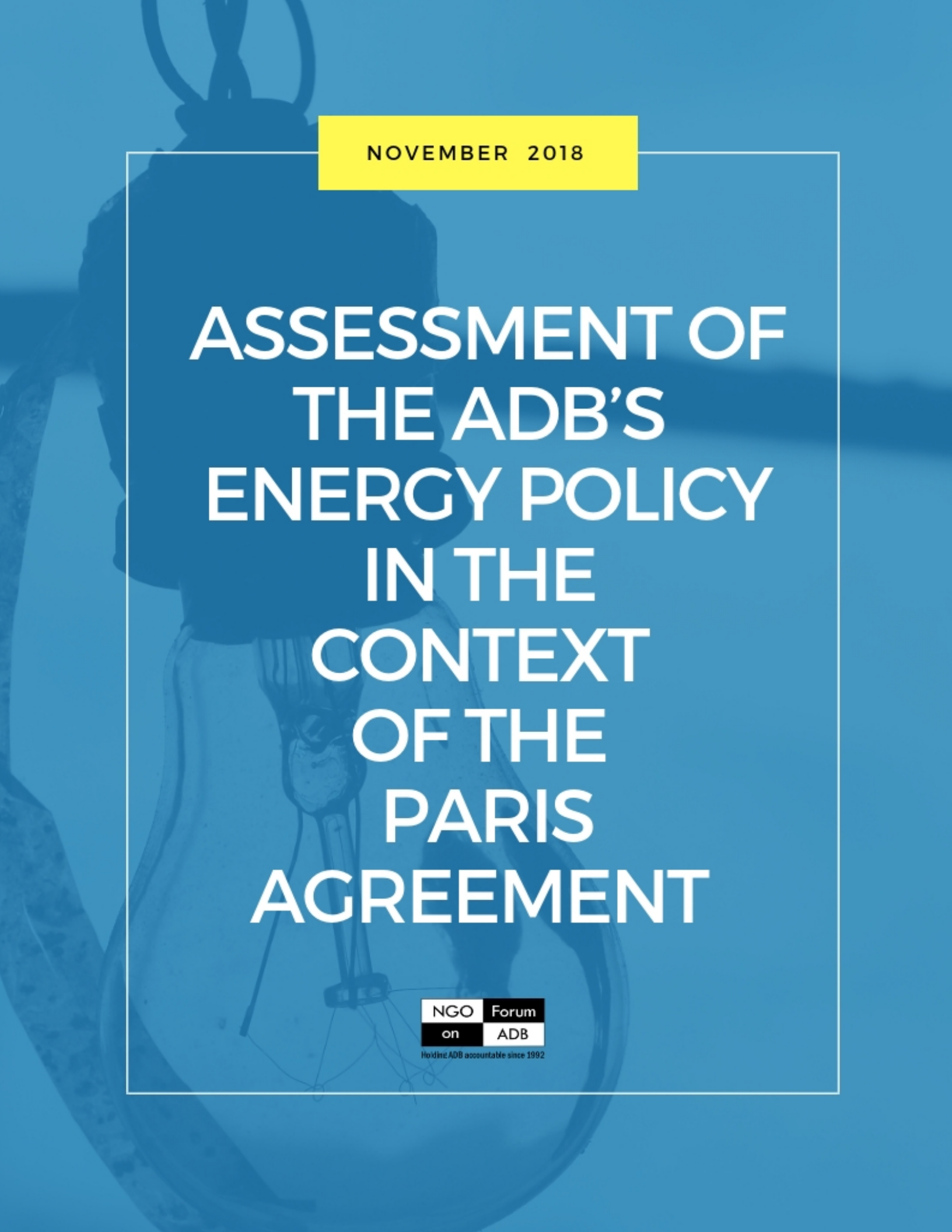

NOVEMBER 2018

ASSESSMENT OF THE ADB'S ENERGY POLICY IN THE CONTEXT OF THE PARIS AGREEMENT

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Written by Tanya Roberts-Davis
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OVERVIEW OF FRAMEWORK AND METHODOLOGY

The following desk-based analysis of the ADB's 2009 Energy Policy was commissioned by the NGO Forum on the ADB ("NGO Forum"). It is undertaken by applying international norms agreed upon by both borrowing and non-regional member countries of the ADB to provide minimal benchmarks that should not be undermined by the financing provided by the Bank, regardless of whether it is for the public or private sector. These include commitments to meet the rights-based text of the 2015 Paris Agreement and respective national goals set towards eliminating greenhouse gas emissions and urgently phasing out the expansion of fossil fuel-based industries. Additional standards presumed as applicable include the ADB's 2009 Safeguard Policy Standard (SPS 20009) and 2011 Public Communications Policy on information disclosure (PCP 2011) as well as the sustainable development goals (SDGs), particularly SDG 7 and 13, as related to energy access and the climate, respectively. In addition, this assessment is informed by the understanding that fundamental concerns continue to be raised by affected communities and locally-based groups in Asia-Pacific allied with the NGO Forum about the social and environmental impacts of Bank's energy sector investments. Substantiated evidence of these issues is provided in the text below with specific cases of legacy, active and pipeline ADB energy projects. These examples are sourced from community advocates allied with the Forum, but remain only briefly articulated, with more substantive information available on the websites of organisations referenced.

To ensure the assessment is evidence-based, a literature review about the region's climate commitments and potential for full reliance on renewable energies (wind, water, and solar, excluding conventional hydropower projects) suitable for a circular economy was undertaken. Information culled from this review is accordingly reflected in the introductory section of this paper. The ADB's 2009 Energy Policy project categories and active energy investments approved between the time of the adoption of the policy and the time of writing (2009-2018) were then reviewed to assess their alignment with the above. Lastly, pipeline energy projects and the 2018 Energy Strategy developed by the Asian Infrastructure Investment Bank (as noted in Annex I) were considered in order to develop a set of forward-looking recommendations to be considered by the ADB.

CHAPTER 1

INTRODUCTION

1.1 ADB Commitments to Clean Energy Investments

Nearly a decade ago, as the ADB advanced its newly conceived "Strategy 2020", an update of the Bank's Energy Policy was finalised. To reflect the Bank's stated priorities at that time, the 2009 Energy Policy was meant to scale-up resources for "emphasizing energy security, facilitating a transition to a low-carbon economy, universal access to energy, and for achieving ADB's vision of a region free of poverty". Specifically, the policy's stated objective was to "provide reliable, adequate, and affordable energy for inclusive growth in a socially, economically, and environmentally sustainable way" for borrowing member countries, with a particular focus on "energy efficiency and renewable energy; access to energy for all; and energy sector reforms". This policy was supposed to have longevity, therefore being reviewed "only if and when circumstances warrant".

Since then, the number of active and approved energy investments has steadily increased annually from twelve in 2009 to more than fifty projects in 2016 and 2017 respectively, with 12 approved/active projects listed as active/approved between January to June 2018.

1.2 The ADB's Role in Reforming the Region's Energy Sector

Since 2009, the focus of energy-related investments appears to have shifted from being primarily project-based financing towards the provision of technical assistance (TA) consultancies that explicitly support public sector-based reforms orientated towards privatisation (including provision of advice to the public sector). Notably, this trend has been the subject of concern for NGO Forum members in relation to energy projects approved by the ADB even prior to the introduction of the 2009 Policy. For example, in 2006, the ADB approved the "Power Sector Development Program Loan"

