

Verbio AG



➤ LEADING EUROPEAN PLAYER IN BIOFUELS

➤ IMPROVING MARKET ENVIRONMENT

➤ STRONG GROWTH OPPORTUNITIES

24 August 2020

Closing prices as of 21/08/20: €11.96

Company / Sector	Fair Value	Recommendation
Verbio AG	€19.0	Buy
Renewable Energy	(€11.5)	(unchanged)

Going for growth

Share price performance



Share data

Reuters	VBKG.DE
No. of shares	63.00
Daily turnover	66,568
Free Float	28.4%
Market Cap.	753.5
EV	684.9
Sales 18-22	8.9%

Valuation	20/21	21/22
EV/Sales	0.6	0.8
EV/EBITDA	4.8	6.2
EV/EBIT	6.5	8.3
PER	11.3	13.4
Div. Yield	2.1%	1.8%
RoCE	24.0%	21.9%
RoE	13.8%	13.3%

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Investment case

Based on an improved market environment, we have raised our earnings estimates for the current financial year. We now expect that the anticipated record earnings for 2019/20 are a sustainable basis. This revision alone supports a valuation of EUR15. However, management intends to exploit further growth opportunities, which could lead to a further doubling of EBITDA. This drives our fair value to EUR19, which is an upside of more than 50% from the current share price.

➤ LEADING EUROPEAN PLAYER IN BIOFUELS

Verbio is one of the leading European players in biofuels. A broad product range and proprietary technology give the company a huge flexibility to react on market or legislative changes and allow for superior margin levels in all market situations.

➤ IMPROVING MARKET ENVIRONMENT

The EU's "2030 climate and energy framework" is currently being translated into national law, which should drive the use of biofuels further over the coming decade. Moreover, the pricing situation for Verbio's products has recently improved. Finally, recent investments are about to become profitable. We thus expect that last year's expected record earnings level can be sustained in 20/21 and be further raised in 21/22.

➤ STRONG GROWTH OPPORTUNITIES

Verbio will enter the European market for BioLNG in the next FY, which we expect to allow for substantial growth. Germany alone could come to an addressable market of 25TWh. In addition, the company intends to push its global expansion forward. This could lead to another doubling of EBITDA within the coming five years.

For additional disclosures please refer to the appendix

Forecasts	17/18	18/19	19/20e	20/21e	21/22e
Sales (€m)	685.9	779.3	862.2	878.3	965.1
EBITDA (€m)	44.8	95.1	110.2	110.6	125.1
EBIT (€m)	22.4	73.7	82.2	82.6	95.1
EPS (€)	0.24	0.84	0.83	0.89	1.03
Dividend (€)	0.20	0.20	0.20	0.22	0.25
Oper. CF (€m)	11.1	44.3	65.2	84.8	88.4
Free CF (€m)	-14.1	-18.7	-4.8	24.8	73.4

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EXECUTIVE SUMMARY

Leading European biofuels player ...

Verbio is one of the leading independent manufacturers of sustainably produced biofuels in Europe. The company counts among the top European players in biodiesel as well as bioethanol and biomethane, and is the only player that is able to serve its customers with all of these products on an industrial scale. Verbio has a diversified customer structure and a broad access to raw materials. The company's focus has always been on being at the cutting edge of technology in the sustainable production of biofuels and Verbio is continuing to work on the optimisation of its processes and the use of additional raw materials such as straw or other non-food related inputs.

... should benefit from tightening CO₂ regulation

The EU's ambition to be at the forefront of international efforts to curb global warming by cutting greenhouse gas emissions sets the framework for most of the markets in which Verbio currently operates. Being in the final phase of the current "2020 climate and energy package", the EU has already defined its targets for the coming decade, which represents the next milestone in its effort to become the first climate neutral continent by 2050. In particular, CO₂ emissions shall be reduced by 20% from their 1990 level until 2020 and by 40% until 2030. For the transport sector, a 6% reduction of CO₂ emissions of fuels against their 2010 baseline has been specified for 2020. In addition, the target share of renewable energies in the transport sector has been raised further from 10% by 2020 to 14% by 2030. In Germany, national law is based on the EU's 2020 targets and the country is currently in the process of translating the 2030 targets into national law. So far, Germany has already specified the target to reduce CO₂ emissions in the transport sector by 40-42%, which now needs to be backed-up by adequate regulation. This should bring positive news for the industry.

New market for biomethane opens up and ...

Verbio's traditional markets, biodiesel and bioethanol, have developed rather stable over the past years and this is not expected to change materially. The required expansion must thus be driven via advanced biofuels. With its biomethane, Verbio has one of the few products available to serve this growth. So far, the use of biomethane as a fuel has been limited due to only few available gas driven vehicles. However, recent regulation supports the economic benefit of gas driven trucks compared to their diesel counterparts so that the admission of LNG trucks is accelerating. In the case of BioLNG, this comes at an additional ecological advantage. LNG in the German market is estimated to reach a level of 25TWh by 2030 and according to Verbio's management, 15TWh could already be reached by 2025.

... provides growth opportunities on a European scale

Within its traditional markets, Verbio intends to retain its high market share and superior economics compared to most competitors. Superior greenhouse gas reductions and a flexible input mix help on this side. In addition, side

products from the production process are used to expand into new business fields such as sterols. In the case of biomethane, this has developed into an independent process. Here, the company has already delivered strong growth. However, the development of an LNG market now opens up a whole new dimension for the company's biomethane activities. With BioLNG, which can be transported independently from the gas grid, Verbio is no longer restricted to developments in Germany but can penetrate the entire European market. This is particularly interesting in countries with double counting systems, which yields a 25% higher CO₂ reduction compared to Germany. Against this background, the company will start to market BioLNG in the second half of 2021 and a further expansion of biomethane capacities could support the company's growth ambitions.

Globalisation already under way

Moreover, the company has already gone beyond the European borders. Verbio North America has acquired a biodiesel production site with a capacity of 150,000 tonnes in Canada. Improving the production process shall now make the operation profitable. In addition, VNA bought a cellulosic ethanol production site in Nevada. There, the company is in the process of building a biomethane facility. On the other side of the globe, in India, Verbio builds a similar biomethane plant. Both biomethane sites should be ready for operation by mid-2021. Scaling operation in North America to the size of its German biorefineries is now the next logical step, which could ensure ongoing growth in subsequent years.

Posting strong earnings growth

The financial year 2019/20, which will be reported on September 23rd, should come in as a record year in Verbio's history. We anticipate full year sales of EUR862m and an EBITDA of EUR110m, which yields an EBITDA-margin of 13%. The company has enjoyed favourable price and margin trends in 2019/20, which might not be repeated in the current financial year. Still, we believe that in particular an increasing sterol production, high prices for CO₂ reductions throughout the FY year, and reaching the break-even in the overseas activities can compensate for a normalisation of margins in the traditional activities. We thus expect the company to deliver once more an EBITDA beyond EUR100m, and have raised our 2020/21 estimate accordingly. Moreover, growth should accelerate in 2021/22, with the facilities currently under construction adding to production. This does not yet include Verbio's planned entry into the BioLNG market or the further expansion of its production sites, which could support another doubling of EBITDA to EUR200m.

Earnings revisions drive valuation to EUR15 - growth prospects bring fair value up to EUR19

Based on our raised estimates, we arrive at a valuation of EUR15, when discounting the free cash flows generated from the sites in operation and the sites currently under construction. This already yields an upside of 25% from the current share price. However, Verbio has clearly shifted into growth mode. Taking advantage of the various growth opportunities can drive EBITDA to the EUR200m mark within the coming five years. This leaves us with a fair value of EUR19 and an upside of more than 50%. A multiple comparison with CropEnergies shows that our raised earnings levels for Verbio do not seem to be anticipated by the market and that growth makes the stock increasingly cheap. Against this background, we see the stock as a clear buying opportunity.

REGULATORY FRAMEWORK

THE EU FRAMEWORK

EU aims at becoming the first climate-neutral continent by 2050

In view of the finite nature of fossil resources and in an attempt to counter global warming, many countries have committed themselves to reduce CO₂ emissions as laid out in particular in the Kyoto Protocol and the Paris Agreement. The EU has always been aiming to be at the forefront of this development and has once again taken a leading role by aiming to become the first climate-neutral continent by 2050.

20/20/20 by 2020 and ...

The EU has placed a major milestone with the “2020 climate and energy package” which was enacted in 2009. The headline targets to be achieved by 2020 were to reduce greenhouse gas emissions by 20% from the 1990 level, to reach a 20% share of renewables in EU energy consumption, and to improve energy efficiency by 20%.

... 40/32/32.5 by 2030

Being well under way to reach most of the 2020 targets, the EU has already enacted the “2030 climate & energy framework”, which covers the period from 2021 to 2030. By 2030, the EU aims at achieving a 40% reduction of GHG emissions from the 1990 level, a 32% share of renewable energies and a 32.5% increase in energy efficiency.

ETS and ...

As a key tool for cutting CO₂ emissions, the EU introduced an Emission Trading System (ETS) for heavy emitting sectors such as power, industry and aviation. The system covers 45% of the EU's CO₂ emissions and is dedicated to a -21% reduction in emissions from these sectors compared to the 2005 level by 2020 and to -43% by 2030.

... national targets drive CO₂ emissions reductions

For the remaining sectors such as housing, agriculture, waste and transport (excluding aviation), covering 55% of the EU's CO₂ emissions, the member states have taken on national emission reduction targets, which collectively aim at delivering a 10% reduction compared to the 2005 level by 2020 (Effort Sharing Decision). Together with the reduction from the ETS, this adds up to -20% compared to the overall CO₂ emission level of 1990. By 2030, non-ETS sectors must contribute a -30% reduction compared to the 2005 level, which is consistent with the -40% reduction target including the ETS. The EU monitors progress of the individual member states on a yearly basis.

Transport sector addressed with CO₂ emission standards for vehicles ...

In the transport sector, binding CO₂ emission targets for new cars from 2015 onwards and for new vans from 2017 onwards were already achieved in 2013. Regulation (EU) 2019/631 has introduced new standards for cars and vans from 2020 onwards. A proposal from emission standards for heavy-duty vehicles was adopted in 2018.

... and a reduction of fuel greenhouse gas intensity	In addition, the Fuel Quality Directive (2009/30/EC) requires a reduction in greenhouse gas intensity of transport fuels by a minimum of 6% compared to the 2010 full life-cycle emission baseline of 94.1gCO ₂ eq/MJ. This reduction is to be achieved primarily via the use of biofuels, electricity and less carbon intense fossil fuels. In addition, a reduction of upstream emissions counts against the target.
RED demands expansion of renewable energies	Renewable energies are addressed by the Renewable Energy Directive (2009/28/EC), which stipulates that on average 20% of gross final energy consumption in the EU shall come from renewable sources by 2020. This is roughly a doubling from the level of 9.8% in 2010. All member states have committed themselves to binding targets, which are laid out in National Renewable Energy Action Plans (NREAPs) and add up to reach the overall EU target. Here, the EU monitors progress of the member states on a biannual basis. The revised directive (REDII - 2018/2001/EU) covers the period from 2021 to 2030 and requires an increase in the overall share of renewables to 32% over the period.
Dedicated targets for the transport sector	In view of the importance of the transport sector, the EU has set a specific target for the share of renewable energies within this subsector. Whereas member states decide on their respective mix of renewable energies within their NREAPs, the share of renewable energies in the transport sector, i.e. fuels from renewable sources, must come to 10% by 2020 in each member state. RED II demands an increase to 14% by 2030. In order to reflect their superior greenhouse gas reduction, biofuels made from raw materials according to Annex IX can count double against this target, electricity in road transport even four times.
Biofuels need to meet sustainability criteria to become eligible	In order to become eligible for the CO ₂ reduction target as well as the renewable energy target, biofuels must meet certain sustainability criteria that are laid out in the Fuel Quality Directive as well as the Renewable Energy Directive. In particular, minimum levels of greenhouse gas reductions for biofuels compared to the fuel that they replace are defined and the preservation of biodiverse lands is required.
Advanced biofuels required to expand	In view of the argument that rising demand for biofuels could have negative effects on the production of food and feed crops and could lead to the conversion of forests and wetland (Indirect Land Use Change), the use of crop based biofuels has been capped to 7% of the energy used in the transport sector. This cap moves to 2020 consumption plus 1% with a maximum of 7% for the period up to 2030. Moreover, high-risk ILUC fuels such as palm oil will be phased out between 2021 and 2030. In contrast, RED II requires an increase in advanced biofuels according to Annex IX A, e.g. straw, by setting minimum levels of 0.2% in 2022, 1.0% in 2025 and 3.5% in 2030 while biofuels according to Annex IX B, in particular used cooking oil, shall be capped to 1.7%.

