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CREDIT OPINION
3 May 2020

Update

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RATINGS

Delek & Avner (Tamar Bond) Ltd.

Domicile	Israel
Long Term Rating	Baa3
Type	Senior Secured - Fgn Curr
Outlook	Negative

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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Delek & Avner (Tamar Bond) Ltd.

Update following outlook change to negative

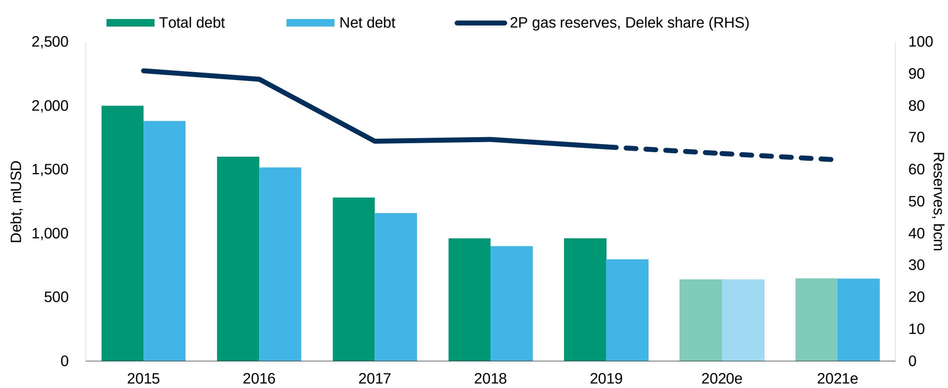
Summary

The credit profile of Delek & Avner (Tamar Bond) Ltd. is supported by significant gas reserves in the Tamar reservoir, the project's national importance to the State of Israel (A1 positive), strong historic and expected electricity demand growth driven by demographic growth and improvement in living standards, the project's strong operating track record, and a diversified pool of long term gas offtakers, anchored by a take-or-pay contract with the Israel Electric Corporation Limited (IEC, Baa2 positive) that runs until 2028.

These factors are balanced by the likelihood of lower achieved prices following the exercise of IEC's price reduction option as well as termination or volume reduction options in other contracts due to competition from other Israeli gas fields, in particular the Leviathan field that started production in December 2019. Coronavirus-related demand reductions will exacerbate these challenges. Credit quality is also constrained by the project's location in a region and country exhibiting significant geopolitical risk, a lack of covenants binding the operator to the project, and weaker creditor protections than many rated projects.

We changed the outlook on the rating to negative on 17 April 2020.

Exhibit 1
Tamar gas reserves have remained stable as the Issuer's debt has fallen



Historical 2P Gas reserves shown as estimated at year-end. The issuer's share of the Tamar project reduced from 31% to 22% in 2017. Moody's projections are Moody's opinion and do not represent the views of the Issuer
Source: Delek, Moody's Investors Service

Credit Strengths

» Substantial gas reserves

» Strong operating track record

» Continued strategic importance of the Tamar gas field to Israel

» Long-term offtake agreements, including new contract with Dolphinus

» Growing gas demand in Israel

Credit Challenges

» Intense competition from other Israeli gas suppliers and risk of oversupply

» Quality of offtakers has deteriorated as IEC share has fallen

» Likely requirement for refinancing

» FFO to weaken from late 2020 as government levy becomes payable

» Geopolitical event risk

Rating Outlook

The negative outlook reflects the likelihood of gas oversupply in Israel because of increasing competition from other gas fields in the region, especially Leviathan, as well as lower demand due to the coronavirus crisis, and the narrowing window for the Delek Drilling Limited Partnership (the Sponsor) to divest its interest in the Tamar lease, as required under the Israeli Gas Framework, which is likely to trigger a mandatory redemption of the notes issued by Tamar Bond unless bondholders choose to waive this right.

Factors that Could Lead to an Upgrade

Upward rating pressure is not currently anticipated. The outlook could be stabilised if:

» Tamar agrees material new take-or-pay gas sale and purchase agreements with high-quality offtakers and/or receives commitments from existing offtakers to maintain volumes at current levels; and

» Increased domestic demand and/or evidence of sustained strong exports reduce the risk of oversupply in the Israeli gas market

» A decision to stabilise the rating would also take into account the Sponsor's progress toward divesting its working interest in the Tamar lease or alternative arrangements that satisfy its obligations under the Gas Framework Agreement

Factors that Could Lead to a Downgrade

The rating could be downgraded if:

» Reduced cash flow or debt market conditions call into question the company's ability to meet maturities in December 2020, December 2023 and December 2025

» There was significant disruption to operations of the Tamar field or EMG pipeline; or

» Moody's had significant doubt about the Sponsor's ability to divest its working interest in the Tamar lease at a price sufficient to redeem the Tamar Bonds by December 2021

Key Indicators

Key operating and financial metrics
Delek & Avner (Tamar Bond) Ltd.

12 month period	2015	2016	2017	2018	2019	2020 proj.	2021 proj.
Total off-take (bcm)	8.3	9.4	9.7	10.3	10.4	9.3	8.9
CFADS interest coverage	3.0x	4.4x	5.0x	5.2x	6.1x	4.1x	4.3x
DSCR (excl. reserves)	3.0x	0.8x	5.0x	0.8x	6.1x	0.5x	4.3x
FFO / Debt	11.3%	20.1%	25.0%	26.9%	29.0%	27%	21%

Note: DSCR is depressed in years when notes are repaid, as in 2016, 2018 and 2020. Moody's projections (proj.) are Moody's opinion and do not represent the views of the Issuer.
Source: Moody's Investors Service