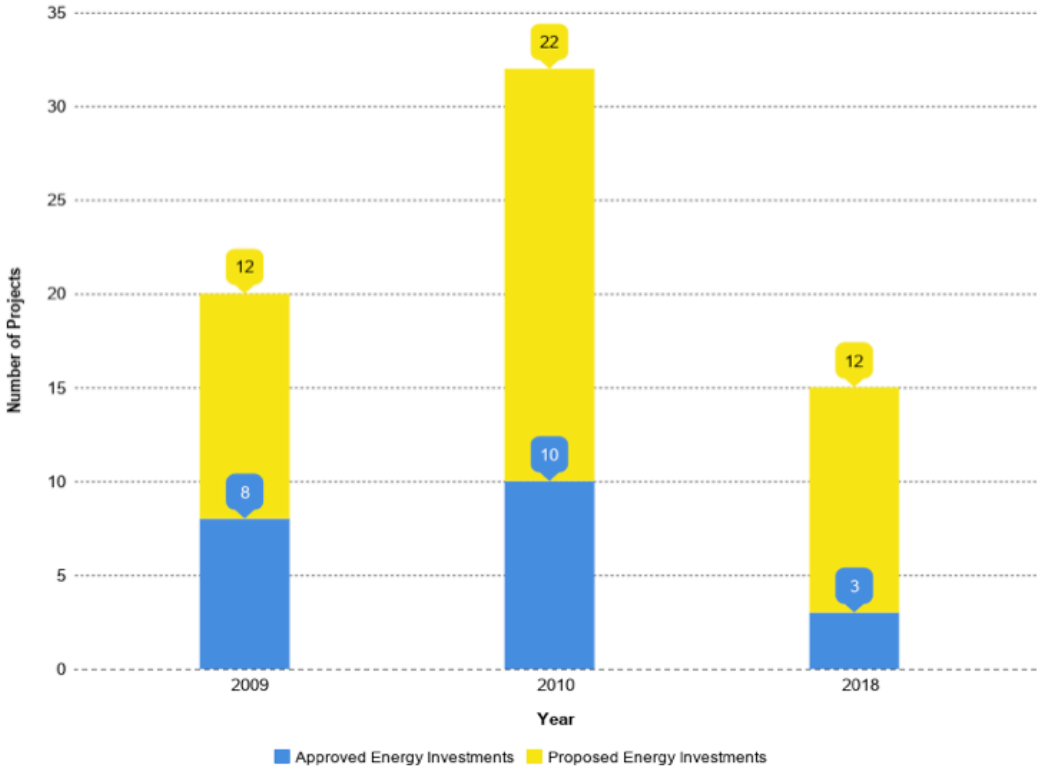


Table 1. South Asia

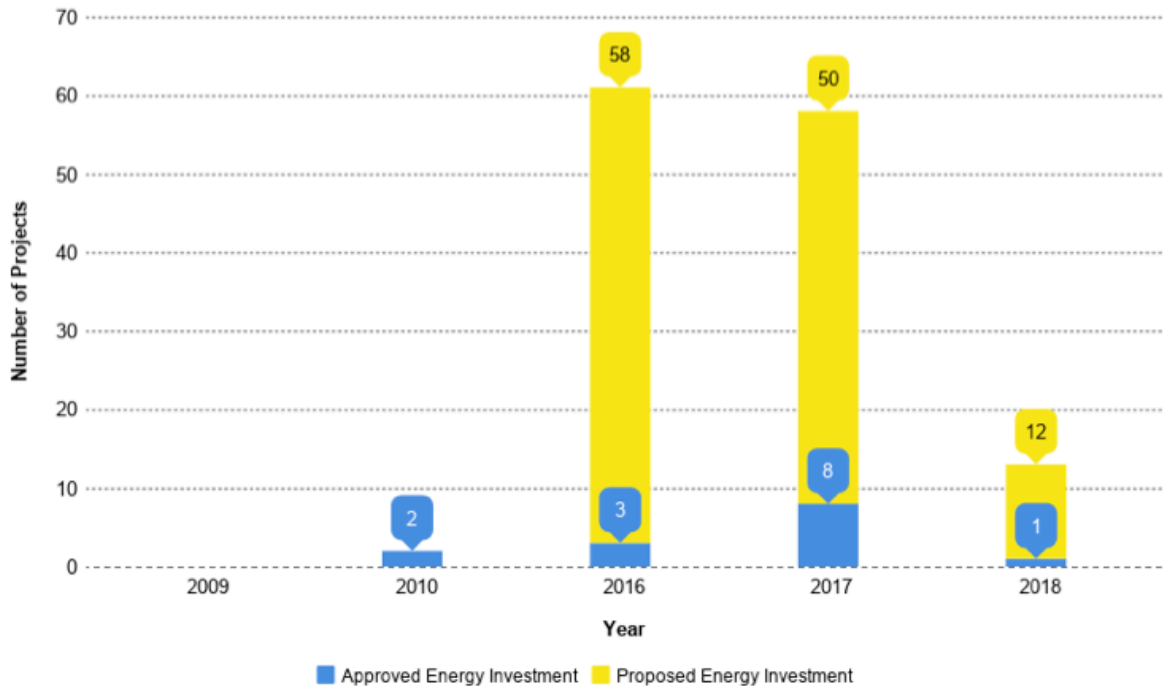


Table 2. Pacific Island

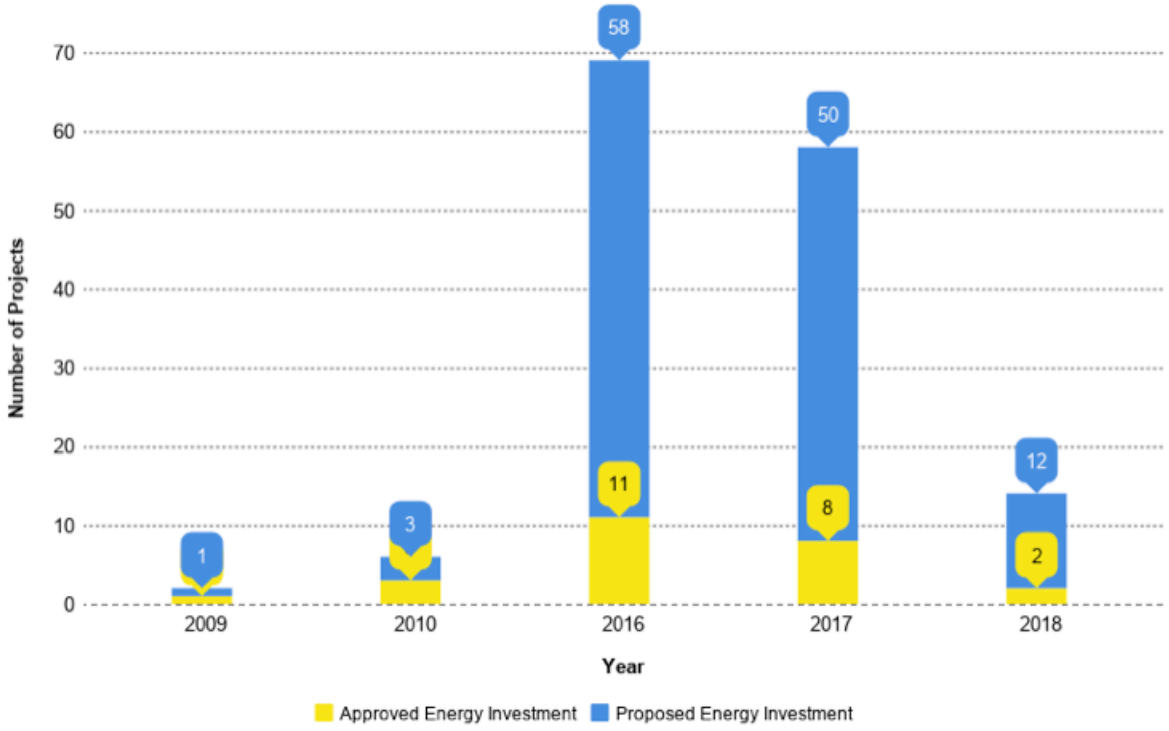


Table 3. Central Asia

for the Philippines (Project 37752-013), which supported the development of the Electric Power Industry Reform Act (EPIRA). This legislation led to the privatisation of publicly owned power generation projects, such as the Angat Dam, thereby impacting not only the energy sector but also (previously publicly owned) municipal water services. Project completion was validated in December 2012. More recently, in 2017, the regional TA project entitled "Leapfrogging of Clean Technology in Central Asia Regional Economic Cooperation Countries through Market Transformation" (No. 49413-001) was approved, while in 2016, TAs based on orientation towards market reforms included the "Power Sector Development Project" (No. 49370-001) in Turkmenistan and "Preparing a Power Sector Financial Recovery Plan" (No. 50079-001) in Azerbaijan. Much of the TA advice provided by the ADB between 2009 and 2018 was geared towards borrowing member states categorised as "fragile", "post conflict" or recently independent, primarily in Central, South and Southeast Asia.

In addition, financial intermediary investments (categorised as "FI", with no thorough safeguard evaluations provided) and general corporate investments labelled as "cornerstone investments in leading power developers" are increasingly being included in the ADB energy portfolio. Approved project examples of the latter category include the 2018 "Cornerstone Investment in a Leading Power Developer in Bangladesh" (No. 51400-001) and the 2017 "Cornerstone Investment in Leading Independent Power Producer Project in Thailand" (No. 51273-001).

1.3 Current Directions of the ADB's Energy Sector Investments

Much of the ADB's current energy sector financing remains locked into fossil fuel development and high intensity resource consumption, such as geothermal, carbon capture and conventional hydropower investments. For example, the most recently approved project at the time of writing (June 2018) is the private sector Rupsha 800-Megawatt Combined Cycle Power Plant Project (No 50161-003) in Bangladesh, which entails the construction of an 800MW gas fired power plant, along with associated supply, distribution and transmission facilities. This project is listed as a category "A" (highest risk) in terms of environmental impacts and is expected to lead to displacement of "some households". With multiple river crossings required and other ecosystem fragmentation, there are risks of contamination of watersheds and surrounding vegetation/village settlements. The UNDP considers Bangladesh as one of the most vulnerable countries in the world to climate change, with sea levels on coastal areas already rising, increasing severity of cyclones, extreme rainfall patterns, increases in flooding and threats to levels of freshwater resources. Increasing risks to riparian ecosystems with gas pipelines (vulnerable to leakage or damage due under circumstances of extreme weather events) in this context while several other more adaptable and less resource-intensive options for power generation could be pursued would seem neither practical nor logical. In addition, in 2017, the Bank approved a project for "Promoting and Scaling Up Carbon Capture and Storage" (No. 48453-001) in China and in December 2016, several subcomponents for the "Shah Deniz Gas Field Expansion Project" (No. 49451-002) in Azerbaijan.

There has been a noticeable increase in the financing for solar and wind energy project components. Although this would appear to be a generally positive trend, projects may result in the imposition of environmentally and/or socially harmful impacts if the scale and/or location lead to forced resettlement or intrusion onto Indigenous Peoples' territories, areas relied upon by local communities for non-and small-scale timber forestry products or critical ecosystem zones. For example, fundamental concerns about the recently approved siting of a 100MW wind power generation project in Mannar, Sri Lanka (Projects /49345-002 and 49345-002) were raised by the Centre for Environmental Justice and the NGO Forum on the ADB. Although the citing of the project significantly interfered with an important migratory route for birds from Europe, Russia, South Asia and Southeast Asia, the project was approved without thorough consideration of cumulative project impacts or turbine shut down options.

1.4 ADB's Considerations for Advancing a "New" Agenda

As the ADB looks to set benchmarks for 2030 and beyond, it has an opportunity to advance current best practice in energy investments. This would entail immediately setting clear timelines for phasing-out current fossil fuel and other resource-intensive energy projects (such as conventional hydropower dams, carbon sequestration, geothermal power extraction and incineration of waste). The Bank would then need to rapidly transition pipeline projects to

Rupsha 800-Megawatt Combined Cycle Power Plant Project in Bangladesh.

reflect adaptive, resilient and forward-looking energy solutions for borrowing member states that -

- rely on technologies based on circular/ closed circuit systems of efficiency and no-waste principles;
- use suitably-scaled renewable energies that apply the precautionary principle; and
- respond appropriately to the diverse social, economic and cultural needs of the public. Full, mandatory compliance with the Bank's 2009 and 2011 PCP would also need to be required.

However, as per the 2009 Energy Policy, the ADB's investments in the power sector continue to aim for a "low carbon scenario" that would limit global temperature rise to 2 degrees Celsius. How the Bank will be able to align with the needs of the communities in borrowing member countries and respective agendas of national governments therefore remains in question.

