

ENHANCING SUSTAINABLE FINANCE IN MEKONG HYDROPOWER:

CHALLENGES, OPPORTUNITIES, AND WAYS FORWARD

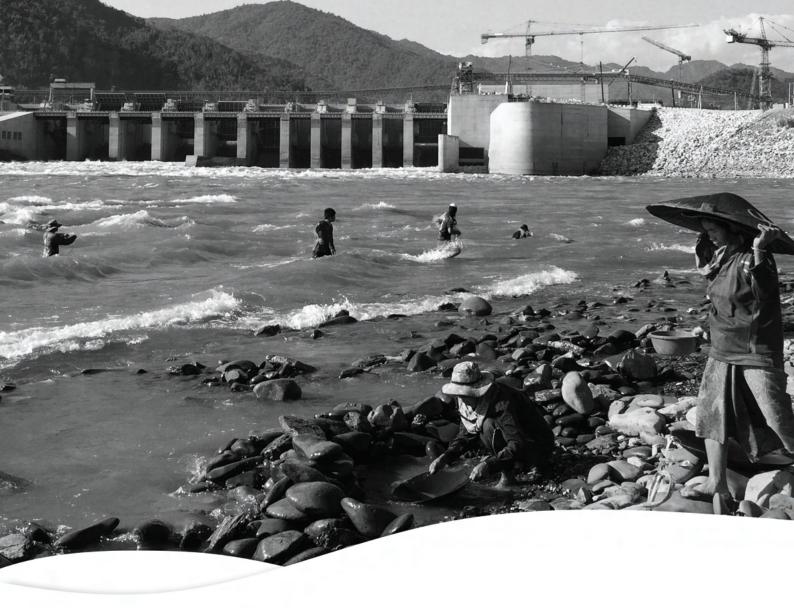
MARCH 2024



ENHANCING SUSTAINABLE FINANCE IN MEKONG HYDROPOWER:

CHALLENGES, OPPORTUNITIES, AND WAYS FORWARD

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About this report

This report has been commissioned by Fair Finance Asia (FFA). FFA is a regional network of Asian civil society organizations that are committed to ensuring that the business decisions and funding strategies of financial institutions in the region respect the social and environmental well-being of the communities in which they operate. Civil society coalitions from 10 countries in the region participate in FFA: Bangladesh, Cambodia, India, Indonesia, Japan, Lao PDR, Pakistan, the Philippines, Thailand, and Vietnam. This report has been developed in consultation with Fair Finance coalitions in Cambodia, Lao PDR, and Thailand.

About Profundo

With profound research and advice, Profundo aims to make a practical contribution to a sustainable world and social justice. Thematically focused on commodity chains, the financial sector and corporate social responsibility, quality comes first, aiming at the needs of the clients. More information on Profundo can be found at www.profundo.nl.

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The correct citation of this report: Fair Finance Asia (2024, March), *Enhancing Sustainable Finance in Mekong Hydropower: Challenges, Opportunities, and Ways Forward.*

Front cover page: Community people at a dam site in Lao PDR (Photo: Shutterstock).

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- The interview respondents for their participation and insightful views.
- International Rivers for sharing valuable insights that helped refine the study's scope.
- Sandy Pederson of Seed Edit Communications for editing the report.
- Saovor Nhel, Art Director Consultant for designing the report.

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Executive Summary

Covering an estimated distance of more than 4,900 kilometers, the Mekong River is one of the world's longest rivers. The river flows through six countries: China, Myanmar, Thailand, Lao PDR, Cambodia, and Vietnam. According to the Mekong River Commission, the Mekong River provides water, food, and energy security for about 70 million people. Yet, its essential contribution to the livelihoods of communities in the Mekong Subregion has been adversely impacted over the years by the construction and ongoing development of hydropower dams. Currently, more than 160 hydropower dams operate on the river and its tributaries, including 13 on the mainstream, with hundreds more either planned or under construction.

Despite many socio-environmental risks, hydropower projects with transboundary impacts in the Mekong Subregion continue to be developed without addressing the concerns raised by civil society organizations (CSOs) and local communities. Banks and investors financing such projects could play an important role in ensuring that environmental and social safeguards are applied by companies in the construction, operation,

and decommissioning of hydropower plants. National and regional regulations could bolster this influence by recognizing the responsibility of financial institutions to conduct robust human rights and environmental due diligence (HREDD) procedures that take the voices of workers and local communities into account.

However, banks and investors are not fully leveraging their influence on companies involved in the development of hydropower projects. This report explores the key environmental and social (E&S) issues and rights-based considerations related to hydropower projects in the Mekong Subregion, with a focus on four of the six riparian countries in the Mekong River Basin: Cambodia, Lao PDR, Thailand, and Vietnam. Together, these are referred to as the "CLTV" countries. More specifically, the report assesses the policy gaps in the HREDD policies of financial institutions and analyzes the national (in CLTV countries) and regional regulations (at the ASEAN level) governing the financing of hydropower projects on the Mekong River.



Mekong River communities' concerns about the social and environmental impacts of hydropower dam projects

According to the Global Energy Monitor (GEM), 97 hydropower projects were operating in Cambodia (6), Lao PDR (29), Thailand (10), and Vietnam (52) in May 2023 with a total capacity of 28,479 megawatts (MW).

The Mekong River and its tributaries host a wealth of aquatic and terrestrial biodiversity, supporting the livelihoods of countless communities in the region. Its fluctuating water levels sustain high levels of biological reproduction – more than 50% of the global freshwater fish population. However, hydropower dams on the Mekong River have had widespread social and environmental repercussions that affect both people and biodiversity.

These dams have displaced many communities, disrupting traditional lifestyles, affecting livelihoods, especially for Indigenous Peoples, and threatening cultural heritage. By altering water levels and flow patterns, the dams harm migratory fish and lead to riverbank erosion and coastal degradation. These ecological impacts on fish stocks and communities are felt across borders, highlighting the complexities of dam projects. Despite international commitments to address cross-border impacts,

there are persistent gaps in implementation due to political constraints and corporate interests. The communities, CSOs, and human rights and environmental activists that monitor dam projects and raise concerns about their impacts often experience intimidation and threats, retaliation, and criminalization.

The mobilization against dam expansion continues despite these challenges, highlighting the urgent need for sustainable, community-oriented solutions. The gendered impacts of Mekong River hydropower projects are also often overlooked. Traditional gender roles persist in communities around the region, burdening women with unpaid care work. Disruptions to water and food sources worsen their workload, especially for rural, Indigenous, and impoverished women. Still, women's concerns are ignored by hydropower project financiers and developers in impact assessments. Marginalized women also face difficulties accessing compensation due to biased assessments that neglect the gender-specific impacts of hydropower dams.

Financial institutions have limited environmental and social safeguards when they finance hydropower plants

To understand how the banks and investors financing hydropower projects use their influence to prevent and mitigate adverse social and environmental impacts, this report analyzes the policies of six financial institutions headquartered in Thailand and Vietnam (see Table 1). A financial flows analysis to hydropower projects was beyond the scope of this research, so financial institutions from Thailand were selected based on the value of their loans to customers and the proportion of outstanding loans in the utilities and services

industry, which was deemed most closely related to hydropower. For financial institutions in Vietnam, selection was based on consideration to highlight their good practices in environmental, social, and governance (ESG) commitment and further engagement with the selected banks. Financial institutions from Cambodia and Laos were not assessed since they are primarily active domestically. The analysis is based on publicly available information.

Table 1 Financial institutions selected for policy assessments

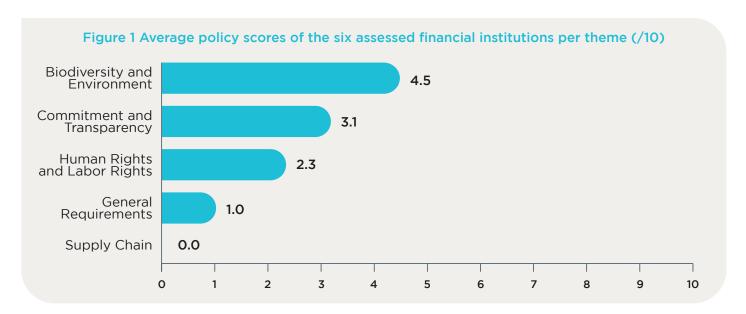
Financial institution	Country
Bangkok Bank	Thailand
Krung Thai Bank	Thailand
Siam Commercial Bank (SCB)	Thailand
Asia Commercial Joint Stock Bank (ACB)	Vietnam
Dragon Capital Group	Vietnam
Vietnam Prosperity Joint Stock Commercial Bank (VPBank)	Vietnam

The policies of these financial institutions were assessed against a set of criteria based on international sustainability standards. All financial institutions were invited to comment on the draft results of the assessment. The criteria were divided

into five main themes covering both the stated commitments of financial institutions and the expectations they have formulated for financed and/ or investee companies:

- Commitment and Transparency: Assesses whether the financial institution has developed a sector policy addressing the environmental and social risks related to the hydropower sector and whether it describes the HREDD process it implements in its lending and/or investment activities. Such a process should also include the development of policies and mechanisms to ensure stakeholders' concerns are heard and addressed.
- **General Requirements:** Assesses whether the financial institution has formulated expectations for financed companies to develop policies and processes that address the environmental and social risks of hydropower plant projects, such as the risk of involuntary resettlement, or to assess the cumulative impacts of hydropower projects.
- **Biodiversity and Environment:** Assesses the financial institution's biodiversity and environmental expectations of the companies they invest in or finance. Specifically, this theme assesses whether a financial institution requires companies to have policies that ensure the protection of animal species and ecologically protected areas. It also assesses whether these financed or investee companies sufficiently assess the (potential) adverse environmental impacts of hydropower projects.
- Human Rights and Labor Rights: Assesses whether the financial institution requires its
 financed or investee companies to adhere to international standards for human rights and
 labor rights. The theme covers topics such as forced and child labor, Indigenous Peoples'
 rights, community compensation schemes, and identification of the gendered impacts of
 hydropower projects on local communities.
- **Supply Chain:** Addresses whether the financial institution requires the companies they invest in or finance to integrate criteria on biodiversity, human rights, and labor rights in their supply chain.

Overall, the policy assessment shows that the public policies of the six financial institutions do not properly address actual and potential adverse environmental and social impacts when financing hydropower projects. Figure 1 shows the average scores (on a scale of 0-10) of the financial institutions across the five themes.



Overall, the average scores per theme range from 0 to 4.5 out of 10. The financial institutions scored highest on Biodiversity and Environment (4.5), followed by Commitment and Transparency (3.1). The average scores for the three other themes – Human Rights and Labor Rights, General Requirements, and Supply Chain – are particularly low (less than 2.5 out of 10).

Siam Commercial Bank (SCB), headquartered in Thailand, tops the ranking with a consolidated score of 6.1 out of 10. It is the only assessed financial institution that discloses a sector policy for the hydropower sector. Its policy identifies some environmental and social risks, such as loss of natural habitat and community land rights. It also identifies key mitigation measures, such as impact evaluations on flora and fauna and resettlement plans for displaced communities. In addition, the SCB is the only financial institution that is a signatory to the Equator Principles (EPs), and consequently commits to identifying, assessing, and managing environmental and social risks when financing projects, using the International Finance Corporation's (IFC) Performance Standards as a benchmark.

On biodiversity topics, Vietnam Prosperity Joint Stock Commercial Bank (VPBank), the SCB, and Dragon Capital stand out with scores above 6 out of 10. All three have adopted an exclusion list, which includes nature-related criteria such as the exclusion of activities in High Conservation Value (HCV) areas or in UNESCO World Heritage Sites. The SCB applies the IFC Performance Standards, including IFC PS 6, "Biodiversity Conservation and Sustainable Management of Living Natural Resources", when financing projects, which explains its good performance.

One of the most salient human rights risks of large hydropower projects is the resettlement of

local communities and/or Indigenous Peoples. It is therefore important to ensure that robust policies and processes are in place to facilitate meaningful consultations and secure the Free, Prior, and Informed Consent (FPIC) of local and Indigenous Peoples (potentially) who are adversely affected. This will help to ensure a just energy transition. However, the policy assessments show that only two of the six financial institutions, the SCB and Bangkok Bank, publicly commit to conducting consultations with rights-holders as part of their due diligence when financing projects. VPBank requires companies to declare whether they have conducted an informed consultation with Indigenous Peoples (potentially) affected by the company's operations. However, the bank does not address any such requirements for other adversely affected rightsholders, such as ethnic minorities. According to the OECD Guidelines for Multinational Enterprises on Responsible Business Conduct (the "OECD" Guidelines"), "meaningful stakeholder engagement refers to ongoing engagement with stakeholders that is two-way, conducted in good faith by the participants on both sides and responsive to stakeholders' views." The research also found that, apart from VPBank and the SCB, none of the financial institutions disclosed a policy requiring companies to obtain FPIC from Indigenous Peoples. The SCB (because it applies the IFC Performance Standards) and Dragon Capital are the only assessed financial institutions with a public policy addressing compensation measures for involuntary resettlement or loss of access to livelihood.

The identification and mitigation of the gendered impacts of hydropower projects on local communities appear to be overlooked by all the financial institutions assessed. In addition, none of the financial institutions have formulated expectations for companies regarding the management of biodiversity, human rights, and labor rights risks in their supply chains.

Countries have varying degrees of ESG integration in their policy landscape

Countries in the Mekong Subregion are at different levels of maturity in terms of embedding environmental and social issues in financial regulations and banking supervision practices. Thailand and Vietnam appear to be making strides in encouraging banks and investors to pay more attention to the social and environmental impacts of hydropower projects, among others. Thailand already has a sustainable finance taxonomy in place that is based on international standards and is, in many respects, aligned with the regional ASEAN Taxonomy and the EU Taxonomy. However, since many of the guiding documents on ESG finance in Thailand and Vietnam are developed and updated by national banking associations and platforms,

rather than by the central banks and financial supervisors, they remain voluntary.

Vietnam is gradually institutionalizing and formalizing supervisory expectations, however. The SBV is integrating environmental and social considerations in its banking sector supervision activities. Cambodia and Lao PDR have yet to develop most of the relevant regulations. Cambodia has already started to develop a national taxonomy for green assets in cooperation with the IFC. This document is expected to fill certain regulatory gaps, including the lack of guidance for banks and asset managers on what constitutes sustainable finance. At the same time, both countries can build on the

ASEAN Taxonomy, as well as on the voluntary principles and guidelines already in place at the national level.

At the regional level, ASEAN considers hydropower an eligible green category (provided that a number of criteria are met), which makes it possible for banks and financial institutions to use hydropower projects as underlying assets for a wide range of sustainable finance tools, including green, sustainability, and sustainability-linked bonds, loans, and trade finance instruments. This means that more of these projects could emerge, posing more risks. However, given that the ASEAN Taxonomy provides for Do No Significant Harm (DNSH) criteria and social safeguards, the overall environmental and social outlook of the hydropower sector may improve.

Since all Mekong Subregion countries within the scope of this research are also ASEAN Member States, the ASEAN Taxonomy appears to be an important tool that could benefit all four countries. Useful as it is, the ASEAN Taxonomy has room for improvement and refining. Updates to the taxonomy should follow an inclusive process and consider a diverse range of opinions of key stakeholders, including from the NGO sector and broader civil society.

Based on the findings of this research project, Fair Finance Asia (FFA) has formulated the following recommendations for financial institutions, national policymakers, and the ASEAN.

Recommendations to financial institutions

The following recommendations are for the financial institutions assessed in this report, but are also relevant to any financial institution that may be providing credit to, or investing in, Mekong River hydropower projects. The recommendations are aimed at accelerating responsible financing and investment in the hydropower sector.

 Develop and disclose an overarching human rights policy and due diligence process aligned with the United Nations Guiding Principles on Business and Human Rights (UNGPs).

Banks and investors have a responsibility to avoid causing or contributing to negative impacts on human rights associated with their activities or business relationships, through their lending and investment activities. To do this, financial institutions should develop due diligence processes that enable them to identify, prevent, mitigate, and account for how they address impacts on human rights.

 When conducting risk assessments, financial institutions should apply an intersectional perspective that considers the specific risks faced by women and other minority groups, such as Indigenous Peoples.

To do so, financial institutions should first identify all communities and/or other stakeholder groups that might be affected by hydropower projects and require investee companies to conduct an informed and meaningful stakeholder consultation with those groups in the early stages of the project. Special attention should be paid to the impacts of hydropower projects on groups that might be more at risk for rights violations, such as women, children, Indigenous Peoples, and ethnic minorities. The fair representation of such groups during consultations is essential,

and companies should develop detailed plans to mitigate the adverse impacts of hydropower projects and devise livelihood strategies that address their different needs. Financial institutions can work with governments, development partners, CSOs, and academics to achieve that goal.

 Develop and disclose a sector policy for the hydropower sector.

Financial institutions should adopt policies that govern their financing and/or investments in the hydropower sector. To assist them in this process, financial institutions can rely on existing standards, such as the International Hydropower Association (IHA) Sustainability Guidelines or the IFC's Good Practice Note on Environmental, Health, and Safety Approaches for Hydropower Projects, as well as the technical screening criteria (TSC) included in their national taxonomy (if applicable) and/or the ASEAN Taxonomy. The sector policy should explain which environmental and social criteria will be used to assess hydropower projects and the companies involved in their construction or expansion. At minimum, the sector policy should set expectations for companies on the following topics:

- Respect for the rights of workers in line with the fundamental conventions of the International Labour Organization (ILO).
- Ongoing consultation with affected communities, with special attention to the representation of vulnerable groups, such as women, children, Indigenous Peoples, and ethnic minorities.

- Where applicable, the FPIC of Indigenous Peoples should be ensured.
- Environmental and Social Impact Assessments (ESIAs) of the full impacts of a dam or hydropower project on biodiversity, including an assessment of cumulative impacts at the earliest possible stage of the planning process.
- Avoiding critical impacts on biodiversity, including protected areas, wetlands of international importance covered by the Ramsar Convention, and designated sites on the UNESCO World Heritage list.
- Diversify information sources when assessing actual and potential adverse impacts of hydropower projects.

Usually, financial institutions rely only on the information provided by the companies they invest in or finance. In doing so, they run the risk of overlooking some of the impacts of hydropower projects and might face risks to their reputation and the profitability of the projects (such as delays from community protests, negative media exposure, etc.). Banks and investors should supplement the information provided by their clients and investee companies with other information sources as part of their screening and monitoring processes, such as reports from national authorities, international organizations, NGOs and other CSOs, independent experts, academia, and media. Setting up channels for stakeholder dialogue and consultation can help with this. Financial institutions could also consider attending and participating in the Mekong River Commission's Procedures for Notification, Prior Consultation and Agreement (PNPCA) processes to obtain relevant information on the benefits and associated risks of new hydropower projects that may have significant impacts on mainstream flow regimes, water quality, and other environmental and socio-economic conditions.

