

Tanggung LNG: Big project, huge risks



Tanggung LNG: Big project, huge risks

September 2025

Published by Trend Asia and Recourse in collaboration with Wahana Lingkungan Hidup Indonesia (WALHI / Friends of the Earth Indonesia), debtWATCH Indonesia, Friends of the Earth Japan and the Big Shift Global coalition.

Authors: Novita Indri and Marjorie Pamintuan.

This briefing has been greatly strengthened by the invaluable feedback and inputs from: Dwi Sawung of WALHI, Diana Gultom of debtWATCH Indonesia and Hozue Hatae of Friends of the Earth Japan.

The report also received comments from the Asian Development Bank, the Asian Infrastructure Investment Bank and the International Finance Corporation, whose review and responses do not imply endorsement.

For further information on the issues raised in this report please contact:

Recourse, Kraijenhoffstraat 137A, 1018 RG, Amsterdam, The Netherlands info@re-course.org

This publication may be used free of charge for the purposes of advocacy, campaigning, education, and research, provided that the source is acknowledged in full. We request that all such use be registered with us for impact assessment purposes.

Cover photo: BP's Tangguh base in Bintuni Bay. Photo by the Environmental Justice Atlas.

Recourse is a non-profit organisation registered in Europe, which campaigns for a world where people and planet are at the heart of development. www.re-course.org

Trend Asia is an independent civil society organisation registered in Indonesia, which acts as an accelerator of energy transformation and sustainable development in Asia. trendasia.org/en/

Contents

| | |
|--|-----------|
| Executive summary | 4 |
| Introduction | 6 |
| The ADB's direct project loans | 9 |
| MDBs' indirect financing of the Tangguh LNG project | 10 |
| MDB Paris Alignment methodologies and energy sector policies are inadequate | 12 |
| The Tangguh trap: How gas risks derailing Indonesia's energy transition | 14 |
| Impacts of Tangguh LNG | 17 |
| Displacement and socio-ecological impacts on Indigenous communities | 17 |
| Increased greenhouse gas emissions | 18 |
| Conclusion and recommendations | 20 |
| References | 22 |



BP's Tangguh base in Bintuni Bay. Photo by the Environmental Justice Atlas.

Executive summary

Governments, including Indonesia, and multilateral development banks (MDBs) have committed to the Paris Agreement's goal of limiting global warming to 1.5 degrees Celsius above pre-industrial levels. This requires phasing out fossil fuels and transitioning to renewable energy systems. And yet, the Indonesian government and MDBs are not honouring their commitments.

In February 2025, the construction of the fourth liquefied natural gas (LNG) production facility (Train 4) and an associated carbon capture utilisation and storage (CCUS) system as part of Indonesia's Tangguh LNG project were identified among the several "mega oil and gas priority projects" during the current President Prabowo Subianto's term.¹

Tangguh LNG is Indonesia's largest natural gas extraction and LNG production site, located in Bintuni Bay, West Papua province. The project is majority-owned and wholly-operated by British Petroleum Berau (BP Berau). Its parent company, British Petroleum (BP), has one of the highest historical GHG emissions of any private sector entity.² The Tangguh LNG project was developed, and continues to do business in, a territory

marked by conflict and armed violence. Its construction in 2005 caused the displacement of local Indigenous communities from their villages and loss of access to their traditional fishing and hunting grounds.

The Asian Development Bank (ADB), Asian Infrastructure Investment Bank (AIIB) and the World Bank Group's private sector arm, the International Finance Corporation (IFC), have not yet made public commitments to finance the construction of Train 4 and the CCUS facility in Tangguh. However, they have previously been involved in direct and indirect financing of the construction of the Tangguh LNG project and its Trains 2 and 3, including through financial intermediaries (FIs).

The Tangguh LNG project has caused untold environmental destruction, human rights violations and increased GHG emissions. Further expanding the project to Train 4 will worsen the project's climate impacts and delay Indonesia's shift to renewable energy. Unfortunately, MDBs' current policies on energy and Paris Alignment methodologies contain numerous loopholes that do not preclude future investments in Train 4 and the CCUS facility. The ADB and World Bank's

current review processes of their policies on energy, and the AIIB's imminent start (no later than 2027) of its review, present opportunities for these banks to strengthen their commitment to the Paris Agreement and fully exclude both direct and indirect investments in fossil gas.

Based on the evidence below, this paper recommends that:

- **MDBs should not fund the expansion of Tangguh LNG to Train 4 and associated CCUS facilities.** Instead, MDBs should help Indonesia step away from fossil fuels and build more capacity for sustainable, accessible, fully renewable energy.
- **MDBs should review their FI clients' portfolios and encourage exit from all fossil fuels, including fossil gas.** MDBs should plug loopholes in their FI lending policies to ensure that they are not indirectly supporting the further expansion of the Tangguh LNG to Train 4 and the associated CCUS facility, as well as other fossil gas projects.
- **MDBs must commit to end funding for all fossil fuels.** As they review their energy policies and strategies, the MDBs must commit to stop funding for all fossil fuels, including through financial intermediaries. At the same time, the MDBs should drop the narrative of 'gas as a transition fuel' and instead commit to scaling up public finance to support the rapid transition from fossil fuels to renewable energy.
- **MDBs should strengthen their safeguards and accountability mechanisms to uphold the rights of affected communities and protect the climate.** For Tangguh LNG, this can be done through conducting an independent and transparent audit of the project with participation from Papuan Indigenous peoples' groups and civil society.

The ongoing IFC Sustainability Framework review should strengthen the existing Performance Standards (PS)³ to ensure the IFC does not fund projects that contribute to worsening the climate, contribute to biodiversity and forest loss and violate the rights of affected communities, including Indigenous peoples.

A new PS on FI lending that will improve transparency and disclosure, assess climate risks, phase-out fossil fuels, and enhance communities' access to remedy should be adopted. The ongoing reviews of the ADB and AIIB accountability mechanisms must result in enhanced accountability for affected communities, in particular by lowering barriers to access and enabling the mechanism to self-initiate investigations in cases where civil society space is severely restricted.



Serene Island Scenery in Papua, Indonesia. Photo by Adiardi Zulfansyah.

Introduction

The Indonesian Papua region is a biodiversity hotspot threatened by extractive industries and climate change. Natural forests span over 24.5m hectares — covering more than 78% of Papua's land. The vast forests act as a carbon sink, removing around 52 million tonnes of carbon dioxide equivalent (CO₂e) from the atmosphere each year (equivalent to the annual emissions of Singapore).⁴ However, these rich ecosystems are rapidly being destroyed for the expansion of extractive industries such as mining, logging, palm oil plantations, large-scale agricultural plantations and fossil gas projects.⁵ By 2024, the loss of 136,000 hectares of natural forest alone is estimated to have released 10.7m tonnes of CO₂ into the atmosphere.⁶

Tangguh LNG is a natural gas extraction and LNG production project located in Bintuni Bay, West Papua province (See Figure 1). The project is majority-owned and wholly-operated by British Petroleum Berau (BP Berau). Its parent company, British Petroleum (BP), has one of the highest historical greenhouse gas (GHG) emissions of any private sector entity.⁷ Tangguh LNG's construction in 2005 caused the displacement of local

Indigenous communities from their villages and loss of access to their traditional fishing and hunting grounds.⁸ With its current three LNG production trains (See Box 1) operating, it is Indonesia's largest gas field and largest LNG producer, capable of producing 11.4 million metric tons per year (mtpa) of LNG.⁹

Tangguh LNG's emissions were estimated at 5mtpa CO₂e between 2010 to 2015¹⁰ and projected to increase to 8mtpa CO₂e after the third LNG production train went online¹¹ in 2023. These emissions are more than four times those of neighbouring Timor Leste's, which were at 2.01mtpa CO₂e in 2022.¹² Emissions from Tangguh LNG are exacerbating climate change, which is already threatening one of Papua's most iconic natural landmarks — the only remaining glacier on the peak of the Jayawijaya Mountains, located between Central Papua and Papua Pegunungan Provinces. Once spanning an estimated 19.3km² in 1850, the glacier had shrunk to just 0.5km² by 2018. According to the Indonesian Agency for Meteorology, Climatology and Geophysics (BMKG), this "eternal snow" could vanish entirely as soon as 2026 if the current warming trend continues.¹³