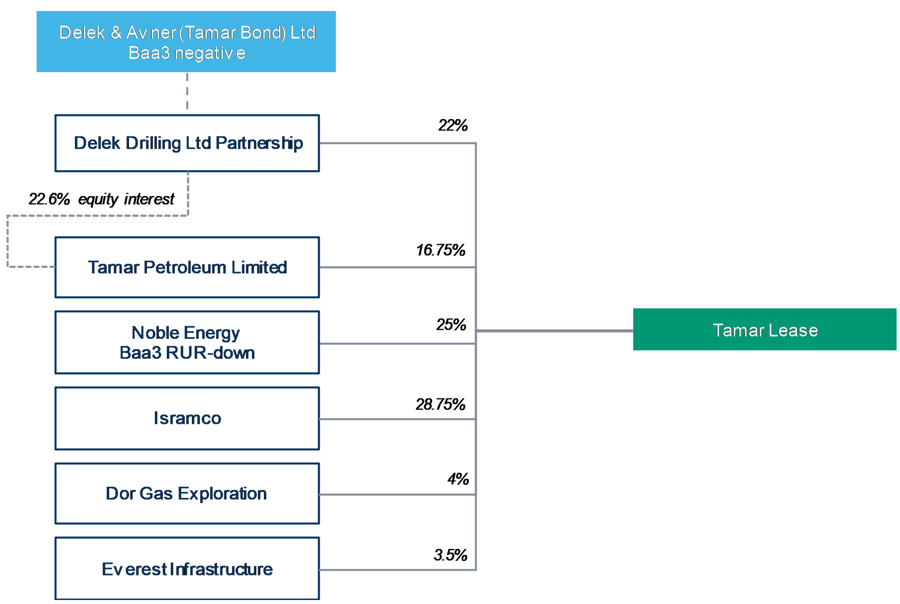
Profile

The Tamar gas field (Tamar) is an operating deepwater field in the Eastern Mediterranean off the coast of Israel. The reservoir was discovered in January 2009, and in December 2009 Tamar Partners were granted a production lease (Tamar Lease) for a term of 30 years, with a 20-year extension option. At 31 December 2019, the field had 219.2 billion cubic metres (bcm) of proven (1P) gas reserves.

Delek & Avner (Tamar Bond) Ltd is a special-purpose entity created in May 2014 to issue bonds secured by a first priority fixed pledge of Delek Drilling's direct working interest, currently 22%, in the Tamar lease. Recourse against the Sponsor is, subject to certain exceptions, limited to the collateral pledged by the Sponsor.

In addition to its 22% direct interest in Tamar, Delek Drilling has an additional economic interest of approximately 3.8% through its investment in Tamar Petroleum Limited. This interest is not part of the security for Tamar Bond.

Exhibit 3
Tamar ownership structure



Source: Moody's Investors Service

Recent Developments

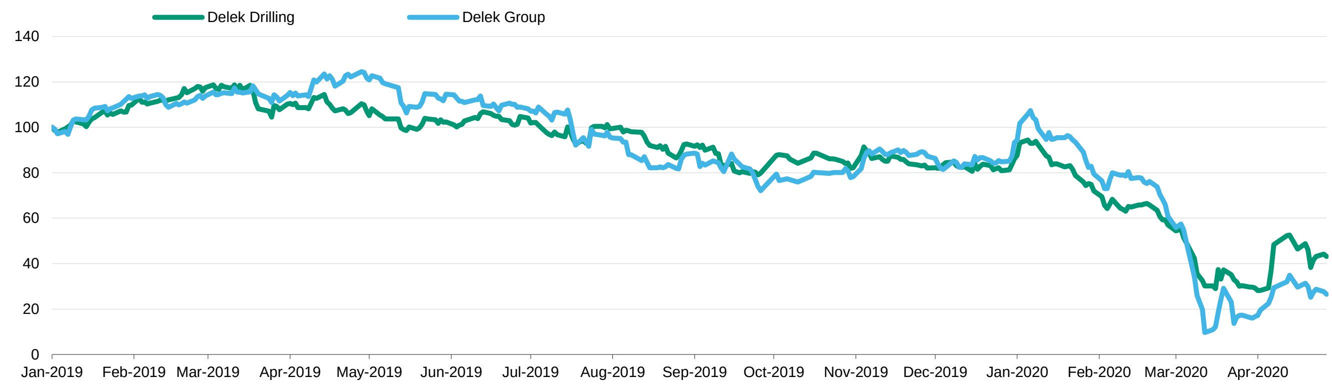
Credit quality of operator has weakened; Sponsor's group facing challenges

On 20 March 2020, we placed the Baa3 ratings of Noble Energy, Inc. (Noble) on review for downgrade. The action reflected Noble's relatively high debt levels and weak cash flow based credit metrics for its Baa3 rating entering the current downturn in oil prices. We regard Noble's strong track record as operator of the Tamar field as an important credit strength of Tamar Bond. However, given relatively low investment requirements at the Tamar field, we do not expect any stress at Noble or resulting actions by management to conserve cash to have an adverse impact on the Tamar project.

On 15 March 2020, Delek Group Ltd, the controlling shareholder of the Sponsor, Delek Drilling, reported that it had breached certain loan covenants because of the falling equity market value of Delek Group and Delek Drilling. As a result, a lender with security over 15% of the shares in Delek Drilling demanded repayment of certain loans and enforced its security over a portion of these shares. Part of the shares were repurchased by Delek Group from the buyer, and following these events Delek Group holds (directly or indirectly) approximately 55% of Delek Drilling.

On 1 April, Delek Group reported that another lender had demanded repayment of loans, and that Delek Group had pledged additional shares of Delek Drilling in exchange for postponing realisation of this collateral.[1] If all shares in Delek Drilling that have been pledged as collateral (including the loans mentioned above and other loans) were realised and sold, we understand that this could constitute a change of control event of default on other loans to Delek Drilling.

Exhibit 4
Share prices of Delek Drilling and Delek Group
Indexed to 100 as of January 2019



Source: FactSet

Tamar Bond's 2019 financial statements, published in March 2020, warn that a deterioration in Delek Group's financial position may have a material adverse effect on the Partnership and its business. However, because our assessment of the Tamar Bonds' credit quality does not incorporate an assumption of sponsor support, and given the cash-trapping provisions and other protections included in the Tamar Bond financing structure, we do not currently believe the credit quality of the bonds would be significantly impacted by a deterioration in the credit quality of Delek Drilling and Delek Group.

IEC volumes reduced to minimum, though some increase likely

In April 2019, IEC announced that it would, from the date that the Leviathan field begins production until the price reset date in 2021, reduce its volumes under the Tamar contract to the minimum level that the company is obligated to buy (around 3 bcm/year, less any carry-forward amounts, compared to 4.66 bcm purchased in 2018) and purchase any additional volumes from Leviathan.[2] However, a subsequent ruling by the Competition Authority, as set out below, increases the likelihood of IEC taking additional gas from Tamar.

