



Betting on a Sinking Ship

Banks Behind the Barossa Gas Field's
FPSO Vessel

◦ Issue Brief

Author

Dongjae Oh
Somin Kim

Contributor

Yuki Tanabe
Nikki Reish
Upasana Khatri
Sonja Meister
Naish Gawen
Lucie Pinson
Sooyoun Han
Donghyun Go
Jooyoung Park
Minji Kim
Jinsun Lee
Joojin Kim

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Intro

- The uncertainty around the Barossa Gas Field Project is increasing as risks related to environmental regulation and the greenwashing controversy become more evident. The Barossa Gas Field Project, an offshore oil and gas production project in the Timor Sea of Australia has been spearheaded by Australian and East Asian energy companies (Santos, SK E&S, JERA). However, after reaching the Final Investment Decision (FID), the project has been suspended after drilling approval was invalidated in accordance with the Australian Federal Court's decision.
- The Barossa Gas Field Project has symbolic significance, as it infringes upon indigenous rights, which have been historically neglected by the fossil fuel industry and is embroiled in a greenwashing controversy. With financial institutions around the world pledging to phase out new fossil fuel investments, this briefing highlights the problems that the Barossa Project financiers face and proposes viable alternatives.

Concerns over the Barossa Gas Field Project have turned into a reality

- **(Regulatory risk)** In September 2022, the Australian Federal Court found that the drilling approval for the project was unlawful and required drilling to be halted. In December 2022, the Australian Federal Court of Appeal upheld the decision and revoked the drilling permit—which was one of the primary permits for the Barossa Gas Field Project—by siding Tiwi Islanders' argument that the project lacked consultation process. Since then, The National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA), a federal offshore safety regulator, tackled another permit—the Barossa Gas Export Pipeline Installation Environment Plan. It resulted in the significant delay of the construction of the planned gas pipeline, which was supposed to commence in January 2023.
- **(Greenwashing)** SK E&S advertised the Barossa Project will produce 'CO₂-free LNG' to emphasize its compliance with climate goals. However, this advertisement was eventually revised in September 2022 after receiving administrative guidance from the Korean Ministry of Environment that the ad could distort consumer's understanding of the project. The Barossa Gas Project's controversy over greenwashing continues as the carbon capture and storage (CCS) project—which forms the core of the project operator's argument—has also been postponed, with no approvals acquired for any component of CCS.

Who is fueling the Barossa Gas Field Project?

- Behind the project developers, financiers' support for the project are there to fuel the Barossa Gas Project. Korean and Japanese Export Credit Agencies (ECAs), including the Export-Import Bank of Korea (KEXIM), Korea Trade Insurance Corporation (K-SURE), and Japan Bank for International Cooperation (JBIC), have agreed to provide approximately USD 1.01 billion to the development of the Barossa Gas Field Project. The ECAs have maintained their financial support for the project

despite the controversies surrounding it, and have been widely criticized by international civil society organizations.

- There has been no public disclosure of information regarding institutions other than the above public financial institutions in Korea and Japan that decided to provide finance for the Barossa Gas Field Project. The undersigned civil society organizations disclose the names and amounts of the financial institutions that provided additional financing for the project.
- According to the South Korean National Assembly member Kang ByungWon, a member of the National Policy Committee, USD 1.15 billion of financing was separately procured for the construction of the Floating, Production, Storage, and Offloading (hereinafter FPSO) system, which is a key offshore production facility for the Barossa Gas Field Project. Nine financial institutions are participating as syndicated lenders, including the Korea Development Bank (KDB), Mitsubishi UFJ Bank of Japan, and United Overseas Bank (UOB) of Singapore.

