Good day, and welcome to the Umicore Half Year Results 2018 Conference Call. Today's conference is being recorded. At this time, I would like to turn the conference over to, Marc Grynberg, CEO. Please go ahead, sir.

Marc Grynberg - Umicore S.A. - CEO & Executive Director

Thank you. Good morning, everybody, and welcome to the presentation of Umicore's results for the first half of this year. I will cover developments in the business and the outlook for the full year before handing over to Filip who will take you through the financials. I will then wrap up before opening up the call to you for any questions that you might have.

Looking first at the highlights, I can say that we produced a really strong performance in the first half with
revenues up by 23% year-on-year, while recurring EBIT was up by 34% and the return on capital employed reached 16.6%.

Revenues and earnings grew across all 3 segments with Energy & Surface Technologies generating the most pronounced increase, mainly as a result of the volume growth in Rechargeable Battery Materials. I will elaborate on the business developments in the main market segments in a moment.

We are continuing to execute our growth strategy consistently and earlier this year we launched a new phase of acceleration in terms of investments which would entail the construction of 2 greenfield production sites for cathode materials: one in China, near the existing production facility; and one in Poland to serve in the fast emerging EV market in Europe.

We are also continuing to streamline our portfolio and divested the European activities of Technical Materials in January of this year. This divestment followed the sale of the Zinc Chemicals' business unit at the end of 2016 and more recently, the sale of Building Products and the large area coating activity of Thin Film Products, thereby completing the portfolio realignment announced in 2015.

With this realignment, we have simplified the organization, which combined with selected acquisitions made in the past couple of years, has sharpened our focus on clean mobility materials and recycling. One of the highlights of the first half was the highly successful placement of 22.4 million new shares in February, whereby we raised close to EUR 900 million of new equity which will be utilized to fund our ambitious growth projects.

On a cash return perspective, the interim dividend amounts to EUR 0.35 and consistently with our dividend policy, represents half of the annual dividend, which was declared for the full year 2017.

Looking ahead now, I expect full year recurring EBIT to be in the range of EUR 510 million to EUR 550 million which is fully in line with the guidance that I provided at the end of April and assumes that current market and macroeconomic conditions continue to prevail. As I also mentioned back in April, I expect the 3 business groups to contribute to the year-on-year growth in revenue and earnings with Energy & Surface Technologies accounting for the vast majority of the increase.

In Catalysis, I expect the demand patterns that we observed in the first half of 2018 to be broadly unchanged in the second half of the year with a mix in Europe that should continue to favor gasoline engines. The second half should also see an introduction of new gasoline platforms that we have recently won. And as a result, revenues are set to increase, both compared to the second half of last year and on a sequential basis.

In Energy & Surface Technologies, I expect sequential revenue growth as demand for our cathode materials continues to increase and new production lines will be ramping up in our existing production sites in Korea and China. Market trends in the other activities are expected to remain broadly unchanged in the second half of the year, although the revenue trends will be likely to reflect the usual seasonality.

In Recycling, revenues in the second half are expected to be higher, year-on-year as a result of the capacity ramp-up in Hoboken and excluding the contribution in the second half of last year of the Technical Materials' activities in Europe, which has been sold in the meantime. The maintenance shutdown in Hoboken is expected to take place towards the end of the year.
Let's now turn to the business review and comment on the main developments in each of the 3 business groups in the first half of the year.

In Catalysis, revenues were up by 12% and recurring EBIT by 7%. In Automotive Catalysts, the growth reflects a higher contribution from heavy-duty diesel catalysts in Europe and China. It also includes the contribution of the heavy-duty diesel and stationary emission catalyst activities acquired from Haldor Topsoe at the end of last year as well as one additional quarter of contribution from the Ordeg business whose consolidation started in the second quarter of 2017. Market trends in the passenger car segment were mixed in the period as the continued growth in Europe and China and the recovery in South America were offset to a large degree by a market slowdown in North America and Korea. Overall, car production grew by 1.7% year-on-year and Umicore outpaced the market growth. In Europe, diesel engines have continued to lose ground against gasoline engines and their market share in the first half was 39%, well below the levels of a year ago. Against this backdrop, we performed broadly in line with the market volume-wise, while the revenue development did not match the volume growth due to the mix effect. As we explained during the Capital Markets Day in June, Umicore will benefit from this changing mix in the medium and long term as we have stronger market positions in gasoline and electrified passenger cars than in diesel. In North America, the introduction of newly-gained platforms improved our mix and allowed us to outperform the market. In South America, we benefited from the sharp recovery of the Brazilian market. Once again, we outperformed the market growth in China as a result of our strong positioning, both with global and domestic brands. We also continued to gain traction with Japanese auto producers globally. Overall, Umicore's sales in Asia progressed really well again, despite subdued demand in Korea.

