

## Research Update:

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

March 18, 2024

## Rating Action Overview

- Despite the ongoing Israel-Hamas war, Leviathan Bond Ltd. (Leviathan; the project) remains fully operational with stable cash flows from domestic and export sales, mainly to Egypt (B-/Stable/B) and Jordan (B+/Stable/B).
- We believe an escalation of the conflict to the wider region remains possible, although not as our base-case scenario, and the risk of a wider regional conflict could still threaten the stability of the project's revenue, continuity of operations, or even physical integrity of assets.
- While the 2023 bond's repayment is positive to Leviathan's metrics and liquidity, the offtakers' creditworthiness continues to constrain our rating on the project, since Leviathan has very limited flexibility in switching to other markets.
- We affirmed our 'BB-' issue rating on Leviathan's senior secured notes, with the recovery rating unchanged at '1', indicating 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.

**PRIMARY CREDIT ANALYST**

**Valeriia Kuznetsova**  
London  
+44 2071760864  
valeriia.kuznetsova  
@spglobal.com

**SECONDARY CONTACTS**

**Livia Vilela**  
Madrid  
+ 34 91 423 3181  
livia.vilela  
@spglobal.com

**Elena Anankina, CFA**  
London  
447785466317  
elena.anankina  
@spglobal.com

## Project Description And Key Credit Factors

Leviathan issued \$2.25 billion 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. (NSAI), the field had proved (1P) reserves totaling 13,813.0 billion cubic feet of gas and 30.4 million barrels of condensate oil as of Dec. 31, 2022 (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 Limited 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**

- The rating is capped by our view of the creditworthiness of the rated GSPA offtakers.
- Potential risks for exports to Egypt and Jordan include the key constraints for Leviathan (under our assumptions, on average, through the project life Leviathan will sell around 45% of its gas to Egypt and 30%-35% to Jordan), 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**

**The risk of the Israel-Hamas war escalating to the wider region remains material, which could affect the project's performance, although not our base case.** Leviathan has been fully operational with no direct effect on its assets since the eruption of war between Hamas and Israel in October 2023. The project exports to Egypt and Jordan, and payments from export and domestic

offtakers have not been interrupted or delayed. Leviathan's construction of the third subsea transmission pipeline (see details under the Performance Update section) is progressing as planned without material delays. That said, the military conflict between Hamas and Israel in Gaza is ongoing, and there has been exchange of fire between Hezbollah and Israel across the Lebanese border, closer to Leviathan's assets. Considering this, we think that the risk of a further escalation of the geopolitical situation in the region remains possible and could materially threaten the project's exports stream if Israel's relationship with neighboring countries deteriorates. The project's operations stability or even physical integrity of assets could be affected in the case of an intensification of military actions in the north of Israel.

**We expect that Leviathan has sufficient liquidity to sustain operations and meet upcoming debt-service payments in the event of production being disrupted.** Leviathan has no upcoming debt maturities in the next 12 months and the project has adequate liquidity reserves to cover the interest payments: A cash-funded \$100 million debt repayment fund plus additional funds in its operational accounts. 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 terrorism 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. Also, after Leviathan's full repayment of its Series A \$500 million bonds in June 2023, we see a material reduction in the project's total debt service (>20%). This provides the project with additional financial flexibility and resiliency of its financial metrics in case of a disruption due to a security threat, a minimum debt service coverage ratio (DSCR) of 2.15x under our base case compared with 1.70x previously. Therefore, we revised our preliminary operations phase stand-alone credit profile (SACP) to 'bbb' from 'bbb-'.

**Exposure to gas sales in Egypt and Jordan remains a key constraint to Leviathan's creditworthiness.** We view these markets as key to Leviathan's economic feasibility because the project cannot switch the full amount of its gas supply to other countries. Israel's domestic market is currently insufficient to fully absorb the gas volumes that Leviathan produces, and Israel does not have liquefaction plants or pipelines to export gas directly to the large European market. Therefore, Leviathan's natural export markets are Egypt and Jordan, which are connected to Israel through existing gas pipelines. We expect Leviathan to sell on average through the project's life about 45% of its gas to Egypt, 30%-35% to Jordan, and the remaining 20%-25% to Israel (AA-/Negative/A-1+). Both Jordan and Egypt present solid demand for Israeli gas to cover their domestic needs and, in the case of Egypt, to earn solid profits from liquifying and re-exporting this gas to Europe. Although there have not been any issues with payments for Leviathan's gas, and although the gas sales price is usually well below international spot benchmarks, both Jordan and Egypt face certain macroeconomic issues that may limit their ability or willingness to pay for gas imports in full and on time in a downside case. In case of a significant change in the mentioned sales mix (for example, a material increase of sales in Egypt with a decrease of sales in Israel) or in case of a noteworthy deterioration in the offtakers' ability to meet their payment obligations, the rating on the project could be majorly affected.

## Outlook

The negative outlook reflects the risk that the war between Israel and Hamas could spread more widely and affect the project's performance. We assume the conflict will remain centered in Gaza and monitor the risk of any damage to the project's assets or any other limitations on its

operations and expansion works, as well as repercussions for exports and domestic sales.