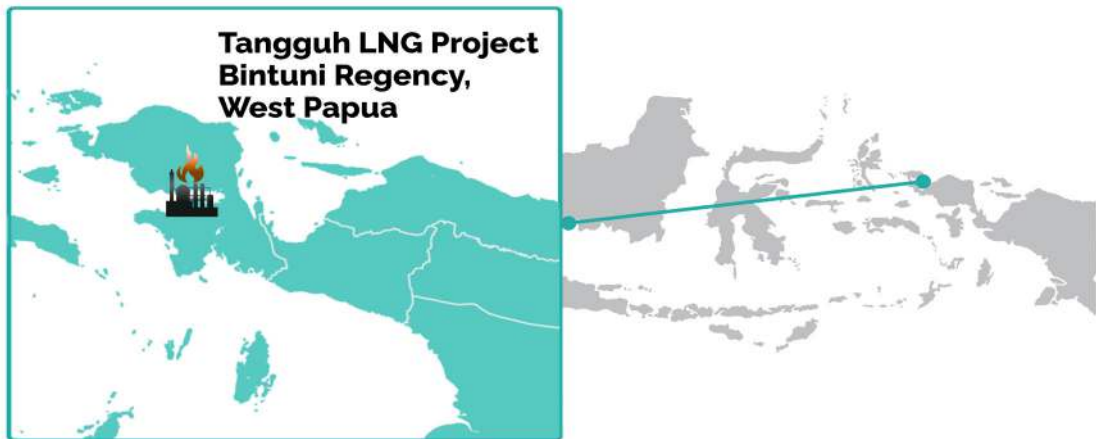


Figure 1. Tangguh LNG Project is located in Bintuni Regency, West Papua, Indonesia.

This sends a clear message: the climate crisis is no longer a distant threat — it is unfolding right now, with real and tangible impacts that endanger communities and exacerbate environmental degradation and rapid biodiversity loss. Governments, including Indonesia, and multilateral development banks (MDBs) have committed to the Paris Agreement’s goal of limiting global warming to 1.5 degrees Celsius above pre-industrial levels. This requires phasing out fossil fuels and transitioning to renewable energy systems.

And yet, the Indonesian government and MDBs are not stepping up to their commitments to the Paris Agreement. In February 2025, the Indonesian government announced that it would be prioritising the completion of several large-scale oil and gas projects,¹⁴ including the fourth liquefied natural gas (LNG) production facility (Train 4) of the Tangguh LNG Project.¹⁵ Further expanding this project will increase the facility’s LNG production capacity, increase Indonesia’s dependence on fossil fuels, block the transition to renewable energy and worsen the climate crisis.

While no MDB has yet made a public commitment to finance the building of the fourth LNG production facility in Tangguh, MDBs have previously been involved in supporting the construction and expansion

of Tangguh LNG. The Asian Development Bank (ADB) provided a \$350m loan in 2005 to support the construction phase, and another \$400m loan in 2016 to support the building of the third LNG production facility (Train 3). The World Bank Group’s private sector arm, the International Finance Corporation (IFC), and the Asian Infrastructure Investment Bank (AIIB), on the other hand, indirectly supported the construction of Train 3 between 2016 and 2024 through investments made by their financial intermediary (FI) clients.



Building the Tangguh LNG Train 4 will increase LNG production and extend the project’s life. The proposed carbon capture, utilisation, and storage (CCUS) facility, to be developed alongside Train 4, will further justify the increased use of LNG and delay Indonesia’s transition to renewable energy. Unfortunately, these MDBs’ policies on energy and Paris Alignment methodologies do not prevent them from investing in Train 4.

The Paris Agreement, which took effect in November 2016, could have marked a moment when the MDBs reconsidered their involvement in the project. However, the MDBs have been slow in their commitment to aligning their financial flows to the Agreement's goal of limiting global warming to 1.5 degrees Celsius above pre-industrial levels. After their collective agreement on Paris alignment in 2017,¹⁶ MDBs were only able to agree on a set of methodological principles on how to do so in 2023, six years later.¹⁷ Moreover, these principles are weak and don't fully align with the 1.5°C goal; for example, they allow the MDBs to continue investing in fossil gas under the pretext of transitioning to 'cleaner' fuels.

The ADB and World Bank's current review processes of their policies on energy, and the AIIB's imminent kick-off (no later than 2027) of its review, present opportunities for these banks to strengthen their commitment to the Paris Agreement. This can be done through excluding direct and indirect support for fossil gas, and ensuring that false solutions such as CCUS, which prolong dependence on fossil fuels, are not supported by the banks.

MDB participation in financing Tangguh LNG

Tangguh LNG is Indonesia's largest natural gas extraction and LNG production site. It currently operates three LNG production trains (see Box 1) in Bintuni, West Papua. The project is part of an integrated development initiative across six gas fields located in Berau, Muturi, and Wiriagar.¹⁸

The construction and expansion of the Tangguh LNG project was financed by three MDBs — the ADB, IFC and AIIB. Export credit agencies such as the Japan Bank for International Cooperation and KfW, as well as other international commercial banks such as Mizuho Bank, Bank of China, China Construction Bank, The Bank of Tokyo-Mitsubishi UFJ, Sumitomo Mitsui Banking Corporation, DBS Bank, United Overseas Bank, BNP Paribas, Credit Agricole Corporate and Investment Bank and Oversea-Chinese Banking Corporation, have also been involved.

The ADB's direct project loans

In December 2005, the ADB supported the construction of the Tangguh LNG through a \$350m loan to the Hongkong and Shanghai

Banking Corporation USA, National Association (HSBC Bank USA, N. A.), which acted as the trustee, or the borrower and paying agent for the project.¹⁹ The loan supported the development of the first phase of the project,²⁰ which consisted of two offshore platforms accessing the giant Jurassic Vorwata gas field delivering gas to the Train 1 and Train 2 LNG production facility.²¹ Indonesian and Papuan civil society opposed the project and raised concerns about pollution, loss of access to traditional fishing grounds and militarisation, among others, in West Papua, to the ADB's management and shareholders. However, management justified the loan, citing contributions to "sustainable economic growth" for Indonesia²² and stating that it would supply "environmentally benign LNG" to neighbouring countries.²³

In December 2016, the ADB signed another \$400m loan to support the expansion of the Tangguh LNG Project.²⁴ The loan funded the building of Train 3 as well as 29km of undersea gas pipelines and two condensate and loading jetties to transport the LNG.²⁵

Box 1. What is an LNG train?

An LNG train is the liquefaction unit that produces LNG. It is composed of a series of interconnected pipes, compressors, turbines and other components that purify, cool down and convert natural gas into LNG.

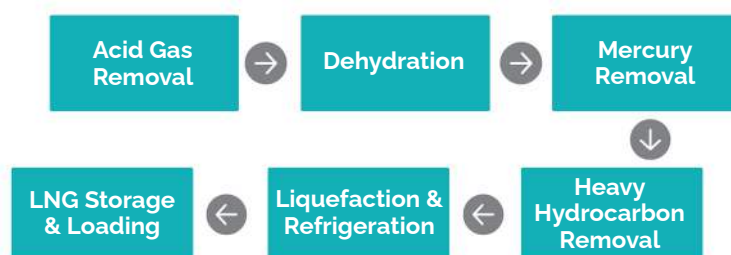


Figure 2. Simplified diagram of an LNG production train

MDBs' indirect financing of the Tangguh LNG project

The ADB, IFC and the AIIB have all indirectly supported the expansion of the Tangguh LNG project between 2016 to 2024. The ADB and IFC indirectly supported the Tangguh LNG project expansion through their financial intermediary, PT Indonesia Infrastructure Finance. Meanwhile, the AIIB's indirect financing for the project was through its investment in the infrastructure debt security Bayfront Infrastructure Capital IV.²⁶

PT Indonesia Infrastructure Finance (IIF) was established in 2010 by the Government of Indonesia to attract investments in public-private partnership infrastructure projects in the country. It was set up with shareholding investments from PT Sarana Multi Infrastruktur, ADB, IFC and Deutsche Investitions-und Entwicklungsgesellschaft (DEG), which is owned by KfW. In 2009, both the ADB²⁷ and IFC²⁸ signed separate \$40m equity investments to contribute to establishing the IIF. In 2012, Sumitomo Mitsui Banking Corporation joined the list of shareholders. Figure 3 shows the current shareholding status of IIF.