In the smaller Precious Metals Chemistry activities, the revenue growth was driven by positive volume developments across applications. It is also worth noting that the integration of the metathesis catalyst business acquired from Materia in January of this year, has started. On the next slide we see in graphical form the revenue and recurring EBIT developments which I have just commented.

Let's now look at developments in Energy & Surface Technologies where growth was outstanding. Revenues increased by 63%, while recurring EBIT doubled from the levels of the first half of last year. Electrified vehicles continued to penetrate the market and the sales of full-electric and plug-in hybrid cars increased by some 60% year-on-year. As anticipated, the growth was most pronounced in China and Europe. I indicated on previous occasions that our successful market positioning across a broad range of customers and car models would allow us to capture a disproportionate share of the growth in this market. And that triggered our decision to add capacity as fast as possible. The sales of Umicore's NMC cathode materials in the first half has confirmed that we are outpacing the market and that our investment decisions were fully justified and well timed. In terms of investments still, I would like to remind you that some additional production lines for cathode materials will be commissioned in the second half of this year in our existing plants in Korea and China. Also, as we announced earlier this year, we will build large greenfield production facilities in China and Poland to cope with the growing demand for our materials and the preparation of these new investments has started.

Demand was also higher both for Umicore's preparatory high energy LCO materials using high-end portable electronics and for NMC cathode materials used in energy storage applications. The growth in
the segment was also driven to a good degree by the Cobalt & Specialty Materials' business units where we achieved higher sales volumes across applications. We also benefited from favorable market conditions and a supportive pricing environment, in particular in the refining, recycling and distribution activities. I would like to add that we have completed the upgrade and expansion of our cobalt refinery in Olen, Belgium and the facility was commissioned in June.

Although its absolute revenue contribution is smaller, we also recorded good growth in the Electroplating business which saw strong demand for its innovative precious metals based electrolytes used in portable electronics.

By contrast, the revenues of Electro-Optic Materials decreased year-on-year due to subdued demand for substrates for use in the space photovoltaics and LED.

So overall, a whopping performance in Energy & Surface Technologies, which contributed a little more than 40% to the group's recurring EBIT as we continue to reap the benefits from our strategic choices.

In Recycling, we divested the European activities of the Technical Materials' business unit in January of this year, which somewhat distorts the year-on-year comparisons. On a like-for-like basis, revenues and recurring EBIT for the segment were up, respectively, by 5% and 13%.

Capacity ramp-up in Hoboken gathered pace in the first half and as anticipated, has started to produce a more visible contribution to the revenues and earnings of the segment. In addition, we benefited from more favorable prices for certain previous and secondary metals, on average over the period. Although recent trends have become less supportive. Supply mix remained largely unchanged, both for industrial by-product and end-of-life materials, while we see continued pressure on commercial terms in certain supply segments. In terms of environmental performance, I am pleased to report that the investment program that we announced at the beginning of 2017 is proceeding well in Hoboken and is starting to show compelling results with a significant reduction of test emissions.

Revenues increased in Jewellery & Industrial Metals too, driven by strong demand in the product business, in particular for glass applications. In Precious Metals Management, we benefited from favorable trading conditions for both PGMs and higher demand for investment bars.

The number of employees has increased slightly since the end of 2017, reflecting the organic growth in Rechargeable Battery Materials, partly offset by the impact of the divestment of the activities of Technical Materials in Europe. In terms of safety, we recorded a slight increase in the number of lost time accidents compared to the first half of 2017, reflecting an unsatisfactory performance in Hoboken in the second quarter. The severity rate by contrast was almost halved from last year's levels.

I will now pass the call to -- over to Filip who will comment on the financial aspects.

Filip Platteeuw - Umicore S.A. - CFO

Yes. Thank you, Marc, and good morning, everyone.
So let me start by reminding you that following the sale of the business unit Building Products at the end of September 2017, no businesses are reported any longer under discontinued operations in 2018.

Revenues for continued operations increased 23% year-on-year, as Marc has mentioned. This first slide highlights the growth in earnings, given that similarly to last year, our strong growth did not come at the expense of margins. Recurring EBIT and recurring EBITDA, reached record levels and increased 34% and 26%, respectively, corresponding to a recurring EBIT margin of 15.2% and a recurring EBITDA margin of 21.3% over the period.

