EMPOWERING KEY DEVELOPMENT FINANCE INSTITUTIONS IN ASIA TO ACCELERATE THE DECARBONIZATION OF THE ENERGY SECTOR

ACKNOWLEDGEMENTS

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WWF | ASFI ASIA SUSTAINABLE FINANCE INITIATIVE

This report is part of the Asia Sustainable Finance Initiative (ASFI) - a multi-stakeholder forum, incubated by WWF-Singapore that aims to harness and amplify the power of the finance sector to create low-carbon, climate-resilient and nature-positive economies that deliver on the UN Sustainable Development Goals (SDGs), the Paris Agreement and the Global Biodiversity Framework (GBF).

ABOUT WWF-SINGAPORE

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As one of WWF's international and regional hubs, WWF-Singapore supports a global network spanning over 100 countries. WWF-Singapore works closely with local stakeholders towards a greener and more sustainable Singapore and the region around us. We work to address key conservation areas, such as deforestation, illegal wildlife trade, oceans, food security, sustainable finance and sustainable consumption through education and outreach efforts with individuals, businesses, and governments. For more information, please visit wwf.sg.

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EXECUTIVE SUMMARY

The prevailing scientific consensus on climate change underscores an undeniable sense of urgency. To limit global temperature increases to below 1.5°C and avert irreversible environmental consequences, the world must achieve net-zero greenhouse gas (GHG) emissions by mid-century. Meeting this colossal challenge demands a swift, science-driven transition across all sectors of the economy, with a particular emphasis on the energy sector, responsible for more than two-thirds of global GHG emissions.

Recent data underscores the various challenges facing South Asia and Southeast Asia's energy sector. Not only do these regions face the imperative to amplify their investments in the energy sector, but they also confront the urgent need to significantly bolster their commitment to clean energy and energy efficiency technologies. However, under current policies, South Asia and Southeast Asia are on track to become increasingly reliant on fossil fuel imports. For example, the International Energy Agency (IEA) estimates that South Asia's fossil fuel imports will increase by 50% between 2020 and 2040, while Southeast Asia's fossil fuel imports will increase by 30% over the same period[1]. This increased reliance on fossil fuel imports will make the region more vulnerable to energy price shocks and climate change impacts[2].

1 International Energy Agency (IEA). 2022. Southeast Asia Energy Outlook 2022. Available here.

2 Climate Analytics. 2019. Decarbonising South and Southeast Asia - Full Report. Available here.

To meet their energy needs and climate commitments, South, East, and Southeast Asia must urgently transition to clean energy. This entails developing fair and equitable solutions to shift away from coal and other fossil fuels, investing in renewable energy sources such as solar and wind power, and enhancing energy efficiency. This task will not be easy, given the diverse net-zero transition commitments and sustainable finance policies of countries in the region (e.g., Japan and Korea compared to Indonesia and India). Consequently, a regional or country-specific approach is necessary for the development of net-zero transition strategies. Customized strategies, robust policy frameworks, technological innovation, financial mechanisms, and international collaboration are indispensable for achieving a just and inclusive transition in these regions. Furthermore, the region should implement a carbon pricing mechanism to discourage the use of fossil fuels and support research and development in new clean energy technologies. Continuing to build regional cooperation on clean energy is also essential. These measures will drive investments in clean energy and render it more affordable for consumers.

Development finance institutions (DFIs) stand at a pivotal juncture in this context. Their primary mandates centre around fostering sustainable growth, encompassing initiatives like decarbonization, and enhancing climate resilience. They can be instrumental in this journey, not only through direct investments but also by establishing benchmarks and best practices for other institutions to replicate. Their contributions encompass financing and fostering the adoption of climate solutions to replace high-emission technologies or facilitate carbon removal and sequestration in beneficial ecosystems. DFIs also support companies in line with the 1.5°C trajectory and aid firms in robust net-zero transitions. A key principle involves refraining from financing new fossil fuel ventures. Additionally, DFIs facilitate the managed phase-out of high-emission assets, necessitating public sector collaboration for subsidies or compensation. Through these strategies, DFIs actively promote GHG intensity and emissions reductions and sustainable economic shifts.

To help empower DFIs to shift the region's financial flows away from unsustainable activities, such as coal-power development and deforestation-linked biofuel production, and to drive the transition to sustainable energy infrastructure, WWF has been assessing the efforts of DFIs in Asia to integrate environmental and social (E&S) considerations into their energy-related decision-making since 2021. This paper summarizes the latest findings of an assessment of DFIs with a majority shareholding structure comprising Japan, China, Indonesia, the Philippines, Malaysia, and India. It also provides recommendations to help DFIs align their overall governance structure, financing strategy, sector policies, products, people management, and portfolio disclosures with the Paris Agreement and the Kunming-Montreal Global Biodiversity Framework (GBF).

SOUTH ASIA'S FOSSIL FUEL IMPORTS WILL INCREASE BY 50% BETWEEN 2020 AND 2040

SOUTHEAST ASIA'S FOSSIL FUEL IMPORTS WILL INCREASE BY 30% OVER THE SAME PERIOD

RESULTS

Overall, DFIs with ownership distributed among multiple governments, including regional and non-regional members, consistently demonstrated closer alignment with our framework expectations across nearly all key indicators. This alignment can be attributed to several factors, including the influence of non-regional shareholders from climate-proactive countries like those in Europe and North America. Additionally, factors such as mission alignment, robust capital base, strong balance sheets, extensive scale and scope of operations, as well as the patience and tenacity to pursue long-term development goals, played significant roles in their success. Conversely, DFIs with partial private sector ownership generally exhibited comparatively less robust performance across a broad spectrum of indicators. This can be attributed to the profit-oriented nature of their private sector shareholders, who may prioritise financial returns over sustainability and development practices. However, it is important to note that there is a wide range of performance among DFIs in this category, and some DFIs with partial private sector ownership have a strong track record of investing in sustainability and development.

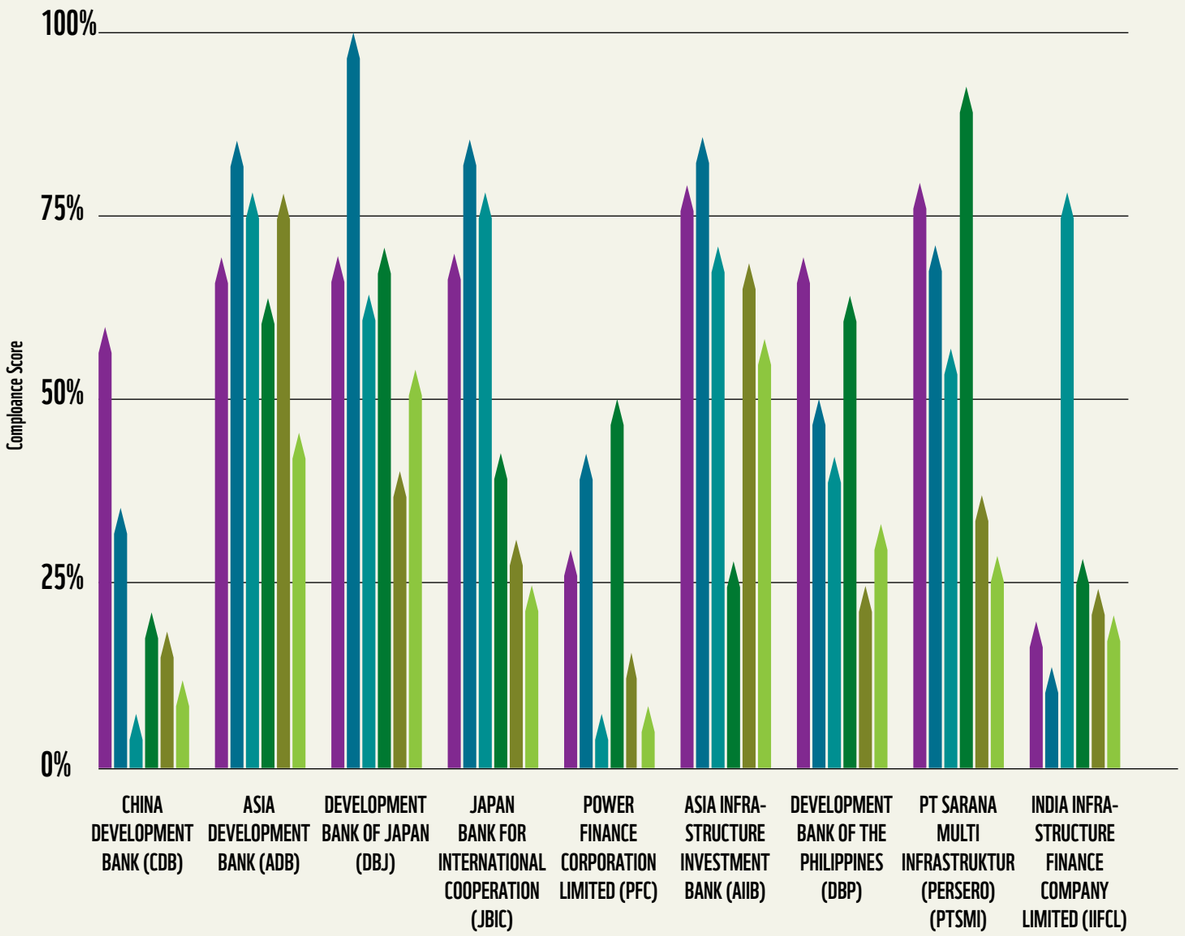


Figure 1. Compliance scores at the indicator level for each DFI. Source: WWF public disclosure analysis.

Pillars/ Criteria	Description	Results
PURPOSE 1 Sustainability strategy and stakeholder engagement 2 Participation in sustainable finance and infrastructure initiatives	Good performance is important as sustainability is a necessary condition for long-term national growth prospects and a dynamic topic with constant developments which need to be followed.	Most DFIs have acknowledged the societal and economic risks associated with climate change, and some have engaged with regulators and policymakers to update their mandates. However, less than half of the DFIs have made significant commitments to sustainable finance initiatives, and none have committed to immediately ending financing for new coal, gas, and oil projects.
POLICIES 3 Public statements on specific ESG issues 4 Public statements on specific sectors	Good performance is important as transparent policies ensure intentions are embedded into daily business operations. Specific policies are required for industries with high E&S risks and otherwise prominent cross-cutting topics, such as climate change and biodiversity loss.	The majority of DFIs have formulated public climate change strategies and have established frameworks for renewable energy financing. However, only four DFIs have established an explicit energy sector-specific policy, and there is an opportunity for improvement in identifying and specifying the risks that need to be managed throughout the entire project lifecycle.
PROCESSES 5 Assessing and monitoring ESG risks at project level	Good performance is important as effective implementation of E&S policies requires transparent integration of E&S criteria into client and transaction approval processes so that policy enforcement is meaningful with consequences for non-compliance.	The vast majority of DFIs conduct E&S risk assessments to classify their clients, but the incorporation of climate risk screening is still limited. Only half of the DFIs currently require an Alternatives Analysis to evaluate lower GHG-intensive alternatives, and the adoption of a carbon shadow price to energy sector projects is also significantly lacking.
PEOPLE 6 Responsibilities for ESG 7 E&S staff competency and performance evaluation	Good performance is important as effectively implementing policies and processes requires sufficient staff capacity and clear allocation of responsibilities to different departments and senior management	While senior management's responsibility for the implementation of the DFI's energy policy, E&S policies, and climate change strategy has mostly been established, there is still room for significant improvement. The assessment highlights the need for senior management to take a more proactive role in managing climate change risks and opportunities, particularly in the context of the energy sector.
PRODUCTS 8 ESG integration in products and services	Good performance is important as integrating ESG issues into business operations does not only entail adequate risk assessment, but also tapping into business opportunities.	Several DFIs are restricting coal financing, including prohibiting new thermal coal extraction, and processing, and coal-fired power plants. However, most DFIs haven't imposed restrictions on diversified mining and energy clients to phase out coal activities. Only a few bilateral DFIs and MDBs limit financial products related to oil and gas. While most DFIs offer renewable energy support, they often overlook sustainable material sourcing in their supply chains. Only one DFI restricts financing for corporations lacking a credible science-based transition plan.
PORTFOLIO 9 ESG risk assessment and mitigation at portfolio level 10 Disclosure of ESG risk exposure and targets	Good performance is important as the assessment of key E&S risks at client and transaction level only provides a micro-level snapshot of issues which ultimately accumulate at the portfolio level. Disclosure of risk exposure indicators and setting targets helps progress assessment in dealing with material ESG risks and business model transitioning.	While most DFIs disclose some information on the energy sector composition of their lending portfolios (e.g., fossil fuel versus renewable energy financing), only a few DFIs disclose the Scope 1, 2, and 3 GHG emissions of their clients or have implemented credible frameworks to assist them in aligning with the Paris Agreement. No DFI requires clients to make sustainability-related commitments, such as establishing science-based GHG emission reduction targets, releasing public Task Force on Climate-related Financial Disclosures (TCFD) reports, and divulging plans for decommissioning fossil fuel assets.

When comparing DFIs credit rating scores with our assessment framework, those with AAA credit ratings consistently achieved the highest average compliance scores (69%) across indicators. In contrast, those with BBB-credit ratings consistently attained the lowest average compliance scores (28%) across indicators. This disparity in performance can be attributed to the fact that credit ratings serve as indicators of an institution's perceived risk of defaulting on its financial obligations. Higher credit ratings, such as AAA, signify a lower risk of default, while lower ratings, like BBB-, imply a higher default risk. The significant difference in compliance scores for DFIs rated between AAA and BBB- implies that institutions with superior credit ratings tend to exhibit more robust financial management practices, enhanced governance structures, and a more favorable risk profile. These factors significantly contribute to their ability to allocate resources efficiently and pursue sustainable development projects effectively. However, while good credit scores often correlate with ESG effectiveness due to the above-mentioned, they don't indicate direct causation. The realm of ESG is complex and nuanced, and simplistic assumptions about credit scores directly equating to ESG performance can be misleading. Careful consideration and a more comprehensive analysis are required to draw meaningful insights in this domain.