IIF has financed several oil and gas projects in Indonesia, including Train 3 of the Tangguh LNG Project. In 2016, IIF participated in a \$3.75bn loan package to finance the project, together with other banks such as PT. Bank Mandiri (Persero) Tbk., PT. Bank Negara Indonesia (Persero) Tbk., and PT. Bank Rakyat Indonesia (Persero) Tbk.²⁹

The AIIB, on the other hand, supported the Tangguh LNG expansion to build Train 3 through its investment in the infrastructure debt securities issued by Bayfront Infrastructure Capital IV (BIC IV),³⁰ which was launched in September 2023.³¹ In August

2023, the AIIB approved up to \$80m³² to be invested in BIC IV. BIC IV's disclosure documents show that the Tangguh Train 3's debt, amounting to \$5m and maturing in 2029, is included in its portfolio.

The AIIB's project information page for BIC IV has been updated with a line saying "as of November 1, 2024, AIIB only holds Class A1 - SU Notes (sustainability tranche)", implying that AIIB is not exposed to fossil fuel projects such as Tangguh. However, the AIIB's past participation in the conventional tranches of BIC IV and its continued shareholding in Bayfront Infrastructure Management overall helped increase other investors' confidence (and therefore their participation) in these issuances. Bayfront Infrastructure Management (BIM), which sponsors the infrastructure debt securities issued through BIC, is 30% owned by the AIIB through a \$54m equity investment in 2019.³³

The above evidence shows that MDBs have played an important role in financing different components of Tangguh LNG, both directly and indirectly. Having contributed to the financing of the project, these institutions therefore bear some of the responsibility for its impacts.



MDB Paris Alignment methodologies and energy sector policies are inadequate

Despite having made commitments to align with the Paris Agreement and reduce climate impact, the existing policies in place at the ADB, the AIIB and the IFC would not prevent them from funding Tangguh LNG, including Train 4 and the CCUS facility, in the future. These loopholes must be fixed to ensure MDBs stop contributing to climate breakdown and deforestation.

MDBs have been slow and inadequate in aligning their financing with the Paris Agreement. It took eight years from the adoption of the Paris Agreement in 2015 for the MDBs to launch the Joint MDB Methodological Principles for Assessment of Paris Agreement Alignment in June 2023. The IFC adopted this joint methodology, while the AIIB published its own version a month later, which built on the joint principles.³⁵ The ADB, on the other hand, is yet to publicly release its guidance note for implementing the principles.³⁶

However, both the MDB joint methodology and the AIIB version fall significantly short, as they allow continued support for fossil gas. The AIIB, for example, made its \$80m investment in securities issued by Bayfront Infrastructure Capital IV just one month after claiming that all of its new investments would be fully Paris-aligned from July 2023.³⁷ Fossil gas is not included in the exclusion list (of investments that are not universally aligned with the Paris Agreement), which means that MDBs can continue to invest in gas projects. Moreover, fossil gas projects can still be considered 'Paris-aligned' as long as they are consistent with the Nationally Determined Contributions (NDCs) and Long-Term Strategies (LTS) of the country where the investment is located, even if these NDCs and LTS are not aligned with the 1.5°C goal of the Paris Agreement.

The weak MDB Paris Alignment methodologies are complemented by their equally fossil gas-friendly energy policies that promote gas as a 'transition fuel'. The World Bank, AIIB and ADB have limited their support for fossil gas to midstream and downstream projects. The AIIB's Energy Sector Strategy particularly mentions "[t]ransitional fuels, such as natural gas or biofuels in some instances, can also quickly lower the carbon intensity of the energy mix where local constraint is significant."³⁸ Both the 2005 and 2016 direct financing of Tangguh LNG by the ADB and the indirect financing through the IIF were made under the previous Energy Policies 1985 and 2009, which did not prohibit the bank from investing in upstream oil and gas projects. However, the ADB's current *Energy Policy 2021* still would not have prevented the ADB from investing in Train 3, and even in Train 4, as it still allows support for mid- and downstream gas investments, under which LNG trains are generally classified. Moreover, the restrictions on mid- and downstream gas projects concerning the alignment of the project with a country's LTS and NDCs, existence of alternatives and economic viability would still have allowed ADB's continued investment in Tangguh LNG because of how broadly these can be interpreted.

Combined, the MDB Paris Alignment methodologies and the MDBs' policies on energy allow public finance to continue flowing to fossil gas projects, despite the urgent need to shift to sustainable renewable energy to avoid the more severe impacts from climate change and to ensure energy security for developing countries like Indonesia.



Civil society groups protested outside ADB headquarters in Manila, Philippines, during the Asian Clean Energy Forum in June 2025. Here, an activist has renamed the ADB as "Asian Destruction Bank". Photo by NGO Forum on ADB.

At the time of writing, the ADB is conducting a mid-term review of its *Energy Policy*, while the World Bank Group is discussing changes to its Energy Sector Directions Paper. These are opportunities for these banks to genuinely align with the 1.5°C threshold. Both banks have made commitments to restrict oil and gas funding to mid- and downstream infrastructure. In 2024, neither MDB *directly* funded any gas project. However, current signals suggest that the ADB and WBG may go in the opposite direction as some executive directors of both banks are actively pushing for a 'technology-neutral' approach in financing energy access projects.³⁹

During a 'consultation' held by the ADB on its mid-term energy policy review on the sidelines of the Asia Clean Energy Forum in June 2025, ADB management indicated that the bank still aims to support mid- and downstream fossil gas for the next five years and intends to finance methane-reduction facilities for existing upstream oil and gas infrastructure.⁴⁰ Supporting methane reduction upstream might seem like a sound move. However, the

resulting improved overall efficiency of the upstream oil and gas infrastructure can extend the operational lifespan of these projects. This can potentially hinder the urgent need to shift to renewable energy. The ADB must ensure that it upholds its commitment that it will not finance any methane reduction projects in greenfield oil and gas production, and that supported projects must result in net GHG emission reductions and must not extend the lifetime of existing oil or gas production fields if it wants to pursue this addition in the Energy Policy Review.

Meanwhile, recent pronouncements from the World Bank indicate that the Bank may reconsider its 2017 decision to phase out investments in upstream gas projects.⁴¹ While the World Bank is set to support nuclear energy projects, its EDs are actively discussing whether the Bank should return to financing upstream gas infrastructure. If adopted, these changes will spell a significant step back in the World Bank's climate commitments.



Combined-cycle Gas Power Plant (PLTGU) Tambak Lorok, located in Semarang, Central Java. Photo by Melvinas Priananda, Trend Asia.

The Tangguh trap: How gas risks derailing Indonesia's energy transition

As the narrative framing gas as a 'bridge' to the energy transition continues to be promoted by MDBs as well as oil and gas companies, various Indonesian government policies forecast an increasing reliance on this fossil fuel at least until 2060.⁴² Indonesia's Enhanced Nationally Determined Contribution (ENDC) is supposed to guide increased ambition in adaptation and mitigation. Instead, it includes the use of gas-based power generation as part of its mitigation action plan. The ENDC indicates that the share of gas in the energy mix should be a minimum 22% in 2025 and minimum 24% in 2050.⁴³

