Five years ago, I wrote about the crossroads that the Philippines and Southeast Asia were confronting as the last battleground of coal. Back then Southeast Asian nations – specifically Indonesia, Vietnam, the Philippines, Myanmar, Malaysia, and Cambodia – were among the top 50 countries with the biggest coal expansion plans. With a total planned capacity of 125,507 MW, they accounted for nearly 15% of the total coal power in the global pipeline.

It was also the time, where global shifts were starting to unfold veering away from the dirtiest energy source in the world. From coal pipeline fleets being defeated in the Philippines, government policies in South Korea and other Asian countries, to major bank policies and massive energy finances diverted away from coal financing. Shifts were finally happening, with policies in the Philippines, Vietnam, and even Indonesia. The hope to achieve the 1.5°C global goal was appearing on the horizon. Unfortunately for the country and the region, that was not the end of the story. Indeed, we’ve finally started to move away from coal, only for another fossil fuel to take its place - fossil gas.

A massive 138 GW of new gas-fired power plants and 118 liquified natural gas terminals are being proposed or already being built in the region. With a massive USD 33.4 billion being poured in, which surpasses even that of China’s gas pipeline in 2022. Lead by the same countries that have embarked on a coal avalanche in the region five years ago, and the very same countries that have vast renewable energy potentials – Vietnam, Indonesia, Philippines and Thailand.

The Philippines alone boasts more than 10 times of renewable energy potential compared to its total installed power capacity at present. This clearly is not a case of fossil gas being a bridge fuel, instead it is a massive detour. This is a major challenge for the climate vulnerable region given the very small window we collectively have in avoiding runaway climate change in this decade.

This study comes at a perfect time. While we regret to be facing this challenge in the region, instead of leapfrogging towards 100% renewable energy systems, we can definitely say that we are in a better situation confronting this massive challenge compared to 8-10 years ago. Renewable energy technologies are far more competitive now; if not cheaper, compared to coal and fossil gas. There are also more policies and mechanisms in place to advance renewable energy. Global fossil gas, on the other hand, is at an all time high now – thus the myth that fossil gas can bring the needed development and poverty alleviation, specially in a region with high level of energy poverty, can be debunked.

We hope that this study will provide energy transition advocates, academics, NGOs, communities and movements in the region a wealth of data and analysis on who to engage and put pressure on.

As the famous saying goes, “We do not inherit the earth from our ancestors; we borrow it from our children”. We owe it to our children and their children, and grandchildren to overcome this new challenge.
Financing A Fossil Future is an important report as it reveals the companies and financiers that are accelerating fossil dependency in a region that is already disproportionately impacted by climate change. This report will be a key tool for campaigners worldwide to hold banks and investors accountable and demand a swift and just shift to sustainable energy.

As this report reveals, Japanese financial institutions, both private and public, have been instrumental in promoting gas expansion in the developing nations of Southeast Asia. It is a significant step for the Japanese government to join the latest G7 commitment to cut new direct public support for the international unabated fossil fuel energy sector by the end of 2022. However, we are highly concerned that the Japanese government arbitrarily interprets the wording and continues to push fossil fuel projects in the way of a false solution, such as CCUS or ammonia co-firing technology. In addition to the climate crises, the fossil fuel projects are depriving the local fishing community of a healthy marine ecosystem. Fossil fuel extraction is also fueling conflicts globally. We continuously call on the Japanese financiers to cut gas and other fossil fuel financing in a responsible manner.

There is no room for half-baked promises at a time when all hope of keeping climate change at least catastrophic levels is quickly vanishing. There is a logical step for financial institutions that pledged to achieve net-zero to come out with strict restrictions against backing new gas, LNG, and other fossil fuel projects or companies with dirty expansion plans.

The ongoing failure of international climate diplomacy has shown market triumphalism over mitigation of the climate crisis and the climate risks continue to be mispriced in financial markets. This report can serve as a guiding map to locate and deal with the dirty economy and extractivism, the factors behind climate chaos.

This study is the result of detailed and investigative research and CEEFD is commendable for its work. Most importantly this study follows the money where financing for fossil gas is concerned. That is critical as the real means to having a fossilfree future including fossil gas, is to end its financing and shift it to renewable solutions.

The financial sector as a whole, and North American banks in particular, continue to jeopardize our future by financing the fossil fuel industry. They are stoking climate flames even when they claim to know better. In doing so, they are going against the best interests of climate-impacted communities. It’s no surprise that JPMorgan Chase is also hovering in Southeast Asia’s gas industry - it is, after all, the world’s biggest fossil fuel banker. Financiers need to move past their empty promises, clean up their act, and cut out their support for gas and other fossil fuels.

The gas industry is cying Southeast Asia as one of the last bastions of opportunity to reap profits at the expense of communities and our planet. This report clearly lays out the need to stop this massive gas expansion, end financing for gas and shift investment to the clean energy solutions that are already cheaper and readily available.
Executive summary

Key findings

Vietnam and the Philippines have the largest planned gas expansion in development

If all planned gas expansion of 138 GW capacity in development is built, gas-fired operating capacity in SEA, 89 GW as of GEM’s February data, will increase by more than twofold.

Vietnam leads the region’s planned gas expansion, with 56.3 GW in pre-construction and construction stages, or in development. The Philippines follows behind with 29.9 GW in development.

Philippine conglomerate San Miguel Corporation Global Power Corporation’s (SMC Global Power) 14.1 GW of proposed projects accounts for half of the planned gas expansion in the Philippines and is also by far the largest in the region. SMC Global Power’s eight proposed gas-fired power plants will have a capacity of 12.3 GW, in addition to the 1.8-GW plant that is under construction.

Thailand constitutes almost a third of new LNG import capacity in development in the region. Its 40.3 mtpa of new capacity is about four times more than the current operating capacity of 11.5 mtpa. The Philippines has 36.5 mtpa of LNG import capacity in development, the second largest in the region. These projects will be the Philippines’s first LNG terminals.

Cambodia and Indonesia make up 65% of new gas pipelines in the region. Cambodia has the most gas pipeline projects with a combined length of 2,553 km, followed by Indonesia’s 2,249 km. Thailand ranks third with 1,115 km.

Financial institutions with net-zero pledges and Thai local banks are leading fossil gas financing in Southeast Asia in the decade of action

Financial institutions are funding the gas industry despite pledging to decarbonize the global economy. Fifteen financiers financed USD 1.4 billion in loans and bonds to oil and gas companies, after joining the Net-Zero Banking Alliance, Net-Zero Asset Owners Alliance, or Net Zero Asset Managers initiative. Among the 15 financiers are BNP Paribas, CIMB Bank, and Mizuho Financial. Except for CIMB Bank, Mizuho Financial, and Nomura Holdings, these financiers are headquartered in Western countries. They include France’s BNP Paribas, Germany’s Allianz and Deutsche Bank, Netherlands’s ING, Switzerland’s Credit Suisse, and UBS, United Kingdom’s Barclays and Standard Chartered, and United-States’ BlackRock, Citigroup, Morgan Stanley, and Wells Fargo & Company. Allianz, UBS, and BlackRock participated by purchasing bonds from Philippines-based SMC Global Power.

Other notable public financial institutions that provided fossil gas financing in the region are: Asian Development Bank, South Korea’s Korea Development Bank and Export-Import Bank of Korea, Germany’s KfW, Thailand’s Government Savings Bank and Export-Import Bank of Thailand, Norway’s DNB Bank, and Japan’s Japan Bank for International Cooperation and Nippon Export and Investment Insurance.

The landscape shifted entirely at the start of the new decade, where Thai banks became top financiers, and transactions in Thailand leaned toward bond issuances. Meanwhile, financiers based in the United States and the United Kingdom climbed to third and fifth spots, if financiers are ranked based on financing only from January 2020 to March 2022, up from their ninth and eighth places if financing since 2016 is considered. The jump in ranking can be attributed to the participation of American banks in the bonds for Philippines-based SMC Global Power and of British banks for SMC Global Power and Thailand-based Ratch Group.

Loans and credit and bonds were almost equally used in financing transactions. Companies also used Islamic finance, which is considered a growing segment of the global financial system and used in countries with a predominant and minority Muslim population alike. Three-quarters of the total financing was provided for the fossil gas companies’ general corporate finance, including financing acquisitions, debt refinancing, and investments, and a quarter for their project finance. These findings highlight the need to close glaring loopholes in fossil fuel pledges or divestments that cover only direct loans or credits to and project financing of fossil gas projects.

The decrease in fossil gas financing from 2020 to early 2022 in countries like Indonesia and Malaysia and the almost steady amount of financing in Thailand, amid the expansion of the gas and LNG industries across Southeast Asia during this period, indicates two possible scenarios: (1) financial closure has not yet been reached for new projects, or (2) there is a lack of transparency and public disclosure on financial transactions involving fossil gas-related operations and companies.
Recommendations

More than five years since the adoption of the Paris Agreement in 2015, gas development is expanding at a rapid pace in Southeast Asia. Behind it are financial institutions building reputations as climate and clean energy foes instead of improving their energy and sustainability policies.

To avert a fossil future for Southeast Asia, financial institutions should:

Adopt a Paris-aligned policy that pursues a 1.5°C Pathway—reaching a global CO2 emissions decline of 45% from 2010 levels by 2030, and a net-zero CO2 emissions by mid-century—without false solutions, in accordance with the P1 Scenario of the IPCC’s Special Report on Global Warming of 1.5°C. This policy should:

a. Prohibit all financing, whether direct or indirect, for new oil and gas fields and LNG terminals and all companies listed in the Global Oil & Gas Exit List,
b. Set stringent restrictions on new fossil gas power plant projects and expansion projects if determined to be a necessary and economically viable bridge fuel for a country’s low-carbon transition,
c. Set and disclose a timeline and measurable targets (including short-, medium-, and long-term targets) in phasing out all fossil gas exposure, and pursue early retirement, in case of equity investments, of existing fossil gas power projects on a 1.5°C-aligned timeline.

A distinction should be made regarding the critical roles of regional development banks and local banks in adopting a Paris-aligned policy:

a. Regional development banks should lead the adoption of the most ambitious Paris-aligned energy policies and strategies to finance the necessary energy transformation in Southeast Asia, starting with prohibiting financing for new fossil gas projects and for all companies engaged in fossil gas expansion projects.
b. Local banks should align financial flows to rapid and just transition pathways that are in accordance with their country’s fair share in the 1.5°C Paris goal, which prohibits financing for new oil and gas fields.

Withdraw and prohibit financing for fossil gas projects that violate human rights, endanger critically important and biologically diverse ecosystems and habitats, and pose grave reputational risks.

Disclose all financial services provided to fossil gas-related operations and fossil gas companies and adopt the full recommendations of the Task Force on Climate-related Disclosures to support its shareholders and stakeholders in appropriately assessing and pricing climate-related risks, and to ensure that the overall effects of climate change become routinely considered in business and investment decisions.
Inside

Foreword 3
Messages 4
Executive summary 6
Introduction: Southeast Asia: From Coal’s Last Bastion to Fossil Gas Hub 12
Methodology 15
Driving Southeast Asia’s Fossil Future 17
Thailand and Indonesia top the gas plant expansion 17
Thailand’s PTT leads LNG imports and overseas investors, LNG exports 18
Gas pipeline projects growing in Indonesia, Myanmar (Burma), and Thailand 18
Vietnam and the Philippines have the largest planned gas expansion 19
Thailand and the Philippines have the largest planned LNG import terminals 19
Cambodia and Indonesia have the most planned pipelines 20
Key Findings 20
Fueling Southeast Asia’s Fossil Future 26
Banks’ slow response in meeting net-zero target 26
Banks in gas-reliant countries leading fossil gas financing 27
Governments propping up the fossil gas industry 27
Gas-oriented countries raising the biggest financing 28
Financing fluctuated over the years 29
Financing fell for Indonesia and Malaysia from 2020 onwards 29
Thai banks leading fossil gas financing in the decade of action 29
Bank lending showing a downward trend since 2020 30
Key Findings 30
Philippine Case Study: Fossil Gas & LNG Boom in Batangas Spells Doom for Amazon of the Oceans 36
After the coal moratorium, fossil gas is now the preferred end-fuel 36
SMC Global Power: Philippines’ largest coal developer, now top fossil gas developer 37
International financiers with net-zero pledges are fueling the country’s fossil future 37
Linseed Field Corporation’s LNG Terminal and Excellent Energy Resources, Inc.’s 1.75 GW Gas Power Plant 39
Protect Verde Island Passage, the Amazon of the Oceans 46

Key Findings 48

Thailand Case Study: ADB, JICA, and AIIB withdraw from 1.4 GW Hin Kong Gas Power Plant, more called to exit 52
Massive fossil gas build-up ahead 52
Local, public Thai banks fueling the fossil gas build-up, leaning towards debt securities underwriting 53
Thai PM Prayut’s bold, net-zero declaration 53
The 1.4 GW Hin Kong Gas-fired Combined-Cycle Power Plant 54
JICA, ADB, and AIIB withdraw from Hin Kong 57
Remaining financiers called to exit Hin Kong Project 57
Key Findings 57
Recommendations 62
Endorsements 64
Acknowledgements 65
I. Introduction: Southeast Asia: From Coal’s Last Bastion to Fossil Gas Hub

Lying along the Western rim of the Pacific Ocean, Southeast Asia (SEA) is a largely maritime subregion of Asia. Its 11 countries boast of diverse cultures and abundant natural resources, with SEA also nesting the marine biodiversity-rich Coral Triangle. Comprised of growing economies, SEA largely expanded its use of coal in the last decade to power countries’ respective growth. In 2019, while the rest of the world dropped in their reported coal power generation, that of SEA’s grew by 12%. Altogether, SEA more than doubled its use of coal since 2010. As such, the region earned its notoriety as the coal industry’s ‘last bastion’.

