CLIMATE-RELATED DISCLOSURE AND THE HYDROPOWER SECTOR

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Introduction

Markets need reliable information on climate double materiality to direct finance to activities that tackle the climate emergency.

In addressing the global challenges, including climate change, water and energy access, hydropower assets have an unprecedented transformational role. However, climate change also poses risks for hydropower business, now and in the future.

Starting the decade of action, there is broad recognition that a fundamental economic shift needs to occur to address the climate emergency and mobilise the trillions of finance in the markets to businesses and activities that have a crucial role.

Markets need reliable data about how exposed businesses are to climate risks and how business contribute to mitigating and adapting to climate (the so-called dual materiality). Also, development and financial institutions put greater attention to investment in disaster risk management and climate change adaptation. So, increasing transparency on climate-related matters makes financing more efficient for hydropower businesses and activities.

Global initiatives and frameworks have emerged to urgently improve and scale-up disclosure of climate-related information, such as the Task Force on Climate-Related Financial Disclosure (TCFD) recommendations, the European Union's Sustainable Finance Disclosure Regulation and the Climate Disclosure Standards Board.

In 2015, the year of the Paris Agreement, the Financial Stability Board formed a task force, i.e., TCFD, to help identify the information needed by investors, lenders, and insurance underwriters to appropriately assess and price climate-related risks and opportunities. The work of the Task Force culminated in 2017 with the publication of its recommendations for climate-related financial disclosure, which promotes transparency to lead to better climate-risk management.

The recommendations are structured around core organisational areas: governance, strategy, risk management and metrics and targets. These areas are interlinked and should inform each other.

The Task Force on Climate-Related Financial Disclosure

Since the publication of the TCFD recommendations, all types of organisations have expressed support to encourage their implementation. For companies, support means an expectation to work toward the implementation of the TCFD recommendations. Other kinds of organisations express support by convening their members and facilitating consistency in implementation. And government agencies and regulators support by encouraging or requiring companies and other organisations to implement the recommendations. National governments supporting TCFD recommendations are South Korea, Canada, Chile, Denmark, France, New Zealand, Norway, Sweden, Switzerland, and United Kingdom.

The increased support by policymakers and regulators in specifically requiring disclosure of climate-related financial information can have a decisive influence to mobilise markets.

Moving forward with climate-related disclosure

TCFD recommendations for climate-related disclosure are turning from a voluntary approach to the main regulatory response with an 85% increase of TCFD supporters in recent years

TCFD supporters´ numbers have grown steadily, with increases of up to 85% in recent years.[i] In February 2020, TCFD supporters surpassed 1,000 connoting a shift among market participants in acknowledging that climate change presents a financial risk. By September 2021, TCFD had over 2300 supporters from over 88 countries.[ii]

With governments agreeing to implement mandatory disclosure aligned with TCFD recommendations, TCFD is becoming the leading framework to help public companies and other organisations disclose climate-related risks and opportunities. In fact, TCFD framework is shifting from a voluntary approach to being the main regulatory response to climate physical and transition risks.

Back in June 2021, the G7 countries[iii] committed in London to achieving carbon neutrality by 2050 and backed mandatory disclosure on climate-related financial impacts. Further, the mandatory disclosures should be made according to existing recommendations made by the Task Force on Climate-related Financial Disclosures (TCFD).[iv]

With this agreement, governments ensure a level playing field and transparency for both companies and financial institutions by introducing a mandatory consistent and comparable disclosure of climate-related information. The disclosure provides consistent and decision-useful information for market participants and will help mobilise the trillions of dollars of private sector finance needed to meet climate targets.

Japan´s corporate governance code hardwires that large-cap companies should disclosure risks and opportunities from the impact of climate change based on the TCFD framework. A revision of the code, once it gets the green light, will lead to a mandatory climate risk-related disclosure that could take effect for the fiscal year ending on 31 March 2022 at the earliest.[v]

As shown in Figure 1, besides the G7 countries plus the European Union, New Zealand, Switzerland and Hong Kong have agreed to mandatory reporting aligned with TCFD recommendations. Before the G7, New Zealand became the first to introduce mandatory climate-related disclosure for financial institutions starting in 2022.

