ADB AND AIIB
FOSSIL FUEL
AND GAS LEGACY
IN ASIA











ADB and AllB Fossil Fuel and Gas Legacy in Asia

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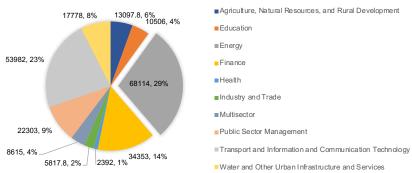
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ADB and AllB Fossil Fuel and Gas Legacy in Asia

ADB's Fossil Fuel Legacy: The Old Policy and the new, has anything changed?

survey of ADB's energy portfolio from 2009 until 2018 reveals that specific to electricity generation, ADB's total "clean" energy investments still almost equal its fossil fuels investments in terms of committed resources and total capacity. When summed up, the energy sector amounts to the top investment sector of the Bank, with the largest committed resources for the past decade, amounting to USD 68,114 Million (Figure 2). This amounts to 29% of all committed resources in the past nine years. This is followed by the Transport and Information and Communication Technology Sector, with over USD 49,068 Million worth of investments.

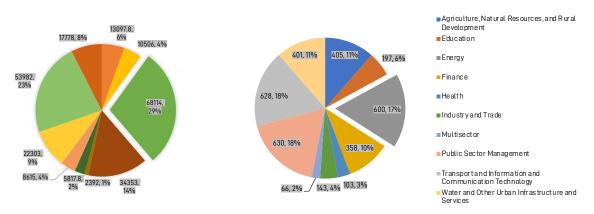
Commitments by sector (in million USD), 2009-2018



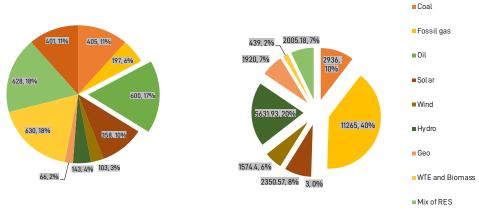
Source: ADB's Annual Reports.

Regarding the number of funded projects by sector, the energy sector has the third most funded projects, next only to Public Sector Management and Transport and Information and Communication Technology Sector. Under its 2009 Energy Policy, ADB consistently financed high-carbon development projects and strategies. The energy sector is its top investment sector in terms of committed resources (approximately USD 68,114 million) and third in the number of funded projects (600 projects). Out of all the energy generation projects, only 19% are fossil fuel projects. However, when measured in terms of installed capacity, fossil fuels comprise 50% of the total installed capacity of all ADB-funded energy generation projects in the past decade.

Commitments by sectors (in million USD) (2009-2018) and Funded projects by sector (2009-2018)



Energy projects by source (2009-2018) and Energy projects by total installed capacity (2009-2018)



Source: ADB Annual Report 2018

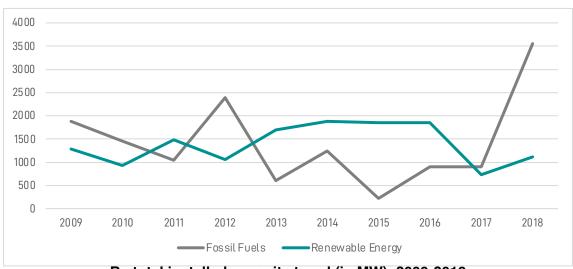
2009 Energy Policy and recent developments

ADB's carbon-intensive energy portfolio is rooted in its "clean" energy agenda being a grave misnomer. Although climate change is considered a vital policy issue, the Bank admits that not all of its clean energy investments are climate investments. Without a strict criterion for "clean" energy and a firm exclusion for the financing of coal projects, the 2009 Energy Policy enabled the Bank to make dirty commitments, providing a crutch for the next generation of advanced coal plants.

Among the many justifications for carbon-intensive projects under the 2009 Energy Policy were following:

- Energy efficiency, which includes improvements in fossil fuel-based power plants such as Circulating Fluidized Bed (CFB), flue gas desulfurization (FGD), Integrated Gasification Combined Cycle (IGCC), High-Efficiency, Low-Emission (HELE) or Supercritical and Ultra-supercritical Technology, Coal-to-Liquid (CTL), and Combined Heat and Power (CHP).
- The need for reliable and affordable energy, supposedly supplied by coal power plants, at least cost for baseload demand.
- ▶ Commercialization of the coal sector to ensure that coal plants have enough supply of coal for captive use.
- ▶ Funding marginal and already proven oil fields should the fields turn out to be commercial eventually.
- Maximizing access to energy for all is an all-encompassing justification for financing fossil fuels.

Energy Generation Projects

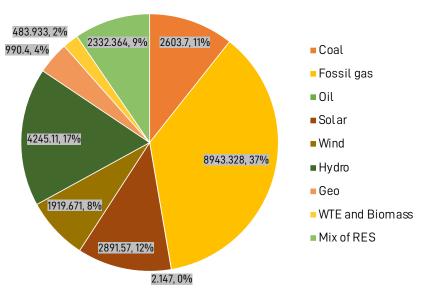


By total installed capacity trend (in MW), 2009-2018

Source: ADB, Projects, https://www.adb.org/projects

When the total installed capacity trend is viewed in terms of fossil fuels vis-à-vis renewable energy, it shows that the ADB has not scaled up efforts in increasing renewable energy capacity in the region towards the end of the decade. In fulfilling its clean energy agenda, the Bank has set investment targets that have not overtaken its investments in fossil fuel projects. Fossil fuel investments have consistently increased between 2015-1018, much larger than renewable energy projects in scale—from 225MW in 2015, 900MW in 2016 and 2017, and 3550MW in 2018.

Committed resources for energy generation projects (in million USD) by source, 2009-2018

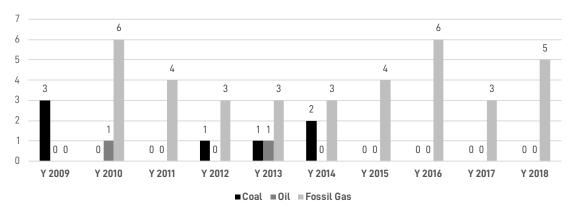


Source: ADB, Projects, https://www.adb.org/projects

A review of the Bank's committed resources to energy generation projects reveals the same. Although the Bank has taken pride in consistently meeting its clean energy investment targets, its investments in fossil fuels are meeting the same targets. Under the 2009 Energy Policy, ADB committed to supporting the financing of fossil gas-based power plants because of their environmental benefit without imposing restrictions or a timeline for phasing out fossil gas investments. Reviewing the Bank's power generation projects, the ADB has invested more in fossil gas than coal and oil projects.

Fossil gas, coal, and oil generation projects funding trend (2009-2018)





In the context of the climate emergency, the IADB mantra is - that fossil gas is the preferred alternative for coal and oil since it is the "cleanest" among fossil fuels and can serve baseload demand. ADB promotes the fallacy that gas and LNG is a transition or bridge fuels that will assist in meeting rising energy demand during the low-carbon transition. The recent gas and LNG importation crisis associated with Russia/Ukraine War

has shown how importation-based gas and LNG financing has crippled economies such as Sri Lanka, Bangladesh, Philippines, and Pakistan, and many more soon to follow in the region. According to the International Renewable Energy Agency's Renewable Power Generation Costs Report, renewable energy technologies are already cost-competitive with fossil gas. At this juncture, ADB must focus its financial flows on expediting renewable energy development towards long-term climate solutions.

ADB's New Energy Policy 2021: Has anything changed?

In October 2021, ADB introduced a new Energy Policy to guide its investments in the sector. After years of pressure leveraged by climate, environmental and social justice, and labor rights advocates, the Bank finally put into writing a commitment to not finance more coal power projects. The revised policy retains provisions for gas and oil financing, including LNG, cross-border pipelines, co-fired facilities, and diesel-powered projects. If 'Paris-alignment' is among the goals of the ADB, then first and foremost, a priority should be to support member countries in averting carbon lock-in and keeping fossil gas in the ground. However, the policy did not include proactive language to restrict ongoing investments in coal projects, nor did it commit to supporting a just transition and coal phase-out in communities where the ADB has financed coal in the past.



