



FAIR FINANCE ASIA



**FINANCING THE JUST TRANSITION**

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# **POWERING ASIA'S SUSTAINABLE ENERGY FUTURE**



# KEY FINDINGS AND OBSERVATIONS

This paper details the key findings and observations of the upcoming joint report of Fair Finance Asia (FFA) and the Stockholm Environment Institute (SEI) on just energy transition due for publication later in November 2022. It was made possible with financial assistance from the Embassy of Sweden in Bangkok, Thailand.

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Fair Finance Asia (FFA) is a regional network of Asian civil society organizations that are committed to ensuring that the business decisions and funding strategies of financial institutions in the region respect the social and environmental well-being of the communities in which they operate. Civil society coalitions from eight countries within the region are participating in FFA: Cambodia, India, Indonesia, Japan, Pakistan, the Philippines, Thailand and Vietnam.

## ABOUT STOCKHOLM ENVIRONMENT INSTITUTE

Stockholm Environment Institute (SEI) has a strategic presence in Asia that allows the global institute to gain critical local and regional insights that drive scientific research to inform environment and sustainable development agendas. SEI Asia provides evidence-based science and understanding on development and makes links across social, economic, and environmental issues from the national to the local levels. SEI Asia focuses on the many environmental dimensions of human health and well-being that integrates poverty, gender, and social equity to emphasize a people-centered and participatory approach to development.

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## AUTHORSHIP

This document is prepared by Shreya Kaushik, Research and Advocacy Advisor, FFA, and Khairun Nisa Zabidi, Research and Advocacy Coordinator, FFA. The full report is researched by Arthur Rempel, Angie Zafra, Lennie Shayne Garcia, Kritiyavara Wongsa and Jan Willem van Gelder, with contributions of Yu Chen and John Arvin Bernabe. Correct citation of this document: *FFA and SEI (2022, October), Key findings and observations: Financing the Just Transition: Powering Asia's Sustainable Energy Future*.

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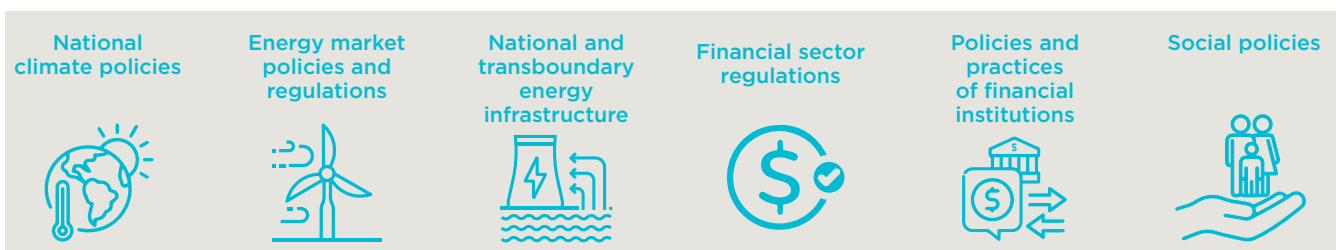
# KEY FINDINGS AND OBSERVATIONS

## INTRODUCTION AND CONTEXT

Asian economies are heavily reliant on fossil fuels to meet their energy needs in both the electricity and transport sectors. Major economic powerhouses like India, Japan, and China relied on coal, oil, and fossil gas to meet 77%, 88%, and 89% of primary energy demands between 2018-2019, respectively, while the Central Asian region was collectively dependent on fossil fuels for meeting as much as 97% of their primary energy needs. Phasing out from this dependence and subsequently driving energy transition across the Asian continent (namely, transitions towards low-carbon and high-renewable economies) poses a number of social, economic, ecological, and financial implications, altogether influencing the extent of whether the overall transition will be 'just' and protective of society's most marginalised, under-resourced, and under-privileged fossil fuel dependents.

The above findings are consistent with Fair Finance Asia's 2021 study<sup>1</sup> titled 'A future without coal: Banking on Asia's just energy transition' which revealed continued growth in Asia's coal sector - even after the signing of the Paris Agreement in 2015 - largely due to ongoing financing by banks and investors operating in the region. It is clear that financial institutions that enable Asia's energy sectors have a critical role to play in developing and implementing a new vision on Asia's energy future by reorienting financing to renewable energy innovations, setting clear objectives and implementing time-bound strategies to exit from fossil fuels.