Following the G7 meeting, Switzerland declared an obligation to report publicly on climate issues by large Swiss companies. The public reporting includes the so-called double materiality between climate and economic activities, so englobes the financial risk that a company incurs because of climate-related activities, and the impact of the company's business activities on the climate and the environment. The binding implementation of the TCFD recommendations is expected to take place from 2024 for the 2023 financial year.[vi]

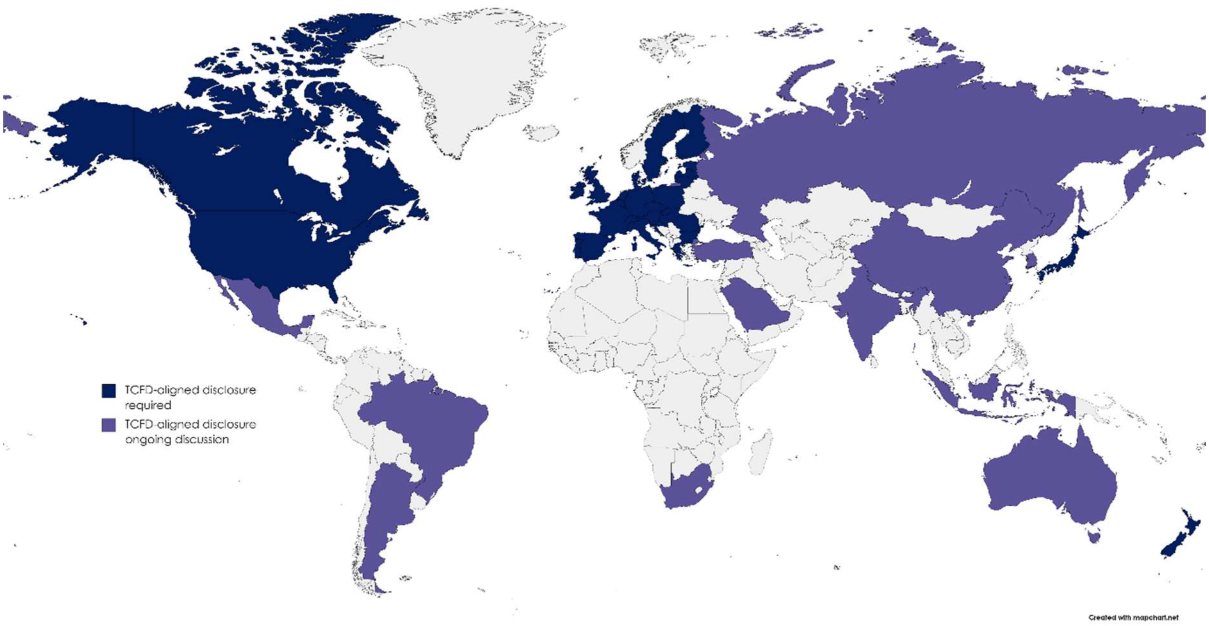
This double materiality is also in line with the European Union's approach. The upcoming EU Corporate Sustainability Reporting Directive[vii] that amends the existing Non-Financial Reporting Directive (NFRD) extends the scope of companies required to disclose information and introduces more requirements. Currently, the corporate disclosure requires the impacts of their business on the climate and the impacts of climate change on their business. To facilitate the disclosure, the European Commission published in 2019 non-binding climate reporting guidelines which are consistent with the requirements and integrate the recommendations of the TCFD.[viii] However, they have proved insufficient to improve the quality of the information provided by the companies. The revision of the NFRD will ensure companies are more transparent and report adequate information about the risks and impacts that companies incur.

Hong Kong has also set a date of 2025 to implement mandatory TCFD aligned disclosures. While Canada tied Covid-19 pandemic bailout funding dependent on TCFD-aligned disclosures.[ix]

In Australia, earlier this year, the regulator has unveiled guidance for banks, insurers and pension funds on managing and disclosing climate-related risks, including physical, transition and liability exposures, and is aligned with the recommendations from TCFD. The guide aims to give clarity about the regulator´s expectations to ensure decisions are well-informed; however, there is not a new requirement.[x]

After the G7 commitment, the discussion on comparable mandatory reporting will now move to the broader G20 group.[xi] It is expected that an international agreement could be reached by the time of the UN Climate Change Conference (COP26) in Glasgow in November.[xii]

Figure 1. Countries that require TCFD-aligned disclosure and countries in the G20 that are undertaking discussion to require TCFD-aligned disclosure.