The ADB's framing of the role of gas in the new 2021 policy reiterates the obsolete assumption that it can continue to function as a transition fuel despite the "deep decarbonization" required by the Paris Agreement and the urgent 'code red' conclusions of the most recent IPCC Assessment Report (AR 6). This approach to fossil gas is neither scientifically nor economically tenable nor credible for the ADB to suggest emissions can be offset via risky, vastly expensive carbon capture schemes. Cleaner, cheaper power options are available at a viable cost and scale for regional deployment. In light of the climate crisis, the Forum takes the position that locking member countries into reliance

on new fossil fuel gas and LNG infrastructure, subject to volatile international markets, is no less than environmentally, socially, and economically unacceptable and unjust, severely lacking in foresight or acknowledgment of the climate imperatives with which we are faced.

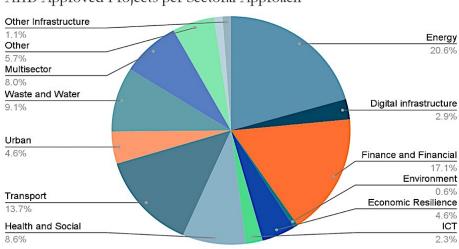
AllB's Fossil Fuel Legacy

In January 2016, the Asian Infrastructure Investment Bank (AIIB or the Bank) began operations as a bank offering financial support for constructing infrastructure in developing countries in the Asia-Pacific region. AIIB's thrust to align itself with three core values, encapsulated in its branding to be a "Lean, Clean, and Green" Bank, is laudable. It is lean because it is composed of an effective and focused team, clean because it has zero tolerance for corruption, and green because it prioritizes sustainable and green investments. But is it green?

AllBs Growing preference for fossil fuels

AIIB's energy investments consist of a diverse range of projects. AIIB funds energy-related adaptation projects, energy efficiency investments, power transmission and distribution, oil and natural gas processing, transportation and distribution, and renewable energy investments.

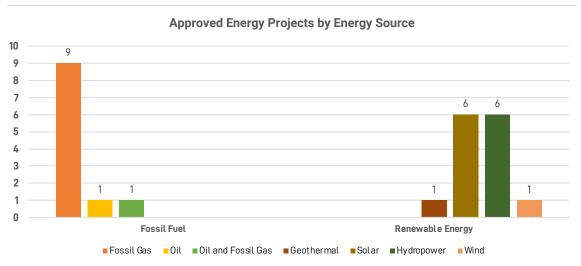
Approved Projects per Sectoral Approach January 2016 – March 2022



AIIB Approved Projects per Sectoral Approach

Of the 36 energy projects approved by the AIIB from 2016 to March 2022, 15 are nonfossil fuel related infrastructure projects, while 11 are are fossil fuel reliant. The Bank invested in supporting infrastructure for oil and gas plants and exportation and fossil gas-fired generation projects. Regarding generation mix, AIIB's fossil gas generation accounts for 1 945 MW. An example of this is reflected in the Bank's financing of the 220 MW Bangladesh Bhola oil and gas generation plant in Bangladesh for \$60 million, the 225 MW Myingyan natural gas power plant project in Myanmar for \$20 million, and the 1500MW Sirdarya 1,500MW CCGT Power Project for \$100. The rest of AIIB's generation energy mix comprises 97.6 MW of geothermal, 1,876 MW of solar, 6,461 MW of hydropower, and 100MW of wind.

Table 1. Approved Energy Projects by Energy Source, January 2016 – March 2022



The Bank considers gas-fired power generation an important tool in assisting a country's transition to sustainable, low-carbon energy and internationally agreed targets.

This shows that the AIIB will "consider development, rehabilitation and upgrading of natural gas transportation (including storage) and distribution networks, and control of gas leakage, to foster greater use of gas during the transition to a less carbon-intensive energy mix/power sector."





Fossil gas will thwart Paris alignment goals

Fossil gas emits carbon dioxide as well as methane, both potent greenhouse gases. Adding to this are the emissions associated with the transport of Liquified Natural Gas (LNG). Additionally, carbon dioxide (CO₂) emissions from the oil, gas, and coal in already operating or under-construction fields and mines globally would push the world far beyond 1.5 degrees Celsius (°C) of warming and would exhaust a 2°C carbon budget. ²

Fossil gas distracts from renewable energy (RE) investments

The dramatic and on-going cost declines for wind and solar is already disrupting the business model for gas in the power sector.³ In fact, the average global unsubsidized LCOE for utility-scale solar and wind has dropped 90% and 72%, respectively, since 2009.⁴ As a result, wind and solar technology are not only cleaner but also more cost-effective choices than gas for replacing coal-fired power.

Fossil gas is not ideal for transition. Like coal, gas-fired power plants and infrastructure needed for its transport and transmission require decades-long contracts involving large, upfront multibillion-dollar investments.⁵ And because the controlling motive for these investments are decades-worth of revenue for contractors and developers, they would also require the creation of contracts typically covering two to three decades, absent any transition policies or clear exit path for fossil gas in the country.

Thus, the development of gas plants and related infrastructure would mean locking in emissions from gas for many decades to come. The following sections of this paper will look at the ADB and AIIB fossil fuel portfolio from a country perspective and expose the dirty carbon footprints of both banks operating in the region.

FOSSIL GAS ADDICTION OF ADB & AIIB IN BANGLADESH: A TALE OF DEBT, EMISSION, STRANDED ASSETS, AND ECONOMIC BURDEN

Since the 1970s, the Asian Development Bank (ADB) has played a significant role in the development of Bangladesh's energy plans and policies. However, rather than supporting the development of renewable energy facilities, this assistance has directly bolstered the reliance of the country on domestic fossil gas, as well as encouraged dependency on imported liquid petroleum.



Since 2010, ADB has financed USD 1,197.55 million for installing new gas power plants and USD 367 million for gas transmission and distribution.



Since 2016, AIIB (established in Dec. 2015) has provided loans totaling USD 170 million for installing gas power plants and USD 60 million for gas transmission and distribution in 2016.



Since the adoption of the Paris Climate Accord in December 2016, ADB and AllB together supported four major gas power plants in Bangladesh with sovereign and non-sovereign loans totaling USD 870 million, majority (¾) of which rely on imported Liquefied Natural Gas (LNG).



225 MW Bhola Dual-Fuel Power Plant

LOAN AMOUNT

In 2018, AIIB approved a <u>USD 60 million non-sovereign loan</u> for building the 225 MW Bhola Power Plant, a domestic fossil gas and high-speed diesel-fired combined cycle power plant. Other financiers involved:

- Infrastructure Development Company Limited (USD 60 million)
- Islamic Development Bank (60 million loan)

SHIFTS IN CORPORATE AND FINANCIAL ACTORS

In 2022, SP Infra sold 49% equity of NBBL to <u>Bridgin Power</u> and paid back AIIB's Ioan. The World Bank Group's <u>Multilateral Investment Guarantee Agency</u> (MIGA) issued guarantees totalling USD 407 million to cover this acquisition and refinancing and Ioans made by an international lending consortium (Bank of China Limited, DBS Bank Limited, ING Bank, Mizuho Bank Limited, Sumitomo Mitsui Banking Corporation (SMBC) and Société Générale).

STATUS

Operating

PROJECT SPONSOR

A subsidiary of <u>SP Infra</u>, Nutan Bidyut (Bangladesh) Limited (NBBL), holds a contract to operate the project as an Independent Power Producer for 22 years from commercial operation date (COD).

IMPACTS OF THE PROJECT



In 2019, NBBL bought 5.78 acres of land from local small farmers without paying proper compensation, but was eventually forced to pay the correct amount following one year of sustained outcry by local people.



Subsequently, NBBL again bought 11.645 acres without paying proper compensation and grabbed a further 0.30 acres of land, paying no compensation whatsoever.



NBBL has dumped debris into a small tidal canal beside the power plant, used by local people for bathing and household needs. As the canal no longer has high tide water carrying capacity, monsoon rains now inundate nearby betel leaf farms, causing people to lose income from ruined crops.

Estimated emissions: 783.29 thousand tonnes of CO2e annually; at least 17.23 million tonnes of CO2e in its lifetime. If priced at USD 25 per ton, project sponsors would owe USD 19.58 million per year.

The Government of Bangladesh paid USD 33.93 million in FY 2021-22 as the capacity charge. If continued for the 22-year contract, the government would pay an estimated USD 750 million to the project sponsors.