With its location and geography, SEA experiences some of the harsher impacts of climate change—a reality whose exacerbation the region ironically contributes to due to its dependence on coal. Moreover, extreme dependence on coal also exposes power consumers in SEA to volatile power prices.

The start of the new decade saw the work of civic movements and communities resisting coal bear fruit with a noticeable slash in SEA’s coal pipeline. Bankrolling coal expansion became a magnet for risks of stranding assets, forcing financial institutions to pull out and even warn against coal investments. Unfortunately, this positive development is being taken advantage of today not by genuinely clean energy from renewables. Even as the 2021 assessment report of the Intergovernmental Panel on Climate Change’s (IPCC) calls for strong, rapid, and sustained reductions in methane emissions alongside those of CO2, its scale is instead expected to grow amidst plans of massive expansion. LNG import terminals and gas pipelines to be developed in Asia would enable consumption of imported gas enough to produce 117 gigatonnes of carbon dioxide equivalent (Gt CO2-eq) over their lifespans. This is a quarter of all emissions the world can produce while warming to 1.5°C.

Gas expansion will also worsen SEA’s energy security and dependence on imported fossil fuels. Countries without a local supply or with a depleting supply of fossil gas will need to import LNG and build the necessary infrastructure to receive it. However, even after developing the necessary LNG infrastructure, SEA countries will have to confront the many challenges that LNG-dependent countries are facing today. The world’s largest LNG importers, including China and Japan, are already in Asia. Increasing demand for LNG in Asia and political instability in top LNG exporters like Russia have already resulted in its tight supply and caused prices to soar to record highs.

Moreover, SEA’s gas plans threaten the rich marine biodiversity housed in the region. Nowhere is this more explicit than in the Amazon of the oceans in the Philippines, the Verde Island Passage, which is home to 60% of all known shorefish species in the world - but also to plans for eight new gas power plants and seven new LNG terminals.

In the face of all these, there is an urgent need to shift all financing away from fossil fuels. Energy transition and climate action must be accomplished equitably and through common but differentiated responsibilities, with historically polluting developed nations obliged to transition far more rapidly. This, however, does not justify a fossil lock-in for developing nations who bear the brunt of the climate crisis, and who are entitled to just contributions and reparations from developed nations to make way for climate mitigation and adaptation. Financial support from public and private sectors alike, however, is still not channeled to sustainable development of developing nations such as those in SEA, but to continued fossil fuel dependences — emboldening proponents to doom already vulnerable peoples to a fossil future.

Following the Paris Agreement, businesses, governments, financial institutions, and other climate actors have banded together to pressure from civil society and frontline communities. The United Nations, for example, convened a Net-Zero Asset Owner Alliance launched in 2019; a Net-Zero Banking Alliance, which represents 40% of global banking assets, was launched in April 2021; and most recently, the Glasgow Financial Alliance for Net Zero was formed by
450 financial institutions from 45 countries, with assets worth USD 130 trillion.6

According to the International Energy Agency, in a net-zero emissions scenario by 2050, there is no more need for fossil fuel exploration, significant investment in new oil and gas pipelines, and liquefied natural gas (LNG) liquefaction facilities currently under construction or at the planning stage. The IPCC’s Special Report on Global Warming of 1.5°C also provides for a 1.5°C model pathway without false solutions, such as carbon capture storage (CCS). In what is called a PI Scenario, the 1.5°C Paris goal is achieved through a downsized energy system, which enables rapid decarbonization of energy supply, and with afforestation as the only Carbon Dioxide Removal option7 considered. Neither fossil fuels with CCS nor bioenergy with CCS are used.8

Despite several net-zero pledges in place, these have made little to no dent in climate and energy transition action. Financial institutions have remained wedded to fossil fuels. A 2021 report by a coalition of NGOs found that some of the banks’ pledges are “dangerously weak, half-baked, or vague”9.

This Report provides an overview of the fossil gas industry in SEA, including the biggest developers and top financiers dooming the region to a fossil future. It also looks at how these institutions are exposing themselves to stranding assets and reputational risks as more frontline communities rise against fossil gas, even as they deal the final blows to the coal industry.

Case studies are provided for Thailand, which has a well-established gas sector, and the Philippines, which seeks to expand its LNG infrastructure amidst depleting domestic supply. They take a closer look at controversial projects—Atlantic Gulf & Pacific’s (AG&P) Linseed Field Corporation (Linseed) LNG Terminal, San Miguel Corporation Global Power Holdings’ (SMC Global Power) Excellent Energy Resources, Inc.’s (EERI) 1.75 GW gas power plant, and RATCH Group and Gulf Energy Development’s Hin Kong Power Company 1.4 GW gas power plant.

II. Methodology

This report covers transactions between oil and gas companies and financial institutions that offered financing services, such as lending (loans and credit services), investment (stocks and bonds), and Islamic finance (any financing activity that abides by Islamic law), from January 1, 2016 to March 31, 2022.

These companies are primarily engaged in the fossil gas and LNG business, from exploration and development to transportation, gasification, storage, re-gasification, and pipelines, and finally, to power generation.

Loans and credit services for general corporate purposes were included if provided to developers whose businesses are limited to fossil gas-related operations to address the fact that a significant portion of total financing for the fossil gas industry was intended for general corporate purposes and other non-project finance purposes. The same rule was followed for equity investments. As for bonds, only underwriting services were considered. However, when information on bondholders is available, such as in the case of SMC Global Power’s USD 600-million and USD 150-million senior perpetual capital securities listed in the Singapore Exchange Securities Trading Limited, it is included in the review.

Rankings for top developers are categorized into two: “post-Paris” and “projects under development”. “Post-Paris” refers to developers of projects with operations expected to start in January 2016 to March 2022, while “projects in development” refers to developers of projects that are proposed or under construction as of March 2022.

As for financiers, rankings are categorized into two: “post-Paris” and “2020-onwards”. 
“Post-Paris” refers to transactions made from January 2016 to March 2022, while “2020-onwards” points to those made from January 2020 to March 2022.

The “post-Paris” and “projects under development” or “2020-onwards” rankings are shown to capture the major players in the massive build-up of gas projects at the start of this critical decade of action for the climate crisis, and following the release of seminal reports such as the IPCC’s Special Report on Global Warming of 1.5°C, and several net-zero pledges.

Developers and financiers are ranked based on their parent or holding companies, considering the broad range of corporations covered, including affiliates and associates. For companies with more than one owner, the parent listed is the majority shareholder or the shareholder who holds the largest equity in the company. Financiers are ranked based on the total amount of transactions that they participated in. The reason is that data on financiers’ known share in transactions is predominantly unavailable.

The transaction and project data in this report is mainly sourced from Refinitiv, a third-party provider of market and infrastructure data, through its platforms Refinitiv Infra360 and Refinitiv Loan Connector. In addition to the Refinitiv platforms, the following publicly available online sources were used:

- Philippine Department of Energy’s Key Energy Statistics and List of Private Sector-Initiated Projects
- Global Energy Monitor’s Global Gas Plant Tracker as of February 2022, Global Infrastructure Tracker for Pipelines as of December 2020, and Global Infrastructure Tracker for LNG Terminals as of June 2021 (for the post-Paris rankings because these databases show the expected year of operation of the projects)
- Global Energy Monitor’s March 2022 LNG Terminals Summary Tables, Pipeline Summary Tables, and Gas Plants Summary Tables
- Urgewald’s Global Oil and Gas Exit List
- Reclaim Finance’s Oil and Gas Policy Tracker
- Listed corporate securities and issuer disclosures in the Philippine Dealing System Holdings Corp. (PDS) Group
- Final Prospectuses and Offer Supplements for the Issuance of Corporate Bonds
- News reports

All amounts in this report are expressed in US dollars (USD) unless otherwise indicated.

The final dataset for fossil gas projects and developers covers all Southeast Asian countries. As for financial transactions, the data search was conducted for all Southeast Asian countries, but the final dataset reflected transactions in seven countries only: Indonesia, Malaysia, Myanmar (Burma), the Philippines, Singapore, Thailand, and Vietnam.

To capture major developments after the first quarter of 2022, these were included in the narrative and analysis of the report, although absent in the dataset.

This initiative is guided and motivated by similar efforts across the world such as those by Unfriend Coal in the insurance sector, Banking on Climate Change in the banking sector, and Withdraw from Coal - Coal Divestment Scorecard in the Philippines.

III. Driving Southeast Asia’s Fossil Future

Southeast Asia has significant gas reserves, which is why it has some of the biggest LNG exporters globally, such as Indonesia and Malaysia. A booming energy consumption amid a declining production in mature reservoirs, such as those in Thailand and the Philippines, is making the region also home to some of the emerging LNG importers. Vietnam and the Philippines are looking into increasing the share of gas in their energy mix while Cambodia, which had never consumed natural gas, is now using it for power generation.

The SEA countries have different experiences with gas energy but are heading toward the same treacherous path: they are resorting to fossil gas to fulfill their growing energy needs, despite warnings of fossil fuel’s capacity for tremendous turmoil.

Since the adoption of the Paris Agreement in 2015, SEA countries at various levels of fossil gas production and dependence have been hugely investing in natural gas infrastructure across the supply chain, from LNG terminals to pipelines to regasification facilities and power plants.

Thailand and Indonesia top the gas plant expansion

In the downstream sector, over 158 GW of planned gas-power capacity is in pre-construction or construction stages - or in development - and 21.4 GW has started operations since the Paris agreement.10 Thailand’s state-owned Electricity Generating Authority of Thailand (EGAT), and its privatized subsidiaries Electricity Generating (EGCO Group) and Ratch Group, together own the largest gas capacity that has been
proposed, constructed, and operated since 2016. Together, their facilities operate at a combined capacity of 15.4 GW.

The Indonesian state-owned PT Perusahaan Listrik Negara (PLN) or State Electricity Company (Persero) owns the highest number of gas-fired power plants that have been built and proposed in SEA from 2016 onwards. Its 19 power plants account for 67% of Indonesia’s fossil gas buildout. EGAT has the second highest number of power plants in the region; 15 are in Thailand and 1 in Indonesia. EGAT owns two in five power plants that have been built and proposed in Thailand in the last six years.

Other developers own and operate gas-fired power plants across several countries. Thailand-based Gulf Energy Development has 15 projects in Thailand and Vietnam. Japan-based Mitsu & Co has 14 projects in Myanmar (Burma) and Thailand. United States-based L-POWER has six projects in Thailand and Vietnam. Thailand’s state-owned PTT has four operating and one proposed power plants in Myanmar (Burma) and Thailand.

**Thailand’s PTT leads LNG imports and overseas investors, LNG exports**

In the midstream sector, aggressive LNG terminal buildout can be observed in LNG exporting countries like Indonesia and Malaysia and countries that are importing or now seeking to import LNG due to a depleting supply from local gas fields, such as Thailand, the Philippines, and Vietnam. LNG terminals that started operations from 2016 onwards have already added 14.2 mtpa capacity. Those that are currently in development will add a whopping 149.8 mtpa more.13

Much of the development in LNG infrastructure consists of LNG import facilities. Many of these facilities are operated and owned by domestic companies, state-owned and private corporations alike. The major contributor to this rapid buildout of LNG import infrastructure is Thailand’s PTT with 35.5 mtpa of capacity in development and 1.5 mtpa operating capacity. Three of PTT’s planned LNG import facilities, with a combined capacity of 20.8 mtpa, are jointly owned with Gulf Energy Development. United States-based Energy Capital Vietnam leads the region with 10.5 mtpa of capacity in development; followed by Vietnamese state-owned PetroVietnam with 7.6 mtpa of capacity in development.

The LNG export buildout is concentrated in only three countries: Indonesia, Papua New Guinea, and Malaysia, countries within the Coral Triangle that represents 50% of the world’s coral reefs. All export terminal projects have overseas investors involved, except for the two export facilities, one under construction and one operating, owned by Malaysia’s state-owned Petronas.

Shell PLC, a multinational oil and gas company based in the United Kingdom, and INPEX, Japan’s largest oil and gas company, own the largest proposed LNG export facility, the 9.5 mtpa onshore Abadi LNG terminal. The American multinational company ExxonMobil and Papua New Guinea’s largest exploration company Oil Search Limited14 have interests in three proposed projects in Papua New Guinea, which have a cumulative capacity of 8 mtpa. Other developers include EnergyWorld from Germany, Repsol from the United States, Mitsui, LNG Japan, JX Nippon, and Kanematsu from Japan, state-owned China National Offshore Oil Corporation, and BP from the United Kingdom.