Public dispute between Sponsor and other Tamar partners, who allege that Delek and Noble are undermining competitiveness

The Sponsor and Noble directly own 47% of the Tamar project, in addition to Delek's further indirect holding through its interest in Tamar Petroleum. However, the two companies own a larger 85% stake in the Leviathan project, and the other Tamar partners have alleged that the companies have therefore conducted negotiations with gas offtakers in a manner that has favoured Leviathan.

In November 2019 these other partners – Tamar Petroleum, Isramco Negev, Dor Gas Exploration and Everest Infrastructures – made an “urgent request” to Israel’s Competition Authority asserting that “the Tamar reservoir’s ability to compete against the Leviathan reservoir [is] being frustrated by Noble and Delek” because they are preventing the other partners from marketing the Tamar gas to new and existing customers[3]. On 13 April 2020, the Competition Authority and other government bodies ruled in favour of the smaller partners and gave the Tamar partners a short period of time to modify the arrangements between them so that the Sponsor, Noble and Isramco will not have veto rights over decisions on the marketing of Tamar gas[4]. As a result of this determination, it is likely that the IEC-Tamar and IEC-Leviathan agreements will be amended in favour of Tamar.

Israel-Egypt gas exports begin; Tamar share reduced following renegotiation

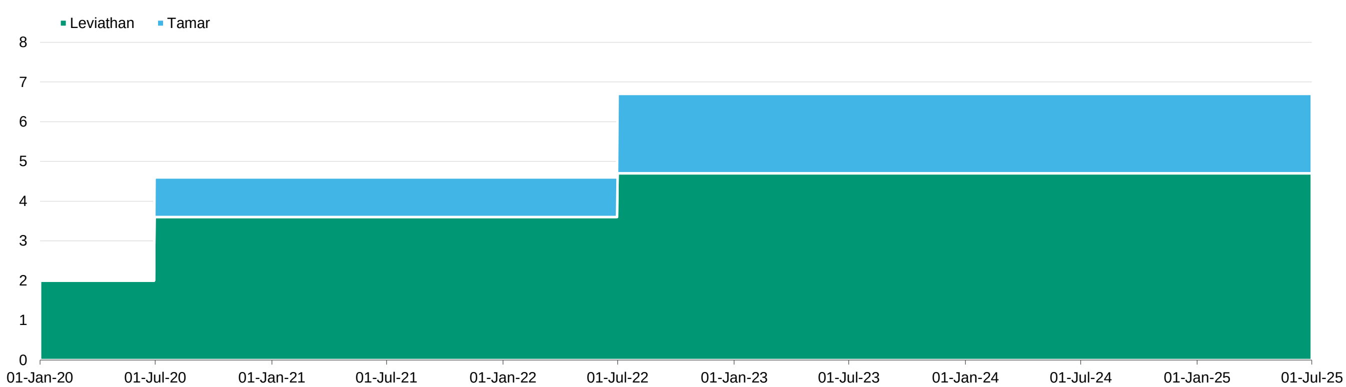
In February 2018, the Sponsor and Noble signed an agreement to sell gas from the Tamar and Leviathan fields to Dolphinus Holdings (Dolphinus), a gas supplier in Egypt.[5] Under this agreement, Tamar and Leviathan would each export approximately 3.5 bcm annually or 32 bcm over the 10-year life of the contract. The gas from Tamar would have been supplied on an interruptible basis, although the Tamar partners had an option to convert all or part of the contracted volumes to firm during the period from July 2020 to December 2021.

In September 2019, the agreement was amended. The contractual quantity from the Tamar field was reduced to 25.3 bcm and the term extended to 15 years, now on a firm basis under a take or pay contract, while the contractual quantity from Leviathan was increased to 60 bcm[6]. Under the headline quantities in the revised agreement, Tamar will supply approximately 1 bcm per year from 30 June 2020 to 30 June 2022 and 2 bcm per year thereafter, with price linked to the price of Brent oil, subject to a floor. Leviathan will supply 2.0 bcm/year until June 2020, 3.6 bcm/year from July 2020 to June 2022 and 4.7 bcm thereafter. Gas deliveries from Leviathan to Dolphinus began on 15 January 2020.

Under its agreement with Tamar, Dolphinus may reduce the minimum annual quantity to 50% of the annual contract quantity in any year in which the average price of Brent oil is below $50 per barrel[7]. Although the current Brent price is below $25/barrel, which would allow Dolphinus to reduce its volumes, the average price for 2020 will not be known with certainty until the end of the year.

Exhibit 5

Israel gas exports to Egypt will increase from July 2020, although majority will come from Leviathan
Billion cubic metres per year



Source: Delek Drilling press releases

Exports to Egypt are expected to be made through the pipeline owned by East Mediterranean Gas (EMG). A special purpose company owned by Noble, Delek and East Gas Company acquired 39% the share of EMG, as well as the capacity, lease rights and operatorship of the pipeline, in November 2019. The pipeline has a nameplate capacity of 7 bcm/year, and the acquirors say that tests indicate that the pipeline is capable of carrying this volume.[8] In 2019, the Tamar partners paid $50 million to guarantee capacity on the pipeline.

Elements of the Israeli gas transportation system may require upgrades to allow the contractual volumes to be supplied. On March 26, 2020 the NGA published a resolution following said hearing, under which Israel Natural Gas Lines shall upgrade the infrastructure, and the exporter shall pay 57% of the cost.

Detailed Credit Considerations

Substantial gas reserves mitigate refinancing risk

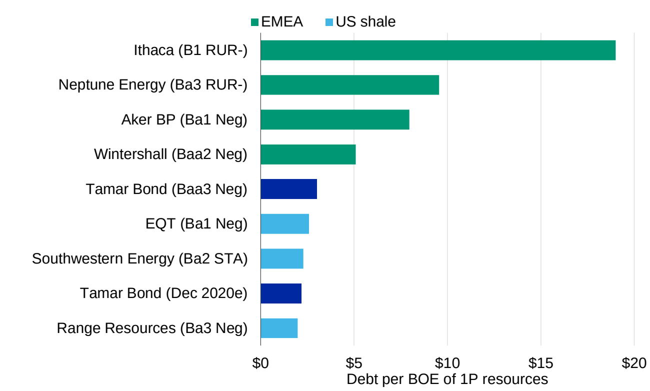
Between 2015 and 2018, the Tamar field produced 38 bcm of gas but development work added 54 bcm of 2P reserves. As a result, 2P reserves have grown since the creation of the project structure.

