

Research Update:

Leviathan Bond Ltd.'s Proposed \$2.25 Billion Senior Secured Notes Rated Preliminary 'BB-', Outlook Stable

July 27, 2020

Rating Action Overview

- Leviathan Bond Ltd. (or the project) expects to issue up to \$2.25 billion in senior secured notes in four bullet series with final maturities in 2023, 2025, 2027, and 2030.
- On July 27, 2020, S&P Global Ratings assigned its preliminary 'BB-' issue-level rating to the proposed notes. We also assigned a preliminary recovery rating of '1' to the notes.
- The preliminary rating incorporates a Sponsor Loan that Leviathan Bond will provide to Delek Drilling Limited Partnership (Delek Drilling), which is a 45.3% joint leaseholder of the Leviathan field that will generate the revenue for the repayment of the notes. The proceeds of the issuance will refinance Delek Drilling's \$1.75 billion debt it raised for the field's deployment debt, fund a \$100 million debt repayment fund, repayment of \$300 million secured corporate debt and for general corporate purposes.
- The stable outlook reflects our expectation that the project will produce and sell approximately up to 12 billion cubic meter (BCM) annually, leading to a debt service coverage ratio (DSCR) of more than 3.0x in the next 24 months.

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Project Description And Key Credit Factors

The Leviathan field is an offshore gas field located in the eastern Mediterranean, discovered in 2010, and is the largest natural gas reserve in Israel. According to a reserve report prepared by the independent engineering consultant, Netherland, Sewell & Associates Inc. (NSAI), the field has proved developed producing reserves (1P) totaling 11,577.3 billion cubic feet (BCF) of gas and 20.8 million barrels (MMbbl) of condensate oil as of December 2019, when it started producing an annual capacity of 12 BCM.

The rights to explore and produce petroleum and gas in the Leviathan field were granted proportion to Delek Drilling (45.34%), to Noble Energy Mediterranean Ltd. (Noble Energy; 39.66%), and Ratio Oil Exploration (15.00%) under a production lease until February 2044, which may be

extended by up to an additional 20 years in case partners continue to produce from the Leviathan field. The operations and associated infrastructure are defined under a joint operating agreement (JOA) among the three parties in the respective proportion in the Leviathan lease. The operations of the field are performed by Noble Energy under the terms defined in the Leviathan lease and JOA.

Given these unique characteristics, we rate the project based on our "Principles Of Credit Ratings" methodology. In particular, we have assessed the cash flow coverage according to Delek Drilling's 45.34% working interest and the JOA. The latter defines that operating committee proposals need to reach at least a 60% approval by the vote of two non-affiliate partners. Whereas there's no majority control by any party, we view the risk of Delek Drilling having a non-controlling stake as mitigated by this voting procedure, because decisions can't be reached without its vote. As such, the repayment of the notes will consist on the pro-rata revenue stream from the sale of gas and condensate produced at the field. We also acknowledge the risk of having Delek Drilling as part of the project under the sponsor loan. But we don't limit the rating on the notes to the credit quality of Delek Drilling, because we see cross-default mitigation in the project's structure, and the risk of default under the JOA as remote at this stage.

The Leviathan field closed long-term gas sales purchase agreements (GSPA) under export contracts that account for around 60%-70% of sales, and the rest with energy producers in Israel totaling approximately 10 BCM per year (85% of production capacity) until around 2035. Currently, 55% of the Leviathan field gas sales in 2020 are expected to be for National Electric Power Co (Nepco) in Jordan and to Dolphinus Holdings in Egypt, and the rest in Israel.

Strengths

- The Leviathan field has minimal resource risk, with 1P reserves sufficient to cover production capacity for over 30 years, according to information provided under a reserve report prepared by NSAI.
- An experienced and global player will undertake the operations of the asset. Noble has been operating similar projects with an approximately 99.7% availability in the adjacent field (Tamar) since 2013, which we view as credit positive. This underlines our view of stable production and low operating cost (below 10% of revenues).

