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Research Update:

Leviathan Bond Ltd.'s Senior Secured Notes Affirmed At 'BB-'; Outlook Remains Negative

October 15, 2024

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Rating Action Overview

- Considering the recent intensification of hostilities between Israel and Hezbollah in the northern part of Israel, Israel's ground invasion of southern Lebanon, and a retaliation missile attack on Israel by Iran at the beginning of October 2024, we think the already high security risks faced by Leviathan Bond Ltd. (Leviathan; the project) have further increased.
- While a wider escalation of the conflict involving other regional players is still not our baseline scenario, we think that the current situation increases the likelihood of a deterioration in Israel's relationship with its neighboring countries, which could affect the project's exports.
- Having said that, and despite the ongoing Israel-Hamas war and the Hezbollah-Israel confrontations, Leviathan remains fully operational with no material interruptions to cash flows from domestic and export sales, mainly to Egypt (B-/Positive/B) and Jordan (BB-/Stable/B).
- We affirmed our 'BB-' issue rating on Leviathan's senior secured notes, with the recovery rating unchanged at '1', indicating a 95% estimated recovery in the case of a payment default.
- The negative outlook indicates that, over the next 12 months, we could lower the rating if security and geopolitical risks for the project intensify and result in repercussions for the project's exports, domestic sales, operations stability, or physical integrity of assets. This could be the case, for example, if the risks of retaliatory rocket attacks from Hezbollah, other Iran proxies in the region, or Iran itself continue to increase, raising the possibility of damage to the Israeli strategic energy infrastructure, including Leviathan.

Project Description And Key Credit Factors

Leviathan issued $2.25 billion in bonds to refinance its portion of the construction and development costs of the Leviathan gas field. Following a repayment of the 2023 bonds, the principal outstanding on Leviathan's bonds was $1.75 billion. Discovered in 2010, Leviathan is an offshore gas field in the eastern Mediterranean and is the largest natural gas reserve in Israel. Situated approximately 120 kilometers (km) west of Haifa, with a production platform located 10 km off the coast of Dor, Israel, Leviathan currently supplies gas to Israel, Egypt, and Jordan (first gas was delivered in December 2019). According to a reserve report prepared by independent

engineering consultant Netherland, Sewell, & Associates Inc., the field had proved (1P) reserves totaling 13,472.1 billion cubic feet of gas and 29.6 million barrels of condensate oil as of Dec. 31, 2023 (under Petroleum Resources Management System [PRMS] standards), and an annual production capacity of 12 billion cubic meters.

Rights to explore and produce petroleum and gas in the Leviathan field were granted proportionately to NewMed Energy Ltd. Partnership (45.34%; Leviathan's parent company), Chevron Mediterranean Ltd. (39.66%), and Ratio Energies (15.00%) under a production lease until February 2044 with an option to extend by up to 20 years if the partners continue to produce from the field. A joint operating agreement (JOA) defines the operations and associated infrastructure among the three parties in their respective proportions of the lease. Chevron Mediterranean Ltd. operates the field under the terms defined in the lease and JOA.

Leviathan has long-term gas sale purchase agreements (GSPAs) under export contracts that account for about 70%-80% of gas production capacity under the 2P scenario (proved and probable reserves). The remainder is supplied to energy producers in Israel. The contracts have a weighted-average length of 12 years. In addition, in March 2024 Leviathan started sales of condensate to Ashdod Refinery Ltd., creating additional revenue stream from the Israeli market.

Strengths

- Minimal resource risk, with 1P reserves (PRMS) sufficient to cover production capacity for over 30 years.
- Chevron Mediterranean is Leviathan's experienced operator, which underlines our view that the project will maintain stable production and low operating costs (below 10% of revenue) supporting robust profitability.
- Leviathan's solid operational performance to date has boosted the project's cash flow generation, which enabled it to repay its $500 million bonds due in June 2023 without the need for refinancing.
- Sufficient liquidity to sustain operations and meet upcoming debt-service payments in the event of a disruption to production.