800 MW Rupsha LNG Power Plant

LOCATION

Along the Bhairab River, a habitat for the globallyendangered Ganges Dolphin (Platanista gangetica) and the source of livelihood for 1350 local families living in the area (near and around Khulna City) who depend upon fishing there.

LOAN AMOUNT

A loan of USD 500.00 million from the ADB was approved in 2018 to build the 880 MW Rupsha LNG Power Plant. Other financiers include the Islamic Development Bank (loan of USD 300.00 million), and Japan's Fund for Prosperous and Resilient Asia and the Pacific (grant of USD 1.50

STATUS Not yet operational. COD proposed for September 2024

PROJECT SPONSOR

Bangladesh's state-owned North-West Power Generation Company Ltd. (under the Bangladesh Power Development Board) holds a contract for operating the project for 22 years after the Commercial Operation Date (COD).

IMPACTS OF THE PROJECT

In 2022, SP Infra sold 49% equity of NBBL to Bridgin Power and paid back AllB's loan. The World Bank Group's Multilateral Investment Guarantee Agency (MIGA) issued guarantees totalling USD 407 million to cover this acquisition and refinancing and loans made by an international lending consortium (Bank of China Limited, DBS Bank Limited, ING Bank, Mizuho Bank Limited, Sumitomo Mitsui Banking Corporation (SMBC) and Société Générale).

UNCERTAIN SOURCE OF FUEL

Rupsha LNG Power Plant was originally planned to run on imported liquefied natural gas (LNG), sourced from the Maheshkhali LNG terminal, the (now canceled) Payra LNG Terminal, or the Indo-Bangla LNG Pipeline. However:

- there is no confirmed source of LNG
- if construction for any gas pipeline begins now, supplies of gas will only be possible by the end of 2025 (i.e. one year after the proposed COD).
- in the interim, the power plant may be run using expensive High-speed Diesel (HSD). Alternatively, it may remain idle as another stranded asset, in which case the government will be left paying additional capacity charges of USD 183.15 million annually for the power plant.

MOVING FORWARD

ADB and AllB must:



Suspend destructive fossil fuel-based projects in Bangladesh and finance for communitybased distributed energy so that the country can achieve 100% renewable energy by 2050 in line with the Paris Agreement;



Ensure proper compensation for the affected communities to continue their traditional livelihoods and enjoy the full potential of economic development;



Impose carbon prices on emissions according to emerging global standards that take into account mortality costs, paying the amount to the communities as compensation for the loss of their health, livelihood and natural resources; and



Translate all project documents in locally understandable languages and ensure proper dissemination of the information in the communities prior to approval.





ADB provided both private sector and public sector loans to fossil gas power projects and LNG related infrastructure as well as technical assistance.

Project 49222-001: Tangguh Liquefied Natural Gas Expansion Project

In 2016, the ADB approved a loan of US\$400 million for the development of the Tangguh Liquefied Natural Gas Expansion Project. Project sponsors are a consortium of companies, including oil and gas majors BP and CNOOC along with Japan Oil Gas and Metals National Corporation (JOGMEC), JX Nippon Oil & Gas Exploration Corporation, Mitsubishi, Sumitomo, Mitsui and Sojitz Corporation.

The ADB financing for the Tangguh expansion project is supporting the addition of a third LNG 'train', increasing the capacity of the fossil gas complex for extracting gas, processing and converting it into LNG by 3.8 million tonnes per year. ADB finances are also implicated in associated onshore and offshore production facilities and supporting infrastructure.

Construction is ongoing, including the development of 13 new production wells, two new offshore production platforms, new subsea pipelines, as well as infrastructure for loading incoming ship tankers. Existing onshore processing facilities (Trains 1 and 2) were developed with financial backing from the ADB between 2006-2010. From the onshore gas facility, shipping tankers are used to supply LNG from the plant to Indonesia and elsewhere in Asia. Once operational, the Tangguh Expansion Project is expected to sell

75% of the LNG generated by the new LNG train to PT. PLN; Japan's Kansai Electric Power Company based in Japan will purchase one million tonnes of LNG per year.

The Tangguh facilities are reported to have had severe impacts on local marine ecosystems and has forcibly dispossessed Simuri Peoples' communities through acquisition of land spanning nearly 3,300 hectares of ancestral territories as well as affected the livelihoods of those in host communities of Onar and Saengga Peoples. These communities all also lost access to fishing areas due to restrictions around the LNG plant, subsea pipelines and offshore platforms.

The ADB has accordingly listed the project as high risk (safeguards category A for impacts on the environment and Indigenous Peoples). Significantly, despite the disputed status of West Papua, and the ongoing struggles for Papuan independence, the ADB does not currently consider this area as a conflict affected area, instead evidently moving ahead with development without any heightened due diligence or the sensitivity required in this context.

Project 51112-001: Jawa-1 Liquefied Natural Gas-to-Power Project

In 2018, ADB approved loans worth 305 million to the private sector project consortium "PT Jawa Satu Power" (Marubeni, PT Pertamina and Sojitz Corporation) for the construction, building and maintenance of the 1760MW Jawa-1 Liquefied Natural Gas-to-Power Project in West Java.

Project components include the development of a Combined Cycle Gas Turbine (CCGT) Power Plant, a Liquefied Natural Gas (LNG) Floating Storage and Regasification Unit (FSRU) and a 500kV power transmission line and Substation. It is the first Indonesian gas power project to rely on LNG and the largest CCGT project in the country. The LNG is expected to be primarily sourced from the Tangguh facility off the coast of West Papua. Environmental risks have been identified as Category A under ADB safeguards and involuntary resettlement as Category B.

Project sponsors did not identify any impacts to surrounding Indigenous Peoples communities. However, over 275 households reliant on fishing were identified as directly affected.

Land acquisition negotiations involved over 130 landowners and 27 landusers as the project is located directly in the midst of fields and adjacent to a residential area. Twenty of the affected households are identified (by the project proponents) as 'vulnerable'.

The transmission line development is expected to affect over 700 households, crossing over land used for paddy cultivation, residential purposes, livestock grazing, fish farming and sites of religious/cultural significance. Other associated facilities (onshore pipeline, access road) are also expected to impact local landowners/users.

The power project is reported to be starting commercial operations this year (2022), however, it is not clear what steps have been taken to prepare for urgently responding to incidents of effluent leaks, spills or explosions if they occur in the future.

Public consultations are claimed by PT Jawa Satu to have taken place in February 2017

to discuss the project's likely impacts, the environmental and social mitigation measures, including on local fisherfolk. However, little information is available on how/if alternative power options were explored, let alone whether local community inputs were sought at such initial planning stages.

Project 50182-001: Riau Natural Gas Power Project

The 275MW Riau Natural Gas Power Project is located in the Tenayan Industrial Zone of Pekanbaru City in Riau, on the eastern part of Sumatra Island. In 2019, ADB provided a total of US\$ 222 million in private sector loans to support the construction, operation and maintenance of this combined gas turbine power project, and associated 40 km gas pipeline, transmission lines as well as other facilities. While \$90 million was provided directly to the IPP company consortium, Medoc Ratch Power, US\$82 million was provided as partial risk guarantees to MUFG and SMBC and USD 77.9 million was provided for capital guarantees. In addition, the World Bank's IFC contributed a loan of US\$50 million. The project became operational in February 2022.

As the ADB considers that no households were directly displaced by the project infrastructure, it is listed as a category B project under ADB safeguards for involuntary resettlement. Similarly, it is listed as a category C for safeguards related to Indigenous Peoples, as no populations were identified by the Medco Ratch Power as belonging to such groups. Nevertheless, nearly fifty households were recorded by the company to be affected by loss of access to land/income generating activities due to construction. However, due to the risks it poses to the surrounding ecosystems, for environmental safeguards, ADB has listed it as a category A project.

In relation to technical assistance grants, including Project 48282-001(Technical Assistance for Carbon Capture and Storage) and Project 47119-001 (Planning a Pilot Carbon Capture and Storage Activity), the ADB has supported plans for piloting, knowledge development and regulatory frameworks related to carbon capture technologies with the aim to make the technology commercially viable "as a promising option for addressing greenhouse gas issues from increasing use of fossil fuels" (see Project 48282-001). This normative framing means that it is assumed fossil fuel extraction and burning can continue to be ramped up, but simply offset by the development of large scale, risky and unproven infrastructure projects to sequester CO2, rather than ending expansion and planning for closure.