One in 10 LNG import facility projects in SEA from 2016 to the present is owned by PTT. EnergyWorld owns one in three export facility projects.

**Gas pipeline projects growing in Indonesia, Myanmar (Burma), and Thailand**

About 5,990 km length of new gas pipelines in the past-Paris era either have started operations or are in development.14 Several of these gas pipeline projects have been developed in countries with significant gas reserves and mature gas markets such as Indonesia, Myanmar (Burma), Thailand, and Malaysia.

Sixteen of the 25 gas pipeline projects are in Indonesia. The two longest pipelines are also in Indonesia: the 1,018 km-long West Kalimantan-Central Kalimantan and 687 km-long Natuna-West Kalimantan gas pipelines, which form part of the proposed $518-million Trans Kalimantan gas pipeline project. The Kalimantan Island has significant onshore and offshore resource potential, which the Indonesian government plans to use to address the country’s rising energy demands. Five pipeline projects, three under construction and two proposed, with a combined length of 953 km are in Thailand. Malaysia is proposing a 410 km-long pipeline expansion of the Sabah-Sarawak Integrated Oil and Gas Project.

The significant role of the state in this sector is evident in the leading developers. Pertamina, an Indonesian state-owned oil and natural gas corporation, is responsible for six projects (two operating, three under construction, and one proposed), with a total length of 986 km. State-owned PTT is solely responsible for the five projects in Thailand and state-owned Petronas for the pipeline expansion proposal in Malaysia. Together with a Thai company, state-owned Myanmar Oil and Gas Enterprise (MOGE) is proposing the Zawtika Replacement Gas Pipeline; the existing gas pipeline transports a third of the daily gas production of the M-9 Zawtika field to Myanmar and two-thirds to Thailand. Finally, state-owned PetroVietnam is also proposing an expansion of the Nam Con Son 2 Gas Pipeline.

All gas pipeline developers are part of the Global Oil & Gas Exit List (GOGEL)16 for upstream and midstream expansion, except for Pupuk Indonesia, which is not part of the lists for both sectors, and MOGE, which is not part of the list for midstream expansion.

**WHO ARE DRIVING THE FOSSIL GAS PROJECTS CURRENTLY IN DEVELOPMENT UNDER SEA?**

Fossil gas power plants that are pre-construction are massively expanding in SEA more than anywhere else in the globe. If all planned gas expansion of 158 GW capacity is built, gas-fired operating capacity in SEA, 89 GW as of GEM’s February data, will increase by more than twofold. To capture this massive build-up of gas projects at the turn of the critical decade of climate action, developers for all gas projects currently under development - proposed and under construction – in SEA are also presented.

**Vietnam and the Philippines have the largest planned gas expansion**

Vietnam leads the region’s planned gas expansion, with 56.5 GW in pre-construction and construction stages. The Philippines follows behind with 29.9 GW in development. The large growth in gas development in Vietnam is in line with the country’s draft Power Development Plan 8 (PDP8), which aims to increase its gas-fired power capacity to 22.4 GW by 2050 and 55.8 GW by 2040. The Philippine Energy Plan 2018-2040 also targets a higher natural gas share in the power generation mix by 2050.

Philippine conglomerate San Miguel Corporation’s (SMC’s) 14.1 GW of proposed projects accounts for half of the planned gas expansion in the Philippines and is also by far the largest in the region. SMC’s eight proposed gas-fired power plants will have a capacity of 12.5 GW, in addition to the 1.6 GW plant that is under construction. Its proposed power plants include the massive 6.49 GW Navotas LNG power plant and the highly contested 1.75 GW power plant in Batangas that is scheduled to be commissioned by the end of 2022.

EGAT is second in leading the development of new gas capacity, with cumulative 9.7 GW in pre-construction and construction stages. It has five proposed power plants and one that is underway. United States’ Millennium Petroleum Group ranks third, with 9.6 GW in the pre-construction stage.

**Thailand and the Philippines have the largest planned LNG import terminals**

Thailand constitutes almost a third of new LNG import capacity in development in the region. Its 40.5 mtpa of new capacity is about four times more than the current operating...
capacity of 11.5 mtpa. The Philippines has 36.5 mtpa of LNG import capacity in development, the second largest in the region. These projects will be the Philippines's first LNG terminals.

Thailand's PTT tops the list of developers of LNG terminals with 18.74 mtpa of planned import capacity, followed by another Thai company Gulf Energy Development with 14.56 mtpa. Vietnamese companies Energy Capital Vietnam and PetroVietnam have 9 mtpa and 5.1 mtpa of new capacity, respectively. In the Philippines, the developers include First Gen of Lopez Holdings, EnergyWorld from Germany, Excelerate Energy from the United States, and Vires Energy from Singapore.

Cambodia and Indonesia have the most planned pipelines
Cambodia and Indonesia make up 65% of new gas pipelines in the region. Cambodia has the most gas pipeline projects with a combined length of 2,553 km, followed by Indonesia's 2,249 km. Thailand ranks third with 1,113 km.

PTT, which is the proponent of all of Thailand's new pipelines, emerges as the top developer. Next are PetroVietnam and Pertamina, which are each seeking to build over 400 km of gas pipelines in Vietnam and Indonesia, respectively.

Key Findings
• Thailand’s state-owned Electricity Generating Authority of Thailand (EGAT), and its privatized subsidiaries Electricity Generating (EGCO Group) and Ratch Group, together own the largest gas capacity that has been proposed, constructed, and operated since 2016. Together, their facilities operate at a combined capacity of 15.4 GW.
• LNG terminals that started operations from 2016 onwards have already added 14.2 mtpa capacity. Those that are currently in development will add a whopping 149.8 mtpa more. The LNG export buildout is concentrated in only three countries: Indonesia, Papua New Guinea, and Malaysia, countries within the Coral Triangle.
• About 5,190 km length of new gas pipelines in the post-Paris era either have started operations or are in development. Several were developed in countries with significant gas reserves and mature gas markets such as Indonesia, Myanmar (Burma), Thailand, and Malaysia.
• All gas pipeline developers are part of the Global Oil & Gas Exit List (GOGEL) for upstream and midstream expansion, except for Pupuk Indonesia.
• If all planned gas expansion of 158 GW capacity in development is built, gas-fired operating capacity in SEA, 89 GW as of GEM’s February data, will increase by more than twofold.
• Vietnam leads the region’s planned gas expansion, with 56.3 GW in pre-construction and construction stages, or in development. The Philippines follows behind with 29.9 GW in development.
• Philippine conglomerate San Miguel Corporation’s (SMC’s) 14.1 GW of proposed projects accounts for half of the planned gas expansion in the Philippines and is also by far the largest in the region. SMC’s eight proposed gas-fired power plants will have a capacity of 12.5 GW, in addition to the 1.8-GW plant that is under construction.
• Thailand constitutes almost a third of new LNG import capacity in development in the region. Its 40.3 mtpa of new capacity is about four times more than the current operating capacity of 11.5 mtpa. The Philippines has 56.5 mtpa of LNG import capacity in development, the second largest in the region. These projects will be the Philippines’s first LNG terminals.
• Cambodia and Indonesia make up 65% of new gas pipelines in the region. Cambodia has the most gas pipeline projects with a combined length of 2,553 km, followed by Indonesia’s 2,249 km. Thailand ranks third with 1,113 km.
WHO ARE DRIVING THE POST-PARIS FOSSIL GAS PROJECTS IN SEA?

TOP POST-PARIS DEVELOPERS OF GAS-FIRED POWER PLANTS IN SOUTHEAST ASIA BY CAPACITY (MW)

- SPC Global Power Holdings Corp (Philippines)
- Gulf Energy Development Public Co Ltd (Thailand and Vietnam)
- PTT PLC (Pattaya/EQECGT) (Thailand)
- Siemens Energy AG (Myanmar and Vietnam)
- Vietnam Oil and Gas Group (Petrovietnam) (Vietnam)
- Electricity du Cambodia (IEC) (Cambodia)
- Korean Electric Power Corporation (KEPCO) (Vietnam)
- Power Engineering Consulting, Inc. (PCIC) (Vietnam)
- Mitsubishi & Co Ltd (Myanmar and Thailand)
- Mitsui Corporation (Indonesia, Myanmar and Vietnam)

TOP POST-PARIS DEVELOPERS OF LNG EXPORT TERMINALS IN SOUTHEAST ASIA BY CAPACITY (mtpa)

- Shell Gas (Indonesia)
- Shell Gas (Philippines)
- GNL (Philippines)
- GNL (Vietnam)
- GNL (Thailand)
- GNL (Myanmar)
- GNL (Indonesia)

TOP POST-PARIS DEVELOPERS OF LNG IMPORT TERMINALS IN SOUTHEAST ASIA BY NUMBER OF PROJECTS

- PTT Public Company Limited (Thailand)
- PTT Energy Development (Thailand)
- PTT Energy Development (Vietnam)
- PTT Energy Development (Thailand)
- PTT Energy Development (Vietnam)
- PTT Energy Development (Thailand)
- PTT Energy Development (Vietnam)

TOP POST-PARIS DEVELOPERS OF GAS PIPELINES IN SOUTHEAST ASIA BY NUMBER OF PROJECTS

*The graphs include projects that are proposed, in construction, and operating since 2018 or onwards.
**The country/ies indicated beside the developer in parenthesis indicates the location of the project(s).
Financing A Fossil Future

Since the signing of the Paris Agreement six years ago, 125 financial institutions have channeled USD 35.4 billion into the fossil gas industry in SEA between January 2016 and March 2022. Based on the total amount of transactions with the bank’s participation, the three biggest financiers of fossil gas across the region include Japan’s Sumitomo Mitsui Financial (USD 15 billion) and Mizuho Financial (USD 10.9 billion), and Singapore’s DBS Bank (USD 8.2 billion). The next largest financiers, funneling at least USD 8 billion into the gas industry, are Singapore’s Oversea-Chinese Banking, Japan’s Mitsubishi UFJ, and Malaysia’s CIMB Bank.

Sumitomo Mitsui Financial, Mizuho Financial, DBS Bank, Oversea-Chinese Banking, and Mitsubishi UFJ Financial are the top lenders, each participating in at least USD 7 billion worth of loans and credit guarantees. The top banks that underwrite fossil gas projects are Malaysia’s Malayan Banking, Thailand’s Bank of Ayudhya, Siam Commercial, and Kasikornbank, and CIMB Bank. Five banks were involved in Islamic financing: Malaysia’s Malayan Banking and Bank Pembangunan Malaysia, Singapore’s United Overseas Bank, Mizuho Financial, and Nomura Holdings, are headquartered in Western countries. They include France’s BNP Paribas, Germany’s Allianz and Deutsche Bank, Netherlands’ ING, Switzerland’s Credit Suisse and UBS, United Kingdom’s Barclays and Standard Chartered, and United-States’ BlackRock, Citigroup, Morgan Stanley, and Wells Fargo & Company. Alliana, BlackRock, and UBS are bondholders of SMC Global Power’s USD 600-million and USD 150-million senior perpetual capital securities listed in the Singapore Exchange Securities Trading Limited.

Top listed financiers also scored poorly in the Oil and Gas Policy Tracker’s criterion scores for immediate exclusion of oil and gas projects, exclusion of companies with oil and gas expansion plans, and the quality of gas phase-out commitments. The Tracker assesses good practices among financial institutions and points out loopholes and inconsistencies in declared policies. Mizuho Financial and Sumitomo Mitsui Financial scored a 0 out of 10 in each criterion while BNP Paribas managed a low score of 4 out of 10 in the criteria for immediate exclusion of oil and gas projects, a score of 1 out of 10 for exclusion of companies with oil and gas expansion plans, and a 0 out of 10 for quality of oil and gas phase-out commitments.

Banks in gas-reliant countries leading fossil gas financing

Together, four private banks in Singapore, which is almost entirely dependent on fossil gas for power generation, dominate overall fossil gas financing in SEA. They supported 45.5% or USD 15.1 billion of the total financing for gas and LNG projects both locally and abroad. Eight public and private banks in Malaysia, which has among the world’s biggest fossil gas reserves and is among the world’s largest LNG exporter, have heavily financed projects mostly in Malaysia with USD 12.2 billion.

Japan and China, which are the world’s major traders and importers of LNG, have financially supported the gas industry in SEA through public financial institutions and other entities where they have minority stakes. More than half of fossil gas financing in the region was aided by state-owned banks, bilateral development banks, and export-credit agencies.

At the top of the list of state-owned financing is China through Agricultural Bank of China, Bank of China, China Construction Bank Corp, China Development Bank, CITIC Securities, and Industrial and Commercial Bank of China. Through these banks, the Chinese government helped finance a total of USD 10.8 billion worth of deals. Half of this amount went to Indonesian fossil gas projects while nearly a third to Thailand. Next is Malaysia, through Bank Pembangunan Malaysia, CIMB Bank, and Export-Import Bank of Malaysia. They collectively supported USD 8.6 billion in financing, half of which was directed into Malaysian projects and the other to Thai projects. The Indonesian government also channeled major financing amounting to USD 7.4 billion into local projects through state-owned Bank Mandiri, Bank Negara Indonesia, Bank Rakyat Indonesia, and Bank Tabungan Negara.