Risks

- Increasing security risks due to the intensification of fighting in the northern part of Israel and due to the higher likelihood of retaliation rocket attacks on Israeli infrastructure from Hezbollah, other Iranian proxies, or Iran itself.
- Potential risks for exports to Egypt and Jordan include the key constraints for Leviathan (under our assumptions through the project life Leviathan will sell around 45%-50% of its gas to Egypt and 30%-35% to Jordan, on average), because the project--absent a material increase in Israel's local demand--has limited flexibility and no infrastructure in place to switch to other markets.
- The project is exposed to refinancing risk on every maturity date due to the bullet nature of the notes, which is partially mitigated by cash reserving provisions.
- Leviathan can issue additional debt, subject to several conditions. This includes maintaining the net present value at a 10% forward discount (NPV10) to net debt above 1.5x.

Rating Action Rationale

Given the recent escalation of conflict between Israel and Hezbollah and a missile attack on Israel by Iran, we anticipate a higher likelihood of retaliation rocket attacks against Israel, which increases the possibility of damage to Israeli strategic infrastructure, such as Leviathan. Leviathan has been fully operational with no direct effect on its assets since the eruption of the war between Hamas and Israel in October 2023. That said, the military conflict between Hamas and Israel in Gaza is ongoing, and since mid-September 2024 there has been a material escalation of the military conflict between Hezbollah and Israel in Lebanon and the northern part of Israel, closer to Leviathan's assets. Due to this, the works on laying the third subsea pipeline for Leviathan have been suspended until around April 2025 with a delay of at least six months (announced on Oct. 6, 2024). We think that such a delay should not have any material effect on our credit metrics because the construction of the third subsea pipeline does not affect the ongoing operations and is primarily for the project's annual capacity growth. Nevertheless, we view this as a sign of material increase in the project's security risks.

Although a broader escalation in the conflict involving other regional players is currently not part of our base case, we see an increasing risk of potential retaliatory rocket fire against Israel from Hezbollah, other Iranian proxies in the region, or Iran itself, which in our view increases Leviathan's operational business risks. Considering that Leviathan is strategically placed for Israel's energy sector and has a very concentrated asset base, we anticipate an increase in the risk of potential disruptions to its operations or even threats to physical asset integrity in the case of an intensification of military actions in the north of Israel or direct targeting of Israeli infrastructure. Therefore, we revised our operations phase business assessment (OPBA) to reflect this increased risk (see below). At the same time, we note that Leviathan benefits from insurance coverage for risks of direct damage to assets and indirect damage (loss of revenue or prevention of profits) in the case of war or terrorist actions. This is in addition to compensation provided under Israel's Property Tax and Compensation Fund Law for physical loss affecting the market value due to war or terrorism.

If Israel's relationship with neighboring countries deteriorates due to a further intensification of Israeli military actions, this could materially threaten the project's exports and, hence, cash flow stability. The project exports its gas to Egypt and Jordan, and payments from export and domestic offtakers have not been interrupted or delayed since the start of Leviathan's operations in 2020, including after the start of the Israel-Hamas war in October 2023. We view Egypt and Jordan as key markets to Leviathan's economic feasibility because the project cannot switch the full amount of its gas supply to other countries due to physical infrastructure constraints and limited domestic gas demand in Israel. We expect Leviathan to sell, on average, about 45%-50% of its gas to Egypt, 30%-35% to Jordan, and the remaining 20%-25% to Israel (A/Negative/A-1) through the project's life.

Although both Jordan and Egypt have a solid track record of strong demand for Israeli gas and strong economic incentives to continue gas purchases, we think that the current military actions of Israel in both Gaza and Lebanon increase a risk of potential deterioration in Israel's relationship with the neighboring countries, which could threaten the project's export stream. Considering that Israel's domestic market is currently insufficient to fully absorb the gas volumes that Leviathan produces, and that Israel does not have liquefaction plants or pipelines to export gas to markets other than Egypt and Jordan, a risk of material disruption of the project's gas exports could significantly affect our rating on the project. This, together with the increase of the project's

security risks, resulted in our revision of the project's OPBA to '10' from '8' and preliminary operations phase stand-alone credit profile (SACP) before the counterparty dependency assessment to 'bb-' from 'bb+'. The project's SACP of 'bb-' and our 'BB-' rating on the project's issue credit rating have not changed.