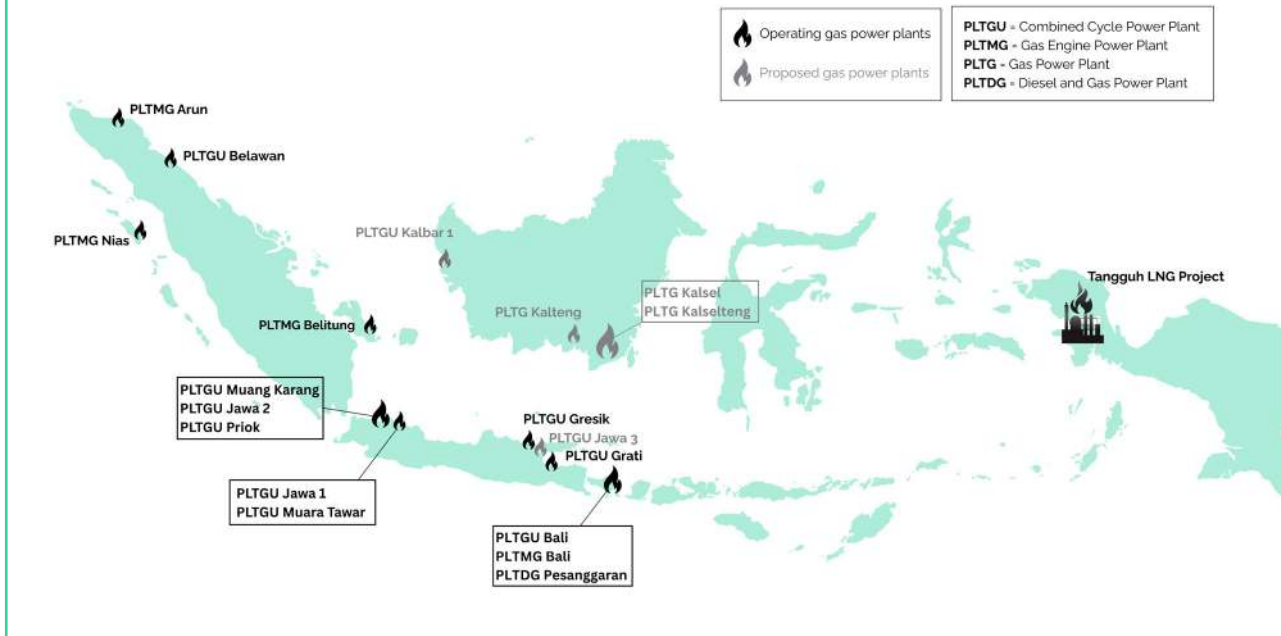
Indonesia's electricity mix in 2024 was already heavily dominated by fossil-based energy sources, with fossil gas playing a significant role. As of October 2024, the country's total installed capacity of power generation reached 75GW, of which almost 30% (21.7GW) comes from gas power plants, while only 12% (8.6GW) comes from renewable energy.⁴⁴ According to the latest *Electricity Supply Business Plan (RUPTL) 2025–2034*, Indonesia is expected to add 10.3GW of gas-based power capacity — a twofold increase compared to previous planning documents.⁴⁵ The *RUPTL 2025–2034*

also mentions Tangguh Trains 3 and 4 will enable larger electricity capacity, including for West and Southwest Papua once they become operational.⁴⁶ The projected expansion of gas-based power supply indicates a significant rise in GHG emissions over the coming decade, potentially undermining national and global climate targets.

Tangguh LNG Project plays a key role in Indonesia's reliance on fossil gas. The total capacity of its three LNG trains reaches up to 11.4mtpa,⁴⁷ which accounts for approximately one-third of Indonesia's total national gas production, with about 33% of its annual production allocated for domestic use.⁴⁸ Perusahaan Listrik Negara (PLN), Indonesia's government-owned electricity generation and distribution company, is one of the primary domestic consumers of LNG supplied by Tangguh. On average, Tangguh LNG supplies approximately 60 LNG cargoes per year to PLN through long-term sales contracts.⁴⁹ Fourteen fossil gas power plants across various regions in Indonesia also receive LNG from Tangguh through Floating Storage Regasification Units (FSRUs) (see Figure 4).

Figure 4. Where does LNG from Tangguh go?

LNG is supplied from Tangguh LNG to several power plants in Indonesia through Floating Storage Regasification Units (FSRUs). Tangguh LNG is also expected to supply to coming power plants that have not yet begun operations.⁵⁰



The Tangguh LNG project continues to expand. Its third LNG production train was officially operational in November 2023.⁵¹ Since 2013, the company has been preparing plans for the construction of a fourth LNG production train.⁵² Aside from the Tangguh Train 4, plans are also underway to build a CCUS facility (see Box 2). In September 2023, BP Berau signed a memorandum of understanding with GE Vernova, CARBONCO, PLN Nusantara and Jawa 1 (owned by PT Pertamina, Marubeni, and Sojitz) to conduct a feasibility study on integrating CCUS into Indonesia's fossil gas industry.⁵³ In November 2024, the Tangguh Ubadari CCUS Compression project (Tangguh UCC) reached its final investment decision.⁵⁴ Co-owners of the Tangguh LNG project agreed to invest \$7m to develop the Ubadari gas field with enhanced gas recovery (EGR) through CCUS, and onshore compressors. The project is expected to begin operation

and production in stages from 2028, and is also estimated to unlock around 84.9 billion cubic metres of additional gas resources for Tangguh LNG. The CCUS component aims to sequester around 15 million tonnes of CO₂ in its initial phase.⁵⁵

Apart from supplying LNG, the Tangguh project has contributed to providing an electricity supply of approximately 4MW through PLN's 30-km subsea cable network. The electricity is purchased from Tangguh LNG at a rate Rp. 450 (\$0.028) per kilowatt-hour (kWh), serving the Bintuni and its surrounding areas.⁵⁶ The supply agreement is set for a 20-year contract period from 2012.⁵⁷ BP and PLN also have ongoing plans to develop two more gas-based power plants in other parts of Papua.⁵⁸ However, the local communities are reportedly not benefiting. In a recent news article, local Indigenous

organisation Dewan Adat Papua (DAP) called on BP and SKK Migas, Indonesia's upstream oil and gas regulator, to fulfil their promise of supplying electricity to communities on the coasts of Bintuni Bay, Berau Bay and the areas of West Papua Province and Southwest Papua

Province.⁵⁹ According to ADB's response to our request for comments on this publication, the PT PLN is responsible for developing the required infrastructure to utilise the gas that is allocated for communities in the provinces of Papua.

Box 2. What is CCUS and why is it problematic?

Rather than immediately transitioning away from dependence on fossil fuels, global stakeholders such as MDBs, energy companies and governments are promoting technologies such as carbon capture, utilisation and storage (CCUS) as a way to mitigate emissions while continuing fossil fuel use, effectively prolonging the very dependency these innovations are meant to replace. The Indonesian government itself has reinforced support, and provided legal legitimacy, for carbon capture technologies by issuing Presidential Regulation No. 14 of 2024 for the implementation of carbon capture and storage (CCS) activities.⁶⁰

CCUS is a false solution⁶¹ that fails to address methane emissions from fossil gas facilities. It is designed to enhance the environmental image of fossil fuel companies to protect the 'sustainability' of their business. Moreover, the technology is not necessarily cheaper compared to renewables and has other costs. A Stanford study found out that "when energy costs, health impacts, and emissions are taken into account, the overall cost of investing in carbon capture and removal is about 9–12 times higher than the cost of switching to 100% renewable energy."⁶² The efficiency of CCUS in mitigating emissions is also largely unproven as existing capture rates of existing facilities are always below target.⁶³ The framing of gas and unproven technologies like CCUS as a 'bridge' to energy transition risks trapping Indonesia in a prolonged dependency on fossil fuels. This could significantly lock Indonesia into a high rate of emissions release and undermine national and global climate targets by delaying action to address the climate crisis.



LNG Tanker at Tangguh LNG. Photo by the Environmental Justice Atlas.

Impacts of Tangguh LNG

Displacement and socio-ecological impacts on Indigenous communities

While the Indonesian government often highlights the positive contributions of the LNG industry, the cascading environmental and social consequences — particularly in the Bintuni Bay region — cannot be overlooked. Indigenous communities were resettled from their ancestral village of Old Tanah Merah to a new site renamed Tanah Merah Baru and to Onar Baru Village.⁶⁴ The Indigenous communities formerly relied on fishing, hunting and processing sago from local palm trees. Now, many members of the community have had to shift to farming because of the loss of access to these resources when the Tangguh LNG project was built and fenced off.⁶⁵ The Tangguh LNG project also attracted migrants from other parts of Indonesia to the communities near the facility. Conflicts emerged because of the cultural shifts and the marginalisation of indigenous Papuans from access to economic opportunities.⁶⁶

Dr Filep Wamafwa, representative of the electoral district of West Papua in Indonesia's Regional Representative Council, has questioned BP's claims on the benefits and welfare that the LNG project has given to the displaced communities. Using evidence from his community visits, Dr Wamafwa has called out the discrepancies between BP's reports and the actual conditions, with regards to Tangguh LNG's contributions to jobs, health, education, access to clean water and general welfare in affected communities.⁶⁷ In a news report in 2025, he urged the West Papua Provincial Government to evaluate the project's permit because the company failed to meet its social responsibilities.⁶⁸

Bintuni Bay is home to an estimated 2.25m hectares of mangrove forests — the largest expanse in Southeast Asia.⁶⁹ These mangrove forests are critical for the maintenance of coastal ecosystem functions, including oxygen production, habitat for diverse marine species and protecting the area from the impacts of large waves. The construction of the Tangguh LNG Project has significantly

damaged these mangrove forests.⁷⁰ Commenting on the draft version of this report, the ADB confirmed that 11 hectares had been cleared.