RECOMMENDATIONS

In conclusion, the assessment highlights certain advancements made by DFIs since our last evaluation in 2022 in addressing climate change within their energy lending and investment decisions. Nonetheless, it remains clear that there is a significant opportunity for them to further enhance their efforts. To this end, the report recommends that DFIs consider the following actions:

A. STRENGTHEN AND MAKE MORE COMPREHENSIVE COMMITMENTS TO SUSTAINABLE FINANCE INITIATIVES:

» This includes an immediate cessation of financing for the coal value chain and all new ventures in the oil and gas sector, coupled with the development of a credible net-zero commitment supported by a Climate Transition Action Plan (CTAP).

- ◇ A CTAP should include a forward-looking list of actions, taken in the near term, to align internal strategies and external climate and energy policy advocacy to reduce GHG emissions in line with a 1.5°C pathway and achieve a just transition.

» Revise their mission and mandate to align investments and lending with clean energy and sustainable development. This, in turn, will benefit not only the environment, economy, and society by reducing carbon emissions and carbon intensity, stimulating economic growth, and enhancing energy security but will also help attract diverse private capital sources, foster innovation, contribute to global agreements, and build trust and long-term viability.

» Promote clean energy investment in target regions by creating investment guides, hosting investor roadshows, and collaborating with governments to foster a favourable policy environment.

B. ADOPT AND IMPLEMENT ROBUST ENERGY SECTOR POLICIES AND RISK MANAGEMENT PROCEDURES:

» Establish explicit energy sector-specific policies that identify and specify the risks that need to be managed throughout the entire lifecycle of a project.

» Strengthen client and project assessment and screening in E&S due diligence:

- ◇ Utilize industry-leading environmental performance standards, tools, and metrics to ensure consistent measurement and reporting of environmental impacts, leading to the certification of project sustainability.
- ◇ Require an Alternatives Analysis to evaluate lower GHG-intensive alternatives for all energy sector projects, regarding risk management frameworks such as the Equator Principles.
- ◇ Adopt a carbon shadow price to energy sector projects following the recommendations of the High-Level Commission on Carbon Prices (e.g., $50-$100 per tonne by 2030).
- ◇ Incorporate biodiversity net gain (BNG) requirements into safeguard policies, including

habitat preservation and adherence to Key Biodiversity Area guidelines.

C. STRENGTHEN GOVERNANCE AND CAPACITY:

» Strengthen governance structures by delegating clear roles and responsibilities across various departments, committees, or teams involved in the development and implementation of E&S and energy policies.

» Hold the Board and Senior Management Team responsible and accountable for the creation, adoption, and rigorous implementation of these policies throughout the organization.

» Expand training efforts to ensure comprehensive preparedness among all staff, including boards and senior management, in appraising climate risks and opportunities.

» Integrate sustainability-related criteria into the staff appraisal process and Key Performance Indicators (KPIs).

D. SCALE UP FINANCIAL SUPPORT AND TECHNICAL ASSISTANCE TO CLEAN ENERGY PROJECT DEVELOPERS TO HELP THEM PREPARE THEIR PROJECTS FOR INVESTMENT:

» Annually raise the proportion of financial investments in clean energy solutions compared to fossil fuels within the portfolio.

» Continue to develop risk mitigation instruments and deploy financial flows to further reduce the cost of capital and increase investment for renewable projects in developing countries.

E. FOSTER GREATER COLLABORATION WITH STAKEHOLDERS IN THE EXTENDED ENABLING ENVIRONMENT INCLUDING GOVERNMENTS, BUSINESSES, AND CIVIL SOCIETY, TO ACCELERATE THE TRANSITION TO A CLEAN ENERGY FUTURE:

» Collaborate with governments to lead the transition to clean energy by fostering clean energy investment, fossil fuel divestment, and accelerating green subsidies.

» Support civil society capacity building and training programs for clean energy entrepreneurs, businesses, and investors.

» Work with relevant stakeholders to share best practices and to build a more coordinated and collaborative approach to climate change risk management.

» Promote public awareness of the benefits and cost parity of clean energy.

INTRODUCTION

THE GLOBAL ENERGY PREDICAMENT

To avoid the worst impacts of climate change, the world needs to cut GHG emissions in half by 2030 and reach net-zero emissions by 2050[3]. With 73% of global emissions caused by energy use[4], it is not possible to achieve global climate and biodiversity goals without a rapid shift to clean and renewable energy (RE)[5]. An estimated 28,000 GW of renewable capacity will need to be installed by 2050—which is over nine times the current global capacity[6]. This means annual clean energy investment worldwide will need to more than triple by 2030, to approximately US$4 trillion, for the world to be on a path to net-zero goals[7].

Accelerating renewable energy, in alignment with Sustainable Development Goal 7 (SDG 7) - ensuring access to clean and affordable energy, is urgently needed to address growing global inequality. Over 750 million people have no access to electricity, and many more require increased access to foster well-being and prosperity[8]. The energy transition should be equitable, supporting communities by increasing energy access, addressing energy poverty, and facilitating a just transition, thereby playing a pivotal role in advancing agriculture, business, communications, education, healthcare, and transportation.

The rapid development of RE has been prompted by Russia's invasion of Ukraine in 2022. This event triggered a global energy crisis and reignited concerns about energy security worldwide. As a result of this [9]crisis, fuel prices surged, with natural gas reaching unprecedented levels and oil prices hitting their highest point since 2008[10]. This prompted a renewed dedication to RE objectives. For instance, Europe established a new target of achieving 42.5% of its energy from renewables to enhance energy security.

Adding momentum to this acceleration, the costs of solar and wind energy have dramatically decreased by 90% and 50% respectively over the last ten years[11]. These sources have now become the most cost-effective options for energy generation, and they are projected to constitute the major portion of future energy investments. The pressing task at hand involves implementing policies that facilitate the rapid and extensive deployment of RE, essential for attaining net-zero emissions by 2050.

3 Intergovernmental Panel on Climate Change (IPCC). 2023. Summary for Policymakers. In: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)]. IPCC, Geneva, Switzerland, pp. 1-34. Available here.

4 Environmental Impact Assessment (EIA). 2023. Energy and the environment explained Where greenhouse gases come from. Available here.

5 Intergovernmental Panel on Climate Change (IPCC). 2021. Sixth Assessment Report. Available here.

6 International Renewable Energy Agency (IRENA), Renewable Energy Targets in 2022: A Guide to Design (Abu Dhabi: IRENA, 2022). Available here.

7 International Energy Agency (IEA), Net Zero by 2050: A Roadmap for the Global Energy Sector (Paris: IEA, 2021). Available here.

8 International Energy Agency (IEA). 2022. For the first time in decades, the number of people without access to electricity is set to increase in 2022, IEA, Paris. Available here.

9 International Renewable Energy Agency (IRENA), Renewable Power Generation Costs in 2021 (Abu Dhabi: IRENA, 2022)

10 World Bank Group. 2022. Commodity Markets Outlook: Pandemic, War, Recession: Drivers of Aluminum and Copper Prices. Available here.

11 International Renewable Energy Agency (IRENA), Renewable Power Generation Costs in 2021 (Abu Dhabi: IRENA, 2022). Available here.

OVERVIEW OF CHALLENGES AND OPPORTUNITIES IN DECARBONIZING THE ENERGY SECTOR IN SOUTH, EAST AND SOUTHEAST ASIA

South, East and Southeast Asia comprises forty member states, each with its distinct energy profiles, demands, and resources. As a collective, the region has witnessed rapid economic growth, urbanization, and increased energy consumption over the past decades. Historically, the energy landscape in these regions has primarily relied on fossil fuels, including coal, oil, and natural gas, which have been central to their energy mix. However, there is an increasing acknowledgement of the immense potential offered by renewable energy sources such as solar, wind, and geothermal power. This recognition is especially pertinent given the rapid growth these regions are experiencing.

In purchasing power parity (PPP), it is forecasted that India will command over 20% of the global gross domestic product (GDP) share by 2050[12], reaching an estimated GDP of $44.1 trillion. China, on the other hand, is expected to maintain a comparable share, also hovering around 20% of the world's GDP in PPP[13], with a projected GDP of $58.5 trillion by 2050. Additionally, the ASEAN region is poised for substantial growth, with a projected GDP growth rate of 5.5%. This trajectory positions it to ascend to the rank of the world's fourth-largest economy by 2050[14].

It has been widely recognized for a considerable period that there is an intrinsic connection between economic growth and the energy demand. As economies expand, there is a concomitant rise in the need for energy resources. As depicted in Figure 2, both India and the ASEAN region are projected to experience an increase in primary energy consumption by 2050, aligning with their rapid GDP growth. In contrast, China's primary energy usage is projected to decline after 2030, coinciding with India's expected GDP at PPP exceeding that of China's.

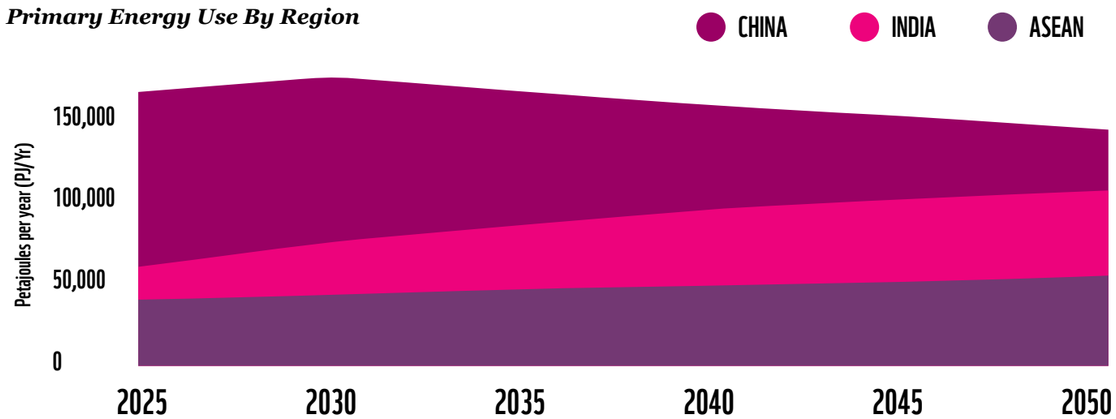


Figure 2. Primary Energy Use by Region 2025 - 2050. Source: Reuters. 2023. Global energy use and emissions hubs set to shift by 205015.

12 Energyworld.com. From the Economic Times. 2022. India to be 2nd largest economy by 2050, to add a trillion dollar to GDP every 12-18 months: Adani. Available here.

13 Yahoo!finance. 2023. 20 Largest Economies in the World by 2050. Available here.

14 US-ASEAN BUSINESS COUNCIL. INC. 2019. ASEAN's Economy is Projected to Grow by over 5.5% per Year and Become the 4th Largest Economy in the World by 2050. Available here.

15 Reuters. 2023. Global energy use and emissions hubs set to shift by 2050. Available here.

ASEAN'S ENERGY DEMAND SURGED BY OVER 80% FROM 2000 TO 2019

FOSSIL FUELS WILL CONTINUE TO DOMINATE THE ENERGY LANDSCAPE, WITH OIL MAKING UP 47.4% OF TOTAL FINAL ENERGY CONSUMPTION BY 2050

IF IMMEDIATE ACTION ISN'T TAKEN TO ADDRESS CLIMATE CHANGE, ASEAN AS A WHOLE COULD EXPERIENCE A 37.4% REDUCTION IN ITS CURRENT GDP BY 2048

ASSOCIATION OF SOUTHEAST ASIAN NATIONS (ASEAN)

The Association of Southeast Asian Nations (ASEAN)'s energy demand surged by over 80% from 2000 to 2019, signalling continued robust growth ahead. With rapid economic expansion, the region is projected to triple its energy demand by 2050, compared to the 2020 baseline scenario[16]. Indonesia is the region's largest energy consumer, followed by Thailand and Malaysia with the primary energy use of 8,910 PJ, 5,616 PJ, 4,262 PJ respectively[17]. ASEAN's current energy demand is mainly satisfied by an 80% reliance on fossil fuels, while the remaining 20% comes from renewable sources. Projections indicate that fossil fuels will continue to dominate the energy landscape in ASEAN, with oil making up 47.4% of total final energy consumption by 2050, followed by electricity (20.3%), coal (14.5%), and bioenergy (9.2%).

If ASEAN persists in primarily using fossil fuels for its development, this would have dire environmental consequences and hinder all member states from achieving their net-zero goals. The Swiss Re Institute's Climate Economics Index reveals that Indonesia, Malaysia, the Philippines, Singapore, and Thailand stand to lose economic output exceeding seven times their GDP by 2050. If immediate action isn't taken to address climate change, ASEAN as a whole could experience a 37.4% reduction in its current GDP by 2048. This situation renders the ASEAN market the most vulnerable in the Asian region.

16 EU-ASEAN Business Council. 2023. Energy Transition in ASEAN 2023. Available here.

17 Heinrich-Böll-Stiftung. 2021. Southeast Asia's Energy And Climate Profiles. Available here.

SOUTH ASIA

In the case of South Asia, which accounted for approximately 7% of global primary energy consumption in 2021, with India contributing about 85% of that total, energy security became a significant concern due to its substantial imports of oil, gas, and coal[18]. Recognising the urgency of addressing climate change, India aims to achieve net-zero emissions by 2070[19]. However, the country heavily relies on coal and crude oil for its energy needs, necessitating substantial investments in clean energy alternatives. India's rapid economic growth requires a reliable and affordable energy supply, with an estimated demand of 3.5 trillion units of electricity by 2036-37, up from 1.37 trillion units in 2021-22. Furthermore, India depends on imports for 35-40% of its primary energy, making it vulnerable to global energy price fluctuations. Transitioning to net-zero emissions also demands significant capital investment, currently estimated at approximately US$ 10.1 trillion by 2070.