At the end of 2019, the independent reserves consultants Netherland, Sewell and Associates, Inc. (NSAI) estimated Tamar's 2P (>50% probability) reserves at 305.0 bcm of recoverable gas and 14.0 million barrels of condensate. On a 1P (>90% probability) basis, proven gas reserves are 219.2 bcm of gas and 10.1 million barrels of condensate.

Scheduled principal repayments of $400 million in 2016 and $320 million in 2018, and a mandatory partial bond redemption of $320 million in 2017 (triggered by the sale of part of Delek's interest in the Tamar project, see Sale of part of interest in Tamar Gas field is credit neutral, 3 May 2017) has reduced the outstanding balance of the notes to $960 million. The next scheduled principal repayment of $320 million occurs in December 2020.

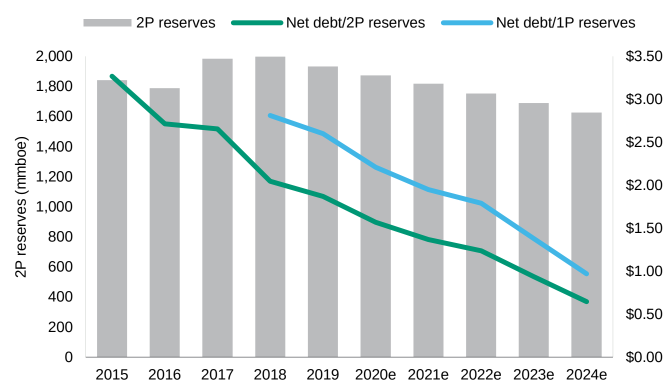
The expected reserves remaining at maturity of the notes is a key mitigation to refinancing risk and support to the value of the security to Tamar bondholders. If production continues at around 10 bcm/year, we estimate the issuer will have net debt equivalent to only around $1 per barrel of 1P reserves at the time of the final debt maturity in 2025.

Exhibit 6
Low debt relative to reserves, compared to European peers



Note: Ithaca pro forma for refinancing
Source: Moody's Financial Metrics

Exhibit 7
Debt has fallen steadily relative to reserves



Source: Delek & Avner (Tamar Bond), Moody's estimates

Strong operating track record

Noble operates and owns a 25% interest in the Tamar field. Since first gas sales in March 2013, production levels have been consistently in line with or above base case projections. In 2019, 10.5 bcm of gas was produced from the Tamar and Yam Tethys fields, exceeding the financial close base case forecast of 9.5 bcm.

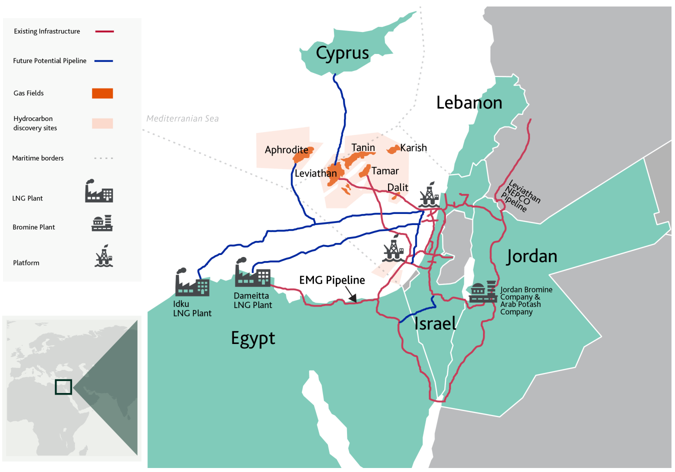
Strategic importance to Israel but growing competition

Tamar was the only domestic gas supplier in the Israel market from the beginning of operations in March 2013 until December 2019, when operations at the neighboring Leviathan gas field started. Despite the loss of its virtual monopoly, bearing in mind Israel's geopolitical situation and the gas shortages of 2011 and 2012, we consider that Tamar remains important to the security of energy supply of the country. We therefore expect the Government of Israel (A1 positive) to remain supportive of the successful operations of Tamar despite the start of operations at Leviathan and expected operation of Karish.

The Leviathan reservoir, discovered in December 2010, has gas reserves estimated to be twice as large as Tamar's. Gas production from the first phase of Leviathan started in December, and the field is expected to have a capacity of up to 12 bcm per year. In addition to Leviathan, the Karish gas field is targeting first gas production in the first half of 2021 and has agreed firm sales of 5.6 bcm/year, contingent on the development of Karish North field, and subject to developing additional capacity.[9]. The production facility serving Karish and Tanin will have capacity of up to 8 bcm/year, according to the developer.

The Aphrodite gas field was discovered in 2011 in Cyprus seas and is expected to start operations after 2023. In November 2019, the Cypriot government announced it had signed a 25-year exploitation license for the field, which could be extended by 10 years, with a consortium comprising Noble Energy, Shell and Delek.

Exhibit 8
Gas fields in Israel and Cyprus seas



Source: Delek, Moody's Investors Service

Exhibit 9
Tamar faces increasing competition

Gas field	Date of discovery	Date of first gas	Estimated reserves	Owners
Tamar	Jan-09	Mar-13	305 bcm (2P)	Noble, Delek, Isramco, Tamar Petroleum , Dor, Everest
Leviathan	Dec-10	Dec-19	649.5 bcm (2P+2C)	Noble, Delek, Ratio
Karish	May-13	exp. Q1 2021	98.6 bcm (2C)	Energean
Tanin	Feb-12			
Aphrodite	Sep-11	TBD	129 bcm (2C)	Delek, Noble, Shell

Sources: Noble Energy, Delek Drilling, Energean, NSAI

Risk of oversupply despite favourable underlying demand dynamics, exacerbated by coronavirus

Israeli gas demand grew at a compound annual rate of 13.5% between 2007 and 2018. We believe that continued growth is likely, driven by the substitution of gas-fired for coal generation, as well as population and economic growth, increasing living standards, electrification of the country's railway system and increased water desalination.