Beyond 2023: ADB and AllB Fossil Gas Investments

Neither the ADB nor the AIIB have yet proposed to build new gas projects in Indonesia as of March 2023.

PAST AND CURRENT ADB & AIIB COMPLICITY IN FOSSIL GAS BUILD-OUT IN INDONESIA (2009-2022)

The Asian Infrastructure Investment Bank (AIIB) has not financed any gas projects in Indonesia. Meanwhile, the Asian Development Bank (ADB) has provided both private and public sector loans to fossil gas power projects and LNG-related infrastructure, as well as technical assistance.



Tangguh LNG Expansion Project

LOCATION





LOAN AMOUNT

Loan of USD 400 million approved in 2016 by ADB to HSBC to finance the expansion of BP's Tangguh LNG terminal for the extraction, processing and conversion of gas into LNG (onshore and offshore facilities).

STATUS

Construction ongoing (drilling 13 new production wells, two new offshore production platforms, new subsea pipelines, as well as infrastructure for loading incoming ship tankers).

PROJECT SPONSORS

















IMPACT OF THE PROJECT



Construction ongoing (drilling 13 new production wells, two new offshore production platforms, new subsea pipelines, as well as infrastructure for loading incoming ship tankers).



Forcibly dispossessed Simuri Peoples' communities through the acquisition of land (approx.3,300 hectares of ancestral territories) without seeking or obtaining their prior, informed consent.



Severe impacts on local marine ecosystems already to date.



Surrounding communities have lost access to fishing areas relied upon for subsistence and income generation (due to restrictions around the LNG plant, subsea pipelines, and offshore platforms).



International and local social movements have raised concerns about the human rights violations associated with the Tangguh project and expansion for over twenty years.



Despite the disputed territorial status of West Papua and the ongoing struggles by the Papuan Peoples for self-determination, ADB does not currently consider this area as a conflict-affected area, proceeding without any heightened due diligence or sensitivity.



Jawa 1 LNG to Power Project

LOCATION



LOAN AMOUNT

A loan of USD 305 million was approved by ADB in 2018 to PT Jawa Satu Power (Marubeni, PT Pertamina and Sojitz Corporation) for the construction and operation of a 1,760 MW Cycle Gas Turbine (CCGT) Power Plant, a Liquefied Natural Gas (LNG) Floating Storage and Regasification Unit (FSRU) and a 500kV power transmission line and substation.

STATUS Operating

IMPACT OF THE PROJECT



Hundreds of households that own and/or use land for paddy cultivation, residential purposes, livestock grazing, and fish farming and that rely upon the coastal areas have been officially identified as directly affected by the development of the facilities.



No estimation of the impacts on surrounding areas has been taken into account in the project documents.



No clear steps to prepare for incidents of effluent leaks, spills, or explosions if they occur in the future.



Little information is available on how/if alternative power options were explored, let alone whether local community inputs were sought at such initial planning stages.



Riau Natural Gas Power Project

LOCATION



LOAN AMOUNT Loan of USD 222 million a subsidiary of Thailand

Loan of USD 222 million approved by the ADB for a subsidiary of Thailand's Ratch Group to support the construction, operation & maintenance of the 275 combined gas turbine power project & associated 40 km gas pipeline, transmission lines as well as other facilities.

STATUS

Operating

IMPACT OF THE PROJECT



50 households directly affected.



No independent cumulative environmental or social impacts appear to have been undertaken despite the location in the midst of an industrial zone, near other power projects.

Through assistance grants, including Project 48282-001 (<u>Promoting Carbon Capture and Storage in the People's Republic of China and Indonesia</u>) and Project 47119-001 (<u>Planning a Pilot Carbon Capture and Storage Activity</u>), the ADB has supported plans for piloting, knowledge development and regulatory frameworks related to carbon capture technologies with the stated intention to make the technology commercially viable "as a promising option for addressing greenhouse gas issues from increasing use of fossil fuels" (see <u>Project 48282-001</u>).



gas projects in Thailand. Although in late 2021, the Bank was initially considering supporting the development of the 1400MW Hin Kong Gas Power Project, it was later withdrawn following a period of intense public outcry. Meanwhile, the ADB has provided support to develop one of the largest gas power project in the country, the Chonburi Natural Gas Power Project, along with other large-scale gas projects since 2009 as well as provided equity investments that were deployed to support gas power project operations. In this way, the ADB has played a significant role in locking the country into a high carbon emitting power system and slowing the pace of the country's shift towards renewable energy.

In October 2018, the ADB approved US \$228 million for a private sector loan to a joint consortium between Thailand's Gulf Energy Development PCL and Japan's Mitsui & Co.for the development of the 2500MW Chonburi Natural Gas Power Project(Project 51051-001). This combined cycle gas turbine project is one of the largest to be ever built in the country, intended to support the expansion of the Eastern Economic Corridor industrial zone. It is listed by the ADB as a safeguard category A in light of its environmental risks but category B for involuntary resettlement since no households directly had to move to make way for the project, but associated facilities required land acquisition from local farming communities. Notably the report written for its initial approval is heavily redacted, leaving few details public about the considerable risks to the local environment and community health as well as any commitments to address such issues.

Between October 2017 and February 2022, a private sector energy investment under the vaguely worded name Cornerstone Investment in Leading Independent Power Producer Project (Project 51273-001) equivalent to over US\$75 million was provided to Gulf Energy Power Company to support the "expansion of power generation in Thailand, especially in servicing industrial consumers". Little information on this investment is available on ADB's website as there are no associated safeguard documents or monitoring reports. Nor are any specific details revealed about how the funds were deployed. As a result, in early 2022, prior to the project being listed as closed on the ADB's website, NGO Forum on ADB sent in a request for information to the ADB's Private Sector Department (PSOD), particularly in light of Strategic Litigation Against Public Participation (SLAPP) suits issued by Gulf against outspoken citizen advocates and rising public concerns about the company's involvement in Mekong mainstream dam infrastructure development and well as a new LNG Terminal in the country. In response to the Forum's inquiries, the ADB PSOD personnel suggested that proceeds from the equity shares were used by Gulf Energy for 3 operational gas power projects in Rayong Province and 1 operational gas project in Ayutthaya, but not in supporting hydropower or LNG infrastructure. Although the ADB PSOD staff suggested that following a review of Gulf's Environmental and Social Monitoring System, they had "cleared it as compliant" with ADB standards, no verifiable information about how due diligence was undertaken to ensure safeguards were not being violated at the specific sites of investment exists in the public domain. Despite this lack of disclosed information, ADB PSOD explained that they remain "unaware of any current material environmental and social issues regarding any Gulf projects currently financed by ADB". However, such a statement on the lack of awareness on the part of staff about problematic consequences connected to their investments provides no actual assurances of safeguard compliance. Nor does it provide any actual information about how/if Bank staff was communicating with surrounding communities on issues of environmental or social concern, or if the channels for engagement were set up to avoid creating risks of reprisals.

Since 2012, the ADB has supporting financing worth US \$185 million to Gulf JP UT Company to build the 1700MW Ayudhaya Natural Gas Power Project (Project 46907-014), a combined cycle gas project designed for baseload power generation. It reached full operational status by 2017. It is categorized as highest risk for environmental safeguards (A), but as it is located inside the Rojana Industrial Park and intended to provide power to the surrounding electronics, car assembly, plastic and packaging facilities, the project itself is not considered as having led to involuntary resettlement. However, associated facilities of pipelines have damaged land and water sources for surrounding households, contaminating the area with bentonite, and as a result, grievances were filed against the company to receive redress, including in court. According to project documents, the company has appealed a court decision ordering clean up, arguing that the contamination has already seeped into the soil and groundwater, and would be impossible to clean up. Due to low offtake of power, according to an ADB project evaluation: "Low dispatch rates over the long-term raise concerns about project sustainability and heighten the risk of tariff renegotiation."

The ADB has provided a loan worth US\$170 million starting in 2011 to Gulf JP Company for the development of the 1,649.6 MW Nong Saeng Natural Gas Power Project (Project 44946-014), a combined cycle gas power project consisting of 2 units of 824.8MW each,

which came online in 2014. Of the total power, 1600MW is supposed to be sold back to the national utility company, the Electricity Generating Authority of Thailand for peaking power purposes. However, it reportedly has maintained a lower than expected output due to low offtake purchases from EGAT, thereby acting as a burden economically, environmentally and on the health and well being of surrounding areas.

