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PRESENTATION

Operator

Ladies and gentlemen, thank you for standing by, and welcome to the Umicore Results Call. (Operator Instructions) I must advise you that this conference is being recorded today. I'd now like to hand the conference over to your speaker today, Marc Grynberg. Please go ahead, sir.

Marc Grynberg Umicore SA - CEO

Good morning everyone and welcome to today's presentation. I will first comment on our performance in 2020 and the outlook for 2021 before reviewing the major achievements in each business group. I will then hand over to Filip who will take you through the financials. And finally, I will wrap up before handing the call over to you for any questions you may have.

Before commenting on Umicore's performance though, please allow me to say a few words about the process we have just launched in order to prepare my succession. In case you were concerned, I would like to reassure you that I am physically fit and, according to my entourage, mentally as well.

When I took over as CEO in 2008, my mandate was to bring Umicore to the next stage of development. Over the past twelve years, we have streamlined the portfolio of activities to create more focus, we have amplified research programs and accelerated growth investments. Together with my teams, we have transformed Umicore into a global leader in clean mobility materials and recycling, with a market cap which is 6 times what it was in 2008. We have now successfully completed the execution of our Horizon 2020 growth strategy and everything is in place for Umicore to keep thriving. We have talented teams, a promising technology pipeline, strong market positions and highly supportive megatrends, as well as strong financials to support our growth ambitions. So, the Board and I felt this would be an auspicious moment to prepare for my succession and I will be pleased to ensure a smooth transition in due course.

Enough said about me, let's review the highlights of 2020.

The pandemic has dramatically redefined my agenda since the beginning of 2020 with a clear priority to protect, to the best possible extent, the health of all Umicore employees. The COVID-outbreak has required the introduction of strict hygiene measures and medical protocols and we have been quite successful in preventing the virus from spreading in our sites. We have also gone the extra mile to continue serving our customers globally and I am grateful to my 11,000 colleagues for their engagement during these challenging times.

The pandemic and the resulting lockdown measures caused a huge downturn in the automotive industry, one of our main end-markets.

In **Catalysis**, we have seen extreme opposite movements during the year. In the spring, we were confronted with the closure by our customers of most car assembly lines and, in turn, had to temporarily shut down most of our catalyst plants. In contrast, we saw a sharp recovery in demand which started in China in the second quarter, took shape in other regions over the summer months and gathered pace through the fourth quarter.

While the performance in Catalysis was impacted to a significant extent by the temporary shut downs in the first half, we benefited in a disproportionate manner from the recovery in demand in the second half, due to our leading positions in gasoline technologies, particularly in China and Europe.

In Energy & Surface Technologies, market demand was also severely affected by the pandemic. In addition, market conditions in the EV battery supply chain remained depressed due to the overcapacity in China and the presence of excess inventories. Excluding inventory effects, Umicore's sales volumes of cathode materials for EVs grew broadly in line with EV battery demand, which confirms Umicore's strong competitive position in the cathode materials space.

In **Recycling**, we achieved a record performance. We nearly doubled earnings compared to 2019 with high metal prices and strong trading conditions by far the largest contributors to the increase.

Overall, Umicore achieved record earnings in 2020 and this goes to show the merits of our strategy which builds on the complementarity of our activities. It also shows the resilience and agility of our teams in the face of unprecedented conditions.

The good news really, is that the patterns we observed in the second half of last year continue to support our business now and I can already say that we are off to a strong start in 2021. We should not get carried away though, as the visibility on market demand remains extremely limited. The pandemic is not yet behind us and the experience of last year has shown that things can change very rapidly.

If we assume for a moment that the pandemic gets gradually under control and will not cause more disruptions to the economy or to Umicore's operations in 2021, we should see again an acceleration in our growth trajectory, with all business groups contributing to the growth:

In **Catalysis**, we expect to keep benefiting from our leading position in gasoline technologies, in particular in Europe and China, in an automotive market which, according to projections by industry experts, should keep recovering. In addition, we expect to benefit from the initial impact of the introduction of China VI standards for heavy duty diesel applications as well as the full year impact of cost improvements which we carried out in 2020.

In **Energy & Surface Technologies**, we see good market traction for cathode materials and we project substantial growth in our sales volumes for EVs. This volume growth should allow us to resume earnings growth in 2021, in line with the current market consensus, and this despite some 50 million euros of additional fixed costs linked to our growth investments and with margins continuing to reflect pricing pressure.

