

## CREDIT OPINION

26 May 2021

### New Issue

✓ Rate this Research

#### RATINGS

##### Lundin Energy AB

Domicile	Sweden
Long Term Rating	Baa3
Type	LT Issuer Rating - Fgn Curr
Outlook	Stable

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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## Lundin Energy AB

### New issue

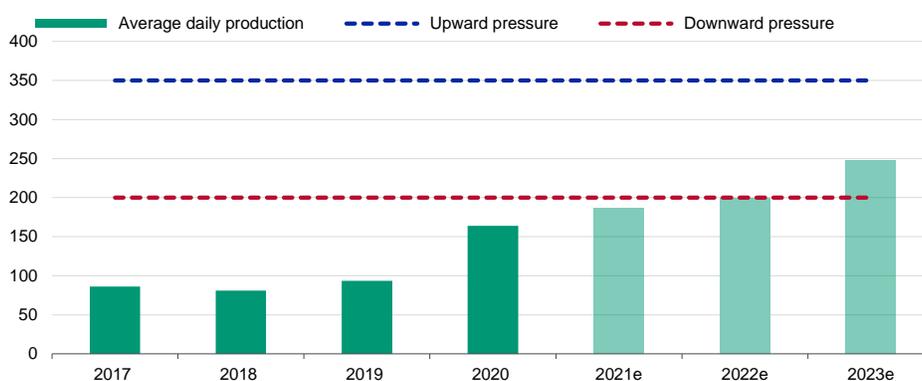
#### Summary

The Baa3 issuer rating of Lundin Energy AB (Lundin) primarily recognises (1) its very low production costs, well below the industry average, which supports the company's free cash flow (FCF) generation even in a low oil price scenario; (2) its established track record of exploration successes and reserve replacement, with a good pipeline of further organic opportunities to fuel production growth in the next 2-3 years, supported by the beneficial tax regime in Norway, where its assets are based; (3) its strategy to ensure carbon neutrality already from 2025, ahead of its peers; and (4) our expectation that the company will continue to manage its balance sheet conservatively and exhibit credit metrics consistent with a Baa3 rating.

The main constraints for the company's Baa3 issuer rating include (1) its relatively small scale and high asset concentration into its two main producing fields, Johan Sverdrup and Edvard Grieg, notwithstanding business interruption insurance policies in place and a good efficiency track record of both fields so far; (2) its exposure to inherently volatile oil prices; and (3) an M&A risk, even though its growth in the next 2-3 years is not dependent on acquisitions.

Exhibit 1

#### We expect Lundin will be able to further grow its average daily production



Forward view is our expectation, which is largely consistent with the company's public guidance

Source: Moody's Financial Metrics

## Credit strengths

- » Very low production costs, well below the industry average
- » Established track record of exploration successes and reserve replacement, with a good pipeline of further organic opportunities to fuel production growth in the next 2-3 years
- » Strategy to ensure carbon neutrality already from 2025, ahead of its peers

## Credit challenges

- » Relatively small scale and high asset concentration into its two main producing fields, Johan Sverdrup and Edvard Grieg
- » Execution risk with regards to ensuring a continued reserve replacement
- » M&A risk

## Rating outlook

The stable outlook on Lundin reflects our expectation that the company will be able to deliver on its growth path to 200 thousand of barrel of oil equivalent per day (Mboe/d) by 2023 and keep its credit metrics in line with the Baa3 rating, such as Moody's adjusted RCF/debt above 45%.

## Factors that could lead to an upgrade

- » Materially enhanced the diversification of its production profile
- » Sustained production towards 350 Mboe/d, while maintaining a reserve replacement rate above 100%;
- » Moody's adjusted RCF/debt is above 60% on a sustained basis.

## Factors that could lead to a downgrade

- » Inability to reach average production above 200 Mboe/d by 2023 and sustain it above that level afterwards or its reserve replacement falling considerably below 100% for a longer period
- » Moody's-adjusted net leverage sustainably above 1.5x
- » Moody's adjusted RCF/debt below 45% for an extended period of time.