EAST ASIA

Looking at the regional perspective, East Asia emerges as the predominant source of energy system emissions in 2018, totalling 6.3 gigatons of CO_2 equivalent ($GtCO_2eq$)[20]. Furthermore, it boasts the most substantial absolute growth in emissions from 2010 to 2018, registering an impressive increase of 1.2 $GtCO_2eq$. This growth has been consistent, averaging at a rate of 2.6% per year during this period. Within the region stands the world's biggest emitter of carbon dioxide, the People's Republic of China (PRC), which produces 12.7 billion metric tons of emissions annually[21]. China is responsible for emitting 27% of the world's carbon dioxide and a third of the planet's GHG emissions[22]. Achieving the necessary transition will demand a monumental reallocation of resources, a surge in innovation, and the adoption of cutting-edge technologies, all geared toward elevating energy efficiency and enhancing resource productivity. Nonetheless, China is poised to curtail its energy consumption and intends to trim its industrial energy intensity by 13.5% between 2021 and 2025, leveraging novel technologies, standards, and financial mechanisms. Presently, industries represent approximately 65% of total national energy consumption, and further enhancements in efficiency could potentially contribute as much as 37% to the country's targeted carbon emission reductions from the present until 2050[23].

Climate change and the energy transition are fundamental drivers of the renewed interest in industrial policy in South, East and Southeast Asia regions. This region is characterized by substantial and continuously growing populations, facing significant vulnerability due to frequent exposure to severe and even extreme climate hazards. Moreover, this

18 Atlantic Council. 2023. The geopolitics of the energy trilemma in South Asia. Available here.

19 EY. 2022. Decarbonization of India's energy Sector. Available here.

20 William F Lamb et al 2021 Environ. Res. Lett. Available here.

21 New York Times. 2023. U.S. and China on Climate: How the World's Two Largest Polluters Stack Up. Available here.

22 The World Bank. 2022. China's Transition to a Low-Carbon Economy and Climate Resilience Needs Shifts in Resources and Technologies. Available here.

23 Reuters. 2022. China to cut industrial energy intensity by 13.5% from 2021-2025. Available here.

region plays a significant role as a major producer of GHG. According to the Global Climate Risk Index by Germanwatch[24], it's noteworthy that among the ten countries most severely impacted by extreme weather events from 1998 to 2017, five are located in South Asia (including Bangladesh and Pakistan) and South-East Asia (such as Myanmar, the Philippines, and Vietnam). Additionally, India, Cambodia, and Thailand are all ranked among the top 20 countries in terms of climate risk. Under a high emissions scenario, climate change may cause substantial GDP losses in the region, including 35% in India, 30% in Southeast Asia, and 24% in the rest of South Asia by 2100[25]. In SEA, to align with the 1.5°C global warming target, GHG emissions need to be reduced by 10% to 25% from their current trajectory by 2030[26].

An analysis of available global and regional scenarios indicates that, in the power sector, a target of at least 50% of electricity generation being decarbonized by 2030 and achieving complete decarbonization by 2050 is imperative for both South Asia and Southeast Asia regions[27]. As a result, there is a growing urgency to transition to a low-carbon economy. The space for public action is currently wide open and as of today, about half of all governments within the region have committed to net-zero targets.

However, in many industrial subsectors, such as wind energy and solar power, the region has only made limited progress[28]. The technological race is still underway, and there is a need for governments and DFIs to invest in research and development, as well as to provide financial support to businesses that are developing green technologies. In other industrial subsectors, such as green hydrogen, the knowledge frontier is still relatively elusive. This calls for governments and DFIs to support the accumulation of knowledge and the experimentation with new technologies. In short, a significant share of initiatives that promote sustainability in Southeast Asia are fraught with uncertainty. Projects may lack a track record of costs and returns, demand is not necessarily guaranteed, and new markets and new firms have yet to emerge. Infant industries face numerous challenges and risks, and institutional frameworks have yet to be consolidated. Consequently, many stakeholders are advocating for dynamic and effective public policies that target "green-oriented" industrial strategies. These policies should focus on stimulating innovation, providing financial support to businesses, and addressing market failures. They should also be designed to consider the specific challenges and opportunities of each country or region. The transition to a low-carbon economy is a complex and challenging task. However, it is essential for the future of Southeast Asia. By taking bold action now, governments and DFIs can help to create a more sustainable and prosperous future for the region.

Furthermore, establishing the necessary energy infrastructure to achieve net-zero GHG emissions is an extensive endeavor that carries the risk of significant societal and environmental repercussions. These include potential effects on both communities and biodiversity, along with the emergence of conflicts that could endanger investments and impede the progress of adopting clean energy.

Furthermore, the materials essential for generating RE are contributing to a novel pattern of mining-related impacts on the environment. Through scientific evaluations, it has been demonstrated that it is possible to fulfil global RE requirements by directing development in manners that not only optimize carbon reduction but also safeguard natural ecosystems and facilitate a fair transition.

Effectively navigating this challenging course demands pre-emptive and meticulous strategizing, procurement, and operation of RE facilities.

24 GermanWatch. Undated. Global Climate Risk Index. Available here.

25 ReliefWeb. 2023. Asia in the Global Transition to Net Zero: Asian Development Outlook 2023 Thematic Report. Available here.

26 Asian Development Bank, Bloomberg Philanthropies, ClimateWorks Foundation and Sustainable Energy for All. 2023. Renewable Energy Manufacturing: Opportunities for Southeast Asia. Available here.

27 Climate Analytics. 2019. Decarbonising South and South East Asia. Available here.

28 International Energy Agency (IEA). 2022. Southeast Asia Energy Outlook 2022. Available here.

Table. 1. Challenges in Decarbonizing the Energy Sector in the South, East and Southeast Asian Region.

INFRASTRUCTURE AND INVESTMENT

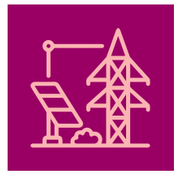
Transitioning from fossil fuels requires significant capital investments in new infrastructure. Given the diverse economic capabilities of the region, not all members have equal access to the financial resources necessary for this transition.

EXISTING COMMITMENTS

Several countries have made substantial investments in coal-fired power plants in recent years, and these plants have decades of operational life left. Abandoning or retrofitting them presents both economic and political challenges.

VARIED ENERGY PROFILES

The diversity in energy profiles across the region means there's no one-size-fits-all solution. While some countries might benefit from expanding hydropower capacities, others might be better suited for solar or wind energy.



GRID MODERNIZATION

To accommodate a higher share of renewables, especially variable sources like solar and wind, energy grids need to be modernized. This involves integrating smart grid technologies, energy storage solutions, and enhancing cross-border grid connectivity.

POLICY AND REGULATORY HURDLES

Consistent, forward-looking energy policies and regulatory frameworks are essential to guide and incentivize the transition. However, inconsistent policies or frequent changes can deter private investments.

GEOPOLITICAL TENSIONS

Trade conflict could result in the isolation of western nations with regard to the global high-tech industrial chain. For example, this would make it harder for China to access the advanced technologies and components it needs for its transition to a low-carbon economy, thereby increasing the difficulty of transitioning the state to a low-carbon economy[29].

29 Nature Reviews. 2021. Challenges and opportunities for carbon neutrality in China. Available here.

Table 2. Opportunities for Decarbonization in the South and Southeast Asia regions.

ABUNDANT RENEWABLE RESOURCES

These regions are endowed with significant renewable energy potential. Indonesia and the Philippines, for instance, are among the top countries globally for geothermal energy. Mekong countries have considerable hydropower potential, while the tropical climate across the region is favourable for solar energy development

TECHNOLOGICAL ADVANCEMENTS

The declining costs of renewable energy technologies, especially Solar Photovoltaic (PV) and wind turbines, make them increasingly competitive against fossil fuels. Countries like India has doubled the share of wind and solar energy in its energy mix to 7%, yet achieving a 'net-zero emissions' future demands disruptive clean energy technologies for safety and affordability[30].

INTERNATIONAL SUPPORT

Global climate commitments, like the Paris Agreement, bring international financing and technical support opportunities for South, East and Southeast Asia countries to pursue cleaner energy paths.

GROWING CONSUMER AWARENESS

With increasing awareness about climate change and its impacts, there's a rising demand from consumers for sustainable energy, which can drive market-based solutions and innovations.

GLOBAL POWER EXCHANGE/ TRADING

Countries are increasingly seeking cross-border energy partnerships to meet their growing electricity needs and enhance energy security. India's exploration of electricity trading with Southeast Asian countries through Myanmar and Thailand reflects a growing trend in global power trade initiatives[31]. This endeavour underscores the importance of continued dialogue, investment, and innovation in the evolving landscape of global power trade.

SCALING OF EMISSION TRADING SCHEMES (ETS)

Proactive approach at the regional level to complement national climate efforts, potentially serving as a model for other regions and countries. The release of Guangdong Province's mid-term implementation strategy to expand and improve its pilot ETS by 2030, running in parallel with the Chinese national ETS and covering sectors not included in the national ETS, signifies leadership, scalability, policy learning, and alignment with climate goals[32].

30 World Bank. 2021. Energy transition in South Asia is critical to reaching global net-zero. Blog post. Available here.

31 Reuters 2023. Exclusive: India aims to trade electricity with Southeast Asia. Available here.

32 International Carbon Action Partnership. 2023. Guangdong Province releases mid-term implementation strategy to expand and improve pilot ETS by 2030. Available here.

ROLE OF DFIs IN SUPPORTING THE ENERGY TRANSITION IN SOUTH, EAST AND SOUTHEAST ASIAN REGION

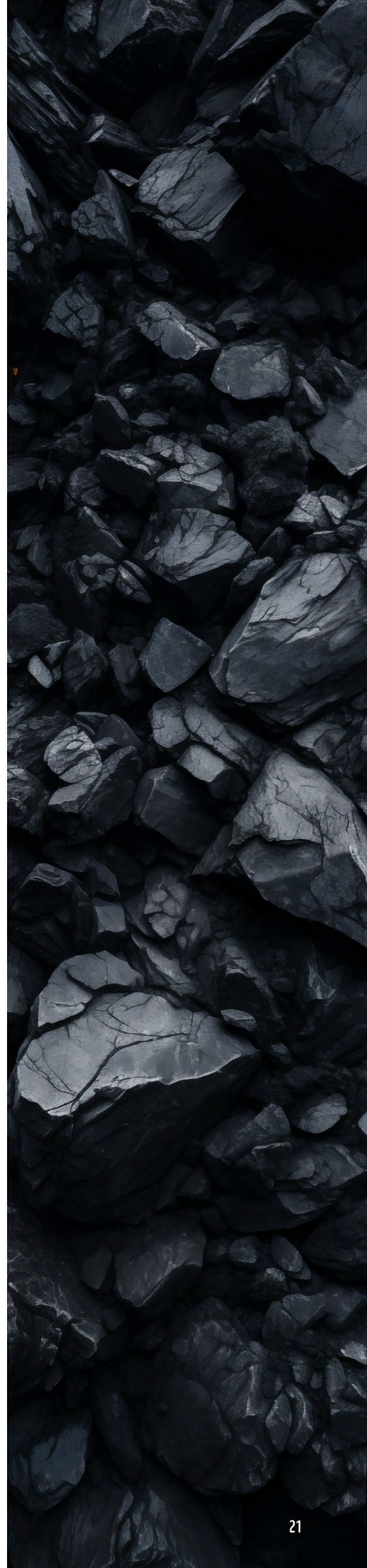
In the dynamic landscape of the energy sector within the South, East and Southeast Asian region, several key players have historically shaped the industry. It is crucial to note that the understanding of energy infrastructure as a critical sector often led governments to limit private sector engagement. This approach was grounded in the belief that energy infrastructure should be primarily owned and operated by the government to ensure energy security and equitable access to resources.

In many countries across the region, state-owned enterprises or government-controlled utilities have played a dominant role in the energy sector. These entities have been responsible for the generation, transmission, and distribution of electricity, as well as the exploration and production of oil and natural gas. This centralized control allowed governments to direct energy policies and investments to meet their developmental goals.

However, this historical approach had its limitations, particularly in terms of meeting the growing energy demands of the region. The public sector often faced challenges in funding and maintaining the required infrastructure, resulting in inefficiencies and supply shortfalls. In response to these challenges and the need for private sector expertise and investment, many countries have gradually opened their energy sectors to private participation in recent years.

One of the persistent challenges in these regions, both historically and in the present, is the lack of availability of long-term financing for energy infrastructure projects. Developing and maintaining modern energy infrastructure requires significant capital investments, and attracting private sector investors has been challenging due to perceived risks, regulatory uncertainties, and project financing constraints.

This financing gap has created a compelling need for DFIs to step in and provide much-needed financial support for energy projects. DFIs, such as the Asian Development Bank (ADB), World Bank, and regional development banks, have played a critical role in facilitating infrastructure development by offering long-term loans, equity investments, and technical expertise. These institutions help de-risk projects, making them more attractive to private investors and lenders.



These institutions, most of which are publicly owned, enjoy relatively stable funding support from governments. While the scale and scope of DFIs may vary, they are versatile entities that (i) provide support to various projects and beneficiaries, (ii) operate with a medium- to long-term outlook, and (iii) leverage multiple financial instruments such as direct loans, loans through commercial banks, grants, guarantees, equity through investment funds, and direct investments in public or private firms. A recent assessment of 527 public financial institutions across 150 countries revealed that they account for approximately 10% of total global investment, with combined assets valued at USD 18.7 trillion[33]. DFIs have gained importance, particularly in the aftermath of the financial crisis and during the COVID-19 pandemic. Despite their differences in size and focus, these institutions share a common trait of strong government influence guiding their strategies towards prioritized public policies, including sustainable development.

To secure the 'trillions' of investment and finance required by 2030 for energy transition technologies to maintain the global 1.5°C temperature target[34], DFIs must fully embrace their central catalytic role within the international ecosystem of actors that support investments in country and sector transitions. Catalysing private investment and finance requires a holistic approach including simultaneous action in many areas. DFIs are uniquely positioned to provide a wide range of catalytic functions to support this, covering both real economy sectors, the financial sector and macroeconomic issues. Examples[35] include:

- Diagnostics of investment needs and investment readiness.
- Investment-enabling policy and regulation in multiple sectors.
- Investment planning, market design and pipeline development.
- Local financial sector and capital market development.
- Provision of risk mitigation instruments addressing both macro and project level risks, thereby enabling pipelines of investments and their financing from domestic and international sources.
- Provision of vehicles and channels connecting private finance with investments through co-investment, re-financing of MDB portfolios etc., including with the use of blended finance.
- Convening country/sector platforms that bring together both national and international public, private and institutional actors around comprehensive, coherent action to catalyse investment in country/sector transitions.
- Engaging in international discussions about "upstream" international barriers to international investment and finance flows.