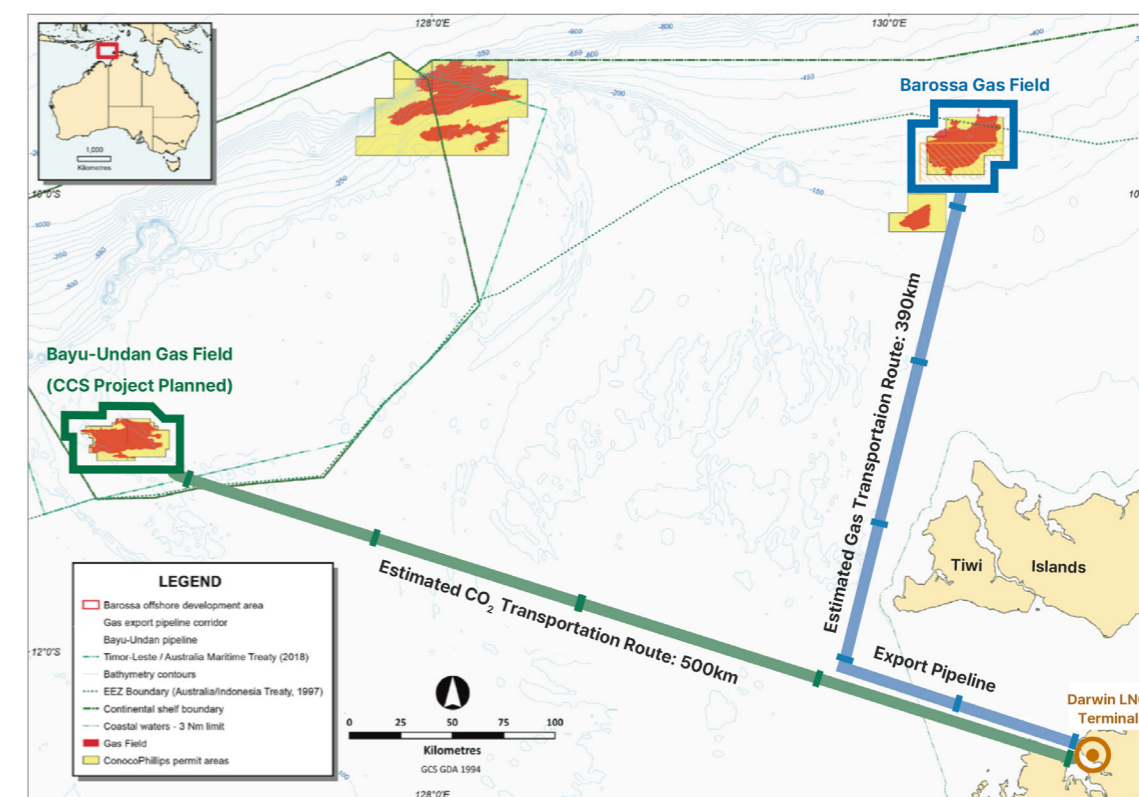
I. Overview of the Barossa Gas Field Project in Australia

1. Project Overview

Category	Content
Location	Located in the Timor Sea, 300 km north of Darwin, Australia's Northern Territory
Project Owners	Santos (50%), SK E&S (37.5%), JERA (12.5%)
Total Project Cost (planned)	USD 5.6 billion ¹
Project Period (planned)	2025~2045
Financiers	JBIC: USD 346 million KEXIM: USD 330 million K-SURE: USD 330 million (in the form of export credit insurance) 5 Private Banks
Approximate Production Rate	3.5 million tonnes of LNG per year, 1.5 million barrels of condensate per year
Import to South Korea (SK E&S Offtake)	1.3 million tonnes of LNG per year (plans to utilize for annual production of 250 kilo tonnes of blue hydrogen)

- The Barossa is an offshore gas field located in the Timor Sea in northern Australia. Gas extracted from the field will be transported to the Darwin LNG terminal for liquefaction and export. Santos, SK E&S, JERA (hereinafter Santos et al) claim that the CO₂ emitted during the production stage will be captured and stored into the depleted Bayu-Undan gas field. The Korean energy company SK E&S plans to import LNG and use it to produce blue hydrogen (250,000 tonnes) starting in 2025.²
- Due to the nature of the offshore gas business, the Barossa Gas Project requires the construction of an FPSO vessel, subsea production facilities, and gas pipelines connected to an onshore terminal.
- The FPSO is an integral part of the Barossa Project where gas and condensate are produced and processed. The FPSO facility accounts for a significant portion of the project's expense. A contract was awarded to BW Offshore to provide a FPSO vessel for the Barossa Gas Field with responsibility for EPC (Engineering, Procurement, Construction), installation and operations of the FPSO, which is currently under construction following the acquisition of dedicated financing.

