MOODY'S INVESTORS SERVICE

CREDIT OPINION
21 December 2022

New Issue

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RATINGS

Neste Oyj

Domicile	ESPOO, Finland
Long Term Rating	A3
Type	LT Issuer Rating - Dom 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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Neste Oyj

First time A3 issuer rating

Summary

Neste Oyj's (Neste) A3 issuer rating incorporates its baa1 baseline credit assessment (bca) and a one notch uplift because of moderate support from and low dependency on the Government of Finland (Aa1 stable), which owns 47% of the company.

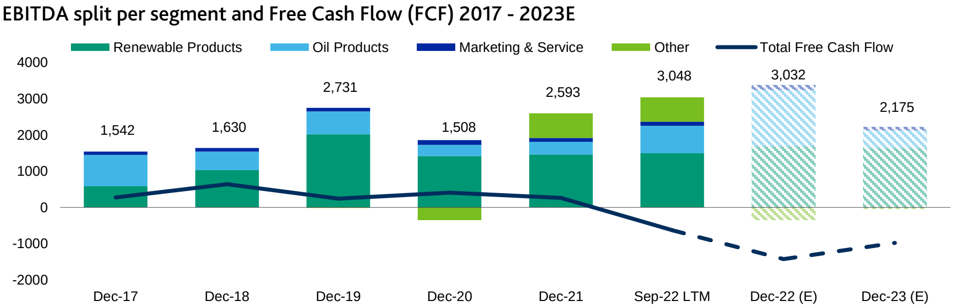
The baa1 bca reflects Neste's strong business profile with industry's leading profitability mainly driven by its competitive advantage of sourcing waste and residuals as main feedstock (92% in 2021). It is globally the largest player in a growing end market for renewable fuels supported by both mandated demand from European and North American governments and voluntary demand. The company grew its renewable output from about 500 thousands tonnes a year to about 3.3 million in 2021, while maintaining a conservative financial policy with very low leverage of 0.8x adj. debt/EBITDA as of LTM September 2022.

Nevertheless, volatile feedstock and end market prices in combination with swiftly increasing competition by many very solvent oil & gas players constrain the bca. Neste aims to almost double its renewable product capacity towards at least 6.5 million tonnes by 2026, exposing it to execution risk. A normalization in its oil products & renewable refining margins from record levels in 2022 and its elevated investment program (about €4.7 billion over the next three years) are likely to increase its leverage to above 1.5x adj. debt/EBITDA in 2023. Macroeconomic pressures have the potential to limit mandated blending requirements for renewable fuel and overall CO2 emission targets and weaken Neste's revenue and profitability. The presence of the Government of Finland as the main shareholder (owing 47% of stock) with a strategic interest in the company provides stability when executing its long term strategy, as well as the potential to reduce shareholder returns in downturns.

Exhibit 1

Renewables EBITDA has been growing and was historically less volatile than oil products

EBITDA split per segment and Free Cash Flow (FCF) 2017 - 2023E



Source: Moody's Investors Service

Credit strengths

» Early mover in renewable fuels resulted in leading market position and competitive advantage

» Growing end markets for renewable fuel driven by regulation & voluntary demand

» Track record of conservative capital structure management

» Presence of Finnish state as anchor shareholder with strategic interest

Credit challenges

» Volatile feedstock end market prices in combination with strongly increasing competition

» Moderately rising debt levels, driven by high growth investments, which also create execution risk

» Global slowdown potentially damages mandated demand targets over next several years

» Potential for quicker than anticipated decline of traditional fuel demand in Finland in the shor term and potentially renewable fuels in the long term, creates challenges in managing transition and asset base

Rating outlook

The stable outlook reflects Moody's expectation that Neste will continue to benefit from demand growth for renewable products and maintain renewable refining margins at above $600 per ton enabling it to generate strong cash flows to help fund its ambitious investment program. Additionally, we expect Neste to maintain a conservative financial policy and to reduce dividends and investments to remain within Moody's expectations for the A3 long term issuer rating throughout economic cycles.

Factors that could lead to an upgrade

An upgrade of the Finish government's rating or if the likelihood of extraordinary support increases could result in an upgrade of Neste's rating.

The bca could be upgraded if the company:

» executes on its investment strategy and continues to grow its renewable asset base successfully, while maintaining industry leading margins amid growing competition

» maintains leverage at around 1.0x debt/EBITDA or lower and RCF/debt above 40% through cycles

» maintains a conservative financial policy and strong backstop liquidity at all times

Factors that could lead to a downgrade

A downgrade of the Finish government's rating or if the likelihood of extraordinary support decreases could result in a downgrade of Neste's rating.