The construction and increased utilisation of gas-fired generation will be a particularly significant driver. In 2015, the Ministry of National Infrastructure, Energy and Water instructed IEC to reduce coal fired generation by 15%, to be replaced with gas fired generation. In 2018, Israel committed to fully phasing out coal generation by 2030, and in 2019 said that this could occur by the end of 2025.

Amendments to Israel's Electricity Sector Law in 2018 (see Passage of Israel electricity sector reforms is positive for IEC, 23 July 2018) require IEC to sell around 4.5 GW of existing gas plants under a specific schedule but also allows IEC to build two new CCGTs with a combined capacity of approximately 1.2 GW. The GSPA with IEC will not be transferred to the new owners of existing gas plants, which will therefore need to enter into contracts with Tamar or other gas fields.

Tamar started to export gas to Jordan in 2017, with a significant increase starting in 2020. As discussed under Recent Developments, Delek and Noble have agreed to sell gas from the Tamar and Leviathan fields to Dolphinus, in Egypt, starting in 2020 and increasing to 6.7 bcm/year from July 2022. Tamar and Leviathan have also agreed to export over 3 bcm/year to Jordan.

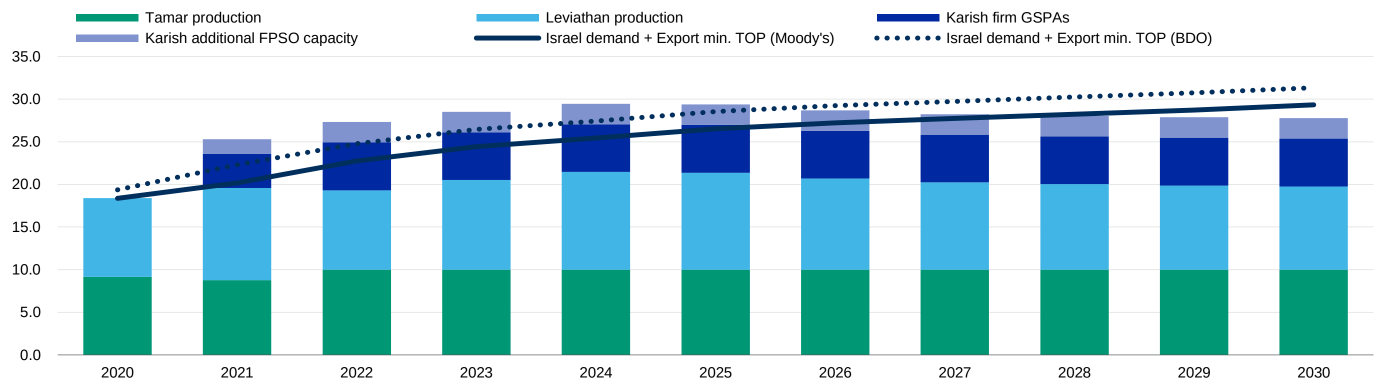
Despite this, there is a likelihood that the Israeli gas market will be oversupplied in the near term. In 2018, Israel's Ministry of Energy estimated that domestic demand in 2020 would be around 11 bcm, which implies total demand including exports of around 17 bcm; strong demand in 2018 and Israel's subsequent decision to accelerate the phase-out of coal means their forecast is likely to be too conservative. A more recent and more optimistic forecast from the consultancy BDO suggests total demand of around 20 bcm including exports in 2020. Both are below potential production from Tamar and Leviathan of around 22 bcm.

The risk of short-term oversupply is exacerbated by the coronavirus crisis. Lower economic growth in Israel is likely to reduce gas demand relative to our prior expectation, although we expect coal-to-gas conversion, in particular, to result in year-on-year increases. In addition, Egypt will have lower domestic demand than previously expected and has stopped LNG exports in response to weaker market conditions, reducing its need for imports from Israel. In the longer term, disruption to development of new projects, expansion of existing projects, and exploration activity may result in lower domestic supply in Egypt, which could contribute to higher imports.

Anticipated oversupply has already contributed to more intense price competition in the domestic market, and may constrain production from the Tamar field.

Exhibit 10

Production capacity is likely to exceed demand, including contracted exports
bcm/year



Source: Moody's Investors Service, Israel Ministry of Energy, Tamar Petroleum, Delek Drilling, Energean Oil & Gas

We note that the governments of Israel, Greece and Cyprus have agreed to develop a gas pipeline from Israel to Europe, which may provide a further outlet for Israeli gas production.[10] However, the project faces significant risks and, even if it proceeds, will not be completed before 2025.

Contract renegotiations increase price, volume and counterparty risk

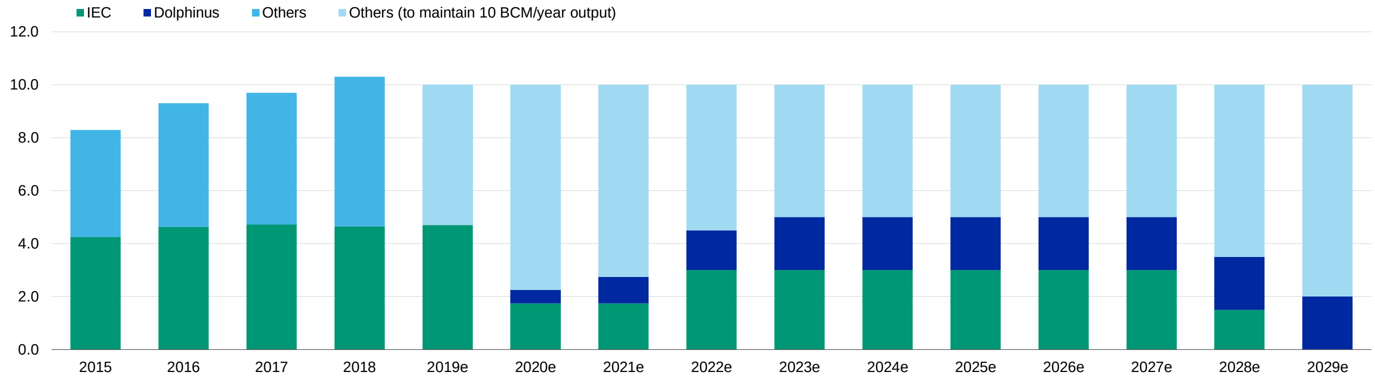
At financial close, the Sponsor entered into long-term gas sale and purchase agreements (GSPAs) with all of Israel's significant gas users. GSPAs covering the project's entire capacity through 2018 were signed with 30 customers. Although the GSPAs are long term in nature (typically 15 years) and stipulate minimum take or pay quantities of gas with defined pricing mechanisms, they typically included a clause allowing minimum volumes to be reduced at around the time of the anticipated production start date of the Leviathan gas field. The flexibility in the contracts was included due to the Israeli government's wish to diversify gas supply sources to the domestic market.