China plans to implement mandatory disclosure of climate-related information, as part of efforts to drive a 'green transformation' of Chinese commercial banking and intends to spur related disclosure activities by domestic listed companies. China is also working on domestic green bond standards but highlights the importance of international collaboration for consistency and comparability with those of the EU and other commonly accepted frameworks such as TCFD on climate-related disclosures.[xiii]

Consequently, the commitments to introduce mandatory disclosure requirements are a step in the right direction, but more details are needed regarding the nature of their implementation, the timing, and which companies will be obliged to report. For example, during the consultation for the EU´s NFRD amendment, stakeholder had a wide range of opinions about which categories of companies should be subject to mandatory reporting requirements. On the one hand, some propose to extend the requirements to large non-listed companies and small-medium enterprises (SME), while on the other hand, some oppose to extending the scope or suggest proportionate and voluntary standards for small and medium-sized enterprises (SME).[xiv]

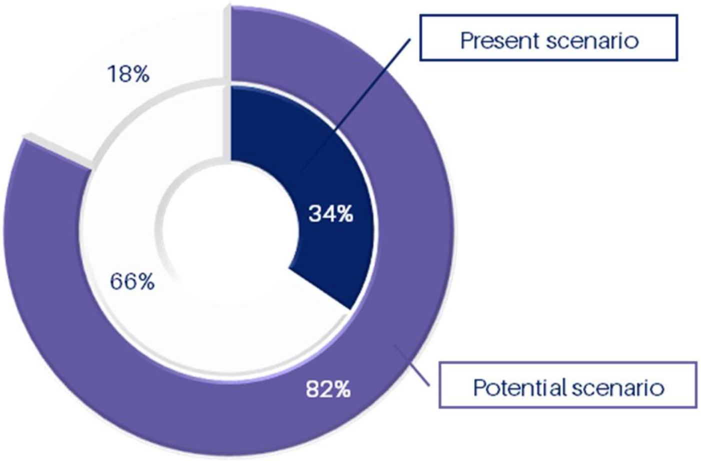
The hydropower sector supporting the TCFD recommendations

With 513 GW of hydropower capacity subject to mandatory climate-related disclosure, the hydropower sector could lead on climate-related reporting

The hydropower capacity in the countries that are working towards mandatory TCFD-aligned disclosure is 513 GW which represents 34% of the worldwide hydropower capacity (including pumped storage hydropower) as depicted in Figure 2. This is concentrated in the northern hemisphere in Europe, North America (excluding Mexico) and Japan. New Zealand is the only country in the southern hemisphere.

In the scenario that the G20 countries reach an agreement, the hydropower capacity subject to mandatory disclosure would increase to 1,220 GW, which translates to over 80% of the world´s capacity. The difference is mainly due to China and Brazil with 370 GW and 109 GW respectively. India, Russia and Turkey follow with 51 GW, 50 GW and 31 GW.

Figure 2. Hydropower capacity of countries currently working to implement mandatory TCFD-aligned disclosure (present scenario) and countries that are considering it (potential scenario).



Present and future of the hydropower sector in relation to climate-related disclosure

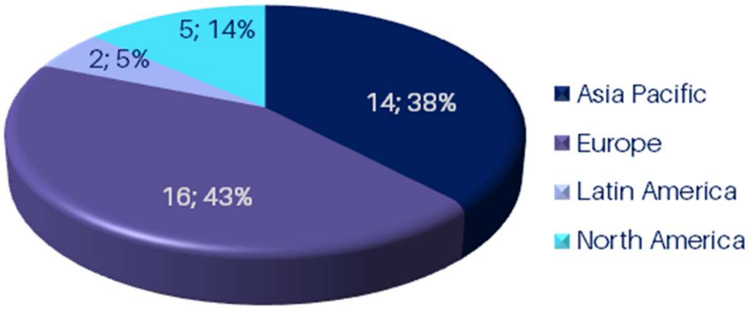
TCFD supporter utilities represent over 40% of the hydropower installed capacity in Europe but only 7% in Asia

Among TCFD supporters, we find stakeholders who are meaningfully engaged in the development, operations or financing of hydropower projects and are located around the globe from the Americas to East Asia and Pacific and Europe in between.