The bca could be downgraded if the company:

» experiences a structural decline of its refining margins, due to increased competition for renewable products or a quicker than anticipated decline of oil products

» its leverage increases to above 2.5x and its RCF/debt drops below 30% on a sustained basis

» financial policy weakens

Key indicators

Exhibit 2
Neste Oyj

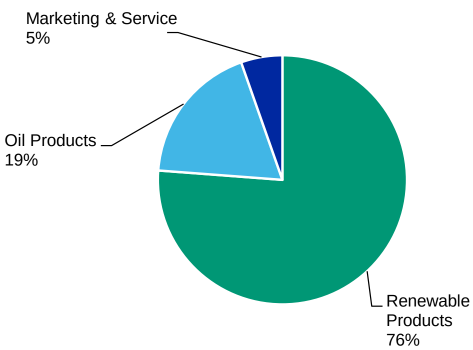
	Dec-18	Dec-19	Dec-20	Dec-21	Sep-22 LTM	2022 (E)	2023 (E)
Crude Distillation Capacity (mbbls/day)	271	271	271	271	271	271	316
EBIT / Total Throughput Barrels	10	23	12.5	14.5	23.2	24.2	15.9
EBIT / Average Book Capitalization	16.8%	28.6%	16.3%	17.1%	23.5%	22.1%	15.0%
EBIT / Interest Expense	22.2x	37.0x	26.6x	27.8x	39.0x	44.6x	16.6x
Debt / EBITDA	0.8x	0.6x	0.8x	0.9x	0.9x	0.9x	1.6x
RCF / Debt	80.0%	108.1%	67.0%	64.6%	89.8%	60.9%	22.2%
Debt / Book Capitalization	23.0%	18.8%	18.7%	20.8%	25.1%	24.1%	29.0%

All figures and ratios are calculated using Moody's estimates and standard adjustments. Periods are financial year-end unless indicated. LTM = Last 12 months. Moody's projections are Moody's opinion and do not represent the views of the issuer.
Source: Moody's Investors Service

Profile

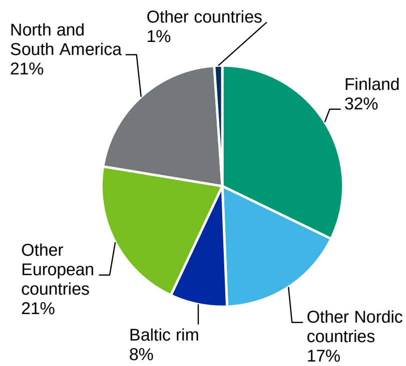
Neste is a Finish refining company with about €15.1 billion sales in 2021 that operates three renewable refineries in Porvoo, Rotterdam and Singapore with a combined capacity of 3.3Mt annually (about 65k boe/d), making it the globally largest renewable refiner. Neste has been the frontrunner for renewable refining after starting the production of renewable diesel in 2007 in Porvoo, Finland. Furthermore, Neste operates in Porvoo, Finland a very complex 206k boe/d oil refinery and a retail network with 947 gas stations in Finland and the Baltics.