Neither the ADB nor AIIB are proposing to build new gas projects in Thailand as of March 2023.



PAST AND CURRENT ADB AND AIIB COMPLICITY IN FOSSIL GAS BUILD-OUT IN THAILAND (2009-2022)

The Asian Infrastructure Investment Bank (AIIB) has not approved financing for any gas projects in Thailand. Although in late 2021, the Bank initially considered supporting the development of the 1400MW Hin Kong Gas Power Project, it was later withdrawn following intense public outcry.

However, the Asian Development Bank (ADB) has played a significant role in locking the country into a high carbon-emitting power system and slowing the pace of the country's shift towards renewable energy, supporting financing for the country's largest fossil gas power projects – a 2.5GW combined cycle gas turbine project in Chonburi – along with other large-scale fossil gas projects since 2009. ADB has also invested equity in power companies specifically allocated to enable the build-out of gas power stations.



Chonburi Natural Gas Power Project

LOCATION



LOAN AMOUNT

Loan of USD228 million approved by the ADB in 2018 to a joint consortium between Thailand's Gulf Energy Development PCL and Japan's Mitsui & Co. to build and operate a 2.5GW combined cycle gas power plant.

STATUS

Operating

IMPACT OF THE PROJECT



Explicitly intended to enable and hasten the expansion of the Eastern Economic Corridor Special Economic Zone, making it difficult for local people to raise questions/concerns without risk of reprisal (due to high level vested interests).



Recognized by ADB as having highly risky environmental implications.



Associated facilities have required land acquisition from local farming communities.

The report written for the initial approval of this project by the ADB's Board of Directors is heavily redacted, leaving little information disclosed about the considerable risks to the local environment and community health or any commitments to address such issues.



Ayudhaya Natural Gas Power Project

LOCATION



LOAN AMOUNT

Loan of USD185 million to Gulf JP UT Company a subsidiary of Gulf Energy), approved in 2012 to build and operate a 1.7GW gas power project.

STATUS

Operating



IMPACT OF THE PROJECT



Associated facilities of pipelines have damaged land and water sources for surrounding households and are reported to have contaminated the surrounding area with bentonite.



Grievances were filed against the company to receive redress, including in court.



Due to low offtake of power, according to an ADB project evaluation: "Low dispatch rates over the long-term raises concerns about project sustainability and heightens the risk of tariff renegotiation."



Nong Saeng Natural Gas Power Project

LOCATION



LOAN AMOUNT

A loan worth USD 170 million to Gulf JP Company (a subsidiary of Gulf Energy) was approved by the ADB in 2011 for the development of a 1,649.6 MW combined cycle gas power project (2 units, each 824.8 MW).



IMPACT OF THE PROJECT



The gas power project has had lower-than-expected output due to low offtake purchases from the Electricity Generating Authority of Thailand (national utility company).



Grievances from surrounding communities have arisen due to impacts of the project's operations on their health and the surrounding environment. However, given the vested interests involved in the project, raising concerns and questions remains highly risky.



Background

DB's 2021 Energy Policy focuses on the Bank's resources where they can make the most significant difference in addressing energy access and security, climate change, and environmental sustainability. The facts and figures from the previous and ongoing programs and projects tell the stories otherwise.

At COP26, Glasgow, ADB President Masatsugu Asakawa launched the Energy Transition Mechanism on November 3, 2021. Indonesia and the Philippines joined as key partners to launch the pilot study for ETM. Japan's Ministry of Finance announced a \$25 million grant, the first seed financing for the ETM program. The Bank has also allocated \$300,000 of grant funds to Pakistan to undertake a pre-feasibility study for the early retirement of coal and fossil fuel plants under the Energy Transition Mechanism.

However, at the same time, the ADB still continues to support fossil fuel related projects and technical assistance, creating dual standards. Here are a few examples showing the banks' failure of the energy efficiency programs on the one hand and the heavy investments in fossil fuels, coal-fired power plants, and fossil gas projects on the other, which contradicts their claims and the recent move of the ETM.

Multi Tranche Financing Facility of ADB

In 2009, the Asian Development Bank (ADB) approved a multi-tranche financing facility (MFF) of 780 USD million for Pakistan's Energy Efficiency Investment Program in response to the government's request to support its energy efficiency program. The program was designed to help achieve Pakistan's energy security with demand and supply balanced in an environmentally sustainable manner. Its intended outcomes were an energy-efficient

and energy-productive Pakistan; a dynamic and integrated policy, an institutional, legal, and regulatory framework for energy efficiency established; and clean technology market transformed.

The Project Completion Report (PCR) rated the program and tranche 1 of MFF less than successful. This validation assesses the program and tranche 1 as less than relevant due to design deficiencies affected by government energy priorities changes. Given the partial achievement of the MFF's and tranche 1's targets, it needed to be more adequate. It was less than efficient due to long delays and economic benefits that were much lower than expected given the unmet outputs and outcomes of tranche 1 and cancellation of tranches 2, 3, and 4 and due to methodological issues in establishing EIRR and not meeting the program's economic benefits. The program and tranche 1 are less than likely sustainable since, despite high projected returns, there is no evidence that the project can continue without donor support. The carbon dioxide emissions rose by 2.7% in absolute terms.

The program ran into significant delays, cancellations, and underutilization of available funds. The targets in the DMF were overly ambitious and could not be achieved with the resources in the MFF. The project governance structure became extremely complex by requiring the government to establish new bodies and hire consultants. ADB fielded 12 missions. This validation assesses ADB's performance as less than satisfactory. The whole program was financially closed in March 2019.

Current ADB Investment in Fossil Fuel (Coal & Gas) Projects

The following list shows ADB and AIIB's ongoing Investments in gas projects in Pakistan. In early November 2021, ADB announced the grant to Pakistan for for an ETM prefeasibility scoping study, while on the other hand, the following data shows the active fossil fuel projects and recent tranches released by the bank. This raises questions about the credibility of the ETM process, when the ADB continues to be involved in the supporting fossil fuel projects in Pakistan, despite pledges and study announcements about supporting the country transition to 'clean energy'. The dual standards may end up being misperceived by people.

S #	Project	Project Details	Financing Details
1.	Gas Storage Development Systems	Project Number: 55170-002 Approval Date: 16-12-2021 Status: Active Project Type / Modality of Assistance: Technical Assistance (TA). (Advisory role on financial structuring and technical modalities, plus assessment studies for identification of storage locations) Location: Nation-wide Closing: 31-12-2023	1). TA 6886-PAK: Gas Storage Development Systems TA Special Fund: USD 6,00,000

2.	Preparing the TAPI Gas Pipeline Project (Phase 1)	Project Number: 52167-002 Approval Date: 18-05-2020 Status: Active Project Type: Technical Assistance (TA) (Plus, the development of energy markets and restructuring of financial modalities.) Location: Pakistan, Afghanistan, and Turkmenistan- Nation-wide Closing: 30-04-2023	TA 9992-REG: TAPI (Phase-1); TA Special Fund: USD 7,50,000
3.	ENGRO Fast- Track LNG Regasification Project	Project Number: 48307-001 Approval: 24-02-2015 Status: Active Project Type: Loan Description: Construction & operation of Fast-Track LNG regasification facility involving 24 km- high pressure gas pipeline, lease of a Floating Storage and Regasification unit, and construction of a jetty and associated facilities. Location: Port QASIM, Karachi	Loan 3247-PAK; Ordinary Capital Resources: USD 30 million.
4.	UCH-II Power Project	Project Number: 43903-014 Approval: 13-12-2010 Status: Active Project Type: Loan Borrower Company: UCH II Power (Private) Limited. Description: Construction, erection and operation of a 404 MW low British Thermal Unit (BTU) combined cycle (gas and coal) power plant adjacent to UCH-I 586 MW power plant (operational since 2010). Location: Dera Murad Jamali, Baluchistan	Loan 2722-001; Ordinary Capital Resources: USD 50 million. Loan 2722-002; Ordinary Capital resources: EUR 37.16 million.
5.	Daharki Power Project	Project Number: 41903-014 Approval: 30-10-2007 Status: Active Project Type: Equity + Guarantee. Borrower Company: DAHARKI Power Holdings Ltd. Description: Commissioning of dual- cycle 175 MW low-BTU gas fired power plant Location: Daharki Sindh	Equity 7265; Ordinary capital resources: USD 2.75 million. Guarantee 7265; Ordinary Capital resources: USD 8.00 million.
6.	Fauji Kabirwala Power Project	Project Number: 27706-014 Approval: 23-04-1996 Status: Active Project Type: Equity Borrower Company: FAUJI KABIRWALA POWER CO LTD. Description: 151 MW gas-fired combined cycle BOO power generation project Location: KABIRWALA, Punjab	Equity 7126; Ordinary Capital Resources: PKR 223.52 million committed