1.5 ADB Member Countries: Committed to the Paris Agreement and Rapidly Reducing GHGs

ADB borrowing member countries have committed to the Paris Agreement from the 2015 COP21, including to uphold the rights-based approach outlined in the preambular text, and have outlined relatively ambitious "Nationally Determined Contributions" (NDCs) of greenhouse gas emission (GHG) reductions, aiming to limit global planetary temperature rise of 1.5 degrees Celsius this century. Taking stock of discussions from follow-up COP meetings along with the severity of climate change impacts in the region, requires the ADB's member countries to address meeting infrastructure and energy needs of diverse populations with an eye towards resilience, adaptability, closed-circuit principles, and phase-out of conventional greenhouse gas emitting technologies. In light of this shifting orientation of development directions, financial institutions committed to due diligence compliance with social and environmental

standards, such as the ADB, will need to pursue a rapid shift towards decarbonising energy portfolios, guided by the above concepts and principles. Unless a new vision of investing in forward-looking energy solutions is adopted, the ADB risks failing to meet standards to which member countries and several private banks with global portfolios have already agreed.

1.6 Coastal States of Asia and the Pacific Take Further Steps to Address Climate Concerns

Signalling the changing standards to which the ADB will need to consider aligning, are the climate-related discussions underway in the Pacific Islands and other coastal countries spanning across the Asia-Pacific region. For example, the members of the Pacific Island Development Forum (PIDF, representing 13 Pacific Island nations, including those which are borrowing member states of the ADB) have conceptualised and agreed upon a binding treaty to transition rapidly to renewables, while banning further fossil fuel extraction and expansion. An excerpt of the treaty preamble pointedly declares that "current international action to limit global temperature rise remains grossly inadequate," "levels of grant-based funding for mitigation and adaptation remain insufficient to realise the right to sustainable development," and that signatory states commit to "phasing-out of fossil fuels at the national, regional and global level". Accordingly, the text directly asserts that among its key purposes is that of "[m]aking finance flows consistent with a pathway towards sustainable and climate-resilient development, adaptation and compensation for loss and damage," and that parties commit to upholding the precautionary principle and polluter-pays principle. Articles 3, 4 and 5, respectively, commit parties to rapidly phase out fossil fuels and reduce greenhouse gases, establish a framework for scaling up renewable energies, address loss and damage within a rights-based framework (including migration and cross-border movement with dignity), and redressing loss and damage caused by climate change specifically through provisions that "enable domestic courts to make an order for damages claimed on behalf of the public". In addition, at COP 23, in November 2017, the PIDF members published a statement explaining the following:

> *High level officials from Pacific Islands have called for a reining in of fossil fuel production in order to stay within the climate limits agreed to in Paris[…] Potential carbon emissions from the oil, gas, and coal present in the world's currently operating fields and mines would take us beyond 1.5 or 2 degrees Celsius of warming. For the world to stay within the Paris climate limits, new fossil fuel production must be halted. This requires stopping exploration for, and expansion of, new reserves and a managed decline and just transition away from fossil fuel production.*

Similar concerns have been expressed by the statements of the finance ministers of the Vulnerable Twenty (V20), many of which are ADB borrowing member states (including Bangladesh, Cambodia, Mongolia, Nepal, Philippines, Sri Lanka, Vietnam, Fiji, Kiribati, Palau, Papua New Guinea, Tuvalu and Vanuatu). For instance, they published a communique in

April 2017 calling for a rapid phase out of support to fossil fuels, accordingly explaining: "Our and other countries' very existence is threatened by climate change. All financial flows, including those of multilateral development banks, should be aligned with the Paris Agreement, the 1.5C temperature limit, and our member economies' 100% renewable energy vision in support of sustainable development."

An adjoining statement issued on the UNFCCC website on the occasion of the release of the V20 ministerial communique reads as follows: "Under the Paris Climate Change Agreement, governments have agreed to limit the global average temperature rise to as close as possible to 1.5 degrees Celsius – a goal which can only be achieved if the world is weaned off fossil fuels and if finance for clean technology is stepped up."

FULL TRANSITION TO RENEWABLES POSSIBLE WITH RESOURCE COMMITMENTS

As research and technologies advance in the field of renewable, low-resource intensity energy infrastructure advances, so too does best practice for investing in the energy needs of the public that the ADB will need to consider. For instance, a recent peer-reviewed study published in September 2017 modelled roadmaps for 139 countries to rapidly transition to wind, water and solar powered electricity (WWS) for all purposes, eliminating all use of fossil fuels and any new conventional hydropower projects. This study was conceptualised acknowledging that the "seriousness of air-pollution, climate, and energy-security problems worldwide requires a massive, virtually immediate transformation of the world's energy infrastructure to 100% clean, renewable energy producing zero emissions," and that accordingly, "avoiding 1.5 degrees Celsius warming since preindustrial times requires no less than an 80% conversion of the energy infrastructure to zero-emitting energy by 2030 and 100% by 2050". Overall findings included the following: global reduction of energy use by over 42% (as end-use efficiency exceeds that of business-as-usual norms), creation of 24.3 million more permanent, full-time jobs, preventing more than 4.6 million premature air-pollution deaths per year between now and 2050; cutting $22.8 trillion USD in 2050 air-pollution costs per year; and trillions per year in climate-related costs. In addition, according to the study, transitioning to a WWS energy base would also be expected to stabilise energy prices, reduce power disruption and increase access to energy by decentralizing power. According to the study authors, this transition is technically and economically feasible within the next three decades, if there is the necessary political and social will accompanied by concerted global efforts.

1.7 The ADB's Partial Support for the Paris Agreement Targets

Top-level messaging by the Bank's personnel and the online version of the Bank's "Road to 2030" acknowledge the commitments of the Paris Agreement and the specific Sustainable Development Goals related to climate change as well as accessible forms of energy. However, unfortunately, these pronouncements are yet to be operationalised, as exemplified at the 2017 Clean Energy Forum at the ADB Headquarters in the Philippines. At that time, President Nakao

acknowledged that the "ADB and its member countries must pursue SDG7 on ensuring universal access to sustainable energy, SDG13 on addressing climate change, and the COP21 Paris Agreement." However, he then proceeded to discuss investments in projects which entail the use of fossil fuels and emissions of highly concentrated greenhouse gases, including methane, carbon monoxide, nitrogen oxide and sulphur dioxide and/or are resource-intensive with heavy environmental impacts. Among these examples were gas fields, gas pipelines, gas-fired power plants, waste-to-energy projects, hydropower projects and geothermal projects. It is therefore questionable how such new investments will take the critical steps needed to – at a minimum - match the standards embraced under the COP21 Paris Agreement and the ambitions of ADB borrowing member countries to meet the SDGs, their NDC plans, as well as their commitments to the Paris Agreement text. This is particularly concerning given the implications on the environment, public health and social well-being (as well as potential of forced relocation of communities) of not only the current projects outlined by Nakao, but also the range of power sector investments being proposed for borrowing member countries in the Bank's pipeline.

1.8 Energy Infrastructure: Is the ADB Meeting Peoples' Needs?

Significantly, recent ADB estimates on the investment costs for power infrastructure for the "Developing Member Countries (DMCs)" from 2016-30 amount to 14.7 trillion dollars, as outlined in the Bank's 2017 report "Meeting Asia's Infrastructure Needs". The estimated multi-trillion-dollar scale-up of infrastructure applies a strategy of "maximizing finance for development" that focuses on financing megaprojects to serve regional trade interests (such as large-scale geothermal extraction, gas-fired plants and hydropower projects along with cross-border distribution networks). Promotion of private public partnerships, engaging private investors in the design of regional master plans and project cycles, and accelerated, standardized project preparation processes are amongst the key thrusts advanced. Since many ADB borrowing member economies are highly dependent on exports of raw commodities, while some are classified as fragile and post-conflict/post-independence states, they are typically vulnerable to market shocks and debt. As a result, if large-scale infrastructure is built for the purposes of regional trade, such as in the cases of long-distance transmission lines and liquefied natural gas distribution pipelines, dependency on low-cost/low-value exports will grow. Simultaneously, however, domestic resources will need to be committed to private-sector partnership schemes. The consequences of such projects then risk entailing trade-offs in terms of the very basic public services that subsistence-level families are most reliant upon, and/or national servicing of high debts. Meanwhile, there are no assurances of transparency, robust time periods of meaningful consultation, time allocations for project adjustments based on considering input from affected communities or guarantees that projects will serve the needs of affected communities. Although the investment calculations in this report are claimed to have been adjusted for climate change and mitigation, the only reference in the text to the Paris Agreement is in the conclusion in relation to the "optimal" aim for no more than a 2 degrees Celsius rise by 2100. As long as the ADB

does not apply a coherent grounding in the internationally accepted Paris Agreement targets for its planned infrastructure and regional power sector investments, the Bank's financing decisions will remain hinged on the 2009 Energy Policy. In light of all above issues highlighted, a review of the applicability of the policy would therefore only appear to be a timely undertaking, and as such, forms the central focus of the following pages.

1.9 Overview of Upcoming Chapters

The next chapter of this report will provide an overview of the current 2009 Energy Policy and a critical review of its project categories. Standards considered as minimal benchmarks in this analysis include the Paris Agreement of COP 21, the NDCs of member countries, the SDGs (particularly SDG 7 and 13), as well as with international laws and norms to which member countries have committed as outlined in the Paris Agreement text. The third chapter will review a selection of private and public-sector projects listed on the ADB's website at the time of writing. The final chapter of this paper concludes with a set of recommendations based on the above sections.

CHAPTER 2

2009 ENERGY POLICY: PILLARS AND PROJECTS ELABORATED

2.1 Overview of Policy Pillars

In the 2009 Energy Policy, the ADB identified three main policy pillars: economic efficiency and renewable energy; maximising the potential for energy for all by mobilising the private sector, and promoting energy sector reform, capacity building and governance. In lieu of an updated energy policy, the Bank has sought to develop a focus on projects and technologies which the institution identifies as "clean" and "low carbon emitting", primarily through increasing investments in energy efficiency (EE), renewable energies, improving access to energy for remote regions, and promoting energy sector reforms. Nevertheless, to date, the ADB has yet to coherently offer support to member countries to meet their changing energy needs or international climate-related commitments. However, given the timing of the development of the ADB's Energy Policy nearly ten years ago, there are no overarching sections to address standards similar to those provided for in the Paris Agreement and the rights-based approach of its text or additional targets for energy transitions considered necessary by the majority of the Banks member states.