Level playing field for domestic producers	In order to ensure a level playing field for domestic producers of biofuels, the EU has enacted anti-dumping duties on the import of biofuels from a number of countries. This relates in particular to bioethanol from the US and Brazil and biodiesel from Argentina and Indonesia. The stipulation of sustainability criteria for biofuels also helps on this side.
Increase in energy efficiency	The third element in the EU framework is the Energy Efficiency Directive (2012/27/EU), which supports the EU's 20% energy efficiency target. It stipulates the overall EU energy consumption should not exceed 1483 million tonnes of oil equivalent (Mtoe) of primary energy or 1086 Mtoe of final energy. This is to be achieved via a number of measures such as an annual reduction of 1.5% of national energy sales. All measures are laid out in national energy efficiency action plans (NEEAPs) which are reviewed every three years. From a 20% increase in efficiency by 2020, the EU aims to come to 32.5% by 2030. This translates to a maximum of 1273 Mtoe of primary energy and 956Mtoe of final energy.

TRANSLATION INTO GERMAN LAW

Germany addresses transport sector with GHG reduction quota	Each member state has to translate the above-described EU regulation into national law. Here, every nation has the flexibility to use different measures to reach the given targets. With regard to the transport sector, Germany had initially promoted the expansion of biofuels by requesting that biofuels must account for a specific share of fuel sales that increases over time (Biokraftstoffquote). From 2015 onwards, Germany has switched to a system focusing on greenhouse gas reductions. Since then, fuel-selling companies must calculate the amount of greenhouse gas emissions they generate from the use of their product and are required to reduce this total by a certain percentage (Treibhausgasminderungsquote). This reduction can be realised e.g. by selling biofuels, which have lower CO ₂ emissions compared to the product they replace. This is performed predominantly in the form of blending biofuels with traditional fuels. The “Bundesimmissionsschutzgesetz” (BImSCHG) specifies a minimum reduction in CO ₂ emissions of fuel-selling companies of 3.5% in 2015, an increase to 4% in 2017, and a level of 6% since 2020.
Set of regulation ensures conformity with EU targets	Further details are laid out in the “Bundesimmissionsschutzverordnung” (BImSCHV). Among others, the 38 th BImSCHV specifies the cap on crop based biofuels and a rising minimum share of advanced biofuels of 0.05% in 2020, 0.1% in 2021, 0.2% in 2023, and 0.5% in 2025. The “Biokraftstoffnachhaltigkeitsverordnung” (BioKraft-NachV) covers the sustainability criteria and the “Upstream-Emissionsminderungsverordnung” (UERV) specifies that reductions in upstream emissions can count against the GHG reduction obligation from 2020 onwards. Further important regulation includes several DIN norms, which specify the standards for biofuels and the current blended fuel standards (B7 and E5/E10). Based on this set of measures, Germany complies with the EU regulation and contributes to the EU's CO ₂ reduction targets as well as the aimed expansion of renewable energies laid out in the country's NREAP for 2020.

GHG reduction of 40-42% until 2030 targeted

In 2016, the German government adopted the Climate Action Plan 2050, which is the country's commitment to the Paris Agreement. The aim is to become extensively climate neutral by 2050. As a medium term target, Germany wants to reduce greenhouse gas emissions by 55% until 2030 compared to the 1990 level. This target has been broken down by sector. For the transport sector, a reduction of 40-42% compared to the 1990 level has been declared. This is quite an important contribution as in contrast to most other sectors, CO₂ emissions in the transport sector have not been reduced mentionable up to now. The entire reduction must thus be realised within the next ten years.

Emission trading system ...

In order to reach this target, it is obvious that the current regulation has to be amended. The measure taken so far is to create a national emission trading system (nEHS) for the segments transport and buildings from 2021 onwards. The "Bundesemissionshandelsgesetz" (BEHG) specifies that the German government will issue a certain amount of CO₂ certificates for these sectors on an annual basis depending on their respective reduction targets. In an introductory phase, prices will be fix, starting at EUR25/t CO_{2eq} and moving gradually to EUR55/t CO_{2eq} in 2025. 2026 will be a transition year with a trading range of EUR55-65/t CO_{2eq} before free trading will commence in 2027. During the introductory phase, the penalty for an insufficient number of certificates is set at twice the original price of the certificate.

... likely to be complemented by further measures

We believe that in particular during the introductory phase, the nEHS is unlikely to provide a sufficient incentive for fuel-selling companies to increase the use of biofuels, in particular advanced biofuels. In order to report progress on the reduction of CO₂ emissions, we would expect an increase in current quotas for greenhouse gas emissions. The German Automobile Association (VDA) has calculated that in its realistic scenario, the expansion of electric vehicles could contribute roughly half of the 40-42% reduction target. The remaining half needs to come from the use of lower emissions on the fuel side. An adequate regulation for the increased use of advanced biofuels is thus a necessity to reach the government's target.

Hydrogen strategy and Maut exemption might give push to gas driven trucks

Moreover, the German government has so far strongly banked upon the development of electric vehicles to cut CO₂ emissions in the transport sector. However, in having reached only around 30% of the 1million electric vehicles targeted for 2020 by the end of 2019, the Government has become more open on the technology side. Within the context of the country's new hydrogen strategy, the transport sector, in particular heavy-duty vehicles, are a clear target market for conversion from diesel to low emitting fuels. This has been supported by the recent extension of the exemption of gas driven trucks from the German Maut system until the end of 2023.

More should come with the implementation of RED II

Finally, the German government is currently in the process of translating the RED II into national law. Particularly interesting will be the translation of the required 14% share of renewable energies in the transport sector, given that 1st generation biofuels in Germany are currently capped at 6.5% and the country might not fully reach the 2020 target of 10%. The French government for example has just decided that RME should count 1.2 times with regard to the quota.

MARKET DEVELOPMENTS

Legislation sets the framework for biofuel markets

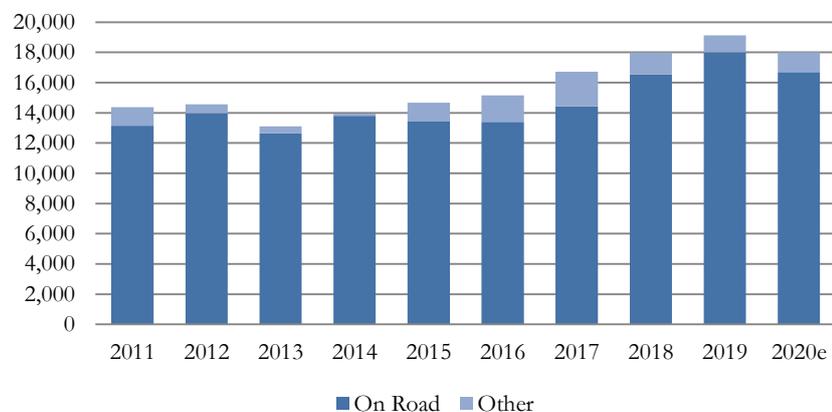
The legislative framework laid out in the previous part of this report, in particular the obligation to cut CO₂ emissions and to raise the use of renewable energies in the transport sector has created significant demand for biofuels within the European Union. The following section is aimed at looking into the dynamics of the different segments of this market and to provide an outlook for the future.

European biodiesel volumes have risen significantly over the past decade

BIODIESEL

The following chart illustrates that under the legislation in the different member states the use of biodiesel in the EU has increased materially over the past 10 years. The consumption of biodiesel moved up by 33% from 2011 to 2019 and even accounting for the dampening effect of covid-19 in 2020, we are still looking at an increase of 25%.

Consumption of biodiesel and HVO in the EU

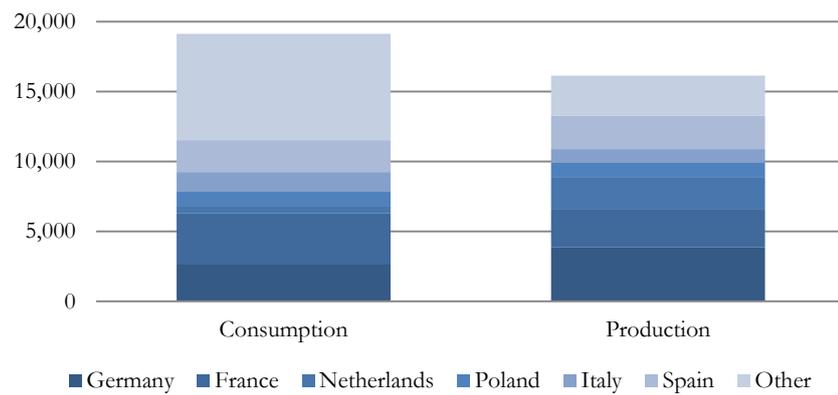


Source Matelan Research based on EU FAS posts data, in million litres

Germany is one of the leading biodiesel countries

In 2019, France was the largest consumer of biodiesel among the member states. With a share of 14%, Germany was the second largest market. Whereas these big markets were rather stable in volume over the past decade, the above-described market increase comes mainly from Spain, Italy and a number of smaller countries. With regard to production, Germany holds a share of 24%. The country is thus a net exporter, similar to the Netherlands while France and Italy need to import biodiesel. The EU as a whole has imported biodiesel in an amount of roughly 3bn litres in the year in 2019.

Consumption and production of biodiesel and HVO in the EU by country

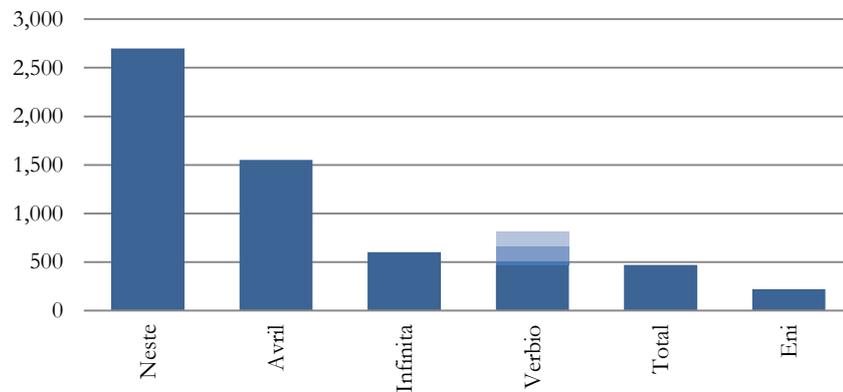


Source Matelan Research based on EU FAS posts data, 2019, in million liters

Verbio counts among the top European producers

The following chart shows the major European biodiesel producers. With a capacity of 2.7 million tonnes, Neste is the clear leader. In 2018, Verbio had a European production of 470,000 tonnes. This has already been increased to 510,000 tonnes. In addition, the company has acquired a site in Canada with 150,000 tonnes. Doubling the size of the Canadian facility would bring the company’s global capacity to 810,000 tonnes and leave Verbio among the top three players.

Major European biodiesel producers

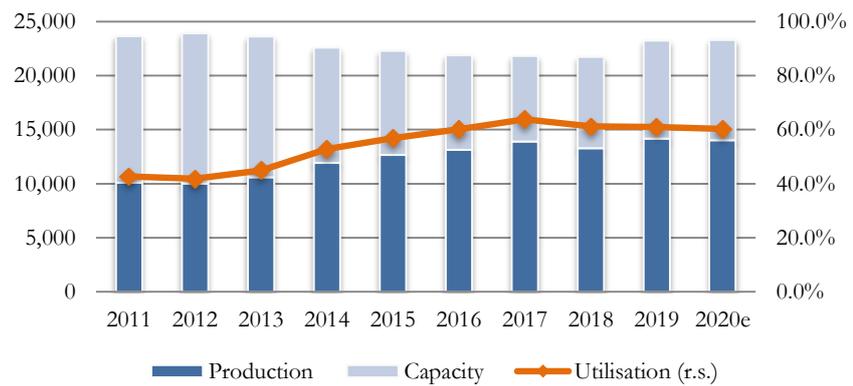


Source: Matelan Research based on EurObserv’ER data, capacity in 000 tonnes, 2018 figures, Verbio showing subsequent capacity additions in Germany and Canada including a doubling of capacity in Canada

Stable capacity and utilisation

Production and capacities in the European Union have been rather stable since 2017. A utilisation rate of 60% does not appear to be too high but looking at utilisation on a country level, we find Germany and France with rather high ratios and a lot of idle capacity in Spain and Italy. The increase in demand in particular in the latter countries has thus largely been covered by imports.

Capacity utilisation of biodiesel and HVO in the EU

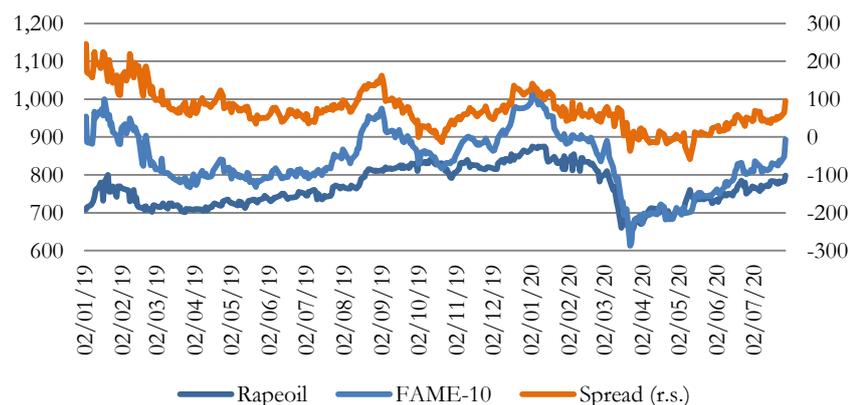


Source Matelan Research based on EU FAS posts data, 2019, in mt

Pricing moves up ...