Work to address the challenge of shrinking civic space in Asia.

Strong environmental and human rights risk assessments of hydropower projects rely on various sources, including engagement with affected stakeholders such as local communities, Indigenous Peoples, and human rights defenders. However, in some countries and regions, human and environmental rights defenders and affected stakeholders who publicly raise concerns that large development projects are affecting their access to land and livelihoods, are often threatened, attacked, and victims of arbitrary lawsuits and detentions.

To address this shrinking civic space in Asia, financial institutions should:

- Publicly recognize the value of human and environmental rights defenders' contributions in their risk assessment process.
- Publicly commit to protecting the rights of human and environmental rights defenders (CSOs, trade unions, activists, journalists, etc.) and encourage clients and investee companies to do the same.
- Assess infringements on civic freedoms by (potential) business relationships, such as the use of Strategic Lawsuit Against Public Participation (SLAPP suits) as part of their ongoing due diligence, and work to engage with companies and regulators when such infringements are observed.
- Develop measures that enable effective remedy for affected stakeholders.

When financial institutions have business relationships with companies involved in human rights violations, they have a responsibility to enable remediation even beyond the life of the hydropower project. There are various ways to do this, and they are not mutually exclusive, including:

- Assessing a client's preparedness for remedy upfront in the due diligence process.
- Systematically require the sponsors of hydropower projects to set up an operational-level grievance mechanisms that meets the effectiveness criteria of the United Nations Guiding Principles on Business and Human Rights (UNGPs).
- Establish their own grievance mechanism or set up a grievance mechanism in cooperation with the other lenders of the project. This mechanism should be open to individuals, local communities, or CSOs representing the interests of affected individuals or communities.
- Incorporate a covenant in the loan documentation addressing the client's responsibility to provide for remediation for adverse impacts it has caused or contributed to.
- When adverse impacts occur, conduct time-bound engagement with clients to support the provision of remedy to affected stakeholders.

To ensure affected stakeholders have access to remedy, financial institutions should be aware that concrete agreements and milestones are the result of ongoing discussions that can go beyond the life of a project. One of the main indicators that engagement with companies has led to effective remediation should be that affected stakeholders are satisfied with the long-term measures resulting from the consultations.

Financial institutions can also find specific guidance on how to enable effective remedy in the suite of new due diligence tools released by the Equator Principles Association and Shift. It is vital to build public confidence that financial institutions and businesses monitor and report publicly on the effectiveness and progress of their operational-level grievance mechanisms.

Align hydropower financing and investments with the green technical screening criteria of national and/or regional taxonomies, or the highest available standard if taxonomies do not comprehensively address relevant issues or have lower threshold standards.

To this end, financial institutions should deploy efforts to publicly disclose:

- The scope of their activities/ investments eligible for the taxonomy.
- The proportion of their assets aligned with the taxonomy.
- Where, relevant, the proportion of their asset under management aligned with the taxonomy.

Recommendations for ASEAN and national policymakers

The following recommendations are for central banks, financial regulators, and policymakers in the CLTV countries and at the ASEAN level:

 Central banks and financial regulatory authorities should make more active use of existing tools and guidelines developed at the regional level, including ASEAN.

The updated version of the ASEAN Taxonomy contains a range of ready-to-use building blocks, including detailed lists of sustainable activities with TSC and thresholds. Several aspects of the ASEAN Taxonomy could be improved, including stricter thresholds and TSC. Therefore, national regulators should be encouraged to go beyond ASEAN requirements. A more inclusive process is recommended for updating the ASEAN Taxonomy, with stronger civil society participation at all stages.

 Countries that still lack national taxonomies (Lao PDR and Vietnam), as well as Cambodia, which initiated a green finance taxonomy in December 2023 in cooperation with the IFC, should develop and launch taxonomies following a transparent and inclusive process.

This will help national banks and financial institutions to develop and offer sustainable financial products and services, including green, social, and sustainability-linked bonds and loans, as well as trade finance products. Such taxonomies should include specific requirements for dams and hydropower projects, including eligibility criteria and DNSH requirements, as well as minimum social safeguards, including FPIC of Indigenous Peoples, and be compliant with the fundamental conventions of the ILO and the UNGPs. The taxonomy development process should be transparent and inclusive, building on public consultations and feedback from a range of stakeholders, including civil society.

Regulators should encourage commercial banks and asset managers to develop hydropower sector policies.

These policies should outline specific conditions under which they can finance and/or invest in hydropower development projects, as explained in the recommendations to financial institutions.

 Central banks and financial regulators and regional development banks should consider changing their approach to largescale hydropower based on a more nuanced assessment of their cumulative transboundary and basin-level impacts.

They should also encourage state development agencies and the private sector to consider more sustainable alternatives to large hydropower projects.

 Central banks should require the banking sector to include material ESG risks, including those related to hydropower, in their credit risk assessments.

Due to the sheer scale of hydropower projects, they can have impacts on entire river basins and even beyond. Central banks must require financial institutions to assess such environmental and social risks and consider them in their lending and investment decisions.

Policymakers should prioritize studies investigating the cumulative impacts of hydropower dams and integrate their findings in national legislation, policy frameworks, and strategic planning processes related to hydropower development.

This will enable informed decision-making and ensure sustainable and responsible hydropower projects.

 Thailand (which published a national taxonomy in June 2023), Vietnam (which is still developing a taxonomy), Cambodia (which initiated the taxonomy development process in cooperation with the IFC at the end of 2023), and other countries in the region that may do so in the future, should set stricter requirements for dams and hydropower projects (including for life-cycle emissions and DNHS criteria), such as those outlined in the EU Taxonomy and other credible standards.

They should require project operators to assess the potential impacts on all water sources in the same basin (including impacts on aquatic flora and fauna and migratory species). Project operators should also be required to measure the cumulative impacts of the new, existing, or planned projects within the same basin.

 Central banks and national governments should consider introducing incentives for banks and other financial institutions to increase their portfolios of green, social, and sustainability- linked financial instruments.

Incentives may include adding green, social, sustainability, and sustainability-linked bonds to their collateral frameworks; subsidizing interest rates on green, social, and sustainability-linked loans; and reducing the reserve requirements for such loans.

 Central banks should create civil society roundtables, committees, or working groups that serve as platforms for dialogue between central banks and representatives of a range of research and CSOs, as well as community and voluntary groups.

Key stakeholders should have opportunities to regularly inform central bank leadership of their environmental and social "asks" and to provide expertise and advice on how these demands can be integrated in the policies and supervisory expectations of banks and financial regulators. CSOs should be guaranteed an active role in the development of green taxonomies to ensure their conservation agenda and social standards receive sufficient consideration.

Solutions Abbreviations

ABC Association of Banks in Cambodia

ADB Asian Development Bank

ASEAN Association of Southeast Asian Nations
ACB Asia Commercial Joint Stock Bank

BoL Bank of Lao PDR BoT Bank of Thailand

CLTV Cambodia, Lao PDR, Thailand, and Vietnam
CSFI Cambodian Sustainable Finance Initiative

CSO Civil Society Organization

DNSH Do No Significant Harm

E&S Environmental and Social

Environmental and Social Risk Management

EOs Environmental Objectives

EPs Equator Principles

ESIA Environmental and Social Impact Assessment
ESG Environmental, Social, and Governance

FFA Fair Finance Asia

FFGI Methodology Fair Finance Guide International Methodology

FPIC Free, Prior, and Informed Consent

GEM Global Energy Monitor
GHG Greenhouse Gas

GRI Global Reporting Initiative
HCV High Conservation Value
HRDD Human Rights Due Diligence

HREDD Human Rights and Environmental Due Diligence

IEA International Energy Agency
IFC International Finance Corporation
IHA International Hydropower Association
ILO International Labour Organization

IUCN International Union for Conservation of Nature

LSCO Lao PDR Securities Commission Office

MFI Microfinance Institution
MRC Mekong River Commission
NBC National Bank of Cambodia

NDC Nationally Determined Contribution

NGFS Network for Greening the Financial System

PNPCA Procedures for Notification, Prior Consultation and Agreement

PPA Power Purchase Agreement

SASB Sustainability Accounting Standards Board

SBV State Bank of Vietnam

SCB Siam Commercial Bank

SET Stock Exchange of Thailand

SUSREG Sustainable Financial Regulations and Central Bank Activities

TBA Thai Bankers' Association
TSC Technical Screening Criteria

TCFD Task Force on Climate-related Financial Disclosures

UNGPs United Nations Guiding Principles on Business and Human Rights

VPBank Vietnam Prosperity Joint Stock Commercial Bank

Covering an estimated distance of more than 4,900 kilometers, the Mekong River is one of the world's longest rivers. The river flows through six countries: China, Myanmar, Thailand, Lao PDR, Cambodia, and Vietnam, and its basin represents an essential biodiversity value with at least 1,200 freshwater fish species² – the world's third most diverse fish population after the Amazon and Congo River basins.³

According to the Mekong River Commission, the Mekong River provides water, food, and energy security for about 70 million people, most of whom have a staple diet of rice, fish, and other aquatic animals. Yet, this essential contribution to the livelihoods of the communities of riparian countries has been adversely impacted over the years by the construction and ongoing development of hydropower dams. Currently, more than 160 hydropower dams operate on the river and its tributaries, including 13 on the river's mainstream, with hundreds more either planned or under construction.⁴

Despite many socio-environmental risks, hydropower projects with transboundary impacts in the Mekong Subregion continue to be developed without addressing the concerns raised by CSOs and communities. Banks and investors in such projects can play an important role in ensuring that the companies that own and develop these hydropower plants apply environmental and social safeguards in the construction, operation, and decommissioning phases. National and regional regulations can bolster the influence of financial institutions by recognizing their responsibility to conduct robust human rights and environmental due diligence (HREDD) that considers the voices of workers and local communities.

This report explores the key issues, rights-based considerations, and policy gaps in the HREDD of financial institutions and in the national and regional regulations governing the financing of Mekong River hydropower projects. At a national level, the report focuses on the regulatory framework of four riparian countries: Cambodia, Lao PDR, Thailand, and Vietnam (CLTV).

The report is structured as follows:

- Chapter 1 explains the variety of methods used to write this report.
- Chapter 2 provides an overview of the ongoing and proposed hydropower projects in the focus countries and describes the adverse environmental and social impacts that hydropower projects in CLTV have had on local communities.
- To assess the extent to which financial institutions active in the region are paying attention to these issues when financing hydropower plants projects, Chapter 3 presents an analysis of the sustainability policies and HREDD processes of select financial institutions in Thailand and Vietnam.
- Chapter 4 maps the regulatory landscape of hydropower financing across CLTV and analyzes how national and regional green taxonomies address hydropower.
- Chapter 5 outlines FFA's recommendations for financial institutions, the ASEAN, and national policymakers.

A summary of the research findings can be found in the first pages of this report.



Methodology

This chapter describes the objectives, research questions, and scope of the study and the methodology used to gather data and conduct the analysis.



1.1 Objectives, research questions, and scope

1.1.1 Objectives

The overarching objective of this study is to explore the key issues, rights-based considerations, and policy gaps in the HREDD of financial institutions and in the national (for four riparian countries) and regional regulations governing the financing of hydropower projects on the Mekong River.

1.1.2 Research questions

This study aims to provide some answers to the following questions:

- What ongoing and proposed hydropower projects in the four focus countries (CLTV) have potential or actual adverse environmental and social impacts on local communities?
- What are these adverse impacts and which community groups in CLTV are at higher risk (e.g., women, Indigenous Peoples, people with customary tenure rights, workers, etc.)?
- To what extent are financial institutions active in Vietnam and Thailand implementing environmental, human rights, and social safeguards to ensure they respect the environment, workers' rights, and the rights of local communities when financing hydropower projects? Do they have operational-level grievance mechanisms in place to enable affected stakeholders to raise concerns and

have access to remedy if their rights have been negatively impacted (or are at risk of being impacted) by the ongoing or proposed projects?

- What are the existing regulatory frameworks for hydropower financing due diligence at the national level (in the four CLTV countries) and at the ASEAN level? To what extent do these frameworks integrate rights-based considerations and ESG standards?
- What recommendations can be proposed to financial institutions, the ASEAN, and national governments and regulators to ensure that the development and implementation of hydropower projects are compatible with respect to environmental and community rights and ensure a just energy transition?

1.1.3 Scope

The study focuses on the environmental and social impacts of hydropower projects in four of the six riparian countries in the Mekong River Basin: Cambodia, Lao PDR, Thailand, and Vietnam. Together, these four countries are referred to as CLTV.



1.2 Identification of ongoing and proposed hydropower projects

This research used the Global Energy Monitor's (GEM) Global Hydropower Tracker (GHPT) to identify hydropower projects in CLTV with the status: Operating, Construction, Pre-construction, and Announced. Information from the May 2023 release of the GHPT was used to develop a picture of the status and future developments of hydropower projects in the Mekong Subregion.



1.3 Selection of financial institutions

This research identified key national financial institutions in Vietnam and Thailand to include in the policy assessments. These institutions were assessed based on the role they play in the financial sectors across all CLTV countries. Financial institutions from Cambodia and Lao PDR were not assessed, as they are primarily active domestically. The following sections describe the criteria applied for selection.

1.3.1 Thailand

The largest banks in Thailand were initially selected based on the value of their loans to customers using data from the Bank of Thailand (BOT).⁵ Data for the five largest banks was then used to identify the proportion of outstanding loans in the utilities and services sector, which was deemed most closely related to hydropower. Of these five, Bank of Ayudhya did not have a sector breakdown of its outstanding loans portfolio. Among the remaining four banks, the three with the greatest exposure to the utilities and services sector were selected: Krung Thai Bank, Bangkok Bank, and Siam Commercial Bank (SCB).

Table 2 Selection of Thai banks for inclusion in policy assessments

Rank	Bank	Loans to customers (billion Baht, June 2023)	Exposure to utilities and services (%)	Selected
1	Krung Thai Bank	2,344	25%	Yes
2	Kasikornbank	2,217	14%	No
3	Siam Commercial Bank	2,208	18%	Yes
4	Bangkok Bank	2,084	20%	Yes
5	Bank of Ayudhya	1,698	n/a	No

Source: Bank of Thailand (2023, June), "Statistics and Dissemination - Financial Institutions - Summary Statement of Assets and Liabilities", online: https://www.bot.orth/en/statistics/financial-institutions/summary-statement-of-assets-and-liabilities.html?filter3=2023&filter4=june, viewed in August 2023; Kasikornbank (2023, March), Annual Report 2022, p. 305 (154); Siam Commercial Bank (2023, April), Annual Report 2022, p. FS-77; Krung Thai Bank (2023, March), Annual Report 2022, p. 291; Bangkok Bank (2023, March), Annual Report 2022, p. 205.

1.3.2 Vietnam

Fair Finance Vietnam has ongoing engagement with key players in the financial sector in Vietnam. Since tracking figures for hydropower financing were beyond the scope of this research, the selection of Vietnamese banks based on consideration to highlight their good practices in ESG commitment and further engage with the selected banks. The following financial institutions were selected:

- Asia Commercial Joint Stock Bank (ACB),
- Dragon Capital Group, and
- Vietnam Prosperity Joint Stock Commercial Bank (VPBank).

VPBank was selected because it scored the highest in Fair Finance Vietnam's financial institution policy assessments, approximately 25/100.6 The ACB was selected due to its strong message on sustainability – it was the first bank in Vietnam to publish a

separate report on sustainable development. Finally, the independent asset manager Dragon Capital Group was selected to include an asset manager in the group of financial institutions and because it discloses a responsible investment policy.



1.4 Policy assessment of the selected financial institutions

1.4.1 Methodology

To evaluate financial institutions on their environmental and social due diligence when financing hydropower projects, Profundo developed an ad hoc methodology comprised of 31 criteria related to human rights, labor rights, climate, and biodiversity topics. It is based on international sustainability standards relevant to the hydropower industry and on the Fair Finance Guide International (FFGI) Methodology 2023.⁷ The detailed methodology and scoring guidelines are included in Appendix 1.

The FFGI Methodology, jointly by the Fair Finance International network and Profundo, is used by coalitions of CSOs operating in Asia, Latin America, Africa, and Europe to assess financial institutions' approaches to sustainability. It is updated every one to two years to stay current with the latest international standards and to incorporate new data from across FFA's global network. The current FFGI Methodology references more than 422 international standards and criteria and is the seventh update since it was developed in 2014. FFA has been using the FFGI Methodology since the program launched in 2018 to engage in constructive, factbased dialogue with financial institutions on more responsible and sustainable financial policies and practices.

In this case study, the FFGI Methodology also considers earlier recommendations by Fair Finance Thailand to Thai banks in the case study, Challenges of Dam Financing for Thai Banks: *The Case of Xayaburi and XPXN Projects, released in 2019.*8

1.4.2 Time frame

Financial institutions have been assessed based on public information available as of 27 October 2023. Documents such as annual reports, sustainability reports, sector policies, exclusion lists, financial institution webpages, and stewardship reports, have been researched. Press releases from financial institutions addressing relevant content are considered for one year after publication. This is because, after this time, it is expected that financial institutions will include their content in their public policies. All financial institutions have been given the opportunity to participate in one round of feedback on the detailed draft results of the assessment. Their feedback has been analyzed and, after being

substantiated and aligned with the methodological approach, integrated in the final assessments. Two financial institutions provided feedback, namely Siam Commercial Bank (SCB) and Dragon Capital.

1.4.3 Scoring approach

Table 3 lists all the criteria assessed, with the maximum points per sub-section and total number of questions. Each financial institution can receive a score between 0 (no policies) and 35 (excellent policies) but, to simplify, the scores have been converted to a 10-point scale.

Example: If financial institution X obtains a total score of 12 points out of 35 points, its score on a 10-point scale will be (12*10)/35=3.4.