Tamar's largest and most important GSPA is with IEC, the state-owned electricity utility. IEC has accounted for 45-50% of Tamar's output since 2014, and it purchased 4.7 bcm from Tamar in 2018. From the start of 2020, however, IEC has announced that it will reduce volumes to around 3 bcm less any carry-forward amonts, the minimum allowed under the GSPA, and buy any additional volumes from Leviathan instead.

Declining sales to IEC will be partly replaced by sales to Dolphinus under a new contract agreed in 2019. However, we believe there is significantly greater counterparty risk associated with the Dolphinus contract, as the buyer is a private company recently formed by two Egyptian entrepreneurs solely to sell gas in Egypt, a country with very low financial strength (see Government of Egypt, B2 stable), and in particular to the government-owned company EGAS.

Exhibit 11

IEC volumes will be partly replaced by sales to Dolphinus



Source: Delek Drilling, IEC, Moody's Investors Service

The Sponsor has also renegotiated a number of existing contracts to lower the minimum volumes that the customers will be required to accept from Tamar in the future, giving them the option to move greater volumes to Leviathan or Karish.

Exhibit 12

The Tamar partners saw significant contract renegotiations in 2019

Recent announced contract renegotiations

Date of renegotiation	Offtaker	Description of change	Source
Nov-19	OPC	Will continue to purchase all requirements from Tamar until reduction option date or commercial operation of Karish, but reduction option to be calculated relative to minimum rather than actual quantities	Tamar Petroleum
Oct-19	Dolphinus	Contractual volumes reduced from 32 BCM to 25.3 BCM, but converted from interruptible to firm	Tamar Petroleum
Apr-19	ORL	Agreed to supply 0.5 BCM for six months from July 2020, extendable by ORL until commercial operation of Karish. Have agreed to purchase from Karish once available	Tamar Petroleum
Apr-19	Dorad	Will continue to purchase all requirements from Tamar until reduction option date or commercial operation of Leviathan, but reduction option to be calculated relative to minimum rather than actual quantities	Tamar Petroleum
Early 2019	Dalia	Will continue to purchase all requirements from Tamar until reduction option date, but reduction option from Leviathan start-up to be calculated relative to minimum rather than actual quantities	Delek Group

Source: Tamar Petroleum, Delek

We note that Energean, owner of the Karish reservoir, says it has signed firm contracts to supply 5.6 bcm/year to the Israeli market from 2022. Although the Karish contracts include a number of customers that are new to the market, including the new owners of the Alon Tavor power station, they also include several current Tamar customers including Dorad, Ramat Negev, ORL, OPC and Israel Chemicals.

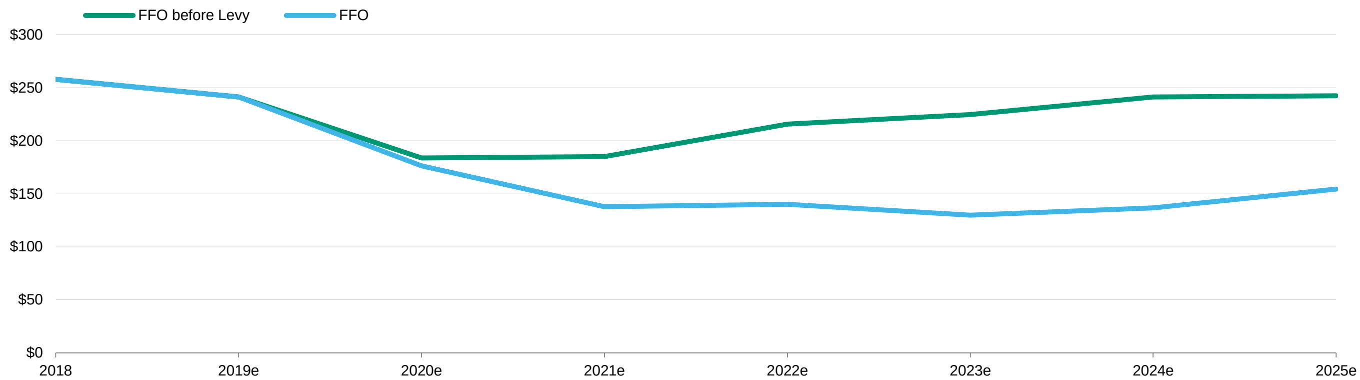
Natural resources levy will reduce cash flow from late 2020

In addition to a 12.5% royalty rate and 23% corporate income tax, Tamar is subject to a levy on "windfall" profits known as the Sheshinski levy. The levy is a progressive tax amounting to between 20%-50% of profits of gas projects after they have achieved a certain level of return on investment. The maximum levy rate is currently 46.8%, given the prevailing corporate tax rate. The proceeds of this levy will be deposited into a sovereign wealth fund.

Over time, the levy will increase to around 47% of levyable income, which will increase the total government share of the Tamar field's income – including taxes, royalties and levies – to more than 60%.

We estimate that Tamar will begin to pay the levy in 2020, and that Delek's share will rise to around $75 million by 2022 and $100 million by 2024, reducing Funds From Operations (FFO) by around 40%. This is consistent with our expectations from the time of financial close.

