Umicore: Play the EV Adoption
BUY @ €43

Umicore – View All Notes and Models

Analyst: Mark Hiley
T: +44 20 3743 9848
E: mh@theanalyst.co.uk

Recommendation: **Buy (No Change)**

Price: **€43**	2-Year Price Target: **€53**	Forecast Return: **~20%**
3m Average Daily Volume: **$40m**	Market Cap: **€10.6bn**	Ticker: **UMI BB**
Valuation Metric: **Sum of the Parts**		

Investment Thesis

- **Umicore has a unique, scaled position in all aspects of a transition to greener cars: battery materials, automotive catalysts, and recycling. Mega-trends will fuel growth as the stock is a play on EV take-off. Ticking most ESG requirements, it can be a super thematic buy idea that robots will buy.**
- **Market leader in NMC battery materials with a high 30% market share. As battery capacity and customer base expand, Umicore needs to 4x capacity by 2025. Umicore has advantages in European position, economies of scale, and long-term experience. Battery materials are more than a commodity product.**
- **Valuation is demanding but the long-term growth story is clear. In the near-term, the stock has multiple ESG drivers and still appears to be the only major EV proxy in Europe. Investors should not ignore the fact that Tesla (no current recommendation) just doubled and Europe is about to adopt EVs in a big way.**

Since bottoming out at €25 on 11 July 2019, Umicore is up 72%. With no earnings upgrades over the same period, investors can no longer fall back on valuation to support the investment case. Similarly, quantifying upside requires assigning some rather 'punchy' multiples. For context, the implied valuation of the Energy & Surface Tech division is >€7bn and Umicore has invested a cumulative capex of ~€2bn, which therefore implies significant growth and sustainably high returns.

However, we feel dropping the stock on valuation alone would be a waste of a good equity story. The fundamentals and technicals are still intact:

- We see 2020 as a turning point for EVs (especially in Europe).
- We see fears over the Chinese EV market as overblown.
- Umicore is a big ESG play as each division contributes to developing a greener society.
- We still see the stock as the best liquid EV proxy in Europe today.

As such, we keep the stock as a Buy recommendation with a slight upgrade to our price target. Robots buy stocks like Umicore.

2019 – Tough Year. 2020 – Inflection Point?

In H1'19, China cut subsidies on EVs, which has caused a decline in EV sales every month since June 2019; Chinese EV volumes were down 48% YOY in October 2019. In 2019, there were 486 registered EV manufacturers, and one aim of the subsidy cuts was to weed out the low-quality EVs that have flooded the Chinese market. Although Umicore is unlikely to be primarily selling into the low-end EVs in China, the company flagged the market issues in its April 2019 profit warning (alongside delays in China to platforms to which it was directly exposed).

We think Umicore will report another poor interim period (H2'19e) at the results on 07 February 2020, with EBIT in the Energy & Surface Technologies division likely to be down at least 20% against a very tough comp in H2'18. We believe that the market will look through any weakness in H2'19 numbers, assuming guidance for 2020 is for positive group profit growth. 2019 was a reset year, with incremental capacity delayed by 12-18 months. Although the profit warning in April 2019 was severe, we see it as a case of getting all the bad news out at once whilst the tailwinds for battery material players have improved and Umicore started selling out future capacity to key battery makers.

Positive tailwinds exist for EVs globally in 2020:

- In China, smaller, low-volume manufacturers are being pressured and premium manufacturers are moving in (e.g. Tesla began deliveries of China built Model 3s this week, Volkswagen is launching two EVs in China this year, and Mercedes-Benz launched its first China-built model in November 2019).

- The European market is gathering momentum as manufacturers face large fines on CO_2 outputs (€95 for every gram over target multiplied by cars sold), and are therefore incentivised to subsidise EVs — another reason that at the same time the number of models and platforms is exploding (175 in 2020, up from 100 in 2019). Car manufacturers must either take the fines or subsidise EVs (to lower average CO_2 per km of their fleet). We believe the latter is the more economical option.

- Although well-known to Umicore investors, EVs are on the cusp of widespread adoption and our initial estimates forecast Umicore needs to 4x production of battery materials by the middle of this decade to meet potential demand (at an assumed 20% market share).

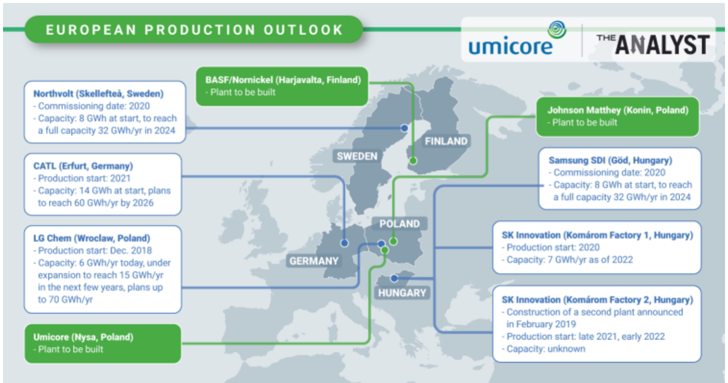
- The US appears to still be some way behind Europe and China. EVs accounted for 1.9% of new car sales in North America in Q3'19 compared to 4.4% and 3.8% in China and Europe respectively. China penetration peaked at 7.1% in Q4'18 and reached 6.9% in Q2'19. There are fewer than 20 new EV models launching in the US in 2020. However, the variety and appeal of those coming should help propel sales. The Tesla Model Y (crossover expected in spring 2020), Porsche Taycan (Tesla Model S competitor), and Rivian R1T (pickup truck expected in late 2020) are just a few examples.