## Key indicators

Exhibit 2

### Key Indicators of Lundin

	2017	2018	2019	2020	03/2021 LTM	Next 12-18 months
Average Daily Production (Mboe/d)	86	81	93	164	172	190 - 210
Leveraged Full-Cycle Ratio			2.5x	1.7x	2.0x	2.4x - 2.8x
E&P Debt / Average Daily Production (\$/Mboed)	\$45,064	\$40,222	\$42,721	\$24,322	\$21,290	\$15,000 - \$18,000
RCF / Debt	32.9%	45.5%	23.8%	23.1%	32.5%	41% - 49%
EBITDA / Interest Expense	8.3x	8.4x	10.1x	10.7x	14.9x	19x - 24x

Data as defined and adjusted by us.

Forward view represents our view and not the view of the issuer.

Source: Moody's Financial Metrics

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## Profile

Headquartered in Stockholm, Sweden, Lundin is an independent oil and gas producer focusing on several offshore fields on the Norwegian continental shelf, including a 20% stake in the Johan Sverdrup field and a 65% stake in the Lundin-operated Edvard Grieg field. The company reported roughly 670 million boe (MMboe) of 2P reserves at the end of 2020, around 95% of which were oil reserves, and achieved average daily production of 165 Mboe/d in 2020. Lundin is publicly listed on Nasdaq Stockholm with market capitalization of around \$9.7 billion as of 14 May 2021. Its key shareholder is Nemesia, an investment vehicle related to Lundin family that held 33% of the company's shares at the end of 2020, with the remainder of shareholders being a variety of institutional and retail investors.

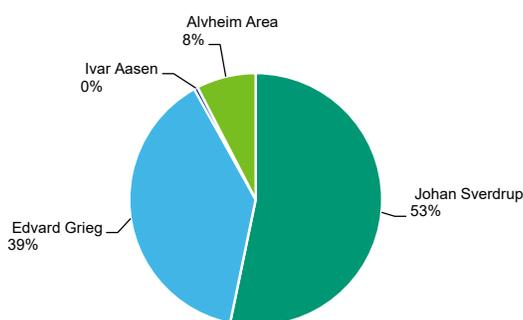
## Detailed credit considerations

### Relatively small scale and a high degree of asset concentration offset by very low production costs

One of the main rating constraints for Lundin's Baa3 issuer rating is the company's relatively small scale compared to the peer group of similarly rated independent oil and gas producers, including its closest rated peer [Aker BP ASA](#) (Baa3 stable), all of which generate daily production in excess of 200 Mboe/d and some well above that level. In addition, Lundin's production profile is comparatively less diversified, because the vast majority of its production is generated by two fields in Norway: Johan Sverdrup (roughly 50% of average daily production in 2020) and Edvard Grieg (roughly 40%). To manage the risks related to business interruptions on its key assets, Lundin has in place various insurance policies. In addition, Johan Sverdrup is operated by [Equinor ASA](#) (Aa2 stable), the largest and the most experienced company active in the Norwegian continental shelf. The efficiency track record of Johan Sverdrup has been strong since first oil in Q4 2019, with production rates consistently well into nineties in % terms over the past couple of months.