[Figure 1] Barossa Gas Project Overview (Source: ConocoPhillips' explanatory data modified by SFOC)



2. Project Timeline

2021	Mar	Barossa Gas Field Project reaches Final Investment Decision (FID)
	May	A letter of concern relating to greenwashing/indigenous rights is sent to SK Group by international civil society organizations
	Aug	A contract for a USD 250 million FPSO construction loan is signed by Korea Development Bank (KDB)
	Dec	JBIC approves financial support
2022	Dec	K-SURE approves financial support
	Mar	Tiwi Islanders file for an injunction in Korean court
	May	KEXIM approves financial support
	June	Tiwi Islanders initiate federal court action in Australia, in a bid to stop the approval of the Barossa Gas Field Project
	June	SK E&S revises advertisements in response to an administrative guidance regarding "greenwashing" issues
2023	Sep	The Australian court sets aside the drilling permit
	Sep	The Australian court dismisses Santos' appeal and revokes the drilling permit
	Dec	NOPSEMA issues general direction against existing Barossa export pipeline installation EP

II. Financiers of the Barossa Gas Field and the FPSO construction

- The development of any new fossil fuel project involves substantial costs and requires large-scale financing from both public and private financial institutions. As fossil fuel projects cannot proceed without financial support, financial institutions bear as much responsibility as the fossil fuel companies directly involved in the project's operation.
- Besides a list of the previously known financial institutions that approved financial support to the Barossa Gas Field project, this briefing provides a list of the financial institutions that financed the construction of the FPSO vessel, the project's production facility.

1. Financiers who fueled the Barossa Gas Project

- As part of the financing of the Barossa Gas Field Project, SK E&S and JERA secured approximately USD 1.01 billion in financial support from Korean and Japanese ECAs ([Figure 2]).
- In December 2021, JBIC and K-SURE approved financial support of USD 346 million³ and USD 330 million,⁴ respectively. K-SURE provided financial support in the form of Export Credit Insurance, enabling five private financial institutions to participate as lenders in the project. KEXIM approved financial support of USD 330 million in May 2022.⁵
- Traditional Owners of the Tiwi Islands and local civil society organizations continuously communicated their concerns over the lack of an adequate consultation process under the local regulations. Those complaints were not taken into account by Korean-Japanese public financiers in the process of making their decisions.⁶
- Consequently, Tiwi Traditional Owners filed a legal claim with the Australian Federal Court seeking to invalidate the project's drilling approval. Following the Australian Federal Court's recognition in September 2022 that the approval requirements were not legally satisfied, the drilling permit was set aside, and the project has been postponed indefinitely ever since.
- Since the Barossa Gas Field Project has been delayed after the environmental regulatory risks arose, the syndicated loan deal has yet to close.⁷
- Despite the Australian Federal Court's decision on the legal invalidity of the drilling approval, Korean and Japanese ECAs have not expired their approval. In January 2023, K-SURE extended its approval period when it was due to expire, sparking controversy.⁸