The hydropower industry is represented within the utilities that englobe electric utilities, gas utilities, independent power and renewable electricity power producers, multi-utilities and water utilities with some hydropower capacity. In total, 37 companies supporting TCFD recommendations add 198 GW of hydropower installed capacity. They represent 15% of the hydropower installed capacity worldwide that reached 1,330 GW in 2020.

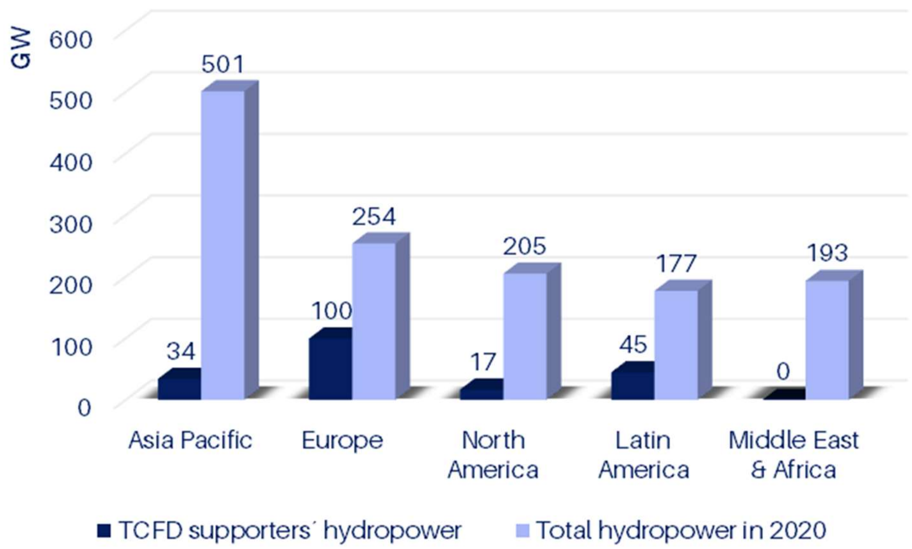
As shown in Figure 3, most of the TCFD supporter organisations from the hydropower industry are based in Europe and they represent the majority of hydropower capacity (100 GW) among TCFD supporters. Asia Pacific follows with 14 organisations while North America only with 5 organisations. Only two utilities are TCFD supporters in Latin America and come specifically from Brazil. This is consistent with the distribution of total TCFD supporters that concentrate a higher number of European organisations. Unfortunately, no organisation from Africa with hydropower capacity is yet a TCFD supporter.

Figure 3. TCFD supporter utilities that own and operate hydropower plants. [Source: own elaboration]



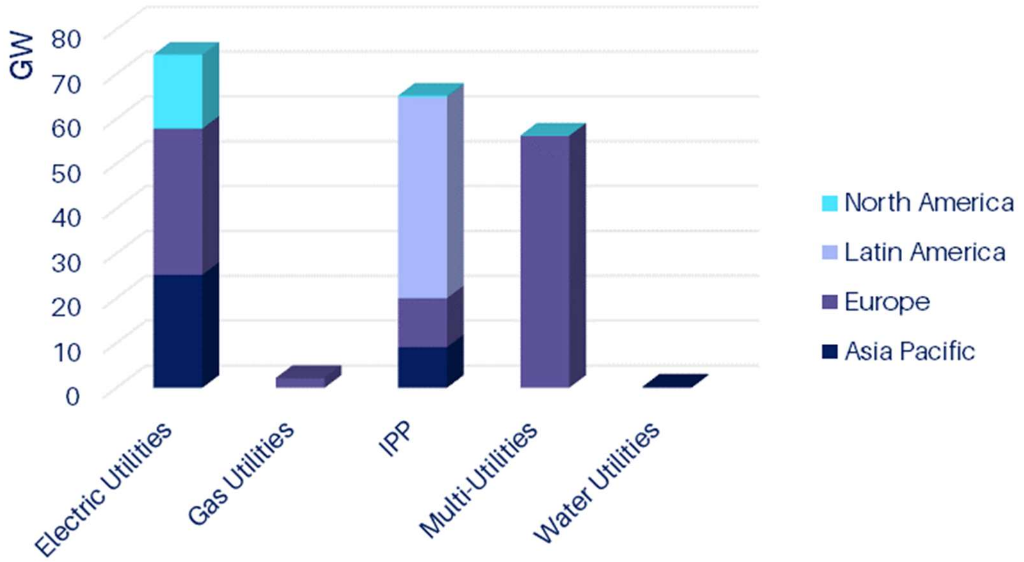
Regarding the regional hydropower presence depicted in Figure 4, Europe leads with 100 GW representing 40% of the region´s capacity. On the contrary, Latin America follows with 45 GW. This is due to the vast hydropower capacity by one Brazilian utility, Eletrobras (42 GW). Despite the enormous hydropower capacity, Asia Pacific has the lowest representativeness with 34 GW that translates to 7% of the total in the region. Lastly, North America is just slightly above 8%, with 17 GW of capacity.