Table 3 List of criteria assessed with maximum points

Criteria Maximum point(s) Questions related to the commitment and transparency of the financial institution The financial institution has developed a sector policy for the hydropower sector. The financial institution's policy is applicable to financial products 2 and services beyond lending (i.e., capital markets and advisory). The financial institution has developed a human rights policy in 1 which it commits to implementing the UNGPs in its lending and/or investment activities. The financial institution conducts human rights due diligence (HRDD) in line with international standards. The financial institution has developed a policy on meaningful 1 consultation with potentially affected groups and other external stakeholders. 6. The financial institution has set up a grievance mechanism that is 1 accessible for individuals and communities that may be adversely affected by its financing/investments AND clearly explains its process for managing complaints. The financial institution incorporates ongoing compliance with 1 environmental and social requirements as covenants in the loan documentation. The financial institution incorporates a covenant in the loan documentation addressing the client's responsibility to provide for, or cooperate in remediation for, adverse impacts it has caused or contributed to. The financial institution reports publicly on the name of project 1 finance transactions that have reached financial close in line with Equator Principle 4 (EP4). Questions related to the expectations of the financial institution for companies General requirements 10. Companies apply the International Hydropower Association (IHA) 2 Sustainability Guidelines⁹ or the IFC Good Practice Note on Environmental, Health, and Safety Approaches for Hydropower Projects. 11. Companies avoid or minimize physical or economic displacement 1 of populations, and displacement of economic activities (such as agricultural lands or fishing). 12. Companies conduct a cumulative impact assessment at the earliest possible stage of the planning process. 13. Companies address the decommissioning of the hydropower 1 operation or project. Biodiversity and environment 8 14. Companies prevent negative impacts on the populations or 1 the number of animal species that are on the IUCN Red List of Threatened Species.

15. Companies prevent negative impacts on High Conservation Value (HCV) areas within their business operations and the areas they

16. Companies prevent negative impacts on protected areas - falling under categories I-IV of the IUCN, the Ramsar Convention on Wetlands, and areas designated as UNESCO World Heritage sites - 3

within their business operations and the areas they manage.	
17. Companies make an environmental and impact assessment or strategic environmental assessment of the full impacts of a dam or hydropower project on biodiversity.	1
18. Companies implement a mitigation strategy that prioritizes efforts to prevent or avoid adverse impacts to biodiversity, then to minimize and reduce those effects, to repair or restore them, and finally to offset or compensate them, with a view to achieving no net loss, and preferably gain of biodiversity.	1
19. Companies disclose their greenhouse gas emissions (GHGs).	1
Human rights and labor rights	11
20. Companies implement the UNGPs.	1
21. Companies identify all communities and/or other stakeholder groups that might be affected and undertake informed and meaningful stakeholder consultation from the early stages of project development.	1
22. Companies ensure that stakeholder consultations enable them to properly assess the impacts of the project on vulnerable groups, such as women, children, Indigenous Peoples, and ethnic minorities.	1
23. Companies must obtain FPIC from Indigenous Peoples AND people with customary tenure rights.	1
24. Companies establish or participate in effective operational-level grievance mechanisms for workers, individuals, and communities that may be adversely impacted.	1
25. Companies establish compensation schemes, in consultation with communities, for involuntary resettlement or loss of access to resources or livelihoods.	1
26. Companies have zero tolerance for all forms of forced and compulsory labor and child labor.	1
 Companies identify and mitigate the gendered impacts of hydropower projects on local communities. 	1
28. Companies have a zero-tolerance policy toward all forms of gender-based discrimination in employment.	1
29. Companies have a health and safety policy.	1
30. Companies conduct an assessment of the natural hazards and technological risks associated with the safety of the hydropower project AND develop a dam safety and emergency preparedness and response plan.	1
Supply chain	1
31. Companies integrate criteria on biodiversity, human rights, and labor rights in their procurement and operational policies.	1
Maximum points for all criteria	35



1.5 Interviews with relevant stakeholders

To capture the views of different Mekong River experts, interviews were conducted with five key informants representing NGOs and the research community. Two informants were based in Thailand, one in Cambodia, one in Japan, and one in Sweden. The interviews took place via video call with an average duration of one hour. These informants are cited anonymously throughout the report. Their opinions fed into the analysis of social and environmental impacts of hydropower dam projects in the Mekong River Subregion.



1.6 Policy and literature review

To investigate the environmental and human rights impacts of hydropower dams in the Mekong River Subregion, this project relied on secondary data sources, including NGO reports, government websites and publications, academic articles, international standards, reports by international and intergovernmental organizations, reports by think tanks, and news articles.



1.7 Regulatory assessment methodology

To better understand how financial regulations and banking supervision can impact the hydropower sector in the Mekong River Subregion, a number of policy areas have been assessed, including micro- and macro-prudential supervision, transparency and reporting, and internal organization and leadership of central banks and financial regulators. The assessment largely follows the set of criteria developed by the World Wildlife Fund (WWF) as part of its Sustainable Financial Regulations and Central Bank Activities (SUSREG) tool. For the two CLTV countries already covered by SUSREG (Thailand and Vietnam), the authors have summarized the existing assessment and enriched it with more data sources and up-to-date information. For Cambodia and Lao PDR, a similar framework is applied, but the assessment is based exclusively on primary sources.



Identification of hydropower projects in the Mekong Subregion and related environmental and social issues

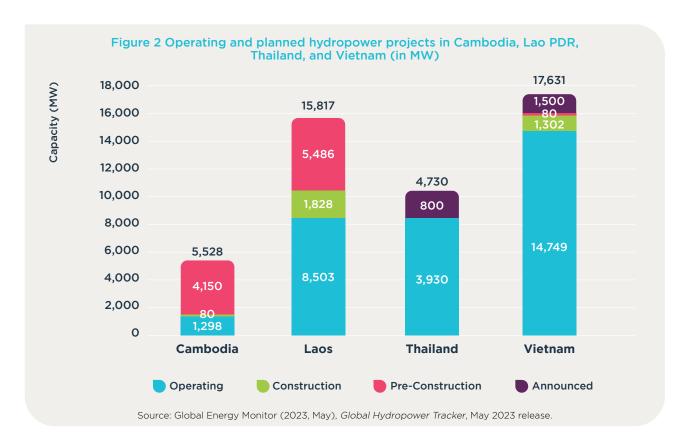
Hydropower dams cause extensive social and environmental impacts, altering river basins dramatically. This chapter provides an overview of ongoing and proposed hydropower projects in the Mekong Subregion (section 2.1) and discusses the impacts of these projects on the region's communities and environment (section 2.2).



2.1 Mapping of ongoing and proposed hydropower projects in the Mekong Subregion

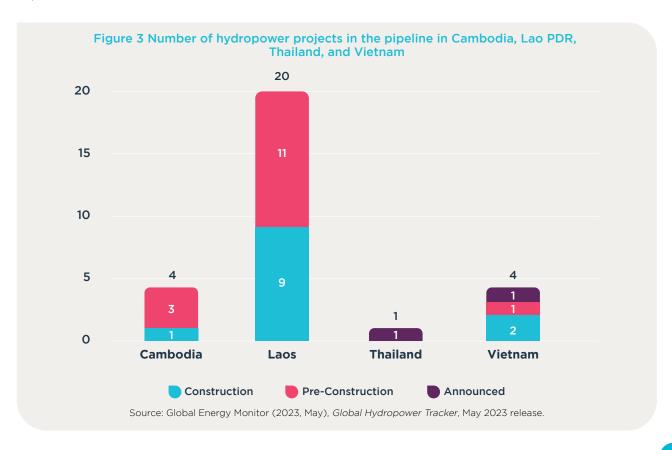
According to the GEM, there were 97 hydropower projects operating in (CLTV) in May 2023 with a total capacity of 28,479 MW. This capacity is set to increase by 15,226 MW to 43,706 MW through 29 projects that have been announced or are in the pre-construction phase or construction phase.¹⁰ The following definitions are used by GEM for these four categories:

- **Announced:** Projects that have been publicly reported in corporate or government plans but have not yet actively moved forward by applying for permits or seeking land, material, or financing.
- **Pre-construction:** Projects that are actively moving forward in seeking governmental approvals, land rights, financing, or power purchase agreements (PPAs).
- **Construction:** Projects for which equipment installation has begun and site preparation and other development and construction activities are underway.
- **Operating:** Projects that have been formally commissioned.



As Figure 2 shows, a large part of the development will occur in Lao PDR and Cambodia. Together, these two countries account for more than three-quarters of the hydropower capacity expansion in the region. The capacity expansion in Lao PDR will result in the country surpassing Vietnam's current hydropower capacity. Developments in Cambodia are set to more than quadruple the country's hydropower capacity.

A closer look at the number of hydropower projects under development in the region further highlights the focus on hydropower in Lao PDR in particular, as well as in Cambodia. Lao PDR accounts for approximately 70% of the projects under development in the region. It is important to note that, while there are fewer projects under development in Cambodia compared to Lao PDR, the average size of the projects is almost three times larger. In Lao PDR, the average project size is 365 MW, while in Cambodia, the average project size is 1,058 MW.



In 2020, Cambodia still relied on imports to meet 55% of its energy needs.¹¹ The large number of hydropower projects in the pipeline is intended to increase Cambodia's energy self-sufficiency and reduce reliance on energy imports.¹²

Lao PDR, on the other hand, is a net exporter of electricity.¹³ Known as the "battery" of Southeast Asia, Lao PDR exports 80% of its generated power to neighboring Thailand and Vietnam. These electricity exports account for 30% of the country's exports by value.¹⁴ The pipeline of hydropower projects in Lao PDR is set to further consolidate its position in the region as a key energy partner by expanding its electricity exports throughout Southeast Asia.



2.2 Environmental and social impacts of Mekong River hydropower projects on workers and local communities

The Mekong River extends from China through Myanmar, Thailand, Lao PDR, Cambodia, and Vietnam, flowing through channels of its tributaries and constituting the Mekong Delta, which drains into what is most commonly known as the South China Sea but also the West Philippine Sea and the East Sea of Vietnam. The 4,909 kilometers that mark its course are host to remarkable aquatic biodiversity and biological production that sustain the livelihoods of nearly 70 million people, 40% of which live along the main river channel. The Mekong River wetlands are home to about 250 bird species and 1,300 fish species, including critically endangered species such as Irrawaddy dolphins (*Orcaella brevirostris*), Siamese crocodiles (*Crocodylus siamensis*), and the giant ibis (*Thaumatibis gigantea*). Figure 1.

Moreover, the Mekong Subregion is home to terrestrial mammal species, such as the endangered Indochinese tiger (Panthera tigris corbetti) and the now extinct Javan Rinocerus (*Rhinoceros sondaicus annamiticus*).¹⁷



The Mekong River stands out due to its significant fluctuations in water levels between low and high seasons, surpassing those of any other major river globally. These fluctuations create diverse environmental conditions and habitats essential for supporting a wide variety of aquatic life. The Mekong River accounts for more than 50% of the global freshwater fish catch, with more than 1,000 freshwater fish species migrating along the river – a crucial source of food and livelihood for the riverine population. The seasons is supported by the seasons of the

However, the Mekong Subregion has faced significant changes due to numerous hydropower dam projects that have had profound social and environmental impacts far beyond the construction sites. Hydropower development in the Mekong Subregion started in the 1960s with projects like Nam Ngum Dam in Lao PDR. Political and financial challenges prevented significant dam projects from being built along the main river channel during that period. However, increasing energy needs in the region have renewed interest in hydropower development along the Mekong River, particularly since the mid-2000s.²⁰

As of 2023, more than 160 hydropower dams are operating in the Mekong Subregion, including 13 on the river's main channel, and hundreds more are planned or under construction.²¹ While the number of hydropower dams in the focus countries is much lower (see section 2.1), it is important to understand that the negative impacts of these projects are felt downstream, affecting ecosystems, livelihoods, and communities across the region.

Despite the evident downstream consequences, there is still a significant research gap in the cumulative effect of these impacts over time.²² Currently, the construction of large dams, particularly in the Chinese and Lao PDR sections of the main Mekong River, raises concerns among other neighboring countries.²³

Putting aside the tensions related to China's strategy to transition from coal to renewable energy via hydropower and the resulting distribution of water resources, the construction of dams, in general, leads to harmful social and environmental impacts and economic consequences. These impacts are explored in the following sections.

2.2.1 Environmental impacts of Mekong River hydropower projects

Hydropower dams have disrupted the natural flow of the Mekong River and its tributaries, causing unseasonal fluctuations in water levels, flow rates, and turbidity. These disturbances often lead to shocks in the life cycles of migratory fish and birds, limiting breeding and egg-laying opportunities and consequentially affecting fish stocks.²⁴ This situation is particularly worrisome as 35% of the fish catch in the Lower Mekong Basin (i.e., Cambodia, Lao PDR, Thailand, and Vietnam) comprises longdistance migratory species. Due to existing dams on tributaries and the conversion of floodplains for agriculture, the fish catch is estimated to have decreased by almost 25% between 2000 and 2015.25 While there are no recent figures on the impact of hydropower dams on fish catch, a few longitudinal studies in the region corroborate the contribution of hydropower dams to fish population decline in the Mekong River and its tributaries.²⁶

It is expected that the further development of hydropower in important fish spawning and feeding sites along the Mekong River will have a negative impact on fish productivity. Large-bodied, long-lived, commercially important fish such as cyprinids and catfish will be disproportionately impacted, as well as many of the short-distance migratory fish species on which riverine communities depend for subsistence.²⁷

Hydropower dams in the Mekong Subregion function by releasing sudden and unseasonable flows or constraining flow, and this is leading to riverbank erosion, especially during high-flow events when the increased velocity of water can undercut and destabilize banks. This erosion occurs mainly in the floodplains of the Mekong River in Cambodia, and the most affected areas are agricultural land and residential areas.²⁸ Likewise, hydropower dams in the Mekong Subregion impede sediment and nutrient transport, causing coastal erosion in the Mekong Delta. This, in addition to disrupting river hydrology, has facilitated deforestation and loss of fish production.²⁹

These ecological disturbances not only affect areas near dams, but also those located many kilometers away in neighboring countries. With each new dam constructed, these negative effects intensify, putting additional strain on the river's hydrology, diverse biological life, and the livelihoods of people dependent on it. The complexity of these challenges extends to decision making processes, energy production, and consumption, often

crossing national boundaries and impacting local communities unequally. These social consequences are explored in the following section.

2.2.2 Social impacts of Mekong River hydropower projects

The impacts of hydropower projects on the 70 million people who rely on the Mekong River and its tributaries for sustenance and livelihood cannot be ignored. As stated in the previous section, hydropower dams obstruct fish migrations and have a detrimental effect on downstream fisheries, significantly impacting food security and the well-being of individuals across the basin.

Communities living along the Mekong River and its tributaries endure continuous losses, including diminished fish stocks, loss of forest, wetlands, and mangrove ecosystems, ecotourism opportunities, and fertile agricultural land. The negative economic impacts of hydropower dams are substantial, with potential annual fisheries losses calculated at USD 4.2 billion in 2020, or USD 565,000 per kilometer.³⁰ It is estimated that by 2040, the diminishing fisheries could lead to losses approaching USD 23 billion and the loss of forests, wetlands, and mangroves would cost USD 145 billion. The further loss of river sediment would also severely curtail production of the region's food staple, rice.³¹

Moreover, major hydropower projects lead to the mass displacement of communities, as damming rivers creates reservoirs that submerge villages, towns, and communities. People are compelled to relocate and rebuild their homes, livelihoods, and lives elsewhere. Globally, it is estimated that between 40 million and 80 million individuals have been forcibly displaced by large dams.³² In Cambodia, dam construction, especially the Lower Se San 2 Dam (located on the Se San River, a tributary of the Mekong River), has displaced more than 5,000 people in six villages, most of whom are Indigenous, since 2017.33 In Lao PDR, it is estimated that tributary dams had displaced a total of 69,413 people by 2012, averaging 868 persons per dam.³⁴ It is likely that these numbers underestimate the actual situation because data for all tributary dams of the Mekong River are scant and the number of dams in the region, especially in Lao PDR, is set to continue growing in the coming years (see section

The displacement of riverine communities due to hydropower dam construction has disrupted social networks, economic prospects, and cultural practices. Communities are forced to shift away from traditional fishing and small-scale agriculture due to declining fish stocks.³⁵ At the same time, declining fishing stocks have triggered significant migration from affected regions, with disparate impacts on various groups. Ethnic minorities that migrate (either forced by the loss of livelihood or as part of resettlement programs) struggle to secure wage labor due to language and technical skill obstacles.³⁶ According to one of the experts who informed this study, even when resettled communities receive skills training, they are worse off. According to the informant, "...companies have an interest to manage the costs of resettlement programs. So, when we talk about not only resettlement but environmental and social impacts more broadly, and in this region, the amount allocated to that is quite minimal, compared to what they're generating in terms of revenue and the different construction contracts."37

Resettled communities not only face monetary losses due to hydropower dam projects, but also the loss of their cultural and spiritual heritage. One of the experts who informed this research stressed that these losses are not considered during impact assessments. Moreover, these losses are greater for Indigenous communities who are displaced from their ancestral lands, thereby losing millennia-old ecological knowledge that is crucial to preserve in the face of climate change and global biodiversity loss. Moreover, the loss of intangible assets such as culture and traditions can be a very traumatic experience that impacts women more adversely and that can last for years (for more on this, see section 2.2.3).

The construction of hydropower dams is a complex process with far-reaching social impacts. In the Mekong Subregion, anticipating and mitigating transboundary impacts is challenging because national interests often prioritize local impacts over those experienced by neighboring regions. When assessing differentiated impacts, rural-urban disparities must be considered. Dams are usually located in remote areas, but provide power to urban areas both within and outside national borders. An informant interviewed for this research provided an example: "Every dam, especially the initial Mekong mainstream dam constructed by a Thai company and financed by Thai banks, has extensive impacts that stretch beyond Lao PDR. These effects reach Thailand and beyond, particularly in how the dams are operated. For instance, irregular fluctuations and sudden releases are affecting people's riverbanks where they grow vegetables for food and income. Additionally, their assets, such as boats, are being washed away and eroded."42

Understanding the connections between where energy is produced and where it is used is central to HREDD. Following a Thai cabinet resolution in 2016 committing to the UNGPs, Thailand became the first country in Asia to commit to addressing

the adverse effects of its overseas investments. Despite this commitment, there remains a significant gap between the plan on paper and its actual implementation.⁴³

Although many CSOs have been working to bridge this gap, numerous obstacles persist, primarily political constraints and vested interests. According to the sources that informed this research, major corporations, especially CK Power, a subsidiary of Ch. Karnchang, one of Thailand's largest construction companies, prioritize profits over public welfare. Despite claims of enhancing Thailand's energy security, these projects disproportionately benefit a small group while riverine communities suffer losses. As more dams are constructed, local resources are centralized and controlled by these projects, disrupting the lives of those who depend on them.⁴⁴

Likewise, it is not surprising that the impacts described above have resulted in the mobilization of diverse civil society groups across the CLTV countries to stop the further expansion of hydropower dam projects. However, this mobilization has been constrained by a shrinking civic space in Asia that puts human and environmental rights defenders at risk.⁴⁵

2.2.3 Gendered impacts of Mekong River hydropower projects

The gendered impacts of hydropower dam projects in the Mekong River Basin have historically received little attention even though the social impacts described above affect women and men in different ways. Because the hydropower industry is male dominated, with men controlling key processes and decisions, these gendered impacts often go unchecked.⁴⁶

Many areas of the Mekong River Basin still follow traditional gender roles, and significant differences in employment and wages between women and men have been observed. In areas where there is heavy reliance on rivers for livelihoods, women play a particularly important role in household water use and management. Women are responsible for most unpaid care and domestic work, such as procuring and producing food, collecting water, and cooking. The devastating impacts of hydropower projects on water and food sources and resettlement add to their already heavy workload.⁴⁷ Women from minority ethnic and Indigenous communities and rural areas, as well as female-headed households and especially single parent families, are exposed more heavily to these challenges.⁴⁸

As stated in the previous section, resettlement induced by hydropower dam projects can be a long-lasting and traumatic experience for women.