Exhibit 3

### A large part of Lundin's production is generated by Johan Sverdrup and Edvard Grieg Average daily production in 2020

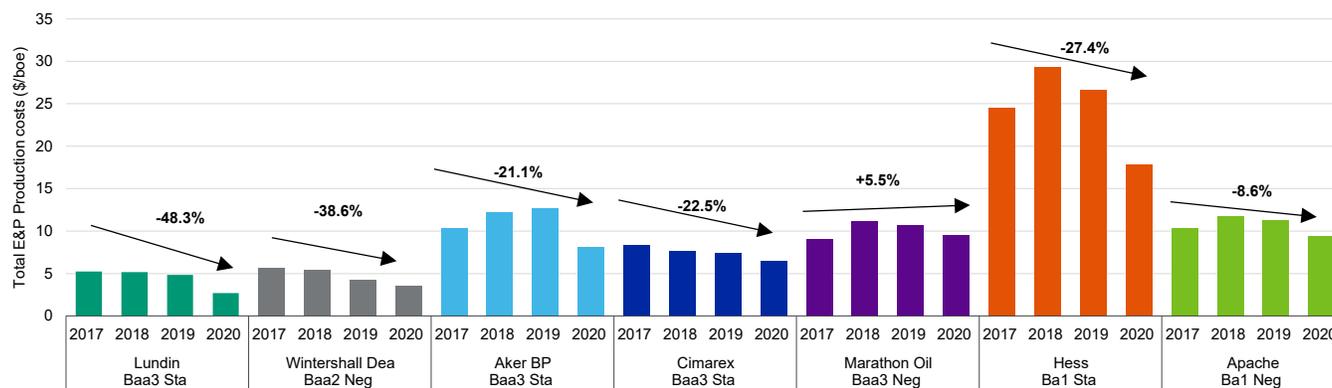


Source: Company's report

The scale and diversification constraints are offset by the very attractive economics of Lundin's assets, in particular Johan Sverdrup with operating costs as low as \$1.7/boe in 2020. Lundin's average production costs, which the company targets to maintain between \$3-\$4/boe in long term (\$2.7/boe in 2020), are among the lowest in the industry, well below the industry average (roughly \$7/boe in Norway) and those achieved by its main rated peers. In addition, both key assets are fairly young, so decommissioning does not represent a major risk factor for Lundin at this point.

Exhibit 4

Lundin has consistently the lowest production costs in the peer group of similarly rated independent E&P companies



Source: Companies reports. Moody's Financial Metrics

### Good pipeline of opportunities to continue organic growth, supported by favourable tax regime in Norway

Lundin has a strong track record of production growth, achieved primarily by capitalising on its exploration successes. Since 2003, Lundin has discovered net 2P and 2C resources of approximately 1 billion boe at fairly attractive finding cost of \$0.8/boe through pure exploration, which includes the discoveries of Edvard Grieg in 2007 and Johan Sverdrup in 2010. Since 2015 Lundin has increased its production eight-fold, fuelled by Edvard Grieg starting production in November 2015 and Johan Sverdrup coming on stream in October 2019, and managed to achieve 2P reserve replacement ratio above 100% every year, with an exception to the pandemic-affected 2020.

The company's medium term growth strategy is based on its ambition to further increase its average daily production above 200 Mboe/d by 2023 (from 165 Mboe/d in 2020) and sustain it above that level afterwards, realising identified upsides in the portfolio through organic growth and opportunistic acquisitions. Specifically for 2021, the company guides its average daily production to be between 170 Mboe/d and 190 Mboe/d, which reflects the expected increase of the current Johan Sverdrup Phase 1 facilities capacity of 500 Mboe/d up to 535 Mboe/d from mid-2021, underpinned by additional facilities capacity available for the Edvard Grieg area (including tie-back projects Solveig Phase 1 and Rolvsnes EWT with first oil expected Q3 2021). Looking beyond 2021, the major enabler of the company's ambition to reach 200 Mboe/d by 2023 will be the completion of Johan Sverdrup Phase 2 in the fourth quarter 2022 aiming to increase the project's production to 720 Mboe/d. The Plan for Development and Operation (PDO) for the project was approved in May 2019 and it is progressing according to schedule.

Lundin's growth over the next few years will be also supported by favourable tax regime to oil and gas exploration and production activities in Norway. In June 2020, the Norwegian government announced tax incentives that will apply to new projects for which a PDO is submitted before the end of 2022<sup>1</sup>. Lundin has identified nine potential new projects that can meet this requirement and will be aiming to accelerate appraisal activities and field development studies, with the objective of maturing and potentially sanctioning them all within the time frame. These projects represent over 200 MMboe of net resources combined. While there is uncertainty with regards to the success of turning these projects into 2P reserves, majority of them are intended to be tie-backs to the existing infrastructure, which generally entail a lower execution risk. According to Lundin the tax regime will lower the new projects break even by around \$10/boe.