Risks

- Despite a high contracted revenue base, we expect the project will remain exposed to market risk, which introduces some cash flow volatility. About 85% of the gas sales benefits from long-term GSPA with minimum 'take-or-pay' volumes at fixed price, floor-price, and escalating price depending on Brent or the domestic electricity production tariff (depending on the type of agreement). Nevertheless, we could only assess the credit quality of 40% of the contracted capacity. For the 60% remainder, we assume that gas is sold in the merchant market throughout the project's life, making expected cash flows available for debt service more volatile throughout the debt's term.
- Each note series has a bullet payment for the respective maturities in 2023, 2025, 2027, and 2030, increasing the refinancing risk to the project. Refinancing risk is partly offset, in our view, by a principal reserve fund that starts to be funded 12 months before the maturity of each series, but is limited at \$150 million and the very long reserve tail.
- Default by Delek Drilling under the JOA might cause an interruption of cash flows to the project,

if not cured. We assess this risk as remote, because our analysis of the base- and downside-case scenarios considers that Delek Drilling has already performed all required payments in respect of the current stage of development of the Leviathan Project and does not have any material outstanding liabilities.

Rating Action Rationale

The preliminary rating mainly reflects the operational risk in the exploration of a gas field and a low market risk exposure. As we cannot assess the creditworthiness of some of the offtakers, we assume that 60% of gas produced will be dispatched in the market, exposing the project to volume and price risk, and consequently to fluctuating cash flows.

Despite our view that the project will generate relatively predictable cash flow from the GSPA, we lack clear visibility on the quality of this cash flow, because around 60% of the offtakers (we exclude all volume sold to Dolphinus under its respective contract) are unrated or do not publicly share sufficient financial information in order for us to fully assess. As such, we only consider the GSPA of 40% of the contracted capacity to the offtakers that we were able to assess its credit quality (including the portion sold to Nepco), and the remainder as exposed to market risk.

Therefore, our base-case scenario assumes 60% of sales exposed to international market prices for gas, whereas Leviathan's contracts have floor prices. This scenario assumes a minimum annual DSCR of 1.45x in 2025 and an average of 1.74x until the end of the refinancing period, which we define as 2044, when the lease agreement matures.

We view positively the extensive experience that Noble Energy has in operating in the region, performing with over a 99% availability in the adjacent field (Tamar) since it started operations in 2013, while maintaining gas production costs in the first cost quartile. We estimate the project's gas production cost below \$0.5 per million cubic feet (mcf) and annual operating expenditure (opex) around \$80 million (Delek Drilling share).

The capital structure consists of several bullet maturities, partially synthesizing an amortizing repayment profile. To ensure that sufficient funds are available to meet each bullet maturity, 12 months ahead of each amortization date, free cash flow from the Revenue Account are reserved to a principal reserve fund that accumulates cash of up to \$150 million. In our view, the long life of 1P provides a sufficient tail for refinancing of the notes. As such, the exposure to refinancing risk in 2023, 2025, 2027, and 2030 doesn't constrain the preliminary rating on the notes.

Finally, despite 30% of the project's gas sales to Jordan (B+/Stable/B), the rating on the latter doesn't limit the preliminary rating on the project. This is because Leviathan Bond comfortably passes a hypothetical sovereign stress scenario (the project's cash sources-to-uses ratio remains above 1.0x under the exercise due to the low operating cost of the field, the bullet debt payments, and existence of debt reserve accounts). All payments are deposited in accounts in Israel, all cash is held offshore Jordan, compensating for the foreign-exchange conversion risk. We didn't apply the typical cash haircut, because all cash is held in Israel, invested under permitted investment-grade titles.

The rating on the notes is preliminary and the assignment of the final rating will depend on our receipt and satisfactory review of all final transaction documentation, while the interest rate on the notes would need to be in line with our expectations. Accordingly, the preliminary rating shouldn't be construed as evidence of the final rating. If we don't receive the final documentation within a reasonable timeframe, or if the final transaction departs from our assumptions, we reserve the right to withdraw or change the rating.

Outlook

The stable outlook reflects our assessment that Leviathan's operations shouldn't encounter substantial setbacks, and that the project has contracted a reasonable proportion of its production capacity at fixed price. Given the bullet nature of the notes, we expect the project to generate DSCRs above 3.0x in the next two years.

Downside scenario

We could lower the preliminary rating if the operations encounter production issues, resulting in lower uptime and higher operating cost, reducing minimum DSCR below 1.4x. In addition, we could revise our gas price assumption if conditions in the oil and gas industry continue to deteriorate, making it difficult for the project to sell its production capacity at favorable prices, leading to lower cash flows. We could also lower the rating if the credit quality of the offtakers deteriorate, in particular Jordan, which guarantees Nepco's GSPA.