Exhibit 3
EBITDA split by segments
As of December 2021



Data from company's annual report for 2021.
Source: Company data

Exhibit 4
Geographical revenue split by segments
As of December 2021



Data from company's annual report for 2021.
Source: Company data

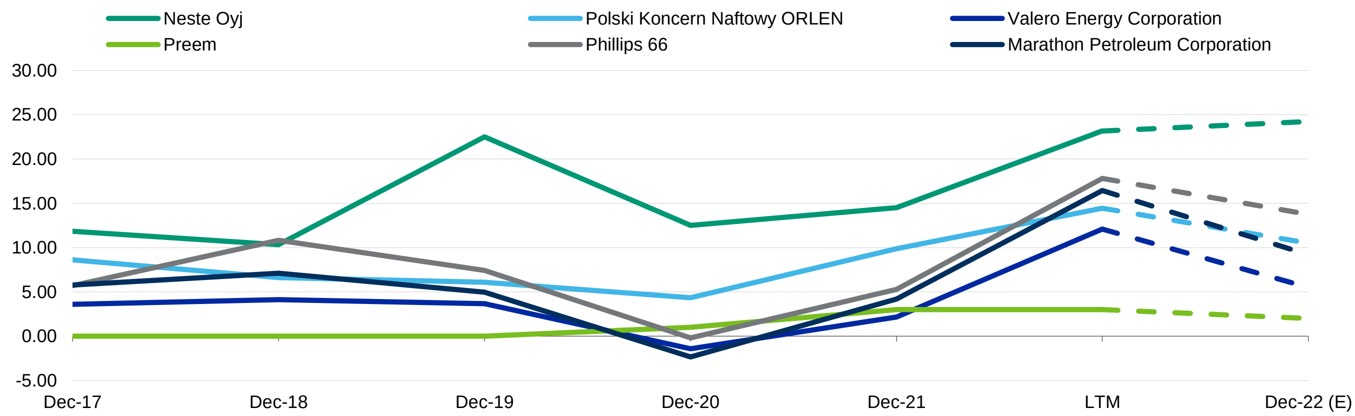
Detailed credit considerations

Early move in renewable fuels resulted in leading market position and competitive advantage

Moody's estimate that Neste is the globally largest producer of renewable fuels followed by US based Diamond Green Diesel (a joint venture of Valero Energy Corp (Baa2 stable) and Darling Ingredients inc (Ba1 stable)), Chevron Corp (Aa2 stable), TotalEnergies S.A. (A1 stable), ENI S.p.A. (Baa1 negative), Repsol S.A. (Baa2 stable) and other integrated oil & gas companies and refiners. Already in 2007 Neste implemented renewable fuel production in its Porvoo refinery and started up larger renewable product refineries in Singapore in Rotterdam in 2010 and 2011 well ahead of most of its competitors. By end of 2021 Neste had 3.3 million tonnes (Mt) of renewable product capacity (about 65k boe/d) annually, which accounted for about 75% of its comparable EBITDA (adjusted for inventory revaluation effects) in 2021. Following the conversion of the Martinez refinery in California (a 50/50 join venture of Neste and Marathon Petroleum Corp (Baa2 stable)), Neste will become the only company operating renewable refineries on 3 continents in 2023.

The early move into renewable refining provided the company with some competitive advantages, including Neste's global network of waste oil, animal fat and protein sourcing through organic growth and several acquisitions, which many of its peers lack. Futhermore, the company increases its ability to recycle a growing number of waste materials and continues to invest into new recycling technologies. Neste used waste and residuals for 92% of its renewable feedstock in 2021, well ahead of competitors' typical target to achieve a 70%-80% waste and residuals share of their feedstock by 2030. The combination of access to a globally vertically integrated sourcing network and the ability to arbitrage a wide variety of different renewable feedstocks (used cooking oils, animal fat waste, other waste and residues, vegetable oils and other sources) allows Neste to secure more than sufficient feedstock to support its meaningful growth and to report industry leading profitability over the past years as shown in exhibit 5.

Exhibit 5
Neste has a track record of industry leading profitability throughout the cycle
EBIT / Throughput barrels evolution 2018 - 2022e



Source: Moody's MFM, company reports

Large investment to capture attractive market growth for renewable fuels but growing competition likely to stress margins

We expect continued growth in demand for renewable fuel, and despite rising investment from competitors, Moody's expects Neste to remain the largest renewable refiner (renewable nameplate capacity of about 5.7 Mt/a (136k boe/d) expected for 2023) over at least the next few years. However, the expansion brings execution risk, and we further expect the escalating competitive environment to weaken margins.

Since 2017 renewable fuel demand more than doubled from about 4.1 million tonnes to about 9 million tonnes in 2021 as estimated by Neste. A combination of mandatory requirements to blend conventional diesel with biodiesel from regulators in mainly Europe and North America to reach CO2 reduction targets and voluntary demand from corporate and municipal customers to reduce their carbon footprint drove this growth. The International Energy Agency (IEA) expects under all of its scenarios for energy transition annual growth rates exceeding 10% until 2030, with sharply growing demand for sustainable air fuel (SAF) and renewable diesel to reduce emission for air & land transportation driving the rise. To satisfy demand, renewable fuels (produced from waste & residuals) will need to grow quicker than bio fuels because of limited availability of farm land to increase production of ethanol and oil seeds and the global need to boost food production.