Biodiesel is a market-traded commodity as is the major input, rapeoil, which accounts for roughly half of the European biodiesel production. Both prices vary to some extent but there is a clear correlation. The difference between the two is the production spread, which tends to fall within a range between 0 and 100 EUR/t. A state of the art producer can still earn money at a spread of 0 EUR/t from the by-products in the production process. At the upper end of the spread, EBIT-margin moves to double-digit figures. Profitability can be enhanced with the use of different input factors, and in countries with a GHG-quota, with the increase in the CO₂ reduction rate of the end product. It should be kept in mind that the biodiesel specification eases over the summer months. Prices for the summer specification, FAME 0, are somewhat lower than for FAME-10 but the companies can make use of cheaper input factors as well.

Pricing and spread of biodiesel



Source Matelan Research based on Reuters and Argus data, in EUR/t

... but balanced situation over the medium term expected

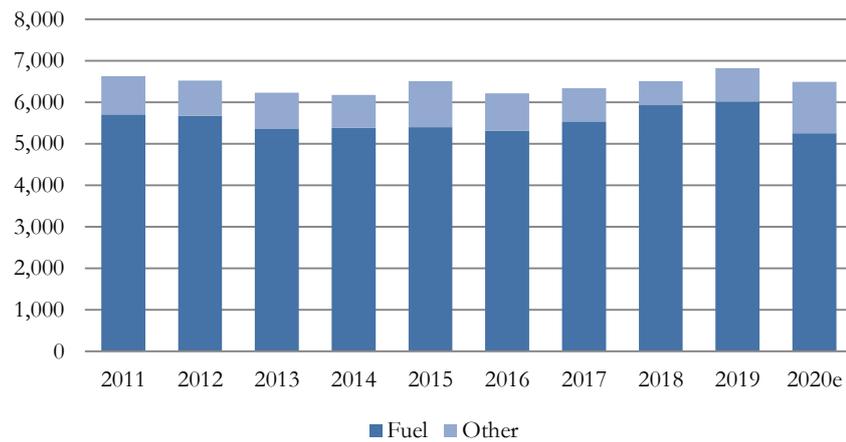
Spreads, for FAME-10 as well as FAME 0 are currently moving upwards and touching the EUR100/t mark at the time of writing in both cases. This represents a very favourable environment for the active biodiesel producers. Over the medium term, we would expect a rather stable volume development, in particular in Germany, where biodiesel is already close to the blending wall, and prices should normalise again with the supply/demand situation coming back to a more balanced situation.

BIOETHANOL

Smaller market – stable development

Whereas we have seen some increase in the consumption of biodiesel, the European ethanol market has experienced a more stable development. The decline in fuel ethanol in 2020 due to covid-19 should largely be compensated for by an increase in other applications. We also see that the European ethanol market comes to only roughly a third of the size of the biodiesel market.

Consumption of ethanol in the EU

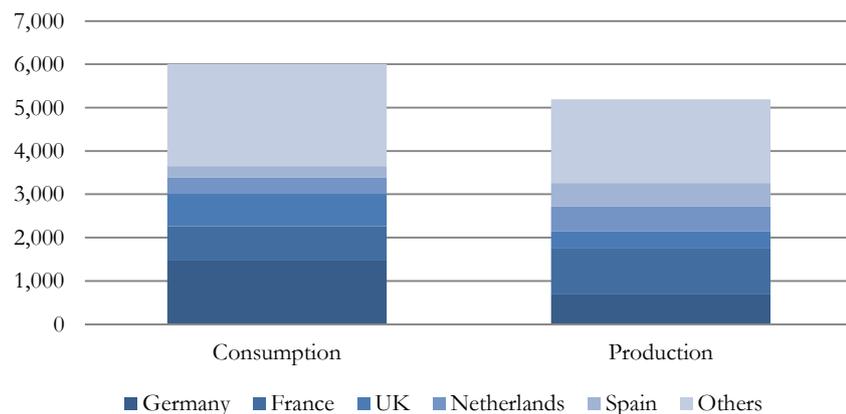


Source Matelan Research based on EU FAS posts data, in million litres

Germany and France largest markets

Once again, Germany and France are the largest consumers and the largest producers. However, in contrast to biodiesel, Germany needs to import ethanol and France has some excess production. The EU as a whole had to import almost 1bn litres of ethanol.

Consumption and production of ethanol in the EU by country

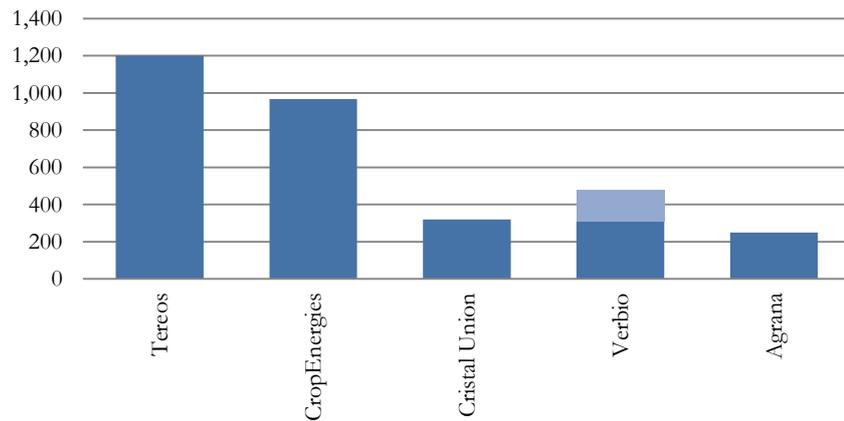


Source Matelan Research based on EU FAS posts data, 2019, in million litres

Verbio is one of the major producers of bioethanol

With 1.2bn litres of production, Tereos is the largest European bioethanol manufacturer, followed by CropEnergies. As in the biodiesel market, Verbio should count among the top three players following a capacity expansion in North America.

Major European bioethanol producers

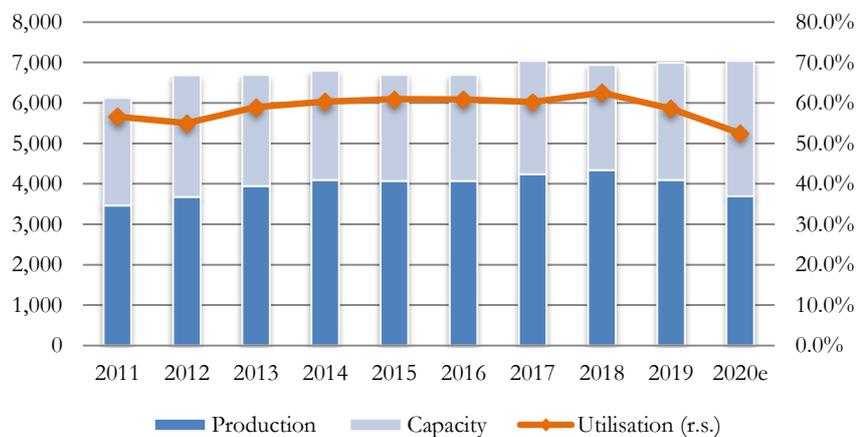


Source Matelan Research based on EurObserv'ER data, 2018 figures, production in million litres, increase in production due to capacity expansion illustrated for Verbio

Capacity utilisation affected by covid-19

Fuel ethanol capacity in Europe has remained rather stable over the past decade. Production was also stable at around 4000 t. For 2020, a material reduction in production is expected due to covid-19. As a result, capacity utilisation, which has been around the 60% mark throughout the decade, should come down to just over 50%. However, part of the capacity has been used for an increased production of other applications. As in the biodiesel market, state of the art bioethanol facilities are running at full capacity.

Capacity utilisation of fuel ethanol in the EU



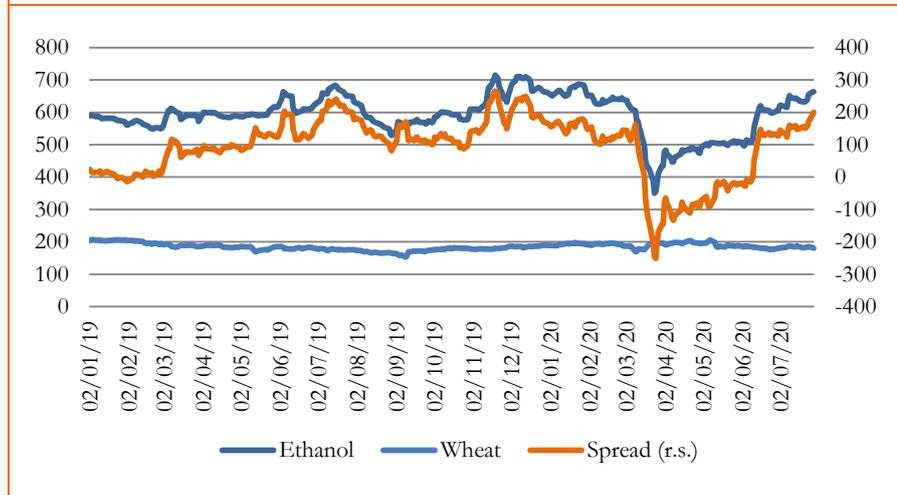
Source Matelan Research based on EU FAS posts data, 2019, in mt

Production spread soars

The following chart illustrates the high volatility in ethanol prices and the resulting production spread from using wheat as an input. Some companies try to smooth this development with a hedging strategy. In addition, the variation of inputs to e.g. rye is possible. Other major inputs in EU ethanol production are corn and sugar beet. Moreover, by-products account for a significant part of revenues, which has a compensating effect in times of negative spreads. In general, ethanol prices moving towards EUR400/cbm makes things difficult for all players, whereas prices beyond EUR600/cbm allow for very strong double-digit EBIT margins. The latter is what we are currently looking at. In addition, a higher greenhouse gas allowance of the

product leads to an add-on in terms of pricing. On average, margins in bioethanol tend to be higher than in biodiesel, which compensates for the higher capital intensity.

Pricing and spread of ethanol



Source Matelan Research based on Reuters and Platts data, ethanol in EUR/cbm, wheat and spread in EUR/t

Stable situation over the medium term

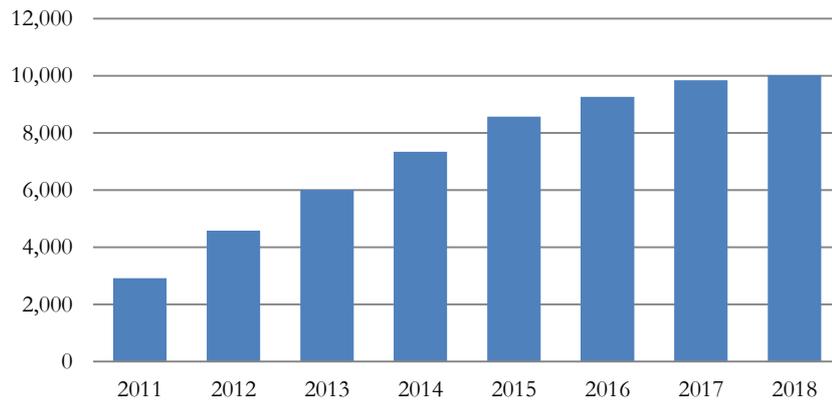
Although the active producers are currently enjoying the high spread, we believe that this situation will normalise over time. There is sufficient capacity to serve the market in particular at such elevated levels and the price difference to markets such as the US makes imports increasingly attractive. On the volume side, we expect a rather stable environment in the European Union, similar to what we have seen in the past. For Germany, there would be some upside due to the low use of E10. However, unless we see a wider price spread between E5 and E10 at the filling station, we would not expect the market share of E10 to rise materially.

BIOMETHANE

Increasing share of production going into the grid

According to the European Biogas Association, the number of biogas plants in Europe has increased to 18,202 in 2018. Capacity reached 11GW and production came to 63.5TWh. Germany accounted for roughly half of the European total with 9,444 sites, an installed capacity of 4.5GW and a production of 33TWh. Only a small portion of the German biogas plants has access to the grid and treats the output so that it can be fed into the gas grid as biomethane. As these plants have a larger size, biomethane volumes in the grid reached 10TWh in 2018. The following chart illustrates the rise in biomethane volumes going into the German grid.