Displacement and resettlement caused by hydropower dam projects have been found to lead to loss of self-esteem for male community members, which can result in increased levels of violence against women (see Box 1). Several studies indicate that women in resettlement areas face significant challenges, including exposure to physical violence, unfavorable marriages, and a decline in social status. Lack of access to common resources and employment opportunities, coupled with fear of crime and violence, hinder women's ability to contribute to their households. Consequently, women in these areas spend more time in isolation indoors, leading to increased anxiety and poor mental health. The loss of in restricted mobility. This dependence on men for protection further limits women's ability to move freely outside the home.⁴⁹

The disruption of women's livelihoods can also strain gender dynamics in families and communities, leading women into deeper poverty and vulnerability. Unfortunately, women's concerns are frequently ignored, and the gendered effects of hydropower projects are often overlooked in consultations and assessments, which lack disaggregated data or specific identification of gender-related and ethnic-specific issues and vulnerabilities. ⁵⁰ Likewise, women from marginalized communities, particularly those from impoverished or Indigenous backgrounds, face challenges in accessing compensation initiatives due to gender-related obstacles and biases. ⁵¹

To assess the extent to which financial institutions active in the region are paying attention to the environmental and social impacts described when financing hydropower projects, the next chapter presents an analysis of the sustainability policies and HREDD processes applied by a selection of Thai and Vietnamese financial institutions.





Policy assessments of Thai and Vietnamese financial institutions

To influence companies to conduct their business responsibly, financial institutions can set clear expectations for clients or investees in public sustainability policies. This chapter analyzes the extent to which six financial institutions headquartered in Thailand and Vietnam have adopted policies and processes to identify, assess, prevent, and/or mitigate environmental and social issues related to the financing of hydropower projects.



3.1 Selected financial institutions

This chapter assesses the policies of six financial institutions headquartered in Thailand or Vietnam, which are listed in Table 4.

Table 4 Financial institutions selected for policy assessments

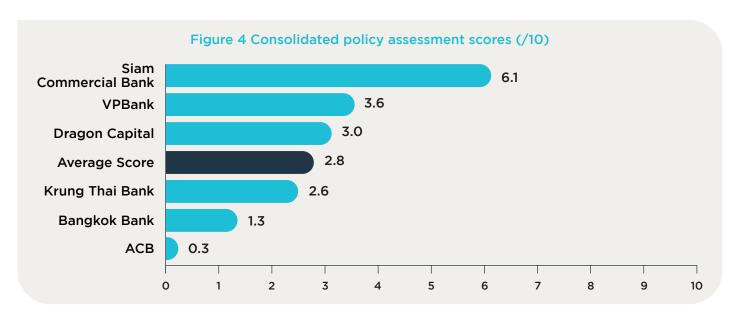
Financial institution	Country
Bangkok Bank	Thailand
Krung Thai Bank	Thailand
Siam Commercial Bank (SCB)	Thailand
Asia Commercial Joint Stock Bank (ACB)	Vietnam
Dragon Capital Group	Vietnam
Vietnam Prosperity Joint Stock Commercial Bank (VPBank)	Vietnam
For more information about the selection process see section 1.	3.



To evaluate financial institutions on their environmental and social due diligence in financing hydropower projects, Profundo developed an ad hoc methodology comprised of 31 criteria related to human rights, labor rights, climate, and biodiversity topics based on international sustainability standards relevant to the hydropower industry and the FFGI Methodology 2023.⁵² The detailed methodology and scoring guidelines are included in Appendix 1. For more information on the FFGI Methodology, see section 1.4.

\ggg 3.3 Main findings of the policy assessment

Overall, the research shows that the six financial institutions do not properly clarify in their lending and investment policies how they address the actual and potential adverse environmental and social impacts of hydropower projects. Figure 4 shows that the overall scores range from 0.3 to 6.1 out of 10.



Siam Commercial Bank (SCB), headquartered in Thailand, tops the ranking with a consolidated score of 6.1 out of 10. It is the only assessed financial institution that discloses a sector policy for the hydropower sector. Its policy identifies some environmental and social risks, such as loss of natural habitat and community land rights. It also identifies key mitigation measures, such as impact evaluations for flora and fauna and resettlement plans for displaced communities.

Vietnamese financial institutions VPBank (3.6) and Dragon Capital (3.0) are in second and third position, respectively. Analysis of the scores by theme shows that while Thai banks scored better than Vietnamese banks on the Commitment and Transparency theme, Vietnamese financial institutions demonstrated better policies on Biodiversity. The scores and key findings per theme are presented in the following section.

3.3.1 Commitment and Transparency

The Commitment and Transparency theme covers financial institutions' commitment to addressing environmental and social issues and the transparency of their policies on financing or investment activities. On average, financial institutions received the highest scores for this theme (3.1/10) compared to the others.

Figure 5 shows the results of the policy assessment for this theme.

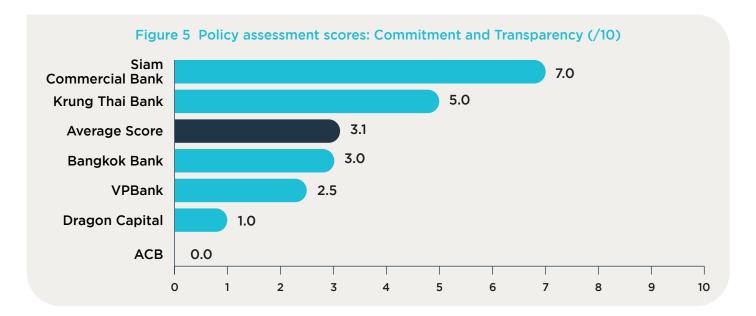


Figure 5 shows that the SCB received the highest score, 7.0 out of 10, followed by Krung Thai Bank (5.0) and Bangkok Bank (3.0). It is important to note that two of the selected financial institutions scored 5.0 and above for this theme. The SCB is the frontrunner because it is the only financial institution that discloses a sector-specific guide on hydropower. This guide identifies some environmental and social risks, such as loss of natural habitat and community land. It also identifies key mitigation measures, such as impact evaluations for flora and fauna and resettlement plans for displaced communities.⁵³

This theme also assesses commitment to the UN Guiding Principles on Business and Human Rights (UNGPs) in lending and/or investment activities, and the human rights due diligence (HRDD) process. The three Thai banks were found to align their policy with the UNGPs. Four of the six financial institutions (SCB, VPBank, Krung Thai Bank, and Bangkok Bank) disclose their HRDD process and Dragon Capital explains that it screens its investments against the IFC Performance Standards. ACB does not report information in this regard.

Assessing whether meaningful consultation with (potentially) affected stakeholders has taken place during the life cycle of a project should be a key component of the due diligence process when financing hydropower plants. According to the OECD Guidelines, "meaningful stakeholder engagement refers to ongoing engagement with stakeholders that is two-way, conducted in good faith by the participants on both sides and responsive to stakeholders' views. To ensure stakeholder engagement is meaningful and effective, it is important to ensure that it is timely, accessible, appropriate and safe for stakeholders, and to identify and remove potential barriers to engaging with stakeholders in positions of vulnerability or marginalisation".54

The research found that, apart from the SCB and

Bangkok Bank, none of the financial institutions disclosed any policy on consultations with rightsholders. Furthermore, it was found that none has set up a grievance mechanism that is accessible for individuals and communities that may be negatively affected by its financing or investments. The SCB and Krung Thai Bank have a complaint mechanism that is open to external stakeholders. However, they do not provide any further information on the number of complaints made or the process for redress.

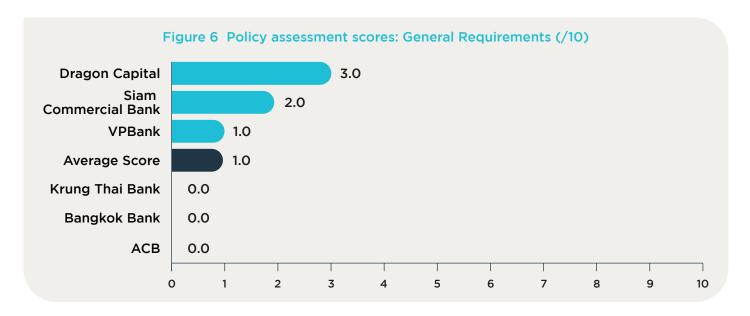
Incorporating compliance with environmental and social requirements as covenants in the loan documentation is an effective way for financial institutions to prevent or mitigate the potential adverse impacts of their financing. The research found that, except for the SCB and Krung Thai Bank, none of the financial institutions had such a policy in place. The SCB is a signatory to the Equator Principles (EPs) and Krung Thai Bank publicly commits to implementing the EPs, a standard for the financial sector aimed at determining, assessing, and managing environmental and social risk in projects. Principle 8 of the EPs covers the inclusion of environmental and social covenants in the loan documentation.55 However, none of the two banks report publicly on how they have actually implemented the EPs.

3.3.2 General Requirements

The General Requirements theme assesses whether financial institutions require the companies they invest in and finance to have policies addressing the environmental and social (E&S) risks within the hydropower sector (for more details about the adverse E&S impacts of hydropower financing on communities, see section 2.2). More specifically, the FFGI Methodology looked at whether financial institutions asked their clients or investees to apply international sustainability guidelines, such as the IHA Sustainability Guidelines⁵⁶ or the IFC *Good*

Practice Note on Environmental, Health, and Safety Approaches for Hydropower Projects.⁵⁷

Figure 6 shows the results of the policy assessments for this theme.



Scores on this theme are particularly low, with three financial institutions scoring 0 out of 10. Asset manager Dragon Capital received the highest score, 3.0 out of 10, followed by the SCB (2.0) and VPBank (1.0). Dragon Capital's exclusion list includes dams located in "high-risk locations", however, this exclusion criterion is unclear since the definition of high-risk locations is not mentioned. During a call with the financial institution, it was clarified that high-risk locations correspond to locations prone to floods and earthquakes. Nevertheless, Dragon Capital does not invest in companies with a high probability of resettlement unless the investee company is compliant with IFC Performance Standard 5 (IFC PS 5) on land acquisition and involuntary resettlement.58 According to IFC PS 5, involuntary resettlement includes physical displacement due to relocation and loss of shelter, as well as economic displacement due to loss of livelihood.⁵⁹ The SCB, a signatory to the EPs, also applies the IFC Performance Standards. VPBank's exclusion list includes large-capacity hydropower plants that could adversely impact local communities. These adverse impacts could be physical or economic displacement of the local population and the displacement of local economic activities, such as fishing or agricultural lands.

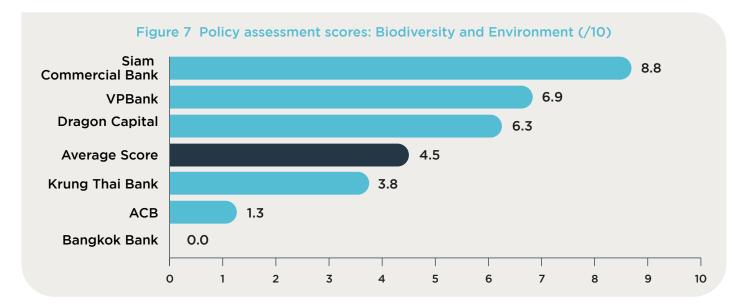
This theme also assesses whether banks require companies active in the hydropower sector to conduct cumulative impact assessments. Cumulative impacts are those that result from the successive, incremental, and/or combined effects of an action, project, or activity when added to other existing, planned, and/or reasonably anticipated future impacts. A cumulative impact assessment analyzes a proposed project's potential impacts and suggests concrete measures to mitigate such

cumulative impacts.⁶⁰ Such mitigation measures are particularly critical for hydropower projects since they can cause direct or indirect detrimental impacts on river systems by altering water flow patterns and reshaping natural habitats.⁶¹ The research found that none of the banks had any policy on cumulative impact assessments. However, asset manager Dragon Capital reports that it excludes investments in companies where there is a high probability of exposure to "Cumulative impacts in a country or region that is having multiple large developments, possibly in the same sector (e.g. multiple mining projects in a country; several dams in a watershed; several cement factories in an airshed)".⁶²

3.3.3 Biodiversity and Environment

The Biodiversity and Environment theme assesses the biodiversity and environmental expectations of the companies in which financial institutions invest or finance. It assesses whether financial institutions require companies to have policies that ensure the protection of animal species and ecologically protected areas. It also assesses whether these financed and investee companies sufficiently assess the (potential) adverse environmental impacts of the hydropower projects.

Figure 7 shows the results of the policy assessments for each bank.



The figure shows that three financial institutions achieve robust scores in this theme, namely the SCB (8.8), VPBank (6.9), and Dragon Capital (6.3). The SCB has strong requirements of the companies they finance since it is an EP signatory and is required to comply with the IFC Performance Standards. The policy assessments reveal that VPBank and Dragon Capital exclude financing projects and activities that could adversely impact endangered species and ecologically sensitive areas, such as HCV areas, wetlands, and UNESCO sites. Krung Thai Bank also excludes financing projects in protected areas as defined by the IUCN, the Ramsar Convention on Wetlands, and UNESCO World Heritage sites. Among the selected financial institutions, four (the SCB, VPBank, Dragon Capital, and Krung Thai Bank) include nature-related criteria in their screening processes.

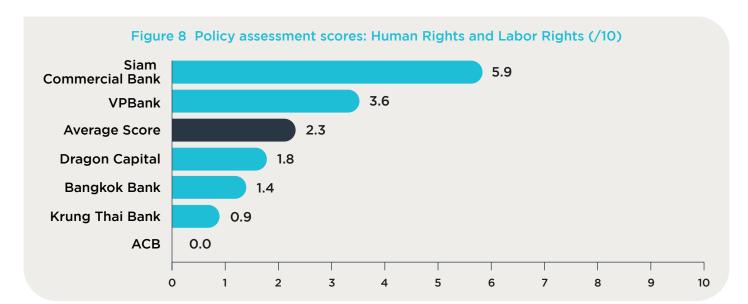
This theme also assesses whether banks require companies to conduct an environmental impact assessment and have mitigation strategies to address potential biodiversity concerns. Four of the six selected financial institutions do not disclose public expectations of companies related to biodiversity mitigation measures. The SCB, as

an EP signatory, commits to comply with the IFC Performance Standards, including IFC PS 6 on biodiversity conservation when financing projects. VPBank requires certain companies to disclose whether or not they have solutions to mitigate any negative impacts on biodiversity from their activities.

3.3.4 Human Rights and Labor Rights

The Human Rights and Labor Rights theme assesses whether the financial institution requires its financed or investee companies to adhere to international standards of human rights and labor rights. This is assessed specifically within the context of hydropower projects. This theme also assesses whether financial institutions require companies to identify all stakeholder groups, engage in meaningful consultation, and ensure this consultation allows for a thorough assessment of the impact of the project on vulnerable groups, such as women, children, Indigenous Peoples, and ethnic minorities.

Figure 8 shows the results of the policy assessments for this theme.



All banks, except the SCB, were found to have poor human rights policies and insufficient measures in place to protect local rights-holders. The SCB received the highest score, 5.9 out of 10, followed by VPBank (3.6) and Dragon Capital (1.8).

A fundamental consideration for companies involved in hydropower projects is engagement with all potentially affected stakeholders. This is essential due to the effects of large-scale human displacement, the impact of flooding on community livelihoods, violations of Indigenous land rights, and disruptions to local food production. 63 Despite this, most of the selected financial institutions do not mention, as part of their HREDD, that they ask companies to identify all communities and/or other stakeholder groups that might be affected by hydropower projects and undertake informed and meaningful stakeholder consultation. As an EP signatory, the SCB ensures compliance with the IFC Performance Standards on the assessment and management of social risks. IFC PS 1 stipulates that borrowers must identify affected communities and undertake consultation in a manner that provides them opportunities to express their views on project risks, impacts, and mitigation measures.⁶⁴

In addition, the gendered impacts of hydropower projects appear to be overlooked in the consultation and assessment processes of the six financial institutions. None report that they apply a gender lens to their HRDD (for more information about the gendered impacts of large hydropower projects, see section 2.2.3). Apart from the potentially adverse impacts on livelihoods, the land acquisition associated with hydropower projects can have particularly severe impacts for Indigenous communities since their way of life, cultural heritage, and identity is closely related to their land.65 Given this, the FPIC of Indigenous communities and people with customary tenure rights is considered critical to ensure the protection of these groups. The research found that, apart from VPBank and the SCB, none of the financial institutions disclosed a policy that required companies to obtain FPIC. VPBank requires companies to provide information on whether the FPIC of Indigenous communities have been obtained, and the SCB ensures compliance with IFC PS 7, which addresses adverse impacts on Indigenous Peoples. However, neither financial institution covers people with customary tenure rights in their policies.

Compensation schemes and grievance mechanisms are two critical mitigation strategies that could protect local communities from adverse environmental and social impacts from hydropower projects. Dragon Capital and the SCB are the only assessed financial institutions with a policy addressing compensation measures for involuntary resettlement or loss of access to livelihood. The SCB ensures compliance with IFC PS 5, which includes offering displaced communities and individuals

compensation for loss of assets at full replacement cost and other assistance to help them improve or restore their standards of living or livelihoods. Dragon Capital also requires investee companies engaged in activities that could lead to large-scale resettlement to be compliant with IFC PS 5.66

Finally, the findings indicate that none of the financial institutions, except VPBank and the SCB, disclose a policy on their operational-level grievance mechanism. VPBank requires companies to declare whether they have established an accessible grievance mechanism that is open to affected communities. While the SCB adheres to the IFC Performance Standards that cover grievance mechanisms for workers (IFC PS 2) and affected communities (IFC PS 1), it does not include all potentially affected stakeholders, such as individuals and minorities.