We think that, in the absence of major operating disruptions, the project's liquidity should support its ability to repay $600 million notes maturing on June 30, 2025. Leviathan benefits from a cash-funded $100 million debt repayment fund and the principal reserve fund, which is already funded to its maximum of $150 million. The project's expected cash generation in the fourth quarter of 2024 and first half of 2025, together with its existing liquidity levels, support our view that in the absence of material disruptions, Leviathan should be able to repay the upcoming bullet payment. Nevertheless, our base case continues to factor in refinancing, because we cannot rule out that the company could still decide to go to the market and refinance the upcoming maturity or part of it. In case Leviathan decides to fully repay its upcoming bullet maturity, as it did in 2023, this could lead to a substantial deleveraging of the project and a material improvement of its financial metrics. We acknowledge that NewMed has secured two credit facilities of $200 million each from Israeli banks for its ongoing operational needs, including the option to use them for the repayment of Leviathan's bonds, although we do not factor this into our issue rating because the amount of Leviathan's total debt outstanding has not changed.

Outlook

The negative outlook indicates that, over the next 12 months, we could lower the rating if the security and geopolitical risks for the project further intensify with potential repercussions for the project's exports, domestic sales, operations stability, or physical integrity of assets.

Downside scenario

We could lower the rating in the next 12 months if:

- Gas exports to Egypt and Jordan were affected, or were at risk of disruption; or
- The project's operations stability or even physical integrity of assets are affected by military actions in the north of Israel intensifying; or if the risks of retaliatory rocket attacks from Hezbollah, other Iranian proxies, or Iran itself continue to increase; raising the possibility of damage to the Israeli strategic energy infrastructure, including Leviathan.

We could also lower the rating if there was a significant change in the project's sales mix (for example, a material increase of sales to Egypt with a decrease of sales to Israel) or in the case of a noteworthy deterioration in the offtakers' ability to meet their payment obligations.

Upside scenario

We could revise the outlook to stable if risks from the conflict subside substantially or the conflict is resolved, resulting in a reduction of regional and domestic geopolitical and security risks without any repercussions for the project's credit metrics.

Performance Update

Stable operational performance

The project delivered its first gas to the Israeli domestic market in December 2019 and has exported to Egypt and Jordan since it started operating. Operations have been stable and in line with expectations. Average monthly uptime has been approximately 99% since May 2020.

Table 1

Total Natural Gas Reserves (100%) in the Petroleum Asset (Gross)

		--As of Dec. 31--				
Scenario	**Type**	**2019**	**2020**	**2021**	**2022**	**2023**
1P (Proved) Reserves		11,577.3	11,269.6	12,259.8	13,813.0	13,472.1
		20.8	24.8	27.0	30.4	29.6
Total 2P (Proved + Probable) Reserves		13,486.2	13,087.6	13,395.9	15,569.2	15,171.4
		24.2	28.8	29.5	34.3	33.4

BCF--Billion cubic feet. MMbbl--Million barrels of oil. Source: S&P Global Ratings.

Base Case

Assumptions

- Leviathan uncontracted gas price: $4.4 per million British thermal units for 2024 and thereafter;
- Leviathan contracted gas price: Prices under GSPAs with rated third parties modeled as per the terms of the GSPAs;
- Revenue mix (including capacity increase): 45%-50% Egypt, 30%-35% Jordan, 20%-25% Israel.
- Operations and maintenance (O&M) costs: In line with historical performance of the operator, adjusted to U.S. inflation;
- Capital expenditure (capex; based on the project's 2023 discounted cash flow): NewMed's share in 2024: about $260 million; 2025: approximately $130 million; 2026: about $30 million;
- Refinancing amount: We assume the refinancing of approximately 85% of the amounts due; and
- Assumed cost of refinancing debt: Each bullet series at 200 basis points (bps) higher spread, with an amortizing loan until Dec. 31, 2044.