This paper, the second in a series, broadly assesses the efforts of DFIs in Asia to integrate E&S considerations into their energy-related governance, strategy, policies, products, and portfolios. The goal of this paper and WWF's holistic energy transition workstream is to empower DFIs to significantly shift the region's financial flows away from unsustainable activities, such as coal-power development and deforestation-linked biofuels production, and to drive the transition to sustainable energy infrastructure that aligns with the Paris Agreement and the Sustainable Development Goals.

33 Jiajun, Xu, Régis Marodon, Xinshun Ru, Xiaomeng Ren, Xinyue Wu. 2021. What are public development banks and development financing institutions ? ——qualification criteria, stylized facts and development trends. China Economic Quarterly International, Volume 1, Issue 4. Available here.

34 Irena. 2023. Investment Needs of USD 35 trillion by 2030 for Successful Energy Transition. Press release. Available here.

35 Concito.2023. MDB "Commitment to Catalyse" Available here.

RESULTS AND DISCUSSION

METHODOLOGY AND DFIs ASSESSED

To achieve the above-mentioned goal, an assessment framework has been designed to encompass the most significant environmental concerns associated with the energy sector in the South, East and Southeast Asian region. This comprehensive framework has been meticulously developed by WWF-Singapore. In its construction, reference has been made to the organization's proprietary Sustainable Banking Assessment (SUSBA) tool, as well as internationally recognized frameworks, standards, and initiatives. Notable among these are the FAST-Infra Sustainable Infrastructure® (FISI) Label, the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines, the UNEP-FI Principles for Responsible Banking (PRB), recommendations from the Task Force on Climate-related Financial Disclosures (TCFD), and the Sustainability Accounting Standards Board (SASB), among others. The assessment covers DFIs with a majority shareholding structure comprising China, Indonesia, India, the Philippines, Malaysia, and Japan.

The assessment framework consists of six distinct pillars that serve as a representation of a best-in-class integration of environmental sustainability into the energy sector. This assessment procedure is founded on information that is readily available to the public and is presented in English-language disclosures. Essentially, the evaluation draws exclusively from the information already accessible to the public through annual reports, sustainability reports, official statements, and press releases. This strategy is integral to maintaining transparency and upholding the integrity of the assessment process.

In terms of the analysis methodology, a comprehensive scoring matrix has been devised for each indicator. The specifics of this matrix are elaborated upon in Annex 6.1. Additionally, calculations have been performed to derive both the average and mode, thus facilitating the extraction of meaningful insights from the data. These insights, stemming from the analysis, were subsequently interpreted within the context of the local energy policy and the financial landscape as well as the science-based pathways and targets advocated by the non-governmental organization (NGO) community.

ASSESSMENT RESULTS

Overall, the 2023 assessment of DFIs in Asia reveals several key findings that shed light on their sustainability performance. Notably, DFIs that excel in the purpose indicator, which likely signifies a clear commitment to sustainability and transition plans, tend to perform well across all other indicators. This underscores the importance of setting and adhering to sustainability goals. One striking revelation is the lack of a significant correlation between the total assets of DFIs and their performance across the assessed indicators. This suggests that an institution's size, as measured by total assets, does not necessarily dictate its level of sustainability performance with respect to energy transition.

Ownership structure plays a vital role in DFI performance. DFIs with ownership distributed among multiple governments, including regional and non-regional members, exhibited strong performance in nearly all indicators (Figure 3). This may be influenced by non-regional shareholders from climate-proactive countries and other factors such as mission alignment, capital base, scale, and determination to achieve development goals. Conversely, DFIs with partial private sector ownership, including foreign institutional investors and mutual funds, demonstrated comparatively weaker performance across most indicators. This outcome may be attributed to the shareholder's return-centric nature, prioritizing financial returns over sustainability practices.

Another critical factor affecting DFI performance is their credit rating. DFIs with higher credit ratings (AAA)[36] tend to perform better than those with lower ratings (BBB-) (Figure 4). Higher credit ratings reflect lower default risk, indicating stronger financial management practices, governance structures, and a more favourable risk profile. This likely enhances their ability to efficiently utilize resources and pursue sustainable development projects. The average compliance score across all indicators for DFIs with a credit rating of AAA was 69%, compared to 28% for BBB- rated DFIs, making it evident that credit rating has a substantial impact on sustainability performance. However, it's worth emphasizing that while strong credit scores tend to align with successful ESG integration, this doesn't necessarily indicate a direct cause-and-effect relationship. The realm of ESG is multifaceted and intricate, and making simplistic assumptions that credit scores automatically translate to ESG performance can be misleading. It necessitates thoughtful evaluation and a more thorough analysis to derive substantial insights within this realm.

As will be unveiled in the subsequent paragraphs, which present the assessment results categorized by each pillar, certain DFIs demonstrate excellence across all indicators, while others face challenges. This underscores the imperative for establishing clear sustainability goals, fostering diversified ownership, and implementing sound financial management practices to advance sustainable development in the region.

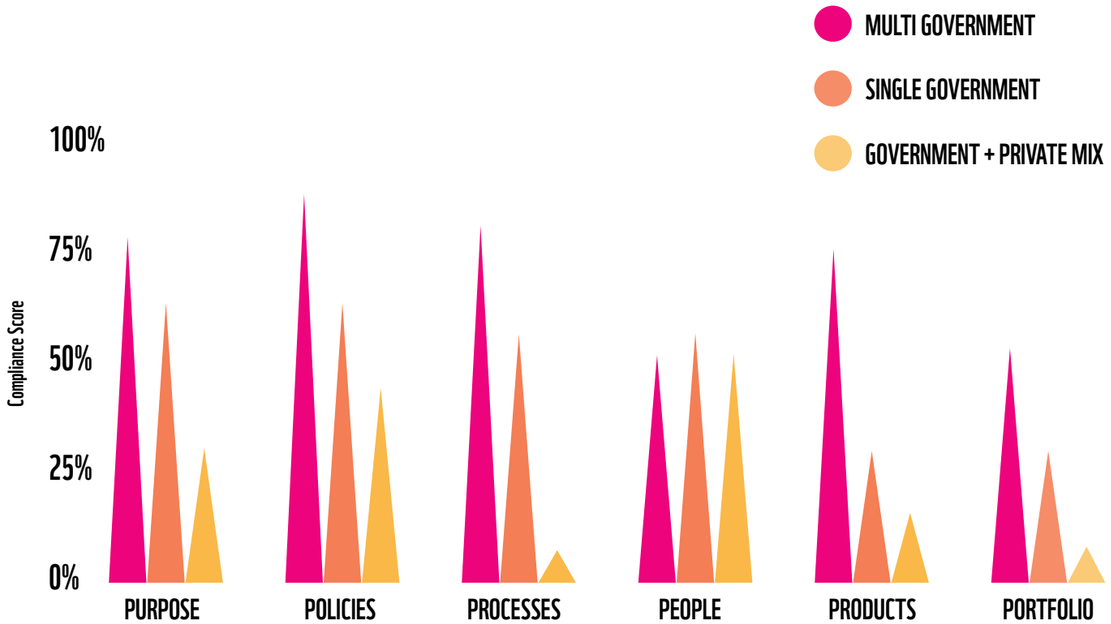


Figure 3. Summary results of the assessment sorted by shareholding structure (aggregated). Source: WWF public disclosure analysis.

Figure 4. Summary results of the assessment sorted by credit rating (aggregated). Note that BPMB is not included as it does not have an international rating. Source: WWF public disclosure analysis.

36 The credit score data used in this assessment mostly comes from Fitch Ratings and Standard & Poor's. The former publishes credit ratings that are forward-looking opinions on the relative ability of an entity or obligation to meet financial commitments. Issuer default ratings (IDRs) are assigned to corporations, sovereign entities, financial institutions such as banks, leasing companies and insurers, and public finance entities (local and regional governments). Fitch's credit ratings do not directly address any risk other than credit risk, and thus, the data used in this report does not contain ESG indicators. Available here.

PURPOSE PILLAR

The ‘Purpose’ pillar of the assessment underscores the importance of DFIs taking the initial steps to acknowledge climate change risks and make comprehensive commitments. It evaluates DFIs based on their engagement with stakeholders, alignment with national climate commitments, participation in sustainable finance initiatives, and collaborations with other institutions.

Among the ten DFIs assessed, it is encouraging to note that almost all of them explicitly acknowledge the societal and economic risks associated with climate change and that sustainable energy is a key sector to help mitigate it. Eight out of ten DFIs have made explicit acknowledgments, while the remaining two demonstrate implicit recognition through their policies and broader mandates. This widespread recognition underscores the growing understanding within the industry of the importance of addressing climate change and transitioning towards sustainable energy solutions. A majority of the assessed DFIs engage with regulators and policymakers to update their mandates. For example, PT SMI was appointed by the Government as a country platform manager through Decree of the Minister of Finance Number 275 of 2022 whose task is to manage energy transition funding in Indonesia, which can be sourced from commercial and non-commercial funding sources in a sustainable manner[37]. However, they often do not specify how regular these meetings are, and it is unclear if they actively address how to finance the energy transition. More transparency is needed regarding the frequency of these meetings and the specific sustainability areas discussed.

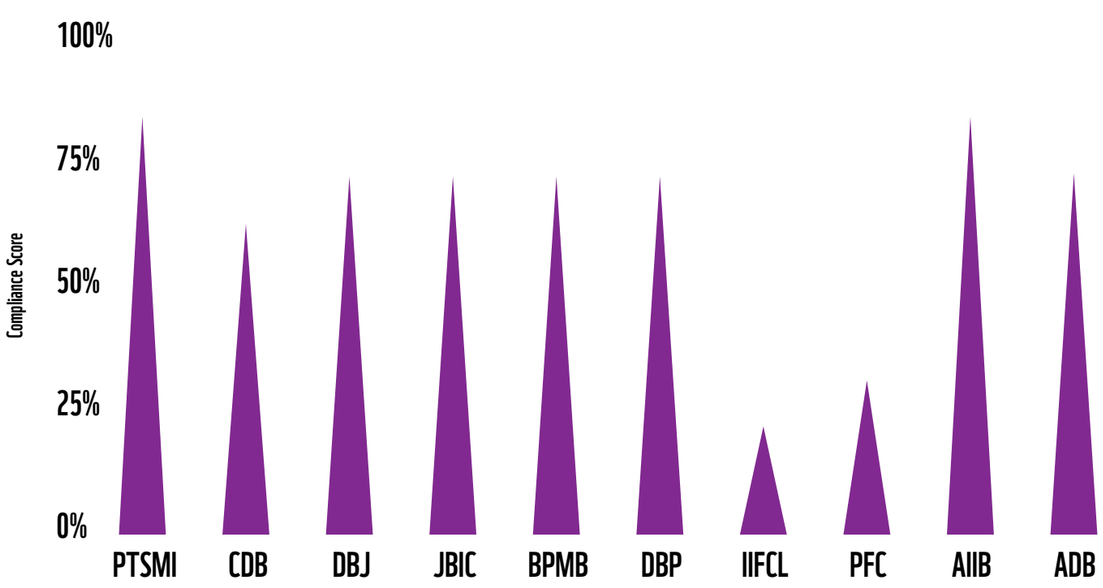


Figure 5. Compliance score for the ‘Purpose’ pillar, for each DFI. Source: WWF public disclosure analysis.

37 The appointment of PT SMI as the country platform manager was carried out in the framework of providing government fiscal support for the funding framework and financing of the national energy transition. As a country platform manager, PT SMI will integrate fiscal support with other financing sources to accelerate the energy transition in the electricity sector in Indonesia. Source: PTSM. 2021. PT SMI Opens an EBT Financing Scheme. Available here.

When it comes to participation in relevant commitment-based sustainable finance initiatives such as such as UNEP FI PRBs, Net-Zero Banking Alliance (NZBA), Finance in Common Summit Joint Declaration, and Common Principles for Climate Mitigation Finance Tracking, it is worth noting that less than half of the DFIs assessed have shown significant engagement. Three DFIs have become signatories of the UNEP Finance Initiative, and one DFI has adopted the GRI principles, indicating some progress. However, it is evident that there is still a long way to go in terms of broader adoption and implementation of sustainable finance principles and initiatives across the industry. Additionally, it is important to highlight that none of the DFIs assessed have publicly committed to immediately ending financing for all new fossil fuel projects including coal, gas, and oil. While more than half of the DFIs have made partial commitments to limit or halt the financing for new coal-related projects, it is crucial to recognize that these commitments still fall short of what is needed. Given the urgency of the climate crisis, stronger and more comprehensive commitments are required from DFIs to align with global climate goals and address the pressing need for a rapid transition to low-carbon energy sources. As an example, AIIB emerged as the leading performer in the Purpose pillar, notably being the sole DFI to make a robust and transparent commitment to immediately cease financing for new coal, gas, and oil projects and clients. However, surprisingly, AIIB was also among the minority of DFIs that did not engage in any commitment-based sustainable finance initiatives such as the UNEP FI PRBs or NZBA.

Finally, DFIs appear to be actively engaging with other financial or multilateral institutions and government bodies, with an aggregate score of 70% indicating a significant effort to develop new financial services/products, publish/disseminate knowledge products, or facilitate conditions for enabling the sustainable energy transition. Engaging with the government, other financial institutions, and communities, and possessing the necessary skills, competencies, and training throughout the organisation, are beneficial disclosure elements. They can be considered indirect actions required to facilitate the transition. These components can support the entity’s strategic ambitions, objectives, priorities, and interim milestones

CASE STUDY

AIIB'S PARIS ALIGNMENT COMMITMENT ON COAL, OIL, AND NATURAL GAS

The Asian Infrastructure Investment Bank (AIIB) has committed to aligning its operations with the goals of the Paris Agreement. This includes not financing thermal coal mining, coal-fired power and heating plants, or projects that are functionally related to coal. Projects functionally related to coal means associated facilities that are dedicated to enable the mining and use of coal or projects that would not be carried out without dedicated coal-based power supply.