Other notable public financial institutions that supported the fossil gas financing are: Asian Development Bank, South Korea’s Korea Development Bank and Export-Import Bank of Korea, Germany’s KfW, Thailand’s Government Savings Bank and Export-Import Bank of

1. **IV. Fueling Southeast Asia’s Fossil Future**

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Japan and China, which are the world’s major traders and importers of LNG, have heavily financed gas and LNG projects beyond their borders through their public and private financial institutions. Seven Japanese public and private banks participated in a total of USD 15 billion in financial support while six Chinese state-owned banks were involved in USD 10.8 billion funding.

Governments propping up the fossil gas industry

Governments themselves have supported the gas industry in SEA through public financial institutions and other entities where they have majority stakes. More than half of fossil gas financing in the region was aided by state-owned banks, bilateral development banks, and export-credit agencies.

At the top of the list of state-owned financing is China through Agricultural Bank of China, Bank of China, China Construction Bank Corp, China Development Bank, CITIC Securities, and Industrial and Commercial Bank of China. Through these banks, the Chinese government helped finance a total of USD 10.8 billion worth of deals. Half of this amount went to Indonesian fossil gas projects while nearly a third to Thailand. Next is Malaysia, through Bank Pembangunan Malaysia, CIMB Bank, and Export-Import Bank of Malaysia. They collectively supported USD 8.6 billion in financing, half of which was directed into Malaysian projects and the other to Thai projects. The Indonesian government also channeled major financing amounting to USD 7.4 billion into local projects through state-owned Bank Mandiri, Bank Negara Indonesia, Bank Rakyat Indonesia, and Bank Tabungan Negara.

Other notable public financial institutions that supported the fossil gas financing are: Asian Development Bank, South Korea’s Korea Development Bank and Export-Import Bank of Korea, Germany’s KfW, Thailand’s Government Savings Bank and Export-Import Bank of
Financing A Fossil Future

Financial institutions from Japan have been the top financiers of the upstream sector in Southeast Asia. This trend is followed by Netherland’s ING, Indonesia’s Bank Mandiri, and Singapore’s DBS Bank, each participating in 64% of the total financing. The money facilitated the construction and development of new LNG terminals, LNG vessels, and gas-fired power plants, refinancing of existing debts and capital expenditure, and acquisition of other gas projects and gas operators.

Banks arranged for USD 4.5 billion in loans and bonds to the upstream developers in net LNG exporters Indonesia and Malaysia. The top financier of the upstream sector in the region is Sumitomo Mitsui Financial, having participated in 64% of the total financing. It is followed by Netherlands’ ING, Indonesia’s Bank Mandiri, and Singapore’s DBS Bank, each participating in 55% of the total financing.

Banks funded the development of the Jambaran-Tiung Biru Unitisation gas field in Indonesia, with USD 1.8 billion, and the floating production storage and offloading facility at the Gumsut-Kakap deep-water field in Malaysia, with USD 1.06 billion. They also financed Medco Energi International’s operations in Indonesia, including its interests in the Acheh Block A gas field, and the acquisition of Giphi Energy, which had deep-water acreage positions in Asia and Africa, with USD 1.6 billion.

The midstream sector had considerable assistance from banks Singapore, Japan, and South Korea, countries that usually receive LNG imports from Indonesia and Malaysia. Banks also financed the LNG infrastructure development of Thailand, which is expected to increase its gas imports, and the Philippines and Vietnam, which are looking to import LNG.

Singapore’s DBS Bank contributed to raising 85% of the total financing for midstream projects. Three banks from one each from South Korea, Singapore, and France participated in at least 70% of the total financing: Sumitomo Mitsui Financial, Korea Development Bank, Oversea-Chinese Banking, Mizuho Financial, Mitsubishi UFJ, and BNP Paribas.

Notably, several public financial institutions helped bankroll 84% of the total financing for midstream projects. These include three Indonesian state-owned banks, three Chinese state-owned banks, South Korea’s Korea Development Bank, JBC, Guangzhou KFW, and the Asian Development Bank. The USD 5.7 billion support for Indonesia’s Tangguh LNG expansion project of the United Kingdom-based BP accounted for much of the total financing that flowed into the midstream sector. Singapore’s development of LNG vessels and terminals was financed with USD 846.8 million, Thailand’s 542.8 km underground pipeline and an LNG terminal, with USD 654.5 million, the Philippines’ LNG terminal in Batangas, with USD 118.1 million, and Vietnam’s Phase 2 of Nam Con Son 2 gas pipeline, with USD 112 million.

The USD 5.7 billion support for Indonesia’s Tangguh LNG expansion project of the United Kingdom-based BP accounted for much of the total financing that flowed into the midstream sector. Singapore’s development of LNG vessels and terminals was financed with USD 846.8 million, Thailand’s 542.8 km underground pipeline and an LNG terminal, with USD 654.5 million, the Philippines’ LNG terminal in Batangas, with USD 118.1 million, and Vietnam’s Phase 2 of Nam Con Son 2 gas pipeline, with USD 112 million.

Thai and Japanese banks emerged as the most engaged in the downstream industry, as half of the total financial support for this sector a joint venture between a Thai and a Japanese developer. The top financiers consist of Mizuho Financial, Sumitomo Mitsui Financial, Bank of Ayudhya, and TMBSinachon Bank, and the export credit agencies JBIC and Export-Import Bank of Thailand.

Thailand’s Gulf Energy Development and Japan’s Mitsui & Co. raised a total of USD 2.5 billion in two tranches to build and operate a 2.5 GW combined cycle gas turbine power plant. The rest of the USD 5.4 billion in financing funded the development and expansion of gas-fired power plants in the Philippines (USD 806 million), Malaysia (USD 653 million), Indonesia (USD 650 million), and Myanmar (Burma) (USD 45 million).

Financing fluctuated over the years

The trend in annual fossil gas financing in the last six years shows that 2016 and 2019 had the most financing, amounting to USD 7.5 billion and USD 6.4 billion, respectively. In both years, gas corporations were consistently financing their current operations in Singapore and Malaysia with a cumulative USD 2.1 billion in bonds.

Substantial amounts of transactions in 2016 and 2019 are attributed to fossil gas projects in Indonesia; USD 5.7 billion in loans were channeled into the USD 8-billion expansion of the Tangguh LNG facility, which started construction in 2016,21 and USD 1.7 billion to the upstream Jambaran Tiung Biru project in 2019. In 2019 too, USD 1.4 billion in loans funded the construction of what will be the fourth-largest gas-fired power plant in Thailand.22

WHO ARE FUELING THE FOSSIL GAS PROJECTS CURRENTLY UNDER DEVELOPMENT IN SEA?

Similar to developers, financial institutions were also ranked from “2020-onwards” to capture the major players behind projects under development.

Financing fell for Indonesia and Malaysia from 2020 onwards

Standing at only USD 5.2 billion and USD 4.8 billion, the amounts of fossil gas financing in 2020 and 2021 are among the lowest in the last six years. Financing ebbed in these years, following the COVID-19 crisis, for previously well-funded countries—Indonesia and Malaysia—but seemingly started to slowly take off for the Philippines, Vietnam, and Myanmar (Burma).

The decrease in fossil gas financing in 2020 and 2021 despite the massive expansion of the gas industry in the region during this period may indicate a lack of financial closure reached for proposed projects or a lack of public disclosure on energy finance. This especially applies to many of the proposed projects in Indonesia, Malaysia, Vietnam, and the Philippines that are not reflected in the data.

Companies with operations in Indonesia and Malaysia raised mostly investment and working capital finance worth about only USD 1 billion, instead of funding huge projects like in the previous years. For the Philippines, banks raised funds for the Udenna Corporation’s USD 400 million loan to acquire stakes in the Malampaya offshore field and SMC Global Power’s total of USD 750 million bond issuances to develop its 1.75GW combined cycle gas power plant in Batangas.

Based on the data, in 2020, financing was raised for Vietnam for the second time and Myanmar (Burma) for the first time in six years: USD 112 million in loans for the former’s Nam Con Son 2 gas pipeline project and USD 45 million in bilateral letter of credit for Myanmar (Burma)’s gas-fired power generation activities.

Unlike its neighbors with fluctuating amounts of financing, Thailand shows a different picture, with an almost constant increasing financing for both existing and proposed gas projects since 2016. A reason could be that most financing requirements were raised by state-owned oil and gas company PT, which might have encouraged local banks to...
invest in local projects. Over the years, half of the total financing in Thailand supported the oil and gas companies’ operations, while the other half, the building of new gas-fired power plants, pipelines, and an LNG terminal.

**Thai banks leading fossil gas financing in the decade of action**

The drop in financing for the gas industry in Indonesia and Malaysia and the constant flow of funds into Thailand explain why from 2020 to the first quarter of 2022, Thai banks took over the top spots in the region’s fossil gas financing. Bank of Ayudhya, Siam Commercial, Kasikorn Bank, Bangkok Bank, and Krung Thai Bank are the top financiers during this period. Thailand naturally also emerged as the top country of origin of the financiers that sustained fossil gas financing in the region in the same period.

Deutsche Bank, JPMorgan Chase, and Standard Chartered also took up spots from 2020 onwards. These institutions have net-zero goals and are signatories to GFANZ but scored very low nonetheless in the Oil and Gas Policy Tracker’s criteria for immediate exclusion of coal and gas projects. All three scored 0 out of 10 for the two remaining criteria — exclusion of companies with oil and gas expansion plans — and the quality of gas phase-out commitments.

Notably, the United States and the United Kingdom climb to third and fifth spots, if banks are ranked based on financing only from January 2020 to March 2022, up from their ninth and eighth places if overall financing since 2016 is considered. The jump in ranking can be attributed to the participation of American and British banks in the underwriting of bonds for Philippine-based SMC Global Power and Thailand-based Ratch Group.

**Bank lending showing a downward trend since 2020**

Fossil gas financing in the last six years is almost equally split between loans and credit guarantees, at USD 16.7 billion, and investments through underwriting bonds, at USD 15.6 billion. Islamic financing and equity investment represent a tiny fraction of the overall financing. Loan and credit guarantees were used mostly by companies operating in Indonesia, the Philippines, and Vietnam. Most underwritings of gas projects were performed for the bond issuances of oil and gas companies operating in Malaysia, Thailand, and Singapore. These countries respectively sourced 72%, 52%, and 49% of their financing through bonds.

Underwriting trends went in opposite directions for these countries in 2020 and 2021. While underwriting transactions dipped in Malaysia and Singapore, they increased in Thailand. For example, underwriting transactions in Malaysia averaged USD 1.4 billion before 2020 but decreased to USD 195 million in 2020 and USD 408 million in 2021; for Thailand in the same years, the total went from USD 582 million to USD 1.4 billion and USD 1.8 billion.

Although underwriting trends moved differently for each country, the total amount of bonds banks underwrote for companies in the entire region did not have a considerable change over the years. Instead, the notable change is seen in the drop in total loans and credit granted by banks in 2020 and 2021.

Islamic finance was used by Indonesian and Malaysian companies from 2019 to 2021. This type of finance, which refers to any banking or financing activity that adheres to Islamic law, is considered by the Asian Development Bank (ADB) as “one of the fastest growing segments of the global financial system.” According to ADB, it is used not only in countries with a predominantly Muslim population like Indonesia and Malaysia but also in those with a minority one like China and the United Kingdom.

**Key Findings**

- Financial institutions are funding the gas industry despite pledging to decarbonize the global economy. Fifteen financiers financed USD 1.4 billion in loans and bonds to oil and gas companies, after joining the Net-Zero Banking Alliance, Net-Zero Asset Owners Alliance, or Net Zero Asset Managers initiative. Among the 15 are top fossil gas financiers BNP Paribas, CIMB Bank, and Mizuho Financial. Except for CIMB Bank, Mizuho Financial, and Nomura Holdings, these financiers are headquartered in Western countries. They include France’s BNP Paribas, Germany’s Allianz and Deutsche Bank, Netherland’s ING, Switzerland’s Credit Suisse, and UBS, United Kingdom’s Barclays and Standard Chartered, and United States’ BlackRock, Citigroup, Morgan Stanley, and Wells Fargo & Company.
- Other notable public financial institutions that provided fossil gas financing in the region are: Asian Development Bank, South Korea’s Korea Development Bank and Export-Import Bank of Korea, Germany’s KfW, Thailand’s Government Savings Bank and Export-Import Bank of Thailand, Norway’s DNB Bank, and Japan’s Japan Bank for International Cooperation and Nippon Export and Investment Insurance.
- Post-Paris, the top five fossil gas financiers consist of banks from Japan and Singapore, countries that are dependent on fossil gas for electricity. These financiers are also the top lenders, each participating in at least USD 7 billion worth of loans and credit guarantees.
- Considerable financing over half in fact was supported by state-owned banks, bilateral development banks, and export credit agencies. There are three state-owned banks in Malaysia and four in Indonesia. Fossil gas plays a major role in the energy mix of these countries.
- Loans and credit and bonds were almost equally used in financing transactions. Companies also used Islamic finance, which is considered a growing segment of the global financial system and used in several countries with a predominant and minority Muslim population alike. Three-quarters of the total financing post-Paris were for the fossil gas companies’ general corporate finance, including financing acquisitions, debt refinancing, and investments, and a quarter for their project finance.
- The landscape shifted entirely at the start of the new decade, where Thai banks became top financiers, and transactions in Thailand comprised largely of bond issuances. Meanwhile, financiers based in the United States and the United Kingdom climb to third and fifth spots, if financiers are ranked based on financing only from January 2020 to March 2022, up from their ninth and eighth places if financing since 2016 is considered. The jump in ranking can be attributed to the participation of American and British banks in the bonds for Philippines-based SMC Global Power and Thailand-based Ratch Group.
- The decrease in financing from 2020 to early 2022 in countries like Indonesia and Malaysia and the almost steady amount of financing in Thailand, amid the expansion of the gas and LNG industries across SEA during this period, indicates two possible scenarios: (1) financial closure has not yet been reached for new projects, or (2) there is a lack of transparency and public disclosure on financial transactions involving fossil gas-related operations and companies.
- Considering that only a fourth of total financing post-Paris was intended for project finance, that bond issuances were used equally as loans and credits, and that Islamic finance was also used, it is now more imperative to close glaring loopholes in fossil fuel pledges or investments that cover only direct loans or credits to fossil gas projects. These pledges should be extended to include (1) financing for general corporate and other non-project finance purposes, for as long as it is intended to bankroll the operations of fossil gas companies; (2) indirect financing through intermediaries; (3) other financial services such as underwriting of bonds; and (4) Islamic finance.
WHO ARE FUELING THE POST-PARIS FOSSIL GAS PROJECTS IN SEA?