2.2 2009 Energy Policy Undermines Member States Climate Commitments

As acknowledged by the ADB, severe climate change impacts are already a reality for its borrowing member countries, including rising sea levels, heat waves, melting glacial ice, flash floods, desertification, unpredictable patterns of rain, and stresses on freshwater sources. Riparian and remaining forest ecosystems in the region provide resilience to weather these changes, and as a result, should neither be needlessly fractured by fossil fuel extraction and/or high-emission nor swapped as simply expendable "offsets". The forest peoples and communities that rely on these ecosystems are critical frontline defenders of national and cross-border forest zones of biodiversity, as recognised within the Paris Agreement, and

their forcible displacement to make way for energy project investments should not be viewed as a simple factor to be integrated into subsequent mitigation measures.

The present 2009 Energy Policy explicitly identifies and supports investments which risk failing to not only meet basic commitments made under the Paris Agreement, but also more substantive climate-related targets made by signatories, including both borrowing member countries and non-regional shareholders. For example, Italy, France and Ireland are introducing legislation to halt oil and gas exploration and extraction on and off-shore. Japan too, has recently amended and expanded its own national renewable energy commitments, and is considering how to scale-up its support for renewables. Why then are the largest shareholders of the ADB approving high GHG emitting technologies and projects for borrowing member countries?

Institutionally, the ADB has committed to the principles outlined in the Paris Agreement in its draft "Strategy 2030". At an absolute minimum, there is therefore a need to urgently review whether the types of projects and defining aspects outlined in the 2009 Energy Policy adequately reflect the language incorporated into the ADB's own present planning documents, the climate targets and rights-based commitments of its own membership, and contemporary forward-looking peer-reviewed evidence-based climate modelling.

2.2.1 2009 Energy Policy Reviewed: Project Categories Fail to be Adaptable, Resilient and Socially Sustainable

Taking the above into account, fundamentally concerning concepts can be identified within the 2009 Energy Policy that continue to be reflected in energy projects incorporated into not only the Bank's current investment portfolio, but also pipeline plans. Below is a critical overview of project designs elaborated in the policy and of the Climate Investment Funds (CIFs) modality.

2.2.2 Financing for Fossil Fuel Industries: Oil, Gas and Coal

According to the current 2009 policy, the ADB will not finance coal mine development 'except for captive use by thermal power plants' and in addition, 'if [determined to be] clean', will invest in coal-related ventures, coal mine safety measures, efficient use of coal for power generation, coal bed methane extraction and use, coal gasification, coal scrubbers, waste coal utilization, and 'efficient' land- and sea-based coal transportation. The Bank also commits to not finance oil field development 'except for marginal and already proven oil fields' and will consider financing transportation of oil and liquefied natural gas (LNG), including oil and LNG terminals, storage facilities, pipelines, and marine transportation as well as natural gas plants.

The Policy explains that the "primary reason for ADB's intervention in the coal industry is to help start commercialization of the coal sector" in member countries, and "could serve as a

catalyst for encouraging and developing good practices". Funds are proposed to be allocated for retrofitting existing power plants under the assumption that in the context of some borrowing member countries, it may be a "least cost option" for pursuing the goal of "energy for all". Although a low-cost option may seem practical for the ADB to suggest, retrofitting fossil fuel-based projects and other technologies that produce high concentrations CO_2 gases over their lifespans fundamentally cannot be considered "clean". Rather than retrofitting and aiming to improve the productivity of coal-producing industries, the present times require support for the decommissioning of coal and gas-fired plants, while equipping workers with the training needed for technologies and industries that do not rely on fossil fuels. Taking account for Paris Agreement commitments, current research on climate change, and the assertions of ADB borrowing members (as above) would mean closing/decommissioning oil fields and coal mines and other fossil fuel-based projects. Yet, all of the exceptions outlined in the 2009 policy on oil and gas encourage the further use of fossil fuels, while failing to-

(i) support the transition towards low-resource intensity technologies,
(ii) take account of serious impacts to health and social well-being of surrounding communities, particularly due to the consequences of emissions and potential induced resettlement, and
(iii) consider the potential devastation that could be wrought by accidents during production, storage, and transportation stages.

In addition, although the 2009 Policy follows outdated notions that natural gas has low greenhouse gas emissions and a mitigable carbon footprint in comparison to other forms of fossil fuel-based energy, this conclusion has been replaced by more accurate scientific understandings of the greenhouse gas emission composition entailed (i.e. methane, which is many times more carbon intensive than CO_2), the social and environmental risks involved in such projects, particularly in cases of spillage and other accidents, and the need to urgently phase out—not step up—fossil fuel reliance.

The health and environmental impacts of coal and gas projects that the ADB has financed to date are substantive. As such, they have been subject to complaints by project affected people and protests by civil societies in the respective member countries. These include, for example, the 600MW Masinloc Coal Fired Thermal Power Plant (41936-014) in the Philippines, financed from 2008 until 2012, the 200MW Visayas Base Load Power Project (43906-014) also in the Philippines, financed from 2009 onwards, the 4150MW Mundra Ultra Mega Power Project (41946-014) in India with financing approved in 2008 (for which there is an active complaint filed by affected fisherfolk being considered by the ADB), and in Pakistan, the 600MW Jamshoro Power Generation Project (47094-001), approved in 2013 with active financing at the time of writing. Concerns have included a lack of thorough assessment by the ADB of renewable energy options to meet needs of local and national populations, displacement of rural communities, a lack of public consultation and information available about health impacts, particularly fly ash and other toxic emissions (e.g. arsenic, chromium, lead and mercury), contamination of surrounding groundwater and

agricultural fields relied upon by local populations, damaging coastal mangroves that were previously vibrant breeding areas for fisheries, and severely impacting livelihoods of coastal and other rural communities who can no longer rely on subsistence crops, fisheries and water sources.

In addition to the potential for additional submissions of complaints by affected communities and further reputational risks, the ADB will also need to consider the economic liabilities of fossil fuels investments. According to researchers at the Institute for Energy Economics and Financial Analysis, economic trends show that oil and gas stock prices are subject to price volatility, but overall, cannot be considered an added value investment that would be durable over the long-term (including natural gas). Meanwhile "breakthroughs in solar, wind, and energy efficiency have created cost-efficient alternatives to inflationary, climate-destroying and economically disruptive fossil fuels". As a result, if the ADB pursues investments in energy powered by coal, oil and gas, these will liable to become 'stranded assets'.

Technologies categorised as energy efficient measures/renewable and sustainable include carbon capture and sequestration, carbon pricing and marketing, geothermal projects and conventional hydropower. However, carbon capture as well as conventional hydropower and geothermal projects all require resource-intensive technologies with typically heavy externalisation of social and environmental consequences that risk being poorly accounted for in project budgeting processes. In addition, none of these three categories of projects can be considered closed-loop energy technologies that would be efficient and appropriately adaptive to meet the needs of the present and future with

The 600MW Masinloc Coal Fired Thermal Power Plant.

the resilience needed to weather climate change.

ADB ENERGY INVESTMENTS: AFFECTED COMMUNITY REALITIES

Carbon capture, conventional hydropower and geothermal projects do not entail resilience or sustainability in the context of the climate vulnerabilities being weathered by communities throughout the region. As confirmed at the site of the ADB co-financed Nam Theun 2 hydropower dam in Lao PDR, multiple pathways of significant levels of greenhouse gas emissions need to be considered and taken into account from a more wholistic viewpoint (see above). Furthermore, geothermal and hydropower projects (as detailed above) often entail forced relocation of communities as well as fragmentation of ecosystems. For example, civil society groups, villagers and the ADB-appointed project-level panel of experts have raised concerns about the 290MW Nam Ngiep 1 Hydropower Project in Lao PDR, where a disputed process for deciding upon submerging one area of contiguous forest and designating areas in other parts of the country as an equivalent conservation zone as an offset with "no net loss" of biodiversity was relied upon; forcibly displaced indigenous communities raised concerns about a lack of access to basic project information and possibilities to raise fundamental questions about the project process; and independent civil society groups had limited access to project affected areas. Similar concerns over ecological fragmentation of riparian habitats protected under international conservation zones and displacement of surrounding communities with insufficient consultation and public disclosure timelines have been raised in relation to assistance for large-scale hydropower projects approved in Bhutan, such as the 118MW Nikachhu Hydropower Project (Project 44444-013) and the 750MW West Seti Hydroelectric Project (WSHP) in Nepal (Project 1055-012). The above conventional hydropower projects were designed to serve urban populations and industries established in bordering countries (such as Thailand and India in the cases of Lao PDR and Bhutan/Nepal, respectively). They also illustrate a preference towards favouring models designed for private-sector bankability as well as a practice of externalising and neglecting the environmental health and lifecycle impacts of mega-projects borne by host countries. In contrast to the ADB's current approach of counting the imported energy as helping the neighbouring country lower the national carbon footprint, would be a model that would acknowledge project impacts in the source and destination countries (not for mathematical accounting and offsetting, but rather as a real implication with consequences for surrounding communities on both sides of the national borders). For example, 90% of the power generated by Nam Ngiep will be exported to Thailand, with the ADB project data sheet asserting the following: "For Thailand, the Project supports sustainable development through the provision of clean energy and energy diversification". Meanwhile, the description of the Nikachhu Dam in the ADB's project data sheet explains: "Clean power generated by the plant will be sold to India and will help reduce carbon emissions. The clean energy from Bhutan will allow India to eliminate around 460,000 tons of carbon dioxide emissions every year that it would otherwise have generated through fossil fuels." Accordingly, the impact of the project is listed as "Expanded cross-border power trading".

Similarly, an excerpt from the ADB's project documents for the WSHP reads as follows: "The WSHP will utilize Nepal's natural resources and export power to meet India's increasing power demand. Therefore, the WSHP will bring institutional investor confidence [...] and set good example [sic] for regional cooperation and private-public partnerships."