The AIIB will only support oil sector investments under exceptional circumstances to improve basic energy access and control GHG emissions from flaring and leakage. As such, the AIIB may support investments in oil-fired power generation as part of renewable energy hybrid systems to supply clean and reliable energy for small grids in isolated locations, island communities, and temporary disaster response initiatives. Such investments will have to demonstrate that an entirely renewable energy-based system is not technically or financially feasible. The non-renewable share in the investment and its future operation will also have to be minimized within the limits of financial feasibility and the targeted level of grid reliability.

The AIIB's framework for supporting natural gas infrastructure is as follows:

» The AIIB will not support gas upstream exploration and drilling activities.

» The AIIB will support gas midstream infrastructure (Liquefied natural gas (LNG) terminals, storage, and transmission pipelines), natural gas-fired power generation, and downstream (distribution and end-use) facilities under the following specific criteria:

» The project must contribute to climate change mitigation by displacing coal or other higher-emitting fuels.

» The project must be technically and financially feasible.

» The project must have a clear environmental and social impact assessment.

» The AIIB's Paris Alignment Commitment is a significant step towards supporting the transition to a low-carbon future. By not financing thermal coal mining, coal-fired power and heating plants, or projects that are functionally related to coal, the AIIB is helping to reduce GHG emissions and mitigate the impacts of climate change. The AIIB's support for oil sector investments under exceptional circumstances and its framework for supporting natural gas infrastructure are also aligned with the goals of the Paris Agreement.

This case study highlights the AIIB's commitment to supporting sustainable infrastructure development in Asia. It represents a good example of a DFI in transition and fully disclosing their commitments and the progress in achieving them.

Disclaimer: WWF calls for accelerated, global shift to clean energy, stopping our reliance on fossil fuels and limiting global warming to 1.5 degrees Celsius by stopping investments in fossil fuels and accelerating green finance for renewable energy and energy efficiency.

POLICIES PILLAR

To effectively address environmental considerations, DFIs require well-established policies and frameworks. Good performance is important as transparent policies ensure intentions are embedded in daily business operations. Specific policies are required for industries with high E&S risks and otherwise prominent cross-cutting topics, such as climate change and biodiversity loss. This section of the assessment examines key indicators that offer valuable insights into the DFI's strategic approach to climate change, as well as their incorporation of exclusionary principles, safeguards policies, and renewable energy financing frameworks within their operations.

The majority of the DFIs assessed have recognized the importance of addressing climate change through the formulation of public climate change strategies, explicitly outlining how climate considerations are incorporated into their investment decision-making processes. This demonstrates a commendable commitment to integrating climate change into their operations. However, it is noteworthy that only four DFIs had established an explicit energy sector-specific policy, indicating that further efforts are needed to ensure comprehensive coverage of the energy sector in their policy frameworks. Furthermore, while almost all DFIs have disclosed frameworks for renewable energy financing, there is an opportunity for improvement in identifying and specifying the risks that need to be managed throughout the entire project lifecycle including design, development, operation, and decommissioning. Additionally, while most DFIs have established safeguards and environmental and social policies, further progress is needed in adopting minimum requirements based on internationally recognized best practices such as the IFC Performance Standards and the World Bank's Environmental and Social Framework. Furthermore, there is a need for DFIs to implement a robust mitigation hierarchy, conduct strategic environmental assessments in addition to environmental impact assessments, and ensuring continuous monitoring.

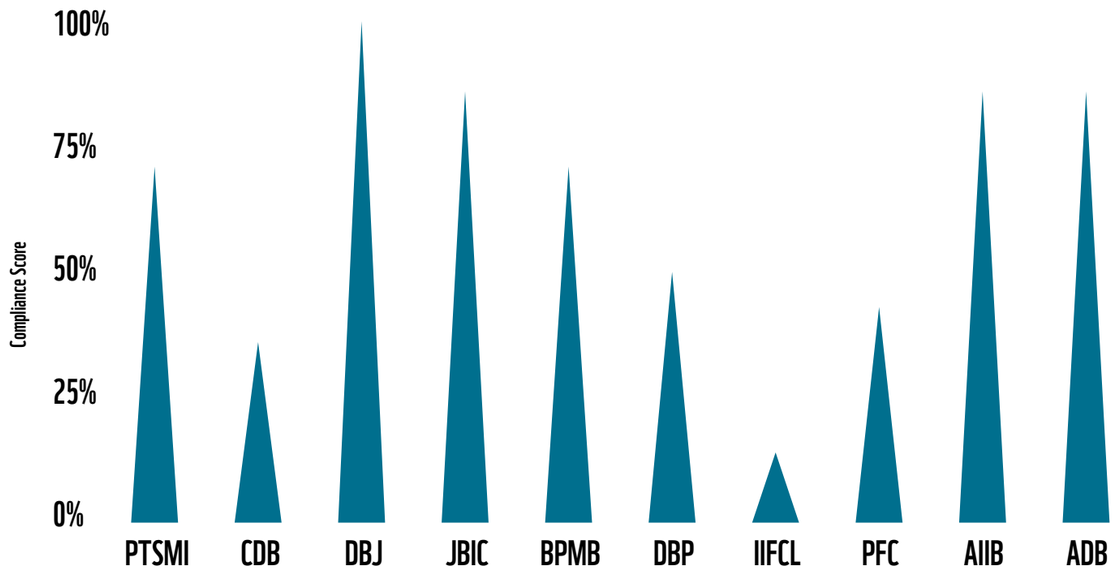


Figure 6. Compliance score for the 'Policies' pillar, for each DFI. Source: WWF public disclosure analysis.

BOX 1

HOW TO MITIGATE THE IMPACTS OF RENEWABLE ENERGY ON BIODIVERSITY

This issue is particularly pertinent given the large-scale buildout of RE generation and the subsequent construction of transmission and distribution lines, and associated infrastructure, such as roads, which will have significant impacts on land and sea biodiversity.

For example, the construction of linear infrastructure can fragment habitats, clear forests, and reduce the risk of interference with the transmission. Accessing roads for maintenance can further compound the problem by opening relatively intact natural ecosystems to exploitation. While this is primarily a concern for biodiversity, natural ecosystems also sequester significant amounts of carbon dioxide (CO_2). Therefore, the degradation of these ecosystems can have negative effects on both climate and biodiversity, reducing the climate mitigation potential of the RE transition.

The Global Biodiversity Framework (GBF) has created a clear mandate to mainstream biodiversity in the energy, infrastructure, and finance sectors in Target 14 and requires countries to conduct an integrated spatial planning process to address land- and sea-use change in Target 1. Ensuring the implementation of these targets will require that they be adopted by entire economies and governments, and consequently DFIs.

Mainstreaming biodiversity is an achievable goal for the RE sector. A global abundance of solar and wind resources provides the opportunity to build RE infrastructure in places where it can better avoid environmental and social conflicts and can be deployed faster. In Southeast Asia, there is enough previously developed land with strong RE resources to meet the Paris Agreement goals 17 times over. These are lands like marginal farmlands, former mine lands, brownfields, and other degraded lands, the development of which could help make the land more productive, support local economic development, and provide new revenue streams for farmers and other landowners while avoiding environmental and social impacts. Focusing on these places can also support a fair and just transition by bringing economic development and health benefits, such as cleaner air, to communities that have borne the brunt of impacts from fossil fuel energy infrastructure.

Take, for example, AVISTEP: the Avian Sensitivity Tool for Energy Planning[38] developed by BirdLife International and the Asian Development Bank (ADB). This tool identifies where renewable energy could impact birds and should therefore be avoided. AVISTEP is a free-to-access online mapping tool that provides a detailed spatial assessment of avian sensitivity relative to different types of renewable energy infrastructure. It generates data and information that can help steer development in low-risk sites and determine the appropriate mitigation measures as early as possible in planning, designing, and implementing renewable energy projects.

38 Asian Development Bank. undated. Avian Sensitivity Tool for Energy Planning (AVISTEP). Available here

Interestingly, while many DFIs have implemented exclusionary principles specifying the activities they will not support, these exclusions are often limited in scope. Our assessment suggests that these exclusions primarily apply to sustainability-related products such as green bonds, rather than encompassing the entirety of the DFI's operations. However, it is encouraging to note that almost all DFIs have implemented safeguards and E&S policies that require their clients to address the potential negative environmental and social impacts associated with energy projects, including renewable energy projects. These policies highlight the commitment to mitigate adverse effects on biodiversity, ecosystem services, employment, community displacement, and visual and noise pollution, among others. Continued adherence and rigorous implementation of these policies are crucial to promoting sustainable energy practices and safeguarding local communities and ecosystems. Both DBJ and AIIB have demonstrated remarkable performance in the 'Policies' pillar. While many DFIs restrict such lists to their environmentally friendly financial products, both DFIs' extensive exclusionary list apply comprehensively across the entirety of the bank's operations.

CASE STUDY

DEVELOPMENT BANK OF JAPAN'S CLIMATE CHANGE STRATEGY

The DBJ Group intends to achieve net zero GHG emissions for its investment and loan portfolio by 2050. Based on a scenario where the world moves toward a decarbonized society (with an average rise in global temperatures below 2.0°C), we are advancing initiatives that take into account the results of our analysis of risks and opportunities, including those in scenarios where average temperatures increase more than 2.0°C.

In May 2017, the DBJ Group set out its Policy on Sustainability to represent its basic approach to contributing to the realization of a sustainable society that balances economic value with social value. Based on this policy, the DBJ Group contributes to the realization of a decarbonized society by solving issues faced by regions and its customers while collaborating with stakeholders. The DBJ Group has positioned addressing climate change, a problem affecting the entire world, as a priority of the utmost importance on the path to creating a sustainable society while also ensuring a stable supply of energy. Under the Fifth Medium-Term Management Plan, which commenced in fiscal 2021, the DBJ Group is advancing its GRIT Strategy* with the aim of building an industrial foundation as well as flexible, strong, safe, and secure regions and communities in a green society.

At the same time, through dialogue (engagement) with customers, the DBJ Group supports their efforts in the transition to decarbonized society. The DBJ Group intends to pursue net zero GHG emissions for its investment and loan portfolio by 2050 while solving management issues and assisting its customers' efforts to decarbonize. Through this process, we are helping Japan maintain and strengthen its competitiveness and spurring growth in our customers' businesses. When formulating its Vision 2030, the DBJ Group identified climate change, natural resources, and energy as areas of change in the external environment that are having a major impact on the stakeholders of the DBJ Group. Properly understanding the risks and opportunities related to climate change is essential when establishing business strategies.

DFIs, such as the DBJ, hold a pivotal role in addressing climate change. Their commitment to achieving net-zero greenhouse gas emissions by 2050 and support for customers' decarbonization efforts are vital steps in building a resilient and competitive economy. Having a climate change strategy is imperative for these institutions as they navigate global challenges, ensuring a sustainable and green future.

PROCESSES PILLAR

The 'Processes' pillar of the assessment examines the methodologies and procedures employed by DFIs to ensure robust E&S management throughout the investment lifecycle. It provides valuable insights into how DFIs classify clients and projects based on E&S risk assessment, incorporate climate risk screening, assess greener alternatives, apply carbon shadow pricing, and monitor for environmental performance.

The vast majority of the assessed DFIs conduct E&S risk assessments to classify their clients as part of the approval process. This highlights the necessity of conducting additional due diligence for projects with potentially high E&S risks and impacts. However, the incorporation of climate physical and transition risk screening into project evaluation is currently limited, with only two DFIs explicitly acknowledging and differentiating between these two types of risks. The lack of explicit attention to climate risks in investment decisions can be attributed to several factors, including a lack of awareness and knowledge of climate change risks, a short-term focus, and incomplete data on climate-related risks. DFIs may lack a comprehensive understanding of the complexities of climate change risks or the methodologies available for assessing and managing these risks. Additionally, DFIs may prioritize short-term returns over the long-term implications of climate risks. In regions where data on climate-related risks is scarce, insufficient, or inaccessible, this lack of data may hinder comprehensive risk assessments.

Furthermore, it is noteworthy that only half of the DFIs currently require an Alternatives Analysis to evaluate lower GHG intensive alternatives as part of their E&S due diligence process. Similarly, the adoption of a carbon shadow price to energy sector projects is also significantly lacking, with only one DFI systematically implementing this practice. These findings underscore the need for broader adoption among DFIs to consider the true costs of carbon emissions and integrate carbon shadow pricing into their decision-making processes. Within the 'Process' pillar, BPMB emerged as one of just two DFIs that effectively integrated climate physical and transition risk assessments into its project evaluation procedure. Despite this commendable effort, there remains an opportunity for improvement. Specifically, the bank currently lacks a formalized procedure mandating clients to perform an Alternatives Analysis, which would involve evaluating lower GHG-intensive alternatives for their projects.

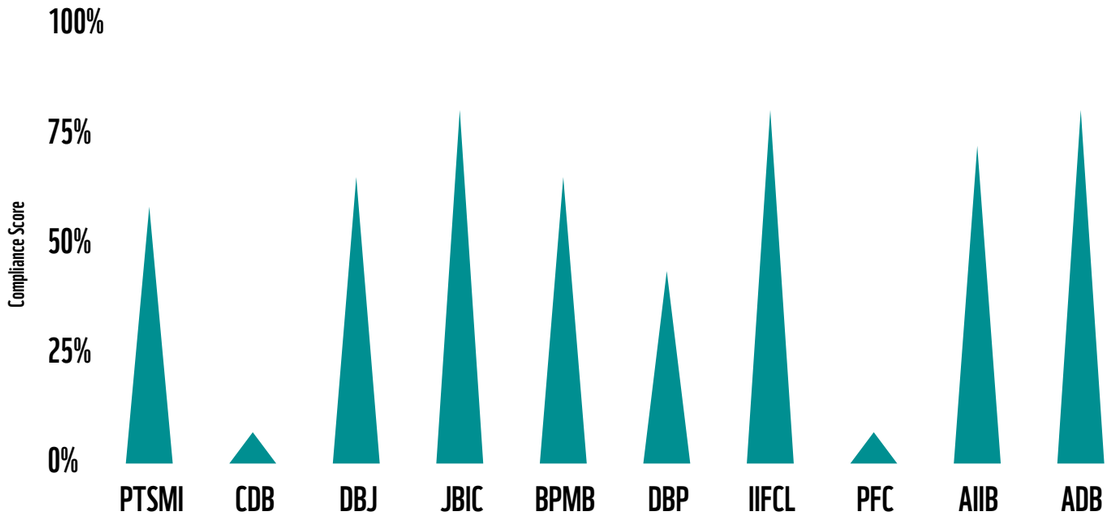


Figure 7. Compliance score for the 'Process' pillar, for each DFI. Source: WWF public disclosure analysis.