7.	TAPI Gas Pipeline Project Phase 1 Description: The proposed project comprises the procurement, installation and operation of the pipeline and related facilities within Afghanistan and Pakistan. Once operational, it will allow free flow transmission capacity of 33 billion cm/ annum.	Project Number: 52167-001 Approval: Proposed Concept Clearance: 18-05-2020. Status: Proposed Project Type: Grant + Loan + Private Sector Ioan. Borrowers: Afghanistan, India, Pakistan & Turkmenistan. Location: Afghanistan & Pakistan.	TAPI Natural Gas Pipeline Project; Ordinary Capital Resources: USD 500 million. Grant: TAPI Natural Gas Pipeline Project; Asian Development Fund: USD 116 million. Loan: TAPI Natural Gas Pipeline Project; Ordinary Capital Resources: USD 300 million. Loan: TAPI Natural Gas Pipeline Project; Ordinary Capital Resources: USD 116 million
8.	Jamshoro Power Generation Project (JPCL), GENCO -I. Description: Installation of 600 MW super critical coal-fired power plant, enhance the capacity of GENCO holding company limited and Jamshoro Power Company Limited, and ensure the efficient energy mix bypassing expensive HFO	Project Number: 47094-001. Approval: 09-12-2013. Status: Active. Project Type: Loan Location: Jamshoro, Sindh. Closing: 30-06-2023 (Loan 3092-window window). 30-06-2027 (Loan 3091- window)	Total financing by ADB: USD 900 million. Running Instruments: 1. Loan 3090-PAK; Ordinary capital resources: USD 658 million. 2. Loan 3091-PAK; ordinary capital resources: USD 3.30 million. 3. Loan 3092-PAK; Asian Development Fund: USD 30 million

From the above-enlisted projects, the following a few selected ADB-funded projects profiles highlight the detailed key features of the projects as well as the environmental, social, economic, and energy justice issues, which are less likely to be highlighted by the ADB during the project life cycle.

Daharki Gas Fired Power Project

The project was approved on October 30, 2007, but the first disbursement was made on February 03, 2009. Under the financial instrument approved, ADB would have to give two tranches worth 'USD 2,75 million' as equity financing and 'USD 8.00 million' as a sovereign guarantee, respectively. The borrower company is 'DAHARKI Power HOLDINGS Limited,' which was later renamed to Foundation Power Company DAHARKI Limited (FPCDL). The project involves commissioning a dual-cycle 175 MW low-BTU gas-fired power plant in DAHARKI, Sindh, and the use of the indigenous gas supply from the nearby Qadirpur gas field.

The government of Pakistan had already approved the project under under a build-own-operate structure under the Power Policy, 2002. The project became operational on May 16, 2011, and would be retired after 25 years. The last Project data sheet (PDS) was updated on July 25, 2022, making it evident that future disbursements from ADB for ensuring feasible operations of this project would be in the pipeline.

Social and Environment Impacts: The environmental issues associated with the project include air emissions, water supply issues due to high consumption requirements in the surroundings, wastewater/sewage, and land usage due to infrastructure development. Besides this project, the region has several other thermal power plants and industries with higher carbon footprints, like Engro Fertilizers, FFC, etc. The nearby localities in Daharki town are known for sugarcane production, which is also a water-intensive crop, and its productivity is being impacted due to the extensive water usage by the project. Moreover, wastewater is a significant issue affecting nearby communities' livelihoods and commercial lifestyles. Similarly, direct air emissions in this area have resulted in a surge in air pollution-borne diseases in DAHARKI and other regions of Sindh with higher penetration of fossil fuel-based power plants and industries.

Jamshoro Power Project

During the 1990s, Pakistan faced a crisis of liquidity crunch and an energy shortfall. At that time, Pakistan's energy sector was mostly dependent on hydropower, which was also facing supply shortages. At that time, the disbundling of WAPDA took place, which paved the way for incorporating government-owned and private-sector investments in thermal power plants. In 1998, Jamshoro Power Company Limited was registered under the companies' ordinance 1984 as WAPDA owned entity to foresee the construction phase and operations of Jamshoro Power Project / GENCO-I. The GENCO-I became operational after gaining a license from NEPRA on July 01, 2002. At that time, 880 MW of power was generated using RFO as fuel in Jamshoro, 100 MW using Natural Gas, and 44 MW using residual Fuel Oil (RF0) was being developed in Kotri. However, the decrease in natural gas reserves and other economic constraints in importing furnace oil strained



the country's overall economy while the energy demand kept increasing. Therefore, ADB approved the financing for constructing and operating one 660 MW of coal-fired power plant out of the proposed two 660 MW power plants in Jamshoro to overcome the energy crisis and meet the future energy demand. The funding started in 2014 and will continue to be disbursed until 2027.

Financing Profile: ADB pledged to finance USD 900 million in 2014. Under the agreement signed in 2014, ADB would finance USD 900 million, Islamic Development Bank would provide USD 220 million, whereas USD 380 million would be GOP's contribution to meet the overall financing of USD 1.5 billion. Over USD 700 million had already been financed during the construction phase, while the modalities for three financing windows would remain open. Two financing instruments titled 'Loan 3090' and 'Loan 3092' will be closed by June 2023, and one financing instrument titled 'Loan 3091' will be continued until June 2027.

Impacts of the Project: The share of imported coal and local lignite coal is the ratio of 80:20 in this power plant. The rationale behind ADB's financing for the coal power project was to overcome reliance on imported furnace oil, making Pakistan's energy sector vulnerable to global supply shocks. However, in the contemporary period, international coal prices have also increased by 5 to 10 times, which has caused difficulties for Pakistan to procure imported coal owing to depleting foreign exchange reserves. This resulted in a shortfall of electricity and consequent load shedding during the peak summer months of 2022. Hence, the vulnerability and dependence on imported fuels remain.

Moreover, digging local coal reserves to use dirty lignite for power generation has come at a huge social and environmental cost for Pakistan. The people of Thar and other areas are at the forefront of facing land degradation, waste management, polluting water bodies in the already water-stressed region, and air pollution-borne diseases like TB. Moreover, the recent devastations in Sindh province due to climate-induced disasters have already made it clear that the vulnerability of Pakistan in specific, and the people of Sindh in general, to climate change, has been exacerbated by poor policy decisions of global financing institutions in funding fossil fuel power plants.

CSO's Perspective: On one side, ADB is financing 'ETM' in Pakistan, while funding of coal and other fossil fuel power plants is still unabated. It is time that ADB started rolling back its commitments to finance fossil fuel industries and retiring. The CSOs strongly recommended opting for the ADB-funded fossil fuel projects as a pilot for the ETM. In addition, if the ETM moves forward in Pakistan, many CSOs suggest ADB-funded fossil fuel projects should be the first pilots for retirement.

Engro LNG Regasification Project

Since the discovery of gas fields in southern regions of the country, industrial and domestic consumers' energy demands were mainly met by using indigenous natural gas reserves. However, with the depletion of gas reserves and continuous increase in energy demand over time owing to increasing population and industrial growth, policymakers decided to import LNG from Qatar and other Middle Eastern countries. To make the imported LNG usable at the national level, Pakistan LNG Limited (PLL) started constructing LNG terminals having the Re-gasification infrastructure. Further, to increase the investment

portfolio of the LNG sector, public-private investments and private investments started pouring in. Pakistan's first LNG plant was awarded to Engro Company by the Prime Minister. In 2015, the permit for Port Qasim, Karachi. Subsequently, ADB entered into an agreement with Engro Elengy, and approved financing as a loan worth \$30 million for RLNG Project on February 24, 2015.