Figure 4. Comparison of global hydropower Installed capacity and TCFD supporter companies´ hydropower capacity. [Source: own elaboration and IHA, 2021[xv]]



By breaking down the hydropower capacity by utilities category, electric utilities, independent power and renewable electricity power producers (IPP) and multi-utilities concentrate the hydropower capacity as presented in Figure 5. The only gas utility with some hydropower capacity that is not insignificant is the Spanish company, Naturgy, with 2,185 MW. Of water utilities, only Manila Water Company has 256 MW in the multipurpose Angut Dam.

Figure 5. Hydropower capacity and regional capacity by TCFD supporter´s categories for utilities (electric utilities, gas utilities, independent power and renewable electricity power producers, multi-utilities and water utilities) [Source: own elaboration]



The estimates of this analysis are conservative since the research does not include hydropower capacity from asset owners and managers. For example, Brookfield, a TCFD supporter, is one of the world's largest investors in renewable power, with 222 hydro generating facilities representing approximately 8,000 MW. In 2016, Brookfield acquired Colombia's third-largest power generation portfolio, based primarily on hydro and accounting for roughly 20% of the country's generation, with 3,000 megawatts of capacity.

Key financiers of the hydropower sector supporters of TCFD recommendations are the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD). They have a great potential to mainstream climate-related disclosure in hydropower asset financing requirements that they will be soon obliged to comply with EU policy.

The gap and the preparedness of the hydropower sector

Additional 300 GW of existing hydropower capacity will need to disclose climate-related information by 2025 and the number could reach to 1 TW

At least 15% of global hydro capacity belongs to organisations that are expected to implement TCFD recommendations. However, 34% of hydropower capacity (513 GW) is in countries that have agreed to require climate-related disclosure aligned with the TCFD recommendations in the coming years to 2025.

While not all the hydropower capacity might be subject to disclosure (as the disclosure affects certain companies such as large, listed companies or large asset owners), there is an estimated gap of over 300 GW of hydropower capacity that could be required to disclose climate-related information by 2025 (excluding about 200 GW of estimated capacity from TCFD supporters). Moreover, if the G20 countries commit to support TCFD recommendations, the gap will increase to over a 1 TW of hydropower capacity.

Given the upcoming mandatory requirements and the timid level of engagement from the hydropower sector supporting TCFD recommendations, it is clear the need to provide the hydropower sector with the tools to understand and be able to inform about the double materiality of their hydropower operations.

in 2019, leading electric utilities addressed the challenges in responding to the TCFD's recommendations under the TCFD Electric Utilities Preparer Forum hosted by the WBCSD.[xvi] The outcomes of this report, as well as the 2020 TCFD Status Report highlighted the need for industry specific aligned recommendations and standardised metrics to ensure the information is relevant and valuable for financial decision-making. [xvii]

Open Hydro is leading action towards streamlining climate reporting integrated with internationally recognised frameworks for the hydropower sector. In September 2021, Open Hydro published a background paper[xviii] that specifically tackled the challenges and opportunities for climate risk disclosure in the hydropower sector that found the emerging need for standardised metrics as the way forward to scale-up and mainstream the climate and ESG disclosure in the hydropower sector. [xix]

Under the Net Zero Climate Resilient Hydropower Initiative, Open Hydro hosted two multilateral meetings over the summer 2021 on incentivising project-level climate disclosure. The meetings gathered the perspectives from over 20 leading organisations, including asset owners and utilities, financial institutions and international organisations on climate reporting and the potential benefits of standardisation for hydropower assets. Also, the participants provided suggestions on practical steps to achieve a project-level reporting standardisation aligned with corporate-level disclosures following TCFD recommendations.