The Tangguh Independent Advisory Panel (TIAP) was established in 2002 to advise BP on issues relating to security, human rights, governance, revenue management, the political environment and the broader issues relating to how Tangguh LNG affects the people of Bintuni Bay and Papua.⁷¹ However, civil society coalitions campaigning on the Tangguh LNG project criticised the lack of independence of the supposedly independent TIAP because the panel was created and funded by BP, and its community visits are also facilitated by BP.⁷² The TIAP was also accused of downplaying the larger context of rights abuses by Indonesian security forces, which the Tangguh LNG project can exacerbate (see Box 3).

Increased greenhouse gas emissions

BP, the global parent of BP Berau, which operates Tangguh LNG, reported a notable increase in its methane emissions in 2023, up by 10% from 2022, due primarily to increased flaring in its Azerbaijan-Georgia-Türkiye region and Tangguh operations.⁷³

Methane is a particularly potent GHG, responsible for about 30% of global temperature rise since the industrial era.⁷⁴ In 2024, Indonesia's methane emission contribution from the oil and gas sector reached 1012.5 kilo tonnes (Kt), the second highest after India in the South and Southeast Asia region.⁷⁵ In fact, the International Energy Agency (IEA) says that the temperature rise from methane emissions is 86 times more powerful than carbon dioxide (CO₂) emissions over a 20-year time span in trapping heat, making it a key driver of the climate crisis.⁷⁶ Thus, avoiding additional methane emissions from this sector is critical to curb global temperature rise above the 1.5°C threshold, and important in mitigating the intensifying impacts of the climate crisis.

Box 3. Repression of civic space in Papua

The Tangguh LNG project was developed and continues to do business in a territory marked by conflict and armed violence. The struggle for rights over land and natural resources is a key aspect of the existing conflict in Papua. Repressive and violent measures have been applied to suppress the voices of press, activists and human rights defenders.

In October 2024, the office of the local press, Jubi, known for reporting on human rights in West Papua, was attacked with Molotov cocktails by unidentified men.⁷⁷ Foreign media access is restricted by a law requiring them to obtain permission before entering “red zones” like West Papua.⁷⁸ In its 2024 monitoring report, global civil society alliance CIVICUS labelled Indonesia’s civic space as “obstructed” because of restrictive laws, excessive use of force, as well as arrests and harassment of human rights defenders and activists, especially in Papua. In 2025, Indonesian authorities criminalised and arrested several Papuan activists for their peaceful protests against nickel mining in Raja Ampat, PT Freeport and other extractive industries, and the militarisation of West Papua.⁷⁹

The Indonesian government has increasingly deployed military personnel across West Papua, particularly to secure areas that have natural resources, including mining and fossil gas. The Tangguh LNG project and associated facilities have been granted high national security status through the National Vital Objects under Decree of the Ministry of Energy and Mineral Resources No. 270.K/HK.02/MEM.S/2022.⁸⁰ [A 2021 report](#)⁸¹ by several civil society organisations revealed the link between ‘development’ projects in Papua and the deployment of military forces, which frequently results in violence against civilians. BP Berau claims it uses the Integrated Community Based Security (ICBS) strategy, which employs local Papuans for everyday security of the project and has committed to only call the police, not the military, and only if a security problem escalates.⁸² However, this is difficult to verify in a context where civil society organisations and both local and foreign press are severely restricted.

This security-first approach has serious implications. While it is framed as a way to protect major projects, the presence of armed forces on the ground can intensify risks of shrinking civic space, infringing on Indigenous rights, and deepening the potential for human rights abuses. These conditions highlight deep concerns about how security is governed in conflict-affected regions like Papua. The opaque deployment of security personnel, without public accountability and transparency, underscores the urgent need for evaluation. Moving forward, any security involvement in development projects must be critically reviewed to prioritise democratic values, safeguard human rights, and ensure that civic space is protected — not suppressed.

Conclusion and recommendations

The Tangguh LNG project has caused untold environmental destruction, human rights violations and increased GHG emissions. Further expanding the project to Train 4 and building CCUS facilities will worsen the project's climate impacts and delay Indonesia's shift to renewable energy.

As of writing, MDBs have no public commitments to finance Train 4. According to the written response by ADB when asked for comment, the bank currently has no plans or discussions to fund Train 4, and any financing will be consistent with the bank's Energy Policy and Paris Alignment methodology. However, the ADB's as well as the IFC's and AIIB's policies and strategies on energy and Paris Alignment methodologies are not robust enough to prevent these banks from financing Train 4. The current discussions on changes to the ADB's Energy Policy and the World Bank's energy directions are taking the wrong turn, but the shareholders still have time to take the right direction. The AIIB's upcoming review of its energy policy (by no later than 2027) is another opportunity for course correction, to set the bank on a path to genuine alignment with the Paris Agreement.

These are the actions that will set MDBs on the right course:

- **MDBs should not fund the further expansion of Tangguh LNG to Train 4 and associated CCUS facilities.** Instead, MDBs should help Indonesia step away from fossil fuels and build more capacity for sustainable, accessible, fully renewable energy.
- **MDBs should review their FI clients' portfolios and encourage exit from all fossil fuels, including fossil gas.** MDBs should plug loopholes in their FI lending to ensure that they are not indirectly supporting the further expansion of the Tangguh LNG to Train 4 and CCUS, as well as other fossil gas projects.
 - ➔ The ADB and IFC should review their legacy clients and encourage concrete, measurable, time-bound and 1.5°C Paris Agreement-compatible targets on phasing out of funding for all types of fossil fuels, including fossil gas.
 - ➔ The AIIB should use its influence to encourage a similar phase-out in Bayfront's and other clients' issuance of infrastructure debt securities.
 - ➔ The IFC, in particular, can strengthen its Green Equity Approach by extending it to cover fossil gas projects and prohibiting existing equity clients from making new fossil gas investments.
- **MDBs must commit to end funding for all fossil fuels.** MDBs must commit to stop funding for all fossil fuels, including through financial intermediaries. At the same time, the MDBs should drop the narrative of 'gas as a transition fuel' and instead scale up public finance to support the rapid transition from fossil fuels to renewable energy. Concrete steps to take include:
 - ➔ In MDB energy policies, expand existing limitations on fossil gas investments (such as the exclusion of upstream oil and gas investments) to other segments of the oil and gas industry (downstream).

- ➔ Set a target for complete, time-bound and rapid phase-out of all fossil fuel financing, including fossil gas.
 - ➔ Shift support to renewable energy, avoiding false solutions like CCUS.
 - ➔ Ensure more transparency on FI lending to ensure that public finance is not indirectly supporting fossil fuels.
 - ➔ Conduct independent evaluations of the effectiveness of MDB Paris Alignment methodologies, two years on from adoption.
- **MDBs should strengthen their safeguards and accountability mechanisms to uphold the rights of affected communities and protect the climate.** The Tangguh LNG project offers poignant lessons on the lasting negative social and environmental impacts of large scale fossil projects. Below are concrete steps that MDBs can take to prevent these from happening again:
- ➔ Conduct a truly independent and public audit that will evaluate the environmental and social impacts, including the gender-based harm, of the Tangguh LNG project. This audit must be conducted not by TIAP, but by an institution with no ties to BP and the other project developers to avoid conflicts of interest and issues of independence. The process should also involve the local and Indigenous group(s), and its findings must be transparently disclosed, especially to affected communities in Papua. Apart from the project developers, MDBs should contribute towards the remedy of the harms that they enabled when they supported the Tangguh LNG project and its expansion.
 - ➔ The ongoing IFC Sustainability Framework review should strengthen the existing Performance Standards (PS)⁸³ to ensure the IFC does not fund projects that contribute to worsening the climate, contribute to biodiversity and forest loss and violate the rights of affected communities, including Indigenous peoples. A new PS on FI lending that will improve transparency and disclosure, assess climate risks, phase-out fossil fuels, and enhance communities' access to remedy should be adopted.
 - ➔ The current reviews of the ADB and AIIB accountability mechanisms must result in enhanced accountability for affected communities, in particular by lowering barriers to access and enabling the mechanisms to self-initiate investigations in cases where civil society space is severely restricted.