In **Recycling**, we expect moderate volume growth and a continued very favourable supply mix. In addition, metal prices could, once again, boost our performance. You will have seen that certain metal prices have continued to surge since the end of last year and, if metal prices were to stay, overall, at their current elevated levels throughout 2021, Recycling earnings would increase very significantly from the record levels of 2020.

All in all, current trends certainly bode well. However, it is early in the year and let's bear in mind that the degree of uncertainty remains high.

Despite the pandemic, or perhaps because of the pandemic, we have seen support for greener policies increasing, whether related to cleaner mobility or the need for a circular economy. This was evidenced, for instance, by the green recovery plan in Europe or by the step up of the NEV penetration targets in China. In other words, the regulatory drivers which underpin our growth strategy continue to get stronger. Against this backdrop, our motivation to maintain the strategic course of action is very high. In particular, we have pursued the construction of our cathode materials plant in Poland and it will start production towards the end of the year. This additional capacity will come in timely to serve the growing EV demand in Europe and the growing needs of our customers. We have also pursued the ramp up of our fuel cell catalyst production in Korea and the expansion of catalyst production capacity in China for light and heavy duty applications. In Recycling the focus of our investments in the short and mid-term is to keep improving the environmental and safety performance of the Hoboken plant. Finally, we have continued to increase our research & development efforts in clean mobility materials and in recycling, both in terms of product and process technologies.

At the same time, of course, I believe that we have responded most effectively to the challenges caused by the pandemic outbreak. As I mentioned in my introductory remarks, the priority is to keep everyone at Umicore healthy and I would like, once again, to thank our medical staff for having ensured safe working conditions and thank all colleagues for having swiftly adopted the required precautions. We have also managed to diversify our sources of funding and increase available cash — Filip will comment on that later. Finally, the pandemic has forced us to adjust to rapidly changing market dynamics which resulted in a streamlining of certain operations and an impairment of certain assets.

Let's now turn to the business review. The slide recaps the key figures for 2020 which are commented in full detail in our press release. I therefore propose to turn immediately to Catalysis.

The automotive market was severely hit by the COVID-outbreak and global car production contracted by 18% in 2020. The graphs show the market development, month by month, against 2019 and you can clearly see how deep the production cuts were in the first half across regions. The graphs also show that the recovery started earlier and was most pronounced in China.

Against the backdrop of an 18% market contraction, our revenues in Catalysis decreased by only 7%, as our leading positions in gasoline technologies allowed us to benefit in a disproportionate manner from the

market recovery in the second half, in China and Europe in particular. You may recall that I mentioned a year ago that Umicore had become the leading supplier of light duty catalysts in China and the benefits thereof are increasingly visible. In Europe, we continue to benefit from the decline of diesel car sales in the mix. Revenues were also supported by strong demand for our China V heavy duty catalysts and our fuel cell catalysts. On the other hand, the stationary catalysts business, which is mainly a project driven business, suffered from delays due to the pandemic.

Within the Catalysis segment, I would like to underline that the business unit Automotive Catalysts showed tremendous resilience. Its revenues and adjusted EBIT for the whole year were only moderately below the levels of 2019. After a performance in the first half which reflected the impact of the pandemic, the market recovery and our outperformance, combined with the effect of cost savings, allowed us to achieve record revenues and earnings in the second half of 2020.

Turning now to EVs, we see that battery demand expressed in GWh, which is the relevant metric to look at for battery materials suppliers, grew by 17% in 2020. This market growth was driven by increasing demand in Europe where the new CO2 regulations are supporting a faster penetration of electrified vehicles. The number of new EV models being launched in the region or in the pipeline is truly impressive. It is also worth noting that plug-in hybrids remain very popular in Europe where they make up half of EV sales. In China, battery demand remained subdued during the better part of 2020 and saw an improvement at the end of the year only. After years of strong growth and a doubling of battery demand for EVs in 2018, the Chinese EV market has shown very limited growth in 2019 and 2020, unlike what was anticipated.

The cathode materials industry grew somewhat less than the 17% increase in GWh for EVs due to excess inventories in the value chain. We believe that these excess inventories have now been depleted. Taking into account the impact of inventory corrections, we estimate that Umicore's sales volumes of cathode materials for EVs grew broadly in line with the market, despite a somewhat unfavorable platform mix. This performance was supported by strong demand in Europe where we doubled our sales volumes in 2020, albeit from a small base. In contrast with the growth in EV applications, cathode materials demand for energy storage systems and portable electronics was very low.

We recorded lower revenues in the Cobalt & Specialty Materials activities due to the pandemic and in Electro-Optic Materials due to low demand for our products used in fiber optics or satellites. The Electroplating activity, now renamed Metal Deposition Solutions, benefited from good demand levels from the electronics industry.