- In Europe, we sense from anecdotal evidence that the EV adoption phase is coming. In Norway, almost 40% of new vehicle sales in 2019 were fully electric and another 25% are hybrids; walking around the streets of Oslo, we witnessed Teslas everywhere, leading to a quieter and cleaner urban experience. Although Norway is a wealthy country with high vehicle tax and generous incentives, we should look to these early adopters for future trends. In South London, we can clearly see the addition of plug sockets to lampposts and one of our team analysed replacing his street-parked Audi A3 with an Audi E-Tron. The conclusion was the fast-charging infrastructure and range was still not good enough for the price point. However, he feels confident that within 2-3 years he will move to a pure EV given the coming iterations of the first releases from major manufacturers.

Capacity Additions in Europe

In September 2019, we visualised the EV supply chain for Umicore, showing that by 2022, the global supply by battery makers would reach 1,211GWh, ~5x from 2018 levels, with the top 10 suppliers providing 740GWh (primarily LG Chem, CATL, BYD, Panasonic, and Tesla).

Exhibit 1: European Production Outlook for Umicore



Source: IFRI

Since then, Umicore has announced supply agreements with LG Chem (125,000t over several years starting in 2020) and Samsung SDI (80,000t multi-year strategic agreement starting in 2020). These announcements coincide with the opening of Umicore's plant at Nysa in Poland and the rapidly evolving ecosystem of EV manufacturing in Eastern Europe. Umicore is also completing greenfield sites in South Korea and China in 2020/21. On six-year average contract durations, the announced deals with LG and Samsung could represent ~85% of Umicore's upcoming capacity additions. These contracts could also be supportive of pricing and margins.

Growth but Poor Disclosure

Forecasting earnings at Umicore is challenging due to the low level of disclosure by the company. For example, the Energy & Surface Technologies division includes battery material sales into electronics and autos alongside sales of cobalt materials, electroplating, and electro-optic materials. Volumes are not disclosed, nor is pricing (we have attempted to ascertain battery premiums independently using kwh, kg, and metal mix estimates). Cashflow and balance sheet disclosure is also poor at the interim results. Nonetheless, we think Umicore can at least double earnings in this division in the coming years as volumes ramp from 60,000t (2019e) to 100,000t (end of 2020/early 2021) and 175,000t (2022). We model flat margins as scaling effects are offset by lower pricing as the industry matures. We assume Battery Materials evolves as a 'specialty material/chemical' with customer-specific solutions and entrenched material positions in batteries built for specific production platforms, rather than that of a commodity industry like polysilicon.

In short, we do not think this is an industry where margins will collapse in the medium term. There may be a delta (+/-) of several percentage points difference, but we are comfortable with margins in the 15-20% range in the long term. Battery materials is a value-add business.

Through Largest Negative Cash Flow Period

We note that short interest in Umicore has dropped from 7% in May 2019 to 0% in December 2019. Clients are no longer discussing the short thesis, which largely focused on poor free cash flow generation (as well as an overhyped product in a weakening auto cycle). We think Umicore is past trough negative free cash flow, although we do forecast a slight negative €3m of FCF for FY'20e. FCF was negative €525m in FY'18.

The company will have large working capital outflows to inventory ahead of upcoming product launches. However, they should not be on the level seen in 2018 due to a more stable metal pricing environment. Cobalt pricing peaked at $95,000 per tonne in March 2018, fell to $25,000 per tonne in August 2019, and has since traded in the $30,000 range since September 2019. We see 2019 as peak capex, with 2020 also at a high level as the greenfield sites are gradually completed as the year progresses. We think Umicore can generate a €350m of FCF in 2021, based on lower capex and working capital requirements.

Why 2020 Can Bring Increased Adoption of EVs

EVs are gradually showing the following attributes:

- Increasing range of models
- Lower priced cars
- Larger variety of options (SUVs, hatchbacks, saloons, pickup trucks, etc.)