Finally, a negative rating action could occur if the partners of the field were to engage in aggressive expansion commitments, which could reduce the net cash flows for the repayment of the notes, and result in extraordinary obligations to Delek Drilling pay its Participating Interest in related joint account expenses.

Upside scenario

We could raise the preliminary rating if the project sells its remaining capacity to counterparties of stronger creditworthiness, reducing its market risk exposure and enhancing the blended average credit quality of its revenue stream, which could reduce risks and even raise minimum DSCR above 1.5x.

Performance Update

The asset started operations in December 2019, and has presented an average uptime of 97%. We estimate stable operations going forward with uptime above 99%.

Month	Monthly uptime of Leviathan filed (%)
January 2020	92.6
February 2020	98.8
March 2020	94.4
April 2020	99.0
May 2020	98.7
June 2020	99.3

Source: Delek Drilling

Base Case

Assumptions

- Annual sales capacity of 12 BCM, 40% of which go to Nepco and some offtakers in Israel, and the remainder at our assumptions on Henry Hub prices as specified below, as we exclude the contracted conditions with the counterparties that we could not assess its respective credit quality (including Dolphinus in Egypt and other energy producers in Israel).
- Prices to rise in line with the combination of the production component of the electricity tariffs set by the Israeli Electricity Authority (EA) and Brent according to the terms of the GSPAs.
- S&P Natural Gas Henry Hub deck price: \$2/MMBTU in 2020, \$2.25/MMBTU in 2021, and \$2.5/MMBTU starting in 2022, and Brent deck price: \$30/bbl in 2020, \$50/bbl in 2021 and \$55/bbl starting in 2022, according to "S&P Global Ratings Cuts WTI And Brent Crude Oil Price Assumptions Amid Continued Near-Term Pressure," published March 19, 2020.
- A fixed interest rate of 6%-7% for the proposed notes.
- Operations and maintenance (O&M) costs in line with historical performance of the operator, adjusted to U.S. inflation, including variable cost of \$0.5 per MCF and opex around \$80 million per year for Delek Drilling share.
- U.S. CPI of 0.7% in 2020, 1.4% in 2021, 2.0% in 2022, and 1.8% in 2023 according to "Credit Conditions North America: Rolling Out The Recovery," published June 30, 2020.
- Budgeted remaining capex around \$240 million (for the partners) until 2022 to finalize the ramp-up of the field. No expansion capex afterward.
- Refinancing of each bullet series at 200 basis points (bps) higher spread, with an amortizing loan until the end the lease agreement in 2044.

Key metrics

- Minimum DSCR of 1.45x in 2025 and average DSCR of 1.74x after the first bullet refinancing.

Downside Case

Assumptions

- 10% lower annual production.
- 10% lower gas market prices, and floor prices under the GSPA.
- 10% higher variable and fixed operating costs, including stress over insurance.
- Higher U.S. CPI by 100 bps, affecting costs.

Key metrics

- Minimum DSCR of 0.86x in 2025.

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. Cash flow could also fall due to external events such as Brent reference prices (subject to floor prices), inflation rates, and insurance costs, particularly because of the project's single-asset nature.

We assess the project's resilience in a stress case as neutral to the transaction, because Leviathan Bond would be able to maintain the timely debt service payments during four years before completely depleting the reserve provisions.

Operations phase stand-alone credit profile (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' in scale of '1' as lowest to '10' as highest). We incorporate our view the project's exposure to market risk and the offtaker's credit quality as a key factor for the preliminary rating on the debt.

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

- The project's operations phase business assessment (OPBA) as '8'.
- Minimal exposure to resource risk, because 1P reserves total 11,577.3 BCF of gas and 20.8 MMbbl of oil, sufficient to cover more than 30 years of production.
- Low market risk exposure. Even though the project has 85% of production contracted under long-term GSPA with minimum take-or-pay and at fixed price, we only assume contracted capacity for 40%, because we can't determine the credit quality of the cash flows stemming from 60% of these contracts.
- The downside resilience is supported by the \$100 million debt payment fund amid exposure to refinancing risk on each of the bullet maturities. Whereas there's a principal reserve fund to accumulate funds to repay each maturity, it only starts to be seeded by the operating cash flows 12 months in advance of each maturity and it's limited to \$150 million.
- As a result, the operations phase SACP is driven by minimum DSCR of 1.45x in 2025.

Counterparties

We view the offtakers of GSPA and the O&M operator of the project as material counterparties, but neutral to the preliminary rating.