3.3.5 Supply Chain

The Supply Chain theme addresses whether financial institutions require the companies they invest in and finance to integrate criteria on biodiversity, human rights, and labor rights in their procurement policies. This would ensure that the supply chains of the financed companies also adhere to essential E&S criteria. The research found, however, that none of the six financial institutions had any policy on supply chain management, which results in a score of 0.0 on this theme for all the financial institutions assessed.



Mapping the policy landscape of hydropower financing

The policies of banks and other financial institutions have an important role to play in enhancing sustainable finance. However, their policies often build upon, and are guided by, the existing regulatory environment set by central banks and financial supervision authorities. This chapter looks at the regulatory landscape for sustainable finance in the CLTV countries (sections 4.2–4.5). Apart from general ESG regulations, this chapter aims to determine the extent to which the negative impacts of hydropower projects can be identified, avoided, and mitigated through the financial sector within the described policy environment. Particular attention is paid to how green taxonomies treat hydropower, including the regional ASEAN Taxonomy and emerging national taxonomies in the CLTV countries (section 4.1).



4.1 Regional regulatory environment

Sustainable finance taxonomies have been on the rise in Asia and globally for several years. In the Mekong Subregion, the ASEAN Taxonomy is currently the most comprehensive, covering a wide range of activities and providing detailed guidance on implementation, including technical screening criteria (TSC) and Do No Significant Harm (DNSH) criteria and social safeguards. Thailand published its first green taxonomy (Thailand Taxonomy Phase 1) in June 2023, while Vietnam is currently developing its own national taxonomy document in cooperation with the IFC. Since 2022, the Ministry of Natural Resources and Environment of Vietnam has partnered with the IFC to create an environment for climate investment. "Building on its ongoing support to the ministry to develop green project criteria, IFC will also help develop and implement a policy and regulatory framework with an initial focus on key areas, including green procurement [and] green taxonomy".⁶⁷

Although Cambodia and Lao PDR do not have national taxonomies, as ASEAN Member States they can benefit from the regional taxonomy.

4.1.1 ASEAN Taxonomy

On 27 March 2023, the ASEAN published an updated version of its Taxonomy for Sustainable Finance,⁶⁸ which specified and considerably expanded the initial documents released in November 2021.⁶⁹ This new version provides much more detail on implementation, including a list of TSC for each eligible activity and a number of safeguards to ensure these activities not only

positively contribute to a particular environment objective, but also do not cause any negative impacts on nature or society.

The ASEAN Taxonomy includes four environmental objectives (EOs): climate change mitigation, climate change adaptation, protection of healthy ecosystems and biodiversity, and resource resilience

and the transition to a circular economy. To be eligible, an activity must contribute to at least one of the EOs and, at the same time, not negatively impact all other objectives. The taxonomy covers electricity generation from hydropower (power generation as part of cogeneration) under Environmental Objective 1 (EO1) – Climate Change Mitigation, which focuses on decarbonization pathways in line with the Paris Agreement.⁷⁰

Taxonomy implementation largely relies on the policy measures adopted by ASEAN Member States, which may vary in terms of the pace and depth

of adopting such measures. It is expected that countries will "reflect their national goals and/or transition policies on an Activity-by-Activity basis".⁷¹

According to international law firm Mayer Brown, "economic activities [under the updated taxonomy are] categorized as either "Green" which clearly contribute to or enable Climate Change Mitigation; 'Amber' which contribute to decarbonization where mitigation of other harm to environmental objectives is necessary; or 'Red' which do not contribute to or enable Climate Change Mitigation and/or fail to meet other safeguards"⁷².

Table 5 Technical screening criteria for hydropower, ASEAN Taxonomy Version 2

Tiers

EO1: Climate Change Mitigation TSC

Generation plant meets criteria (1) and (3) OR (2) and (3):

Tier 1 (Green)

- The electricity generation facility is a run-of-river plant and does not have an artificial reservoir.
- Power density of the electricity generation facility is above 5 W/m2.
- Life-cycle greenhouse gas (GHG) emissions from the generation of electricity by the entire facility <100 g CO2e/kWh.

Generation plant meets criteria (1) and (3) OR (2) and (3):

Tier 2 (Amber T2)

- The electricity generation facility is a run-of-river plant and does not have an artificial reservoir.
- Power density of the electricity generation facility is above 5 W/m2.
- Life-cycle GHG emissions from the generation of electricity by the entire facility: > 100 and < 425 g CO2e/kWh.

The GHG emissions intensity is the average GHG emissions intensity, including emissions associated with the reservoir only and allocated to hydropower only, averaged over an estimated 100-year life of the facility. This can be estimated in one of two ways:

Applicable standards

- Using the G-res tool (web-based tool for hydropower companies and researchers to estimate and report net GHG emissions from a reservoir), or
- Site-specific assessments carried out by the issuer or its appointed consultant following IEA Hydro Framework as described in the Guidelines for the Quantitative Analysis of Net GHG Emissions from Reservoirs.

Power density is defined as the nameplate capacity of the facility divided by the surface area of the reservoir.

Source: ASEAN Taxonomy Board (ATB)

The ASEAN Taxonomy also covers the construction and operation of grid-connected electricity storage, including pumped hydropower storage.⁷³ In addition, it requires that an Environmental and Social Impact Assessment (ESIA) be conducted for hydropower projects with an electrical output of 50 MW or more.⁷⁴

For hydropower, the taxonomy outlines detailed DNSH criteria for the damming of waterways, which differ for existing facilities and new power plants and storage facilities.

Table 6 DNSH biodiversity and habitat criteria for dams, hydropower facilities, and power storage

For existing facilities

All technically feasible and ecologically relevant mitigation measures must have been implemented to reduce adverse impacts on water, as well as on protected habitats and species directly dependent on water.

Measures, where relevant and depending on the ecosystems naturally present in the affected water bodies, must include:

- Measures to ensure downstream and upstream fish migration (such as fish-friendly turbines, fish guidance structures, state-of-theart, fully functional fish passes).
- Measures to stop or minimize operation and discharges during migration or spawning).
- Measures to ensure minimum ecological flow (including mitigation of rapid, short-term variations in flow or hydro-peaking operations) and sediment flow.
- Measures to protect or enhance habitats.

The effectiveness of those measures must be monitored in the context of any authorization or permit setting out conditions aimed at achieving good status or potential of the affected water body.

For new facilities

An impact assessment of the project must be carried out to assess all potential impacts on the status of water bodies within the same river basin and on protected habitats and species directly dependent on the water bodies.

Based on the impact assessment, it must be established that the plant is conceived, by design, location, and mitigation measures, so that it complies with one of the following requirements:

- The plant does not necessitate any deterioration nor compromises the achievement of good status or potential of the specific water body it relates to.
- Where the plant risks deteriorating or compromising the achievement of good status/potential of the specific water body it relates to, such deterioration is not significant, and is justified by a detailed cost-benefit assessment demonstrating both of the following:
 - The reasons for overriding public interest or the fact that benefits expected from the planned plant outweigh the costs from deteriorating the status of water that are accruing to the environment and to society,
 - The fact that the overriding public interest or the benefits expected from the plant cannot, for reasons of technical feasibility or disproportionate cost, be achieved by alternative means that would lead to a better environmental outcome (such as refurbishing of existing hydropower plants or use of technologies not disrupting river continuity).

All technically feasible and ecologically relevant mitigation measures must be implemented to reduce adverse impacts on water as well as on protected habitats and species directly dependent on water. Where relevant and depending on the ecosystems naturally present in the affected water bodies, mitigation measures must include:

- Measures to ensure downstream and upstream fish migration (such as fish-friendly turbines, fish guidance structures, stateof-the-art, fully functional fish passes),
- Measures to stop or minimize operation and discharges during migration or spawning),
- Measures to ensure minimum ecological flow (including mitigation of rapid, short-term variations in flow or hydropeaking operations) and sediment flow, and
- Measures to protect or enhance habitats.

The effectiveness of those measures must be monitored based on the authorization (or permit) setting the conditions aimed at achieving good status or potential of the affected water body.

Source: ASEAN Taxonomy Board (ATB)

4.1.2 Implications of the EU **Taxonomy in the Mekong Subregion**

According to the EU Commission, "[t]he EU is ASEAN's third-largest trading partner after China and the US, accounting for around 10.2% of ASEAN trade. The EU is [also] the second-largest investor in ASEAN countries. In 2020, its Foreign Direct Investment (FDI) stocks into ASEAN accounted for €350.1 billion. [...] Although a more recent phenomenon, ASEAN investment in Europe has also been growing steadily and impressively to a total stock of over €172.4 billion in 2020."75

The ASEAN Taxonomy and EU Taxonomy are largely in line with each other in terms of the TSC for hydropower-related activities. Both taxonomies rely on the G-res tool (a web-based tool for hydropower companies and researchers to estimate and report net GHG emissions from a reservoir) and the IEA Hydro Framework. However, in terms of thresholds, the ASEAN Taxonomy is somewhat weaker than the EU recommendations.

Therefore, in its final report on the EU Taxonomy, the Technical Expert Group (TEG) on Sustainable Finance set a declining threshold: facilities operating at life-cycle emissions lower than 100g CO2e/kWh, declining to 0g CO2e/kWh by 2050, are eligible.⁷⁶ This threshold is believed to contribute to reaching net-zero CO2e emissions by 2050.

At the same time, the ASEAN Taxonomy requires life-cycle GHG emissions from the generation of electricity by the entire facility of <100g CO2e/kWh for the "green" tier, life-cycle GHG emissions from the generation of electricity by the entire facility of >100, and <425g CO2e/kWh to qualify under the "amber" tier. Thailand's taxonomy requires GHG emissions intensity of <100g CO2e/kWh during the life cycle of the power plant for facilities that came into operation before 1 January 2024, and <50g CO2e/kWh for those commencing operation on or after 1 January 2024.

In addition to the environmental criteria, the EU Taxonomy also contains the minimal social safeguards requiring the "alignment with the OECD Guidelines for Multinational Enterprises and the UN

Guiding Principles on Business and Human Rights, including the principles and rights set out in the eight fundamental conventions identified in the Declaration of the International Labour Organization on Fundamental Principles and Rights at Work and the International Bill of Human Rights."77

As the EU is ASEAN's third-largest trading partner and second-largest investor, the differences in the TSC applied to hydropower projects may have important implications for the future ability of EU companies to invest and participate in hydropower projects in the Mekong Subregion.

4.1.3 Potential impact of regional taxonomies on hydropower development

Both the ASEAN Taxonomy - which can be applied at the national level in any Member State and from which countries without national taxonomies can benefit most - and the Thailand Taxonomy recognize hydropower development (new projects), operation (existing projects), and pump storage facilities as eligible and contributing to climate change mitigation activities. This makes investment in, and financing of, such projects potentially more attractive for national and regional banks. Furthermore, the eligibility of hydropower as green projects under the ASEAN Taxonomy makes it possible for banks and financial institutions to use them as underlying assets for a range of sustainable finance tools: green, sustainability, and sustainability-linked bonds, loans, and trade finance instruments.

Since both taxonomies aim to provide additional environmental and social (E&S) safeguards, it can be expected that financing hydropower or investing in it may pose fewer ESG risks - at least for the banks and asset managers that aspire to comply with taxonomies - and the risks that arise will be properly assessed, avoided, mitigated, or compensated.

At the same time, hydropower projects should still be subject to public scrutiny (including by local and international NGOs) because of the potentially farreaching environmental and social impacts resulting from their scale.



Cambodia **M**



In 2018, the Asian Development Bank (ADB) conducted a study of Cambodia's energy sector. This assessment estimated that Cambodia possesses significant hydropower potential, with an estimated capacity of 10,000 MW. Approximately half of this potential lay along the Mekong River, 40% in its tributaries, and the remaining 10% in the southwestern coastal highlands. As of 2018, only 980 MW of this capacity had been developed, with an additional 400 MW under construction and 90 MW in the feasibility study phase. The ADB also noted that the generation of hydropower in Cambodia experiences notable fluctuations between the dry and wet seasons, resulting in reduced electricity production during the hotter months. The country also has untapped potential in small and micro hydropower, although their specific capacities have yet to be quantified.⁷⁸

It is important to bear in mind that even though the ADB considers hydropower a green sector that contributes to energy transition, many NGOs have stricter positions and consider large-scale dams and hydropower stations as unsustainable.

With considerable hydropower potential still untapped, it is important that ongoing and future hydropower construction projects consider E&S criteria, and avoid, mitigate, and compensate any negative consequences commensurate to their impacts. Thus, it is important to understand the extent to which sustainability issues are integrated in Cambodia's financial regulations.

In December 2023, the Prime Minister of Cambodia announced that the country would not develop any hydropower dams on the Mekong River, confirming the moratorium on mainstream dam projects that was put forward in 2020. According to the Prime Minister, constructing dams on the mainstream of the Mekong River must be avoided because of their substantial environmental impact.⁷⁹

According to the ADB, "Cambodia is mapped under the "Advancing" sub-stage of the "Implementation" stage for the ESG Integration Pillar. There is an existing national framework addressing the integration of environmental, social, and governance (ESG) risk and performance considerations into the practices of financial institutions (FIs). In addition to ongoing activities to raise awareness and build capacity, implementation tools and initiatives are in place, and FIs report on their ESG implementation with consistent reporting instructions."80

4.2.1 Central banking

This section explores whether sustainability criteria are integrated in the policies of the National Bank of Cambodia (NBC), the country's central bank.

Monetary policy

Even though the NBC is not currently including ESG considerations in its monetary policy (for example, it does not seem to have integrated E&S criteria in the management of its foreign exchange reserves portfolio, nor in determining reserve requirements for banks),81 it has embarked on a journey to embrace sustainability issues and include them in its operations and supervisory expectations. The bank's recent partnership with the IFC to develop a green taxonomy for Cambodia, clearly manifests its intentions. However, there is still much to be done, including the integration of sustainability requirements in NBC's collateral framework and in the implementation of its corporate asset purchase programs.

• Leadership and internal organization

The NBC is actively promoting sustainability integration in the country's banking system, currently on a voluntary basis, rather than creating "hard" regulations. In June 2023, it conducted a workshop to raise awareness and build the capacity of regulators to promote environmental and social considerations in the Cambodian banking system. Among other issues, the participants discussed regional trends and regulations updates related to ESG (presumably including the ASEAN developments), as well as the importance of developing a national taxonomy to further promote sustainable finance in the country.⁸²

Banking supervision

According to USAID, as of May 2023, the NBC was not actively integrating ESG in nation-wide compulsory regulations: "[...] discussions were held with the which stated they were not ready to design, develop, or enforce banking regulation related to ESG criteria, and requested a voluntary approach, instead. This would allow them the time to join in the process and learn, as they contemplated future regulatory options."⁸³

4.2.2 Banking supervision

The Cambodian Sustainable Finance Initiative (CSFI) was launched in 2016. In 2019, the Association of Banks in Cambodia (ABC) developed and launched the Cambodia Sustainable Finance Principles and issued Implementation Guidelines. Together, the Principles and Guidelines form a voluntary framework that Cambodian banks can use to embed sustainability issues in their business. The Sustainable Finance Principles were originally signed by 47 banks,⁸⁴ and, according to USAID, 27 banks in Cambodia had adopted them by May 2023.⁸⁵

The Cambodia Sustainable Finance Principles stipulate that signatory institutions commit to:

- Assess and manage environmental risks relating to climate change, pollution, and waste management and the protection of critical natural resources.
- Assess and manage risks that could potentially negatively impact people, in particular local communities, workers, and Indigenous/minority populations.

- Assess and manage risks that could potentially negatively impact aspects of cultural heritage, including language, culture, traditions, and monuments.
- Increase the financial awareness and literacy of the Cambodian people and improve their approach to customer/client protection.
- Expand the reach to those who previously had no or limited access to the formal banking sector, and provide more innovative solutions to improve banking access and service levels.
- Finance innovations that create efficiencies and improve existing, traditional sectors and business activities, as well as develop new green economic activities.
- Seek to build capacity across the banks to deliver on their commitments, and raise awareness of customers and communities about sustainable, inclusive finance.
- Manage their own environmental and social footprints and request similar standards for their suppliers.
- Annually report their individual and sector progress against these commitments to hold

- themselves accountable and to share the story and outcomes of their journey and the value they believe can be created for Cambodia.⁸⁶
- Banks/microfinance institutions (MFIs) assess and manage environmental (and social) risk and issues through an Environmental and Social Risk Management (ESRM) process.

Under the Implementation Guidelines, Cambodian banks are expected to develop and implement an Environmental and Social Management System (ESMS), which should be tailored to reflect their specific activities, operations, services, and products.⁸⁷ The ESMS should cover environmental and social (E&S) policies, tools and procedures, governance structure, reporting, and capacity building activities.

In the Annex of the Implementation Guidelines, the ABC sets out detailed recommendations for including ESG in bank policies. Thus, the policies are divided into two broad categories: general (applying to entire processes or business areas) and specific (applying to particular sectors, topics, or products). Table 7 outlines the policies that the banks are expected to develop.

Table 7 Key elements of an ESMS: ESG policies

General ESG policies

The ESG, sustainable finance, or sustainability policy should cover both the business activities and business operations of the bank/MFI. The policy should describe, among others:

- The bank/MFI's principles and commitment to certain E&S standards and its E&S objectives and ambitions,
- The bank/MFI's commitment to integrate E&S considerations in business decisions and risk management processes across the bank/MFI or in certain business lines,
- The bank/MFI's E&S risk appetite,
- The type of activities the bank/MFI would not finance (a Prohibited/ Excluded Activities List),
- The type of sectors, issues, and/ or banking activities that present an increased E&S risk for the bank/MFI and will be subject to more detailed E&S risk due diligence,
- Specific E&S requirements for clients and transactions,

Specific ESG policies

Specific ESG policies can include, as applicable:

- Sector policies stating the rules under which the bank/MFI would engage with companies operating within a particular sector (e.g., in relation to agriculture, hydropower dams, forestry or energy industries),
- Thematic policies related to certain groups of E&S issues (e.g., climate change, human rights or reputational risk), and
- Product policies that apply to particular banking products, such as project finance, financial investments, or trade finance.

- E&S considerations for the bank/MFI's business operations,
- The main roles and responsibilities for implementing the ESG policies,
- ESG resources and capacity building requirements.
- The context of other specific commitments (e.g., to implementing the Financing the Future of Cambodia – Principles 4, 5, 6),
- The internal and external reporting requirements, and
- The intervals for periodic reviews and updates of the ESG policy.

Source: The Association of Banks in Cambodia (ABC) and Sustainable Banking and Finance Network (SBFN).

As shown in Table 7, the ABC considers hydropower a sensitive sector that requires a dedicated sector policy. Such a policy is expected to regulate the conditions under which a bank should engage with companies operating in this sector.