To capture the growth and maintain its leading market position, Neste plans to invest about €4.7 billion over the next three years, with only about €860 million of it for maintenance of existing refineries. New projects comprise the extension of the Rotterdam refinery for about €1.9 billion to expand production capacity (by 1.3Mton/a to 2.7Mton/a by 2026) and the investment of $1 billion into a JV with Marathon Petroleum Corporation (Baa2 stable) to transform the Martinez refinery into a renewable products refinery during 2023 (Neste's share will be about 1.0 Mt/a). Additional investments include the strategic study on transformation of the Porvoo refinery into a renewable circular site over the next 10-15 years, among other initiatives. Furthermore, the company expects to conclude the €1.65

billion expansion of its refinery in Singapore by about 1.3Mton in Q1 2023. Assuming a successful start-up of the Singapore refinery extension and the Marathon JV, Neste would be the only renewable refiner with facilities in Asia, Europe and North America.

At same time nameplate refining capacity for renewable fuel oil has the potential to double by 2025 as most of the North American and European integrated oil and gas companies / refiner are undertaking or planning to transform gradually their existing refinery footprint. While the strongly growing end market will absorb a large portion of additional renewable fuel supply, Moody's believes that pressure on both feedstock supply as well on sells margin will increase and reduce margins from record high levels in excess of $700 per end of September 2022 and has the potential to pressure profitability going forward. Especially profitability in the US seems likely to fall given the large capacity additions, partially balanced by Neste's competitive advantages on availability and ability to process many different feedstocks.

Profitable and well managed Porvoo refinery faces structural decline

In its home market Finland, Neste operates the very complex (Nelson complexity index at 12.1) 206k boe/d Porvoo oil refinery as well as a retail network with 947 gas stations in Finland and the Baltics The refinery benefitted from attractive Ural/Brent differentials and its position as being the only and dominant refinery in Finland and was over the past years one of the most profitable and complex refineries in Europe (average comparable EBITDA of €518 million over the past 5 years). Generally the refinery experienced earnings volatility similar to the broad refining sector but benefitted from record refining margins of about $28 per barrel at end of Q3 22 due to the shortage of middle distillates, which we expect to continue throughout the next quarters. Beyond 2023 we expect the refinery's profitability to gradually decline, as the company will no longer buy Russian crude and the shortage of middle distillates in Europe eases due to the economic slowdown.

The refinery will be particularly exposed to the energy transitions as Finland and other Scandinavian markets are the most advanced markets in terms of electric vehicle adaption and regulation on fuel blending. Hence, Neste forecasts fuel consumption in its home market to decline by about 50%-60% by 2035. In response the company plans to fully transform the refinery into a refinery for renewable fuel and other circular products gradually, becoming a carbon neutral company by about 2035. We expect the marketing network to provide stable comparable EBITDA of about €100 million annually over the next 5 years, considering its leading position in the Finnish market. Over the medium to long term declining sales of traditional fuel will only partially compensated by growing renewable fuel sales due to increased blending requirements.

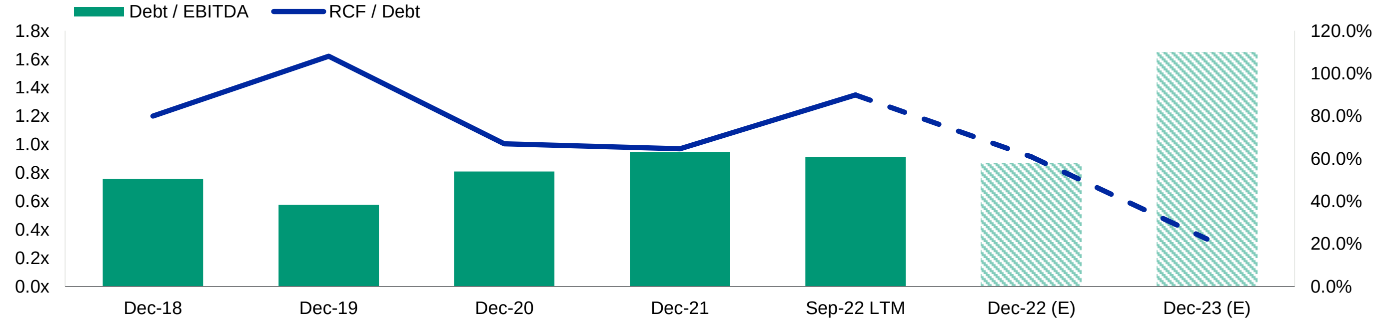
Track record of conservative capital structure despite increasing debt going forward