Biomethane fed into the German gas grid

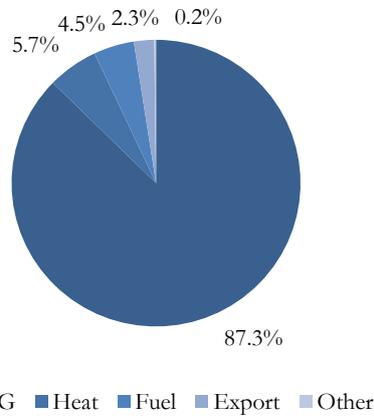


Source Matelan Research based on dena data, in GWh

Still small portion of grid volumes going to the filling stations

However, the predominant part of these biomethane sales still makes use of the EEG. Only 4.5% go to the filling stations and serve as fuel for gas driven cars. The increase in GHG reduction obligation from 4% to 6% and the introduction of the subquota for advanced biofuels of 0.05% in 2020 is expected to lead to some increase in the share of gas going to the filling stations. We could thus be looking at an increase to 1TWh in the current year.

Biomethane sales in 2019

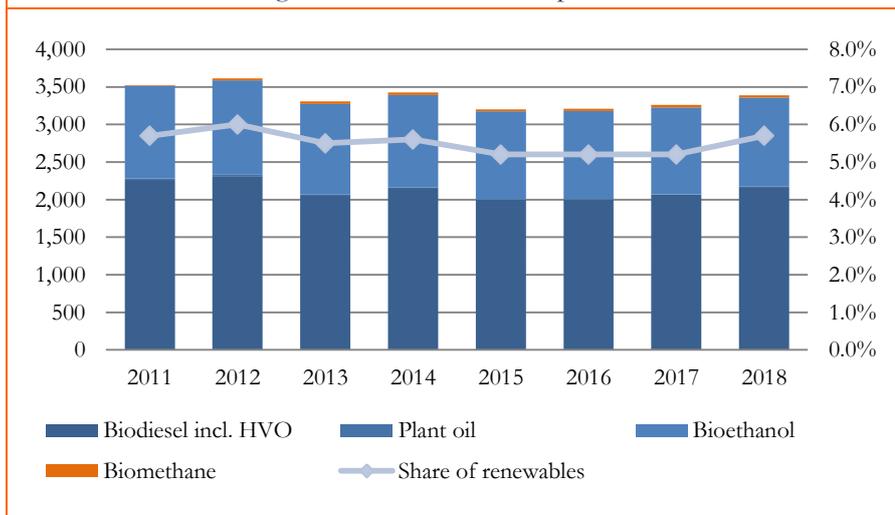


Source Matelan Research based on dena data

Biomethane’s share in fuel mix is still negligible ...

The following chart shows that the share of biomethane in the composition of renewable energies in German transport sector is negligible. Whereas it is rather easy to use biodiesel and bioethanol in the fuel segment as these products can be blended with their fossil counterparts and can be consumed by the existing fleet, it needs gas driven cars and a network of gas filling station to bring biomethane into the market.

Use of renewable energies in the German transport sector



Source Matelan Research based on BMWi data, in 000 tonnes, share of renewables right scale

... but Germany is struggling to reach the 2020 target

However, we had pointed out that the EU requires each member state to reach a 10% share of renewable energies in the transport market by 2020 and the German government has committed itself to this target. We would expect crop based biofuels to come in not too far-off the German cap of 6.5%. In addition, double counting of products such as UCOME and lower fuel sales as a result of covid-19 could bring the country closer the target. However, the country should still be struggling to fulfil the target, which could have a positive effect on further incentivising biomethane in the future.

Reaching the 2030 target should be even harder

RED II demands an increase in the share of renewable energies to 14% by 2030. Depending on the projections of traffic and car efficiency, the base might vary to some degree. Moreover, an increased use of electric vehicles, which count four times with regard to the target, could make up a good portion of the required increase. However, the gap that needs to be filled should remain significant.

Biomethane should benefit from legislation to comply with RED II ...

Among advanced biofuels, only HVO and biomethane have so far found their way into the European fuel landscape. While further products are researched, in particular the latter might be the one that could fill this gap as it has already a price advantage of around 20% compared to HVO and this gap might even widen as increasing demand for HVO raw materials from overseas is expected to drive costs further up. It has already been stipulated that the subquota for advanced biofuels in Germany will rise gradually to 0.5% by 2025. Further incentives might be set with the translation of RED II into German law.

... and the Climate Action Plan 2050

In addition, it should not be forgotten, that the German government has committed itself to a decrease of 40-42% in greenhouse gas emissions in the transport sector by 2030. Part will come from higher emission standards and part will be covered by the increasing use of electric vehicles. However, here again, a material expansion of advanced biofuels is required to reach the target. We would thus expect legislation to create an adequate framework for markets in which such products can develop.

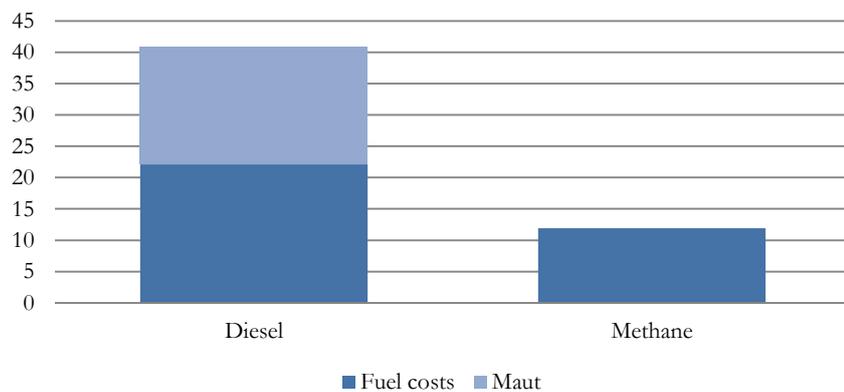
Strong incentives for gas driven trucks upheld

We have already touched upon the fact, that in order to use biomethane as a fuel, an adequate infrastructure is required. While electric vehicles might remain the preferred option for the passenger car market, biomethane could play an important role for heavy-duty vehicles. Against this background, the German government has set a number of incentives to support the acquisition of gas driven trucks. The German “Energiesteuergesetz” (EnergieStG) specifies a reduced tax rate of gas compared to diesel and petrol. In addition, according to the “Bundesfernstraßenmautgesetz” (BFStrMG), gas driven trucks have been exempt from the German Maut for trucks. This saves between 9 and 26 ct/km. Finally, the government supports the purchase of CNG trucks with EUR8,000 and of LNG trucks with EUR12,000. The recent prolongation of the Maut exemption until the end of 2023 should be taken as a sign that this set of measures should continue to incentivise the market and the German minister for transport has already indicated that he is prepared to give further incentives for the use of advanced biogas after this period.

Major price advantage for LNG

In addition, the cost of LNG at this point in time comes to around EURct8/kg. This translates to EURct46 per litre of diesel, which is roughly half of the current price for diesel. The following chart illustrates the huge difference in cost per 100km when looking at fuel costs and the Maut. At a utilisation of around 120,000km a year, this saves roughly half of the initial investment of the LNG truck in the first year. Against this background, a pick up in the number of gas driven trucks can be expected, in particular as the upcoming emission trading system is likely to widen this gap even further.

Comparison of cost per 100 km



Source Matelan Research in EUR/100km

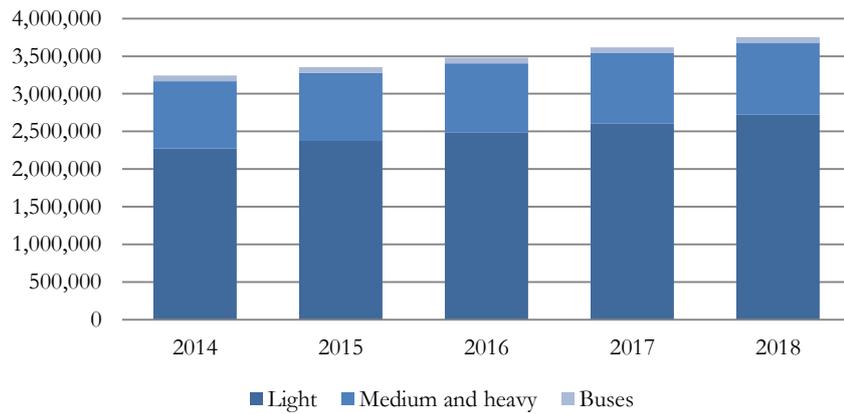
Infrastructure ramping up

A basic network of filling stations for gas already exists with 836 access points for CNG and 24 for LNG in Germany. On a European scale, LNG access points come to 300. The density is currently increasing and likely to develop in line with demand. Against this background, Shell, for example, has already announced to increase its LNG access points in Germany to 35-40.

Increasing demand for trucks

The following chart shows that according to ACEA, the number of commercial vehicles in Germany has increased over the period from 2014 to 2018. The main driver was light commercial vehicles. Medium and heavy commercial vehicles came to an average annual growth rate of 1.5%.

Development of commercial vehicles in Germany

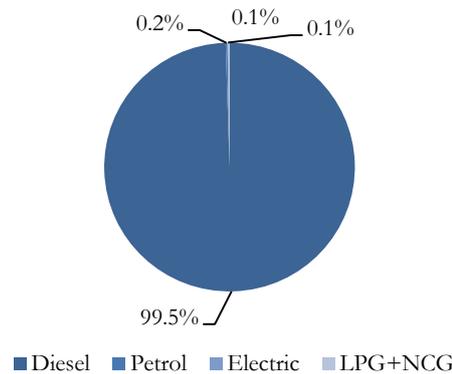


Source Matelan Research based on ACEA data, in units

Share of gas driven trucks is low ...

In 2018, Germany had a total of 3.7m registered commercial vehicles. Thereof, almost 1m were medium and heavy commercial vehicles, of which 99.5% were diesel driven. LNG and CNG vehicles came to a share of 0.1%, i.e. around 1000 units.

German medium and heavy commercial vehicles by fuel type



Source Matelan Research based on ACEA data, share of units in 2018

... but gaining speed

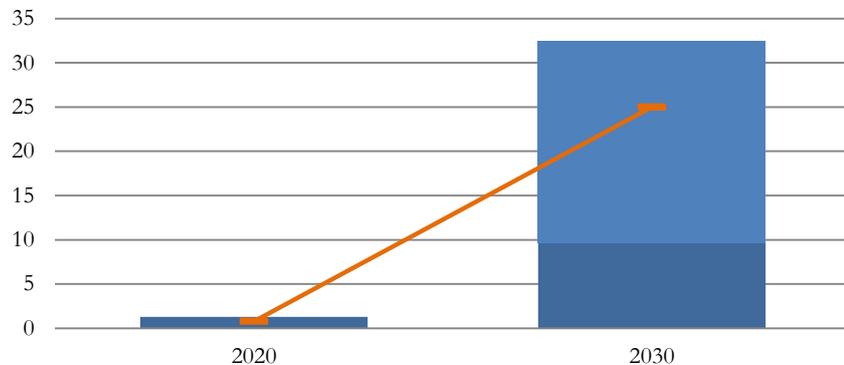
By June 2020, the number of German gas driven trucks exempted from the Maut had already reached 4600. Moreover, the share of biomethane in CNG provided at German filling stations has increased from 20% in 2018 to an estimated 50% in 2020. Here, the higher ecological benefit of biomethane compared to its fossil counterparts is thus increasingly recognised and in contrast to biodiesel or bioethanol, the use of biomethane is not restricted by a blending wall. It must be kept in mind that CNG trucks still have a smaller reach compared to LNG trucks so that the former are more used in local distribution rather than on long distances. Against this background, we would expect BioLNG to become the fuel of choice in this rapidly growing market.

Significant potential for BioLNG

German energy agency dena has calculated different scenarios for the potential development of BioLNG in German road and seafreight. Dena arrives at a potential of 35 to 117 PJ by 2030, which is predominantly driven by an increase in the share of LNG heavy-duty vehicles to 10-35%. This equates 9.7-32.5 TWh of biomethane. In their likely case, the need for

biomethane comes to 25TWh, which represents an annual average growth rate of more than 40% from the 2020 level. Management at Verbio expects that 15TWh could already be reached by 2025.