Margins in E&ST were affected by the underutilization of our cathode materials capacity in China and pricing pressure, as well as higher fixed costs following recent and ongoing expansion programs.

Our Recycling activities did benefit in 2020 from an exceptionally supportive metal price environment, especially for PGMs. You can see on the graphs that rhodium and palladium prices had a great run in 2020, despite lower demand from the automotive industry in the first part of the year. New, more stringent emission norms require higher PGM loadings and the shift from diesel to gasoline is exacerbating the

tension for rhodium and palladium. We also observe that new supply sources can hardly keep up with the higher market demand and the recovery of automotive demand has pushed prices to new highs.

For the same reasons, price volatility was extremely high in 2020 which has resulted in a remarkably high contribution from our trading activity. Finally, demand for gold and silver investment products has remained very high, probably due in part to the crisis context as these metals continue to be seen by investors as a safe haven.

I would also like to point out that metal prices are even higher today and, in certain cases, much higher than the average prices of 2020. In addition, certain hedges that were entered into before 2020 and which meant that we did not fully benefit from the price rally in 2020, have rolled off in the meanwhile.

Metal prices constituted the largest factor behind the increase in revenues and earnings in Recycling in 2020. We also performed well volume wise, despite the operating constraints aimed at preventing the virus from entering or spreading in our sites. We had a higher availability of the Hoboken smelter which underwent a regular maintenance shutdown in 2020, compared with an extended shutdown in 2019. The supply environment also continued to be favorable with ample input of recycling materials, in particular PGM-bearing spent catalysts.

Finally, the Precious Metals Management unit benefited from high price volatility and generated exceptionally high earnings.

At this point, I would like to hand over to Filip to cover the financials.

Filip Platteeuw Umicore SA - CFO

Thank you, Marc and good morning everyone.

Marc has already provided you with the group's key financials. This slide puts the adjusted operating earnings in a historical perspective. Despite the challenging business context and in particular the downturn in the automotive sector in the first half of the year, Umicore managed to generate record adjusted earnings and margins due to its diversified and unique business portfolio. As has been the case in past economic crises, the Recycling business group and its metal price sensitivity once again demonstrated its counter-cyclical characteristics with its stellar performance, more than offsetting lower earnings in Catalysis and Energy & Surface Technologies. The effect from higher metal and trading results in Recycling pushed group margins to a new record. When focusing on the second half performance, next to Recycling, also Catalysis contributed to year on year growth and even exceeded pre-COVID margins on the back of cost savings and a strong volume recovery. Operating cash flows, expressed here as adjusted EBITDA, reflect the same trends. When stripping out the 24 million euros year-on-year increase in depreciation charges, adjusted EBITDA increased 7 % to reach a new high.

In our first half year release, we referred to the particularly pronounced operating leverage effects at play: then a negative factor in Catalysis and E&ST and a positive driver in Recycling. In the second half of the year, the leverage effect in Catalysis reversed and turned positive through a combination of business recovery and cost saving effects, including some initial benefits from the restructuring measures of the

first half. As Marc mentioned, these underlying earnings drivers are expected to persist going into 2021. By contrast, in Energy & Surface Technologies the negative lever effect accelerated in the second. Finally in Recycling the margin tailwind of the first half continued into the second half, increasing overall group margins.

Reviewing Umicore's full P&L, the 5 % higher adjusted operating result translated into a 3 % higher adjusted net group result. Continuing the trend of the first half, net finance costs increased on a full year basis, mostly on the back of higher gross financial debt. For example the interest due on the 390 million euros US Private Placement debt payable as from September 2019, was now accounted for a full year. Also, the financial charge related to the 500 million euros convertible bond issued in June and which consists of the discounted value of the implied conversion rights and the amortized transaction costs were newly accounted for.

The adjusted tax rate was stable at 24.2 % resulting in flat adjusted tax charges year on year despite some substantial changes in the underlying regional result distribution.

The most significant impact on the full P&L comes from 237 million euros adjustments to EBIT. This includes 72 million of charges already recognized in the first half, leaving 165 million for the second half which is somewhat higher than the previous guidance of some 150 million euros.