Neste has a track record of managing its balance sheet conservatively as shown in exhibit 6. The company's leverage has not exceeded 1.0x debt/EBITDA and its RCF/debt stood in average at a very strong 80% since 2018, despite the company's relative generous dividend policy (to pay out at least 50% of net profit). Moody's forecasts Neste's debt / EBITDA to increase to a moderate 1.5x in 2023 and to remain at this level during the following years, considering the meaningful growth investments, while the company aims to pay out 50% of its net profit as dividends. Its RCF/debt ratio is forecasted to decrease towards 25% in 2023 assuming an easing of refining margins for both traditional and renewable fuels. Afterwards, it should improve gradually to above 40% in 2024/2025, once the new Singapore refinery extension and the Martinez joint venture with Marathon are started and fully ramped up.

Exhibit 6

Growth investments will increase Neste's debt and leverage moderately

Debt / EBITDA and RCF / Debt development 2018 - 2022E



Source: Moody's Investors Service

Neste has a defined gearing target of 40% (interest bearing net debt / interest bearing net debt + total equity). The company managed its gearing well below the target since 2014 and remained below 1% over the past 4 years. At end of Q3 2022 Neste's company defined gearing rose to 16.3% due to working capital built up (mainly driven by commodity prices) and meaningful growth investments. We expect Neste will not max out the with its board agreed debt capacity and will maintain meaningful headroom to the 40% limit.

Our rating favorably takes into account the strategic long term interest of Neste's main shareholder the Republic of Finland, which supported a period of moderate dividend payouts to facilitate the company's reduction of gross debt following the construction of the Singapore and Rotterdam refineries. Neste has not bought back shares during the last decade and does not plan to do so in future.

ESG considerations

Moody's considers Neste's leading position among renewable products refiners, its plans to lower carbon emissions, and its efforts to reduce waste and pollution, balanced by the emissions and waste its refineries produce under environmental considerations.

As social factors Moody's considers the growing end market demand for renewable products, partially balanced by the declining demand for oil products from its Porvoo refinery.

Moody's governance analysis considers Neste's conservative financial policy and successful track record in building the renewable refinery business. The company moderated dividends and reduced growth investments in the past to repay gross debt. Moody's also considers the Government of Finland's strategic long term interest in Neste, willingness to accept a moderation of dividend payments if necessary, and moderate likelihood to support Neste if necessary.

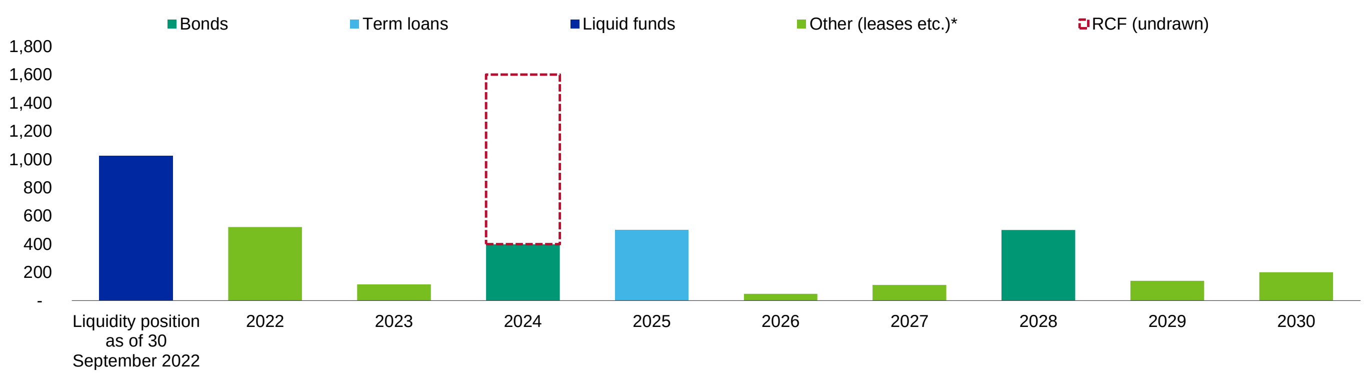
Liquidity analysis

Neste's liquidity is adequate. The company has €1,027 million cash on balance and access to a fully undrawn €1.200 billion revolving credit facility (RCF) maturing December 2024 with two extension options to 2026 and a fully undrawn €150 million overdraft facility. Furthermore, the company has a €400 million commercial paper program in place. Liquidity sources in combination with Moody's expected operating cash flow of about €2 billion should easily cover potential working capital swings, committed CAPEX of about €1.9 billion and relatively high dividend payments of about €1.1 billion expected in 2023.