Market potential for BioLNG in Germany

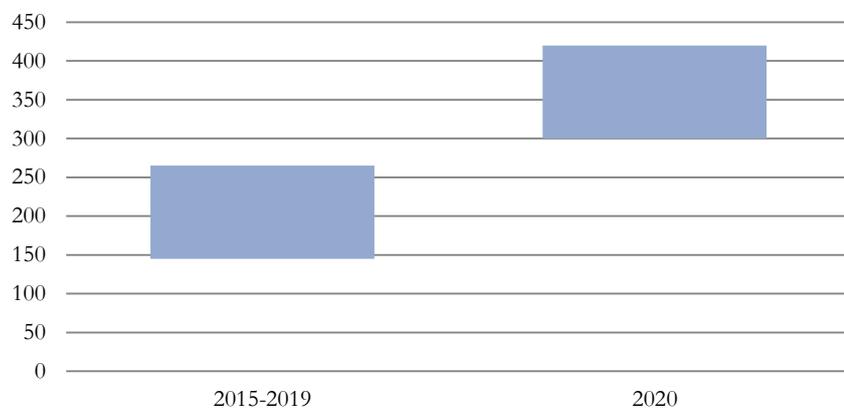


Source: Matelan Research based on dena, in TWh, min-max scenario for 2030, value for heavy duty vehicles in orange

Strong increase in pricing for CO₂ reductions

With regard to pricing, it is clear that biomethane competes with rather cheap fossil gas at the filling station. However, it is the superior CO₂ reduction that makes the product interesting as tightening regulation has driven the price for CO₂ reductions upwards. According to STX Services, GHG-quota prices have varied between EUR145 and EUR265/tonne CO_{2eq} over the period from 2015 to 2019. With the increase in the German GHG reduction obligation from 4% to 6% in 2020, prices have soared. Starting at around EUR300 at the start of the year, they are now in a range of EUR380-420. Such prices are still more favourable than paying the penalty of EUR470/tonne CO_{2eq} if the reduction obligation was not fulfilled. Assuming that prices stayed at current levels, the above-described growth in BioLNG would create a market of EUR2.2bn in Germany. In particular the increasingly tightening CO₂ regulation should continue to give support to current price levels.

GHG-quota pricing

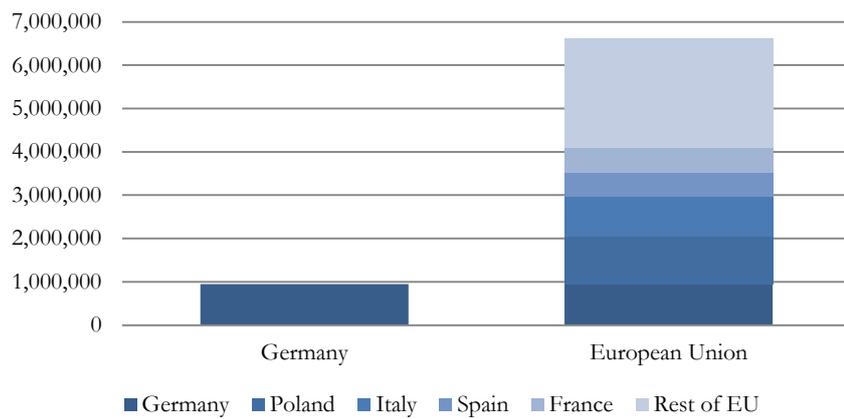


Source Matelan Research based on STX Services, in EUR/t CO_{2eq}

Serving the European market yields additional growth

So far, we have looked at the potential that the German market alone holds for the development of biomethane. The following chart illustrates the potential arising from a leverage into further European countries. With regard to medium and heavy-duty vehicles, the European Union holds roughly 6.5 times the units of the German market. Moreover, by providing BioLNG, it is now possible to retain the value of the GHG reduction when crossing borders, which is not the case when using the grid. Moreover, in countries with a double counting system, the CO₂ reduction of biomethane is even around 25% higher compared to the German system.

Medium and heavy commercial vehicles in the European Union



Source Matelan Research based on ACEA data, in units

COMPANY STRATEGY

Leading European biofuel producer

Verbio has been one of the pioneers in the biofuel market in Germany. With a current capacity of 660,000t of biodiesel and 260,000t of bioethanol, Verbio counts among the leading European biofuel producers. In 2009, the company started to build two biomethane plants at its bioethanol sites in Schwedt and Zörbig, which use the mash from the ethanol production as the major input factor. Meanwhile, further biomethane plants based on straw as the main input have been added. This adds up to an annual production of roughly 800GWh at this point in time.

Broad product range and proprietary technology give a maximum of flexibility

Since the early days, the company has been present in all biofuel markets and has been making use of a wide variety of input materials. This gives Verbio the flexibility to even out volatility in individual markets. Moreover, the company has always been using its own technology. Thus, the process cannot be copied easily and profitability suggests that the company is well ahead of most of its competitors. Moreover, with the acquisition of Ximo, Verbio has the know-how to convert part of its biodiesel production to the production of lubricants, should this become more attractive. Against this background, the company remains flexible with regard to all market developments.

Enabler of CO₂ reductions in Germany – at a price

With the introduction of the greenhouse gas quota in Germany, Verbio has become a provider of CO₂ reductions. Disregarding certain limitations, such as e.g. fuel standards, these fuels have become interchangeable and they are valued according to their degree of CO₂ reduction. Biodiesel and bioethanol are traded commodities. However, the company can realise higher prices in Germany if their product has a higher CO₂ reduction compared to the standard product. Biomethane is priced similar to fossil gas at the filling station but the CO₂-reduction can be sold separately, which makes this business very lucrative.

Stable core business but adding growth with by-products and add-ons

We had pointed out that the German markets for biodiesel and bioethanol should remain rather stable in volume terms. Verbio accounts for roughly 23% of German biodiesel sales and some 21% on the bioethanol side. Here, no capacity additions are planned and the aim is to further optimize the process and the use of input materials in order to enhance profitability. However, the company has made intelligent use of the by-products in the production process. In bioethanol, instead of producing DDGS, Verbio has banked on the production of biomethane from the mash coming out of the ethanol production. This is currently developing into an entire new business field. In biodiesel, the company has added a sterol production, which is a growth driver in the segment.

New growth market BioLNG ...	In biomethane, Verbio has more than doubled its production over the past seven years and is the only mentionable player that sells its gas as fuel at the filling stations. The limiting factor so far has been the small number of vehicles using gas. However, the registration of gas driven trucks is currently gaining speed in Germany, in particular on the LNG side, based on superior economics combined with the ecological benefit. To address this new market, Verbio intends to provide BioLNG, starting in the second half of 2021.
... will be addressed on a European scale	While growth in the German market is already expected to yield strong growth prospects, the company is already looking at the European market. In many other European countries, biomethane counts twice with regard to the quota, which makes pricing even more attractive. Management is currently considering investments in biomethane sites in a number of European countries, in particular those with favourable raw material conditions. The BioLNG can then be shipped to the countries with the most interesting regulatory incentives. This clearly reduces the company's exposure to the national regulation of any particular country.
Globalisation has already started ...	Moreover, Verbio has already demonstrated that its ambitions do not end at the borders of Europe. In fact, the company has acquired a biodiesel plant in Dain City, Ontario, Canada, which is located close to the American border and serves the American market. The plant has a capacity of 150,000 tonnes and Verbio is currently in the process of bringing the plant up to its own technological standards to improve profitability. In Nevada, Iowa, US, Verbio has bought DuPont's cellulosic ethanol plant. There, the company currently builds a 20MW unit to produce renewable natural gas from the available straw. A further biogas plant is currently under construction in India. There, the site is in a remote region with sufficient available straw but no connection to the grid. The project is thus independent from any governmental support for renewable energies.
... and should gain traction	In addition, management has made it clear that it intends to seize further opportunities on a global scale. Though the company considers adding sites on further continents, making full use of the assets that the company has acquired in North America is the next logical step. In Nevada, the company can make use of the existing ethanol facilities and add a biomethane plant that uses the mash from the ethanol production. Setting up a biorefinery similar to Verbio's operation in Schwedt makes perfect sense. This includes the biodiesel site in Canada, which has to double capacity to reach the size of the operation in Schwedt. In addition to benefitting from the technological know-how and an adequate size, a ramp-up of Verbio's North American operation also allows the company to make efficient use of varying regulatory regimes. For example, it already makes sense to transport biomethane via the grid to California, where in addition to the RIN, the Low Carbon Fuel Standard (LCFS) currently grants an additional USD200 per tonne of CO ₂ reduction. In the case of bioethanol, which is priced rather low in the US, the export of EU quality material is an option.

FINANCIAL DEVELOPMENT

BIODIESEL

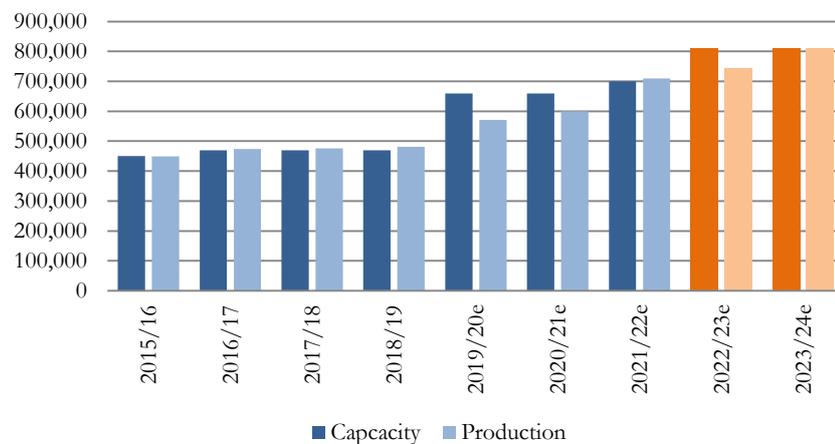
Stable production at high utilisation in Germany

Capacities in the biodiesel activities have been rather stable over the past years. Additions came from the improvement of processes. The company holds a significant market share in a German market that is limited by the blending wall. Thus, the main issue was to optimize capacity utilisation and the following chart illustrates that the company has been at or even slightly beyond the limit in this respect.

Globalisation adds growth

The company’s globalisation strategy is driving growth since the past financial year. Verbio had acquired a biodiesel plant in Dain City, Ontario, Canada, with a production capacity of 150,000 tonnes. We estimate that the plant currently runs at around 70% of this capacity. The company is in the process of building a new refinery, which should be finished by the end of next year, and improving processes should add some capacity. The next step in developing the North American operations could be reached in 2022/23 when the Canadian site could have been developed to the size of the operation in Schwedt, bringing the company’s global biodiesel capacity to 810,000 tonnes. Production follows the path of the capacity expansion and drives growth in the segment.

Capacity and production



Source Matelan Research, in tonnes

Normalisation of biodiesel prices anticipated ...

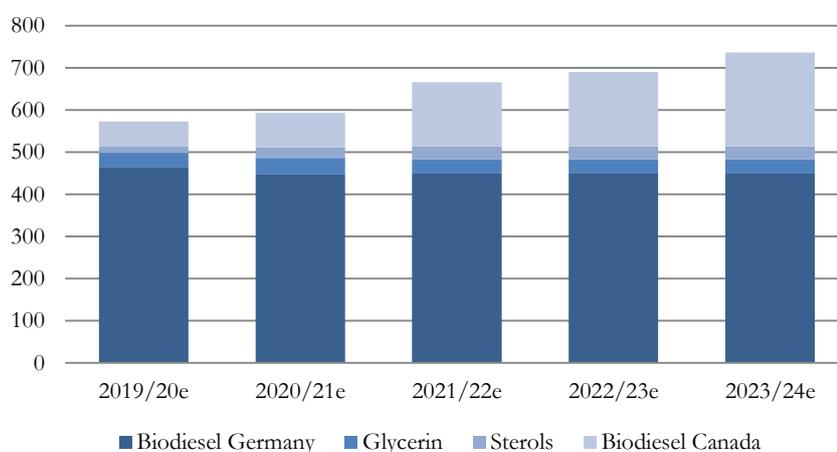
The following chart illustrates that this translates into solid sales growth. However, there are also a number of other effects reflected in these estimates. Firstly, we saw quite high biodiesel prices in the first quarter of the

financial year 2019/20. This could happen again but we plan with a normalised pricing for 2020/21 and 2021/22. Thus, there is a slight decline in the sales from the German biodiesel activities. This also includes the additional revenue Verbio gains from selling biodiesel with higher greenhouse gas emissions.

... but sterols and Canada drive sales ...

Glycerine and in particular the increasing production of sterols compensate for the anticipated decline in revenues from German biodiesel in 2020/21. Further rises here add to growth in 2021/22. However, the main growth should come from the production increase of the Canadian biofuel activities, which should drive sales to EUR665m by 2021/21. An additional capacity expansion can drive sales beyond EUR730m in 2023/24.