This next slides provides some detail on these adjustments. While in the first half of the year these charges were concentrated in Catalysis, the second half items mostly relate to the E&ST and Recycling segments. Most of these adjustments find their origin in Umicore's response to the COVID-19 crisis and the resulting changes in business context in some business units. Over half of the charges are restructuring-related as we consolidate activities on fewer sites in the Automotive Catalysts and Cobalt and Specialty Materials business units. Close to the full charge in Recycling consists of a 50 million euros provision to establish a green zone neighbouring the Hoboken plant as already explained by Marc. As concertation with the city and the residents continues, this best estimate may be updated going forward. In Energy & Surface Technologies, the bulk of the charges relate to the beforementioned restructuring in Cobalt & Specialty Materials, including a non-cash value impairment following the sale of part of the unit's rightsized permanent cobalt inventory. Of the total full year EBIT adjustment of 237 million euros, close to 150 million has a non-cash nature and most of the remaining 90 million will be cashed out in future years. After accounting for tax effects, the impact of these adjustments on Umicore's net profit amounted to 192 million euros.

Despite the challenging business context in 2020, Umicore's operating cash flows were the highest in years. Cashflow from operations before changes in working capital were up 13 % to 707 million euros as is plotted on the top line of the top graph. Cash working capital further increased in the second half, growing 104 million euros over the full year, driven by higher metal prices and PGM prices in particular. Catalysis saw the highest increase in working capital with an acceleration in the second half. Working capital in Recycling also grew but to a much lesser extent than Catalysis while Energy & Surface Technologies reduced its working capital needs. The working capital trend for the current year will also depend to a large extent on the prevailing metal prices.

Cash spent on capex and capitalized development costs amounted to 435 million euros compared to 588 million euros over the same period in 2019. This reduction reflects the decision following the COVID-19 outbreak to restrict spending on non-strategic projects. As in 2019, E&ST accounted for approximately two thirds of capex with the Rechargeable Battery Materials' greenfield plant in Poland as key project. For 2021, we would currently guide for an increase in group capex from the 2020 level.

Finally, these combined flows resulted in a positive net free operating cash flow of 168 million euros compared to a net cash out of 39 million in 2019.

As you can see from the chart on the next slide, this free operating cash flow was sufficient to fund the financial and tax cash outs as well as the interim dividend payout, resulting in a roughly stable net financial debt compared to end of 2019.

This stable net financial debt corresponds to a solid leverage ratio of 1.8 times adjusted EBITDA for the group. Next to stabilising the absolute level of net indebtedness, we took the opportunity in 2020 to further strengthen and diversify our sources of funding, amongst others by securing two important new long-term funding instruments: an eight-year loan with the European Investment Bank of 125 million euros and a 500 million euros five-year convertible bond.

This concludes my section and I hand back over to you Marc.

Marc Grynberg Umicore SA - CEO

Thank you, Filip. Before opening the line to your questions, I would like to recap the key messages of this morning's call. I will not rehash how the COVID-19 outbreak has complicated our lives and affected the global economy. I am simply happy that the precautionary measures which we have taken early enough have proven very effective at protecting the health of my colleagues at Umicore. I am proud that we have equally well managed to keep serving our customers and generated our best ever financial performance and I expect an even better performance across businesses in 2021. Proud also to have maintained the strategic course of action and successfully demonstrated the merits of our Horizon 2020 strategy. Everything is in place for the company to keep thriving and the Board and I felt that this would be an auspicious moment to start preparing for my succession.

With this, I would like to open the floor to your questions and I hand over the call to our moderator, Valeria.

QUESTIONS & ANSWERS

Operator

(Instructions)

And the first question comes from Sebastian Bray. Please unmute yourself and go ahead.

Sebastian Bray, Berenberg

Good morning and thank you for taking my question. If Umicore is moving back to a more volume centric strategy in China, is the greenfield expansion that was stopped in 2020 back on the menu and where are these incremental volumes primarily going to be coming from in the year 2021? Is there still spare capacity in Korea or will it have to come from China? Thank you.

Marc Grynberg Umicore SA - CEO

The fact is that we expect much better volumes in 2021 because of the fact that the models that we serve are showing very good traction now from a regional distribution point of view. The volume growth is going to be spread across Europe, China and Korea. Korea to a more limited extent because there we have some lower available capacity. We expect quite a bit of a recovery in China in terms of demand for our products and in terms of sales. But not to an extent where we will be able to utilize the full capacity in China. And finally, we see the excellent traction in Europe and towards the end of the year or new plant in Europe will also come onstream and start producing for the European market.

Operator

OK, thank you. The next question comes from Adam Collins. Please ask your questions.

Adam Collins, Liberum

Yeah hello everybody. First of all, can I congratulate Marc on 25 years of service. The business has certainly been transformed during this period so like to offer you my thanks for some great service. I had one question in relation to the structural issues in the non-automotive area of cathode materials. Does NMC have a future in utility scale? And then on the portable electronic side, could you address whether LCO is a commoditized space now?