Exhibit 7

Maturity profile for Neste

As of September 2022



Source: Moody's Investors Service, Neste's AR 2021

Rating methodology and scorecard factors

The scorecard-indicated rating outcome of Baa2 is two notches below the senior unsecured rating of A3 and one notch below the baa1 BCA. The final rating of A3 is mainly supported by Neste's strong competitive position in the market for renewable fuels and solid credit metrics and industry leading profitability, as well as the one notch uplift from the bca.

Exhibit 8

Rating factors

Energy, Oil & Gas - Refining & Marketing Industry Scorecard [1][2]	Current LTM 9/30/2022		Moody's 12-18 Month Forward View As of 12/8/2022 [3]	
Factor 1 : Scale (25%)	**Measure**	**Score**	**Measure**	**Score**
a) Crude Distillation Capacity (mbbls/day)	271	Ba	271 - 316	Ba
b) Number of Large-Scale Refineries	Ba	Ba	Ba	Ba
Factor 2 : Business Profile (20%)				
a) Business Profile	Baa	Baa	Baa	Baa
Factor 3 : Profitability and Efficiency (15%)				
a) EBIT / Total Throughput Barrels ($/Bbl)	$23.2	A	$16 - $25	A
b) EBIT / Average Capitalization	23.5%	A	15% - 22%	A
Factor 4 : Financial Policy (20%)				
a) Financial Policy	Baa	Baa	Baa	Baa
Factor 5 : Leverage and Coverage (20%)				
a) EBIT / Interest Expense	39.0x	A	17x - 45x	A
b) Debt / EBITDA	0.9x	A	0.9x - 1.5x	A
c) RCF / Debt	89.8%	A	25% - 61%	A
d) Debt / Capitalization	25.1%	Baa	24% - 29%	Baa
Rating:				
a) Scorecard-Indicated Outcome		Baa1		Baa2
b) Actual Rating Assigned				A3
Government-Related Issuer	**Factor**			
a) Baseline Credit Assessment	baa1			
b) Government Local Currency Rating	Aa1			
c) Default Dependence	Low			
d) Support	Moderate			
e) Actual Rating Assigned	A3			

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

[2] As of 9/30/2022(L); Source: Moody's Financial Metrics™

[3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures

Source: Moody's Investors Service

Appendix

Exhibit 9
Peer comparison

	Neste Oyj			Polski Koncern Naftowy ORLEN			Phillips 66			Valero Energy Corporation			Marathon Oil Corporation		
	A3 Stable			A3 Stable			A3 Stable			Baa2 Stable			Baa2 Stable		
(in US millions)	FYE Dec-20	FYE Dec-21	LTM Sep-22	FYE Dec-20	FYE Dec-21	LTM Jun-22	FYE Dec-20	FYE Dec-21	LTM Sep-22	FYE Dec-20	FYE Dec-21	LTM Sep-22	FYE Dec-20	FYE Dec-21	LTM Sep-22
Revenue	$13,412	$17,922	$26,158	$22,145	$34,054	$44,180	$64,129	$111,476	$162,315	$64,912	$113,977	$170,540	$71,212	$120,451	######
EBITDA	$2,000	$2,390	$3,183	$2,106	$3,549	$4,660	$1,759	$5,526	$13,644	$656	$4,246	$15,029	$1,768	$8,183	$21,335
Distil. Capacity (MB/day)	271	271	271	705	707	707	2,200	2,152	1,961	2,615	2,615	2,615	2874	2887	2887
EBIT/Throughput Bbls	12.52	14.52	23.16	4	10	14	0	5	18	-1	2	12	-2	4	16
EBIT/Avg Book Capital	16.3%	17.1%	23.5%	6.2%	11.9%	18.1%	-0.3%	7.9%	22.7%	-3.4%	5.5%	32.1%	-2.9%	6.3%	25.3%
EBIT / Int. Exp.	26.6x	27.8x	39.0x	7.5x	14.8x	20.6x	-0.2x	5.5x	18.4x	-1.9x	3.1x	18.5x	-1.4	3.1	13.4
Debt / EBITDA	0.8x	0.9x	0.9x	2.4x	1.5x	1.1x	10.3x	2.9x	1.4x	26.1x	3.8x	0.9x	19.3	3.3	1.3
RCF / Debt	67.0%	64.6%	89.8%	35.4%	65.3%	117.9%	5.4%	14.9%	41.2%	-4.5%	9.9%	73.4%	-0.9%	5.8%	49.9%
Total Debt/Capital	18.7%	20.8%	25.1%	30.9%	27.6%	25.5%	40.0%	37.4%	32.8%	42.2%	40.4%	33.8%	48.5%	41.0%	41.7%