Exhibit 13
Natural resources levy will significantly reduce Funds From Operations
$ millions



Source: Moody's Investors Service estimates

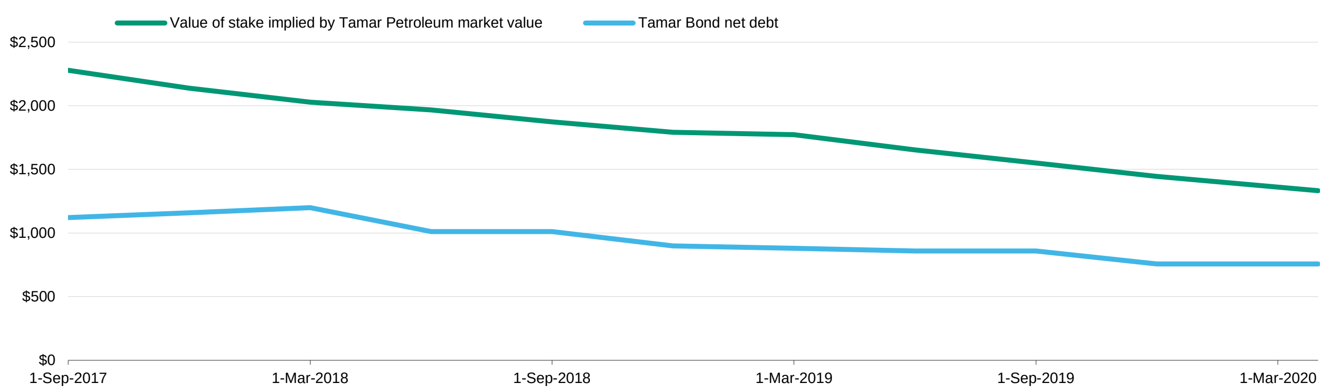
Delek Drilling required to sell holding in the Tamar gas field by the end of 2021

Under the provisions of the Israeli Gas Framework, published in August 2016, Delek Drilling is required to divest its entire working interest in Tamar by 17 December 2021. If the sale is not completed by this date, the right to sell the assets will be assumed by a trustee appointed by Israel's Antitrust Commissioner from a shortlist proposed by the Sponsor. The trustee will be required to sell the working interest within twelve months of appointment, "with consideration for market value and the highest price, even if such bid does not represent their real value".

Under the terms of the note, a sale of Delek Drilling's working interest in Tamar would trigger a mandatory redemption of all of the Tamar notes at par, unless bondholders choose to waive this right. Tamar Bond's ability to meet this redemption would depend on the value received for its interest in the Tamar Lease, which would in turn reflect market conditions at the point of sale.

We have estimated the market value of Tamar Bond's interest in the Tamar lease by looking at the equity market value and debt of Tamar Petroleum, a listed company that owns 16.75% of the Tamar lease. Using this approach, we estimate that Delek Drilling's direct interest has a market value of around $1.3 billion as of April 2020. Although significantly lower than the implied value in 2017 and 2018, this remains significantly higher than Tamar Bond's debt, net of cash reserves, of around $720 million.

Exhibit 14
Value of Tamar Bond's interest in the Tamar Lease, implied by equity market value of Tamar Petroleum



Source: FactSet, Moody's Investors Service

As of December 2019, Delek Drilling's reserve consultants estimate the present value of future net revenue (before corporate income taxes), discounted at a rate of 10%, to be $1.8 billion

As an alternative to a sale, Delek Drilling is considering distributing its interest in Tamar to its shareholders as a dividend in kind, leaving the Tamar Bonds in place, although this would require the consents of both the Antitrust Commissioner and bondholders.

ESG considerations

Coronavirus will affect many sectors

The rapid and widening spread of the coronavirus outbreak, deteriorating global economic outlook, falling oil prices, and asset price declines are creating a severe and extensive credit shock across many sectors, regions and markets. The combined credit effects of these developments are unprecedented. We expect that credit quality around the world will continue to deteriorate, especially for those companies in sectors that are most affected by reduced revenues, margins and disrupted supply chains. At this time, the sectors most exposed to the shock are those that are most sensitive to consumer demand and sentiment, including global passenger airlines, lodging and cruise, autos, as well as those in the oil & gas sector most negatively affected by the oil price shock. Moody's will take rating actions as warranted to reflect the breadth and severity of the shock, and the broad deterioration in credit quality that it has triggered. In the case of Tamar Bond, these pressure are only partly mitigated by committed volumes and floor prices under Tamar's long-term contracts.

For more information on research on and ratings affected by the coronavirus outbreak, please see moodys.com/coronavirus.

Gas will play important role in Israeli energy transition

Israel ratified the Paris agreement in November 2016, committing the country's government to reducing greenhouse gas emissions. To this end, the Israeli government has announced that it would end coal fired generation by 2025. While natural gas represented around 67% of electricity generation in 2018, its share will need to increase to around 83% to replace coal-fired generation. This shift will contribute to emission reductions, given that the combustion of natural gas emits around 50% less CO_2 per energy unit produced than coal. We therefore believe that gas will continue to play an important role in the Israeli energy mix for the foreseeable future.

The Israeli Ministry of Energy estimates an increase in domestic demand for natural gas from 10.4 bcm in 2017 to 14.3 bcm in 2025. BDO's estimates are even higher, projecting an increase of gas consumption to 18.9 bcm in 2025.

Ownership structure creates risk of conflicts

The Sponsor's cross-shareholdings in Tamar and Leviathan leases create the risk that it may take actions that disadvantage the Tamar project and creditors of Delek & Avner (Tamar Bond). As discussed under Recent Developments, several partners in the Tamar project have alleged that the Sponsor and Noble have prevented Tamar from marketing gas to new and existing customers in order to favour the Leviathan project.

The Sponsor is required to sell all its rights in the Tamar lease to an unrelated third party before 17 December 2021, which may lead to short-term decision-making not in the interest of the issuer's creditors.

The Sponsor is also an indirect shareholder in the EMG pipeline, which is critical to Tamar's strategy of increasing export sales. Once it has sold its interest in the Tamar project, Delek and Noble will continue to control the EMG pipeline as well as Tamar's major competitor, the Leviathan project. A Capacity Allocation Agreement recently signed between the Tamar partners, the Leviathan partners and EMED Pipeline BV reduces but does not eliminate the potential for conflicts of interest resulting from this vertical consolidation.

These risks are mitigated by Delek Drilling's interest in maximising the sale value of its share of the lease, and the ongoing interest of Noble in both Tamar and EMG.