2.2.3 Financing for False "Climate Solutions" to Mitigate GHG Emissions

Carbon capture and sequestration pilot trials require inefficient energy intensive inputs for injection of gases into the subsurface of the earth and fail to duly apply a precautionary principle approach. According to recent research published in "The International Weekly Journal of Science", Nature, since scientific studies to date about technologies such as carbon capture are based on climate modelling, "non-climatic impacts that large-scale CO_2-removal could have on ecosystems" are generally not taken into account. As a result, the research concludes that key questions in relation to other risks and impacts have never been considered. For example, the technology has neither been proven to work nor adequately studied to ensure it will not trigger subsidence, or cause problems for groundwater sources of surrounding areas. In early 2018, a study undertaken for the European Academies Science Council conclusively demonstrated that the use of negative emissions technologies, such as carbon capture and sequestration, require a land mass and other inputs that could "lead to severe global warming and 'serious implications for future generations'". One of the lead researchers summed up the findings in the news as: "don't put off the clean-up for 50 years, as is currently the case in most emission-scenarios...The key issues are now of scale: the scaling-down of the unrealistic use of negative emissions in climate models [such as carbon capture] and the scaling-up of ambition to achieve net zero emissions, as rapidly as possible." The ADB's active and proposed carbon capture and sequestration projects consequently cannot be considered an adaptive, resilient form of technology, particularly in the context of the region where many states either are bounded by coastlines or conversely, are landlocked, as extreme weather events are already causing desertification in some areas and disastrous flooding in others. In addition, investing in this form of technology does not support member countries to make the necessary transition away from the use of fossil fuels.

2.2.4 Scaling-up private sector involvement

The present 2009 Energy Policy seeks "the promotion of an enabling policy framework" for "private sector participation," and includes public-private partnerships as well as a focus on engaging higher private sector investments. For example, to "Promote Energy Sector Reforms", the ADB will support the "introduction of competition" in markets dominated by state interests (i.e. private sector promotion), the development of public-private partnerships and reforms towards privatisation or corporatisation on a "selective country-by-country" basis, and the transition of energy projects from public to private enterprises "if requested".

However, in seeking profitability, private-sector energy projects can entail a lack of transparency in all stages of development and offer substantive concern for local realities that would allow for project design changes or adjustments based on thorough consultative processes. As a result, they can fail to uphold scales of technology appropriately suited to the needs of communities they are meant to serve, particularly those at the household level. Instead, they are often geared towards supporting larger, profitable industries that can entail resource-intensive consumption (as outlined below).

2.2.4.1 Acknowledging Applicable Long-Term Trend Observations

Fiscal, efficiency, and equity concerns related to such private sector involvement have been well documented, including for instance, the conclusions of peer-reviewed academic studies considering worldwide trends in private sector partnerships in infrastructure development since the 1990s and in particular since the mid-2000s. For example, one study carried out by EU-university based researchers found that in relation to regions in the Global South, (i) fiscal liabilities borne by the public sector had negative costs over the long-term that outweighed any short-term benefits observed, especially because of forced early contract renegotiations; (ii) efficiency gains varied within countries and regions but generally showed low success rates in places where regulatory environments are weak; and (iii) in terms of equity and equilibrium, not all areas of countries are able to attract high investments, consequently leading to a situation in which low income communities were not appropriately reached through good access or affordable rates, while services for middle-upper levels of income areas ended up being more expansive.

Similarly, a study carried out in 2014 under the auspices of the Asia Research Centre of the London School of Economics reviewing trends related to public-private partnership projects (PPPs) in the infrastructure sector found that particularly in the context of many developing countries where regulatory environments are weak, (i) it is common for the private stakeholders involved in PPPs to renege on contracts, seeking better conditions (ie. higher liabilities shouldered by the public sector), and (ii) heavy pressures were imposed on public officials to accept forms of bribery/rent-seeking from private stakeholders involved, potentially leading to corrupt practices being more common than when there is a higher degree of accountability acknowledged to the public. Public disclosure at all stages of project development was found to be generally not diligently followed by the private sector. The LSE study referenced above, for example, found instances of information asymmetries to be common, with the private sector having more and better access to information about the project details than any of public stakeholders. Meanwhile, meaningful consultation with affected communities was found to be often not applied due to vested interests in fast-tracking project processes, as opposed to applying sensitive engagement with careful documentation. Civil society stakeholders also typically experience major challenges when trying to hold private firms accountable to social and environmental safeguards, particularly in cases where company headquarters are located out of reach of local communities.

Considering the above, it is not clear how the ADB will be able to position itself to fulfil commitments to 'inclusive development', 'energy access for all', the environmental and social benchmarks outlined in the 2009 SPS and the public disclosure requirements of the 2011 PCP. In addition, given current investment trends and member countries' accession to the international Energy Charter Treaty, if governments decide to transition energy services back into the public domain or to steer energy plans into line with the latest international climate discussions after beginning to privatise the sector or develop PPP arrangements, they could be subject to costly lawsuits by companies claiming present and future lost revenues.

2.2.5 Financing regional trade and connectivity

Under the policy pillar of "Maximizing Energy for All", the ADB will promote financing for regional energy interconnections for trade in power in terms of: technical assistance grants, equity investments in financial intermediaries, and infrastructure projects that offer cross-border transport and distribution of electricity, gas and oil. Regional trade and connectivity investments by the ADB to date, such as transmission lines for trade between Sarawak (Malaysia) and Kalimantan (Indonesia) as well as countries in the Greater Mekong Subregion (Laos-Thailand, Laos-Vietnam) have favoured large-scale projects, aiming to support cross-border trade involving large corporate sponsors, and generally fail to appropriately address needs of communities affected. As a result, the ADB re-considered initial funding commitments for cross-border transmission line projects in the Mekong (e.g. Lao PDR), South East Asia (e.g. Malaysia) and South Asia (e.g. Nepal), as safeguard standards, public disclosure and anti-corruption measures could not be ensured. This was for instance, summed up by one indigenous rights lawyer in relation to proposed funding for the Sarawak to West Kalimantan transmission line in the following statement:

> *The electricity transmitted through the power grid may be 'cheap' for consumers that want to purchase it in West Kalimantan, but it comes at an enormous cost and irreparable loss on the other side of the border. It is the Indigenous Peoples - the Kayan, Kenyah, Penan, Iban, Kajang and Bidayuh - whose customary lands and livelihoods are at stake in this equation. If the ADB approves the loan, they will also become associated with the social and environmental problems related to the generation and export of hydropower from Sarawak. We hope the ADB does not opt to neglect its own social and environmental safeguards, and hastily approve a plan for cross-border power trade without looking into the reputational and long-term socio-economic risks...*

As outlined above, the large infrastructure projects typically relied upon for regional trading purposes do not entail technologies that are appropriate for local communities and adaptive to the changing climate. Instead, they generally are resource-intensive (for example, requiring large-scale hydropower dams or gas-fired plants to generate high volumes of power distributed across borders), incurring heavy

carbon footprints and high environmental impacts, while leading to instances of forced relocation (as per examples provided above). Given the expansive space required, upstream, downstream and cross-border communities are affected that are often not initially accounted for in nationally-based project plans or budgeting.

Fundamental concerns about regional infrastructure plans being advanced by development banks such as the ADB have also been raised in studies and writings published by the UN Office of the High Commissioner for Human Rights (OHCHR). For instance, in an op-ed published in March 2017, the UN High Commissioner, Zeid Ra'ad Al Hussein, explained that in terms of financing "mega-infrastructure, success is measured by size and speed, breeding the denial of human rights rather than due diligence," and that to date, accompanying plans have "largely eluded public debate". In the context of highly populated regions (including Asia and the Pacific), such megaprojects typically risk leading to large-scale displacement but fail to have effective mechanisms of redress for the surrounding communities. In the long-term then, such projects risk failing to position countries of the region for weathering the challenges of fluctuating weather patterns and sea, ground and fresh water levels. As a result of the above considerations, one of the most prominent calls of the UN OHCHR is that financing institutions ensure all infrastructure projects planned first go through a process of "thorough public deliberation and consultation with the communities directly affected, free of intimidation or coercion."

This section of the 2009 policy also envisions financing coal plants, along with coal and oil transport in 'remote border regions'. Yet, these forms of investment could pose serious challenges given the potential for cross-border impacts and accidents with high ecological impacts and/or risks to the health and well-being of marginalised border communities. In such zones, where boundary demarcations may still be under negotiation, disputed or have been relatively recently agreed upon in post-conflict or post-independence contexts, ensuring full public disclosure and accountability for project impacts can be highly elusive.

2.2.6 Designing "Business as Usual" Energy Sector Roadmaps

Given the timing of the 2009 policy and the existence of no coherent updates, there is no commitment to bring roadmaps into line with member country NDCs, requirements to uphold the Paris Agreement text (including the rights-based approach mandated by the preamble) or the SDGs. As a result, if the ADB continues to follow an approach towards "low carbon development" that retains a goal of a global 2 degrees Celsius temperature rise, roadmaps designed will reflect and replicate problematic business-as-usual policies and will be inappropriate for member countries given their own commitments to the Paris Agreement, SDGs and climate-resilience targets. Recently, for example, the ADB has been involved in developing 20-year plans for the Myanmar energy sector, that have incorporated the scaling-up of fossil fuel-based technologies (coal, oil and natural gas) along with other resource intensive industries, such as mid and large-scale hydropower. If followed, such long-term plans would therefore risk locking-in reliance on fossil fuels and other high

greenhouse gas-emitting industries, remaining fundamentally incompatible with the Paris Agreement and not responsive to the requirements of a changing climate or development priorities of the region.

2.2.7 Unfulfilled Commitment to publish GHG footprints

To date, the ADB has failed to follow-through with this policy-level commitment. Now, nearly ten years after the 2009 Energy Policy was approved, a widely accepted model to account for emissions applicable to the ADB's investments is the GHG Protocol. Following this disclosure commitment would represent a minimum critical step in the direction towards accounting for the Banks' contribution to emissions, illustrating the need to (i) immediately phase-out fossil fuel investments, (ii) transition to renewables, and (iii) uphold the commitments of the Paris Agreement, observant of the target to ensure global temperatures do not rise above 1.5 degrees Celsius.

2.2.8 Climate Investment Funds (CIFs)

To hasten "low carbon development" with sustained economic growth as per the 2009 Energy Policy, the ADB is administering 1.5 billion USD for projects and programs in Asia and the Pacific under "Climate Investment Funds windows". According to the ADB website, these include 22 investment plans for 18 countries, a regional investment plan for the Pacific, regional programs under the Clean Technology Fund private sector fund, and a "Private Sector Set-Aside" for Cambodia. The CIFs have two separate pools: (i) the Clean Technology Fund (pilot testing of low carbon development projects), and (ii) the Strategic Climate Fund (three funds for country development, primarily infrastructure-related). In terms of regional disbursement, the majority (82%) is provided for South and Southeast Asia. Given that the projects are planned as pilot-tests, and typically entail large-scale energy infrastructure, they are often risky (environmentally and/or socially), resource-intensive, and may be fast-tracked, lacking robust forms of planning tailored specifically to the needs of those to whom they are supposed to be targeted. Of major concern to civil society is the fact that the projects for which these funds are disbursed are neither explicitly articulated in country-level planning and strategy documents nor need to comply with the same safeguard policy standards that apply to the ADB's own institutional projects. As a result, there are also no assurances that mandatory measures are in place for -

(i) full public disclosure during all project stages;
(ii) meaningful consultation with all affected communities, and
(iii) careful, documented adherence to strict social and environmental safeguards.