All figures are calculated using Moody's estimates and standard adjustments. Periods are financial year-end unless indicated. LTM = Last 12 months.
Source: Moody's Investors Service

Exhibit 10
Debt bridge

(in EUR million)	FYE Dec-18	FYE Dec-19	FYE Dec-20	FYE Dec-21	LTM Sep-22
As Reported Total Debt	**1,140**	**1,322**	**1,306**	**1,756**	**2,533**
Pensions	124	111	111	146	146
Leases	191	0	0	0	0
Non-Standard Adjustments	0	0	0	10	0
Moody's Adjusted Total Debt	**1,455**	**1,433**	**1,417**	**1,912**	**2,679**

All figures are calculated using Moody's estimates and standard adjustments. Periods are financial year-end unless indicated. LTM = Last 12 months.
Source: Moody's Investors Service

Exhibit 11
EBITDA bridge

(in EUR million)	FYE Dec-18	FYE Dec-19	FYE Dec-20	FYE Dec-21	LTM Sep-22
As Reported EBITDA	**1,604**	**2,615**	**1,341**	**2,593**	**2,910**
Unusual Items - Income Statement	270	(121)	410	(573)	24
Pensions	2	1	1	0	0
Leases	49	0	0	0	0
Moody's Adjusted EBITDA	**1,925**	**2,495**	**1,752**	**2,020**	**2,934**

All figures are calculated using Moody's estimates and standard adjustments. Periods are financial year-end unless indicated. LTM = Last 12 months.
Source: Moody's Investors Service

Exhibit 12

Key Metrics

(in EUR million)	FYE Dec-18	FYE Dec-19	FYE Dec-20	FYE Dec-21	LTM Sep-22
INCOME STATEMENT					
EBITDA	1,925	2,495	1,752	2,020	2,934
EBIT	1,386	1,993	1,239	1,436	2,291
Interest Expense	62	54	47	52	59
BALANCE SHEET					
Total Debt	1,455	1,433	1,417	1,912	2,679
Cash & Cash Equivalents	1,210	1,493	1,552	1,831	1,027
Net Debt	245	(60)	(135)	81	1,652
CASH FLOW					
Funds from Operations (FFO)	1,599	2,132	1,733	1,850	3,030
Cash Flow From Operations (CFO)	1,493	1,458	2,065	1,997	1,661
Capital Expenditures	(418)	(632)	(877)	(1,121)	(1,670)
Dividends	435	584	784	616	623
Retained Cash Flow (RCF)	1,164	1,548	949	1,234	2,407
RCF / Debt	80.0%	108.1%	67.0%	64.6%	89.8%
Free Cash Flow (FCF)	640	242	404	260	(632)
FCF / Debt	44.0%	16.9%	28.5%	13.6%	-23.6%
PROFITABILITY					
% Change in Sales (YoY)		6.2%	-25.8%	28.9%	
EBIT margin %	9.3%	12.6%	10.5%	9.5%	9.5%
EBITDA margin %	12.9%	15.8%	14.9%	13.3%	12.2%
INTEREST COVERAGE					
(FFO + Interest Expense) / Interest Expense	26.6x	40.5x	38.2x	36.8x	52.5x
EBIT / Interest Expense	22.2x	37.0x	26.6x	27.8x	39.0x
EBITDA / Interest Expense	30.9x	46.3x	37.6x	39.1x	49.9x
LEVERAGE					
Debt / EBITDA	0.8x	0.6x	0.8x	0.9x	0.9x
Net Debt / EBITDA	0.1x	0.0x	-0.1x	0.0x	0.6x

All figures are calculated using Moody's estimates and standard adjustments. Periods are financial year-end unless indicated. LTM = Last 12 months.
Source: Moody's Investors Service

Ratings

Exhibit 13

Category	Moody's Rating
NESTE OYJ	
Outlook	Stable
Issuer Rating -Dom Curr	A3

Source: Moody's Investors Service

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