References

- 1 Nurmutia, E. (2025, February 18). Megaproyek Migas Ini Diusulkan Jalan di Era Pemerintahan Prabowo. *CNBC Indonesia*. <https://www.cnbcindonesia.com/news/20250218154525-4-611614/megaproyek-migas-ini-diusulkan-jalan-di-era-pemerintahan-prabowo>
- 2 Carbon Majors. (n. d.). *Carbon majors entities*. <https://carbonmajors.org/Entities>
- 3 Relevant IFC Performance Standards include Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts; Performance Standard 3: Resource Efficiency and Pollution Prevention; Performance Standard 4: Community Health, Safety, and Security; Performance Standard 5: Land Acquisition and Involuntary Resettlement; Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources; Performance Standard 7: Indigenous Peoples and Performance Standard 8: Cultural Heritage.
- 4 WRI Indonesia. (n. d.). *Protecting the landscape of Tanah Papua*. <https://wri-indonesia.org/en/initiatives/protecting-landscape-tanah-papua>
- 5 Jong, N. H. (2024, June 7). #AllEyesonPapua goes viral to highlight threat to Indigenous forests from palm oil. *Mongabay*. <https://news.mongabay.com/2024/06/alleyesonpapua-goes-viral-to-highlight-threat-to-indigenous-forests-from-palm-oil/>; WRI Indonesia. (n. d.). *Protecting the landscape of Tanah Papua*. <https://wri-indonesia.org/en/initiatives/protecting-landscape-tanah-papua>
- 6 Global Forest Watch. (n. d.). *Indonesia-Papua*. <https://gfw.global/3lyXSOK>
- 7 Carbon Majors. (n. d.). *Carbon majors entities*. <https://carbonmajors.org/Entities>
- 8 Down to Earth. (2013, May). *Bintuni Bay communities want accountability at Tangguh*. <https://www.downtoearth-indonesia.org/story/bintuni-bay-communities-want-accountability-tangguh>
- 9 Bp Indonesia. (2023, October 19). *bp ships first cargo from Indonesia's expanded Tangguh LNG facility*. https://www.bp.com/en_id/indonesia/home/news/press-releases/bp-ships-first-cargo-from-indonesias-expanded-tangguh-lng-facility.html
- 10 PT GreenCap Indonesia. (2016). *Tangguh LNG Trains 1 and 2 independent environmental and social compliance audit report*. <https://www.adb.org/sites/default/files/project-documents/49222-001-ecar-01.pdf>
- 11 Frans, S.J.P. & Maulana, A. (2023). Concept selection and feasibility study for Tangguh carbon capture, utilization and storage/enhanced gas recovery project. <https://www.ipa.or.id/en/publications/concept-selection-and-feasibility-study-for-tangguh-carbon-capture-utilization-and-storage-enhanced-gas-recovery-project>
- 12 EDGAR - Emissions Database for Global Atmospheric Research. (2024). *GHG emissions of all world countries*. https://edgar.jrc.ec.europa.eu/report_2024
- 13 Fadilah, R. (2025, March 5). Salju abadi Puncak Jayawijaya akan segera punah, ini dampaknya. *Antara News*. <https://www.antaraneews.com/berita/4690285/salju-abadi-puncak-jayawijaya-akan-segera-punah-ini-dampaknya#:~:text=Pencairan%20gletser%20di%20Puncak%20Jayawijaya,25%20derajat%20Celsius%20per%20dekade>
- 14 Nurmutia, E. (2025, February 18). Megaproyek Migas Ini Diusulkan Jalan di Era Pemerintahan Prabowo. *CNBC Indonesia*. <https://www.cnbcindonesia.com/news/20250218154525-4-611614/megaproyek-migas-ini-diusulkan-jalan-di-era-pemerintahan-prabowo>
- 15 Bp. (2025). *Tangguh LNG*. https://www.bp.com/en_id/indonesia/home/who-we-are/tangguh-lng.html
- 16 Asian Development Bank. (2023, June 20). *MDBs agree principles for aligning financial flows with Paris Agreement goals*. <https://www.adb.org/news/mdbs-agree-principles-aligning-financial-flows-paris-agreement-goals>
- 17 World Bank. (n. d.). *Joint MDB methodological principles for assessment of Paris Agreement alignment*. <https://www.worldbank.org/en/publication/paris-alignment/joint-mdb-paris-alignment-approach>
- 18 Bp. (2025). *Tangguh LNG*. https://www.bp.com/en_id/indonesia/home/who-we-are/tangguh-lng.html
- 19 Asian Development Bank. (2013, September 19). *Indonesia : INO: Tangguh LNG project*. <https://www.adb.org/projects/38919-014/main#project-pds>
- 20 Asian Development Bank (2005, November). *Report and recommendation of the President to the Board of Directors. Proposed loan Republic of Indonesia: Tangguh liquefied natural gas project*. <https://www.adb.org/sites/default/files/project-documents/38919-ino-rpp.pdf>
- 21 Birt, C., Prastowo, H., Priyambodo, D., Wolfarth, S., & Stone, J. (2019). *Delivering a step-change in imaging from Indonesia's first ocean bottom node 3D seismic survey at Tangguh*. <https://www.ipa.or.id/id/publications/delivering-a-step-change-in-imaging-from-indonesia%E2%80%99s-first-ocean-bottom-node-3d-seismic-survey-at-tangguh>
- 22 Asian Development Bank (2005, November). *Report and recommendation of the President to the Board of Directors. Proposed loan Republic of Indonesia: Tangguh liquefied natural gas project*. <https://www.adb.org/sites/default/files/project-documents/38919-ino-rpp.pdf>
- 23 Asian Development Bank. (2006, August 1). *ADB to assist in developing major natural gas project in Indonesia*. <https://www.adb.org/news/adb-assist-developing-major-natural-gas-project-indonesia>
- 24 Asian Development Bank. (2025, March 11). *Indonesia: Tangguh Liquefied natural gas expansion project*. <https://www.adb.org/projects/49222-001/main>
- 25 Asian Development Bank. (2016, November). *Report and recommendation of the President to the Board of Directors. Proposed loan HSBC Bank USA, National Association Tangguh Liquefied Natural Gas Expansion Project (Indonesia)*. <https://www.adb.org/sites/default/files/project-documents/49222-001-rpp.pdf>
- 26 Clifford Capital. (n. d.). *Bayfront Infrastructure Capital IV*. <https://www.cliffordcapital.sg/products/BIC-IV>
- 27 Asian Development Bank. (2014, October 1). *Indonesia: Equity investment in Indonesian Infrastructure Financing Facility company project*. <https://www.adb.org/projects/42935-014/main>
- 28 International Finance Corporation. (2010, April 22). *PT Indonesia Infrastructure Finance Facility*. <https://disclosures.ifc.org/project-detail/SPI/26443/pt-indonesia-infrastructure-finance-facility>
- 29 Bp. (2016, August 3). *Tangguh enters into financing agreements for the Train 3 project*. https://www.bp.com/en_id/indonesia/home/news/press-releases/tangguh-enters-into-financing-agreements-for-the-train-3-project.html. International banks in the commercial tranche financing include affiliates of Mizuho Bank, Bank of China, China Construction Bank, The Bank of Tokyo-Mitsubishi UFJ, Sumitomo Mitsui Banking Corporation, DBS Bank, United Overseas Bank, BNP Paribas, Credit Agricole Corporate and Investment Bank, Oversea-Chinese Banking Corporation, Korea Development Bank, Shinsei Bank, and KfW Bank
- 30 Asian Infrastructure Investment Bank. (2023, August 30). *Singapore: BIC IV*. <https://www.aiib.org/en/projects/details/2023/approved/Singapore-bic-iv.html>