TOP POST-PARIS FINANCIERS OF THE FOSSIL GAS INDUSTRY IN SOUTHEAST ASIA

- **Loan or Credit**
  - Sumitomo Mitsui Financial Group Inc. (Japan): $1,196.73
  - Mizuho Financial Group Inc. (Japan): $32.75
  - DBS Group Holdings Ltd (Singapore): $8,507.56
- **Bond Issuance**
  - Overseas Chinese Banking Corp Ltd (Singapore): $7,574.4
  - Mitsubishi UFJ Financial Group Inc. (Japan): $7,352.64
  - CNIB Group Holdings Bhd (Malaysia): $3,000.2
- **Islamic Financing**
  - Bank Mandiri (Persero) Tbk PT (Indonesia): $0.34
  - BNP Paribas SA (France): $792.12
  - Bank of Ayudhya PCL (Thailand): $625
  - Japan Bank for International Cooperation (Japan): $3,105.8

COUNTRY OF ORIGIN OF POST-PARIS FINANCIERS OF THE FOSSIL-GAS INDUSTRY IN SOUTHEAST ASIA

POST-PARIS FINANCING FOR SOUTHEAST ASIA’S FOSSIL GAS INDUSTRY BY COUNTRY

- Indonesia: $10,373.66
- Malaysia: $7,184.32
- Thailand: $6,444.78
- Singapore: $4,302.81

TOP POST-PARIS FINANCERS OF UPSTREAM GAS PROJECTS IN SOUTHEAST ASIA

- **Loan or Credit**
  - DBS Group Holdings Ltd (Singapore): $2,855.65
  - Overseas Chinese Banking Corp Ltd (Singapore): $7,352.64
  - Mizuho Financial Group Inc. (Japan): $7,010.03
- **Bond Issuance**
  - Sumitomo Mitsui Financial Group Inc. (Japan): $1,196.73
  - Mitsubishi UFJ Financial Group Inc. (Japan): $3,000.2
- **Other**
  - Bank Mandiri (Persero) Tbk PT (Indonesia): $0.34

TOP POST-PARIS FINANCERS OF MIDSTREAM GAS PROJECTS IN SOUTHEAST ASIA

- **Loan or Credit**
  - DBS Group Holdings Ltd (Singapore): $2,855.65
  - Mizuho Financial Group Inc. (Japan): $7,010.03
- **Bond Issuance**
  - Overseas Chinese Banking Corp Ltd (Singapore): $7,352.64
  - Sumitomo Mitsui Financial Group Inc. (Japan): $1,196.73
- **Other**
  - Mitsubishi UFJ Financial Group Inc. (Japan): $3,000.2

TOP POST-PARIS FINANCERS OF DOWNSTREAM GAS PROJECTS IN SOUTHEAST ASIA

- **Loan or Credit**
  - DBS Group Holdings Ltd (Singapore): $2,855.65
  - Overseas Chinese Banking Corp Ltd (Singapore): $7,352.64
- **Bond Issuance**
  - Mizuho Financial Group Inc. (Japan): $7,010.03
  - Sumitomo Mitsui Financial Group Inc. (Japan): $1,196.73
- **Other**
  - Mitsubishi UFJ Financial Group Inc. (Japan): $3,000.2
WHO ARE FUELING THE FOSSIL GAS PROJECTS CURRENTLY UNDER DEVELOPMENT IN SEA?

TOP FINANCIERS OF THE FOSSIL GAS INDUSTRY IN SOUTHEAST ASIA JANUARY 2020-MARCH 2022

<table>
<thead>
<tr>
<th>Bank Name</th>
<th>Total Amount of Transaction (in million USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Siam Commercial Bank PCL (Thailand)</td>
<td>3,416.73</td>
</tr>
<tr>
<td>Bank of Ayudhya PCL (Thailand)</td>
<td>3,416.73</td>
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<tr>
<td>Kasikornbank PCL (Thailand)</td>
<td>2,180.52</td>
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<tr>
<td>Bangkok Bank PCL (Thailand)</td>
<td>2,283.73</td>
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<td>Krung Thai Bank PCL (Thailand)</td>
<td>2,050.96</td>
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<tr>
<td>United Overseas Bank Ltd (Singapore)</td>
<td>886.40</td>
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<td>Deutsche Bank AG (Germany)</td>
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<tr>
<td>Malayan Banking Bhd (Malaysia)</td>
<td>652.80</td>
</tr>
<tr>
<td>Standard Chartered PLC (United Kingdom)</td>
<td>1,006.44</td>
</tr>
<tr>
<td>JPMorgan Chase &amp; Co (United States)</td>
<td>750.00</td>
</tr>
</tbody>
</table>

COUNTRY OF ORIGIN OF THE FINANCIERS OF THE FOSSIL GAS INDUSTRY IN SOUTHEAST ASIA JANUARY 2020-MARCH 2022

TYPES OF FINANCING FOR SOUTHEAST ASIA’S FOSSIL GAS INDUSTRY JANUARY 2016–MARCH 2022

Legend:
- Sovereign Financing
- Government Financing
- External Financing

2015

2016

2017

2018

2019

2020
V. Philippine Case Study: Fossil Gas & LNG Boom in Batangas Spells Doom for Amazon of the Oceans

After the coal moratorium, fossil gas is now the preferred end-fuel

In the past decade, the Philippines saw massive coal expansion with 16 new coal-fired power plants and one additional unit for an existing coal plant coming online. With an additional 4.45 GW, these new coal plants raised the country’s total coal capacity to almost 12 GW.

However, at the turn of the decade, and after years of resistance from frontline coal communities and environmental groups, the Department of Energy announced a coal moratorium with the aim of improving energy security, reliability, and flexibility by expanding the use of renewable energy. A total of 10 projects with a combined capacity of over 6 GW were shelved from the coal pipeline following the coal moratorium, bringing the country closer to the end of the coal pipeline, and the start of the phase-out of existing coal-fired power plants.

While the coal moratorium creates an opportunity to tap the country’s at least 250 GW renewable energy potential, the Department of Energy, however, positioned the new preferred end-fuel that is threatening a detour in the country’s energy transition—fossil gas.

After the adoption of the Paris Agreement in 2016, gas-fired power projects in the pipeline amounted to 2 GW only. However, since the coal moratorium, several fossil gas projects have cropped up. By 2022, there are already seven LNG terminals, and 27 gas-fired power plants with a combined rated capacity of 29.6 GW in the pipeline, almost 15 times larger than that of the pipeline in 2016, many of which will be built in Batangas, specifically along the Verde Island Passage.

The expansion of the fossil gas projects in the Philippines is expected to continue if pending bills that seek to develop the midstream and downstream fossil gas industry are passed. Both Senate and House Energy Committees are proposing the climate-blind bills—Senate Bill No. 1819, otherwise known as the “Midstream Natural Gas Industry Development Act”, which is pending before the Senate Energy Committee, and House Bill No. 5031, otherwise known as the “Downstream Natural Gas Industry Development Act”, although it is still subject to further work by the Technical Working Group.

While fossil gas is being considered as a transition or bridge fuel in both bills, they are suspiciously mum on the need to phase-out coal, and even oil. These bills mandate the preparation of development plans, the inclusion of fossil gas in the energy mix, and granting of incentives to the midstream and downstream fossil gas industries without imposing restrictions on capacity, lifespan, technology, and emissions. The promotion of fossil gas without a coal phase-out policy followed by a clear fossil gas exit strategy may crowd out renewables and result in a carbon lock-in.

Massive fossil gas expansion also threatens the Philippines’ energy security. Malampaya, the largest producing gas field and the country’s largest coal developer, overtook the country’s total coal capacity in 2022, almost 12 GW.

If all 27 proposed gas-fired power plants come online, the Philippines will be forced to rely on imported fuel to keep these fossil fuel plants running. The country is however all too familiar with the challenges of relying on imported fuel when it dealt with the Oil Crisis of 1973, and enacted the Oil Exploration and Development Act and several laws thereafter mandating the integrated and intensive exploration, production, and development of indigenous energy resources.

Electricity consumer groups are also raising the implications of importing fuels to electricity rates. The experience of coal power supply agreements has proven that consumers are at the short end of the stick, as power supply agreements involving imported fuels pass on risks from volatile fuel costs and foreign exchange to consumers.

SMC Global Power: Philippines’ largest coal developer, now top fossil gas developer

Until recently, the Lopez Group’s First Philippine Holdings Corporation was the largest developer of gas projects in the Philippines. First Gen Corporation, the primary holding company for First Philippine Holdings Corporation’s power generation and energy-related businesses, which developed the country’s first gas-fired power plant in 2000, owns four of the six operating gas-fired power plants in the country. In addition to its existing portfolio of power plants, it is also proposing the 1.26 GW Santa Maria Combined-Cycle Power Plant in Batangas and the Floating Storage & Regasification Unit Terminal in Batangas City, targeted for commercial operation later this year. The Conglomerate has however made a net-zero pledge last year, and committed to phase-out its gas-fired power plants or consider a fuel shift to hydrogen as part of its decarbonization strategy.

In the past year alone, SMC Global Power, the country’s largest coal developer, overtook the Lopez Group after announcing its intention to construct several gas-fired power plants.

The Amazon of the Oceans

LNG Boom in Batangas Spells Doom for Amazon of the Oceans

After years of resistance from frontline coal communities and environmental groups, the Department of Energy announced a coal moratorium with the aim of improving energy security, reliability, and flexibility by expanding the use of renewable energy. A total of 10 projects with a combined capacity of over 6 GW were shelved from the coal pipeline following the coal moratorium, bringing the country closer to the end of the coal pipeline, and the start of the phase-out of existing coal-fired power plants.

While the coal moratorium creates an opportunity to tap the country’s at least 250 GW renewable energy potential, the Department of Energy, however, positioned the new preferred end-fuel that is threatening a detour in the country’s energy transition—fossil gas.

After the adoption of the Paris Agreement in 2016, gas-fired power projects in the pipeline amounted to 2 GW only. However, since the coal moratorium, several fossil gas projects have cropped up. By 2022, there are already seven LNG terminals, and 27 gas-fired power plants with a combined rated capacity of 29.6 GW in the pipeline, almost 15 times larger than that of the pipeline in 2016, many of which will be built in Batangas, specifically along the Verde Island Passage.

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In the past year alone, SMC Global Power, the country’s largest coal developer, overtook the Lopez Group after announcing its intention to construct several gas-fired power plants.
Financing A Fossil Future

The top four financiers of fossil gas expansion in the Philippines 2020-onwards contributed to almost half of the total fossil gas financing, each accounting for at least USD 1.1 billion. Financing from the United States contributed USD 1.5 billion, the largest among all countries. Japan (USD 1.2 billion), Germany (USD 1.2 billion), and the United Kingdom (USD 1.2 billion) follow behind. Local financing notably accounted for only 6.5% or USD 674 million. Of these financing, transactions are predominantly through bond issuance. Bond issuance is the primary form of financing for past-Paris and 2020-onwards fossil gas projects.

In 2020, there has been a massive increase and entry of bond issuance in the Philippines amassing USD 750 million, topping over the USD 400 million in loans or credit. Financing in 2020 has also skyrocketed more than twice as compared to the years prior, 2016 to 2019, and years after, 2021 to 2022. This is the same year that SMC Global Power started announcing fossil gas projects.

Top fossil gas financiers post-Paris and 2020-onwards barely varied in the Philippines. Among the top financiers are Deutsche Bank AG, JPMorgan Chase & Co., Standard Chartered PLC, Allianz SE, BlackRock, and GAM Holding. Notably, all of these financial institutions have made various net-zero pledges. Deutsche Bank, JPMorgan Chase, and Standard Chartered, Allianz and BlackRock did not fare well in the tracker’s criterion scores. Both scored a 0 out of 10 for the exclusion of companies with oil and gas expansion plans criteria and the quality of gas phase-out commitments criteria. Allianz however managed a 5 out of 10 for the immediate exclusion of oil and gas projects criteria.