Project Profile: The project has the capacity for regasification of up to a peak of 690 million standard cubic feet per day or a terminal capacity of 4.5 million tons of LNG per year. The company claims that the RLNG provided through the terminal has reduced the cost of electricity generation by 40%. With the help of ADB financing, the company acquired a Floating Storage Regasification Unit (FSRU) vessel, the project's main component. The facility has an LNG jetty, including a 6 km high-pressure gas pipeline. The LNG supply from the international market is directed to the FSRU vessel, which is moored to the LNG Jetty and connected to its pipeline. The pipeline is connected to the grid of SSGCL (Sui Southern Gas Company Limited). The rationale behind ADB's financing was to ensure the country's energy security using a diversified energy mix. However, in the contemporary period, the spot market of LNG have skyrocketed in the international market due to disruptions created by the Russia-Ukraine war, making Pakistan more vulnerable and energy insecure. The financing for this facility is continuing, and the PDS was updated on February 18, 2022, making it evident that the funding will be continued immediately. The revised date for closing the financing window still needs to be issued.

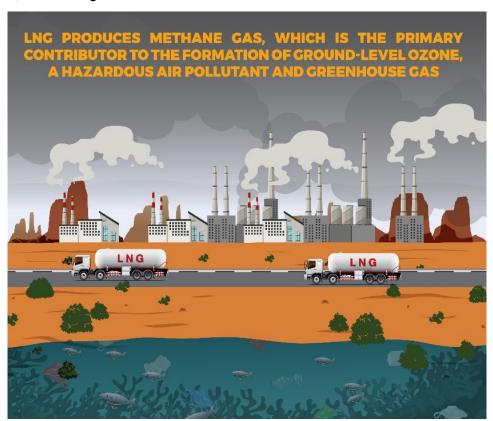
Environmental Impacts: Experts worldwide strongly reject that LNG is a clean fuel. Extracting gas, processing, storing, transporting, and reusing it in its original form is much more dangerous than one might think. The main component of LNG is methane gas, which is 80% more hazardous than coal-fired carbon dioxide gas. Methane gas is released throughout the LNG supply chain, which is insoluble. According to reports, methane gas emissions increased by 30% between 2000 and 2019. When the gas freezes, it emits methane gas, significantly damaging the ozone layer. In addition, additional energy is required to transport LNG from one country to another and convert it into gas.



Social Impacts: The following are quotes recorded during a focus group discussion conducted in the area by Indus Consortium:

"After the Engro LNG and Lucky Coal plants, fish production has dropped drastically. The companies, especially the Port Qasim Authority, have almost wiped out the mangrove forests. The government has set up a factory zone near the village, but the smoke from the factories has polluted the environment a lot. All these factories dump their waste into the sea. The LNG waste, known as sludge, is thrown over the mangroves by the Engro. The cruelty is that the filth of the cattle farms established in the nearby buffalo colony and the chemical waste of the textile industry of Qaidabad are also dumped here as if it was not our home but a garbage dump." --H. S., resident, Rehri Village

"Since the arrival of the LNG ships, we have faced many difficulties. The roads and trails that our ancestors used to travel and fish on have banned us all. Because of this, the growth of fish has also decreased. Now we have to make a big round trip and then go hunting, for which our oil is costly. Due to the filth, the wood of boats rots quickly. Now the same boat called a hoda barely sustains for six to seven years compared to the boat's minimum two decades life span. These companies neither gave us any employment nor any development in the area. The most disturbing matter is that the security guards of these companies and the security guards of the Navy insult us. If in Peshawar (located in another province of Khyber Pakhtunkhwa) bomb blasts, false FIRs are filed against us, and they lock us up in false cases. We who have lived here since our ancestors and with our children consider them terrorists. Sometimes they stop us, disrespect us a lot, and ask us to bake bread and cook the meal for them. If by any chance one does not have a real ID card, the shirt is taken off, and the bare back is laid flat on the snow."--S.S., resident, Rehri Village."





DOES ASIAN DEVELOPMENT BANK PLAY FOUL WITH FOSSILS IN PAKISTAN?

In early November 2021, the Asian Development Bank (ADB) announced it would provide a technical assistance grant for scoping studies on deploying an Energy Transition Mechanism (ETM) scheme in Pakistan to support the decommissioning of 'high carbon power plants.' Yet the ADB still continues to provide loans and financing packages to build out fossil fuel-dependent infrastructure in the country.



Daharki Power Project

LOCATION



LOAN AMOUNT

In 2007, ADB approved an equity investment in Daharki Power Holdings Limited (DPHL) of up to USD2.75 million, and a guarantee in the principal amount of up to USD44 million plus interest for the lenders to DPHL for the planning and construction of the 186MW Dharaki Gas Fired Project.

STATUS Operating

IMPACT OF THE PROJECT

Despite the ADB's extended annual review of the project in 2013 rating the project as satisfactory in terms of environmental, social, health, and safety issues, local people have reported:



A surge in air pollution-borne diseases surrounding the project location as well as nearby regions of Sindh.



Water supply shortages due to the high consumption requirements of this project, wastewater/sewage contamination, and land usage due to infrastructure development associated with the project.



Adverse impacts for those who depend on growing sugar cane and other crops for income due to extensive water usage by the power project and the consequential lowering of the groundwater table.



Jamshoro Power Generation Project

LOCATION



LOAN AMOUNT

A loan of USD 900 million was approved in 2014 by the ADB to finance the development of a 660 MW supercritical coal power-fired unit, provide operation and maintenance support, install emission control devices for the existing units and support remediation plans, provide management training for project proponent personnel, and support a local education program on coal-fired plant operation.

The project is also intended to support the Government of Pakistan in planning an additional 600-MW unit at the same site.

FAST FACTS



The site is expected to rely on a mix of local reserves of lignite and imported subbituminous coal for power generation, both of which place an onerous burden on the environment, human health, and the national economy.



The additional units can be expected to compound the toxic emissions, ash, and effluent (leading to further contamination of the air, surrounding land, and waterways), create an accumulation of hazardous waste (from the ash), exacerbate the chronic respiratory illnesses faced by local people, and lock-in further dependency on the coal sector, rather than supporting its phase out.



Engro LNG Regasification Project

LOCATION



LOAN AMOUNT

A project loan of USD30 million was approved by the ADB in 2015 to Engro Elengy Terminal Private Limited (EETPL) to finance the construction and operation of the Engro liquefied natural gas (LNG) import terminal.

Despite the ADB's extended annual review of the project in 2019 claiming it "demonstrated environmental sustainability" and has a satisfactory performance record in relation to environmental, health and safety standards:



ADB fails to consider the reality that methane gas emissions are 80% more potent as a GHG than CO2 and is considered to have significantly damaging impacts on the ozone layer.



Residents in the nearby villages of Rehri and Lath Basti have reported that fish catches have dropped drastically since the project was built.



LNG waste materials (known as 'sludge') are reportedly transported and dumped inside sensitive mangrove forests by Engro staff.



Roads and trails once accessible to local people are now blocked due to the land acquisition by the Engro.



Private security forces hired by Engro reportedly threaten and harass local community members.





The mad dash for fossil gas in Southeast Asia

In June 2022, the Center for Energy, Ecology and Development published a report entitled Financing a Fossil Future: Tracing the Money Pipeline of Fossil Gas in Southeast Asia⁶, which revealed that Southeast Asia—coal's last bastion—is swiftly turning into Asia's fossil gas and liquefied natural gas (LNG) hub. Governments and power companies are promoting massive fossil gas plans totalling 138 GW of new fossil gas capacity and 118 LNG terminals being proposed or already being built.

The region is already eclipsing East Asia's fossil gas and LNG plans. In terms of fossil gas power plant projects in the pre-construction stage, Southeast Asian projects have a combined capacity of 117 GW compared to East Asia's 77 GW. Southeast Asia's total estimated capital cost of pre-construction and in-construction projects will reach up to \$102 billion as of March 31, 2022, which is also far higher than East Asia's estimated capital cost of \$84 billion.

The sheer amount of fossil gas and LNG projects in the pipeline alone exposes the falsity of the proposition that fossil gas will only be used as bridge fuel in the transition to a sustainably powered future. The mad dash for fossil gas and LNG is in reality posing a threat of a massive detour in the transition, which is a major challenge for the climate vulnerable region and in light of the very small window in avoiding runaway climate change in this decade.

ADB's exposure to fossil gas in the Philippines

Despite pledging support Paris-alignment approaches, the Asian Development Bank (ADB) is one of the notable public financial institutions that supports fossil gas financing in the region.