2. Financiers who enabled FPSO construction

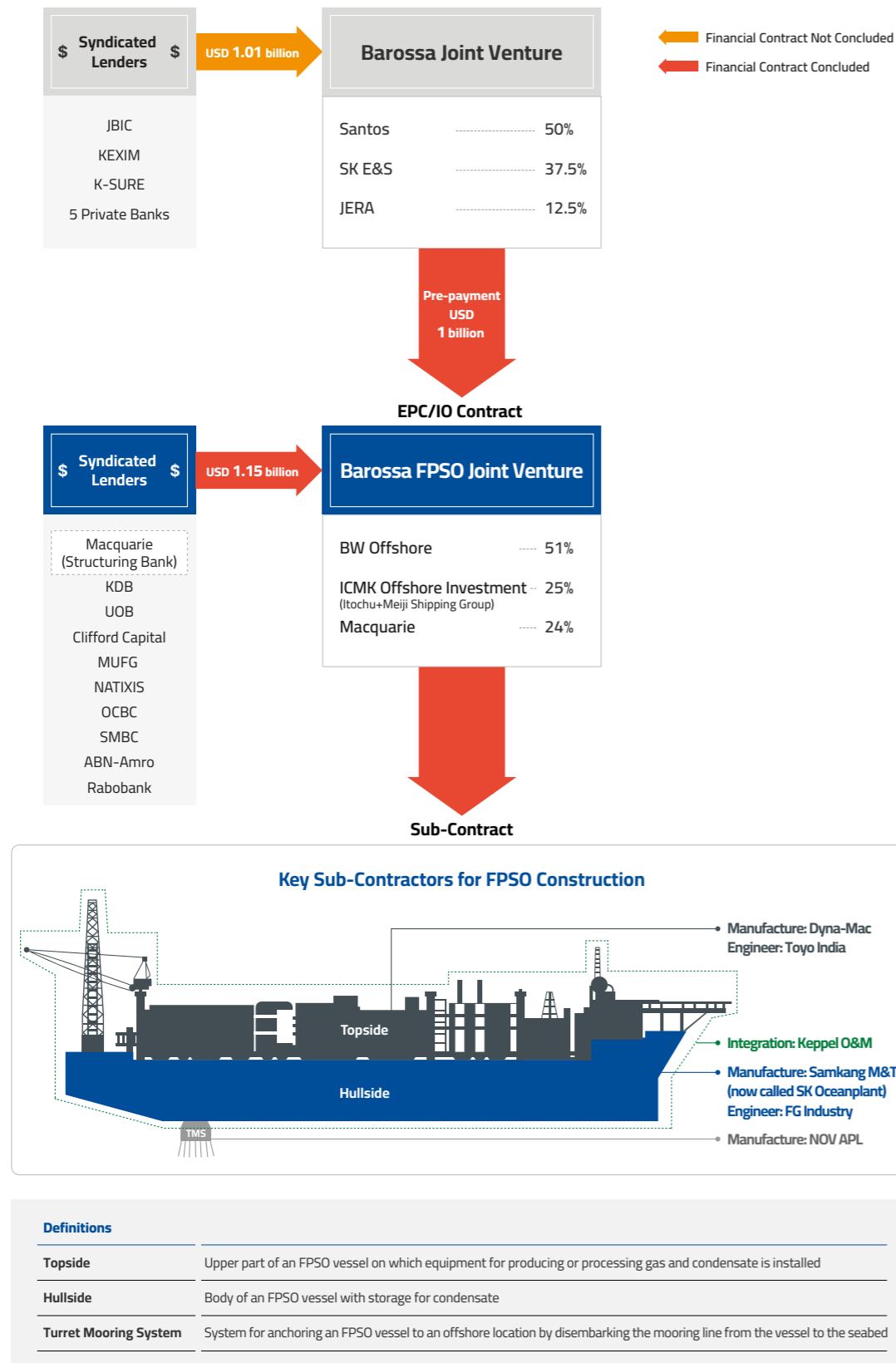
- BW Offshore, the EPC contractor for the FPSO, acquired separate equity and debt financing for the construction of the Barossa FPSO vessel (an offshore production facility). BW Offshore secured financing for the FPSO through a Joint Venture partnership and debt financing.⁹
- FPSO construction requires capital expenditure (CapEx) of approximately USD 2.4 billion, of which USD 1 billion was pre-paid in advance by the project owners, USD 240 million was raised through equity financing, and USD 1.15 billion was financed through loans.¹⁰
- [Table 1] indicates that nine financial institutions provided USD 1.15 billion for the construction of the Barossa FPSO,¹¹ including a Korean public financial institution (Korean Development Bank) as well as private financial institutions in Japan (MUFG and SMBC Bank), Singapore, and the EU.¹²