Linseed Field Corporation’s LNG Terminal and Excellent Energy Resources, Inc.’s 1.75 GW Gas Power Plant

Many of the proposed gas-fired power plants are located in Batangas, one of the five provinces within the VIP—the center of the center of marine shorefish biodiversity. The VIP holds a unique position as the most biodiverse marine habitat in the world, and also the hotspot for rapid expansion of fossil gas in the Philippines. VIP, touted as the Amazon of the oceans, houses about 60% of the world’s known shorefish species. That’s over 1,756 fish species, 556 coral species, and thousands of other marine organisms. VIP spans five provinces: Batangas, Occidental Mindoro, Oriental Mindoro, Marinduque and Romblon. The abundant marine biodiversity in VIP support over seven million people in the provinces within its corridor through fishing, aquaculture, and tourism.

Among the long list of gas projects being proposed in VIP, and the first few to come online, are Atlantic Gulf & Pacific’s subsidiary Linseed Field Corporation’s LNG import terminal (Ilijan LNG Import Facility) and SMC Global Power’s subsidiary Excellent Energy Resources, Inc.’s 1.75 GW gas-fired combined-cycle power plant.

The Ilijan LNG Import Facility is an onshore terminal to be built on a 9-hectare Agro-forestry land in Batangas City, with 157,000 m³ storage capacity. The USD 504 million project is scheduled to be commissioned by June 2022 and expected to operate for the next 55 years. The terminal is intended to supply regasified LNG to the existing 1.2 GW Ilijan Combined-Cycle Power Plant that is currently sourcing gas from the Malampaya gas field, and its future expansion plant with 850 MW Combined-Cycle Power Plant.

China Banking Corporation and China Bank Capital and Development Bank of the Philippines (DBP) have reportedly granted AG&P a term loan facility worth PHP 6 billion. Meanwhile, Osaka Gas and JBIC reportedly invested USD 100 million worth of equity and I Squared Capital even more at USD 300 million worth of equity.

EERI’s gas-fired power plant project is proposed to be built adjacent to the Ilijan LNG Import Facility. The PHP 67.865 billion-project is scheduled to be operational by June-December 2024, and expected to operate for 25-50 years. In 2021, SMC Global Power issued USD 600 million senior perpetual capital securities and an additional USD 150 million securities, which are listed in the Singapore Exchange Securities Trading Limited (SGX-ST). SMC Global Power’s disclosures indicate that the net proceeds of the securities will be used primarily for investments in the EERI gas-fired power plant and related assets or for general corporate purposes.

For the USD 600 million securities, Credit Suisse (Hong Kong) Limited, DBS Bank Ltd, Mizuho Securities Asia Limited, Standard Chartered Bank, and UBS AG Singapore Branch acted as joint lead managers. DB Trustees (Hong Kong) Limited acted as trustee, and Deutsche Bank AG, Hong Kong branch acted as paying agent. For the additional securities worth USD 150 million, Standard Chartered Bank and Mizuho Securities Asia Limited once again acted as joint lead managers, DB Trustees (Hong Kong) Limited as trustee, Deutsche Bank AG, Hong Kong branch acted as paying agent, and Latham & Watkins as listing agent.
Currently, the bondholders for the securities are UBS AG, BlackRock Inc, CA Indosuez Wealth Asset Management SA/Luxembourg, Allianz SE, Schroders PLC, UOB Asset Management Ltd, GAM Holding AG, JPMorgan Chase & Co, Janus Henderson Group PLC, AVENUE ASSET MANAGEMENT, Mirabaud & Cie Banquiers, Oversea-Chinese Banking Corp Ltd, GAOTENG GLOBAL ASSET MANAGEMENT, Delen Private Bank Luxembourg SA, Franklin Resources Inc, Universal Investment Co LLC, CAPRI DELEN ASSET MGMT.
The Financiers of the AG&P’s LNG Terminal and SMC Global Power’s 1.75 GW Gas Plant

Financiers of AG&P’s LNG Terminal

I Squared Capital invested USD 300 Million worth of equity.

JBIC and Osaka Gas invested USD 100 Million worth of equity.

China Bank Capital as Lead Arranger, China Bank and Development Bank of the Philippines as lenders funded a PHP 6-Billion Term Loan Facility.
International Financiers of SMC Global Power’s 1.75 GW Gas Project

Credit Suisse (Hong Kong) Limited, DBS Bank Ltd, Mizuho Securities Asia Limited, Standard Chartered Bank, and UBS AG Singapore Branch acted as joint lead managers of SMC Global Power’s senior perpetual capital securities worth USD 600 million listed in the Singapore Exchange Securities Trading Limited. DB Trustees (Hong Kong) Limited acted as trustee, and Deutsche Bank AG, Hong Kong branch acted as paying agent. In SMC Global Power’s additional senior perpetual capital securities worth USD 150 million listed in the Singapore Exchange Securities Trading Limited, Standard Chartered Bank and Mizuho Securities Asia Limited once again acted as joint lead managers, DB Trustees (Hong Kong) Limited as trustee, Deutsche Bank AG, Hong Kong branch acted as paying agent, and Latham & Watkins as listing agent.

Protect Verde Island Passage, the Amazon of the Oceans

Considering the alarming expansion of fossil gas projects in VIP, on top of an already existing coal and gas fleet, several environmental, conservation, and faith-based groups launched the Protect VIP Campaign on 27 September 2021. The Protect VIP Campaign was launched 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.

To date, 12,500 individuals have signed the Campaign’s online petition which calls on: (1) concerned government agencies and local government units to fulfill their mandate under EO 578 to ensure the protection, conservation, and sustainable resource use of the VIP Marine Corridor; and (2) the DENR Environmental Management Bureau and the local government of Batangas City to cease issuing permits for the establishment of fossil gas plants and LNG terminals in Batangas City.

Since the launch of the campaign, over 25 student leaders, religious groups, and various environmental organizations sent protest letters to all of the financiers of Linseed’s Ilijan LNG import facility and EERI’s gas-fired 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.

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. VIP stakeholders have also alleged that Linseed and 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.

Most recently, the Protect VIP Campaign celebrated Earth Day through a landmark fluvial parade participated by fishermen, religious groups, environmentalists, and concerned citizens in Batangas to protest against a fossil gas project site in Barangay Ilijan. A total of 25 boats decorated with “Protect VIP” flags and banners and volunteered by fisherfolk across six municipalities of Batangas from Calatagan, Balayan, Lian, Mabini, Nasugbu, to Batangas City joined in the fluvial parade which sailed to the front of Linseed and EERI’s projects.

Batangueño fishermen hold a fluvial protest in front of LNG facilities, signifying the threat of these projects over the marine life of Verde Island Passage and their livelihood.

During the fluvial protest, fisherfolk stressed their fear that additional gas-fired power plants will threaten their livelihood, which is already at stake with only five operating gas-fired power plants. They are concerned that fish stock will continue to dwindle if more projects are to come. One fisherman shared that many of them sail for nine hours only to sell their catch for PHP 35 per kilogram. On top of that is the degradation and overexploitation of coastal and marine habitats, erosion, and siltation from denuded watersheds also heavily impacted seagrasses and coral reefs.

Youth advocates and environmentalists, including renowned climate activist and muralist AG Saño, also joined the call to Protect VIP on Earth Day by painting a 25-meter mural that shows the diverse marine life in the VIP, and highlights the need to stop pollution, fight climate change, and promote renewable energy.

Youth and environmentalists paint and protest in front of their 25-meter mural in Batangas City calling for protection of marine biodiversity hotspot Verde Island Passage from pollution, climate change, and dirty energy projects.
In the past decade, the Philippines saw massive coal expansion with 16 new coal-fired power plants and one additional unit for an existing coal plant coming online. With an additional 4.45 GW, these new coal plants raised the country’s total coal capacity to almost 12 GW.

While the coal moratorium shelved a total of 10 projects with a combined capacity of over 6 GW and created an opportunity to tap the country’s at least 250 GW renewable energy potential, the Energy Department, however, positioned the new preferred end-fuel that is threatening a detour in the country’s energy transition-fossil gas.

After the adoption of the Paris Agreement in 2016, gas-fired power projects in the pipeline amounted to 2 GW only. By 2022, there are already seven LNG terminals, and 27 gas-fired power plants with a combined rated capacity of 29.6 GW in the pipeline, almost 15 times larger than that of the pipeline in 2016, many of which will be built in Batangas, specifically along the Verde Island Passage.

Until recently, the Lopez Group’s First Philippine Holdings Corporation was the largest developer of gas projects in the Philippines. First Gen Corporation owns four of the six operating gas-fired power plants in the country, and is also proposing the 1.26 GW Santa Maria Combined-Cycle Power Plant in Batangas and the Floating Storage & Regasification Unit Terminal in Batangas City. The Conglomerate has however made a net-zero pledge last year, and committed to phase-out its gas-fired power plants or consider a fuel shift to hydrogen as part of its decarbonization strategy.

In the past year alone, SMC Global Power, the country’s largest coal developer, overtook the Lopez Group. It is already constructing one gas-fired power plant and proposing seven more for a combined capacity of 14.1 GW, including the following controversial projects – the massive 6.49 GW Navotas LNG power plant in Metro Manila, Reliance Energy Development Inc.’s 500 MW LNG power plant in the Philippines’ Renewable Energy Capital Negros Occidental, and the highly contested Excellent Energy Resources, Inc.’s 1.75 GW power plant scheduled to be commissioned end of this year in the Verde Island Passage, to name a few.

Other top coal developers have also ventured into the fossil gas industry, such as the Aboitiz Group, Meralco PowerGen Corporation, and AC Energy. There are also notable foreign developers making a foray into the country’s fossil gas industry, such as the United States’ ExCelerate Energy and Australia’s Energy World.

The top four financiers of fossil gas expansion in the Philippines in 2020-onwards contributed to almost half of the total fossil gas financing, each accounting for at least USD 1 billion each. Financing from the United States contributed USD 1.5 billion, the largest among all countries. Japan (USD 1.2 billion), Germany (USD 1.2 billion), and the United Kingdom (USD 1.2 billion) follow behind. Local financing notably accounted for only 6.5% or USD 674 million.

In 2020, there has been a massive increase and entry of bond issuance in the Philippines amassing USD 750 million, topping over the USD 400 million in loans or credit. Financing in 2020 has also skyrocketed more than twice as compared to the years prior, 2016 to 2019, and years after, 2021 to 2022.

Top fossil gas financiers post-Paris and 2020-onwards barely varied in the Philippines. Among the top financiers are Deutsche Bank AG, JPMorgan Chase & Co., Standard Chartered PLC, Allianz SE, BlackRock, and GAM Holding. Notably, all of these financial institutions have made various net-zero pledges.

Among the long list of gas projects being proposed in VIP, and the first few to come online, are AG&P’s Unseeded LNG import terminal and SMC Global Power’s EERI L7.5 GW gas-fired combined-cycle power plant.

AG&P’s has reportedly received a term loan facility worth PHP 6 billion from China Banking Corporation and China Bank Capital and Development Bank of the Philippines, and an equity investment from Osaka Gas, JBC, and I Squared Capital.

Several local and international banks assisted SMC Global Power in managing and listing securities in the Singapore Exchange Securities Trading Limited to finance the EERI gas-fired power plant and related assets or for general corporate purposes. Some of the notable banks are DBS Bank Ltd, Mizuho Securities Asia Limited, Standard Chartered Bank, UBS AG Singapore Branch, and Deutsche Bank AG.

Some of the notable bondholders are BlackRock Inc, Allianz SE, GAM Holding AG, JPMorgan Chase & Co, and Oversea-Chinese Banking Corporation.

Considering the alarming expansion of fossil gas projects in VIP, on top of an already existing coal and gas fleet, several environmental, conservation, and faith-based groups launched the Protect VIP Campaign in 2021. The Campaign has raised the alarms over the expansion of fossil gas projects in VIP, on top of an already existing coal and gas fleet.

The Campaign has an ongoing online petition calling for the protection, conservation, and sustainable resource use of the VIP Marine Corridor with 12,500 signatures. It has sent protest letters to all of the financiers of Unseed’s Iligan LNG import facility and EERI’s gas-fired power plant to urge them to withdraw their investments and financial services to the projects. It has also pursued a series of legal complaints against the proponents, starting with a complaint about illegal tree cutting under the Revised Forestry Code and followed by a complaint about premature land conversion.

Most recently, the Protect VIP Campaign celebrated Earth Day through a landmark fluvial parade participated by fishermen, religious groups, environmentalists, and concerned citizens in Batangas to protest against a fossil gas project site in Barangay Iligan, and by painting a 25-meter mural that shows the diverse marine life in the VIP, and highlights the need to stop pollution, fight climate change, and promote renewable energy.
WHO ARE DRIVING AND FUELING THE POST-PARIS FOSSIL GAS PROJECTS IN THE PHILIPPINES?