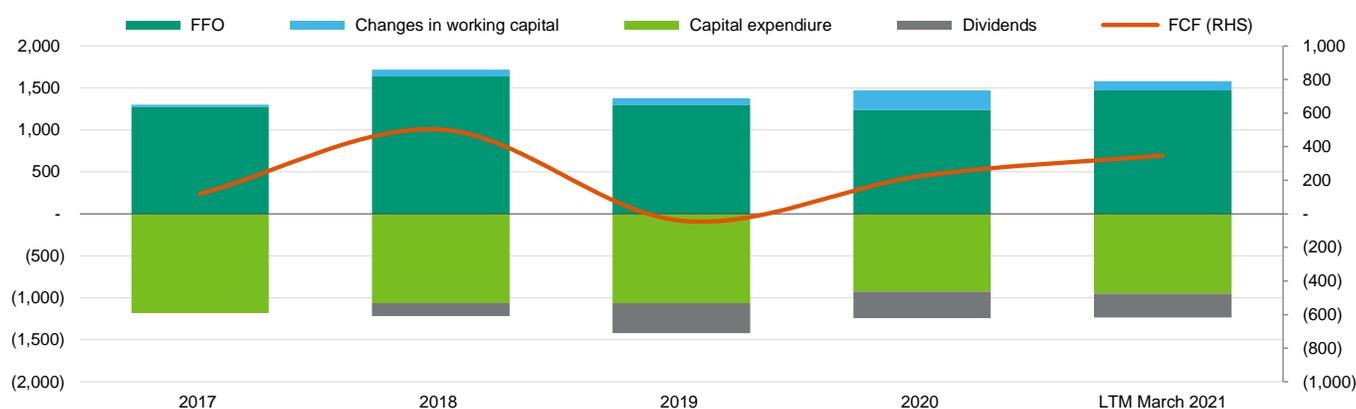
Lundin's exploration portfolio is spread across seven core areas in Norway, representing a mix of new frontier areas and lower risk mature basins, and the company estimates that it holds 3 billion boe of net unrisks prospective resources. The company's 2021 exploration programme budgeted at \$260 million involves seven wells, out of which one has been drilled, yielding a small oil discovery. The remaining six wells are targeting roughly 300 MMboe of net unrisks resources.

## Ability to generate positive FCF gives Lundin financial flexibility to manage its balance sheet with metrics consistent with a Baa3 rating

One of Lundin's key credit strengths is its financial flexibility enabled by its very low production costs. The company calculates that in 2021 it will be able to fully cover its sizeable capital spending budget and dividend at the pre-pandemic level of \$1.8/share already at a Brent oil price of \$43/barrel (bbl). In our base case, which is based on our expectation of oil prices moving within the range \$45/bbl to \$65/bbl in the medium term, Lundin should be in position to comfortably cover its dividend and investments needs and still generate positive FCF in the next 2-3 years, which gives the company a degree of the flexibility to manage its balance sheet. Lundin's Baa3 issuer rating is based on our expectations that the company will continue to exhibit financial discipline, achieving the credit metrics sustainably in line with the Baa3 rating, despite no formal public commitment to an investment grade rating and no specific capital structure targets. This expectation is supported by Lundin's behaviour amid the pandemic in 2020 when it postponed some of its capital spending, and decided to cut dividend to just \$1/share. The cut has helped Lundin to maintain positive FCF in 2020 in a low oil price scenario, which only a few oil and gas producers managed to achieve.

Exhibit 5

### Lundin has a track record of positive FCF generation, even in 2020



Data as defined and adjusted by us  
Source: Moody's Financial Metrics

Although Lundin undertook a \$1.5 billion buyback in 2019 in connection with Equinor divesting a 16% stake in Lundin for a direct interest of 2.6% in Johan Sverdrup and a cash consideration of around \$560 million, we do not expect buybacks to become a recurring feature of Lundin's capital allocation priorities. The buyback further reduced the company's already negative equity position, but we note that Lundin's current market capitalisation well exceeds the accounting value of liabilities and its debt. While M&A is a risk factor for Lundin, the growth of the company through mid-decade is not dependent on acquisitions. Over the past five years Lundin's acquisition activities were limited to the acquisition of 10% working interest in the major Wisting oil discovery in Barents sea and a further 15% working interest in Alta oil discovery (taking Lundin's working interest to 55%) in 2020, adding estimated net contingent resources of approximately 70 MMboe, for a cash consideration of \$125 million.