[Table 1] Barossa FPSO Financing Structure and Contract Amount

Type	Name of Financial Institutions	Nationality	Amount
Equity Financing USD 240 million	BW Offshore (51%)	Norway	USD 240 million
	ICMK Offshore Investment (25%)	Japan	
	Macquarie (24%)	Australia	
Debt Financing USD 1.15 billion	Korea Development Bank (KDB)	Korea	USD 250 million
	United Overseas Bank (UOB)	Singapore	USD 160 million
	Clifford Capital	Singapore	USD 116 million
	MUFG Bank	Japan	USD 116 million
	Natixis	France	USD 116 million
	Oversea-Chinese Banking Corporation (OCBC)	Singapore	USD 116 million
	Sumitomo Mitsui Banking Corporation (SMBC)	Japan	USD 100 million
	ABN Amro	Netherlands	USD 96 million
	Cooperative Rabobank	Netherlands	USD 80 million

* Macquarie Bank is participating in the syndicated loan as a structuring bank

[Figure 2] Financial structure of the Barossa Gas Field and FPSO construction



III. Concerns surrounding the Barossa Gas Field Project

As a result of the revocation of the drilling permit in September 2022, the project has been virtually suspended for over six months. Pipeline installation also did not commence as planned and is now on hold. In light of the project being postponed indefinitely, multiple concerns are being raised.

1. Proclaimed 'operation of gas field by the first half of 2025' in doubt

The project operators initially committed to begin producing 'CO₂-free LNG' in the first half of 2025,¹³ and they still insist that the gas field will begin production on schedule.¹⁴ As a result of ongoing controversies, however, it appears that the existing project plan is facing substantial setbacks.

(Increased regulatory risks) In the aftermath of the Federal Court of Australia's decision to overturn the drilling approval,¹⁵ the regulatory risks associated with the project's lack of consultation began to affect other permits that had been previously obtained. In relation to the project's gas pipeline installation permit, the Australian National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) ordered a General Direction to conduct and submit an assessment to identify whether the project would affect underwater cultural heritage sites of Traditional Owners.¹⁶ Santos must engage independent experts to carry out the assessment and the work to lay the pipeline is on hold indefinitely.

Further concerns have been raised about the reliability of the gas pipeline for the Barossa Gas Field Project. A whistleblower's statement was read out in the Australian parliament during the Senate Estimates hearing in February 2023, accusing Santos of covering up an oil spill that resulted in dolphin deaths in another operating region.¹⁷

(Postponement of the CCS project) A CCS project, which is a crucial component of the operators' argument for the 'low-carbon gas field', has also been postponed until after 2025. After the approval of Korean and Japanese public financing, Santos published its 2022 Climate Change Report (March 2022), which indicates that the final investment decision (FID) for the Barossa CCS project is scheduled to take place in 2025, whereas operation is expected to commence in 2027, which is a delay from the previously committed schedule.¹⁸

(Experts and regulators' remarks) There have also been statements and comments implying a postponement of the project.

Right before appeal court's decision (Dec 1st, 2022), Credit Suisse, a global financial services company, said, "If Santos loses an appeal, then a fresh environment plan could take between five and eighteen months, as the authority would review the plan afresh across the entire project."¹⁹

- The former CEO of NOPSEMA, Stuart Smith, stated in a Senate Estimates hearing on February 16th, 2023, "We don't have a particular minimum number of days or months or years. We expect the process will take a significant amount of time."
- According to the federal court's decision, project developers intended to drill eight production wells between 2022 and 2025.²⁰ Given that the project has already been delayed for over six months and that it is unclear when operations will resume, it appears unlikely that planned production operations will commence on schedule.