POST-PARIS TYPES OF FINANCING FOR THE FOSSIL GAS INDUSTRY IN THE PHILIPPINES

<table>
<thead>
<tr>
<th>Loan or Credit</th>
<th>Bond Issuance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deutsche Bank AG</td>
<td>750.00</td>
</tr>
<tr>
<td>JPMorgan Chase &amp; Co</td>
<td>750.00</td>
</tr>
<tr>
<td>Standard Chartered PLC</td>
<td>750.00</td>
</tr>
<tr>
<td>Allianz SE</td>
<td>750.00</td>
</tr>
<tr>
<td>Avenue Asset Management</td>
<td>750.00</td>
</tr>
<tr>
<td>BlackRock Inc</td>
<td>750.00</td>
</tr>
<tr>
<td>CA Indosuez Wealth Asset Management</td>
<td>750.00</td>
</tr>
<tr>
<td>Delen Private Bank NV</td>
<td>750.00</td>
</tr>
<tr>
<td>Franklin Resources Inc</td>
<td>750.00</td>
</tr>
<tr>
<td>GAM Holding AG</td>
<td>750.00</td>
</tr>
<tr>
<td>Total Amount of Transaction (in million USD)</td>
<td>1,200.00</td>
</tr>
</tbody>
</table>

POST-PARIS DEVELOPERS OF LNG TERMINALS IN THE PHILIPPINES BY NUMBER OF PROJECTS

<table>
<thead>
<tr>
<th>Proposed</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philippine National Oil Company (PNOC)</td>
<td>1</td>
</tr>
<tr>
<td>Viscy Energy Corporation</td>
<td>1</td>
</tr>
<tr>
<td>Shell Energy Philippines Inc.</td>
<td>1</td>
</tr>
<tr>
<td>Linwood Field Corporation</td>
<td>1</td>
</tr>
<tr>
<td>Gunpower Ltd. Co.</td>
<td>1</td>
</tr>
<tr>
<td>FGEN LNG Corporation</td>
<td>1</td>
</tr>
<tr>
<td>Evensolar Energy LP</td>
<td>1</td>
</tr>
<tr>
<td>EnerTech Energy Corp.</td>
<td>1</td>
</tr>
<tr>
<td>China National Offshore Oil Corp. (CNOOC)</td>
<td>1</td>
</tr>
<tr>
<td>Phoenix Petroleum Philippines Inc.</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
</tr>
</tbody>
</table>

WHO ARE DRIVING AND FUELING THE LATEST FOSSIL GAS PROJECTS IN THE PHILIPPINES?

TOP DEVELOPERS OF FOSSIL GAS-FIRED POWER PLANT PROJECTS UNDER DEVELOPMENT IN THE PHILIPPINES BY CAPACITY

<table>
<thead>
<tr>
<th>Proposed</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMC Global Power Holdings Corp.</td>
<td>12,307</td>
</tr>
<tr>
<td>First Philippine Holdings Corp.</td>
<td>1,750</td>
</tr>
<tr>
<td>Power Partners Ltd. Co.</td>
<td>1,500</td>
</tr>
<tr>
<td>AC Energy Corp.</td>
<td>1,000</td>
</tr>
<tr>
<td>Fort Pilar Energy Inc.</td>
<td>1,200</td>
</tr>
<tr>
<td>Mariveles Power Inc.</td>
<td>1,200</td>
</tr>
<tr>
<td>Lloyds Energy Ltd.</td>
<td>1,128</td>
</tr>
<tr>
<td>Global Luzon Energy Development Corp.</td>
<td>1,000</td>
</tr>
<tr>
<td>Philippine National Oil Company</td>
<td>1,000</td>
</tr>
<tr>
<td>Gen X Energy LLC</td>
<td>1,000</td>
</tr>
<tr>
<td>Total</td>
<td>24,000</td>
</tr>
</tbody>
</table>

TOP DEVELOPERS OF LNG IMPORTS CAPACITY OF PROJECTS UNDER DEVELOPMENT IN THE PHILIPPINES

<table>
<thead>
<tr>
<th>Proposed</th>
<th>Construction</th>
</tr>
</thead>
<tbody>
<tr>
<td>FGEN LNG Corporation</td>
<td>3</td>
</tr>
<tr>
<td>EnergyWorld</td>
<td>2</td>
</tr>
<tr>
<td>Excelerate Energy</td>
<td>2</td>
</tr>
<tr>
<td>Viscy Energy Corporation</td>
<td>3</td>
</tr>
<tr>
<td>Shell Energy Philippines, Inc.</td>
<td>3</td>
</tr>
<tr>
<td>BW Group</td>
<td>3</td>
</tr>
<tr>
<td>Balangas Clean Energy Inc.</td>
<td>3</td>
</tr>
<tr>
<td>Atlantic Gulf and Pacific Company</td>
<td>2</td>
</tr>
<tr>
<td>Phoenix Petroleum</td>
<td>2</td>
</tr>
<tr>
<td>China National Offshore Oil Corporation</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
</tr>
</tbody>
</table>

TOP FINANCERS BASED ON THE TOTAL AMOUNT OF TRANSACTIONS IN THE PHILIPPINES JANUARY 2020-MARCH 2022

| Deutsche Bank AG | 750.00 |
| Allianz SE | 750.00 |
| JPMorgan Chase & Co | 750.00 |
| Avenue Asset Management | 750.00 |
| BlackRock Inc | 750.00 |
| CA Indosuez Wealth Asset Management | 750.00 |
| Delen Private Bank NV | 750.00 |
| Franklin Resources Inc | 750.00 |
| GAM Holding AG | 750.00 |
| Total | 4,500.00 |

parent Bank's Country of Origin

<table>
<thead>
<tr>
<th>Parent Bank's Country of Origin</th>
<th>Total Amount of Transaction (in million USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>1,500.00</td>
</tr>
<tr>
<td>Japan</td>
<td>1,250.00</td>
</tr>
<tr>
<td>Germany</td>
<td>1,150.00</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1,133.45</td>
</tr>
<tr>
<td>Belgium</td>
<td>750.00</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>750.00</td>
</tr>
<tr>
<td>Singapore</td>
<td>750.00</td>
</tr>
<tr>
<td>Switzerland</td>
<td>750.00</td>
</tr>
<tr>
<td>Philippines</td>
<td>673.66</td>
</tr>
<tr>
<td>Netherlands</td>
<td>455.56</td>
</tr>
<tr>
<td>Australia</td>
<td>400.00</td>
</tr>
</tbody>
</table>

Total Amount of Transaction (in million USD)
VI. Thailand Case Study: ADB, JICA, and AIIB withdraw from 1.4 GW Hin Kong Gas Power Plant, more called to exit

Similar to the Philippines, Thailand is also being positioned as a regional LNG hub in Asia, considering its strategic location near the emerging LNG markets in SEA such as the Philippines, Vietnam, and Myanmar (Burma), and some of the world’s biggest LNG buyers like China and Japan. In September 2020, Thailand’s Supawat Tatthong, PTT PCL’s Vice President for gas business development, announced that PTT aims to meet 75% of the global LNG trade and become Asia’s regional LNG hub. PTT is Thailand’s state-owned oil and gas company and the top developer of gas power plants and pipelines in Thailand.

Unlike the Philippines which has only three producing gas fields, six operating gas-fired power plants, and neither gas pipelines nor LNG terminals in place, Thailand has a far more mature fossil gas industry considering that it is also the largest consumer of fossil gas in SEA. Thailand has more than 15 producing gas fields, 2 operating LNG terminals, over 20 operating gas pipelines, and more than 60 gas-fired power plants. With over 52.27 GW of installed fossil gas capacity, fossil gas supplies 54% of the country’s gross power generation, followed by coal and lignite at 36%. Thailand has increased its purchase of imported LNG over the years from 25% in 2016 to 31% in 2020.

Massive fossil gas build-up ahead

With a massive fossil gas infrastructure already in place, Thailand’s pipeline projects show a massive build-up ahead. After the Paris Agreement, 10 more LNG terminals were proposed. PTT expectedly tops the list of developers of LNG projects, proposing half of these projects.

Gulf Energy Development follows PTT, proposing three more LNG terminals-the Gulf MTP LNG Terminal, Gulf of Thailand FSU LNG Terminal, and Samut Prakan FSU Terminal. Han Yang Group is also developing the proposed Chana LNG Terminal.

For gas pipelines, PTT, which has been the sole developer of Thailand’s gas pipelines since 1981, is proposing three more pipelines post-Paris.

As for gas-fired power plants, Gulf Energy Development tops the list, with 10 operating power plants, 3 under construction, and 1 plant proposed. All in all, Gulf Energy Development has a total of 5.8 GW operating gas power plants and 7.8 GW more under construction across the provinces of Pathum Thani, Ratchaburi, Rayong, Ayutthaya, Saraburi, Nakom Ratchasima, Prachinburi, and Chachoengsao.

It is followed by Mitsui & Co Ltd, which is constructing 2 more power plants on top of its 11 existing plants. Electricity Generating PCL ranks third for operating six power plants. EGAT, the leading state-owned power utility in Thailand, holds majority equity in Electricity Generating PCL at 25.4%.

EGAT is also among the top developers with three proposed projects-the Nam Phong power station, Surat Thani power station, and Wong Noi power station-and the Bang Pakong power station under construction.

Across LNG terminals, gas pipelines, and gas-fired power plants, there is an evident high concentration of ownership among the same developers-PTT, Gulf Energy, Development, and EGAT.

The top proponents of projects in development as of March 2022 mirror all of the projects that have been proposed and are already under construction post-Paris. There are no major changes in terms of the developer companies.

Local, public Thai banks fueling the fossil gas build-up, leaning towards debt securities underwriting

Local, public Thai banks are leading the financing for the fossil gas build-up post-Paris and 2020 onwards. Bank of Ayudhya and Siam Commercial Bank top the list, with the former being the leading financing post-Paris, and Siam leading from 2020 onwards. Kasikornbank, Bangkok Bank, and Krung Thai Bank place third, fourth, and fifth, respectively, in both rankings.

Only three foreign banks were included among the top financiers from 2016 until March 2022. Japan’s Sumitomo Mitsui Financial Group (ranked sixth) and Mizuho Financial Group (ranked ninth) also provided loans and credits to Thai gas projects, together with Malaysia’s CIMB Bank (ranked seventh) and Thailand’s TMB Thanachart Bank (ranked eighth). Notably, Asian Development Bank (ADB) is the only regional development bank, and ironically one that touts itself as a climate bank, but made it among the top banks fueling the fossil gas industry in Thailand after the Paris Agreement was signed.

For projects in development starting 2020, Japanese banks, ADB, and TMB Thanachart Bank were dropped from the list and replaced by Standard Chartered which is financing the construction of a new 92 MW gas-fired cogeneration combined cycle power plant in Rayong province by Nexif Energy, China Development Bank, and two other Thai local banks-Asia Plus Group Holdings and AIRA Capital. CIMB dropped a notch in ranking from 7th post-Paris to 8th in 2020 onwards.

After the Paris Agreement, over 70% of the financing for Thailand’s fossil gas projects was facilitated through loans and credits. At the start of the decade, available data on financing reveals that nearly all financing for Thai gas projects was facilitated by banks through underwriting debt securities rather than providing loans or credits.
The massive fossil gas infrastructures in development are however being built on shaky ground after Thailand Prime Minister Prayut Chan-o-cha’s bold net-zero declaration at COP26 in Glasgow. From the initial goal of reaching carbon neutrality by 2050 and net-zero GHG emissions by 2065, Prime Minister Prayut announced that Thailand can raise its ambition to 40% GHG emissions reduction by 2050 policy set by Japan’s Prime Minister Yoshihide Suga, and JICA’s own guidelines for the selection of overseas projects as the same requires that the project must be “pioneering”; and

4. According to a Thailand opposition lawmaker, illegality is suspected because there was no bid placed when RATCH Group received an order for this project.

Months later, financing giants JICA and ADB backed out from the Hin Kong Gas Project but not long after, Asian Infrastructure Investment Bank (AIIB), another development financing giant in Asia, also announced its interest to fund the project. This was met with an even stronger opposition – this time from 55 organizations also from over 15 countries.

As early as 2019, Hin Kong Power Company has secured a 25-year power purchase agreement with the EGAT. With the project slated for commissioning only in March 2024 and January 2025, this power purchase agreement guarantees that the project will operate profitably for the next 25 years or at least until 2050, derailing Thailand’s carbon neutrality goal by 2050.

JICA, ADB, and AIIB withdraw from Hin Kong
When the JICA announced that it was considering financing the massive 1.4 GW Hin Kong Gas Project together with ADB through a syndicated loan agreement on January 8, 2021, it was met with fierce opposition. About 48 organizations from over 15 countries, through a joint statement, called out JICA and ADB to withdraw all financing for the Hin Kong Gas Project due to the following reasons:

1. There is no merit to JICA’s justification that the project will supply Thailand’s increasing electricity demand due to the rise of digitalization and electric vehicles because there is in fact an existing energy surplus in Thailand;
2. Fossil gas-fired power plants are producing 60% of the country’s electricity. It is illogical to add the same kind of power plant to serve as bridge fuel;
3. Building a gas-fired power plant is not aligned with the Paris agreement, the net-zero greenhouse gas emission by 2050 policy set by Japan’s Prime Minister Yoshihide Suga, and JICA’s own guidelines.