Key metrics

- Minimum debt service coverage ratio (DSCR) of 2.18x in 2025 and median DSCR until the final

maturity of the refinancing period of 2.18x.

Downside Case

Assumptions

- Annual production: -15% compared with base case;
- Gas price: -10% compared with base case;
- O&M costs: +10% higher variable and fixed operating cost, including stress over insurance compared to base case;
- Availability of the field: -5% compared with base case;
- Capital expenditure (capex): +20% compared with base case; and
- Assumed cost of refinancing debt: Each bullet series at 400 bps higher spread.

Key metrics

- Minimum DSCR of 1.40x in 2044 and median DSCR of 1.40x.

Liquidity

- We assess the project's liquidity as neutral given the cash-funded $100 million debt repayment fund. Even though this is not a standard debt service reserve account, the resources are sufficient to cover more than one semiannual interest payment of all series of the notes.
- Additionally, the issuer accumulates cash one year ahead of any scheduled principal repayment, under a principal reserve fund, which it will use along with the debt payment fund and the cash flows to repay the bullet notes as they become due. The principal reserve fund is limited to a $150 million maximum amount.
- The project is not subject to financial covenants, which could cause an event of default or an acceleration of the notes' payment. The transaction structure has a forward-looking distribution lock-up test, based on 1.5x NPV10/net debt test (remaining net present value discounted at 10%, according to the reserve consultant report, but based on lower Brent prices). Whereas we typically expect a lock-up mechanism within the next 12 months of operations to allow for seasonality and volatile cash flows and to effectively preserve additional cash to meet project liquidity needs, we view the proposed lock-up mechanism as neutral.

Rating Score Snapshot

Senior debt issue rating	BB-
Operations phase (senior debt)	
Asset class operating stability:	4
Operations phase business assessment:	10

Senior debt issue rating	BB-
Preliminary operations phase SACP	bb
Downside resiliency assessment and impact:	Moderate (+1 notch)
Median DSCR impact:	No impact
Debt structure impact:	-2 notches
Liquidity impact:	No impact
Refinancing impact:	bb+ cap
Future value modifier impact:	N/A
Holistic analysis impact:	No impact
Structural protection impact:	Neutral
Counterparty assessment impact:	Capped at 'bb'
Operations phase SACP	bb-
Parent linkage and external influences (senior debt)	
Parent linkage:	Delinked
Project SACP:	BB-
Extraordinary government support:	N/A
Sovereign rating limits:	Neutral
Full credit guarantees:	N/A

SACP--Stand-alone credit profile. DSCR--Debt service coverage ratio. N/A--Not applicable.

Operations phase SACP

Our operations phase SACP reflects our view of the operating risk typical of a gas exploration field, which we view as relatively moderate ('4' on a scale of '1' being the lowest risk to '10' being the highest). We think the project's exposure to market risk and the GSPA offtakers' credit quality are key factors for the preliminary debt rating.

We assess the operations phase SACP as 'bb-' based on:

- The project's OPBA of '10'.
- Minimal exposure to resource risk, as 1P reserves are sufficient to cover more than 40 years of production.
- Market risk exposure, with the potential volatility of cash flows of 15%-30%. Even though the project has 85% of production contracted under long-term GSPAs with minimum take-or-pay and with a floor price, underpinning relatively stable and predictable cash flows, we only assume contracted capacity for 40% because we cannot determine the credit quality of the cash flows from 60% of these contracts.
- We factor into our downside case scenario the project's ability to mitigate effects on cash flows that could stem from operating risks, such as lower production and higher operating and maintenance expenses, among other costs. Cash flows could also fall due to external events such as Brent reference prices, inflation rates, and insurance costs, especially considering the project's single-asset nature.

Operations counterparties

- We view the offtakers of the GSPAs as material counterparties. Therefore, we set the blended average credit quality of the rated offtakers considered in our base case at 'bb', which does not currently constrain the rating.
- Our counterparty analysis of the National Electric Power Company (NEPCO) mirrors the ratings on its parent, Jordan (BB-/Stable/B). This is because the government provides a timely guarantee for the due payment of NEPCO's obligations under the GSPA.
- We view Chevron Mediterranean (a wholly owned subsidiary of Chevron Corp.) as an irreplaceable O&M counterparty. Despite the existence of other operators that could perform the same services, we view the unique characteristics of the lease agreement and JOA as tied to the obligations devoted to Chevron Mediterranean as the operator under these contracts. In addition, absent the O&M reserve account, we do not see the financial flexibility for replacement.