2. The Barossa Gas Project contributes neither to energy security nor to climate goals

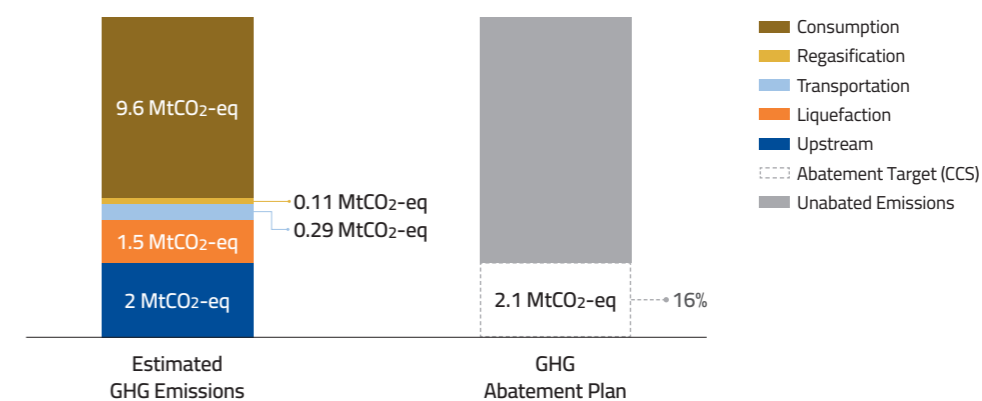
- **(Blue hydrogen production)** The Barossa Gas Field project will be the first large-scale project to produce 'blue hydrogen' in South Korea,²¹ as part of Korea's plan of a fossil fuel-based hydrogen economy.²² SK E&S plans to utilize most of the imported LNG for hydrogen production, which has little to do with the security of gas supply that is currently under discussion as one way to address the energy crisis.
- Therefore, concerns regarding the Barossa Gas Field Project should be centered on the impracticality of implementing a fossil fuel-based hydrogen economy, rather than on the issue of energy security.
- With major fossil fuel investment countries except Korea committing to end public financing for new fossil fuel projects in favor of increasing renewable energy investments, Korea's support for a fossil fuel hydrogen economy will inevitably face numerous challenges in the future.²³
- **(Project timeline irrelevant to current crisis)** Even if the imported LNG is not used to produce hydrogen, the Barossa Gas Field Project still will not alleviate the current energy crisis. Assuming that the project is successfully developed, it cannot start producing gas until at least 2025, which is two years away. The project has already been postponed for a considerable period of time, and the schedule is even less predictable at this point.
- The International Energy Agency (IEA) also stated that the development of new oil and gas fields would not contribute to solving the energy crisis. Rather, the IEA suggested making use of flared and leaked methane to tackle the short-term energy crisis, and to reduce fossil fuel demands by scaling up investment in the clean energy transition.²⁴
- **(Concern over accelerating climate crisis)** If the Barossa Gas Field Project proceeds, 13.5 million tonnes of greenhouse gases are expected to be emitted every year for the next 20 years.²⁵ Even if the CCS project is implemented, it would only reduce about 16% (2.1 million tonnes) of total emissions, and there are concerns that there will be virtually no reduction effect when calculating the additional emissions resulting from the CCS facility's operation. With the CCS plan as outlined above, SK E&S marketed the project under the name "CO₂-free LNG", which eventually sparked a greenwashing controversy.

[Box] Greenwashing controversies around the Barossa Gas Field Project

After reaching FID (Mar 2021), SK E&S argued that the project will be 'CO₂-free' with its separate CCS project. The 'CO₂-free LNG' promotion faced huge backlash from South Korean media and climate advocacy groups, as the Barossa Gas Field Project was previously known as the highest carbon-intensive gas field project in Australia.²⁶

Jang HyeYeong, a member of Korean national assembly obtained estimates of greenhouse gas emissions from KEXIM—one of the project financiers—and revealed SK E&S' plan to sequester 16% (2.1 Mt) of total emissions (13.5 Mt including scope 3 emissions).