Marc Grynberg *Umicore SA - CEO*

So let me start with the LCO, which indeed, as you pointed out, is a commoditizing market and we have clearly de-emphasized LCO in our development programs as well as in our capacity allocation plans as our focus clearly has moved to automotive applications where there is more room for differentiation. And today in energy storage applications, the picture is somewhat different. NMC has a role to play there it is one of the technologies which is being utilized. So one of the mainstream technologies in ESS, and we

expect that it will continue to be the case. However, it's a project driven business in which the patterns can be somewhat erratic indeed, so I wouldn't extrapolate too much from the fact that it was very low in

2020 compared to prior years. I think it's a business that will continue to have ups and downs and but is for us a good business, a good application and again NMC has definitely a role to play there.

Adam Collins, Liberum

OK, thank you. I'll just clarify the first point about portable electronics. So, LCO is challenged. Do you have an NMC for portable electronics or is that also a market you're going to de-emphasize?

Marc Grynberg Umicore SA - CEO

NMC for portable electronics or portable applications was, a long time ago, one of the outlets for Umicore product so, but that's something that has been de-emphasized already. A longer while ago because of the the focus clearly shifting to automotive applications and the developments in automotive require a lot of resources and we want to be sure that we have the right critical mass and the right focus.

Operator

Thank you, Adam. Our next question is coming from the IR inbox from Charlie Webb from Morgan Stanley. And the question is: "How sustainable do you believe the H2 margins in Catalysis are? Would you expect some normalization from this very high level in 2021?

Marc Grynberg Umicore SA - CEO

Good morning Charlie. It's a bit early in the year to talk about the margins in any business because there is still quite a level of uncertainty regarding demand patterns. However, with the caveat that if the pandemic does not cause new disruptions to the market, I would expect indeed the higher levels of margins which we achieved in the second half of last year to be more or less so sustainable. Why did we have such an improvement? First of all, because we have completed a certain number of cost improvement programs, we have streamlined operations and launched successful operational excellence initiatives. So you have cost improvements which are definitely sustainable. And secondly, we have a very supportive mix effect, which indeed is today set to continue throughout 2021. So I would say again with the caveat that I've mentioned about the uncertainty and the limited visibility that we have today, I would say that more or less yes, these margins are sustainable.

Operator

He also has a second question in Energy & Surface Technologies: "Can you help us better understand what you're seeing in the underlying cathode and EV markets around pricing technology and the increase use of LFP and, in particular, what you expect from Europe in 2021?"

Marc Grynberg *Umicore SA - CEO*

So that's a very comprehensive question, covering many, many bases and many important aspects of the market evolution in battery materials. So first of all, I expect a continued strong traction in Europe. There is little doubt about the amazing efforts that are being carried out by automotive makers to bring new electrified models to the market driven by the impact of more stringent CO2 regulations and a change in consumer mindsets as well. So I expect very strong traction in Europe and strong growth. And that's why I mentioned in my remarks that that the new capacity in in Poland will actually come in timely to serve the growing needs of our customers in the region. You will also recall that we serve to a certain extent, the European market through our facility in Korea, so that will have to continue for a while. In terms of other market dynamics, I would say that I expect no change in 2021 in terms of pricing environment, so pricing pressure continues to be very much present. I expect no real change in terms of margin configuration, I mean give or take a few basis points which are somewhat difficult to predict but other than that, I expect a certain continuation in terms of both pricing and margin context, and the real difference for us will come from the additional volumes. Also in terms of margin, you have to bear in mind that we continue to add significant fixed costs to our cost base as we continue to expand. I mean the construction of a new plan to start up a new plant implies additional D&A charges, significant startup and qualification costs and we thought it would be useful to quantify those and that's why we have mentioned the € 50 million of additional fixed costs to be taken into account.

Now let me say a few words about the technology development. Actually, what we described a year or two years ago already is clearly materializing. There is a gradual trend to increase nickel content in the cathode chemistry today. The vast majority of the market is what we call a mid nickel chemistry market but higher nickel compositions are starting to take a greater proportion of the market, and this gradual evolution continues along the lines that we had anticipated a year or two ago.