- 31 Clifford Capital. (n. d.). *Bayfront Infrastructure Capital IV*. <https://www.cliffordcapital.sg/products/BIC-IV>
- 32 Asian Infrastructure Investment Bank. (2023, August 30). *Singapore: BIC IV*. <https://www.aiib.org/en/projects/details/2023/approved/Singapore-bic-iv.html>
- 33 Asian Infrastructure Investment Bank. (2019, July 22). *Singapore: Infrastructure private capital mobilization platform*. <https://www.aiib.org/en/projects/details/2019/approved/Singapore-Infrastructure-Private-Capital-Mobilization-Platform.html>
- 34 Indonesia Infrastructure Finance. (n. d.). *About IIF*. <https://iif.co.id/en/about-us/shareholders/>
- 35 Asian Infrastructure Investment Bank. (n. d.). *AIIB and Paris Alignment*. <https://www.aiib.org/en/how-we-work/paris-alignment/overview.html>
- 36 Asian Development Bank. (2021, July 8). *ADB commits to full alignment with Paris Agreement*. <https://www.adb.org/news/adb-commits-full-alignment-paris-agreement>
- 37 Asian Infrastructure Investment Bank. (2023, August 30). *Singapore: BIC IV*. <https://www.aiib.org/en/projects/details/2023/approved/Singapore-bic-iv.html>
- 38 Asian Infrastructure Investment Bank. (2022, November). *Energy sector strategy: Sustainable energy for tomorrow*. <https://www.aiib.org/en/policies-strategies/strategies/sustainable-energy-for-tomorrow.html>
- 39 For WBG, see Shalal, A. (2025, June 12). World Bank to end ban on nuclear energy projects, still debating upstream gas. *Reuters*. <https://www.reuters.com/sustainability/climate-energy/world-bank-end-ban-nuclear-energy-projects-still-debating-upstream-gas-2025-06-11/> and Lanz, K. & Matile, L. (2025, June 29). *World Bank reform: Back to the future?* <https://www.alliancesud.ch/en/world-bank-reform-back-future>. For ADB, see Wright, P. K. (2025, May). *Last week I attended the Asian Development Bank (ADB) Annual Meeting in Milan. A hot topic was the pending Energy Policy review* [Post]. LinkedIn. <https://www.linkedin.com/feed/update/urn:li:activity:7328405191056121856/>
- 40 Pamintuan, M. (2025, June). *Red flags amidst green promises* [Post]. LinkedIn. <https://www.linkedin.com/feed/update/urn:li:activity:7339156636902506496/>
- 41 Shalal, A. (2025, June 12). World Bank to end ban on nuclear energy projects, still debating upstream gas. *Reuters*. <https://www.reuters.com/sustainability/climate-energy/world-bank-end-ban-nuclear-energy-projects-still-debating-upstream-gas-2025-06-11/>
- 42 Trend Asia. (2024, September 15). *Peraturan pemerintah Kebijakan Energi Nasional penuh solusi palsu dan tidak mendorong transisi energi yang adil dan berkelanjutan*. <https://trendasia.org/peraturan-pemerintah-kebijakan-energi-nasional-penuh-solusi-palsu-dan-tidak-mendorong-transisi-energi-yang-adil-dan-berkelanjutan/>
- 43 See page 24 annex 1 of Republic of Indonesia. (2022). *Enhanced nationally determined contribution of Republic of Indonesia*. <https://unfccc.int/sites/default/files/NDC/2022-09/ENDC%20Indonesia.pdf>
- 44 See page IV-1 of PT PLN (Persero). (2025). *Rencana Usaha Penyediaan Tenaga Listrik (RUPTL) 2025-2034*. <https://jdih.esdm.go.id/dokumen/download?id=2025kmesdm188k.pdf>
- 45 Ibid.
- 46 Ibid.
- 47 Bp. (2024, May 3). *bp tingkatkan kompetensi CCUS dan CCS di Indonesia*. https://www.bp.com/id_id/indonesia/home/berita/siaran-pers/bp-tingkatkan-kompetensi-ccus-dan-ccs-di-indonesia.html
- 48 Bp. (2025, May). *Leading energy partner of Indonesia*. [https://www.bp.com/content/dam/bp/country-sites/id_id/indonesia/home/who-we-are/bp%20Company%20Profile%20-%202025%20\(ENG\).pdf](https://www.bp.com/content/dam/bp/country-sites/id_id/indonesia/home/who-we-are/bp%20Company%20Profile%20-%202025%20(ENG).pdf)
- 49 Bp. (2024, May 3). *bp tingkatkan kompetensi CCUS dan CCS di Indonesia*. https://www.bp.com/id_id/indonesia/home/berita/siaran-pers/bp-tingkatkan-kompetensi-ccus-dan-ccs-di-indonesia.html
- 50 PT PLN (Persero). (2025). *Rencana Usaha Penyediaan Tenaga Listrik (RUPTL) 2025-2034*. <https://jdih.esdm.go.id/dokumen/download?id=2025kmesdm188k.pdf>. Tangguh LNG supplies gas to PLTGU Muara Karang, PLTGU Priok, PLTGU Jawa 2, PLTGU Muara Tawar, PLTGU Jawa-1, PLTGU Gresik, PLTGU Grati, PLTGU Bali, PLTMG Bali, PLTDG Pesanggaran, PLTMG Arun, PLTGU Belawan, PLTMG Nias, PLTMG Belitung. Upcoming power plants PLTGU Jawa-3, PLTG Kalsel, PLTG Kalteng, PLTGU Kalbar 1, and PLTG Kalselteng will also receive gas from Tangguh LNG.
- 51 Bp Indonesia. (2023, November 24). *Presiden Jokowi resmikan Tangguh LNG Train 3*. https://www.bp.com/content/dam/bp/country-sites/id_id/indonesia/home/news/press-releases/231124_Siaran%20Pers_Presiden%20Jokowi%20resmikan%20Tangguh%20LNG%20Train%203_241123.pdf
- 52 Oktarianisa, S. & Zuraya, N. (2013, February 10). BP segera bangun Train 4 Tangguh. *Republika*. <https://ekonomi.republika.co.id/berita/mhzt23/bp-segera-bangun-train-4-tangguh>
- 53 Bp Indonesia. (2023, September 11). *bp, GE Vernova, CARBONCO, PLN Nusantara dan Jawa 1 bekerja sama dalam studi kelayakan rantai nilai penangkapan, pemanfaatan, dan penyimpanan karbon (CCUS)*. https://www.bp.com/content/dam/bp/country-sites/id_id/indonesia/home/news/press-releases/230911_Siaran%20Pers_bp%20bekerja%20sama%20dalam%20studi%20kelayakan%20rantai%20nilai%20CCUS.pdf
- 54 Mitsubishi Corporation. (n. d.). *Indonesia's Tangguh UCC project reaches final investment decision (FID)*. <https://www.mitsubishicorp.com/jp/en/news/release/2024/20241122001.html>
- 55 Bp. (n. d.). *Enhanced gas recovery/carbon capture, utilization and storage*. https://www.bp.com/en_id/indonesia/home/who-we-are/tangguh-lng/enhanced-gas-recovery-carbon-capture-utilization-and-storage.html
- 56 PT PLN (Persero). (2013, December 3). *PLN tandatangani perjanjian penyaluran dan pengambilan tenaga listrik dengan BP Tangguh*. <https://web.pln.co.id/cms/media/siaran-pers/2013/12/pln-tandatangani-perjanjian-penyaluran-dan-pengambilan-tenaga-listrik-dengan-bp-tangguh/>
- 57 SKK Migas & Bp. (2013, December 3). *BP tandatangani perjanjian dengan PLN untuk memasok listrik bagi Teluk Bintuni*. https://www.bp.com/content/dam/bp/country-sites/id_id/indonesia/home/news/press-releases/131203_final_bp_press_release.pdf
- 58 Bp. (2023, May 9). *Program percontohan listrik off-grid LNG Tangguh di Teluk Bintuni dan Fakfak*. https://www.bp.com/id_id/indonesia/home/berita/siaran-pers/program-percontohan-listrik-off-grid-lng-tangguh-di-teluk-bintuni-dan-fakfak.html
- 59 Samagita, H. (2025, June 4). DAP pertanyakan komitmen SKK Migas dan BP Indonesia yang tertuang di dalam dokumen AMDAL. *Teropong News*. <https://teropongnews.com/dap-pertanyakan-komitmen-skk-migas-dan-bp-indonesia-yang-tertuang-di-dalam-dokumen-amdal/>
- 60 Setiawati, D. & Tisnadisastra, A. A. (2024, July 02). *PR 14/2024: A unified and expanded carbon capture storage regulation*. <https://www.lexology.com/library/detail.aspx?g=87fb12ab-26a8-4590-8cb2-33ed5a9a3700>
- 61 Recourse. (2024, October 15). *Banking on renewables criteria for public investment in renewable energy – with case studies from Asia and Africa*. <https://re-course.org/newsupdates/banking-on-renewables-criteria/>