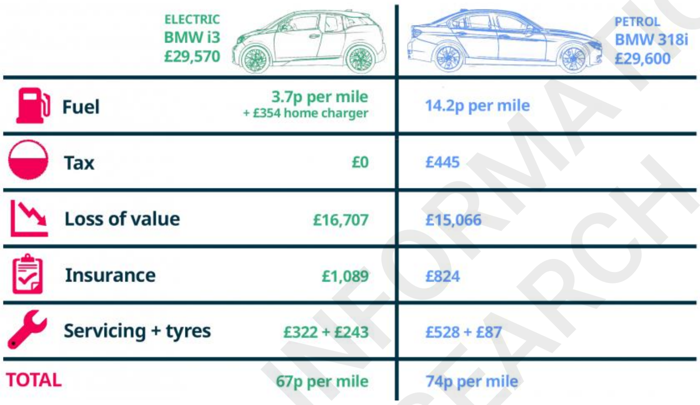
The best illustration of this is the comparison between the VW e-Golf and its replacement the VW ID3. The e-Golf has a range of 144 miles and starts at roughly £30,000 while the ID.3 is expected at ~£26,000 with a range of 205 miles.

The Hyundai Kona Electric and Kia e-Niro SUVs both offer ranges at the 280-mile mark, both costing ~£36,000. Although this still lags the range of a full gasoline tank, these numbers should be comfortably high enough for everyday city drivers. The current longest range EV on sale is the Tesla Model S Long Range model with a 375-mile range, costing ~ £80,000.

As manufacturers flood the market in an attempt to lower average CO_2 output, variety increases. Intuitively, more EV models should mean increased sales. It helps that prices of these EV models are lowering while they are also showing improved attributes (e.g. range).

However, there is still a long road ahead for widespread EV adoption. Charging infrastructure is being built out but is still nascent. Depending on the charging method, charge time can range from 9-42 hours (for the Audi e-Tron). Of course, charge time varies by model, with the Nissan Leaf charge time between 1-11 hours depending on charging method. Range of petrol cars is still far higher — the approximate range of a VW golf on a full tank of petrol is even as high as ~1,050 miles. Although EVs are still comparatively more expensive than petrol/diesel cars (including government grants), running costs are lower (Exhibit 2).

Exhibit 2: Costs of Owning an Electric versus Petrol Car



Source: Buyacar.co.uk

Valuation

On our estimates, Umicore trades on 17x FY'21e EV/EBIT. The stock is no longer cheap. Car sales are volatile, and EVs will prove no exception to this. However, the long-term story is compelling. Umicore is the largest scaled battery material producer listed globally and is a unique equity play for European investors. LG Chem and Samsung SDI, two of the battery makers with the 'best' insourcing capabilities, have signed long-term supply agreements with Umicore. We do not think battery materials will be a focus of start-up battery makers. Despite this, battery materials are valuable to the performance and range of the EV. The various combinations can determine range, power, safety, etc.

With the shares at €44, Umicore has essentially reached our price target of €47. We provide an updated price target of €53, with the rationale shown in Exhibit 3.

Exhibit 3: Umicore 2022 Sum-of-the-Parts Valuation

Division (FY'22e)	Sales	EBIT	Multiple	Valuation	Logic
Catalysis	1685	199	15	2984	Medium-term growth via shift to gasoline
E&ST	2428	437	20	8742	Global leader in battery materials
Recycling	704	174	18	3130	Unique asset driving high ROCE and margins
Corporate Costs		-52	17.67	-916	Group avg
EV Target				13941	
Forecast net debt				-1190	
Forecast market cap				12751	
Upside				**21%**	

Source: The Analyst Estimates (Completed January 2020)

On the group level, we forecast average revenue growth of 13% coupled with earnings growth of 19% over the period 2020e-23e.

Other Positive Drivers

Some technical or potentially overlooked factors on Umicore include:

- Closed-loop battery recycling: This is a unique, early-stage activity on which Umicore is collaborating with several car manufacturers (Audi, BMW). Early tests completed in December 2019 indicated the ability to recover more than 90% of the cobalt and nickel from Audi e-tron batteries. The future potential here is big, and Umicore has previously indicated that the capex required would be in the low triple-digit range.

- Increased vertical integration: Umicore highlighted at the H1'19 results that it had acquired Freeport Cobalt's refining and cathode precursor activities in Finland. We like this move to capture more of the value chain, as Umicore looks to set up a vertically-integrated battery material supply chain in Europe.

- ESG positioning: Umicore achieves the highest possible MSCI ESG rating (AAA). It has remained at this ranking since February 2016. It ranks in the top 16% of specialty chemicals companies. We think a lot of the recent share price movement has been from ESG bots buying shares and expect Umicore to continue as a leader in the ESG field.

- Only liquid EV proxy in Europe: We cannot think of a better liquid play on EVs in Europe today.

- Long-term value creation: Umicore's long-term share price chart is promising. This is a company that has continually created value for shareholders. CEO Marc Grynberg has been with the company since 1996, serving as CEO since 2008.

Conclusion

The recent share price movement gives cause to reflect. The valuation support for the investment thesis is arguably now absent. However, we do not drop the stock as we see a swathe of positive drivers on both the fundamental and technical side. The stock is still far from bubble territory and is one that can arguably become a bubble (as it had done in 2018) in today's market (ref Tesla). We recommend clients buy the stock on any warnings, weakness, or volatility. Although a smooth EV rollout is not a given, the medium-term trends are positive and we view Umicore as the winner in this non-commoditised, specialty chemicals product.

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