[Figure 3] Composition of GHG emissions from the Barossa Gas Field Project



Source: Data provided by KEXIM to Jang HyeYeong, a member of the National Assembly of the Republic of Korea

After SFOC made the accusation regarding the SK E&S' advertisement, South Korean regulator, the Ministry of Environment (MoE) sided with 'greenwashing' claim by issuing administrative guidance to SK E&S to "provide factual grounds with clear proof to consumers". MoE also stated that "there are concerns that further exposure could distort consumer perception".²⁷

SK E&S later changed the wording of "CO₂-free LNG" to "low carbon LNG".

IV. Rising pressure for financiers after Barossa's suspension.

- With the Barossa Gas Field Project currently in jeopardy, it is difficult for both public and private financial institutions who provided or are willing to provide financial support to evade their responsibilities for fueling the project—unless they do the right thing and pull out immediately.

1. The Barossa FPSO financing could face increased pressures from financiers' pledge to accelerate de-carbonization

- After the signing of the contract in August 2021, loans for the construction of the Barossa FPSO have been continuously drawn down. In the case of Korea Development Bank, it was confirmed that approximately 43% of the contract amount (USD 108 million) had been drawn down from the account as of February 2023.²⁸
- In spite of this, since Santos et al, the charterer of this FPSO, did not obtain its major approval for the Barossa Gas Field Project, syndicated lenders may request the charterer to repay the entire balance on the grounds of default and pull out from the deal.²⁹
- Financial institutions have adopted more ambitious climate goals in recent years. Among ten financial institutions that provided financing for the Barossa FPSO construction project (including Macquarie), eight are part of the Net-Zero Banking Alliance³⁰ and have declared Net-Zero goals before and after signing the Barossa FPSO's debt financing agreement. UOB, Natixis, ABN Amro, and Rabobank took further steps by announcing exclusion policies on new oil and gas investments.
- In view of the current climate goals of financial institutions that participate in syndicated lending, institutions may face growing demand and pressure to withdraw financial investments from fossil fuel projects that are being delayed.

[Table 2] List of syndicated lenders for the Barossa FPSO with status of membership in Net-Zero Banking Alliance (NZBA) and their oil and gas exclusion policies

Institution Name	Nationality	NZBA Member	Oil/Gas Exclusion Policy
Macquarie Group ³¹	Australia	O	X
Korea Development Bank (KDB)	Korea	X	X
MUFG Bank ³²	Japan	O	X
Sumitomo Mitsui Banking Corporation (SMBC) ³³	Japan	O	X
United Overseas Bank (UOB) ³⁴	Singapore	O	O
Clifford Capital	Singapore	X	X
Oversea-Chinese Banking Corporation (OCBC) ³⁵	Singapore	O	X
Natixis ³⁶	France	O	O (restriction on unconventional O&G fields and conventional O&G exploration)
ABN Amro ³⁷	Netherlands	O	O (restriction on unconventional oil and gas field investment)
Cooperative Rabobank ³⁸	Netherlands	O	O (restriction on unconventional O&G fields and oil exploration & extraction (including FPSO))

2. Public financial institutions' support for legally invalid overseas projects will face criticism from the international community

- Concerns regarding the Barossa Gas Field Project's lack of consultation with Tiwi Islanders and aroused human rights and environmental permit risks have been raised for years. However, public financial institutions in Korea and Japan decided to provide financial support despite the concerns of Traditional Owners.
- Throughout the Full Federal Court case, the arguments of Tiwi Islanders were upheld, which affirmed the legal invalidity of the Barossa Gas Field Project's drilling permit. Nevertheless, K-SURE and KEXIM did not withdraw their approvals but rather extended the approval deadlines in January 2023 and November 2022, respectively.
- However, even after the Australian court's decision to invalidate the existing drilling approval due to the project's legally unsatisfactory procedure, South Korea and Japan's public banks are downplaying the judgment and upholding the Barossa Gas Field project by not withdrawing its approval for financing the Barossa Gas Project. The banks thus expose themselves to diplomatic criticism. They not only violate the ESG principles to which they have committed before, but they also disrespect the judicial system of Australia, a major partner of both South Korea and Japan.