Another significant finding is that most DFIs do not explicitly state the requirement to evaluate the capacity, commitment, and track record of their clients as part of their E&S due diligence process. Instead, due diligence practices primarily focus on individual project evaluations. Enhancing the integration of broader client assessment within the E&S due diligence process can provide a more comprehensive understanding of the potential risks and impacts associated with investments. Additionally, the identification of key metrics for assessing and monitoring the environmental performance of investments is crucial for effective environmental management. However, our assessment reveals that only two DFIs have explicitly identified such metrics, highlighting the need for broader adoption of standardized metrics to enhance transparency and accountability.

CASE STUDY

INDIA INFRASTRUCTURE FINANCE COMPANY LIMITED (IIFCL) DUE DILIGENCE AND MONITORING PROCESSES

India Infrastructure Finance Company Limited (IIFCL) requires its borrowers/clients to promote the reduction of project-related anthropogenic GHG emissions in a manner appropriate to the nature and scale of project operations and impacts.

During the development or operation of projects that are expected to or currently produce significant quantities of GHG, the borrower/client will:

» Quantify direct emissions from the facilities within the physical project boundary.

» Quantify indirect emissions associated with the off-site production of power used by the project.

» Conduct quantification and monitoring of GHG emissions annually in accordance with internationally recognized methodologies.

» Evaluate technically and financially feasible and cost-effective options to reduce or offset project-related GHG emissions during project design and operation, and pursue appropriate options.

» The significance threshold to be considered for these requirements is generally 100,000 tons of carbon dioxide equivalent per year for the aggregate emissions of direct sources and indirect sources associated with electricity purchased for own consumption.

IIFCL's due diligence process for GHG emissions begins with a screening of the project to assess its potential to generate GHG emissions. If the project is determined to have a significant potential to generate GHG emissions, IIFCL will require the borrower/client to prepare an environmental and social impact assessment (ESIA) that includes a detailed analysis of the project's GHG emissions.

IIFCL will also require the borrower/client to develop a GHG emissions management plan (GHGEMP) that outlines the measures that will be taken to reduce or offset the project's GHG emissions. IIFCL will monitor the borrower/client's compliance with the GHGEMP through regular reporting and audits[39].

IIFCL demonstrated its commitment to sustainability by mandating GHG emissions reduction measures for borrowers/clients. The importance of DFIs like IIFCL lies not only in their due diligence but also in their rigorous monitoring processes to ensure compliance with these vital emissions reduction strategies, contributing to a greener and more responsible project portfolio.

39 India Infrastructure Financing Company Limited. 2013. Framework for Environmental and Social Safeguards. Available here.

PEOPLE PILLAR

Effective implementation of sustainability policies and processes requires strong involvement from senior management and a well-equipped workforce. Dedicated sustainability-focused teams play a vital role in driving the integration of E&S considerations into the organization's operations. Equally important is comprehensive staff training on E&S policies and processes, empowering employees to navigate emerging tools and frameworks, such as net zero strategy implementation guidance. This holistic approach to sustainability implementation encompasses climate governance, assessing how a DFI incorporates climate strategy into its governance structure and remuneration policies.

While senior management's responsibility for the implementation of the DFI's energy policy, E&S policies, and climate change strategy has mostly been established, there is still room for significant improvement. The assessment highlights the need for senior management to take a more proactive role in managing climate change risks and opportunities, particularly in the context of the energy sector.
Clear delineation of roles and responsibilities across various departments, committees, or teams involved in the development and implementation of E&S and energy policies is crucial for effective coordination. For example, PTSMI demonstrated a high level of disclosure in the assessment regarding the roles and responsibilities of various departments involved in the development of E&S and energy policy. Although some progress has been made, the establishment of a dedicated Environmental, Social, and Governance (ESG) team remains inconsistent across the DFIs assessed, hindering the efficient implementation of E&S policies and procedures. While some of the DFIs assessed provide training on E&S policies and implementation processes, it is evident that a significant portion, more than half, either do not offer such training or lack clarity on whether their training initiatives encompass E&S policies. Therefore, there is a pressing need to expand training efforts across all DFIs to ensure comprehensive preparedness among all staff, including senior management, in appraising climate risks and opportunities. Furthermore, it is evident that the integration of sustainability-related criteria into the staff appraisal process and KPIs is virtually non-existent across all DFIs assessed, with a lack of clarity and explicit specification regarding the integration of sustainability criteria in the appraisal processes.

Addressing these gaps will lead to strengthened governance structures, enhanced risk management, and empowered staff, facilitating the achievement of environmental goals through the effective implementation of sustainability policies and processes.

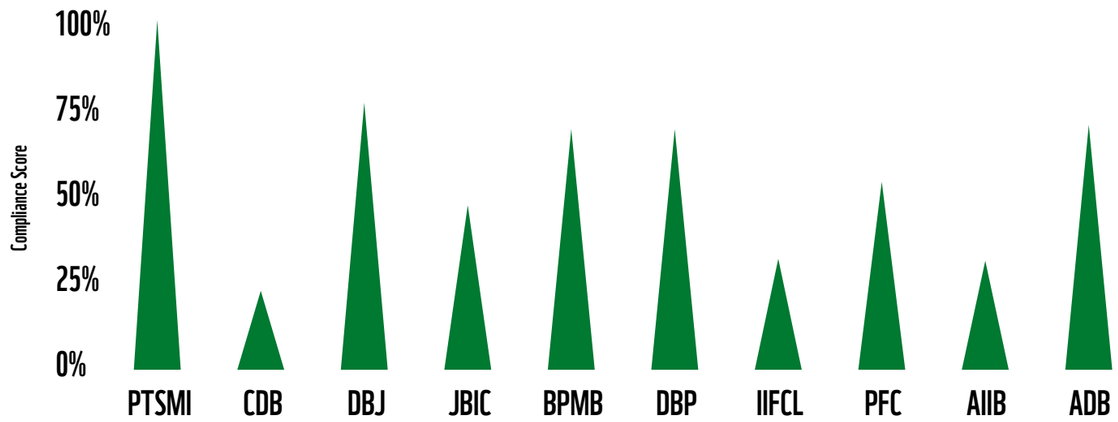


Figure 8. Compliance score for the 'People' pillar, for each DFI. Source: WWF public disclosure analysis.

CASE STUDY

EFFECTIVE SENIOR MANAGEMENT TRAINING IN SUSTAINABLE FINANCE, THE CASE OF PT SMI

PTSMI has set a remarkable standard in the 'People' pillar, securing the highest compliance score of 93%. This achievement can be attributed to its exceptional transparency in disclosing the roles and responsibilities of various departments involved in shaping E&S policies, as well as energy policies.

Furthermore, the bank has taken a pioneering step among the assessed DFIs. It is the sole institution that has made strides toward incorporating sustainability criteria into its staff KPIs. Specifically, PT SMI has articulated its commitment to achieving the SDG Indonesia One programs, emphasizing the potential positive impact on the environment and society as one of the performance benchmarks for its Board of Directors.

PT SMI demonstrates a steadfast commitment to sustainability and climate change by periodically developing the competencies of its Board of Commissioners and Board of Directors. This case study explores PT SMI's strategic approach to equipping its senior management team with comprehensive knowledge in sustainable finance, spanning economic, environmental, and social dimensions. The primary objective is to align the company's policies with government commitments, particularly focusing on Sustainable Development Goals (SDGs) and Net-Zero Emissions.

Through a multifaceted approach that includes training sessions, workshops, and exposure to real-world practices, PT SMI's senior management undergoes transformative growth. This investment yields tangible results, enhancing competencies, ensuring up-to-date knowledge, and fortifying alignment with government sustainability goals. PT SMI's case serves as a testament to the value of structured senior management training in sustainable finance, facilitating both organizational success and active participation in global sustainability initiatives. Other organizations are encouraged to consider similar initiatives to fortify their commitment to sustainability and climate change mitigation while aligning their strategies with global sustainability agendas.

PT SMI's dedication to senior management training in sustainable finance underscores the crucial role of development financial institutions in achieving sustainability goals. Effective training empowers senior leadership to align with government commitments and global sustainability initiatives, ensuring informed policies and a proactive stance in addressing climate change and sustainable development challenges.

PRODUCTS PILLAR

Effective implementation of sustainability-focused financial products is essential for DFIs to drive positive environmental outcomes. An assessment of the product offerings of DFIs reveals key trends that require attention and improvement. Good performance is important because integrating ESG issues into business operations is not just about adequate risk assessment, but also about seizing business opportunities.

Only a limited number of DFIs, specifically three out of the ten assessed, currently prohibit the financing of new thermal coal ore extraction, processing, and power plants. This indicates that there is significant room for improvement in ensuring that DFIs align their financial support with decarbonization commitments. Additionally, only two DFIs have imposed restrictions on the exploration and development of new oil and gas assets. Notably, no DFI requires its diversified energy clients to phase out all thermal coal power generation and distribution by 2040. This key trend underscores the current approach of DFIs, primarily assessing the environmental impacts of the projects they finance at the project level, rather than considering the overarching environmental commitment of their clients. To address this, DFIs should enhance their evaluation methods to encompass the broader environmental implications of their clients' activities beyond individual projects. Such an approach will ensure a more comprehensive and cohesive strategy for reducing carbon emissions and facilitating the transition to cleaner energy sources.

In the 'Product' pillar, AIIB emerged as the second-highest performer, closely trailing behind ADB. This distinction is primarily attributed to its resolute stance as one of the mere two DFIs imposing restrictions on coal, oil, and gas assets. Moreover, AIIB has implemented the most stringent limitations on financial products and services associated with the exploration and development of new oil and gas assets, surpassing all other assessed DFIs in this aspect. Despite this noteworthy performance, AIIB still lags behind ADB in this pillar, primarily due to the absence of restrictions on financial products and services for corporations lacking a credible, science-based transition plan.

There are promising trends in the realm of renewable energy, with all ten DFIs providing financial products or services for renewable energy. This is a positive indication of the industry's recognition of the importance of renewable energy in mitigating the societal and economic risks associated with climate change. Additionally, almost all DFIs offer innovative financial products and services, such as green bonds, to support the mitigation of environmental issues, particularly climate change, and to finance sustainable energy infrastructure. Furthermore, a majority of the assessed DFIs offer de-risking products or advisory services to facilitate sustainability improvements and private sector involvement in the energy sector.

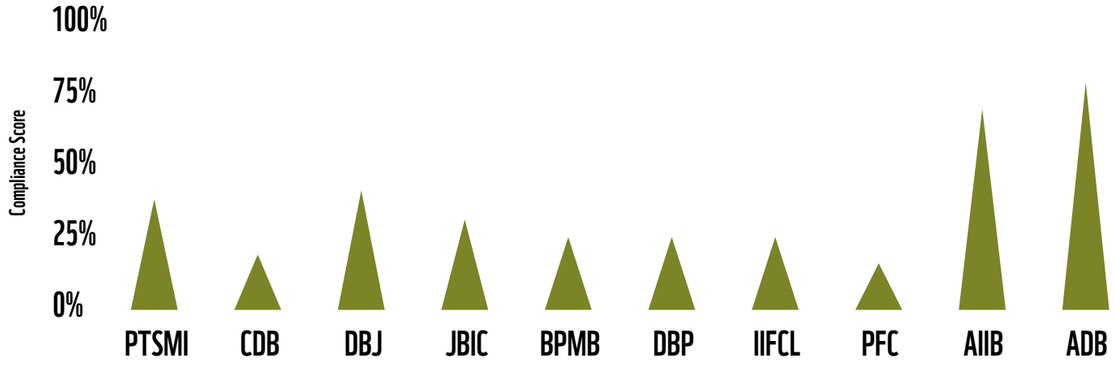


Figure 9. Compliance score for the 'Product' pillar, for each DFI. Source: WWF public disclosure analysis.

Despite these positive developments, further work is needed in offering financial products and services for the early and managed retirement of coal assets, as only two DFIs currently provide such products. Broadening the availability of financial instruments to support the phase-out of coal and the transition to cleaner energy sources will enable DFIs to play a crucial role in driving sustainable energy transformation and reducing greenhouse gas emissions.

CASE STUDY

ASIAN DEVELOPMENT BANK'S 2021 ENERGY POLICY AND CLIMATE COMMITMENTS

In 2021, the ADB introduced a comprehensive energy policy with far-reaching implications for its financing initiatives. A cornerstone of this policy is a resolute stance against funding "new coal-based capacity for power and heat." Additionally, the bank committed to actively "support the early retirement and decommissioning of coal resources," encompassing coal mining, processing, storage, and transportation within its exclusion criteria.

Aligned with its climate-centric approach, ADB unveiled a robust Climate Change Action Plan in the same year. Central to this plan is the commitment to "phase out support for new coal-fired power generation" and to "align all ADB's operations with a 1.5-degree pathway." This commitment catalysed the development of stringent climate screening criteria, designed to assess the credibility of companies' science-based transition plans.

Companies failing to meet these criteria face ineligibility for ADB financing, a decisive move intended to curb support for entities expanding fossil fuel assets, notably coal-fired power plants.

This resolute stance underscores ADB's pivotal role in the global climate fight, signalling a clear message to the private sector regarding its unwavering dedication to championing the clean energy transition.

Simultaneously, in a bid to combat climate change, ADB launched the Energy Transition Mechanism (ETM) in 2021. The ETM represents a ground-breaking programme aimed at reducing GHG emissions across Asia and the Pacific. It utilizes a blend of concessional and commercial capital to expedite the retirement or repurposing of fossil fuel power plants, paving the way for the adoption of clean energy alternatives.