CHAPTER 3

PIPELINE ENERGY INVESTMENTS INCUR HEAVY ENVIRONMENTAL AND SOCIAL COSTS

As of the time of writing, there are 40 pipeline energy investments listed on the ADB website, which include natural gas, conventional hydropower projects, and carbon capture/ sequestration. As a result, the resource intensive projects in the pipeline would be considered inappropriate if the Bank aligns with the need to uphold widely accepted standards of divesting from fossil fuels and decarbonising its energy portfolio. A sampling of these projects are outlined below, providing a context for this concerning indication of where the Bank is intending to position its investments in the years ahead.

SELECTION OF SOVEREIGN (PUBLIC) PIPELINE INVESTMENTS

In China, the Qingdao Rural Waste-to-Energy Project (No. 50089-002) will entail seven heating/cooling systems utilising natural gas and heat acquired from sewage waste. Requiring sourcing of natural gas would accordingly lead to fossil fuel extraction, rather than offering support to fully transition from the use of non-renewable, resource-intensive sources of energy.

In Indonesia, the Sustainable Energy Access in Eastern Indonesia-Power Generation Sector Project (No. 49203-002) will entail building several gas-fired power stations as well as pilot gas and solar hybrid units. It has been categorised as a level "A" for environmental impacts due to the possibility of siting at (undetermined) sensitive ecological sites. It is also expected that Indigenous Peoples' communities will be required to accept forced relocation in some areas to make way for the projects, including in Kalimantan, Maluku, Nusa Tenggara, Papua, and Sulawesi. As a result of being sited on coastal communities, these gas

power stations fail to pursue resilient, flexible forms of energy development fit for the realities of changing sea levels and severe fluctuations in weather patterns.

The Pilot Carbon Capture and Storage Activity in the Natural Gas Processing Sector (No. 49204-001) will establish and operate facilities to capture and sequester carbon produced by a natural gas processing plant in Central Java, including (i) capturing and preparing the carbon gases, (ii) transporting and injecting the gas into the ground for sequestration, and (iii) verifying permanent sequestration at the injection site. Despite pursuing this form of risky technology that does not consider the secondary impacts once the carbon is injected in the soil, and the failure of the carbon capture process to be a viable solution to climate change, the project is not identified as entailing significant environmental risks. Of considerable importance is the fact that the carbon capture technology is rationalised as a necessity to mitigate the emission impacts of a nearby gas-fired plant, which bears similarity to the gas-reliant projects the Bank itself is financing in other areas of the country. It therefore does not support Indonesia in transitioning towards downstream, long-term efforts to become forward-looking and embrace readily available climate solutions that are not based on fossil fuel dependent technologies.

In the Solomon Islands, the Tina River Hydropower Project (No. 50240-001) is considered a category "A" for environmental and resettlement impacts. It will directly displace people living in the surrounding area and riparian habitat from an area covering 150 hectares. At a time of climate change, when there is a notable rise in sea levels on the coastal areas of the Pacific Islands, peoples' livelihoods and fresh water ecosystems are already under a high degree of stress. Most particularly in this context, such a project fails to be either sustainable or entail a consideration of the social, economic or environmental implications over the project lifespan.

In Uzbekistan, the Sustainable Hydropower Project (No. 50130-002) will entail refurbishing three large hydropower projects that have been assessed as inefficient and in need of modernisation, as well as building three new smaller dams. Due to a lack of publicly disclosed information, the size and potential impacts of each component project remain unclear. As a result, it is possible that among these six dams, some may have more severe ecological impacts and require communities to accept forced relocation or have areas of their homes inundated. However, given the increased soil and water salinity from the drying and shrinking of the Aral Sea, the increased loss of vegetation from desertification, and threats to freshwater sources in Uzbekistan, this plan fails to support the development of forward-looking, adaptable, and climate resilient energy solutions.

SELECTION OF PRIVATE SECTOR PIPELINE PROJECTS

In Indonesia, the Riau Natural Gas Power Project (No. 50182-001) requires the construction, operation and maintenance of a 275MW combined-cycle gas-fired power plant, a 40-42km long gas pipeline, a transmission line, and associated facilities. It is categorised as having high environmental impacts and entailing involuntary resettlement of the surrounding communities.

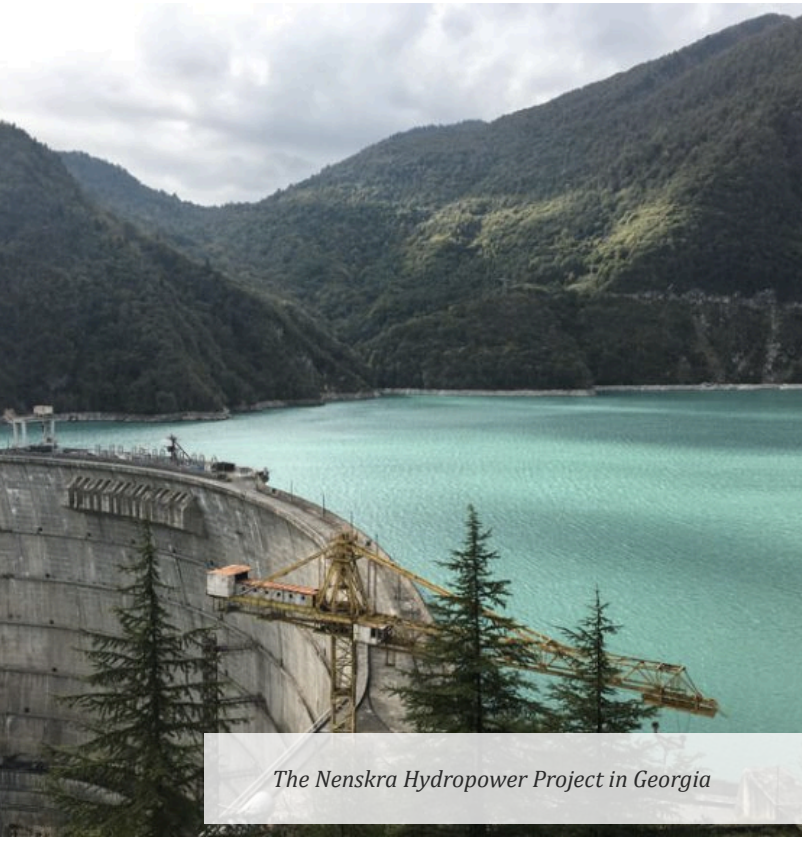
In addition, a larger gas project with more severe environmental and resettlement impacts in the pipeline for Indonesia is the Jawa-1 LNG to Power Project (No. 51112-001). It requires the construction, operation and maintenance of a 1,760MW combined-cycle gas-fired power plant, a Floating Storage and Regasification Unit with a seven-kilometre seawater and discharge pipeline, an associated 52km long transmission line, a substation, and a 21km gas pipeline for the liquefied natural gas. It will be sited along the coastline of Java, requiring forced resettlement of surrounding communities. Areas local people have used in the past for rice paddy fields and livestock grazing will be usurped for project purposes, thus further constraining spaces they have used for critical livelihood and subsistence purposes. It will also entail pipeline and transmission line crossings of some areas categorised as critical ecosystem habitats of protected forest lands. Terrestrial and marine habitats are therefore expected to be disrupted by the project construction. During operation, the plant will produce NO_2, CO_2 and other greenhouse gas emissions, noise emissions, as well as solid waste and wastewater discharges. Given the effects on the land and water, a wide zone relied upon by local communities for agriculture and fisheries will be negatively impacted. Placing such an intrusive and polluting industry along the coastline at a time of unpredictable sea level fluctuations fails to be adaptive, resilient or forward-looking towards decarbonisation, particularly considering the significant GHG emissions already noted by the ADB on the project data sheet disclosed online.

In Nepal, the Upper Trishuli 1 Hydroelectric Power Project (No. 49086-001) entails the construction and operation of a 216MW hydropower facility located in the Trishuli watershed. Due to the substantive impacts of this dam on the environment and surrounding Indigenous Tamang communities, the ADB has classified this project as a category "A" for all three socio-environmental safeguard categories considered: environmental, resettlement and Indigenous Peoples. The Tamang communities will need to be forcefully relocated and will lose access to areas used for both timber and non-timber forest produce. Given the extreme climatic impacts of melting Himalaya waters and the consequential fluctuations in river flow, building conventional large-scale, resource intensive dams and assuming reliable, long-term energy provision appears to lack an overall assessment of factors for adaptability, resilience and practicality as well as of the heavy, unmitigable environmental and social tolls over the course of the project lifespan.

In Georgia, the Nenskra Hydropower Project (No. 49223-001) entails the construction, operation, and maintenance of a 280MW dam (including reservoir) spanning the Nenskra and Nakra valleys. Due to heavy impacts imposed on the surrounding ecology during both construction and operation phases, the ADB has classified it as entailing considerable environmental risks (Category "A"). Households in the surrounding area will lose productive land acknowledged by the ADB as a source of community livelihoods and income generation. According to a UNDP study conducted in 2011, rivers in the Central Caucasus region, including Georgia, will experience substantially reduced flow. Fresh water resources are similarly expected to become highly stressed in the years ahead. In light of these realities of climatic stress in the region, at a minimum, the importance of preserving water flow and

avoiding fracturing the watershed systems to the greatest possible extent cannot be underestimated. As such, it would seem only practical to consider the many reliable alternative options available for energy generation that do not entail the inundation of complex ecosystems and impose forced livelihood losses for surrounding communities.

