generated total net income of £535k, and spent a total of £685k which culminated in an operating loss of -£150k over the two-year period.

Total net income were £298k (35%) lower than budget (833k). This was predominantly driven by the effect of the Covid-19 pandemic which halted or delayed assessments and impacted the delivery of capacity building programmes. However, in October 2020, IHAS launched the online training academy which helped to generate and maintain revenue expectations.

Across the 2-year period IHA Sustainability spent a total of £685k compared to budget of £861k, making significant costs savings of £176k (20%) across staff, administrative and legal and professional costs.

At the end of the 2-year period to 30 April 2021, IHA made an operating loss of -£150k, compared to budget of a loss of £28k. This also translated to net reserves of -£62k at the end of the period.

# 11. Looking ahead

## Moving forward:

- Launch and implement the Standard
- Position the Standard at the core of Government's regulation and policy design for hydropower and energy, and its use as an expectation of industry
- Application for the ISEAL Community Membership
- Promotion of the Hydropower Sustainability Tools
- Implementation of donor funded programmes and seeking other programme opportunities
- Management of the Training Academy, including development of new topic-specific training courses and provision of accredited assessor training
- Preparation of proactive communications and social media presence
- Development of the How-to Guides and relevant publications on international good practice

## Governance Review

In 2022, an independent review of the governance of the Hydropower Sustainability (HS) and its derivatives – the Council, the Governance Committee, the chambers, the Management Entity and the Chair – will take place. The objective of the review will be to enhance HS's ability to deliver its ambitious programme.

The review might encompass the following issues:

- The name and branding of HS.
- The long-term financing of HS.
- The role and structure of the management entity.
- The structure of the chambers.
- The inclusion of geothermal technology under the umbrella of the HSGC (with potential impact on name and branding)
- Use of co-optees on the HSGC.
- Revision of the Charter.

The review would seek to be delivered in the first half of 2022 and be followed by a review of the Hydropower Sustainability communications plans.



Learn more at [hydrosustainability.org](https://hydrosustainability.org)

Talk to us: [sustainability@hydropower.org](mailto:sustainability@hydropower.org)

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