Liquidity Analysis

Unlike typical project financings, the Tamar Bond structure does not use amortising debt. The outstanding debt as of April 2020 comprises three bullets of $320 million with maturities in December 2020, December 2023 and December 2025. Compared to amortising debt structures, non-amortising debt structures involve a greater refinancing risk with a potential strain on liquidity at each maturity date. To mitigate refinancing risk, the Tamar bond structure includes two reserves mechanisms: (1) a Debt Payment Fund of $100 million that can be used to fund both principal and interest payments and (2) a Principal Reserve Fund building up (a) 100% of the next principal payments 12 months before maturity for the 2018 maturity, 15 months before the 2020 maturity and (b) 100% of the principal less 50% of the Debt Payment Fund balance 18 months before the 2023 and 2025 maturities. Both reserves must be funded in order to make distribution payments. We expect both reserves to be generally sufficient to meet interest and principal payments from internal cash flows.

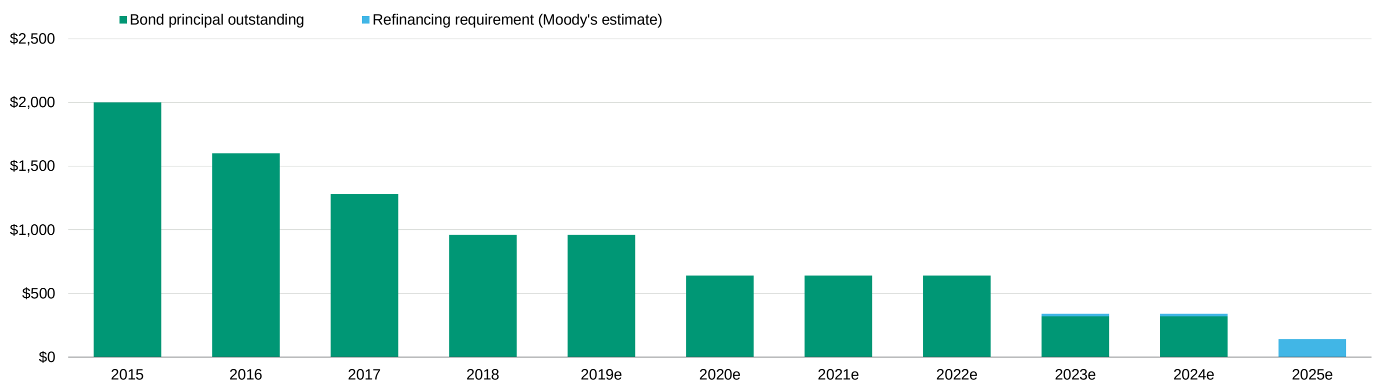
The debt payment fund had a balance of $102 million as of December 2019, and total cash (including the principal reserve fund and debt payment fund) had increased to approximately $230 million as of late March 2020. We believe it is highly likely that the December 2020 maturity can be fully repaid from internally generated cash flow.

It is likely that some part of the December 2023 maturity will need to be refinanced, if the bonds are not redeemed before that time. The extent of this refinancing will depend on the Tamar project's success in selling uncontracted volumes and whether the sponsor chooses to pay dividends available to it under the project structure.

Exhibit 15

Some refinancing is likely in 2025, and may be required in 2023

Gross debt outstanding, $ millions



Source: Delek & Avner (Tamar Bond) financial statements, Moody's estimates

Rating Methodology and Scorecard Factors

The Project's rating falls within the scope of Moody's Generic Project Finance Methodology, published in November 2019.

Exhibit 16

Rating factors grid

Delek & Avner (Tamar bond) Ltd.

Factor	Subfactor	Score	Metric
1. Business Profile	a) Market position	Baa	Baa
	b) Predictability of Net Cash Flows	Ba	Ba
2. Operating Risk	a) Technology	A	A
	b) Capital Reinvestment	A	A
	c) Operating Track Record	A	A
	d) Operator and Sponsor Experience, Quality and Support	A	A
Project Risk		**Medium**	
3. Leverage and Coverage	a) Average CFADS / Debt service to 2025 [1]	0.92x	Ca
	b) Project CFO / Adjusted Debt	21.5%	Baa
Preliminary Scorecard Indicated Outcome before Notching:			**Ba1**
Notching Considerations		**Notch**	
	1 - Liquidity		0
	2 - Structural Features		-1
	3 - Refinancing Risk		0
	4 - Construction and Ramp-up Risk		0
	5 - Priority of Claim, Structural Subordination and Double Leverage		0
Preliminary Scorecard Indicated Outcome before Offtaker Constraint:			**Ba2**
	Offtaker Constraint Applied?		No
	Level of Offtaker(s) Constraint		n/a
Scorecard Indicated Rating:			**Ba2**
Assigned Senior Rating			**Baa3**

[1] Because of the non-amortising nature of the project's debt, the DSCR is highly volatile depending on principal repayment timing. We use average CFADS to debt service until the last maturity in 2025 instead of DSCR.

Source: Moody's Investors Service

Ratings

Exhibit 17

Category	Moody's Rating
DELEK & AVNER (TAMAR BOND) LTD.	
Outlook	Negative
Senior Secured	Baa3

Source: Moody's Investors Service

Endnotes

1 Delek Group, Additional 1.3% of Delek Drilling's Participation Units Have Been Mortaged In Favour Of An Israeli Bank, 1 April 2020

2 Israel Electric Corporation, Immediate Report – Leviathan Agreement, 6 April 2019

3 Tamar Petroleum, Application to the Competition Commissioner, press release 20 November 2019

4 Statement from Israel Competition Authority (in Hebrew), 16 April 2020

5 Delek Drilling, Signing of Agreements for Export of Natural Gas to Egypt, 19 February 2018.

6 Delek Drilling, Update to the Egyptian Gas Export Agreement, 2 October 2019

7 Delek Drilling, Immediate report: Motion for Class Certification, 26 April 2020

8 Delek Drilling, The EMG Transaction – Update; Flow of Gas Via the EMG Pipeline, 1 July 2019.

9 Energean, Competent Persons Report certifies 1.2 Tcf (34 Bcm) plus 39 million barrels of gross 2C recoverable resources in Karish North, a 32% uplift on prior estimates, 9 April 2020

10 Israel Ministry of Foreign Affairs, EastMed Gas pipeline agreement signed at trilateral summit between PM Benjamin Netanyahu, Greek PM Kyriakos Mitsotakis and Cypriot Pres. Nicos Anastasiades, 2 January 2020

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