Key recommendations for the hydropower sector

Therefore, to scale-up climate action and streamlining climate reporting to efficiently direct capital to hydropower investments that drive climate change mitigation and adaptation solutions, we need:

- Financiers and policy makers to acknowledge the complexity of hydropower assets to manage and adapt to climate impacts from a water and energy perspective.
- To increase awareness on how climate reporting will affect the financing and operations of hydropower assets
- More companies and financial institutions to support climate-related disclosure to ensure their progress towards their climate targets.
- To increase clarity around and guidance to the hydropower sector on how to assess and report climate-related physical and transitional risks and opportunities to demonstrate how hydropower assets contribute to mitigate and adapt to climate change.
- To reach a consensus for a common reporting to allow consistency and comparability so companies and financiers have a common ground towards streamlining climate-related disclosure.

References

i Own calculation from the difference between TCFD Status Report 2019 and TCFD Status Report 2020:
FSB (2019). Task Force on Climate-related Financial Disclosures: 2019 Status Report
FSB (2020). Task Force on Climate-related Financial Disclosures: 2020 Status Report
ii TCFD (access 2021). Support the TCFD. https://www.fsb-tcfd.org/support-tcfd/
iii The G7 country members are UK, USA, Canada, Japan, Germany, France and Italy plus the EU that also participates.
iv https://www.g7uk.org/official-documents/
https://www.g7uk.org/wp-content/uploads/2021/06/Carbis-Bay-G7-Summit-Communique-PDF-430KB-25-pages-1-2.pdf
v https://www.regulationasia.com/japan-proposes-mandatory-climate-risk-disclosures/
vi https://www.admin.ch/gov/en/start/documentation/media-releases.msg-id-84741.html
vii https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en#companies
viii https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/corporate-disclosure-climate-related-information_en
ix https://www.spglobal.com/esg/insights/companies-investors-face-new-pressure-from-compulsory-disclosure-of-climate-risk
x https://www.reuters.com/business/environment/australian-regulator-issues-long-awaited-climate-risk-guidance-2021-04-22/
xi The members of the G20 are: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of South Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom, the United States, and the European Union.
xii https://www.reuters.com/business/environment/g7-backs-making-climate-risk-disclosure-mandatory-2021-06-05/
https://www.responsible-investor.com/articles/the-time-has-come-for-mandatory-disclosure-mary-schapiro-on-the-historic-g7-announcement-on-tcfd-reporting
xiii https://www.xbrl.org/news/china-plans-mandatory-climate-disclosures-in-green-transformation-drive/
xiv European Commission (2021). Proposal for a Directive of the European Parliament and of the Council. Amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021PC0189&from=EN
xv International Hydropower Association (IHA) (2021). Hydropower Status Report 2021. IHA, London.
xvi World Business Council for Sustainable Development (2019). TCFD Electric Utilities Preparer Forum. Disclosure in a time of transition: Climate-related financial disclosure and the opportunity for the electric utilities sector. WBCSD
xvii FSB (2020). Task Force on Climate-related Financial Disclosures: 2020 Status Report.
xviii Open Hydro (2021). Background paper: Incentivising project-level disclosure. A way forward for climate action. Open Hydro, London. www.openhydro.net/
xix Open Hydro (2021). Background paper: Incentivising project-level disclosure. A way forward for climate action. Open Hydro, London. www.openhydro.net/

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For a climate resilient future

Net Zero Climate Resilient Hydropower Initiative aims to promote the development of a commonly agreed climate-related reporting for hydropower assets to advance in the availability and quality of climate-related disclosure at the project level. In doing so, the aim is to help the effective mobilisation of climate investment to finance or refinance hydropower assets that demonstrate their contributions towards a climate-resilient, zero-carbon planet.

Speak to us today

Book a 30-minute consultation with our team