Structural counterparties

- We acknowledge the risk of having NewMed Energy as part of the project under the sponsor loan. We assess NewMed as a nonmaterial structural counterparty and we do not limit the rating on the notes to the credit quality of NewMed. This is because we see cross-default mitigation in the project's structure and the risk of default under the JOA as remote at this stage.

Financial counterparties

- The bank account provider will be the Tel Aviv branch of HSBC Bank PLC, and we consider it to be a material but replaceable counterparty. The project's management will be able to react in case of stress, and we assess the liquidity as available in the structure allowing for the replacement. Therefore, we set the counterparty dependency assessment at six notches above the bank's creditworthiness, which does not currently constrain the rating.

Recovery Analysis

Key analytical assumptions

- We think that lenders would achieve the greatest recovery amounts through reorganization of the project, rather than liquidation, given consistent demand for gas in the region.
- The '1' (95%) recovery rating indicates that we expect full recovery in this default scenario.
- We value the asset using the net present value of future cash flows of the field's expected remaining life through 2044, when the refinancing matures under our expectations.

Simulated default assumptions

- Simulated default year: 2025;
- We simulate a reduction of revenues for around $180 million coupled with $190 million of unexpected cash outflows due to capex;
- Our hypothetical default considers the security situation deteriorating in the region in 2025, which would impair the company's ability to pay the upcoming debt payments in 2025 and would be the trigger point for a potential financial default;
- In our recovery forecast, demand for gas in the region and the strength of the company's historically good operations drive a viable business model, supporting its ability to protect the existing GSPA;
- We discount the cash flow over the remaining life of the charter at a 10% rate and deduct 5% of administrative expenses to arrive at the net value; and
- We add six-month pre-petition interest to the estimated debt at the time of default.

Simplified waterfall

- Debt outstanding at the hypothetical default (including pre-petition interest): $1.8 billion;
- Estimated net value of the project: $1.89 billion; and
- Recovery expectations: Rounded to 95% (recovery rate of '1').

Related Criteria

- General Criteria: National And Regional Scale Credit Ratings Methodology, June 8, 2023
- Criteria | Infrastructure | General: Sector-Specific Project Finance Rating Methodology, Dec. 14, 2022
- Criteria | Infrastructure | General: General Project Finance Rating Methodology, Dec. 14, 2022
- General Criteria: Environmental, Social, And Governance Principles In Credit Ratings, Oct. 10, 2021
- General Criteria: Guarantee Criteria, Oct. 21, 2016
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- General Criteria: Global Investment Criteria For Temporary Investments In Transaction Accounts, May 31, 2012
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011

Related Research

- Widening Middle East Conflict Poses Risks For Regional Sovereign Ratings, Oct. 9, 2024
- Israel Long-Term Ratings Lowered To 'A' From 'A+' On Heightened Security Risk; Outlook

Negative, Oct. 1, 2024

- Israel Long-Term Ratings Lowered To 'A+' From 'AA-' On Heightened Geopolitical Risk; Outlook Negative, April 18, 2024
- Leviathan Bond Ltd.'s Senior Secured Notes Affirmed At 'BB-'; Outlook Remains Negative, March 18, 2024

Ratings List

Ratings Affirmed	
Leviathan Bond Ltd.	
Senior Secured	BB-/Negative
Recovery Rating	1(95%)

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.spglobal.com/ratings for further information. A description of each of S&P Global Ratings' rating categories is contained in "S&P Global Ratings Definitions" at https://disclosure.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/504352. Complete ratings information is available to RatingsDirect subscribers at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings' public website at www.spglobal.com/ratings. Alternatively, call S&P Global Ratings' Global Client Support line (44) 20-7176-7176.

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