In Tajikistan, the Sughdneft Expansion Project (No. 51045-001) entails the development of a wholesale and retail distribution network of petroleum, including retail outlets, handling and storage facilities. The ADB considers the project as meeting the needs of Agenda 2020 for poverty reduction, economic growth and infrastructure development. Yet there are considerable risks of leakage of petrol or liquified petroleum gases (as outlined by the ADB in the project's data sheet posted online) with corresponding impacts on the health, safety and well-being of workers and surrounding communities. According to a 2017 study by the World Food Programme, there are "severe challenges in relation to soil degradation such as erosion, swamping, deforestation and salinization [...] both due to climate change and man-made factors". In addition, desertification is "one of the burning issues". Promoting the expansion and use of non-renewable resources that require a heavy environmental cost for extraction and impose risks of devastating impacts in the case of spillage, in the current context would be neither socially nor environmentally sustainable.



The Nenskra Hydropower Project in Georgia

LOOKING AHEAD: RECOMMENDATIONS

The following recommendations are formulated based on the above indications of a fundamental lack of coherence noted between the energy project investments identified in (i) the text of 2009 Energy Policy, (ii) the project pipeline as well as (iii) the CIF portfolio, and the commitments entailed by the ADB's member country climate commitments (including, but not limited to the Paris Agreement text).

1. The draft "Strategy 2030" references both the Paris Agreement and the SDGs. In addition, as detailed above, borrowing member states, particularly the Pacific Island nations and those affiliated with the Vulnerable Twenty Group, have already committed to transition away from fossil fuels and other resource intensive technologies that fail to be resilient, adaptive and socially/environmentally sustainable. It is now the international community, including financiers such as the ADB, which must follow their leadership. At a minimum then, the ADB will need to consider

how its own investments align with supporting member countries to meet the ambitions and standards to which they have committed.

2.In light of the above, the 2009 Energy Policy should be evaluated to ensure unequivocal alignment with borrowing member countries' commitments to the Paris Agreement and subsequent climate-related targets, meeting the SDG standards from a rights-based perspective. To address gaps identified by the evaluation, a policy overhaul and/or substantive revisions will need to be urgently undertaken. While the review and revisions are underway, at a minimum, the ADB can immediately be proactive by ending all pipeline investments in fossil fuel and other resource-intensive greenhouse gas emitting technologies. An accompanying timeline with firm indicators and benchmarks to similarly transition its current investment portfolio would also be needed. Although policy-level commitments to publish greenhouse gas emissions of projects should begin during this transition period, an agenda towards decarbonisation should not consider carbon calculations as a matter of zero-sum mathematics. In addition, carbon should not be marketed as a source of capital profit, or an opportunity to trial risky technologies, as implied by the current institutional directions. As member countries of the Pacific Islands have emphasized, there is an urgent necessity to shift towards long-term publicly accountable climate solutions, acknowledging the harm and injustice wrought on communities by fossil fuel-based development approaches. Taking responsibility and accountability for its operations seriously, it is time for the ADB to launch -

- open consultations with stakeholders about the current relevance of the 2009 Energy Policy; and
- accordingly pursue revisions of the policy as per concerns identified during these consultations.

3.Any new policy, pipeline project options, and CIF commitments should endorse a clear definition of clean energy that is reflective of knowledge emerging from the most recent conclusions and discussions about climate change. Accordingly, they should be based firmly on the precautionary principle and closed-circuit systems of efficiency. Such a definition should demonstrate a full commitment to transition from fossil fuels to renewable energy options (wind, water and solar-based), excluding all conventional hydropower project options, with comprehensive indicators and targets.

4.A clear commitment must be made towards a rapid phase-out and no new investment commitments through the CIFs as well as any other lending facilities in fossil fuel-based projects (including gas, petrol, LNG and LPG), associated facilities and distribution networks, or resource-intensive and GHG emitting waste to energy, geothermal, and conventional hydropower projects.

5.Acknowledging that several of its borrowing member countries along with many non-regional member countries are signatory to the Aarhus Convention (UN Agreement on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters), with corresponding obligations to information disclosure, the ADB must ensure all energy investments, including those made

through CIFS and other funding modalities, diligently uphold – and do not undermine – the principles of full disclosure and transparency at all stages. Specifically, commitments should be made to ensure all energy investments (including those involved in the CIFs and other funding modalities) follow full mandatory adherence to the ADBs 2009 SPS and 2011 PCP.

6.All energy investments should only be considered for board approval (as mandatory "Quality of Entry" requirements) if there is clear documentation with accompanying indicators to illustrate all factors outlined above are duly applied. Consideration should then only be made for projects that demonstrate strict alignment with respective member country climate-related commitments as well as the standards outlined SDGs, particularly SDG 7 and 13.

ANNEX I

AIIB 2018 ENERGY STRATEGY

In contrast to the ADB, the Asian Infrastructure Investment Bank (AIIB) published their Energy Strategy in April 2018. From the outset, the AIIB has accordingly developed a framework which endorses the SDGs and Paris Agreement NDCs and seeks to finance energy projects which help meet borrowing member countries' commitments as per the above. As an investment strategy, it is informed by the following six specific guiding principles:

- Energy access and security (which includes support for SDG 7);
- Energy efficiency (which includes support for rehabilitation and upgrading of existing power plants and the transmission and distribution of gas power as well as financing funnelled through financial intermediaries);
- Reducing carbon intensity (which includes concerted efforts to reduce greenhouse gas emissions through reductions in coal, oil and other fossil fuels);
- Cooperating with other Multilateral Development Banks in projects to address environmental degradation;
- Catalyzing private capital;
- Regional connectivity (which includes financing gas and other power utilities)

The AIIB has not developed an explicit exclusion to nuclear power but "will not develop expertise" in this sector. Digital and smart grids will be financed, with transmission lines built that "pay attention to ecosystem fragmentation" (but not specifically any concerns of communities or landowners affected). Different scales of conventional hydropower projects along with wind and solar mini- and micro-grids will be developed to provide both central and decentralised access to energy

.

The AIIB workplan on energy does not have provisions to ensure processes—and clear documentation—of how affected communities are consulted or assurances that Indigenous Peoples give free, prior and informed consent to the implementation of energy projects on land identified as their ancestral territories (as per the preambular text of the Paris Agreement). There are no assurances to offer full public disclosure at all stages. In terms of project implementation, carbon capture and carbon pricing will be financed as part of the strategy, as will a range of fossil fuel-based investments. As a result, although the AIIB strategy entails explicit language about meeting the SDGs, the Paris Agreement and NDCs, it instead promotes financing of projects which do not support borrowing member countries to make the necessary transition towards reliance on resilient, socially and environmentally sustainable wind, water and solar powered energy systems. In addition, despite mentioning gender-based dimensions of energy access and the importance of reliable energy supplies for rural communities, the strategy does not systematically apply a perspective that is rights-based as per the preambular text of the Paris Agreement or commit to addressing gender-disaggregated concerns of affected communities.

SOURCES CITED

ADB, "Energy Policy" (June 2009): <https://www.adb.org/documents/energy-policy>.

ADB, "The Future Is Here: Achieving Universal Access and Climate Targets: Speech By Takehiko Nakao" (6 June 2017): <https://www.adb.org/news/speeches/future-here-achieving-universal-access-and-climate-targets-takehiko-nakao>.

ADB, "The Asian Development Bank and the Climate Investment Funds: Country Fact Sheets" (2nd Edition, 2016): <https://www.adb.org/publications/adb-and-climate-investment-funds-country-fact-sheets>.

ADB, "Draft Strategy 2030" (April 2018): <https://www.adb.org/multimedia/roadto2030/>.

ADB, "Meeting Asia's Infrastructure Needs" (2017): <https://www.adb.org/publications/asia-infrastructure-needs>.

ADB, "Using Clean Energy to Power Asia," 11 June 2015: <https://www.adb.org/news/infographics/using-clean-energy-power-asia>.

ADB Energy Project Data Sheets:

"Azerbaijan: Preparing a Power Sector Financial Recovery Plan": <https://www.adb.org/projects/50079-001/main>.

"Azerbaijan: Shah Deniz Gas Field Expansion Project": <https://www.adb.org/projects/49451-002/main>.

"Bangladesh: Cornerstone Investment in a Leading Power Developer": <https://www.adb.org/projects/51400-001/main>.

"Bangladesh: Rupsha 800-Megawatt Combined Cycle Power Plant Project": <https://www.adb.org/projects/50161-003/main>.

"Bhutan: Second Green Power Development Project" (2018): <https://www.adb.org/projects/44444-013/main>.

"China: Promoting and Scaling Up Carbon Capture and Storage":<https://www.adb.org/projects/48453-001/main>.

"China: Qingdao Rural Waste-to-Energy Project": <https://www.adb.org/projects/50089-002/main>.

"Georgia: Nenskra Hydropower Project": <https://www.adb.org/projects/49223-001/main>.

"Indonesia: Jawa-1 LNG to Power Project": <https://www.adb.org/projects/51112-001/main>.

"Indonesia: Pilot Carbon Capture and Storage Activity in the Natural Gas Processing Sector": <https://www.adb.org/projects/49204-001/main>.

"Indonesia: Riau Natural Gas Power Project": <https://www.adb.org/projects/50182-001/main>.

"Indonesia: Sustainable Energy Access in Eastern Indonesia-Power Generation Sector Project": <https://www.adb.org/projects/49203-002/main>.

"Indonesia: West Kalimantan Power Grid Strengthening Project": <https://www.adb.org/projects/41074-013/main>.

"Myanmar: Institutional Strengthening of National Energy Management Committee in Energy Policy and Planning": <https://www.adb.org/projects/46389-001/main>.

"Myanmar: Capacity Building Support for Project Identification": <https://www.adb.org/projects/46255-001/main>.

"Nepal: Preparing the West Seti Hydroelectric Project" (2007): <https://www.adb.org/projects/documents/preparing-west-seti-hydroelectric-project-financed-regional-cooperation-and-integ>.

"Nepal: Upper Trishuli 1 Hydroelectric Power Project": <https://www.adb.org/projects/49086-001/main>.

"Pakistan: Jamshoro Power Generation Project": <https://www.adb.org/projects/47094-001/main>.

"Pakistan: MFF Hydropower Development Investment Program": <https://www.adb.org/projects/49055-002/main>.

"Philippines: Acquisition and Rehabilitation of the Masinloc Coal-Fired Thermal Power Plant": <https://www.adb.org/projects/41936-014/main>.