Furthermore, ADB has fortified its commitment to environmentally sustainable growth in developing member countries through a green and blue bond framework. This framework serves as a vital instrument in supporting nations striving to reduce poverty and enhance their citizens' quality of life while adhering to environmentally sustainable practices. ADB's comprehensive energy policy and climate-focused initiatives exemplify its pivotal role in the global quest for a sustainable and climate-resilient future.

The ADB provides an example of an MDB, that seems to be committed to supporting a clean energy transition in Asia and the Pacific. The bank's new Climate Change Action Plan, the Energy Transition Mechanism, and the green and blue bond frameworks are all important steps in this effort. These initiatives will help countries retire coal-fired power plants, invest in clean energy, and protect the environment.

PORTFOLIO PILLAR

The 'Portfolio' pillar evaluates the extent to which DFIs disclose climate-related information about their lending portfolios, including: the amount of their lending to climate-sensitive sectors, such as energy, transport, and agriculture, the emissions associated with their lending and investment portfolios, and their efforts to set science-based targets for GHG emissions reduction and renewable energy proliferation. These assessments provide valuable insights into the DFIs' proactive management and alignment of their portfolios with environmental objectives and sustainable practices. For example, DFIs that disclose more climate-related information are more likely to be setting science-based targets and investing in renewable energy.

Among the 10 DFIs assessed, none currently disclose the GHG emissions of their primary carbon-intensive sectors within their portfolios. However, it is noteworthy that four DFIs have expressed their commitment to measure and monitor scope 3 emissions in the near future, demonstrating a positive shift towards greater transparency in emissions reporting. In terms of the integration of TCFD recommendations, only two DFIs, namely, ADB and DBJ, have actively incorporated these recommendations into their disclosure efforts. This indicates the need for broader adoption of TCFD guidelines among DFIs to ensure comprehensive and robust reporting on climate risks and opportunities. It is also important to highlight that no DFI currently requires its clients in the energy exploration, extraction, and generation sectors to set public GHG emissions reduction targets, nor do they mandate the provision of public TCFD reports. This presents an area where DFIs can enhance their influence and encourage clients to align with global climate goals and increase transparency in their reporting practices.

Turning our attention to JBIC's performance on the 'Portfolio' pillar left room for improvement, primarily due to its limited disclosure regarding the sector composition of its lending portfolios, particularly in distinguishing between fossil fuels and renewable energy investments. However, in a commendable move, JBIC stands out as one of the select few DFIs that have established science-based GHG targets. It has pledged to achieve net-zero GHG emissions from its operations by 2030 and has set a more ambitious goal of achieving net-zero GHG emissions in its finance portfolio by 2050.

Encouragingly, a majority of the assessed DFIs demonstrate a proactive approach by conducting regular assessments with clear frequency guidelines to monitor the E&S performance of clients within their portfolios. This commitment to monitoring showcases their dedication to managing the sustainability impacts of their investments. It is also notable that three DFIs have established frameworks to assist clients in high-emitting sectors in aligning with the Paris Agreement, highlighting their commitment to supporting the transition to a low-carbon economy and promoting sustainable practices within these sectors. However, while these initiatives are commendable, further efforts are still needed to ensure broader adoption and implementation of such frameworks across the industry.

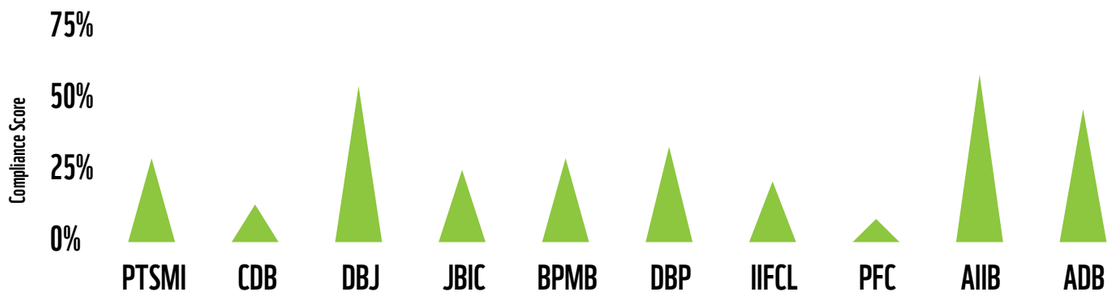


Figure 10. Compliance score for the 'Portfolio' pillar, for each DFI. Source: WWF public disclosure analysis.

CONCLUSION

DFIs with significant exposure to the power sector need to be aware of the climate-related risks associated with investments in power firms that are not aligned with net-zero transition plans. Non-compliance with transition goals can lead to increased risks of stranded assets, regulatory interventions, and reputational risks. DFIs should integrate these risks into decision-making and their overall risk assessment frameworks. Transitioning to net-zero in the power sector is a complex and challenging journey that requires systematic cooperation between firms and various stakeholders, policy and financing support, and behavioural and consumption changes.

While DFIs in Asia are beginning to incorporate climate strategies into their investment decisions, it is evident that current efforts to reduce GHG emissions remain insufficient. South, East and Southeast Asia face a pressing energy crisis with reliance on fossil fuel imports and the looming threat of increased GHG emissions. In this context, DFIs hold a pivotal role in addressing these challenges by prioritizing investments in renewable energy, energy efficiency projects, and collaborating with governments to establish supportive policy frameworks.

The WWF assessment of DFIs in Asia highlights the need for substantial improvements in integrating environmental and social considerations into energy-related decision-making processes. DFIs need to further strengthen their commitment to sustainable practices and consider broader risks associated with clients and their activities to drive impactful and responsible investment decisions. To strengthen their impact on sustainability, DFIs should consider adopting a more holistic approach that includes overarching sustainability commitments from their clients. By requiring, for example, clients to set GHG emission reduction targets, provide TCFD reports, and disclose plans for decommissioning fossil fuel assets, DFIs can drive more comprehensive and long-term sustainability efforts. This approach can lead to greater transparency, accountability, and alignment with global climate goals, ultimately fostering more responsible and sustainable practices across the clients' operations.

If DFIs systematically embrace the goals of the Paris Agreement, they can reap several benefits, including:

REDUCED CLIMATE RISK

Investing in clean energy and energy efficiency projects allows DFIs to mitigate their exposure to the financial risks associated with climate change.

ENHANCED REPUTATION

DFIs recognized as pioneers in sustainable finance are more likely to attract investors and strategic partners who value environmentally responsible investments.

POSITIVE IMPACT

DFIs can lead the way in facilitating Asia's transition to a clean energy future, benefiting the environment, regional economies, and the well-being of local communities.

FUTURE-PROOFING INVESTMENTS

Aligning with the Paris Agreement ensures that DFIs direct their investments toward projects that are better equipped to address the challenges posed by climate change and environmental sustainability.

RECOMMENDATIONS

DFIs in Asia operate in diverse regions with varying net-zero transition commitments and policies, which necessitates the development of customized strategies. Thus, they will need to carefully consider the practicality of implementing the recommendations below within their own operations and financing activities while aligning their financing practices with sustainable objectives:

THEME 1

STRENGTHEN COMMITMENTS TO SUSTAINABLE FINANCE

» Make stronger and more comprehensive commitments to sustainable finance initiatives, including:

- ◇ Cease financing for the coal value chain and all new ventures in the oil and gas sector, while committing to a substantial increase in investments for renewable energy and climate-friendly projects.
- ◇ Develop a credible net-zero commitment supported by a Climate Transition Action Plan (CTAP). This plan should include a forward-looking list of actions, taken in the near term, to align internal strategies and external climate and energy policy advocacy to reduce GHG emissions in line with a 1.5°C pathway and achieve a just transition.
- ◇ Revise and modernize the mission and mandate to incorporate the connection more effectively (i.e., risks and opportunities) between clean energy transition and sustainable development into investment and lending activities.
- ◇ Develop commitments to catalytic functions and associated KPIs to mobilize “the trillions”, particularly when it comes to investment in energy-related sectors and in middle-income countries where mitigation efforts are most urgent.
  - ◇ This could include a range of direct and indirect functions to support mobilizing investments and finance. Commitments should be impact-oriented and specific enough to drive adjustments to the operating models of the DFIs.
  - ◇ KPIs should also incentivize MDBs to take responsibility for the effective functioning of the international ecosystem of support for country energy transitions and investment mobilization.

» Highlight common needs and opportunities for clean energy investment in the regions targeted by MDBs to attract their support and stimulate large-scale private sector investment. For example:

- ◇ Develop and publish investment guides and related resources that highlight specific clean energy investment opportunities in Asia.
- ◇ Organize investor roadshows to connect potential investors with clean energy project developers and other stakeholders in Asia.
- ◇ Work with governments to create a supportive policy environment for clean energy investment.

THEME 2

ADOPT AND IMPLEMENT ROBUST ENERGY SECTOR POLICIES AND RISK MANAGEMENT PROCEDURES

» Establish explicit energy sector-specific policies that identify and specify the risks that need to be managed throughout the entire project lifecycle.

» Enhance E&S due diligence for clients and projects through the following recommended ways:

- ◇ Implement best-practice environmental performance standards, tools and metrics, and reporting and certification guidelines such as the Greenhouse Gas Protocol, the Integrated Biodiversity Assessment Tool (IBAT), and the FAST-Infra Sustainable Infrastructure® (FISI) Label to ensure consistency and comparability in measuring and reporting on environmental impacts of projects and ultimately to certify the sustainability of infrastructure projects.
- ◇ At a minimum, adopt the Equator Principles (EPs) as a risk management framework for determining, assessing and managing environmental and social risk in project finance. This includes:
  - ◇ Requiring an Alternatives Analysis from clients for all projects that are expected to emit more than 100,000 tonnes of CO_2 equivalent annually during the construction and/or operational phase to evaluate lower GHG-intensive alternatives for all energy sector projects.
  - ◇ Considering the cost of carbon emissions when evaluating projects and adopting a carbon shadow price following the recommendations of the High-Level Commission on Carbon Prices (e.g., $50-$100 per tonne by 2030).
- ◇ Integrate nature-positive requirements into safeguards policies for the RE sector. For example, require project proponents to:
  - ◇ Incorporate BNG requirements into safeguard policies: achieve an overall net gain for natural and critical habitats, including affected freshwater, terrestrial, and marine habitats.
  - ◇ Ensure that projects do not lead to adverse impacts on biodiversity and ecosystem services, and do not significantly convert or degrade natural or critical habitats.
  - ◇ Adhere to the Key Biodiversity Area Business Guidelines.
- ◇ Enhance the integration of broader client assessment within the E&S due diligence process. For example:
  - ◇ Review the client's E&S management system and track record on E&S performance.
  - ◇ Assess the client's E&S policies and procedures.
  - ◇ Identify and assess the client's E&S risks associated with its industry sector and geographical location.

THEME 3

ENHANCE AND FORTIFY GOVERNANCE STRUCTURES AND CAPACITY-BUILDING EFFORTS

» Strengthen governance structures by delegating clear roles and responsibilities across various departments, committees, or teams involved in the development and implementation of E&S and energy policies.

» Hold the board and Senior Management Team responsible and accountable for the creation, adoption, and rigorous implementation of these policies throughout the organization.

» Expand training efforts across all DFIs to ensure comprehensive preparedness among all staff, including senior management, in appraising climate risks and opportunities.

» Integrate sustainability-related criteria into the staff appraisal process and Key Performance Indicators (KPIs).

THEME 4

BOOST FINANCIAL AND TECHNICAL ASSISTANCE FOR CLEAN ENERGY DEVELOPERS, ENABLING THEM TO PREPARE PROJECTS FOR INVESTMENT AT AN INCREASED SCALE

» Increase the ratio of financial flows in clean energy solutions (vs. fossil) every year at the portfolio level.

» Continue to develop risk mitigation instruments – such as guarantees, insurance products, and public-private partnerships – and deploy financial flows such as concessional loans, grants, and blended finance options to further reduce the cost of capital and increase investment for renewable projects in developing countries.

THEME 5

FOSTER GREATER COLLABORATION WITH DIVERSE STAKEHOLDERS INCLUDING GOVERNMENTS, BUSINESSES, AND CIVIL SOCIETY, TO ACCELERATE THE TRANSITION TO A CLEAN ENERGY FUTURE. THIS INCLUDES TO

» Collaborate closely with governments to establish a conducive policy environment that promotes clean energy investment and facilitates the divestment from fossil fuels. This collaborative effort aims to both mitigate harm and expedite the transition through increased green subsidies.

» Facilitate capacity-building and training programs for clean energy entrepreneurs, businesses, and investors in collaboration with civil society.

» Foster a coordinated approach to climate change risk management by sharing best practices with relevant stakeholders.

» Advocate for heightened public awareness regarding the advantages of clean energy.

Taken cumulatively, these initiatives will help DFIs accelerate the transition to a clean energy future and mitigate the impacts of climate change by:

- Reducing investment in fossil fuels and increasing investment in clean energy.
- Making clean energy projects more affordable.
- Improving the risk profile of clean energy projects.
- Promoting innovation in the clean energy sector.