This study builds on its predecessor by exploring the role of financial institutions in the just transition against the backdrop of social, political, legal, geographical, technical, and legislative hurdles that have impeded (or complexified) Asia's move to renewable energy to date. The study first maps the financial flows that have been directed to support Asia's renewable energy production, then delves into thirteen country cases to assess these aforementioned complexities, focusing on:



Asia's just transition spotlights winners and losers, particularly losers in terms of affected sectors and livelihoods lost<sup>2</sup>. Among the identified thirteen linchpin countries for regional energy transition in this study, very few currently have policies to support direct, indirect, and induced fossil fuel labourers<sup>3</sup> and in countries where the coal sectors are still emerging, policies to slow the growth of coal have not been introduced<sup>4</sup>.

This document introduces the key findings pertinent to these thirteen linchpin countries for Asia's just energy transition which were generated using a multi-method approach, consisting of, inter alia, literature reviews, semi-structured stakeholder interviews, and an NGO survey.

<sup>1</sup> Van Gelder, J.W., W. Warmerdam, D. Quiroz, G. Rijk, E. Kaynar, F. Muna and E. Achterberg (2021, November), *A future without coal: Banking on Asia's just energy transition*, Amsterdam, The Netherlands: Profundo, online: <https://fairfinanceasia.org/blog/2021/11/09/a-future-without-coal-banking-on-asias-just-energy-transition/>, viewed in September 2022.

<sup>2</sup> Interview 15



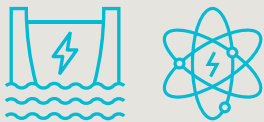
<sup>3</sup> Oei, P., Hermann, H., Herpich, P., Holtemöller, O., Lünenbürger, B. and Schult, C. (2020), "Coal phase-out in Germany - Implications and policies for affected regions", *Energy*, 196: 1-19.

<sup>4</sup> Interview 15.

# STATUS AND TRENDS IN FINANCIAL FLOWS TO RENEWABLE ENERGY AND FOSSIL FUELS IN ASIA

The financial flow analysis in this study focuses on the trends in both fossil fuel financing as well as renewable energy financing in Asia for the period of 2016-September 2022, which is grounded on the assumption that the more invested in fossil fuels a country is, the more investments are needed in renewable energy to achieve a just energy transition in Asia. The energy sources referenced in this paper are classified as follows:

TABLE 1 - CLASSIFICATION OF DIFFERENT ENERGY SOURCES

Fossil Fuels	Renewable Energy	Other Non-Fossil Sources <sup>5</sup>
Coal	Geothermal	Biomass - co-firing
Gas	Concentrated solar power (CSP)	Biomass - dedicated
Oil	Solar PV	Large hydropower
	Wind onshore	Nuclear power
	Wind offshore	Waste to energy
	Ocean and tidal energy	
	Micro-hydropower	
		

This report assesses the annual volumes of energy financing by private Asian banks between the period of January 2016 to September 2022. The data is based on the analyses of the financing of 234 global and Asian energy companies, including all major companies active in the coal, oil & gas, and renewable energy supply chains. The study found that most of the energy financing of the main banks from the selected Asian countries is predominantly destined for fossil fuels, with renewable energy only accounting for 0% to 26% of their energy financing between 2016 to 2022. In this period, Asian banks provided a total amount of USD 1,482 billion of financing to 203 companies in the global energy sector, in the form of loans and underwritings, as shown in Table 2. Of this amount, USD 1,277 billion was earmarked for fossil fuels and USD 205 billion for renewable energy. On average over the period, only 14% of total energy financing by Asian banks was earmarked for renewable energy.

TABLE 2 - LOANS AND UNDERWRITING BY ASIAN BANKS FOR THE ENERGY SECTOR IN USD MLN, IN 2016-2022

Year	Fossil fuels	Renewables	Total	% renewables
2016	195,916	16,940	212,856	8%
2017	142,074	27,919	169,993	16%
2018	152,637	31,893	184,530	17%
2019	199,162	20,558	219,720	9%
2020	220,297	26,310	246,607	11%
2021	204,007	44,981	248,988	18%
2022	163,306	36,341	199,647	18%
Total 2016-2022	1,277,400	204,942	1,482,342	14%

<sup>5</sup> Other Non-Fossil Sources are listed separately in Table 1 as they are not fossil fuels, but they are not considered as renewable energy sources either. This is partly because of the high lifecycle greenhouse gas emissions caused by some of these energy sources, and partly because of the huge environmental and social problems created by these energy sources

Table 2 illustrates that the energy financing trends found in Asia in the period 2016-2022 are incompatible with the recommended pathway of the International Energy Agency (IEA), to a 1.5° scenario<sup>6</sup> which suggests that annual reductions in fossil fuel production are required between 2020 and 2030 of 11% for coal, 4% for oil, and 3% for fossil gas to meet this goal.<sup>7</sup> This contrasts sharply with the figures in Table 6, which demonstrates that the annual amount of fossil fuel financing provided by Asian banks had increased by 4% in 2021 in comparison with 2016 (USD 204 billion vs USD 196 billion).