Sales development

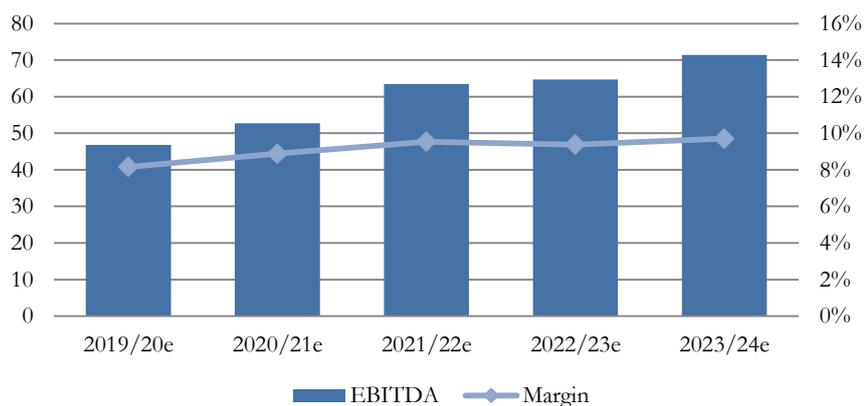


Source Matelan Research, in EURm

... and earnings growth

The main driver for profitability in the biodiesel division is obviously the spread between sales prices and input prices. This spread tends to be quite volatile. However, going forward we also plan with normalised input prices, which leaves a decent margin. Optimization with regard to the input factors might even leave some upside, here. Moreover, earnings volatility is reduced due to the production of glycerine and sterols. Growth in sterols also drives the margin of the division due to their high profitability. A further driver of earnings growth will be an improved profitability in Canada. In 2019/20, we expect mid-single-digit losses coming from the new entity due to the still low capacity utilisation. For 2020/21, the break-even is expected and 2021/22 should see the move into profitability. However, we would not yet expect the entity to reach the profitability of the German operation. Still, in particular the material increase in sterol production and the turnaround in Canada should bring the division's EBITDA margin to 9.5% in 2021/21. With the refinery in Canada fully operational and the site realising additional economies of scale, this should be pushed towards the 10% mark in subsequent years.

EBITDA and margin development



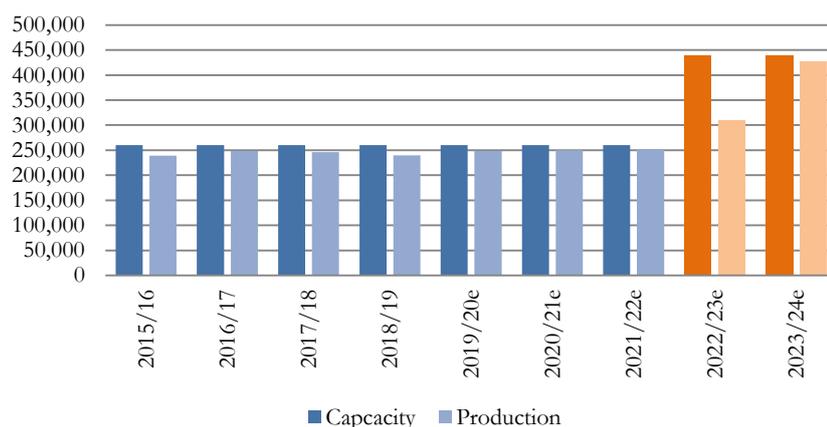
Source Matelan Research, in EURm, margin left scale

BIOETHANOL / BIOMETHANE

Stable bioethanol production in Germany – North America should drive growth

In bioethanol, Verbio has made no capacity additions over the past years. The company has a strong share in the German market and although there would be some upside with regard to the blending wall, consumers remain sceptical with regard to the use of E10 so that demand is not rising. The following chart shows that capacity utilisation has been quite high over the past years, also in market situations that were rather difficult. For the coming two years, we expect a stable development on this side. Bringing the North American activities to the size of the operations in Schwedt could give the division a major boost in 2022. Some ramp-up must be expected so that the full benefit is anticipated from the financial year 2023/24 onwards.

Capacity and production of bioethanol



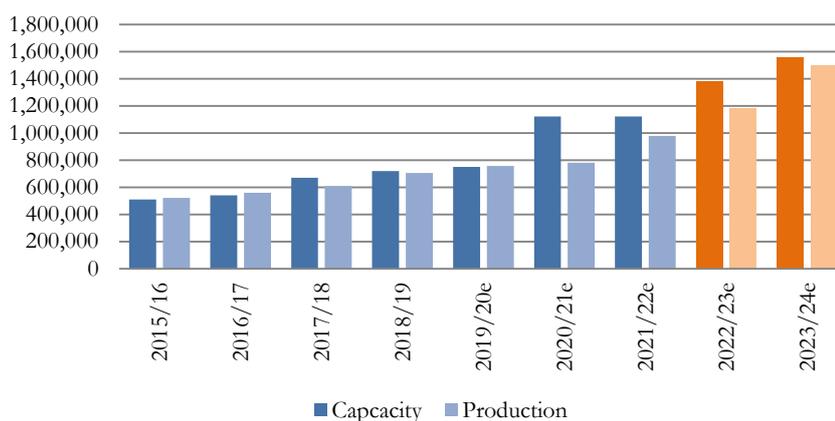
Source Matelan Research, in tonnes

Biomethane expansion under way – BioLNG to come on top

In contrast to other companies, Verbio prefers to produce biomethane from the by-product of the bioethanol process. Here, the company has shown strong growth over the past years. Management has been able to improve the process gradually so that output could be enhanced without major investments. Apart from using the mash coming out of the bioethanol production, Verbio has built a demonstration facility for biomethane made

from straw. In 2018, a straw biomethane plant in Pinnow was added. Within the context of its globalisation strategy, two sites, one in the USA and one in India are currently under construction. We should see the start of production by the end of the current financial year. The year 2021/22 should then see quite a material increase in production to almost a doubling of the volumes produced in 2015/16. Further plants should be added in line with the potential ethanol production process in Nevada and within the context of the company’s ambitions in the BioLNG market. We could thus even be looking at a tripling of the 2015/16 volumes by 2023/24.

Capacity and production of biomethane

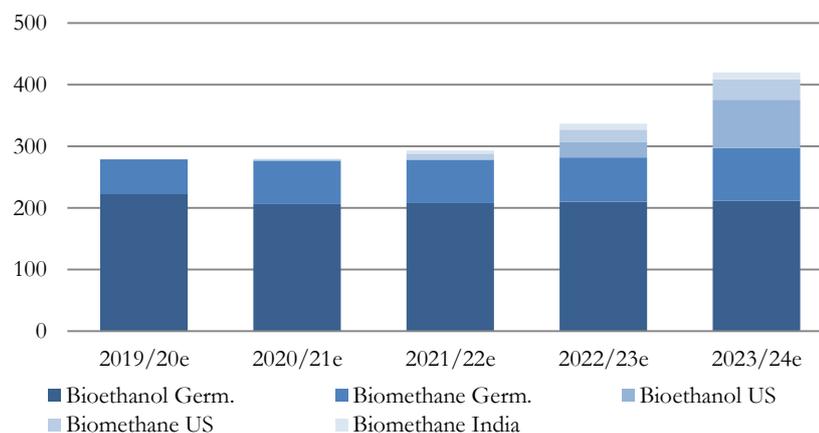


Source Matelan Research, in MWh

Sales could head for EUR400m

In bioethanol, pricing shows an even higher volatility compared to biodiesel. Despite the high levels that we currently observe, we work on a rather normal pricing for the current financial year, which is slightly below the 2019/20 level. However, this is more than compensated for by a higher production and a higher pricing on the biomethane side. The following chart makes it clear that biomethane already makes up quite a substantial part of Verbio’s revenues in the bioethanol division, according to our estimates. In 2021/22, we should see some impact of the new facilities in the US and India, which should drive divisional revenues close to the EUR300m line. The further expansion in the US could drive sales beyond EUR400m by 2023/24.

Sales development



Source Matelan Research, in EURm

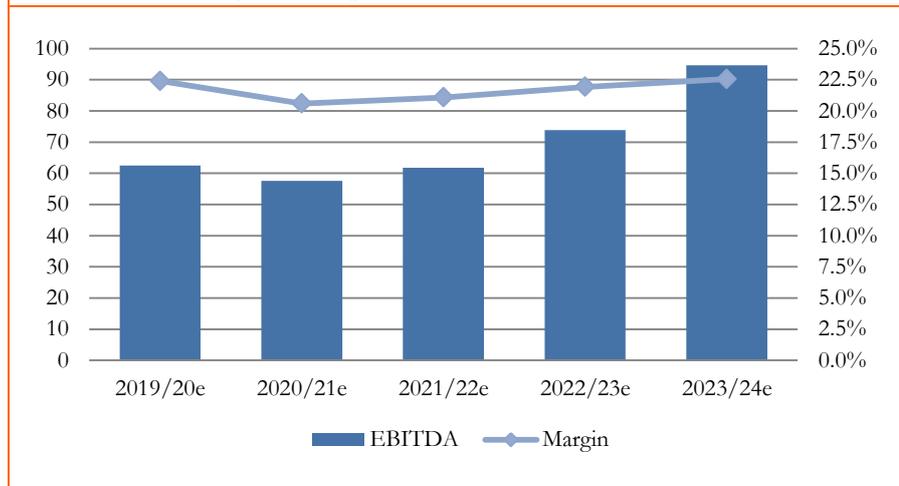
Normalisation of margins in bioethanol

Margins in the bioethanol business tend to be volatile due to the high fluctuations in bioethanol prices. However, on average, they tend to be higher compared to the biodiesel activities. In addition, Verbio manages to gain an add-on to commodity prices as it receives a premium in Germany as a result of an above-average greenhouse gas reduction of its products. In contrast to the biodiesel activities, this benefit is a bit smaller in bioethanol. For 2020/21, we assume a normalisation of the high margin level seen in 2019/20.

Quota prices and new facilities should sustain high earnings levels

The biogas activities give a stabilizing effect on the division’s margin and ensure profitability even in times of very low ethanol prices. Moreover, CO₂ pricing has increased quite substantially at the beginning of the current calendar year and in view of the CO₂ reduction target of the German government this is likely to be sustained. We should thus see a positive pricing effect on this side in the financial year 2020/21. A further driver of profitability in the segment is the turnaround of the facilities currently under construction. These still produce slight losses in the construction phase and should reach the break-even in the current financial year. These factors could almost compensate for the expected normalisation of the margin situation in German bioethanol so that we would no longer expect the division to fall significantly behind 2019/20’s very strong earnings level. A further expansion of the business could even drive EBITDA to EUR95m by 2023/24.

EBITDA and margin development



Source Matelan Research, in EURm, margin left scale

GROUP FIGURES

Repeating last financial year’s record earnings could be possible

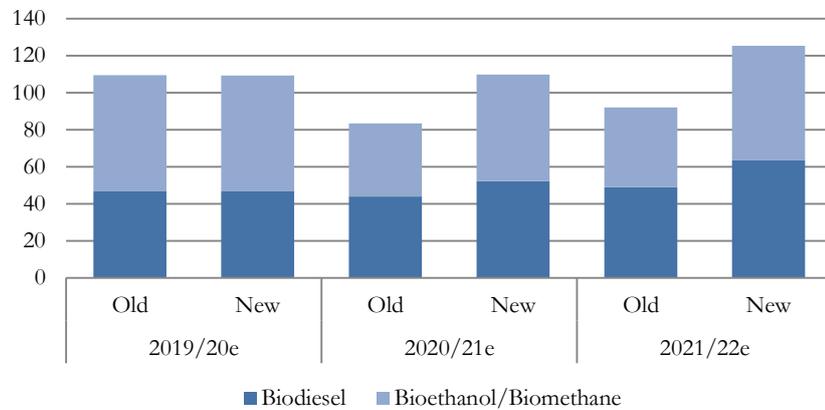
The following chart compares our revised calculations with our previous estimates for the coming two years. In fact, we believe that it is possible to repeat last year’s record earnings in the current financial year and that 2021/22 could add to that due to the above-described factors.

Recent price hikes make this increasingly likely

We would believe that management presents itself more cautious when giving guidance at the start of the financial year. However, the recent recovery in biodiesel spread and the high pricing in ethanol should give the company an

excellent start into the new financial year, which should become visible with the first quarter reporting. So far, pricing is clearly ahead of what we have included for the full year in both divisions.

Change in EBITDA estimates

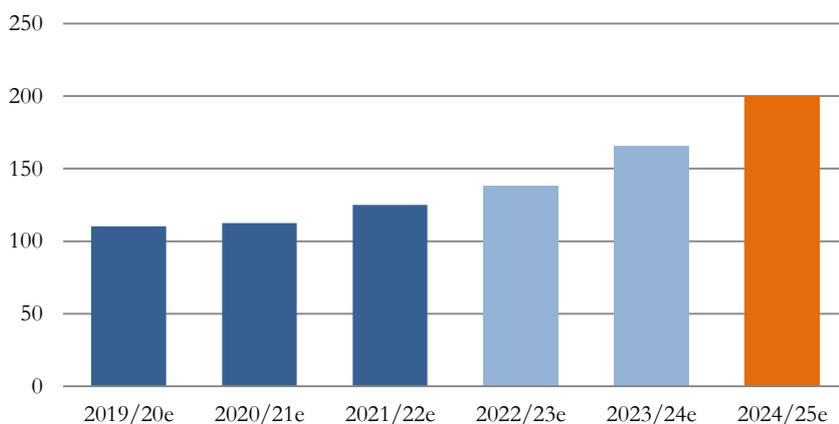


Source Matelan Research, in EURm

Growth opportunities could lead to another doubling in EBITDA

Moreover, it should be highlighted that the changes shown in the previous chart only include existing plants and plants already under construction. We have pointed out that growth should continue in subsequent years if the company follows-up on taking advantage of the opportunities that are currently available in various markets, in particular ramping up its facilities in North America and entering the developing market for European BioLNG. This could lead to further EBITDA increases in 2022/23 and 2023/24 as illustrated in the following chart. The graph also makes it clear that Verbio is heading for a level of EUR200m in EBITDA. While the company has already roughly doubled EBITDA over the past five year, this means that another doubling in EBITDA might be realised within the coming five years.