## Downside scenario

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

- Israel's relationship with neighboring countries deteriorates, resulting in material repercussions for Leviathan's exports; or
- The project's operations stability or even physical integrity of assets are affected in the case of an intensification of military actions in the north of Israel.

We could also lower the rating if the creditworthiness of the rated GSPA offtakers weakens.

## 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.

We view an upgrade as unlikely, since it would require an improvement in the creditworthiness of the counterparties that currently cap the rating.

## 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.

As per the NSAI report as of Dec. 31, 2022 (PRMS), the remaining natural gas reserves increased by approximately 13% in the 1P scenario and by about 16% in the 2P scenario compared with NSAI's 2021 report. One of the main drivers for such a material increase was the acceleration of the third gathering line as well as the addition of the fifth producing well 'Leviathan-8' to the project (drilling was completed in 2022 and production from the well began in June 2023).

Table 1

### Total natural gas reserves (100%) in the petroleum asset (gross)

Scenario	Type	As of Dec. 31, 2019	As of Dec. 31, 2020	As of Dec. 31, 2021	As of Dec. 31, 2022
1P reserves	Natural Gas BCF	11,577.30	11,269.60	12,259.80	13,813.00
	Condensate MMbbl	20.80	24.80	27.00	30.40
Total 2P reserves	Natural Gas BCF	13,486.20	13,087.60	13,395.90	15,569.20
	Condensate MMbbl	24.20	28.80	29.50	34.30

**Leviathan is looking for various alternatives for the project's development, which is driving the revision of its capital expenditure (capex) plan for 2023-2025.** NewMed's share in the Leviathan's field capex increased to \$400 million (based on the project's 2022 Discounted Cash

Flow [DCF] figures)--to be invested over 2023-2025. The planned debottleneck of the existing production system drives the increase, which will include construction of a third subsea transmission pipeline from the production wells to the platform, enabling an increase in the annual capacity of the project up to 14 billion cubic meters (works to be finalized in the second quarter of 2025; NewMed's share is about \$258 million).

## **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;
- Operations and maintenance (O&M) costs: In line with historical performance of the operator, adjusted to U.S. inflation;
- Capex (based on the project's 2022 DCF): NewMed's share in 2024: \$150 million-\$170 million; 2025: \$20 million-\$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 DSCR of 2.15x in 2025 and median DSCR until the final maturity of the refinancing period of 2.15x.

## **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.
- Capex: +20% compared with base case.
- Assumed cost of refinancing debt: Each bullet series at 400 bps higher spread.

## Key metrics

- Minimum DSCR of 1.14x in 2044 and median DSCR of 1.29x.

## 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

<b>Senior debt issue rating</b>	<b>BB-</b>
<b>Operations phase (senior debt)</b>	
Asset class operating stability:	4
Operations phase business assessment:	8
Preliminary operations phase SACP	bbb
Downside resiliency assessment and impact:	Moderate (no impact)
Median DSCR impact:	No impact
Debt structure impact:	-2 notches
Liquidity impact:	No impact
Refinancing impact:	Neutral
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-
<b>Parent linkage and external influences (senior debt)</b>	
Parent linkage:	Delinked
Project SACP:	BB-

Senior debt issue rating	BB-
Extraordinary government support:	N/A
Sovereign rating limits:	Neutral
Full credit guarantees:	N/A

DSCR--Debt service coverage ratio.

## 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 operations phase business assessment of '8';
- Minimal exposure to resource risk, as 1P reserves are sufficient to cover more than 40 years of production;
- Market risk exposure, with 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; and
- We factor into our downside case scenario the project's ability to mitigate impacts 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. As such, we limit the project's operations phase SACP at 'bb-' that is the blended average credit quality of the rated offtakers considered in our base case.
- Our counterparty analysis of the National Electric Power Company (NEPCO) mirrors the ratings on its parent, Jordan (B+/Stable/B). This is because it 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. ProjectCo'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**

- S&P Global Ratings believes 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: 2024;
- We simulate a reduction of revenues for \$300 million coupled with \$3.5 billion of unexpected cash outflows due to capex;
- Our hypothetical default contemplates a deterioration of the oil and gas industry in 2024, which would impair the company's ability to pay the upcoming interest payments in 2024 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: \$1.76 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

- Israel Electric Corp. Ltd. Ratings Affirmed At 'BBB+' Despite Geopolitical Risks; Outlook Stable, Nov. 27, 2023
- Regional Gas Is More Exposed Than Oil To War In The Middle East, Nov. 15, 2023
- Israel, Nov. 13, 2023
- Outlook On Leviathan Bond's Debt Revised To Negative On Geopolitical Risk; Affirmed At 'BB-', Nov. 6, 2023
- Israel Outlook Revised To Negative On Geopolitical Risks; 'AA-' Ratings Affirmed, Oct. 24, 2023
- War In The Middle East Compounds Global Geopolitical Risks, Oct. 18, 2023

Ratings List

Ratings Affirmed

Leviathan Bond Ltd.

Senior Secured	BB-/Negative
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Revised

	TO	From
Recovery Rating	1(95%)	1(90%)

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](http://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/sourceld/504352>. Complete ratings information is available to RatingsDirect subscribers at [www.capitaliq.com](http://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](http://www.spglobal.com/ratings). Alternatively, call S&P Global Ratings' Global Client Support line (44) 20-7176-7176.

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