On the revenue side, we calculated the blended average credit quality of the offtakers, which resulted in 'bb-'.

Our counterparty analysis of Nepco mirrors the ratings on its parent, Jordan (B+/Stable/B), because it provides a timely guarantee for the due payment of Nepco's obligations under the GSPA. We also included some of the Israeli offtakers, namely IPM Beer Tuvia Ltd., Paz Ashdod Refinery Ltd., Israel Chemicals Ltd. (BBB-/Stable), and Israel Electric Corp Ltd. (BBB/Stable).

We view Noble Energy Mediterranean (a wholly-owned subsidiary of Noble Energy) 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 Noble Energy as the operator under these contracts. In addition, absent of O&M reserve account, we don't view financial flexibility for replacement.

Lastly, the account bank will be the Tel Aviv branch of HSBC Bank PLC. The documented replacement language is not consistent with our financial counterparty criteria. However, our 'A+' rating on the counterparty assessed in line with our criteria applicable to bank branches doesn't currently pose a constraint to the preliminary rating on the notes.

Liquidity

- We assess the project's liquidity as neutral given a 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 semi-annual interest payment of the 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, however based on lower Brent prices). Whereas we typically expect 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

Construction phase SACP (Senior Debt)

- Not under construction

Operations phase SACP (Senior Debt)

- Operations phase business assessment: 8 (on a scale of '1' [lowest risk] to '12' [highest risk])
- Preliminary SACP: bb-
- Downside impact on preliminary SACP: bb (no impact)
- Liquidity: Neutral
- Comparative analysis assessment: Neutral
- Adjusted preliminary operations phase SACP: bb-
- Operations counterparty ratings adjustment: bb-

- Financial counterparty ratings adjustment: A+ [1]
- Operations phase SACP: bb-

Modifiers (Senior Debt)

- Parent linkage: De-linked
- Structural protection: Neutral
- Sovereign rating limits: BB (not capped)
- Senior debt issue rating: BB- (prelim)

[1]HSBC Bank is the Trustee and the Account Agent.

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 preliminary '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 lease agreement end.

Simulated default assumptions

Simulated default year: 2023

- Our hypothetical default contemplates deterioration of the oil and gas industry in 2023, when the project is expected to refinance the first series of the new notes. The failure to place new notes would be the trigger point for a potential default.
- Our recovery forecast assumes there would continue to be a viable business model driver by the continued demand for gas in the region and the strength of the project's historically solid operations, supporting its ability to protect the existing GSPA.
- We discount the cash flow over the remaining life of the charter at a 15% rate (even though we typically discount at 10% based on the valuation method that follows the U.S. Securities and Exchange Commission guidance, we use a higher discount rate in this analysis, because 40% of volumes were assumed sold under contracted prices higher than the commodity benchmark and other commonly parameters used in the industry), and deduct 5% of administrative expenses to arrive at the net value.
- 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): \$2.0 billion
- Estimated net value of the project: \$2.3 billion
- Recovery expectations: Rounded to 100% (recovery rate of '1'- 95%).

Related Criteria

- Criteria | Structured Finance | General: Counterparty Risk Framework: Methodology And Assumptions, March 8, 2019
- General Criteria: Methodology For National And Regional Scale Credit Ratings, June 25, 2018
- General Criteria: Guarantee Criteria, Oct. 21, 2016
- Criteria | Corporates | Recovery: Methodology: Jurisdiction Ranking Assessments, Jan. 20, 2016
- Criteria | Corporates | Project Finance: Project Finance Framework Methodology, Sept. 16, 2014
- Criteria | Corporates | Project Finance: Project Finance Operations Methodology, Sept. 16, 2014
- Criteria | Corporates | Project Finance: Project Finance Transaction Structure Methodology, Sept. 16, 2014
- Criteria | Corporates | Project Finance: Key Credit Factors For Oil And Gas Project Financings, Sept. 16, 2014
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- General Criteria: Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions, Nov. 19, 2013
- General Criteria: Methodology: Timeliness Of Payments: Grace Periods, Guarantees, And Use Of 'D' And 'SD' Ratings, Oct. 24, 2013
- Criteria | Corporates | Project Finance: Project Finance Construction And Operations Counterparty Methodology, Dec. 20, 2011
- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011
- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009

Ratings List

New Rating

Leviathan Bond Ltd.

Senior Secured	BB-(prelim)/Stable
Recovery Rating	(prelim)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.standardandpoors.com for further information. Complete ratings

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