Potential EBITDA growth



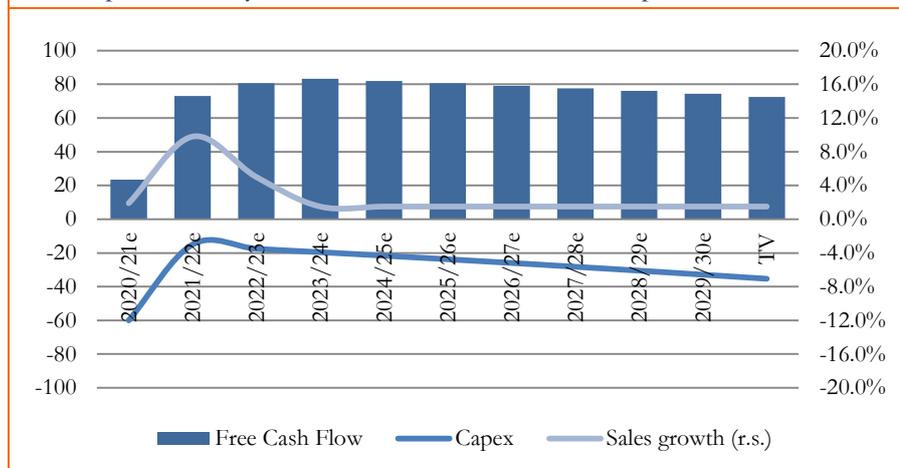
Source Matelan Research, in EURm

VALUATION

Earnings revisions drive valuation to EUR15 – based on current expansion

Our main tool for valuing Verbio’s shares is a DCF model, which is based on the detailed financial estimates for the coming two years that are laid out at the end of this report. For the eight years thereafter, we estimate the major value drivers to converge towards a level that we deem to be sustainable. Pricing in the earnings revisions we have laid out in the previous part of this report, we come to an increase in the valuation of the stock to EUR15. The following chart shows some key value drivers and the resulting free cash flows. It illustrates only slight sales growth in 2020/21 due to the anticipated normalisation of pricing in biodiesel and bioethanol and a material rise with the facilities currently under construction becoming productive in 2021/22. A further increase in utilisation drives growth in 2022/23. Thereafter, all current investments are fully productive and the company is back in a stable state, extracting sizable free cash flows from the business.

Development of key value drivers based on current expansion

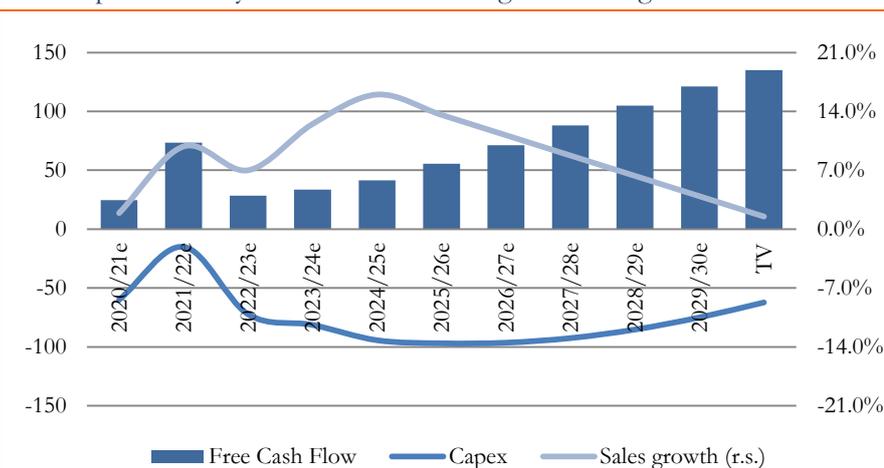


Source: MATELAN Research, l.s. in EURm

Management aims for additional growth ...

However, management has made it clear that it intends to grab additional growth opportunities, which could lead to another doubling in EBITDA within the coming five years. The following chart illustrates the path of the key value drivers that result from the scenario described in the financials part of this report for the next five years, including the required investments. For the remaining five years of the projection, growth rates and investment are still assumed to converge towards the sustainable level that is the base for our terminal value calculation. The additional capex reduces free cash flows in the near term to yield a much higher value in the terminal value.

Development of key value drivers including additional growth



Source: MATELAN Research, l.s. in EURm

... which drives our fair value to EUR19 and leaves an upside of more than 50%

The following table shows the full details of the model that includes these additional growth prospects. This yields a fair value of EUR19 per share. From the EUR15, which result from the increase in our earnings estimates due to the improved market environment, additional growth prospects add another EUR4 per share. While valuing only the current expansion already leaves an upside of around 25% from the current share price, we are looking at more than 50% when including the additional growth.

DCF model

EURm	2018/19	2019/20e	2020/21e	2021/22e	2022/23e	2023/24e	2024/25e	2025/26e	2026/27e	2027/28e	2028/29e	2029/30e	TV
Sales	779.3	862.2	878.3	965.1	1,032.6	1,161.7	1,349.9	1,535.5	1,709.0	1,860.3	1,979.3	2,057.5	2,088.4
Growth	13.6%	10.6%	1.9%	9.9%	7.0%	12.5%	16.2%	13.8%	11.3%	8.9%	6.4%	4.0%	1.5%
EBIT	73.7	82.2	82.6	95.1	107.4	130.1	157.9	174.0	187.4	197.2	202.6	203.0	198.4
Margin	9.5%	9.5%	9.4%	9.9%	10.4%	11.2%	11.7%	11.3%	11.0%	10.6%	10.2%	9.9%	9.5%
Depreciation	21.4	28.0	28.0	30.0	32.0	35.8	41.5	47.0	52.1	56.5	59.9	62.0	62.7
Other non cash items	-13.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cash taxes	-25.2	-28.3	-24.2	-27.9	-31.6	-38.4	-46.6	-51.5	-55.6	-58.7	-60.4	-60.7	-59.5
Change in NWC	-12.2	-16.7	-1.6	-8.8	-6.7	-12.9	-18.9	-18.5	-17.2	-14.9	-11.7	-7.5	-3.1
Capex	-61.0	-70.0	-60.0	-15.0	-72.3	-81.3	-94.5	-97.2	-96.8	-93.0	-85.8	-75.4	-62.7
Free Cash Flow	-16.7	-4.8	24.8	73.4	28.8	33.3	39.4	53.8	69.8	87.1	104.5	121.3	135.8
PV of Free Cash Flows (EV)	1,139.4		23.2	64.1	23.5	25.4	28.1	35.8	43.5	50.7	56.9	61.6	726.6
- Net financial debt		55.0											
- Pension provisions		-0.2											
- Minorities		-1.4											
+ Participations		3.2											
Equity Value		1,196.0											
No of shares		63.0											
Fair Value per share		19.0											

Source: MATELAN Research

Risk factors to our valuation

It needs to be highlighted that our estimates are based on the existing regulatory environment as described in the market section of this report. Though there is a general political will to increase the share of renewable energies further, political decisions in individual countries can always lead to temporary imbalances in the market and biofuel prices as well as feedstock prices in general tend to be volatile. Factors such as new capacities, imports or extreme harvests can lead to a widening or narrowing of the spreads, and thus have an influence on margins. Still, Verbio has managed such situations very well in the past and we believe that the scenario described here is a decent reflection of the trends that can currently be observed in the market.

CropEnergies is the only reasonable peer

Against this background, we try to countercheck the results coming out of our DCF model with the valuation multiples of comparable companies. In the German biofuel arena, there is only one listed competitor, CropEnergies. Although Verbio and CropEnergies are both serving the bioethanol market and have an almost similar size as a group, there are also clear differences. While CropEnergies has a focus on bioethanol, Verbio is also active in biodiesel and biomethane. In addition, Verbio has embarked on a growth strategy, while CropEnergies is so far still concentrating on the optimization of its existing facilities, though they also aim at diversifying their activities over the medium term.

Comparison of multiples

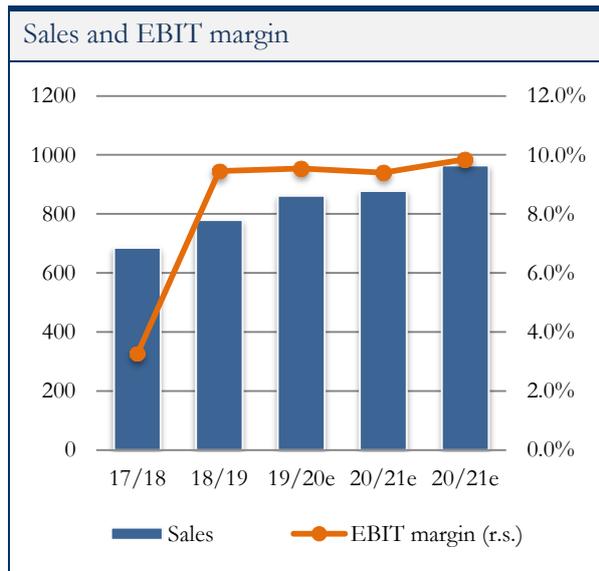
	Verbio Current	CropEnergies Current	Verbio Revision	Verbio Growth
Share price	11.96	11.94	15.00	19.00
No of shares	63.0	87.3	63.0	63.0
Equity Value	753.5	1041.8	945.0	1197.0
+ Net Debt	-67.0	-148.2	-67.0	-67.0
+ Pension provisions	0.2	25.0	0.2	0.2
+ Minorities	1.4	0.0	1.4	1.4
- Participations	-3.2	-2.0	-3.2	-3.2
Enterprise Value	684.9	916.6	876.4	1128.4
2020/21e				
Sales	878.3	831.0	878.3	878.3
EBITDA	110.6	119.3	110.6	110.6
EBIT	82.6	74.3	82.6	82.6
Net Profit	56.2	49.6	56.2	56.2
EV / Sales	0.8	1.1	1.0	1.3
EV / EBITDA	6.2	7.7	7.9	10.2
EV / EBIT	8.3	12.3	10.6	13.7
PE	13.4	21.0	16.8	21.3
2021/22e				
Sales	965.1	845.0	965.1	965.1
EBITDA	125.1	119.2	125.1	125.1
EBIT	95.1	79.0	95.1	95.1
Net Profit	65.0	52.9	65.0	65.0
EV / Sales	0.6	1.1	0.8	1.1
EV / EBITDA	5.0	7.7	6.5	8.5
EV / EBIT	6.6	11.6	8.6	11.2
PE	11.6	19.7	14.5	18.4

Source: MATELAN Research, share price in EUR as of 21/08/2020, no of shares in million, all other in EURm except for multiples. CropEnergies financial year ends at the end of February, Verbio at the end of July.

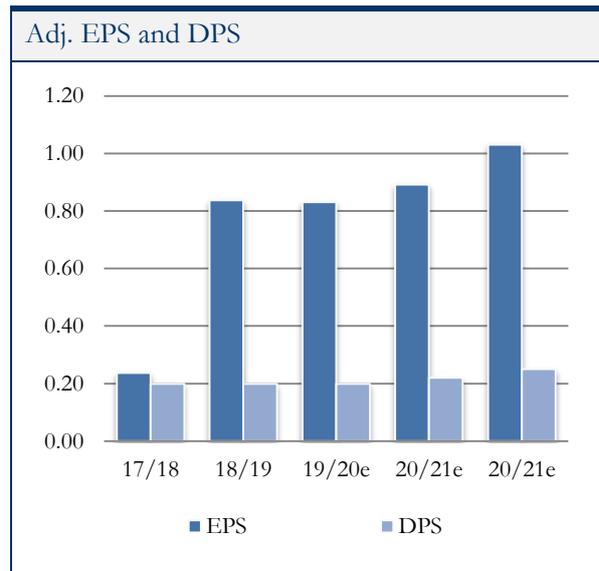
Growth makes Verbio look increasingly cheap

The previous table shows the multiples of the two stocks. Based on current share prices, we find Verbio trading at much lower multiples compared to CropEnergies. These estimates are based on a normalisation of the high spreads over the coming quarters in both cases. However, we have made it clear that we believe that in the case of Verbio, quota pricing, sterols and the eliminating losses from the new entities should allow the company to maintain last year's record earnings. This has apparently not yet been reflected in Verbio's share price. The valuation resulting from this revision comes to EUR15, which brings multiples roughly in line with those of

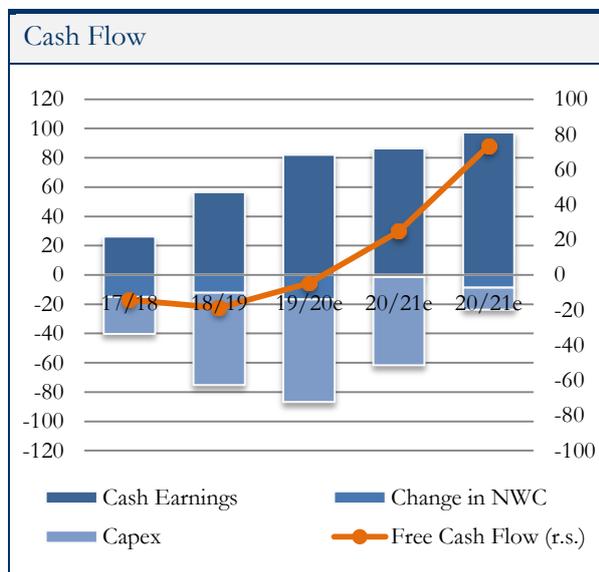
CropEnergies on a 2020/21 basis. On a 2021/22 basis, Verbio still looks cheaper due the superior growth we expect from Verbio as a result of the ramp-up of the facilities currently under construction. Verbio's additional growth ambitions, which lead to a valuation of EUR19, leave the company with a premium compared to CropEnergies' multiples. This is a reflection of the superior growth in subsequent years. Moreover, the rather small difference to CropEnergies' current multiples suggests that even our EUR19 valuation for Verbio is not stretched.