LFP is gaining somewhat ground in China. Clearly you have seen that some of the best selling models in China in the course of 2020 were low speed, low range, low cost cars using LFP. So I think that, as I mentioned a year ago, or even more recently, that LFP will have a role to play but I see it as a niche chemistry in a way, because of the intrinsic limitation it has in terms of weight, in terms of range, in terms of overall performance. Clearly for lower cost cars with lower range requirements and low speed requirements, that's certainly a chemistry that can be considered. Now this being said, and sorry to offer a long answer to your question, bear in mind that today the LFP chemistry is mostly using idle capacity spare capacity which exists in China, so that may also distort somewhat the cost for the price comparisons and if at a certain point in time capacity would have to be built to produce LFP this may have an impact on the price comparisons and we remain convinced that NMC and higher nickel NMC will continue to be the mainstream whether it's an NMC or NCA. I mean this family of technology will remain the mainstream because it offers a unique tradeoff between performance, range, safety and all the

parameters which are important for the lectric vehicles to be successful.

Operator

The next question comes from Wim Hoste. You can unmute yourself.

Wim Hoste, KBC

Yes, good morning I would spend like to spend my question on rhodium please. You appear to have made some hedges on rhodium while in the past there has not been a paper market for that. Can you maybe elaborate on this? The counterparty, was it just a financial party or someone who had some spare rhodium and is there the establishment of a rhodium hedgeable market for you now going forward. Can you maybe elaborate on that?

Filip Platteeuw Umicore SA - CEO

I'll take that question. So unfortunately we cannot go into too much of details. I think the important thing is that we felt we should say that we have indeed hedged a minor part. I have to emphasize a minor part of the volume exposure in 2022-2023 through forward contracts. So this is with individual bodies indeed. I think the importance in a way is that you have counterparties that at today's record rhodium prices are willing to step into forward contracts for 2022 and 2023, so a minor part of that exposure is hedged. You're right, we typically in the past we have not entered into hedges for rhodium, but obviously given the current pricing context, we felt it was appropriate, again emphasizing that it's only a minor part of our expected exposure. But on the details, unfortunately, we cannot provide you with more information. This being said, I would like to add that it we're talking about physical hedges, so it's not the paper hedges. There is still no paper market for hedging, so the counterparties are industrial users of the metal.

Operator

Thank you, the next question comes from Jean-Baptiste Rolland. You can unmute yourself.

Jean-Baptiste Rolland, BAML

Good morning, I wanted to better understand the guidance that you're providing in Energy & Surface Technologies, and especially the fact that you're basically comfortable with consensus for next year. I'd like to understand what sort of assumptions around Cobalt or Nickel you have made around that guidance, as we have seen that it is, it can be a pretty substantial part of or at least bring some benefits. And given whether prices are today, that would be helpful if that's something that you could clarify, thank you very much.

Marc Grynberg Umicore SA - CEO

Good morning. What we see the best assumption that we can use is the current pricing in a way which is should reflect everything that the market knows about possible developments on the supply and demand side, and so that's what we're using. It's based on what we currently see in the market.

Jean-Baptiste Rolland, BAML

OK, thank you very much can I just follow up on this? Just a quick one on the Rechargeable Battery Materials in China, as you mentioned continued pricing pressure. There are also a couple of data points that we're seeing pointing towards price increases. However, it's a little bit unclear whether that's completely related to increase in raw materials or whether there is also an improvement in the underlying dollar margin and I was just curious to see if this is something that given development in volumes etc that that you're benefiting from?

Marc Grynberg Umicore SA - CEO

That's a good observation and I can clarify that the price developments are related to the metal price content and not the underlying. I would say that what we call technology premium, remained pretty much unchanged compared to your 2020, so it's more I would say related to the cost of the raw materials. So no benefit really for us, or possibly for others, because typically we pass that through to our customers.

Jean-Baptiste Rolland, BAML

Very clear, thank you very much Mark and best wishes for the future. Thank you.

Operator

Thank you, the next question comes from Mubasher Chaudhry. You can unmute yourself, go ahead.

Mubasher Chaudry, Citi

Thank you for taking my questions. Just a quick one around the timeline for the succession plan. Just some comments around how long that's like to take and whether you're looking for candidates internally or externally. Just some comments around that would be helpful. And just to follow up on one of the questions from earlier, how are you thinking about that greenfield capacity in China? Is that still planned? And when do you plan to get to the previously announced target of 100 GWh of capacity?

Good morning Mubashar. The timing of the succession is not yet known, otherwise we would have communicated about it. And today we have just started the process and the search for a successor, so difficult for me to estimate today how long it will take for the board to appoint a successor and for the successor to be in place. Really difficult to estimate, but we're not talking in days I would think we're talking in months. But how many months is absolutely difficult to estimate today.

Will internal candidates candidates be considered? Yes, it is meant to be run as a dual track process and so yes it will be open to internal candidates as well.