In the Philippines, ADB lists only one fossil gas project in its Energy Technical Assistance Portfolio Approved in 2009-2019:⁷

Technical Assistance (TA) No.	Title	Туре	TA Approval Date	Completion or Expected Completion Date	TA Amount (USD)	Status
9523	The Philippine National Oil Company Batangas Liquefied Natural Gas	Project Preparatory TA	11 May 18	02 Feb 21	2,000,000	Active

According to ADB's press release on the project dated 30 January 2018,8 the proponent of the project is the Philippine National Oil Company's (PNOC). PNOC is a government owned and controlled corporation created in 1973, in response to the oil crisis at the time, purportedly to ensure a stable supply of petroleum products to sustain the growth of the economy and the national well-being. Currently, it serves as the key institution in the exploration, development and utilization of indigenous oil and non-oil energy sources.9

The proposed project for which ADB's assistance was secured consists of a regasification terminal, storage, power plant, and other related infrastructure sited in Mabini, Batangas, 10 which is estimated to cost up to \$2 billion. 11 ADB described PNOC's project as the Philippines' first LNG hub project in Batangas that would help in "ensuring long-term energy security to the Philippines and source a cleaner energy resource". 12

As transaction adviser, ADB committed to advise and assist in all aspects of the project, including the award and execution of the final project agreements. While the IED's report states that the completion or expected completion date is on 2 February 2021, no technical assistance report or other documentation is available in the ADB's website currently. According to a December 2022 update on PNOC's website, "in January 2019, due to the impending DOE [Department of Energy] issuance of Notice to Proceed to private-led LNG project/s, the PNOC Board directed the management to conclude and terminate all activities in relation to the Competitive Selection of the Joint Venture Development partner for the project ".13"

While the ADB recently updated its energy policy, the new 2021 Energy Policy still leaves its door open for fossil gas and LNG projects subject to certain considerations, which many organizations have heavily criticized.¹⁴

PNOC's Batangas LNG is only one of the many fossil gas and LNG projects being proposed in the province. Since the Department of Energy's announcement of a moratorium on greenfield coal projects in 2020, several fossil gas and LNG projects have cropped up. By 2023, there are already nine LNG terminals and 32 gas-fired power plants in the pipeline with a combined capacity of 34.793 GW. Seven LNG terminals and nine fossil gas power plants are sited in Batangas Province. To date, ADB is not known to be providing related technical assistance or financial backing, however civil society groups remain vigilant given the role ADB has played in supporting fossil fuel infrastructure build out and the provisions of the 2021 Energy Policy.

Background: The fight to protect the Amazon of the Ocean

Batangas Province is part of the five provinces comprising the Verde Island Passage (VIP). VIP is a rich marine biodiversity hotspot, which is home to 60% of all known marine shorefish species in the world. Considering that there are 1,736 fish species, 338 coral species, and thousands of other marine organisms, VIP is celebrated as the Amazon of the Oceans. Concerned that the center of fossil gas expansion is concentrated in the VIP, several frontline communities, fisherfolk groups, environmental, conservation, and faith-based groups launched the Protect VIP Campaign on 27 September 2021.

The Protect VIP Campaign seeks to celebrate the beauty and significance of the VIP, oppose practices that harm it, and ultimately urge local, national, and environmental authorities to act on existing commitments to preserve the area. The Campaign mentions numerous developments in the vicinity of VIP that now gravely threaten it through reckless tourism practices, chemical and water pollution, destructive industrial activity, unsustainable fishing practices, human waste, and intensifying climate change. But the most alarming among these is the expansion of a fossil fuel industry in the province of Batangas, on top of an already existing coal and gas fleet.

Among the first few LNG and gas power projects expected to start operations in 2022 were Atlantic Gulf and Pacific-Linseed Field Power Corporation's (AG&P-Linseed) LNG terminal and San Miguel Corporation-Excellent Energy Resources Inc.'s (SMC-EERI) 1,200 MW Gas Power Plant in Batangas City. However all have been delayed due to difficulties in securing LNG supply coupled with the mounting opposition from frontline communities and environmental groups. ¹⁵ For example, protest letters have been sent to all of the financiers of AG&P-Linseed's Ilijan LNG import facility and SMC-EERI's gasfired power plant to urge them to withdraw their investments and financial services to the projects. Representatives of the Campaign Network have met with Development Bank of the Philippines, Standard Chartered, and JBIC to further discuss their involvement in these projects, the hazards that the project inflicts on the health, livelihood, and environment of the stakeholders of VIP, and several irregularities in the environmental permitting process of the projects.

Photos of the project sites of Atlantic Gulf and Pacific-Linseed Field Power Corporation's LNG terminal and San Miguel Corporation-Excellent Energy Resources Inc.'s Gas Power Plant in Batangas City¹⁶





Photos of marine species in the Verde Island Passage¹⁷









A series of legal complaints have also been filed, starting with a complaint about illegal tree cutting under the Revised Forestry Code and followed by a complaint about premature land conversion, which resulted in a Cease and Desist Order (CDO) against the companies. VIP stakeholders have also alleged that AG&P-Linseed and SMC-EERI have committed violations of the terms and conditions of their Environmental Compliance Certificate, and that certain parameters in the coastal water of the project site exceed Water Quality Guidelines.

At the start of 2023, two other companies—Shell Energy Philippines Inc. (SEPH) and Batangas Clean Energy Inc. (BCE)—held public hearings in the province as part of their Environmental Impact Assessment Process. Groups part of Protect VIP, Bukluran ng Mangingisda sa Batangas (Coalition of Fisherfolk in Batangas), and Shell Out of VIP protested these processes and demanded a cancellation.

Meanwhile, on February 28, 2023, a fuel tanker carrying 800,000 liters of industrial oil capsized off the coast of Oriental Mindoro, an area located within the VIP. As of early March 2023, the full damage to the livelihoods and health of communities living on the coastlines is yet to be assessed while estimates reveal that over 36,000 hectares of mangroves, coral reefs, and seagrasses within the VIP will potentially be affected. Demands for a full assessment of the impacts, accountability and reparations have been issued by the Protect VIP Campaign. The devastation wrought by this incident clearly exposes the social, environmental and economic toll of the race to build fossil fuel infrastructure as more shipping vessels carrying fuel in this marine passage will only lead to the risk of more such incidents occurring in the future.

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The Center for Energy, Ecology, and Development (CEED) is a think-do institution that conducts research and advocacy, and partners with communities in promoting an ecologically just, people-centered energy and development path. Read CEED's full report entitled Financing a Fossil Future: Tracing the Money Pipeline of Fossil gas in Southeast Asia here: https://ceedphilippines.com/sea-fossil-future/.

FINANCING A FOSSIL FUTURE: ADB'S GAS INVESTMENTS IN THE PHILIPPINES

Despite pledging to support the decarbonization of energy systems in Asia and the Pacific and to follow a Paris-aligned approach, the Asian Development Bank (ADB) is one of the notable multilateral development banks involved in developing fossil gas infrastructure in the Philippines.



Technical Advice for Batangas Liquefied Natural Gas Hub

In 2018, ADB signed an agreement with the Philippine National Oil Company (PNOC) to act as transaction advisor for the first liquefied natural gas (LNG) hub project in the Philippines, located in Mabini, Batangas. Under the agreement, ADB's Office of Public-Private Partnerships "will advise and assist PNOC in all aspects of the project, including the award and execution of the final project agreements." The project consists of a proposed regasification terminal, storage, power plant, and other associated infrastructure and is estimated to cost up to USD 2 billion. (See: https://www.adb.org/news/adb-advise-philippines-first-Ing-hub-project).





Batangas Province is part of the five provinces in the Philippines comprising the Verde Island Passage (VIP), a rich marine biodiversity hotspot that is home to 60% of all known marine shorefish species in the world.



With 1,736 fish species, 338 coral species, and thousands of other marine organisms, VIP has been likened to an Amazon of the Oceans.



ADB's support for hastening the development of an LNG hub here means putting at risk this entire sensitive ecological zone along with jeopardizing the livelihoods and health of local coastal communities.



Opposition to LNG developments in the area has brought frontline communities, fisherfolk groups, and environmental, conservation, and faith-based groups together and resulted in the Protect VIP Campaign.



The filing of legal complaints, writing of protest letters and petitions against the development of LNG facilities in Batangas continues.

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