"Philippines: Power Sector Development Program Loan": <https://www.adb.org/projects/37752-013/main#project>.

"Philippines: Visayas Base-Load Power Project": <https://www.adb.org/projects/43906-014/main>.

"Regional: ASEAN Distributed Power Project" (2017): <https://www.adb.org/projects/50410-001/main>.

"Regional: Leapfrogging of Clean Technology in Central Asia Regional Economic Cooperation Countries through Market Transformation": <https://www.adb.org/projects/49413-001/main>.

"Solomon Islands: Tina River Hydropower Project": <https://www.adb.org/projects/50240-001/main>.

"Sri Lanka: Wind Power Generation Project": <https://www.adb.org/projects/49345-002/main>.
"Tajikistan: Sughdneft Expansion Project": <https://www.adb.org/projects/51045-001/main>.
"Thailand: Cornerstone Investment in Leading Independent Power Producer Project": <https://www.adb.org/projects/51273-001/main>.
"Turkmenistan: Power Sector Development Project": https://www.adb.org/projects/49370-001/main.
"Uzbekistan: Sustainable Hydropower Project": <https://www.adb.org/projects/50130-002/main>.
Ahmad, E. et al., "Involving the Private Sector and PPPs in Financing Public Investments: Some opportunities and challenges," LSE Asia Research Centre (October 2014): <https://www.lse.ac.uk/asiaResearchCentre/_files/ARCWP67-AhmadBhattacharyaVinellaXiao.pdf>.
AIIB, "Energy Sector Strategy: Sustainable Energy for Asia" (June 2018, amended April 2018). Accessed June 2018: <https://www.aiib.org/en/policies-strategies/strategies/sustainable-energy-asia/index.html>.
AIPP, CARE, CIEL, IWGIA, ITUC, RNF and WEDO, "Delivering on the Paris Promises: Combating Climate Change while Protecting Rights Recommendations for the Negotiations of the Paris Rule Book" (2017): <https://unfccc.int/sites/default/files/903.pdf>; <https://www.deliveringonparis.com/>.
Banktrack, "List of banks that ended direct finance for new coal mines/plants" (1 June 2018): <www.banktrack.org/page/list_of_banks_that_ended_direct_finance_for_new_coal_minesplants>.
Carrington, D., "'Silver bullet' to suck CO2 from air and halt climate change ruled out," The UK Guardian (1 Feb 2018): https://www.theguardian.com/environment/2018/feb/01/silver-bullet-to-suck-co2-from-air-and-halt-climate-change-ruled-out>.
Deshmukh, C. et al., "Carbon dioxide emissions from the flat bottom and shallow Nam Theun 2 Reservoir: drawdown area as a neglected pathway to the atmosphere," Biogeosciences 15, pp. 1775–1794 (2018): <https://doi.org/10.5194/bg-15-1775-2018>.
Estache, A. and Phillipe, C., "The Impact of Private Participation in Infrastructure in developing countries: Taking stock of about 20 years of experience," Universite Libre de Bruxelles (November 2012): <https://dipot.ulb.ac.be/dspace/bitstream/2013/133537/1/2012-043-ESTACHE_PHILIPPE-theimpact.pdf>.
Freedom from Debt Coalition, "Protest vs. ADB's Role in Privatization of Essential Services" (2010) <http://fdc.ph/programs/water/news-on-water/178-protest-vs-adbs-role-in-privatization-of-essential-services>.
Friends of the Earth Asia Pacific, "Stop Coal Financing in the Asia Pacific" (May 2017): <https://www.foei.org/news/asian-development-bank-must-end-50-year-addiction-coal>.
GAIA, "Facts About Waste to Energy Projects" (January 2018): <www.no-burn.org/wp-content/uploads/GAIA-Facts-about-WTE-incinerators-Jan2018-1.pdf>.
Global Infrastructure Facility, "What we do" (2018): <https://www.globalinfrafacility.org/what-we-do>.
Guay, J. and Imhof, A., "The ADB's Dirty Little Coal Secret," Huffington Post (6 December 2017) <https://www.huffingtonpost.com/justin-guay/the-adbs-dirty-little-coa_b_5504315.html>.
Hipple, K. and Sanzillo, T., "IEEFA Update: New Oil Price Volatility Will Help Drive Transition From Fossil Fuels," Institute for Energy Economics and Financial Analysis (16 May 2018): <http://ieefa.org/ieefa-update-new-oil-price-volatility-will-help-drive-transition-from-fossil-fuels/>.
Hurst, D., "Why Japan is Rethinking its Energy Diplomacy," The Diplomat (February 2018): <https://thediplomat.com/2018/02/why-japan-is-rethinking-its-energy-diplomacy>.
Jacobson, M. et al, "100% Clean and Renewable Wind, Water, and Sunlight All-Sector Energy Roadmaps for 139 Countries of the World," Joule 1.0 (pp 108-121), (6 September 2017): <http://dx.doi.org/10.1016/j.joule.2017.07.005>.
International Rivers and Mekong Watch, "ADB Approves Loan for Dam in Laos Despite Key Safeguard Violations: Position Statement" (29 August 2014): <https://www.internationalrivers.org/resources/8397>.
International Rivers, "Asian Development Bank Urged to Shelve Loan For Power Grid in Sarawak" (8 Oct. 2014): <https://www.internationalrivers.org/resources/8418>.
International Rivers, "Lao-Vietnam Power Interconnection Project": <https://www.internationalrivers.org/node/7729>.

International Rivers, "Letter to the ADB Expressing Concern about Sekong and Sekaman Dams" (29 November 2012): <https://www.internationalrivers.org/resources/letter-to-the-adb-expressing-concern-about-sekong-and-sekaman-dams-7751>.

International Rivers, "West Seti Dam, Nepal" (2011): <https://www.internationalrivers.org/campaigns/west-seti-dam-nepal-0>.

Japan Times, "In long-term plan, Japan set to confirm renewables as 'major' energy source" (30 March 2018): <https://www.japantimes.co.jp/news/2018/03/30/business/long-term-plan-japan-set-confirm-renewables-major-energy-source/#.WzDQPCB9g2w>

Market Forces, "Banks with no current record of funding fossil fuels" (2018): <https://www.marketforces.org.au/info/compare-bank-table/>.

Nam Ngiep 1 Power Company and Lao Ministry of Minerals and the Environment, "Nam Ngiep 1 Biodiversity Offset Framework" (March 2015): <http://namngiep1.com/wp-content/uploads/2014/10/Nam-Ngiep-1-Biodiversity-Offset-Framework-UPDATE.pdf>.

NGO Forum of the ADB, "A Visual Testimony of Asian Development Bank's 50 Years of Destruction," 2017.

NGO Forum on the ADB, "Mannar Wind Power Generation Project" (2017): <https://www.forum-adb.org/mannar-wind-power-generation-projec>.

Pacific Island Developing Forum, "High Level Call to Constrain Oil, Gas and Coal Production to Achieve the Paris Goals" (24 November 2017): <http://pacificidf.org/high-level-call-to-constrain-oil-gas-and-coal-production-to-achieve-the-paris-goals>.

Pacific Island Development Forum, "Pacific Climate Treaty" (Revised Version, June 2016) <http://pacificidf.org/wp-content/uploads/2013/07/Pacific-Climate-Treaty.pdf>.

Ra'ad Al Hussein, Z., "Human rights trampled in push to build infrastructure, " Miami Herald Online (7 March 2017): <https://www.miamiherald.com/opinion/op-ed/article136884218.html>.

Reitar, K. and P. Velt, "Indigenous Peoples and Local Communities Are the World's Secret Weapon in Curbing Climate Change," World Resources Institute (November 2016): <http://www.wri.org/blog/2016/11/indigenous-peoples-and-local-communities-are-worlds-secret-weapon-curbing-climate>.

Reuters, "China to invest £292bn in renewable power by 2020," The UK Guardian (5 January 2017): <https://www.theguardian.com/business/2017/jan/05/china-invest-renewable-fuel-2020-energy>.

Stockman, L. et al, "Debunked: The G20 Clean Gas Myth", Oil Change International (11 June 2018): <http://priceofoil.org/2018/06/11/debunked-g20-clean-gas-myth/>.

Times of India, "Budget 2016: Govt Doubles Clean Energy Cess on Coal" (29 February 2016), <https://timesofindia.indiatimes.com/budget-2016/industry/Union-Budget-2016-Govt-doubles-Clean-Energy-Cess-on-coal-to-Rs-400-per-tonne/articleshow/51191619.cms>.

Transnational Institute and Corporate Europe Observatory, "One Treaty to Rule them All" (2018): <https://www.tni.org/en/energy-charter-dirty-secrets>.

UNDP, "Climate Change Adaptation: Bangladesh" (2018): <http://www.adaptation-undp.org/explore/bangladesh>.

UNDP, "Regional Climate Change Impacts Study for the South Caucasus Region" (2011): <http://www.ge.undp.org/content/georgia/en/home/library/environment_energy/climate-change-in-the-south-caucasus--2011.html>.

UNFCCC, "G20 Need to End fossil fuel subsidies by 2020" (25 April 2017): <https://unfccc.int/news/g20-need-to-end-fossil-fuel-subsidies-by-2020>.

UNFCCC, "The Paris Agreement" (2018): <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>.

Vulnerable Twenty Group, "Ministerial Dialogue IV of the Vulnerable Twenty (V20) Group" (23 April 2017): <http://www.v-20.org/v20-ministerial-communique-ministerial-dialogue-iv>.

Vulnerable Twenty Group, "Vulnerable 20" (June 2018): <www.v-20.org>.

Walker, B., "Bhutan's PM defends hydropower dams against blistering report," Third Pole (4 October 2016): <https://www.thethirdpole.net/en/2016/10/04/bhutans-pm-defends-hydropower-dams-against-blistering-report/>.

Williamson, P., "Emissions reduction: Scrutinize CO2 removal methods" Nature: The International Weekly Journal of Science (10 February 2016): <https://www.nature.com/news/emissions-reduction-scrutinize-co2-removal-methods-1.19318>.

World Bank, "Maximising Finance for Development" (2018): <http://www.worldbank.org/en/about/partners/maximizing-finance-for-development#1>.
World Food Programme, "Climate Risks and Food Security in Tajikistan" (April 2017): <https://www.wfp.org/content/2017-climate-risk-and-food-security-tajikistan>

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