V. Recommendations

- This briefing intends to provide the following policy recommendations to financial institutions participating in the Barossa Gas Field Project as follows:

1. Japanese and Korean ECAs should withdraw their financial support for the Barossa Gas Field Project

- Since ECAs of Korea and Japan (KEXIM, K-SURE, and JBIC) first approved financial support, the project's outlook has become quite uncertain. It is evident that the project does not comply with the local environmental regulations and international environmental standards (IFC performance standards, Equator Principles) that the syndicated lenders had set as a condition for the approval. Considering the financial contract has not been concluded yet, previous approvals of financial support should be expired.

2. Financial institutions participating in the Barossa FPSO debt financing should terminate the loan contract

- It is expected that international civil society pressure on financial institutions that have participated in debt financing of the Barossa FPSO will increase as long as the environmental permit risks persist. As these financiers are committed to climate goals, if investments that have already been made are being postponed or delayed, the same criteria should be applied, and their investments should be withdrawn.

3. Establish a policy to exclude financing for new upstream oil and gas projects, including for FPSO/FLNG³⁹ shipbuilding projects

- As stated by the IEA, no new oil and gas fields are needed to achieve net zero by 2050. Furthermore, 39 countries have already committed not to invest in new fossil fuel projects. Since FPSOs and Floating Liquefied Natural Gas (FLNGs) play a critical role in the development of new offshore oil and gas fields and require large-scale financing, financial institutions need to implement policies that restrict investments in FPSOs and FLNGs, not just in upstream oil and gas financing.

Reference

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- 4 The Hankyoreh (2022). 'With 800 billion won in public finance support, will the Barossa gas project keep its low-carbon promise?' <https://www.hani.co.kr/arti/economy/marketing/1045459.html>
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- 6 A letter of concern was sent to K-SURE by Australian civil society organizations in December 2021. In March 2022, Traditional Owners filed a preliminary injunction against KEXIM and K-SURE in a South Korean court to suspend the closure of financial contracts.
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- 22 According to 'The First Basic Plan for the Implementation of the Hydrogen Economy' of South Korea, 87%(1.7Mt) of proclaimed domestic hydrogen production will rely on fossil fuels.

- 23 In November 2021, major public financial institutions and multilateral development banks in 39 countries, including the United States, UK, Canada, European Central Bank, Germany have joined the Glasgow Statement, which is an initiative to commit to ending unabated investments in fossil fuel projects by the end of 2022 and prioritizing support for clean energy projects.
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- 29 As per the document provided by the Korean Development Bank (KDB) to the National Assembly member Kang ByungWon, if the borrower doesn’t acquire the major approvals needed for the project, lenders could declare an event of default, obliging the borrower to repay the loan before the due date. Charterers-Santos et al-also committed to repay the loan and termination payments to the borrower (BW offshore) and lender.
- 30 A total of 125 banks (as of February 2023) have joined the NZBA initiative launched in 2021. By joining the NZBA, banks must achieve net zero investment portfolios by 2050, and within 18 months of joining, 2030 emissions reduction targets should be developed to reduce carbon-intensive sectors.
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- 38 Rabobank Group (2022). Global Standard on Sustainable Development.
<https://www.rabobank.com/en/images/sustainability-policy-framework.pdf>
- 39 Floating Liquefied Natural Gas (FLNG) is an offshore gas production vessel similar to FPSO, but with the additional capability of processing and liquefying natural gas onboard. This allows LNG carriers to offload LNG directly from the FLNG vessels.



Solutions for Our Climate (SFOC) is a non-profit corporation based in Korea established in 2016 in order to advocate for stronger climate and air policies. SFOC is led by legal, economic, financial, and environmental experts with experience in energy and climate policy and works closely with domestic and overseas nonprofit organizations.

Betting on a Sinking Ship

Banks Behind the Barossa Gas Field's FPSO Vessel