At the same time, it should be noted that the ABC Principles and Implementation Guidelines remain voluntary. As reported by the World Bank in its 2023 assessment report, Cambodia's "regulations for banks, insurers, and large investors do not yet include specific disaster and climate risk requirements." To tackle this, the World Bank recommends that several steps be taken. These include:

- Developing a green finance taxonomy, aligned with international standards and supported by verification and validation systems.
- Updating current legislation on disaster-related fiscal risk management to quantify, recognize, and disclose disaster-related contingent liabilities.
- Exploring options for environmental tax reform and carbon pricing instruments that incorporate revenue recycling.
- Encouraging private risk financing and the insurance sector to develop, promote, and grow microinsurance and contingent finance solutions for key productive sectors, as well as household insurance solutions.⁸⁹

4.2.3 Enabling environment

In 2021, Cambodia adopted its Long-Term Strategy for Carbon Neutrality.⁹⁰ However, this document does not specifically refer to banks and financial institutions and does not set any targets for carbon neutrality at the portfolio level.

At the same time, the NBC actively engages in capacity building activities for both its employees and the country's banks and financial institutions. As recently as June 2023, the NBC, in collaboration with KPMG, organized the workshop, "ESG Integration in Cambodian Banking Sector." 91

Most activities related to ESG coordination, selforganization, and implementation are overseen by the ABC as part of the CSFI. The ABC developed the aforementioned Sustainable Banking Principles and Implementation Guidelines, and is actively engaged in information sharing and training activities. It regularly conducts webinars, workshops, and discussions on a wide range of ESG topics, including carbon footprint, gender, the risks and opportunities of climate change, green financing, ESG requirements, ESRM, climaterelated disclosures, scenario analysis, and corporate financial reporting and sustainability disclosures.⁹²

At the end of December 2023, the NBC and the IFC signed a Cooperation Agreement on the Development of the Cambodia Green Finance Taxonomy and Market. "The partnership is expected to help strengthen the regulatory framework by developing a national taxonomy in line with best international practices, which will help define green assets qualifying for green investment. Additionally, the partnership will help improve capacity for financial institutions and prepare relevant guidelines including reporting and disclosure requirements

on green lending and environmental, social, and governance (ESG) risks."93

Cambodia is exploring the international carbon market. In 2022, during COP27, Cambodia agreed to "sell 15 million tonnes of carbon credits to international partners in order to offset their carbon emissions while reducing deforestation in the Kingdom through its REDD+ projects".94 At the same time, the country appears to lack an internal carbon market, so a comprehensive carbon pricing mechanism and relevant infrastructure (e.g., a carbon trading floor and clearing tools) still need to be developed.



4.3 Lao PDR



The substantial growth experienced in Lao PDR over the past 20 years was propelled primarily by significant investments in capital-intensive sectors, including hydropower. These investments have not always contributed to employment opportunities and, in certain cases, have incurred significant environmental drawbacks. Funding for public investments in the power sector has also relied largely on external debt.95

According to Lao PDR's Nationally Determined Contributions (NDCs), hydropower, along with energy efficiency and transport, are considered key sectors for the country's climate change mitigation efforts. "Total target installed hydropower capacity in the country by 2030 is set at 13 GW." 6 Currently, total hydropower production makes up 9.6 GW, while total hydropower potential may reach 23 GW.⁹⁷ It is therefore important to take stock of how financial regulations may impact the hydropower sector in Lao PDR.

4.3.1 Central banking

Monetary policy

The Bank of Lao PDR (BoL) does not currently consider environmental and social (E&S) issues in its monetary policy decisions. Thus, E&S factors are not taken into account when implementing corporate asset purchase programs, nor are they included in BoL's collateral framework. E&S considerations are also not integrated in the management of its foreign exchange reserves portfolio. The central bank does not currently offer subsidized loans or preferential targeted refinancing lines based on E&S considerations. E&S issues are also not considered when determining reserve requirements for banks.

Leadership and internal organization

In September 2022, BoL and the IFC signed a Memorandum of Understanding (MoU) on green finance technical assistance.98 The MoU is the first step in the partnership between BoL and IFC, which is expected to "[...] start with a market readiness assessment to review the current framework for green finance and identify market opportunities for potential green financing products. This will allow financial sector to consider improving the enabling environment for green finance through development of a sustainable finance roadmap, a climate risk assessment framework for the financial system, and a harmonized green

taxonomy, as well as regulations and guidelines on green finance and bonds, while developing a robust green finance market in line with international standards."99

Although ESG issues are not yet integrated in the BoL's internal organization and regulatory activities, it can be expected that the partnership with the IFC will boost such integration in the near future.

4.3.2 Banking supervision

Environmental and social factors do not seem to be currently integrated in the BoL banking supervision agenda. Thus, the IMF Technical Assistance Report on the Lao PDR Risk-Based Banking Supervision, completed in March 2019, does not contain any references to the ESG agenda.100

According to the BoL's Annual Economic Report, in 2022, as part of its securities and exchange supervision activities, the Lao Securities Commission Office (LSCO) completed a study on green, social, and sustainable bonds.¹⁰¹ However, the report does not seem to have been published, so it is not possible to assess the outcomes of this study and their potential implications for the sustainable finance market in Lao PDR.

The Basel Master Plan and Implementation Plan for Bank Supervision Development toward Basel Standards, published in 2017, states that BoL's vision for bank supervision includes building a safe, sound, sustainable, and modernized banking sector capable of integrating with international markets. However, no details are provided on how the sustainability agenda may be integrated in banking supervision.

4.3.3 Enabling environment

Lao PDR is in the initial stages of developing an enabling environment for sustainable finance. According to a 2022 ADB study, "[u]nder the National Green Growth Strategy, the banking sector is considered a supporting sector to promote sustainable development through monetary policy such as low-interest rate loans for investment in sectors related to green and sustainable development. However, there is no regulation or provision for the inclusion of such initiatives in the monetary policies and practices of the banking sector in the Lao PDR yet." The report goes on to conclude that "as such, the concepts of sustainable finance - including a green definition or taxonomy, sustainability risk management, sustainability disclosure, and a sustainability index - are new to both regulators as well as market participants in the Lao PDR."103

An important step was taken in June 2023 to incentivize climate finance and build an enabling environment when the Government of Lao PDR,

the Government of Australia, and the Global Green Growth Institute (GGGI) signed a partnership agreement aimed at supporting carbon market development in the Lao PDR. The partnership is expected to "[...] establish a coordinated multisectoral policy framework for carbon markets in the country. This framework will strengthen the domestic carbon market while also enabling sustainable participation in international carbon markets. By enhancing policy, institutions, systems and infrastructure for carbon market management, the Lao PDR will be better equipped to actively engage in the global carbon market."104

In its Promoting Best Corporate Governance Practices report, the IFC claims that, in collaboration with the LSCO, the Swiss State Secretariat for Economic Affairs (SECO), and the Government of Japan, it has worked to promote awareness of effective corporate governance and pinpointed areas where policies need improvement. This has led to the formulation of new regulations and standards related to ESG practices.¹⁰⁵ However, the report does not specify which new ESG regulations have been developed as a result of this collaboration.



4.4 Thailand



With 13.5 GW of potential hydropower capacity and 33.7 GW already in place. Thailand may see this industry continue to develop. It is therefore important to understand whether the financing or investment in the hydroelectric sector may be carried out in a sustainable manner, ensuring that life-cycle emissions are kept to a minimum, and avoiding, mitigating, or compensating other negative environmental and social impacts. To do so, it is crucial to look at how sustainable finance is regulated, and to what extent it applies to hydropower.

4.4.1 Central banking

Monetary policy

According to SUSREG, the Bank of Thailand (BOT) currently does not comprehensively integrate environmental and social issues in its monetary policy activities. Thus, the BOT does not take E&S considerations into account when implementing corporate asset purchase programs or in its collateral framework. The BOT also does not integrate E&S considerations in the management of its foreign exchange reserves portfolio. It does not seem to currently offer subsidized loans or preferential targeted refinancing lines based on E&S considerations. Thailand's central bank also does not consider E&S issues when determining reserve requirements for commercial banks.

Leadership and internal organization

The BOT is a member of the Network for Greening the Financial System (NGFS) and subscribes to its key principles. It has also defined science-based, climate- and environmental-related objectives beyond its conventional ones (e.g., price stability, full employment). Thus, in its 2021 Annual Report, the BOT "set goals in line with accelerating the implementation of Paris Agreement that required decisive actions by national authorities to reduce their GHG emissions drastically. the BOT targeted to sustain the temperature rise below 1.5°C, and reduce to net zero GHG emission by the year 2050 as per contribution to the whole Thailand's goal to net zero GHG emission by the year 2065."106

The BOT has also established a Financial Institutions Strategy Department, which is responsible, among many other tasks, for promoting sustainable finance. In 2021, the BOT expedited financial institutions' system readiness by:

- Setting policy direction (sustainable finance initiatives),
- Setting green taxonomy standards (launched in mid-2023),

- Incorporating environmental factors into the supervisory framework,
- Integrating environmental impacts in financial stability and macroeconomic assessments, and
- Strengthening collaboration with international stakeholders.¹⁰⁷

However, the BOT does not currently integrate E&S considerations in its portfolio and asset management practices (for its own, pension, and third-party portfolios). It also does not yet disclose the share of its own portfolio that is aligned with existing classification systems for sustainable or unsustainable activities (taxonomies). With the first version of the Thailand Taxonomy published in 2023, it may be expected that the BOT may start reporting on its portfolio alignment from 2024 or 2025 onwards, or as the Taxonomy is refined and expanded. The BOT also has not regularly reported publicly on its exposure to and management of climate-related risks and opportunities, in line with the TCFD recommendations.

4.4.2 Banking supervision

Micro-prudential supervision (supervisory expectations)

In Thailand, principle-based supervisory expectations related to sustainable banking have been issued and are applicable to all supervised commercial banks. These are summarized in the Thai Bankers' Association's (TBA) Sustainable Banking Guidelines – Responsible Lending, which cover a range of ESG issues:

Environmental

GHG emissions and climate change, deforestation and biodiversity loss, water stewardship, air/soil pollution and contamination, impact on ocean health, hazardous material, and waste management.

Social

Human rights, labor rights, occupational health and safety, community relations and community rights, excessive household debt, and stakeholder engagement.

Governance

Corporate ethics and integrity, business conduct, anti-corruption, risk management, monitoring, reporting, and transparency.¹⁰⁹

The Guidelines reflect both the expected impact of E&S issues on the bank's risks and value creation, and the impacts of the bank's

activities on E&S issues ("double materiality assessment").

However, it should be noted that this document, published in 2019, was developed by the Thai Bankers' Association, not the regulator. It could therefore be considered semi-voluntary, even though the BOT and other members of the Working Group on Sustainable Finance are committed to implementing it. Thailand also currently lacks regulations or supervisory expectations that extend beyond lending to cover other financial products and services provided by banks, such as mortgage or trade finance tools.

The Guidelines also "serves as a guidance for banks to establish a responsible lending strategy to manage their environmental and social impacts and risks. The strategy includes, but not limited to, developing robust lending policies that incorporate Environmental, Social and Governance criteria, and establishing effective internal controls along with transparent disclosures". The Guidelines ask banks to dedicate resources and specify clear roles and responsibilities to support the implementation of the responsible lending strategy.

At the same time, Thai banks are not currently expected to consider E&S risks when preparing their board-approved risk appetite statement, nor to extend E&S consideration beyond the short term (1 to 5 years) to medium (5 to 10 years) and longer term (10 to 30 years) in their business and risk management. Banks are also not expected to regularly provide their board with relevant information related to the implementation of their E&S strategy, nor to include criteria related to implementation in their appraisal and remuneration policy.

The Sustainable Banking Guidelines – Responsible Lending reference a number of international and national initiatives, including the United Nations Sustainable Development Goals (SDGs), the Paris Agreement, Thailand's NDCs, Task Force for Climate-related Disclosure (TCFD), Science Based Targets initiative (SBTi), Principles for Responsible Banking (PRB), and the Anti-Corruption Organization of Thailand Collective Action against Corruption (CAC). Reliance on such recognized standards makes Thailand's guidance more robust and gives local banks the opportunity to stay abreast of the international ESG agenda and boost their competitiveness.

The Guidelines recognize that banks can be exposed to highly sensitive sectors and issues and should take them into consideration when developing responsible lending policies and

processes. However, banks are not yet required to develop and implement sector policies outlining minimum E&S requirements for their clients, particularly in sectors with high E&S risks and impacts. At the same time, the Guidelines encourage banks to integrate E&S considerations in their decision-making and risk management processes and policies.

Thai banks are not expected to put internal controls in place to manage E&S risks in accordance with the "three lines of defense"* approach. They are also not currently required to have an internal process for monitoring and addressing situations where clients are not compliant with the bank's E&S policies that are based on applicable laws and regulations, or internationally recognized, science-based scenarios and findings (e.g., IEA 2050 Scenario outlining the immediate end of fossil fuel exploration and expansion projects). Banks are also not obliged to include clauses (e.g., covenants, representations, and warranties) related to E&S issues in loan documentation for bilateral and syndicated credit facilities.

There are also currently no regulatory expectations for Thailand's banks to develop systems that are integrated in the banking group's broader data governance and IT infrastructure to collect and aggregate E&S risk and impact data. At the same time, the BOT stresses the need to "fix information asymmetry by collaborating with other agencies to develop a national-level platform for environmentrelated data, in order to ensure sufficient data availability to support the classification of activities according to the Thailand Taxonomy, as well as to support the development of financial products and services". The development of such data platforms was expected to start in the fourth quarter of 2022.113

According to the *Sustainable Banking Guidelines - Responsible Lending*, banks in
Thailand are to identify and seek to manage
their lending portfolio exposure to ESG risks.¹¹⁴

However, banks are not specifically required or expected to continually assess, manage, and mitigate their portfolio-level exposure to material ESG risks by using science-based, forward-looking scenario analysis and stress testing over the short, medium, and long term. There are also no requirements to continually assess, manage, and mitigate the material negative E&S impacts associated with their business relationships at the portfolio level. Neither the BOT nor the Thai Banking Association expect banks to set up-to-date climate science-based targets and align their portfolios with the objectives of the Paris Agreement, let alone to set science-based

targets to mitigate negative environmental impacts beyond climate.

Thai banks are also not required to evaluate and mitigate reputation and litigation risks associated with E&S considerations.

Micro-prudential supervision (rule-based)

ESG factors are not currently included in the rule-based micro-prudential regulations in Thailand. Thus, banks are not expected to integrate E&S considerations in their Internal Capital Adequacy Assessment Process (ICAAP), nor in their liquidity risk management process. Liquidity ratios are not adjusted to take E&S considerations into account, through a differentiated risk-based approach or otherwise. Minimum capital requirements or capital addons for banks in Thailand currently do not incorporate E&S considerations.

Disclosures and transparency

Banks in Thailand are expected to publicly disclose how their sustainable lending policies are put into practice. This could be done as part of annual reports or at least regular website updates. Banks are also expected to report on the positive impacts achieved while implementing their sustainability strategy. The Sustainable Banking Guidelines – Responsible Lending suggest that such reporting should be in line with the TCFD, Global Reporting Initiative (GRI), the Sustainability Accounting Standards Board (SASB), and national standards and recommendations, including the Stock Exchange of Thailand (SET) Guidelines for Sustainability Reporting.

*According to the BOT, the three lines of defense include:

- Business units, or the first line of defense, should preliminarily evaluate and control environmental risk to ensure that business decisions appropriately account for environmental risks. This includes, for example, enquiry about environmental actions and impacts as part of the processes for accepting new clients and reviewing existing clients' risk profiles, especially in the case of high-risk industries.
- The second line of defense, such as risk management, compliance, and credit review units, should integrate environmental risks as part of the organization's overall risk assessment and establish risk assessment frameworks that can balance decision-making power. This includes, for example, the right to object to the first line's decision, and ensure that the environmental risk assessment process is aligned with the risk appetite, other relevant regulations, and laws.
- Internal audit units, or the third line of defense, should act independently in their audit of the risk management framework, internal control, and related monitoring. This is to ensure that the overall organizational conduct supports environmental risk management effectively in an end-toend manner.

However, there are currently no regulatory expectations that banks and financial institutions in Thailand must publicly disclose their time-bound transition plans to reach set strategies and objectives pertaining to E&S issues.

Macro-prudential regulations

In terms of macro-prudential regulations, the BOT has developed specific risk indicators to monitor the exposure of banks to material E&S risks. Thus, the BOT deems it important for banks to start assessing climate-related financial risks in the financial system by mapping physical and transition risk transmission channels within the financial system and adopting key risk indicators to monitor these risks, in line with the NGFS Recommendation.¹¹⁷

The BOT is not currently assessing the exposure of banks to material E&S risks and the implications for financial system stability, based on forward-looking scenario analysis and stress testing. It has also not yet published a methodology for such an assessment. The supervisor has not issued prudential rules to limit the exposure of banks to certain activities to prevent and protect against the build-up of systemic risk, based on E&S considerations. Specific capital requirements for banks in Thailand do not incorporate a macro-prudential buffer for systemic E&S risks.

According to a 2022 BOT Directional Paper on Transitioning towards Environmental Sustainability Under the New Thai Financial Landscape, the bank will "develop a framework for climate scenario analysis and stress testing. In the initial phase, a pilot exercise with large financial institutions will be conducted by the end of 2023, and will later expand to include all Thai commercial banks by 2024".¹¹⁸

• Leadership and internal organization

According to Sustainable Finance Initiatives for Thailand, the BOT is a member of the NGFS and subscribes to its key principles.¹⁹

In 2022, the BOT "placed great emphasis on risk diversification and embarked upon several initiatives as follows: [...] introducing sustainable investment framework that combined environmental, social, and governance (ESG) considerations into investment decisions with intention to support long-term objective of enhancing risk-adjusted return along with creating positive real-world impact". 120

Also in 2022, the BOT published its first Directional Paper on Transitioning towards Environmental Sustainability Under the New Thai Financial Landscape. This document outlines the Bank's ESG direction and policies.¹²¹

Figure 9 The BOT's approach to tackling environmental challenges

	Building Blocks	Challenges	Intended Outcomes	What Thais will gains
•	Products and services	 Environmental impact notreflected in operational costs. Discrepancy in each financial institution's environmental actions. 	Financial institutions systematically incorporate environmental aspects into their decision-making and business-as-usual processes.	 The business sector can access the financial products and services that serve their needs in environment-related transitioning. Financial institutions are trusted by customers and investors for their quality environmental risk management.
2	Taxonomy	Uneven transition within the business sector.	Thailand has a common classification system for environmentally-friendly economic activities that is aligned with international standards and Thailand's own context. It can be used as reference in the development of products, data disclosure, and also in creating incentives, in a consistent manner across different sectors.	 The business sector can make transition plans that are in line with the set environmental targets. The financial sector can more precisely allocate capital to environmentally-friendly activities
3	Data and disclosure	Information asymmetry in accessing and allocating capital.	Thailand has a central environment-relateddata system that connects and can be utilized by both financial and non-financial sectors, to support environmental actions.	Every sector can access and utilize quality environmental data that is robust and sufficient for the evaluation of opportunities and risks in their decision making process.
4	Incentive	Cost of transition in each sector.	Financial institutions offer a diverse range of financial products at incentivizing prices, in order to support the cost burden of businesses to adapt during the transition period.	The business sector, particularly SMES, have lower cost of transition, and therefore are encouraged to adapt and survive in the long term.
5	Capacity building	Unpreparedness of each sector.	Financial institutions personnel have adequate expertise and skill for managing environmental risk.	The business sector, particularly SMEs, can obtain advisory support from financial institutions that serve their need in transitioning towards environmental sustainability.