- 62 Rosen, T. (2025, February 24). *New study finds carbon capture ineffective and costly compared to investing in renewable energy*. <https://environmentamerica.org/center/updates/new-study-finds-carbon-capture-ineffective-and-costly-compared-to-investing-in-renewable-energy/>
- 63 IEFA. (2024). *Carbon capture and storage. An unproven technology that cannot meet planetary CO2 mitigation needs*. <https://ieefa.org/ccs>.
- 64 Bp. (2016, September). *Resettlement and Indigenous Peoples plan. Proposed loan Tangguh liquefied natural gas expansion project (Republic of Indonesia)*. <https://www.adb.org/sites/default/files/project-documents/49222-001-remdp-02.pdf>
- 65 Rohman, M. S. (2017, October 28). *Green belt of bintuni bay ethnographic studies on the introducing program for the implementation of carbon emissions reduction in Bintuni Bay Regency, West Papua*. <https://igsci.pasca.ugm.ac.id/green-belt-of-bintuni-bay-ethnographic-studies-on-the-introducing-program-for-the-implementation-of-carbon-emissions-reduction-in-bintuni-bay-regency-west-papua/>
- 66 Setiadi, S. & Sumini, S. (2023). The more people come, the harder lives become: migration to the villages around the LNG Tangguh project. *Papua. Kritika Kultura*, 40(28). <https://doi.org/10.13185/1656-152x.2038>
- 67 Wamafma, F. (2024). Justice perspectives on BP Tangguh's claim to corporate social responsibility in Bintuni Bay. *Journal of Law and Sustainable Development*, 12(2), e3014. <https://doi.org/10.55908/sdgs.v12i2.3014>; Wamafwa, F., Mansawan, I. S. K., & Bonggoibo, A. A. (2024). The role of Tangguh Development projects in achieving welfare for the Papuan community. *Revista de Gestão Social e Ambiental*, 18(7), 1-19. <https://doi.org/10.24857/rgsav.18n7-004>; Redaksi. (2023, May 06). Senator Filep tanggap rilis kontribusi BP Tangguh untuk Papua. *Jaga Papua*. <https://jagapapua.com/article/detail/7746/senator-filep-tanggap-rilis-kontribusi-bp-tangguh-untuk-papua>
- 68 Ichsan, A. N. & Supar, E. (2025, May 20). DPD RI desak Pemprov Papua Barat evaluasi perusahaan BP Tangguh. *Antara Papua Tengah*. <https://papatengah.antaranews.com/berita/65241/dpd-ri-desak-pemprov-papua-barat-evaluasi-perusahaan-bp-tangguh>
- 69 Raharusan, A. & Galuwo, K. (2024, June 28). Melindungi hutan mangrove di Teluk Bintuni. *Jubi*. <https://jubi.id/domberai/2024/melindungi-hutan-mangrove-di-teluk-bintuni/>
- 70 Alfian, A. (2023, April 18). Proyek LNG Tangguh di Teluk Bintuni terindikasi rusak ekosistem mangrove, haris pertama: Ini pelanggaran undang-undang. *Rmol*. <https://rmol.id/politik/read/2023/04/18/571141/proyek-lng-tangguh-di-teluk-bintuni-terindikasi-rusak-ekosistem-mangrove-haris-pertama-ini-pelanggaran-undang-undang>
- 71 Bp. (2002). *BP response to the first report on the Tangguh LNG Project*. https://www.bp.com/content/dam/bp/country-sites/en_id/indonesia/home/news/reports/2002_en_bp_response_to_tiap_report.pdf
- 72 Down to Earth. (2004, February). *The Tangguh gas project: What hope for human rights protection in a worsening political climate?* <https://www.downtoearth-indonesia.org/story/tangguh-gas-project-what-hope-human-rights-protection-worsening-political-climate>
- 73 Bouso, R. & Vakil, D. (2024, March 9). BP's carbon emissions rise for the first time since 2019. *Reuters*. <https://www.reuters.com/business/energy/bps-operational-emissions-edge-higher-2023-2024-03-08/>
- 74 International Energy Agency. (2025, May). *Global methane tracker 2025*. <https://www.iea.org/reports/global-methane-tracker-2025>
- 75 International Energy Agency. (2025, March 24). *Methane emissions from the fossil fuel sector in South and Southeast Asia, 2024*. <https://www.iea.org/data-and-statistics/charts/methane-emissions-from-the-fossil-fuel-sector-in-south-and-southeast-asia-2024>
- 76 International Energy Agency. (2020, October). *World energy outlook 2020*. <https://www.iea.org/reports/world-energy-outlook-2020>
- 77 Human Rights Monitor. (2024, November 4). *Attack on Jubi office raises alarms over press freedom in Papua*. <https://humanrightsmonitor.org/case/attack-on-jubi-office-raises-alarms-over-press-freedom-in-papua/>
- 78 Alaidrus, F. (2025, June 20). *Journalists face new restrictions in Indonesia*. <https://globalpressjournal.com/asia/indonesia/journalists-face-new-restrictions-indonesia/>
- 79 Civicus. (2025, July 17). *Indonesia: Civic space regresses with targeting of activists, brutal crackdown on protests and problematic law revisions*. <https://monitor.civicus.org/explore/indonesia-civic-space-regresses-with-targeting-of-activists-brutal-crackdown-on-protests-and-problematic-law-revisions/>
- 80 Ministry of Energy and Mineral Resources. (2022). *Perubahan ketiga atas keputusan Menteri Energi dan Sumber Daya Mineral nomor 77 k/90/mem/2019 tentang objek vital nasional bidang energi dan sumber daya mineral*. <https://jdih.esdm.go.id/common/dokumen-external/Kepmen%20ESDM%20No.%20270.K-HK.02-MEM.S-2022.pdf>
- 81 Trend Asia. (2021, August 1). *Ekonomi politik penempatan militer di Papua*. <https://trendasia.org/ekonomi-politik-penempatan-militer-di-papua/>
- 82 Mckenna, K. (2015, September 4). BP, security and human rights in West Papua. *New Mandala*. <https://www.newmandala.org/bp-security-and-human-rights-in-west-papua/>
- 83 Relevant IFC Performance Standards include Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts; Performance Standard 3: Resource Efficiency and Pollution Prevention; Performance Standard 4: Community Health, Safety, and Security; Performance Standard 5: Land Acquisition and Involuntary Resettlement; Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources; Performance Standard 7: Indigenous Peoples and Performance Standard 8: Cultural Heritage.
- 84 Trend Asia. (2024, September 15). *Peraturan pemerintah Kebijakan Energi Nasional penuh solusi palsu dan tidak mendorong transisi energi yang adil dan berkelanjutan*. <https://trendasia.org/peraturan-pemerintah-kebijakan-energi-nasional-penuh-solusi-palsu-dan-tidak-mendorong-transisi-energi-yang-adil-dan-berkelanjutan/>
- 85 See page 24 annex 1 of Republic of Indonesia. (2022). *Enhanced nationally determined contribution of Republic of Indonesia*. <https://unfccc.int/sites/default/files/NDC/2022-09/ENDC%20Indonesia.pdf>
- 86 See page IV-1 of PT PLN (Persero). (2025). *Rencana Usaha Penyediaan Tenaga Listrik (RUPTL) 2025-2034*. <https://jdih.esdm.go.id/dokumen/download?id=2025kmesdm188k.pdf>
- 87 Ibid.
- 88 Ibid.
- 89 Bp. (2024, May 3). *bp tingkatkan kompetensi CCUS dan CCS di Indonesia*. https://www.bp.com/id_id/indonesia/home/berita/siaran-pers/bp-tingkatkan-kompetensi-ccus-dan-ccs-di-indonesia.html

RECOURSE

Making finance accountable to people and planet

Krajenhoffstraat 137A 1018 RG
Amsterdam, The Netherlands

www.re-course.org