In terms of capacity, I'm not sure I got the full extent of your question. Our greenfield in China is going to be better utilized in 2021 than it was in 2020. Clearly so, however, it will not yet reach full capacity utilization. The market in China is only showing the first signs of recovery at the very end of 2020 and is still trailing a little bit compared to the levels of traction that we see in in Europe, at least for the models that we do serve in in that region. So it will take a bit longer for us and will take us beyond 2021 to reach a much more optimal capacity utilization in that greenfield site. Now on the overall GW hours target, I would prefer to wait until we provide some more quantified guidance, typically at the end of April to update the market on this specific aspect.

Operator

Thank you, the next question comes from Jaideep Pandya. Please go ahead.

Jaideep Pandya

Best wishes to Mark you did deliver better than what you said in 2015 for 2020. So well done. Just a very simple question what is Umicore's defence strategy. So you've now announced you want to step down. There is no beyond 2020 sort of mid term target. So if there is a takeover offer or there is a let's say hostile takeover offer how do you defend yourself with in a interim CEO situation and no mid term targets?

Marc Grynberg *Umicore SA - CEO*

Good morning Jaideep, thank you for the kind words. I would like to maybe clarify that I don't see myself as an interim CEO. It may be a little bit of a weird situation of announcing a succession process without the other successor being announced, but actually it's our duty to make this announcement so early in the process. It's in my opinion, a legal obligation if a company launches such a process. We have a duty of informing the market, it's a matter of sound governance and plus it is also the tradition of Umicore to communicate openly with its stakeholders on important decisions and important moments about the company. This being said, I don't see myself as an interim CEO. We have a growth plan that is still in place and we have enough on our agenda in terms of growth investments, research programs, qualification programs. So Horizon 2020 has reached a milestone in terms of completion. Because 2020 is

behind this by definition, however, the underlying content of Horizon 2020, which is the spectacular growth in clean mobility materials and in recycling, continues to be exactly what we are pursuing today and, in a way, the best of that is yet to come. If you look at the electrification of the car industry, we're still at, let's say, 5-6 seven 8% of penetration, which means that there is still more than 90% to go for the industry. So we know exactly what we have to do in the coming weeks, months, years. Now, of course, it would be best if we could also spell out how this translates into financial targets for the mid term and you will have to bear with us a little while a little longer in that respect.

Jaideep Pandya

Just to follow up, there's been a lot of changes on a divisional level as well. Considering that, obviously with your announcement like you know, should we worry at all? Obviously there's been changes on recycling. You've shuffled your chairs around in terms of division heads as well so in light of your comment about internal an external search. How is that going to fit when a lot of the new leadership in divisions is also relatively new?

Marc Grynberg *Umicore SA - CEO*

So I've just realized before I go that I forgot to answer your question about defense. So or defense has always been at Umicore to make sure that we are properly valued and that our valuation reflects what we do with our potential in terms of growth or profitability, and I think this is in a way the first line of defense that the company needs to have: to be properly valued. So that means for us having a compelling strategy, having a compelling execution of the strategy, and having a clear and open communication to the financial markets to support all of that.

Is there a risk a more of a risk today for a hostile approach than in the past? Yeah, difficult for me, in a way of we've had that question time and again, and we've had that question also at times when the share price was much lower than where it is today, so difficult for me to offer a different or a better answer than the answer we have always given. Which is we need to make sure we have the best strategy in place that we thrive, we deliver and that we are correctly valued.

Now, in terms of management changes, no, there is nothing to be worried about in a way, because, first of all, reshuffling of responsibilities is something we do once in a while or at regular intervals and if you look at the people around the table, the average tenure is pretty long. And in recycling and Energy & Surface Technologies we have Umicore executives now taking over with a very long and deep experience and knowledge of the business. So there is absolutely nothing to be worried about and bringing also some new talent and fresh talent to the management board, as we have also recently announced, is a good thing for the company. I mean it's part of constant rejuvenation process that a leadership team needs to to go through and I have to say that at Umicore over the past 20 years, without willing to sound presumptuous, we have managed to combine a I would say energy - rejuvenation with experience by bringing people early in their career to high levels of responsibility. Which means that by

the time they reach the age of 45 or 50, they have already accumulated along leadership experience and a deep knowledge of our markets in our businesses. So I'm not worried and I'm actually quite proud about the manner in which I have shaped the management team at Umicore and continue to do so, and so, no worry, we're all in good shape. We know what we have to do and we're all extremely engaged and passionate about what we do at Umicore.

Operator

Thank you and the next question comes from Chetan Udeshi. You may now mute yourself. Please go ahead.