Source: BOT (2022, August 23), Directional Paper on Transitioning towards Environmental Sustainability Under the New Thai Financial Landscape.

4.4.3 Enabling environment

To accelerate sustainable development in Thailand, the Working Group on Sustainable Finance, which consists of the Fiscal Policy Office, the BOT, the Securities and Exchange Commission, the Office of Insurance Commission, and the Stock Exchange of Thailand, have joined forces to steer and align Thailand's sustainable finance policies.

In June 2023, the Thailand Taxonomy Board developed and released a classification system for sustainable activities - the Thailand Taxonomy (Phase 1) - which was developed through a science-based and multi-stakeholder process. However, a classification or catalogue of unsustainable activities (a so-called "brown" taxonomy) are yet to be developed.

Thailand's regulators are supporting capacity building for the financial industry in sustainable banking and insurance practices and related aspects. The BOT "has been hosting a series of quarterly capacity building workshops and events for stakeholders across the Thai financial sector, covering a range of topics such as the impact of climate risk in infrastructure investment and responsible lending. The BOT has also hosted the Bangkok Sustainable Banking Forum since 2018 to raise awareness, deepen adoption of sustainability practices in the Thai financial industry, and alert the financial industry regarding the imminent ESG threats that would be sources of financial risk." 122

Thailand also published the *Guidelines on Issuance* and *Offer for Sale of Green Bond, Social Bond and Sustainability Bond,* which are based on relevant ASEAN standards and are expected to set out a transparent and fair playing field for banks and financial institutions in the creation of a robust market for sustainable financial products.¹²³

The Excise Department of Thailand is currently (as of October 2023) developing a carbon tax that will apply to three broad economic sectors: energy, transportation, and industry. This measure is expected to prompt companies to transition to greener energy sources, with the goal of reducing emissions by up to 30% and reducing the expenses associated with imported fuels. The tax is being developed in line with Thailand's goal to achieve carbon neutrality by 2050 and reach net-zero GHG emissions by 2063. While specific details on the carbon tax are not currently available, the Excise Department is conducting a study.¹²⁴ The data collection process is expected to be completed by the end of 2024.¹²⁵

In Thailand, non-financial corporates are required to report on current and planned activities according to internationally or nationally recognized sustainability reporting standards and definitions. To facilitate this process, in 2017, the Thailand Securities

and Exchange Commission released the Corporate Governance Code, which provides guidance on how to report on ethical, environmental, and social issues.¹²⁶ However, non-financial companies are not yet required to publish science-based transition plans.

Thailand has not yet set targets or created incentives for banks to support the transition to a net-zero and nature-positive economy by engaging with hard-to-abate sectors without substitutes, channeling capital into innovative technological and nature-based solutions, or into certain industries on the basis of sustainability considerations.

4.4.4 Thailand Taxonomy

The Thailand Taxonomy Board released the first version of the national green taxonomy – so-called "Phase One" – in June 2023. The version currently available on the BOT website is dated 1 September 2023.¹²⁷

The Thailand Taxonomy classifies hydropower production (including pump storage) as renewable energy. This applies to both the construction of new facilities and the operation of existing facilities that produce electricity, heating, and cooling from hydropower. However, the Taxonomy also recognizes that the hydropower industry may pose considerable risk for the aquatic and terrestrial ecosystems due to the sheer scale of its operations. To ensure that hydropower fully contributes to climate change mitigation and, at the same time, does not negatively impact biodiversity and habitats, the Taxonomy includes several TSC and mitigation measures.

Table 8 Hydropower generation eligibility criteria under the Thailand Taxonomy

Metrics and thresholds

Tier

Green

Criteria

A hydropower facility in operation before 1 January 2024 is eligible if it has either:

- A power density of >5W/m2, OR
- GHG emissions intensity of <100g CO2e/kWh during the life cycle of the power plant.

A hydropower facility commencing operation on or after 1 January 2024 is eligible if it has either:

- A power density of >10W/m2, OR
- GHG emissions intensity of <50g CO2e/kWh during the life cycle of the power plant.

In addition, pumped storage facilities must also meet one of the following criteria:

- The facility is demonstrably purposefully built in conjunction with intermittent renewables, AND/OR
- The facility is contributing to a grid that already has a share of intermittent renewables deployment of at least 20% or has credible evidence of programs in place that increase the share of intermittent renewables to this level within the next 10 years.

Evidence of such programs might be the current development of renewable energy facilities that are due to come online in the near term, or the auction of PPAs for renewables, AND/OR

 The facility can credibly demonstrate that the pumped storage will not be charged with an off-peak grid intensity that is higher than the intensity of the electricity it will displace when it is discharged. For example, demonstrating that there is no combination of the following in the merit order: (1) mid-merit coal and (2) gas used at times of peak demand.

For any new project, the executor must also follow additional criteria.

Amber

Red

Retrofitting that improves either power density or decreases the emission intensity of the existing hydropower plant by at least 15% is eligible.

- Activities that are not compliant with green or amber criteria are non-compliant, and
- Power plants dedicated to support fossil fuel infrastructure are excluded.

Climate Bonds Initiative Hydropower Criteria Document and Background Paper.

In the current version, "existing facility" refers to a facility that is operating or received a construction permit from the relevant authorities before 1 January 2024. "New facility" refers to a facility that received the construction permit after 31 December 2023.

Criteria reference

Source: Thailand Taxonomy Board, BOT.

In addition to the TSC, Thailand's Taxonomy also lays out requirements for new hydropower production projects. These criteria aim to mitigate the potential negative impacts of such projects and are summarized in Table 9.

The Taxonomy also requires that eligible activities should not generate a negative social impact and comply with minimum social safeguards. The safeguards cover human rights, workers' rights (freedom of association, prohibition of Forced Labour Convention, provisions on child labor, equal remuneration, etc.), land rights and rights of Indigenous Peoples. The social safeguards are in line with the International Bill of Human Rights, relevant ILO conventions, and IFC Performance Standards.¹²⁸

Table 9 BOT requirements for new hydropower projects

For new facilities

Requirements

All technically feasible and ecologically relevant mitigation measures have been implemented to reduce adverse impacts on water, as well as on protected habitats and species directly dependent on water. Measures include, where relevant and depending on the ecosystems naturally present in the affected water bodies:

- Measures to ensure downstream and upstream fish migration (such as fish-friendly turbines, fish guidance structures, state-of-the-art, fully functional fish passes),
- Measures to stop or minimize operation and discharges during migration or spawning),
- Measures to ensure minimum ecological flow (including mitigation of rapid, short-term variations in flow or hydro-peaking operations) and sediment flow, and
- Measures to protect or enhance habitats.

The effectiveness of these measures is monitored in the context of the authorization or permit setting out conditions aimed at achieving good status or potential of the affected water body.

For new power plants it must be established, on the basis of the impact assessment, that the plant is conceived - by design, location, and mitigation measures - to comply with one of the following requirements:

- The plant does not deteriorate or compromise the good status/ potential of the specific water body it relates to,
- Where the plant is at risk of deteriorating or compromising the good status/potential of the water body, such deterioration is not significant and is justified by a detailed cost-benefit assessment that demonstrates both of the following:
 - The reasons for overriding the public interest or that the benefits expected from the planned hydropower plant outweigh the costs of deteriorating the status of water accruing to the environment and to society.
 - The fact that overriding the public interest or the benefits expected from the hydropower plant cannot, for reasons of technical feasibility or disproportionate cost, be achieved by alternative means that would lead to a better environmental outcome (such as refurbishing existing hydropower plants or using technologies that do not disrupt river continuity).

- A new plant should not permanently compromise the good status/ potential of any water body in the same river basin district, and
- Compensatory measures must be implemented to ensure the project does not increase the fragmentation of water bodies in the same river basin district. This is achieved by restoring continuity within the same river basin district to an extent that compensates for the disruption of continuity that the planned hydropower plant may cause. Compensation must begin prior to the execution of the project.

Source: Thailand Taxonomy Board, BOT.



🚰 4.5 Vietnam 🔀



4.5.1 Central banking

Monetary policy

One of the goals of the Action Plan for the Implementation of the National Green Growth Strategy for 2021-2030 (Decision No. 1408/QD-NHNN), issued by the State Bank of Vietnam (SBV) in July 2023, is to ensure that managing monetary policy and bank credit contributes to the implementation of national green growth goals.¹²⁹ However, the detailed policies guiding the implementation of the Strategy (such as corporate asset purchase programs, collateral framework, foreign exchange reserves portfolio, subsidized loans, preferential targeted refinancing lines) do not yet include the relevant environmental and social (E&S) elements.130

Leadership and internal organization

The SBV is actively engaged in promoting sustainable finance in the country. Key activities include developing the relevant regulations, creating an enabling environment, and providing training and education for Vietnam's bankers and financial sector professionals. According to the Deputy Governor of the SBV, the banking system "...has been proactive and creative towards achieving the goals as set by the Government in the National Green Growth Strategy for the 2021-2030 period, Vision to 2050, and has obtained encouraging results, such as the approval of the Scheme on the development of green banks in Vietnam. the formulation of the Action Program of the banking sector to implement the National Green Growth Strategy; the development of Circulars on the environmental and social risk management in the credit granting operations, with the purpose of gradually increasing the proportion of green credit outstanding balance for the economy."131

Under the Scheme on Green Bank Development in Vietnam, issued in 2018, the SBV aims to implement a number of solutions by 2025:

- Formulate and issue instructions on the directions of green bank development to be circulated to credit institutions.
- Formulate and issue incentive policies and preferential mechanisms to support credit institutions in green bank development,
- Promote training and communication activities on green banking, and
- Study and implement measures to increase the economic benefits (combined with administrative incentives) to encourage non-cash payments based on the application of Technology 4.0 with a view to greening banking operations.¹³²

The SBV has not yet established a specialized department responsible for the sustainability agenda across units and functions. Rather, each department is responsible for embedding environmental and social principles in its key activities and tasks. For example, the Department of Credit for Investment Economic Sectors is expected to research and perfect regulations on environmental risk management in credit-granting activities, and the Department of Personnel and Organization is expected to develop and implement training and foster programs on green growth and green economic development for the banking industry. 133

4.5.2 Banking supervision

The SBV has been actively integrating environmental and social considerations in its banking sector supervision activities. As part of the Scheme on Green Bank Development in Vietnam, it has created regulatory expectations for commercial banks and set a number of goals to be achieved by 2025. These include:

- 100% of banks will have developed internal regulations on ESRM in their lending activities.
- 100% of banks will have conducted an assessment of social and environmental risks in their lending activities.
- Environmental standards will have been applied for all projects receiving loans from the banks,
- The environmental risk assessment will be integrated as part of the banks' credit risk assessments.
- At least 10 to 12 banks will have established specialized units or agencies for ESRM.
- At least 60% of the banks will have gained access to green capital resources and will have provided green credits.¹³⁴

To meet these goals, the SBV expects banks to develop and launch a comprehensive ESRM system that should cover aspects such as E&S criteria in lending operations, a dedicated department or unit responsible for the assessment of E&S risks, and a reporting mechanism for ESRM. The SBV also recommends that banks should integrate the E&S risk assessment in their credit risk assessment, and to have relevant risk management plans in place.

In December 2022, the SBV issued Circular 17/2022 TT-NHNN, which aims to regulate environmental risk management in credit-granting activities by credit institutions and foreign bank branches. This Circular "requires the credit institutions and the foreign bank branches to develop their own internal regulations to manage environmental risks in the independent credit granting activities, or to integrate it in the existing internal regulations on credit granting or the internal control regulations of the respective credit institutions, in compliance with the applicable legal regulations on credit granting activities and credit risk management". ¹³⁵

As far back as 2017, the SBV worked with the IFC to develop a handbook for commercial banks on the social and environmental risk assessment of projects in 10 key economic sectors, including agriculture, chemicals, construction and infrastructure, energy, food processing, textiles, petroleum, mining, non-metallic mineral products exploitation, and waste management. The handbook was planned to be published in 2017, but the official text was not located during the research.¹³⁶

The SBV has published the Green Project Catalogue, which identifies six categories of green initiatives as priorities:¹³⁷ renewable energy, energy saving and energy efficiency, land use conversion and management, sustainable forestry, sustainable waste management, and green agriculture.

Importantly, the SBV is planning to "set up a database on the compliance and violations of the legal regulations and requirements for environmental protection of the customers and enterprises in order to be used by the commercial banks as a basis for the loan appraisal and identification of environmental risks during their evaluation of the creditors, and thereby minimize/reduce the credits for non-environmentally friendly activities [by banks]".138

The SBV also expects commercial banks to develop sector policies for the most sensitive sectors, including agriculture, hide and leather, renewable energy, and apparel. The SBV demands that banks strictly supervise and take measures to reduce lending to projects in these industries that may have negative environmental or social consequences. Presumably, hydropower will be covered by such policies as part of the broader renewable energy industry. However, it is still unclear what such policies will look like and how dams and hydropower will be treated.

In addition to its core strategic tasks, the SBV is also planning to review, amend, and supplement strategies and action plans of the banking industry to ensure integration and compliance with the goals of the National Strategy on Green Growth for 2021–2030, Vision to 2050, Strategy on Adaptation to Climate Change and Reduction of Greenhouse Gas Emissions to 2050, and Project on Tasks and Solutions to Implement the Results of the 26th Conference of the Parties to the United Nations Framework Convention on Climate Change (the Banking Strategy Institute is the focal point for coordinating implementation with relevant units).

4.5.3 Enabling environment

The development of a comprehensive green taxonomy is underway in Vietnam. The aim is to cover eight sectors, 83 green economic activities, and environmentally-screened criteria, thresholds, and indicators for green investment projects. This taxonomy will contribute to the achievement of eight environmental goals outlined in the Law on Environmental Protection (LEP).¹⁴⁰ A 2022 SBV report claims that Vietnam, along with other five countries - Bangladesh, Brazil, China, Indonesia, and Mongolia - have published comprehensive taxonomies for green and/or sustainable finance. This report could not be located in the research, but a news item dated June 2023 stated that the "Vietnamese green taxonomy is currently being developed and has yet to be released". 141 Meanwhile, Vietnam can use the ASEAN Taxonomy.

Decree O6/2022/ND-CP issued in January 2022 outlines the regulations for the upcoming development of a carbon market in Vietnam. From 2023 to 2027, the Government of Vietnam is planning to design and publish regulations on carbon credits, carbon credit management, and quota exchange activities. Pilot projects to test the implementation of a carbon credit clearing and exchange tool are expected to commence in 2025. By 2028, authorities plan to have a carbon credit trading floor fully operational, allowing the domestic carbon market to link with regional carbon markets across Asia and globally.¹⁴²

As part of its efforts to create an enabling environment for commercial banks, the SBV is committed to "[...] deploy programs, events, forums, seminars and conferences to share experiences, raise awareness and strengthen capacity on green finance and green growth and sustainable development". 143

To facilitate the development of sustainable finance, it is important that not only banks and financial institutions, but also (and most importantly) clients and non-financial corporations, actively engage on environmental and social issues. Sustainability reporting is often considered an essential first step. According to Vietnam Investment Review, "while the issuance of a sustainability report is considered a tool that could improve enterprises' awareness of new business risks and opportunities, such issuance has not been taken full advantage of. In the 2022 reporting season, only 19 companies issued a separate sustainability report."¹⁴⁴

According to Circular No. 96/2020/TT-BTC, which provides guidelines on disclosing information on the stock market, issued by Vietnam's Ministry of Finance in 2020, companies should also report on their essential environmental and social issues. This regulatory expectation, however, seems to currently apply only to listed companies, so its scope appears to be somewhat limited.



Recommendations

Based on the findings of this study, FFA has recommendations for financial institutions, national policymakers, and the ASEAN.

5.1 Recommendations to financial institutions

The following recommendations are for the financial institutions assessed in this report, but are also relevant to any financial institution that may be providing credit to, or investing in, hydropower projects on the Mekong River. The recommendations are aimed at accelerating responsible financing and investment in the hydropower sector:

 Develop and disclose an overarching human rights policy and due diligence process aligned with the UNGPs.

Banks and investors have a responsibility to avoid causing or contributing to negative impacts on human rights associated with their activities or business relationships, through their lending and investment activities. To do this, financial institutions should develop due diligence processes that enable them to identify, prevent, mitigate, and account for how they address impacts on human rights.

 When conducting risk assessments, financial institutions should apply an intersectional perspective that considers the specific risks faced by women and other minority groups, such as Indigenous Peoples.

To do so, financial institutions should first identify all communities and/or other stakeholder groups that might be affected by the hydropower projects, and require investee companies to conduct informed and meaningful stakeholder consultations with those groups in the early stages of project development. Special attention should be paid to the impacts of the projects on groups that might be more at risk of rights violations, such as women, children,

Indigenous Peoples, and ethnic minorities. The fair representation of such groups during consultations is essential, and companies should develop detailed plans to mitigate the adverse impacts of hydropower projects and devise livelihood strategies that address their different needs. Financial institutions can work with governments, development partners, CSOs, and academics to achieve this goal.

Develop and disclose a sector policy for the hydropower sector.

Financial institutions should adopt policies that govern their financing and/or investments in the hydropower sector. To assist them in this process, financial institutions can rely on existing standards, such as the IHA Sustainability Guidelines or the IFC's Good Practice Note on Environmental, Health, and Safety Approaches for Hydropower Projects, the technical screening criteria (TSC) included in their national taxonomy (if applicable), and/ or the ASEAN Taxonomy. The sector policy should explain which environmental and social (E&S) criteria will be used to assess hydropower projects and the companies involved in their construction or expansion. At minimum, the sector policy should set expectations for companies on the following topics:

- Respect for the rights of workers in line with the fundamental conventions of the ILO.
- Ongoing consultation with affected communities, with special attention to the representation of vulnerable groups such as women, children, Indigenous Peoples, and ethnic minorities,
- Where applicable, the FPIC of Indigenous Peoples should be ensured,
- Conducting an ESIA on the full impacts of a dam or hydropower project on biodiversity, including an assessment of cumulative impacts at the earliest possible stage during the planning process, and
- Avoiding critical impacts on biodiversity, including protected areas, wetlands of international importance covered by the Ramsar Convention, and sites on the UNESCO World Heritage list.
- Diversify information sources when assessing the actual and potential adverse impacts of hydropower projects.