## ESG considerations

Our rating assessment of Lundin considers its positions as an oil and gas producer with one of the lowest carbon footprint in the industry. In 2020 Lundin achieved a carbon intensity of 2.6kg CO<sub>2</sub>/boe on net equity basis (scope 1 and 2), which is well below the industry average, and its decarbonization strategy targets carbon neutrality already from 2025. This target is backed by \$750 million worth of investments in electrification, renewable energy and natural carbon capture, of which over 55% has already been spent. Lundin also aims to reduce its absolute Scope 1 and 2 emissions by 55% across its operations by 2023, from 2019 levels, with the remainder to be offset through natural carbon capture.

The key enabler of the carbon neutrality will be the investments in renewable energy projects and the electrification of the company's main producing assets. Lundin aims to replace 100% of its net electricity usage at Johan Sverdrup, and subsequently Edvard Grieg, through investments in renewable energy. With its commitment to three renewable energy projects, Lundin has a net power generation

of around 600 GWh per annum from late 2023, which will cover essentially all of its expected net electricity usage for its offshore producing assets. Already in April 2021, Lundin delivered world's first carbon neutrally produced oil, which is a competitive advantage.

Governance considerations includes our assessment of Lundin's financial policies that Moody's deems consistent with a Baa3 rating. In terms of social considerations, Lundin's Baa3 long-term issuer rating assumes that the ongoing investigations related to alleged complicity of Lundin in violations of International humanitarian law in Sudan during 1997–2003 will not lead to fines and reputational consequences that would substantially weaken the company's credit quality.

## Liquidity analysis

Lundin has a good liquidity profile, supported by its ability to generate positive FCF even in a low oil price scenario. As of the end of March 2021 Lundin reported around \$160 million of cash and cash equivalents, further supported by a largely undrawn \$1.5 billion committed credit facility maturing in December 2025. The facility contains net leverage and interest coverage covenants, under which we expect Lundin to maintain ample capacity. As of the end of March 2021 the company did not report meaningful short term, with the next debt maturity being \$500 million term loan in December 2022.

## Rating methodology and scorecard factors

The principal methodology used in this rating was Independent Exploration and Production Industry published in May 2017. The scorecard indicates a Baa3 rating for 12 months to March 2021 and a Baa2 rating for our forward-view calibrated around the mid point of our medium term price range of \$45/bbl to \$65/bbl. The one notch difference can be explained by a still limited track record of the company being able to achieve and sustain such metrics.

Exhibit 6

### Scorecard for Lundin

Methodology: Energy, Oil & Gas - Independent E & P published on 31 Mar 2021	Current LTM (Mar-21)		Moody's Forward View Next 12-18 months (as of May-21)	
	Measure	Score	Measure	Score
<b>Factor 1: SCALE (20%)</b>				
a) Average Daily Production (Mboe/d)	186	Baa	190 - 210	Baa
b) Proved Developed Reserves (MMboe)	not public	Baa	not public	Baa
<b>Factor 2: BUSINESS PROFILE (10%)</b>				
a) Business Profile	Ba	Ba	Ba	Ba
<b>Factor 3: PROFITABILITY AND EFFICIENCY (25%)</b>				
a) Leveraged Full-Cycle Ratio	2.0x	Baa	2.4x - 2.8x	Baa
<b>Factor 4: LEVERAGE AND COVERAGE (30%)</b>				
a) E&P Debt / Average Daily Production	\$21,290	Ba	\$15,000 - \$18,000	Baa
b) E&P Debt / PD Reserves boe	not public	B	not public	Ba
c) RCF / Debt	32.5%	Baa	41% - 49%	Baa
d) EBITDA / Interest Expense	14.9x	Baa	19x - 24x	A
<b>Factor 5: FINANCIAL POLICY (15%)</b>				
a) Financial Policy	Baa	Baa	Baa	Baa
<b>Rating Outcome:</b>				
a) Scorecard-Indicated Rating		Baa3		Baa2
b) Actual Rating Assigned				Baa3

Metrics as adjusted by us.