Chetan Udeshi, JP Morgan

Can you give us some color on what have you assumed in terms of Jim growth in cattle business to offset some of the headwinds you mentioned. That would be the first question, and second question was. Was more on, you know these recent announcements by auto OEMs that they're cutting productions because of semiconductor shortages. So if any comment update on what you see in terms of impact from that yet in your volumes? And a related question would be you know based on what you might have shipped in Q4 in the Catalysis business, do you believe there was a bit of restocking by OEMs ahead of the actual production by them? And can you quantify that at all? Thank you.

Marc Grynberg *Umicore SA - CEO*

On the volume assumptions in cathode materials I don't want to be specific and offer a figure or percentage at this point in time. I prefer just to stick to what we wrote that it's going to be a substantial volume growth indeed. But basically, yeah, we are well positioned and the market is showing good signs of traction and so are volumes for Umicore. But I prefer to not be more specific than, that at this point in time. It's going to be substantial in a way to be able to offset some of the headwinds and additional costs that I've mentioned, and that's why I thought that's another reason why we thought that it would be useful to quantify these additional costs so that you can also appreciate how much more volumes and we need to sell and how much more revenues we need to generate to grow the earnings.

In terms of the semi semi conductor issues or shortages which are affecting the car build rates. Yes, clearly this is a factor in this first quarter of the year. But in a way this is relatively marginal compared to the overall recovery which we see in the automotive industry which took shape in the second part of last year except in China where it took shape in the second quarter already of last year. And our volumes continue to be strong. I mean, we had very strong volumes in Q4 and so the two questions that you have raised about restocking and disruptions are a little bit related, because in a way, I don't think there's been a lot of restocking because the volumes continue to be strong for now, and so it doesn't look like the Q4 trend was an, I would say, isolated event because of restocking and the semi conductor disruptions are not causing a major disruption to us and we continue to see a significant growth in 2021 in that business.

Operator

Thank you and the next question comes from Ranulf Orr. Please go ahead.

Ranulf Orr, Redburn

Lastly, I just have one question on pricing in NMC. Just wondering if you could be a bit more specific as to how much of that effect is coming through? Are you seeing broadly average price declines across your entire book of business? Or is it sort of related to some of your shorter term contracts in China? Or is it creeping into the long term contracts too?

And then my second question, if I may, is just on the rest of E&ST, excluding RBM. If you were to sort of lump CSM and the rest of it together, what kind of profit growth sort of are you expecting for next year? Thank you.

Marc Grynberg *Umicore SA - CEO*

So first of all, on the pricing. Clearly the some of these are shorter term exposure, in particular China continues to affect the overall mix and our margins. So I don't see improvement in the short term in that respect, because the overcapacity in China continues to be there. And is probably likely to affect the market for another couple of years, so I don't see imminent improvement in that respect.

Next to that, clearly the automotive industry is putting pressure on prices across the value chain as part of the drive to reduce the cost per kWh and make electrified vehicles more affordable. So that's a long term trend which doesn't come as a surprise which was anticipated and is indeed materializing in the mid and long term contracts and up to the industry to figure out through technology improvements or process improvements etc. how to mitigate those effects and and make up for that margin wise. But these are two trends that indeed are playing out in the cathode material space as in the rest of the battery materials value chain.

On the other business units, I mean some of these units had had a hard time in 2020. Cobalt & Specialty Materials, clearly, but Electro Optic Materials as well, and so these units are set to do better in 2021. In line I would say with the overall economy.

Ranulf Orr, Redburn

Great thank you and just one quick follow up. If I may just go back to pricing you see? Are technological advancement and the move to higher grade nickel materials and more sophisticated materials a reasonable offset to price deflation over the medium term?

Well, first of all, there is always a move to more sophisticated grade materials. Also in the mid nickel chemistries. So as I've explained in the past, it's not because you increase the nickel that you move to higher grade.

Within each type of chemistry you have higher grade and lower grade materials with more sophistication, more properties, etc. And there is a high degree of customization for each type of chemistry. Actually the path that we pursue, which is most important in terms of margin or pricing margin improvement in a way, is continued process improvements on one side and scale effects.

Operator

Great thank you, thank you. We're going to conclude the Q&A session and I hand over to Marc Grynberg for his final conclusions.

Yes, thank you a Valeria. I suppose that there will be more questions and we will be happy to follow up with you and to take care of your questions offline. Don't hesitate to reach out to our Investor Relations team as usual. I apologize again for the technical hiccups, which have probably prevented us from taking one or two more questions this morning, but will have a chance to reconnect in the next few days and continue the dialogue. In the meantime, I would like to thank you for attending the call this morning and I wish you well for the rest of the day. Thank you and bye bye.