Usually, financial institutions rely only on the information provided by the companies they finance or invest in. By doing so, they run the risk of overlooking some impacts and might face future risks to their reputation and the profitability of the projects (such as delays due to community protests, negative exposure in the media, etc.). Banks and investors should supplement the information provided by their clients and investee companies with other information sources as part of their screening and monitoring processes, such as reports from national authorities, international organizations, NGOs, other CSOs, independent experts, academia, and media. Setting up channels for stakeholder dialogue and consultation can help in this regard. Financial institutions can also consider attending and participating in the Mekong River Commission's Procedures for Notification, Prior Consultation and Agreement (PNPCA) processes to obtain relevant information on the benefits and associated risks of new hydropower project which may have significant impacts on the Mekong River mainstream's flow regimes, water quality, and other environmental and socio-economic conditions.

Work to address the challenge of shrinking civic space in Asia.

Strong environmental and human rights risk assessments of hydropower projects rely on various sources, including engagement with affected stakeholders such as local communities, Indigenous Peoples, and human rights defenders. However, in some countries and regions, publicly raising concerns about large development projects that affect access to land and livelihoods often leads to human and environmental rights defenders being threatened, attacked, or victims of arbitrary lawsuits and detentions. To address the shrinking civic space in Asia, financial institutions can:

- Publicly recognize the value of human and environmental rights defenders' contributions in their risk assessment process,
- Publicly commit to protecting the rights of human and environmental rights defenders (CSOs, trade unions, activists, journalists, etc.) and encourage clients and investee companies to do the same, and
- Assess infringements on civic freedoms by (potential) business relationships, such as the use of Strategic Lawsuit Against Public Participation (SLAPP suits) as part of ongoing due diligence and work to engage with companies and regulators when such infringements are observed.

Develop measures that enable effective remedy for affected stakeholders.

When financial institutions have business relationships with companies involved in human rights violations, they have a responsibility to enable remediation even beyond the life of the project. To achieve this goal, they can adopt various options when financing or investing in hydropower projects (not mutually exclusive):

- Assess a client's preparedness for remedy upfront in the due diligence process,
- Systematically require the sponsors of hydropower projects to set up an operational-level grievance mechanisms that meet the effectiveness criteria of the UNGPs,
- Establish their own grievance mechanism or set up a grievance mechanism in cooperation with the other project lenders. This mechanism should be open to individuals, local communities, or CSOs representing

the interests of affected individuals or communities.

- Incorporate a covenant in the loan documentation addressing the client's responsibility to provide remediation for adverse impacts it has caused or contributed to, and
- When adverse impacts occur, conduct time-bound engagement with clients to support the provision of remedy to affected stakeholders.

To ensure affected stakeholders have access to remedy, financial institutions should be aware that concrete agreements and milestones are the result of ongoing discussions that can extend beyond the project life cycle. One of the main indicators that engagement with companies has led to effective remediation should be that affected stakeholders are satisfied with the long-term measures resulting from the consultations.

Financial institutions can also find specific guidance on how to enable effective remedy in project finance transactions in a suite of new due diligence tools released by the Equator Principles Association and Shift.¹⁴⁵ It is vital to build public confidence that financial institutions and businesses monitor and report publicly on the effectiveness and progress of their operational-level grievance mechanisms.

 Align hydropower financing and investments with the green technical screening criteria (TSC) of national and/or regional taxonomies, or the highest available standard if taxonomies do not comprehensively address relevant issues or have lower threshold standards.

To this end, financial institutions should publicly disclose:

- The scope of their activities and investments that are eligible for the taxonomy,
- The proportion of their assets that are aligned with the taxonomy, and
- Where relevant, the proportion of their assets under management that are aligned with the taxonomy.



5.2 Recommendations for ASEAN and national policymakers

The following recommendations are for central banks, financial regulators, and policymakers in the CLTV countries and at the ASEAN level:

 Central banks and financial regulatory authorities should make more active use of existing tools and guidelines developed at the regional level, including ASEAN. The updated version of the ASEAN.

Taxonomy contains a range of ready-to-use building blocks, including detailed lists of sustainable activities accompanied by TSC and thresholds. However, several aspects of the ASEAN Taxonomy could be improved, including stricter thresholds and TSC, so national regulators should be encouraged to go beyond ASEAN requirements. A more inclusive process is recommended for the future updates of the ASEAN Taxonomy, with stronger civil society participation at all stages.

 Countries that still lack national taxonomies (Lao PDR and Vietnam), as well as Cambodia, which initiated a green finance taxonomy in December 2023 in cooperation with the IFC, should develop and launch taxonomies following a transparent and inclusive process. This will help national banks and financial institutions develop and offer sustainable financial products and services, including green, social, and sustainability-linked bonds and loans, as well as trade finance products. Taxonomies should include specific requirements for dams and hydropower projects, including eligibility criteria and DNSH requirements, as well as minimum social safeguards, including FPIC of Indigenous Peoples, and be compliant with the fundamental conventions of the ILO and the UNGPs. The taxonomy development process should be transparent and inclusive, building on public consultations and feedback from a broad range of stakeholders, including civil society.

Regulators should encourage commercial banks and asset managers to develop hydropower sector policies.

These policies should outline specific conditions under which they can finance and invest in hydropower development projects, as explained in the recommendations to financial institutions.

Central banks and financial regulators and regional development banks should consider changing their approach to largescale hydropower projects based on a more nuanced assessment of the cumulative transboundary and basin-level impacts.

They should also encourage state development agencies and the private sector to consider more sustainable alternatives to large hydropower projects.

 Central banks should require the banking sector to include material ESG risks, including those related to hydropower, in their credit risk assessments.

Due to the sheer scale of hydropower projects, they can have impacts on entire river basins and even beyond. Central banks must require financial institutions to assess such environmental and social risks and consider them in their lending and investment decisions.

 Policymakers should prioritize studies investigating the cumulative impacts of hydropower dams and integrate their findings in national legislation, policy frameworks, and strategic planning processes related to hydropower development.

This will enable informed decision-making and ensure sustainable and responsible hydropower projects.

Thailand (which published a national taxonomy in June 2023), Vietnam (which is still developing a taxonomy), Cambodia (which initiated the taxonomy development process in cooperation with the IFC at the end of 2023), and other countries in the region that may do so in the future, should set stricter requirements for dams and hydropower projects (including for life-cycle emissions and DNHS criteria), such as those outlined in the EU Taxonomy and other credible standards.

They should require project operators to assess the potential impacts on all water sources in the same basin (including impacts on the aquatic flora and fauna and migratory species). Project operators should also be required to measure the cumulative impacts of the new, existing or planned projects within the same basin.

 Central banks and national governments should consider introducing incentives for banks and other financial institutions to increase their portfolios of green, social, and sustainability-linked financial instruments. Incentives may include adding green, social, sustainability, and sustainability-linked bonds to their collateral frameworks; subsidizing interest rates for green, social, and sustainability-linked loans; and reducing the reserve requirements for such loans.

Central banks should create civil society roundtables, committees, or working groups that serve as platforms for dialogue between central banks and representatives of a range of research and CSOs, as well as community and voluntary groups.

Key stakeholders should have opportunities to regularly inform central bank leadership of their environmental and social "asks" and to provide expertise and advice on how these demands can be integrated in the policies and supervisory expectations of banks and financial regulators. CSOs should be guaranteed an active role in the development of green taxonomies to ensure their conservation agenda and social standards receive sufficient consideration.

APPENDIX 1

Methodology of the policy assessment of financial institutions

This appendix presents in more detail the criteria used in this report to assess the extent to which the credit and investment policies of financial institutions deal with the social and environmental impacts of hydropower projects.



1.1 Introduction

The criteria are grouped into five themes. The first theme is the commitment and transparency of the financial institution itself (section 1.2). The other four themes deal with the expectations the financial institution should have for the companies it is financing or investing in, including general requirements for hydropower projects (section 1.3) and specific expectations related to biodiversity and environment (section 1.4), human rights and labor rights (section 1.5), and supply chain management (section 1.6)

It must be noted that if the financial institution only includes one of these criteria in its hydropower sector policy and not in a cross-cutting policy, for example on biodiversity or human rights, the financial institution will still receive a score for this criterion. This is because this report focuses on the role of finance in the hydropower sector. Where relevant, more information is provided in the scoring guidance.



1.2 Commitment and Transparency

The following criteria are used to assess the commitment and transparency of the financial institution itself:

 The financial institution has developed a sector policy for the hydropower sector. (Maximum 1 point)

Scoring guidance:

- 1. The financial institution does not disclose any sector policy for the hydropower sector. (O points)
- 2. The financial institution reports publicly that it has developed a sector policy for the hydropower sector, but the policy is not disclosed. (0.5 points)
- 3. The financial institution discloses a sector policy for the hydropower sector. (1 point)
- 2. The financial institution's policy is applicable to financial products and services beyond lending (i.e., capital markets and advisory). (Maximum 2 points)

Scoring guidance:

- 1. The policy applies to limited lending activities, such as project finance. (0.5 points)
- 2. The policy applies to all lending activities. (1 point)
- 3. The policy applies to financial products and services beyond lending, such as underwriting or advisory activities. (2 points)
- The financial institution has developed a human rights policy in which it commits to implementing the UNGPs in its lending and/or investment activities. (Maximum 1 point)

Scoring guidance:

- 1. The financial institution does not disclose a human rights policy. (O points)
- 2. The financial institution discloses a human rights policy applicable to its core

business but does not refer to the UNGPs. (0.5 points)

- 3. The financial institution discloses a human rights policy applicable to its core business in which it commits to implementing the UNGPs. (1 point)
- 4. The financial institution describes its human rights due diligence (HRDD) process. (1 point)

Scoring guidance: Score if the financial institution describes its HRDD process. The important elements of an HRDD process are the identification, assessment, and mitigation of human rights risks. The scope of this criterion is restricted to the financial institution's core business activities.

5. The financial institution has developed a policy on meaningful consultation with potentially affected groups and other external stakeholders. (1 point)

Scoring guidance: Score if the financial institution has set up channels for meaningful consultation with external stakeholders, particularly potentially affected groups. The criterion intends to assess whether financial institutions are considering the views of rights-holders while assessing human rights risks and impacts.

6. The financial institution has set up a grievance mechanism that is accessible for individuals and communities that may be adversely affected by its financing/

investments AND clearly explains its process for managing complaints. (Maximum 1 point)

Scoring guidance: Score if the financial institution has set up a grievance mechanism that is available in multiple languages (accessible) AND explains the different steps in the process for handling complaints (for instance, the timeline for responding). If only one of the two criteria is met, half the score is given.

7. The financial institution incorporates ongoing compliance with environmental and social requirements as covenants in the loan documentation. (Maximum 1 point)

Scoring guidance: If the financial institution is a signatory to the Equator Principles 4 (EP4) or commits to implementing them, this is sufficient for scoring.

8. The financial institution incorporates a covenant in the loan documentation addressing the client's responsibility to provide for, or cooperate in remediation for, adverse impacts it has caused or contributed to. (Maximum 1 point)

Scoring guidance: This criterion is not applicable to pension funds.

9. The financial institution reports publicly on the name of project finance transactions that have reached financial close in line with EP4.¹⁴⁶ (Maximum 1 point)

Scoring guidance: If the financial institution is a signatory to the EPs or reports on the name of project finance transactions in line with the requirements of EP4 (total project capital costs of USD 10 million or more), this is sufficient for scoring.



1.3 General Requirements

The following criteria are used to assess the general expectations that financial institutions should have for the hydropower sector projects or companies they invest in or finance:

- 10. Companies apply the International Hydropower Association (IHA) Sustainability Guidelines¹⁴⁷ or the IFC Good Practice Note on Environmental, Health, and Safety Approaches for Hydropower Projects.¹⁴⁸ (2 points)
- 11. Companies avoid or minimize physical or economic displacement of populations and displacement of economic activities (such as agricultural lands or fishing). (1 point)
- **12.** Companies conduct a cumulative impact assessment at the earliest possible stage of the planning process. (1 point)

Scoring guidance: Score if the financial institution requires companies to conduct a cumulative impact assessment at the earliest possible stage of the project planning process, or an equivalent study that identifies and addresses significant regional or basin-level environmental and social impacts.

13. Companies address the decommissioning of the hydropower operation or project. (1 point)

Scoring guidance: Score if the financial institution requires companies to address decommissioning in the design stage of the project, laying out the details of the decommissioning plans.

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1.4 Biodiversity and Environment

The following criteria are used to assess the biodiversity and environmental expectations that financial institutions should have for the companies they invest in or finance:

14. Companies prevent negative impacts on the populations or number of animal species that are on the IUCN Red List of Threatened Species. (1 point)

Scoring guidance: Score if the financial institution operates a policy requiring financed companies to prevent negative impacts on species that are on the IUCN Red List of Threatened Species. Companies should take measures to avoid activities that negatively impact these species, including avoiding certain areas.

15. Companies prevent negative impacts on High Conservation Value (HCV) areas* within their business operations and the areas they manage. (1 point)

Scoring guidance: Score if the financial institution expects financed companies and/or investees to prevent negative impacts on HCV areas or refuses to finance companies that fail to prevent such impacts. (1 point)

16. Companies prevent negative impacts on protected areas that fall under categories I-IV of the IUCN, the Ramsar Convention on Wetlands, and areas designated as UNESCO World Heritage sites, both

within their business operations and the areas they manage. (3 points)

Scoring guidance: Score if the financial institution requires companies to prevent negative impacts in protected areas. One point is granted for each type of protected area.

17. Companies make an environmental and impact assessment or strategic environmental assessment of the full impacts of a dam or hydropower project on biodiversity. (1 point)

Scoring guidance: Score if the financial institution expects companies engaged in dam or other water infrastructure projects to conduct an environmental impact assessment on the total impacts of the project on biodiversity.

18. Companies implement a mitigation strategy that prioritizes efforts to prevent or avoid adverse impacts to biodiversity, then to minimize and reduce those impacts, to repair or restore them, and, finally, to offset or compensate them, with a view to achieving no net loss, and preferably gain of biodiversity. (1 point)

Scoring guidance: Score if the financial

^{*}According to the HCV Resource Network's good practice guide, Common Guidance for the Management and Monitoring of High Conservation Values, HCVs are defined as biological, ecological, social, or cultural values that are considered outstandingly significant or critically important at the national, regional, or global level.

- institution has a mitigation strategy that prioritizes avoidance, minimization, and restoration measures.
- **19.** Companies disclose their GHG emissions. (1 point)

Scoring guidance:

1. The financial institution has policies in place to encourage or require companies to disclose their GHG emissions, but the policy does not refer to Scope 3 emissions. (0.5 points)

2. The financial institution has policies in place to encourage or require companies to disclose their Scope 1, 2, and 3 GHG emissions. (1 point)

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1.5 Human Rights and Labor Rights

The following criteria are used to assess the human rights and labor rights expectations that financial institutions should have for the companies they invest in or finance:

- **20.** Companies implement the UNGPs. (1 point)¹⁴⁹
 - **Scoring guidance:** Score if the financial institution requires companies to implement the UNGPs.
- 21. Companies identify all communities and/or other stakeholder groups that might be affected, and then undertake informed and meaningful stakeholder consultation with them from the early stages of project development. (1 point)
- 22. Companies ensure that stakeholder consultations enable them to properly assess the impacts of the project on vulnerable groups, such as women, children, Indigenous Peoples, and ethnic minorities. (1 point)
- 23. Companies must obtain Free, Prior, and Informed Consent (FPIC) from Indigenous Peoples AND people with customary tenure rights. (1 point)
 - Scoring guidance: Score if the financial institution requires companies to adhere to the principle of FPIC for Indigenous Peoples and people with customary tenure rights. If only one of the two criteria is met, half the score is given.
- **24.** Companies establish or participate in effective, operational-level

- grievance mechanisms for workers, individuals, and communities that may be adversely affected. (1 point)
- 25. Companies establish compensation schemes, in consultation with communities, for involuntary resettlement or loss of access to resources or livelihoods. (1 point)
- **26.** Companies have zero tolerance for all forms of forced and compulsory labor and child labor. (1 point)

Scoring guidance:

- 1. The financial institution commits to applying the IFC Performance Standards. (0.5 points)
- 2. The financial institution explicitly states that it considers all forms of forced labor OR child labor to be unacceptable or undesirable. (0.5 points)
- 3. The financial institution explicitly states that it considers all forms of forced labor AND child labor to be unacceptable or undesirable. (1 point)
- 4. The financial institution requires companies to apply the ILO Declaration on Fundamental Principles and Rights at Work¹⁵⁰ or the ILO fundamental conventions on forced labor and child labor.¹⁵¹ (1 point)
- 27. Companies identify and mitigate the gendered impacts of the hydropower projects on local communities. (1 point)

Scoring guidance: Score if the financial institution requires companies to address the gendered impacts of its operations.

28. Companies have a zero-tolerance policy towards all forms of gender-based discrimination in employment. (1 point)

Scoring guidance: Score if the financial institution requires companies to have a clear zero-tolerance policy for all forms of gender discrimination. The policy must be explicitly about gender and cover all operational activities of the bank, not just hiring.

- **29.** Companies have a health and safety policy. (1 point)
- 30. Companies conduct an assessment of the natural hazards and technological risks associated with the safety of the hydropower project AND develop a dam safety and emergency preparedness and

response plan. (1 point)

Scoring guidance: Score if the financial institution requires companies to conduct an assessment of the safety risks of a hydropower project during the project design phase and develop appropriate mitigation and response plans. If the financial institution, commits to implementing the IFC Performance Standards or the IFC Good Practice Note on Environmental, Health, and Safety Approaches for Hydropower Projects, it is sufficient for scoring.



1.6 Supply Chain

The following criteria are used to assess the supply chain expectations that financial institutions should have for the companies they invest in or finance:

31. Companies integrate criteria on biodiversity, human rights, and labor rights in their procurement and operational policies. (Maximum 1 point)

Scoring guidance:

- 1. No criterion included. (O points)
- 2. Criteria on at least one of the crosscutting themes. (0.5 points)
- 3. Criteria on all three cross-cutting themes. (1 point)

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