Forward view represents our view and not the view of the issuer.

Source: Moody's Financial Metrics

## Appendix

Exhibit 7

### Adjusted EBITDA breakdown

(in US Millions)	FYE Dec-17	FYE Dec-18	FYE Dec-19	FYE Dec-20	LTM Ending Mar-21
<b>As Reported EBITDA</b>	<b>1,639.8</b>	<b>1,886.8</b>	<b>2,399.5</b>	<b>2,194.3</b>	<b>2,857.6</b>
Interest Expense – Discounting	-13.7	-16.4	-17.9	-19.2	-19.5
Unusual	98.7	-130.5	-631.1	104.9	185.6
<b>Moody's-Adjusted EBITDA</b>	<b>1,724.8</b>	<b>1,739.9</b>	<b>1,750.5</b>	<b>2,280.0</b>	<b>3,023.7</b>

We define EBITDA as pretax income plus gross interest expense plus depreciation and amortisation. Exploration costs are added back as a part of unusual adjustments.

Source: Moody's Financial Metrics

Exhibit 8

### Peer comparison

(in US millions)	Lundin Energy AB Baa3 Stable			Aker BP ASA Baa3 Stable			Cimarex Energy Co. Baa3 Stable			Hess Corporation Ba1 Stable		
	FYE Dec-19	FYE Dec-20	LTM Mar-21	FYE Dec-19	FYE Dec-20	LTM Mar-21	FYE Dec-19	FYE Dec-20	LTM Dec-20	FYE Dec-19	FYE Dec-20	LTM Dec-20
Revenue	\$2,192	\$2,564	\$2,981	\$3,339	\$2,868	\$3,222	\$2,350	\$1,678	\$1,678	\$6,495	\$4,667	\$4,667
EBITDA	\$1,751	\$2,280	\$3,024	\$2,420	\$2,214	\$2,564	\$1,536	\$936	\$936	\$3,402	\$2,223	\$2,223
Average Daily Production (MBbl)	93	164	172	156	211	214	278	252	252	309	320	320
Total Proved Developed Reser				449,000	511,000	511,000	531,723	447,171	447,171	738,500	817,667	817,667
Leveraged Full-Cycle Ratio	2.5x	1.7x	2.0x				0.9x	0.4x	0.4x	2.5x	1.0x	1.0x
EBITDA / Interest Expense	10.1x	10.7x	14.9x	10.9x	10.0x	11.5x	14.4x	9.0x	9.0x	7.5x	4.4x	4.4x
E & P Debt / Average Daily Pro	42,721	24,322	21,290	22,946	19,863	17,160	8,320	8,817	8,817	20,777	23,499	23,499
E&P Debt / Proved Developed				8	8	7	4	5	5	9	9	9
RCF / Debt	23.8%	23.1%	32.5%	29.8%	42.3%	47.4%	59.2%	37.6%	37.6%	31.4%	19.9%	19.9%

Metrics as defined and adjusted by us

Source: Moody's Financial Metrics

## Ratings

Exhibit 9

Category	Moody's Rating
<b>LUNDIN ENERGY AB</b>	
Outlook	Stable
Issuer Rating	Baa3

Source: Moody's Investors Service

## Endnotes

- The introduced tax incentives include: 1) the full Special Tax depreciation of 56% becomes fully deductible in year 1 compared to a straight line depreciation over 6 years previously; and 2) an increase of the uplift to 24%, which also becomes entirely deductible in year 1 compared to a 20.8% uplift deductible over 4 years (5.2% each year) previously. As a result, under the new temporary regime, investments will be 73% depreciated after year 1 compared to 16% previously. In addition, the tax value of all losses incurred in 2020 and 2021 will be refunded rather than carried forward

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Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454