In a statement addressed to AIIB president Jin Liquin and its Board of Directors, the organizations reiterated the same line of arguments raised to JICA and ADB, but also brought up RATCH Group’s alarming track record of handling project accidents. RATCH Group acted as a construction advisor and co-sponsor in Xe Pian-Xe Namnoy Dam in Lao PDR, which collapsed before becoming operational in 2018, killing 49 people and leaving thousands of riparian villages homeless and without lands to cultivate. As of 2022, RATCH Group has yet to properly compensate the victims of the said project accident. It is precisely due to RATCH’s poor reputation for addressing social and environmental issues as well as human rights violations that it is currently in the exclusion list of three huge global asset managers–Robeco AM, State Street Global Advisors, and Storebrand.

On February 1, 2022, AIIB officially withdrew from the gas project considering the project misaligned with its climate-related policy, but other financiers remained.
Remaining financiers called to exit Hin Kong Project

The US Dollar tranche amounting to USD 250 Million will be funded by Mizuho, Sumitomo Mitsui Banking Corporation, Sumitomo Mitsui Trust Bank, Société Générale, Natixis, Standard Chartered, Bank of China, Oversea-Chinese Banking, and Industrial and Commercial Bank of China (ICBC).

The Thai Baht tranche which consists of roughly USD 150 Million will be funded by Siam Commercial Bank and Bangkok Bank.
Remaining financiers called to exit Hin Kong Project

With JICA, ADB, and AllB out of the picture, Hin Kong Company is still seeking to close a USD 400 million loan deal with at least 11 more banks. The loan is reportedly equally divided into a US Dollar tranche and a Thai Baht tranche. Many of the remaining financiers of the Hin Kong Project are among the top financiers of fossil gas projects in SEA. Among the top post-Paris financiers of the fossil gas industry in SEA, Sumitomo Mitsui Financial Group, which owns Sumitomo Mitsui Banking Corporation and Sumitomo Mitsui Trust Bank, ranks first, Mizuho Financial Group second, and Oversea-Chinese Banking fourth.

Meanwhile, Siam Commercial Bank and Bangkok Bank place eight and ninth, respectively, in the top post-Paris financiers for downstream gas projects. These same local banks ranked second and fourth, respectively, in the top gas financiers for 2020-onwards, together with Standard Chartered which ranked ninth in the same list. Siam Commercial Bank is the first Thai bank established by Royal Charter, and with no less than the King of Thailand, King Vajiralongkorn as the largest single shareholder. Bangkok Bank is the sixth largest bank in SEA and the largest bank in Thailand by total assets, and a leading provider of corporate finance.

Bank of China and Industrial and Commercial Bank of China are also part of the list of top state-owned banks financing fossil gas projects in the region, including projects in Indonesia and Malaysia. As for Société Générale and Natixis, although they are not part of any of the top financiers list in SEA, they are listed in the top 50 financiers of fossil fuels in the world according to the latest League Table in the Banking on Climate Chaos Fossil Fuel Finance Report 2022. While most of these banks have a history of financing fossil gas projects in the region, they have made Net-Zero pledges recently. As members of the Net-Zero Banking Alliance, Sumitomo, Mizuho, Standard Chartered, and Société Générale have all committed to align their lending and investment portfolios with net-zero emissions by 2050. This commitment will be nothing short of a false promise if they will support the Hin Kong Gas Project, which is guaranteed to operate until 2050, and possibly beyond. According to the Oil and Gas Policy Tracker, Sumitomo, Mizuho, and Standard Chartered have not been proactive in excluding oil and gas.

The domestic banks, Siam Commercial Bank and Bangkok Bank, have not adopted strong climate commitments as compared to the international lenders who are explicit with their goal of carbon neutrality by 2050. However, assessing and managing climate-related financial risks, including the policy risks and stranding assets risk of fossil gas power projects, should be a growing concern for these banks, especially following Thai PM Prayut Chan-o-cha’s bold net-zero pledge by 2065, or even earlier at 2050 with adequate and equitable support.

Key Findings
• With a massive fossil gas infrastructure already in place, Thailand’s pipeline projects show a massive build-up ahead. After the Paris Agreement, 10 more LNG terminals, 3 more gas pipelines, and 4 more gas-fired power plants are expected to be developed.
• Across the entire fossil gas infrastructures—LNG terminals, gas pipelines, and gas-fired power plants—there is an evident high concentration of ownership among the same developers—PTT, Gulf Energy, Development, and EGAT.
  • PTT, a Thai state-owned oil and gas company, tops the list of developers for LNG projects, proposing half of all terminals in development, the sole developer for gas pipelines, and the sixth top developer of gas-fired power plants.
  • Gulf Energy Development follows PTT in the list of top LNG terminal developers, proposing three LNG terminals—the Gulf MTP LNG Terminal, Gulf of Thailand FSRU LNG Terminal and Samut Prakan FSRU Terminal; and leads the development of gas-fired power plants, with a total of 5.8 GW operating gas power plants and 7.8 GW more under construction across the provinces of Pathum Thani, Rayong, Ayutthaya, Saraburi, Nakorn Ratchasima, Prachubkirikhan, and Chachoengsao.
• The top proponents of projects in development as of March 2022 mirror all of the projects that have been proposed and are already under construction post-Paris. There are no major changes in terms of the developer companies.
• Local, public Thai banks are leading the financing for the fossil gas build-up post-Paris and 2020-onwards. Bank of Ayudhya and Siam Commercial Bank top the list, with the former being the leading financing post-Paris, and Siam leading from 2020-onwards. Kasikornbank, Bangkok Bank, and Krung Thai Bank place third, fourth, and fifth, respectively, in both rankings.
• Foreign banks, Japan’s Sumitomo Mitsui Financial Group (ranked sixth) and Mizuho Financial Group (ranked ninth) provided loans and credits to Thai gas projects, together with Malaysia’s CIMB Bank (ranked seventh).
  • Notably, ADB is the only regional development bank, and ironically one that touts itself as a climate bank, that made it to the top banks fueling the fossil gas industry in Thailand after the Paris Agreement was signed.
  • Japanese banks and ADB are noticeably lacking in the 2020-onwards Top Financiers Ranking but are replaced by Standard Chartered and China Development Bank, along with two other Thai local banks—Asia Plus Group Holdings and Aira Capital.
• After the Paris Agreement, over 70% of the financing for Thailand’s fossil gas projects was facilitated through loans and credits. A stark contrast to the financing of projects currently in development, in which nearly all financing is being facilitated by banks through underwriting debt securities.
• The massive fossil gas infrastructures in development are however being built on shaky ground after Thailand Prime Minister Prayut Chan-o-cha’s bold net-zero declaration at COP26 in Glasgow. From the initial goal of reaching carbon neutrality by 2050 and net-zero GHG emissions by 2065, Prime Minister Prayut announced that Thailand can raise its ambition to 40% GHG emissions reduction by 2050 and net-zero GHG emissions by 2050 if there is adequate and equitable support for technology, finance, capacity building, as well as cooperation under the convention.
• This precise pronouncement has been cited by several organizations across the country in calling on developers and financiers alike to exit the controversial 1.4 GW Hin Kong Gas-fired Combined-Cycle Power Plant.
VII. Recommendations

More than five years since the adoption of the Paris Agreement in 2015, gas development is expanding at a rapid pace in Southeast Asia. Behind it are financial institutions building reputations as climate and clean energy foes instead of improving their energy and sustainability policies.

To avert a fossil future for Southeast Asia, financial institutions should:

1. Adapt a Paris-aligned policy that pursues a 1.5°C Pathway-reaching a global CO2 emissions decline of 45% from 2010 levels by 2030, and net-zero CO2 emissions by mid-century-without false solutions, in accordance with the P1 Scenario of the IPCC’s Special Report on Global Warming of 1.5°C. This policy should:

   a. Prohibit all financing, whether direct or indirect, for new oil and gas fields and LNG terminals and all companies listed in the Global Oil & Gas Exit List,
   b. Set stringent restrictions on new fossil gas power plant projects and expansion projects if determined to be a necessary and economically viable bridge fuel for a country’s low-carbon transition,
   c. Set and disclose a timeline and measurable targets (including short-, medium-, and long-term targets) in phasing out all fossil gas exposure, and pursue early retirement, in case of equity investments, of existing fossil gas power projects on a 1.5°C-aligned timeline.

2. A distinction should be made regarding the critical roles of regional development banks and local banks in adopting a Paris-aligned policy:

   a. Regional development banks should lead the adoption of the most ambitious Paris-aligned energy policies and strategies to finance the necessary energy transformation in SEA, starting with prohibiting financing for new fossil gas projects and for all companies engaged in fossil gas expansion projects, and
   b. Local banks should align financial flows to rapid and just transition pathways that are in accordance with their country’s fair share in the 1.5°C Paris goal, which prohibits financing for new oil and gas fields.

3. Withdraw and prohibit financing for fossil gas projects that violate human rights, endanger critically important and biologically diverse ecosystems and habitats, and pose grave reputational risks.

4. Disclose all financial services provided to fossil gas-related operations and fossil gas companies and adopt the full recommendations of the Task Force on Climate-related Disclosures to support its shareholders and stakeholders in appropriately assessing and pricing climate-related risks, and to ensure that the overall effects of climate change become routinely considered in business and investment decisions.
Endorsements

This report is endorsed by the following organizations:

Disclaimer: The organizations listed as endorsers endorse the contents of this report as a whole, but not every organization necessarily endorses the ranking for every company.

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Endnotes

1 In the IPCC’s S1 Scenario, the 1.5°C Paris goal is achieved through a downsized energy system, which enables rapid decarbonization of energy supply, and with afforestation as the only Carbon Dioxide Removal option considered. Neither fossil fuels with CCS nor bioenergy with CCS are used.


7 Carbon dioxide removal (CDR) pertains to anthropogenic activities removing CO2 from the atmosphere and durably storing it in geological, terrestrial, or ocean reservoirs, or in products. It includes existing and potential anthropogenic enhancement of biological or geochemical sinks and direct air capture and storage, but excludes natural CO2 uptake not directly caused by human activities.

8 IPCC, Special Report on 1.5°C, Summary for Policymaker. Box SPM. 1: Core Concepts Central to this Special Report, 26.

9 Greenpeace USA, Carbon Capture Scam (CCS): How a false climate solution bolsters big oil, April 2015, 6.

10 IPCC, Special Report on 1.5°C, Summary for Policymaker, 16.


12 Global Energy Monitor’s data as of February 2022 shows that planned gas expansion in SEA has 120 GW of intended capacity in pre-construction and under construction. The 120 GW includes 12.5 GW in the Philippines, which excludes some projects that have been announced but are not yet reflected in the Department of Energy’s list of private sector-initiated projects. Therefore, if these projects are included, the Philippines has about 50 GW of capacity in development as of March 2022. Using this figure, the total planned capacity in SEA now becomes 156 GW. Global Energy Monitor. Boom and Bust Gas Report 2022. (March 2022). https://globalenergy-monitor.org/wp-content/uploads/2022/05/GEM_BoomBustGas2022_FINAL.pdf

13 Figure is based on GEM’s Global Fossil Infrastructure Tracker (GFIT) for Terminals as of June 2021. According to GEM, updates to status that have occurred after June 2021 are not reflected in the GFIT database. This might explain the inconsistencies of data on capacities and projects that are in development and operating between the GFIT database and GEM’s updated summary tables as of March 2022. Since the latter does not differentiate between projects that began operations before 2016, or to the Paris Agreement, and those completed from 2016 onwards, the GFIT database is used in the discussion on overall projects that are in development and operating from January 2016 to March 2022. Based on this condition, the operating import and export capacities of LNG terminals stand at 9.35 mtpa and 4.8 mtpa, respectively.

14 Figure is based on GEM’s updated summary tables and CEED’s dataset on LNG terminals in the Philippines, both as of March 2022. According to GEM, the total import capacity in development stands at 107.01 mtpa, which includes the 10.5 mtpa in the Philippines. The Philippine figure has been updated to 36.53 mtpa, which brings the total import capacity in development to 135.04 mtpa. The total export capacity in development is 16.8 mtpa.


16 14  Figure is based on GFIT for Pipelines as of December 2020. Although this dataset is not updated, it was used to compute for the gas pipeline projects that have started operations from 2016 onwards. The 5,190 km comprises 4,655 km of pipeline projects in development and 535 km of projects that began operations in 2016 onwards. The total length of the gas pipeline projects in development has now increased to 7,542 km based on GEM’s summary tables as of March 2022.

17 GOGEL is a public database that tracks the largest oil and gas expanders and the companies responsible for the most controversial forms of oil and gas production. It provides the information financial institutions need to stop enabling fossil fuel expansion and begin steering toward an oil and gas exit.


Financing A Fossil Future

47  Joint Statement - We stand against JICA and ADB’s financing of Hin Khong Gas Power Project in Muang Ratchaburi, Thailand.
50  In the IPCC’s PI Scenario, the 1.5°C Paris goal is achieved through a downsized energy system, which enables rapid decarbonization of energy supply, and with afforestation as the only Carbon Dioxide Removal option considered. Neither fossil fuels with CCS nor bioenergy with CCS are used.