Figure 1 breaks down the loans and underwritings provided by private Asian banks to fossil fuels and to renewable energy in the period from 2016 to September 2022 by country of origin of the banks. It shows that Chinese banks are by far the largest providers of energy financing, both for fossil fuels (60%) and renewable energy (86%). Japanese banks come in second, but their role in fossil fuel financing (32%) is clearly more important than their role in the financing of renewable energy (9%). While banks in India, Singapore, Indonesia, and Thailand also provide significant financing for fossil fuel and renewable energy projects, the amount invested comes far behind banks in China and Japan.

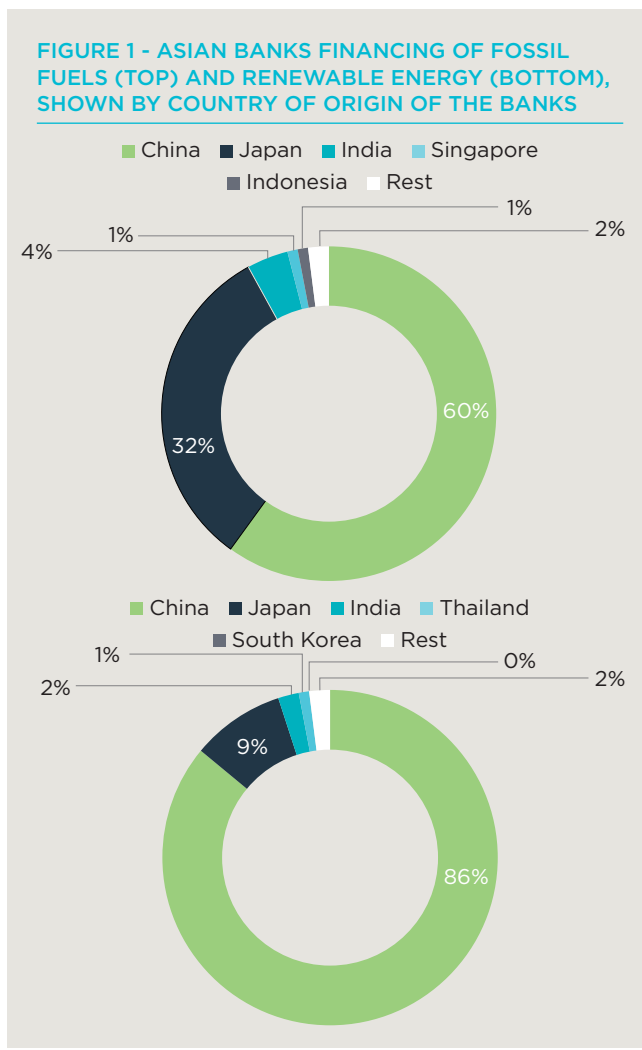
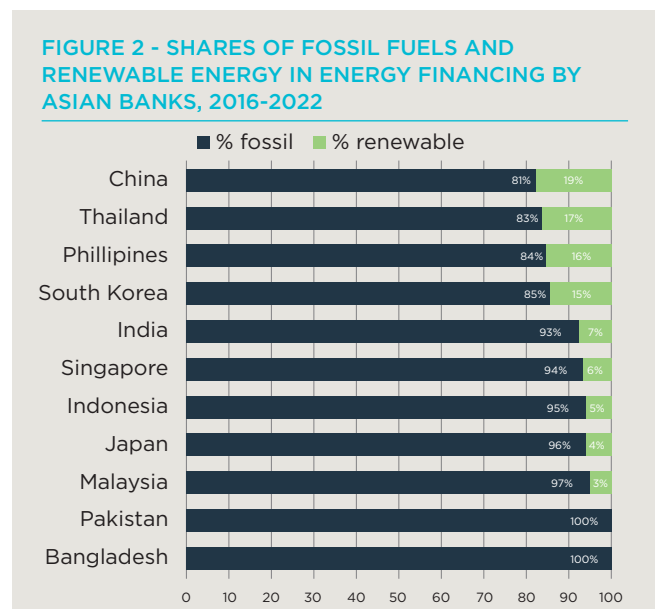


Figure 2 shows how the energy financing between 2016-September 2022 by Asian banks from 11 out of 13 selected countries is distributed between fossil fuels and renewable energy (data from the respective countries). The figure shows that banks from these countries spent at least 80% of their energy financing on fossil fuels in this period. Chinese banks scored relatively best, with 81% fossil fuel financing and 19% renewable energy financing, followed by banks from Thailand (83% vs 17%) and the Philippines (84% vs 16%). Banks from Pakistan and Bangladesh scored the lowest, with 100% fossil fuel financing and no renewable energy financing. On average, 84% of the energy financing of Asian banks in the period 2016-2022 was used for fossil fuels, while 16% was used for renewable energy.