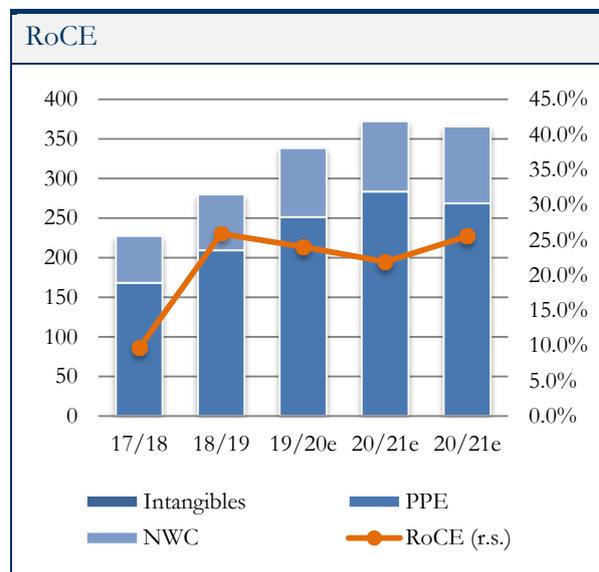
In EURm



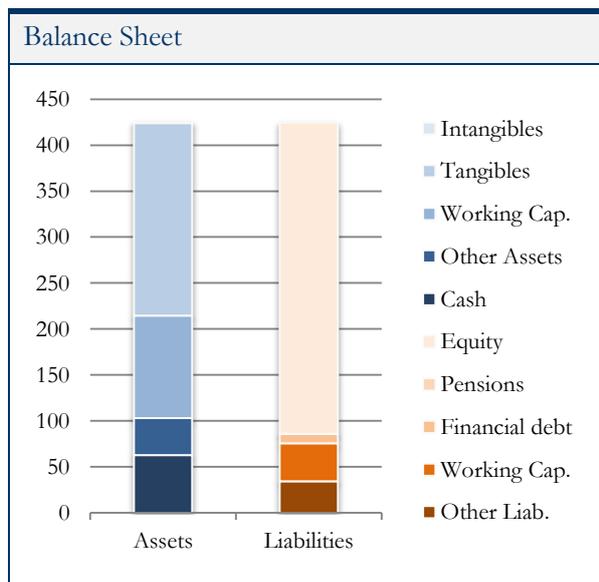
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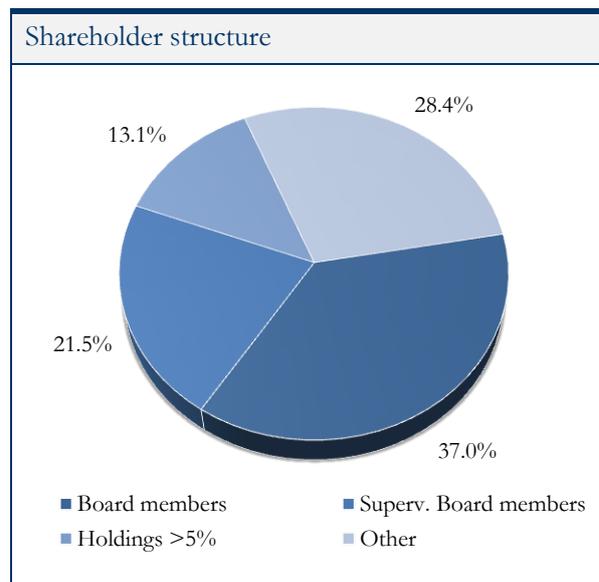
In EURm



In EURm



In EURm



P & L					
EURm	2017/18	2018/19	2019/20e	2020/21e	2021/22e
Sales	685.9	779.3	862.2	878.3	965.1
<i>Growth</i>		13.6%	10.6%	1.9%	9.9%
Material costs	-591.0	-618.4	-674.0	-673.7	-747.0
Gross profit	94.9	160.9	188.2	204.6	218.1
<i>Gross margin</i>	13.8%	20.7%	21.8%	23.3%	22.6%
Other operating costs	-23.4	-28.6	-35.0	-49.0	-49.0
EBITDA	44.8	95.1	110.2	110.6	125.1
<i>Margin</i>	6.5%	12.2%	12.8%	12.6%	13.0%
Depreciation	-22.4	-21.4	-28.0	-28.0	-30.0
EBIT	22.4	73.7	82.2	82.6	95.1
<i>Margin</i>	3.3%	9.5%	9.5%	9.4%	9.9%
Financial result	-0.2	-0.6	-1.4	-2.0	-2.0
EBT	22.2	73.1	80.8	80.6	93.1
Taxes	-7.1	-21.4	-28.3	-24.2	-27.9
Net profit	15.1	51.7	52.5	56.4	65.2
Minorities / Discon. Op.	-0.2	1.1	-0.2	-0.2	-0.2
Net profit a.m.	14.9	52.8	52.3	56.2	65.0
<i>Growth</i>	n.m.	n.m.	n.m.	n.m.	n.m.
No of shares	63.0	63.0	63.0	63.0	63.0
EPS	0.24	0.84	0.83	0.89	1.03
Adj. EPS	0.24	0.84	0.83	0.89	1.03
<i>Growth</i>	n.m.	n.m.	n.m.	n.m.	n.m.
Dividend	0.20	0.20	0.20	0.22	0.25

Cash Flow					
EURm	2017/18	2018/19	2019/20e	2020/21e	2021/22e
EBIT	22.4	73.7	82.2	82.6	95.1
Depreciation	22.4	21.4	28.0	28.0	30.0
Other non-cash items	-5.1	-13.4	0.0	0.0	0.0
Cash taxes	-13.6	-25.2	-28.3	-24.2	-27.9
Cash earnings	26.1	56.5	81.9	86.4	97.2
Change in NWC	-15.0	-12.2	-16.7	-1.6	-8.8
CF from operations	11.1	44.3	65.2	84.8	88.4
Capex	-25.2	-63.0	-70.0	-60.0	-15.0
Other investm./divestm.	2.1	2.0	0.0	0.0	0.0
CF from investing	-23.1	-61.0	-70.0	-60.0	-15.0
CF from fin. and other	-14.2	-8.8	26.7	-12.8	-13.4
Change in cash	-26.2	-25.5	21.9	12.0	60.0

Valuation multiples					
	2017/18	2018/19	2019/20e	2020/21e	2021/22e
Share price	7.28	6.56	9.35	11.96	11.96
x No of shares	63.0	63.0	63.0	63.0	63.0
Market Capitalisation	458.6	413.3	589.1	753.5	753.5
+ Net financial debt	-88.2	-53.0	-55.0	-67.0	-127.0
+ Pension provision	0.2	0.2	0.2	0.2	0.2
+ Minorities	1.2	-0.3	1.4	1.4	2.4
- Participations	-0.1	-0.1	-3.2	-3.2	-3.2
Enterprise Value	371.8	360.0	532.5	684.9	625.9
Sales	685.9	779.3	862.2	878.3	965.1
Adj. EBITDA	44.8	95.1	110.2	110.6	125.1
Adj. EBIT	22.4	73.7	82.2	82.6	95.1
Adj. Net profit a.m.	14.9	52.8	52.3	56.2	65.0
EV / Sales	0.5	0.5	0.6	0.8	0.6
EV / EBITDA	8.3	3.8	4.8	6.2	5.0
EV / EBIT	16.6	4.9	6.5	8.3	6.6
PE	30.7	7.8	11.3	13.4	11.6

Source: Matelan Research

Balance Sheet					
EURm	2017/18	2018/19	2019/20e	2020/21e	2021/22e
Intangible assets	0.3	0.9	0.7	0.7	0.7
Tangible assets	168.0	209.3	251.3	283.3	268.3
Participations	0.1	0.1	3.2	3.2	3.2
Other non-current assets	3.4	3.9	3.4	4.8	5.8
Non-current assets	171.7	214.2	258.6	292.0	278.0
Inventories	45.2	63.1	86.7	88.3	97.0
Receivables	45.2	48.5	46.0	46.9	51.5
Cash	88.6	63.1	85.0	97.0	157.0
Other current assets	15.3	36.1	43.7	15.0	15.0
Current Assets	194.2	210.8	261.4	247.2	320.5
Total assets	366.0	424.9	520.0	539.1	598.5
Equity	299.0	339.2	379.1	423.0	474.3
Minorities	1.2	-0.3	1.4	1.4	2.4
Total equity	300.2	338.9	380.5	424.4	476.7
LT financial liabilities	0.0	0.1	30.0	30.0	30.0
Pension provisions	0.2	0.2	0.2	0.2	0.2
OtherLT liabilities	7.5	6.9	15.0	7.5	7.5
Non-current liabilities	7.7	7.1	45.2	37.7	37.7
ST financial liabilities	0.4	10.0	0.0	0.0	0.0
Payables	31.2	41.3	45.7	46.6	51.2
Other ST liabilities	26.5	27.6	48.5	30.5	33.0
Current liabilities	58.1	78.9	94.3	77.1	84.1
Total liabilities	366.0	424.9	520.0	539.1	598.5

Segments and adjusted earnings					
EURm	2017/18	2018/19	2019/20e	2020/21e	2021/22e
Biodiesel	456.8	514.5	572.8	588.4	659.7
Bioethanol/-methan	219.1	254.7	279.2	279.7	293.2
Other	15.7	16.7	16.2	16.2	17.2
Consolidation	-5.7	-6.6	-6.0	-6.0	-6.0
Sales	685.9	779.3	862.2	878.3	965.1
<i>Growth</i>		13.6%	10.6%	1.9%	9.9%
Biodiesel	24.5	70.7	46.8	51.9	62.9
Bioethanol/-methan	19.9	23.8	62.7	58.3	61.8
Other	0.4	0.6	0.7	0.4	0.4
Consolidation	0.0	0.0	0.0	0.0	0.0
EBITDA	44.8	95.1	110.2	110.6	125.1
<i>Margin</i>	6.5%	12.2%	12.8%	12.6%	13.0%

Key operational indicators					
	2017/18	2018/19	2019/20e	2020/21e	2021/22e
Equity ratio	82.0%	79.8%	73.2%	78.7%	79.6%
Gearing	0.0	0.0	0.1	0.1	0.1
Asset turnover	4.0	3.6	3.4	3.0	3.5
NWC / sales	8.6%	9.0%	10.1%	10.1%	10.1%
Payable days outst.	16.6	19.4	19.4	19.4	19.4
Receivable days outst.	24.1	22.7	19.5	19.5	19.5
Fix operating assets	171.7	214.1	255.4	288.8	274.8
NWC	59.2	70.3	87.0	88.6	97.4
Capital employed	230.9	284.4	342.4	377.4	372.2
RoE	5.0%	15.3%	13.8%	13.3%	13.7%
RoA	6.1%	17.3%	15.8%	15.3%	15.9%
RoCE	9.7%	25.9%	24.0%	21.9%	25.5%
Gross margin	13.8%	20.7%	21.8%	23.3%	22.6%
EBITDA margin	6.5%	12.2%	12.8%	12.6%	13.0%
EBIT margin	3.3%	9.5%	9.5%	9.4%	9.9%
Net profit margin	2.2%	6.8%	6.1%	6.4%	6.7%

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Verbio	
Date	Rating
12/12/18	Buy
09/11/18	Strong Buy
12/02/18	Buy
29/03/16	Neutral
05/02/15	Buy
10/02/12	Neutral

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