At the very least, DFIs must honour their pledge to the 2020 Finance in Common Join Declaration to shift strategies, investment patterns, activities, and operating modalities, collectively and consistently with their respective mandates and governance, the countries' policies, and long-term strategies, taking into account national and regional circumstances. Specifically, in the context of the energy transition, the commitment is as follows:

"WE COMMIT TO INCREASING THE PACE AND COVERAGE OF INVESTMENT IN RENEWABLE ENERGY, ENERGY EFFICIENCY, AND CLEAN TECHNOLOGIES TO ACCELERATE EQUITABLE ACCESS TO CLEAN ENERGY AND THE ENERGY TRANSITION. WE WILL WORK TOGETHER TO INTRODUCE RENEWABLE ENERGIES INTO COUNTRIES WHERE THERE IS LITTLE OR NO SUCH DEVELOPMENT, EFFECTIVELY LEAPFROGGING TRADITIONAL FOSSIL FUEL SOLUTIONS. WE WILL SUPPORT AND PROMOTE SUSTAINABLE ALTERNATIVES TO FOSSIL FUEL INVESTMENTS AND EXPLORE WAYS TO REDUCE THESE INVESTMENTS, THEREBY CONTRIBUTING TO THE AMBITION OF LONG-TERM LOW-CARBON DEVELOPMENT TRAJECTORIES AND NATIONALLY DETERMINED CONTRIBUTIONS (NDCS) TOWARDS A DECARBONIZED SOCIETY. WE WILL ASSESS THE RANGE OF FOSSIL FUEL INVESTMENTS IN OUR PORTFOLIOS, AVOID STRANDED ASSETS, AND STRIVE TO APPLY MORE STRINGENT INVESTMENT CRITERIA, INCLUDING EXPLICIT POLICIES TO PHASE OUT COAL FINANCING, IN ALIGNMENT WITH THE PERSPECTIVE OF COP26." [40]

Finally, the upcoming Conference of the Parties 28 (COP28) presents significant opportunities for energy transition and emphasizes the strengthened roles of DFIs. The COP28 Presidency is urging DFIs and specialized climate funds to simplify and streamline access to climate finance. They are also seeking practical, collaborative approaches to expedite and amplify private financing for climate transition in Emerging Markets and Developing Countries (EMDCs).

40 Finance in Common. 2020. Joint Declaration of All Public Development Banks in The World. Available here.

ANNEX

ASSESSMENT INDICATORS

NO.	INDICATOR / QUESTION
1) PURPOSE	
1.1	Does the DFI explicitly acknowledge the societal and economic risks associated with climate change including that sustainable energy is a key sector to help mitigate it?
1.2	Does the DFI regularly engage with regulators, policymakers, and civil society to update its mandate to include credible decarbonization commitments and transition plans, specifying short- and medium-term milestones and developing science-based sector targets that align with or surpass the national climate commitments of its shareholders (governments)?
1.3	Did the DFI publicly commit to immediately end the financing for new coal-, gas- and oil-related projects/clients, and urgently address these sectors' phase-out in alignment with ambitious science-based 1.5C criteria? (Note: this would indicate that the DFI is willing to align its financial flows with the Paris Agreement)
1.4	Does the DFI participate in relevant commitment-based sustainable finance initiatives such as UNEP FI Principles for Responsible Banking (PRBs), Net-Zero Banking Alliance (NZBA), Finance in Common Summit Joint Declaration and Common Principles for Climate Mitigation Finance Tracking?
1.5	Does the bank engage with other financial or multilateral institutions to develop new financial services/products, publish/disseminate knowledge products, or facilitate conditions for enabling the sustainable energy transition?
2) POLICIES	
2.1	Does the DFI have a public climate change strategy? (e.g., explaining that climate change is incorporated into investment decision-making)
2.2	Does the DFI publicly disclose its energy sector policy?
2.3	Does the DFI disclose a framework for renewable energy financing, specifying the types of technologies it will support and identifying the risks that need to be managed throughout the project lifecycle (including planning, design, development, operation, and decommissioning)?

NO.	INDICATOR / QUESTION
2.4	Does the DFI have policies and guidelines for financing sustainable infrastructure projects, considering factors such as avoiding carbon, energy efficiency, climate resilience, and social and environmental impacts?
2.5	Does the DFI have exclusionary principles/lists/'no go' provisions or other related guidance covering activities that the bank will not support (e.g., projects located in, or having negative impacts on protected areas such as IUCN Categories I-IV Sites, World Heritage Sites (WHS), and Ramsar Wetlands, as well as new coal-fired power plant projects, and oil and gas and nuclear activities)?
2.6	Does the DFI's safeguards/E&S policy include minimum screening-, due diligence- and engagement-related requirements/recommendations based on internationally recognized standards/best practices (e.g., IFC Performance Standards, World Bank's Environmental and Social Framework)?
2.7	Does the DFI's safeguards/E&S policy address the potential negative environmental and social impacts associated with renewable energy projects specifically, including impacts on biodiversity, ecosystem services (direct, indirect, and cumulative impacts), employment, community displacement, and visual and noise pollution, among others?
2.8	Does the DFI periodically review its E&S/safeguards and energy policies, or has it stated that the last date of the review was within the past 2 years?

NO.	3) PROCESSES
3.1	Does the DFI incorporate climate physical and transition risk screening into its project evaluation process, using guidance such as EP4 or other recognized methodologies?
3.2	Does the DFI apply a carbon shadow price to all energy sector projects (not only for those that reduce emissions), following the recommendations of the High-Level Commission on Carbon Prices (e.g., $40-$80 per tonne of CO2 by 2020 and $50-$100 per tonne by 2030) to inform decision-making when assessing potential transactions?
3.3	Does the DFI assess the capacity, commitment, and track record of its clients as part of its E&S due diligence process?
3.4	Does the DFI utilize standardized frameworks for E&S due diligence, such as tools, checklists, questionnaires, and external data providers, when evaluating clients or transactions?
3.5	As part of the approval process, does the DFI classify its clients, projects and transactions based on E&S risk assessment (e.g., high, medium, and low risk)?
3.6	Does the DFI define key metrics for assessing and monitoring the environmental performance of its portfolios/projects such as GHG emissions, and nature-related indicators – as specified in the TNFD guidance)?

NO.	INDICATOR / QUESTION
	4) PEOPLE
4.1	Is senior management responsible for the implementation of the DFI's energy policy, E&S policies, and/or climate change strategy?
4.2	Do senior management's responsibilities include the management of climate change risks and opportunities (as they relate to the energy sector) relevant to the DFI's activities?
4.3	Does the DFI describe the roles and responsibilities of the various departments, committees, or teams involved in the development and implementation of its E&S and energy policies?
4.4	Does the DFI have a dedicated ESG team responsible for implementing E&S policies and procedures?
4.5	Does the DFI provide training to its staff on E&S policies and implementation processes?
4.6	Does the DFI provide specific training for its senior management that covers sustainability issues such as decarbonization?
4.7	Are sustainability-related criteria part of the staff (incl. senior management) appraisal process and/or integrated into their KPIs?

NO.	5) PRODUCTS
	COAL
5.1.1	Does the DFI prohibit the financing of new thermal coal ore extraction and processing, as well as for the expansion of such activities?
5.1.2	Does the DFI prohibit the financing of new coal-fired power plant projects, as well as the expansion of existing power plants?
5.1.3	Does the DFI require diversified mining clients to phase out all thermal coal extraction and processing by 2030?
5.1.4	Does the DFI require diversified energy clients to phase out all thermal coal power generation and distribution by 2030?
5.1.5	Does the DFI impose restrictions on the financial products or services it provides to clients involved in physical coal trading?

NO.	INDICATOR / QUESTION
OIL AND GAS	
5.2.1	Does the DFI impose restrictions on financial products or services for the exploration and development of new oil and gas assets?
5.2.2	Does the DFI impose restrictions on financial products or services for oil sands activities?
5.2.3	Does the DFI impose restrictions on financial products or services for fracked shale oil and gas activities?
5.2.4	Does the DFI impose restrictions on financial products and services for unconventional oil and gas infrastructure, such as pipelines?
RENEWABLE ENERGY	
5.3.1	Does the DFI require clients to assess and address nature-related risks (such as water, biodiversity, and deforestation) when financing renewable energy projects? This includes implementing a robust mitigation hierarchy, conducting strategic environmental assessments, environmental impact assessments, as well as monitoring.
5.3.2	Does the DFI require clients to invest in programmes designed in collaboration with local communities that help ensure a just transition for affected consumers, workers, and communities? (e.g., FPIC, worker reskilling and assistance)
5.3.3	Does the DFI require clients to source sustainable materials and account for the E&S impact of materials sourced as part of their supply chain? (e.g., sustainable mining of metals in storage batteries)
CROSSCUTTING	
5.4.1	Does the DFI offer de-risking products or advisory services such as technical assistance, grants for research and guarantees to facilitate overall sustainability improvements in the energy sector, private sector involvement and/or implementation of the goals outlined in the Paris Agreement?
5.4.2	Does the DFI offer financial products and services for the early and managed retirement of coal assets, following a framework that ensures the credibility of relevant energy transition and coal phase-out plans; 'meaningful' impact across climate impact, financial viability, and socio-economic considerations; and transparency and accountability for coal phaseout plans?
5.4.3	Does the DFI restrict financial products and services to corporations that lack a credible, science-based transition plan (aligned with the 1.5-degree goal)? (Note: this implies no funding for corporations expanding fossil fuel assets).

NO.	INDICATOR / QUESTION
6) PORTFOLIO	
6.1	Does the DFI disclose the greenhouse gas (GHG) emissions or carbon intensity of the primary carbon-intensive sectors in its portfolio such as mining and energy?
6.2	Does the DFI actively integrate the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) into its disclosure efforts, ensuring comprehensive and robust reporting on climate risks and opportunities?
6.3	Does the DFI pilot Task Force on Nature-related Financial Disclosures (TNFD) recommendations such as the LEAP framework?
6.4	Does the DFI itself set science-based GHG targets (based on guidance and resources provided by the Science Based Targets initiative (SBTi)) to reduce real economy emissions and contribute to the net-zero transition?
6.5	Does the DFI set a specific target for financing renewable energy, either in terms of a certain number of projects or a target share of its portfolio?
6.6	Does the DFI perform regular assessments with clear frequency guidelines to monitor the environmental and social performance of its clients in its portfolio?
6.7	Does the DFI disclose the process to address non-compliance of existing clients with the bank's policies or with pre-agreed E&S action plans?
6.8	Does the DFI have a framework to help clients in high-emitting sectors align with the Paris Agreement? (e.g., selection and performance criteria using energy efficiency benchmarks, disclosure requirements, and monitoring processes)
6.9	Does the DFI require its clients in the energy exploration, extraction and generation sectors to set public GHG emissions reduction targets based on guidance and resources provided by the Science Based Targets Initiative (SBTi)?
6.10	Does the DFI have requirements for all clients in the energy exploration, extraction and generation sectors to provide public TCFD reports?
6.11	Does the DFI establish clear requirements for all relevant clients to commit to and disclose appropriate plans for decommissioning fossil fuel assets, including strategies for repurposing and ensuring rehabilitation of the natural environment?

ABBREVIATIONS

ADB	Asian Development Bank
AIIB	Asian Infrastructure Investment Bank
ASEAN	Association of Southeast Asian Nations
ASFI	Asia Sustainable Finance Initiative
AVISTEP	Avian Sensitivity Tool for Energy Planning
BPMB	Bank Pembangunan Malaysia Berhad
BNG	Biodiversity Net Gain
CDB	China Development Bank
COP28	Conference of the Parties 28
CO_2	Carbon Dioxide
CTAP	Climate Transition Action Plan
DBJ	Development Bank of Japan, Inc.
DBP	Development Bank of the Philippines
DFI	Development Finance Institution
EMDCs	Emerging and Developing Countries
ESIA	Environmental and Social Impact Assessment
ESG	Environmental, Social, and Governance
E&S	Environmental and Social
ETM	Energy Transition Mechanism
ETS	Emission Trading Scheme
FISI	FAST-Infra Sustainable Infrastructure®
GBF	Global Biodiversity Framework
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GHGEMP	Greenhouse Gas Emissions Management Plan
GRI	Global Reporting Initiative
IIFCL	India Infrastructure Finance Company Limited
IBAT	Integrated Biodiversity Assessment Tool
JBIC	Japan Bank for International Cooperation
KPI	Key Performance Indicators
LNG	Liquefied natural gas
MDBs	Multilateral Development Banks
NDC	Nationally Determined Contribution
NGO	Non-governmental organization
NZBA	Net-Zero Banking Alliance
PFC	Power Finance Corporation Limited
PPP	Purchasing Power Parity
PRB	UNEP-FI Principles for Responsible Banking
PRC	People's Republic of China
PTSMI	PT Sarana Multi Infrastruktur (PERSERO)
PV	Photovoltaic
RE	Renewable Energy
SA	South Asia
SASB	Sustainability Accounting Standards Board
SDG	Sustainable Development Goals
SEA	Southeast Asia
SUSBA	Sustainable Banking Assessment
TCFD	Task Force on Climate-related Financial Disclosures
WWF	World Wide Fund for Nature

LIST OF DFIS ASSESSED

China Development Bank (CDB)	Founded in 1994, the CDB is a state-owned institution committed to fostering economic growth in vital industries and underdeveloped sectors. Available here.
Asia Development Bank (ADB)	ADB, formed in 1966, aims for a prosperous, inclusive, resilient, and sustainable Asia-Pacific while sustaining its efforts to eradicate extreme poverty. It has 68 members, with 49 from the region. Available here.
Development Bank Of Japan (DBJ)	DBJ is a Japanese development bank incorporated on 1 October 2008, and it operates on a commercial basis for Japan's economic and social development. It is fully owned by the Japanese government through the Minister of Finance. Available here.
Japan Bank for International Cooperation (JBIC)	JBIC, established on April 1, 2012, is a policy-based financial institution of Japan. It conducts lending, investment, and guarantee operations while complementing private sector financial institutions. Available here.
Power Finance Corporation Limited (PFC)	Established in 1986, the PFC primarily finances power sector and electrification projects in India. It also offers consulting and advisory services to power sector companies. Available here.
Asia Infrastructure Investment Bank (AIIB)	The AIB, operational since January 2016, is a multilateral development bank working to enhance economic and social progress in Asia. Available here.
Development Bank of the Philippines (DBP)	DBP is headquartered in Makati, Philippines, was founded in 1947 after World War II to rebuild the nation's infrastructure. It offers financial aid to financial institutions and direct borrowers for investment purposes. Available here.
PT Sarana Multi Infrastruktur (PERSERO) (PTSMI)	PTSMI was formed on February 26, 2009, under the Ministry of Finance, is a national entity catalysing infrastructure development in Indonesia. Available here.
India Infrastructure Finance Company Limited (IIFCL)	The IIFCL is a wholly-owned government of India enterprise, established in 2006 with a primary mission to provide long-term financial support to viable infrastructure projects. Available here.
Bank Pembangunan Malaysia Berhad (BPMB)	BPMB was established on November 28, 1973, is a development financial institution aiding small and medium-sized entrepreneurs. Available here.

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