It is clear that the financial sector plays a critical role in the just energy transition and incentivising them to contribute more actively can accelerate this process. However, the financial sector in Asia does not yet have standardized and mandatory regulations that explicitly ban fossil fuel investments, nor do they adequately mandate carbon disclosure to drive emissions reductions across their operations and value chains. Where ambition is explicitly stated, the timeframes for implementation are often too slow and not sufficiently ambitious. Finally, and very notably, regulatory tools, such as credit weighting or carbon tax have not yet emerged as deployment strategies by financial regulators, despite the efficacy potential of such policies.

Nonetheless, some promising initiatives have been denoted in financial sector and capital market regulations, particularly the extent to which capital markets across Asia are incubating attractive environments for financial institutions to issue green bonds to raise financing towards addressing climate change. This is not complemented, however, by sufficient guidance on how these financial institutions should spend and/or redistribute the funds collected. These gaps highlight challenges and opportunities for the Asian financial sector in the energy transition.



<sup>6</sup> IEA (2021, May), *Net Zero by 2020*, online: <https://www.iea.org/reports/net-zero-by-2050>

<sup>7</sup> UNEP (2021, October), *Production Gap Report 2021*, online: <https://productiongap.org/2021report/>

# SOCIAL POLICIES IN ASIA IN THE CONTEXT OF A JUST TRANSITION

Social policies concerning just energy transitions vary across different countries in Asia, but one thing is shared among all nations: these policies are introduced much later than the energy policies and are often not inclusive to the overarching policy narrative, suggesting that the 'justice' element of the 'just transition' is secondary to the 'transitional' component.

The study also indicates that renewable energy projects that are implemented with gender-transformative actions and consideration for the most vulnerable and disadvantaged are not initiated by government, but rather, by official development assistance funders, multilateral organizations, and Civil Society Organizations (CSOs).<sup>8</sup>

Some social issues are accounted for and advocated for by CSOs and NGOs and are interwoven in general social and political dialogue, but continue to remain largely absent from official government policies themselves. For instance, the prospect of skyrocketing electricity prices from phasing out coal-fired electricity was often identified as a pertinent

point in energy transition contexts. However, it is not at all certain that a price rise will indeed be the consequence of the energy transition, and it is often a contentious and stigmatized topic that it is avoided by policymakers as it is often part of their election campaigns.

It is important that the needs and aspirations of communities, particularly the most climate-vulnerable, are at the centre of transition efforts and policy design. Decision-makers, both in the public and private sectors, should view them as co-creators of energy systems that meet their needs and align with their practices,<sup>9</sup> as community-driven initiatives are more inclusive and have a potential to produce effective and sustainable energy transition results.<sup>10</sup>

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<sup>8</sup> Interview 25

<sup>9</sup> IEA, IRENA, UNSD, World Bank, WHO (2022), *Tracking SDG 7: The Energy Progress Report*, Washington DC: International Bank for Reconstruction and Development / The World Bank, p. 44.

<sup>10</sup> Tarekne, B., K. Kazimierczuk, and R. O'Neil (2022), "Communities in energy transition: exploring best practices and decision support tools to provide equitable outcomes", *Discover Sustainability*, 3(1), 1-19.

## OVERARCHING CONCLUSIONS

The study culminates by generating two broad and overarching conclusions:

- The Asian continent is experiencing an 'energy addition' rather than an energy 'transition' due to the slow uptake of climate and energy policies adopted by Asian policy makers, financial regulators as well as banks and investors within Asia and beyond. This means that increasing volumes of renewable energy generating capacity are added to currently dirty and fossil-intensive grids, leading to no net change in global greenhouse gas emissions.
- The 'justice' element of Asia's prospective energy transition (or 'addition', as argued above) is largely being overlooked and side-lined, particularly its implications to the most at risk groups in society. Other pertinent social considerations concerned to jobs, gender, and indigenous rights, are grossly omitted from national climate and energy policies, which suggests that whatever manifestation of an energy 'addition' or 'transition' that evolves has the potential to pose major and disadvantageous threats to under-privileged, under-resourced, and vulnerable minority groups.

RESEARCH PARTNER



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