It is worth mentioning that this increase in operating performance is also translated into a higher net result. With an increase in net profit of 28% or 18% in earnings per share terms as this latter number includes the effect of the recent capital increase on the number of shares.

Adjusting for the impact on Recycling of the divestment of the European operations of technical materials, all 3 business segments grew both top line and earnings. Energy & Surface Technologies was of course by far the largest contributor, generating margins for this business group above the group's average.

The return on capital employed for the group remains above our 15% target and increased from the 2017 level to reach 16.6%, which is substantially above our effective cost of capital. Average capital employed for continued operations for the period increased some 28% year-on-year, which corresponds to close to EUR 700 million. This increase was driven by a combination of organic growth and a few acquisitions, with more than 2/3 of the increase accountable to Energy & Surface Technologies. Nevertheless, this same business group was the main driver behind the accretion of the group’s return on capital employed.

Recycling remains a segmented generating, by far the largest returns, with the return on capital employed for the period of 34%, also well up from last year, thanks to higher earnings, and a lower capital employee base due to the divestments of the European Technical Materials' business.

Catalysis saw its return on capital employed come down to just below the 15% hurdle, due to the impact of recent acquisitions on its capital employed.

Moving now to cash flows. The operating cash flow generated by the group reached EUR 437 million compared to EUR 257 million in same period of last year. 3 quarters of this cash flow funded a substantial increase in our net working capital resulting from our strong business growth. This increase is by and large the result of higher inventory values, as the increase in accounts receivable was funded by a similar increase in our accounts payable. These higher inventories are the result of higher demand, higher raw material prices, including metals, and new production capacity coming on stream.

CapEx over the period amounted to just below EUR 200 million and was driven mainly by our various expansion projects, and in particular, the growth in Rechargeable Battery Materials. Over 2/3 of the cash spent on higher working capital and CapEx together is for the account of Energy & Surface Technologies.

Taxes paid for the period accounted to EUR 71 million, which is in line with the amount of current tax charge. And you will have seen from our press release that the recurring effective tax rate for the period amounted to 25.4%, which is similar to last year's rate.
Net interest base came in at the EUR 17 million, which is higher than last year, given that our Schuldschein private loan was only issued in April of 2017 and that our U.S. private placement loan was only drawn in December of last year.

We spent EUR 109 million on dividends and close to EUR 100 million on M&A. The latter amount is the combination of the acquisition of the metathesis catalyst business of Materia and the increase of our stake in our Chinese cathode material production entity from 70% to 90%, netted with the proceeds from the divestments of our European operations of Technical Materials.

Finally, the other column mainly represents the EUR 892 million capital increase from last February that resulted in net proceeds of EUR 882 million, as well as some other remaining cash flow items.

As a result, our net financial debt decreased from EUR 840 million at the end of 2017 to EUR 429 million at the end of June.

Our CapEx spending of EUR 198 million over the period compares to EUR 141 million last year and reflects our strategic growth priorities, particularly our ambition in the fields of Rechargeable Battery Materials, as already mentioned, close to 70% of this amount was spent in Energy & Surface Technologies.

In Hoboken, the investments to further enhance the site's operational and environmental performance are starting to show their first benefits. All key investment projects are on schedule and group CapEx is expected to accelerate in the second half of the year. You will recall that earlier, we guided for a full year CapEx in the region of EUR 600 million. In addition to CapEx, we also spent 8% more on R&D as technology innovation remains a key differentiator for Umicore.

There is no need to stress that following the capital increase earlier this year when we raised 10% new shares, our growth plan is built on a very solid foundation with a capital structure that provides us the required flexibility to execute our strategy.

The ratio of net financial debt over recurring EBITDA at the end of June stood at 59% and leaves ample room to accommodate future profitable growth. The most significant financial debt on Umicore's books consists of the EUR 690 million of long-term private debt raised last year, and this at very attractive and fixed interest rates. Additionally, our accelerating growth in Asia resulted in higher local debt funding in local currency.

Finally, in the first 6 months, we accounted for a small amount of nonrecurring items totaling a net charge on EBIT level of EUR 6 million gross. Restructuring charges of EUR 12 million mainly covered a restructuring plan that we have in Brazil and that provides for a gradual closure of our site in Guarulhos. These charges were partly offset by EUR 7 million of income from other items, including the gain on the sale of the European operations of Technical Materials.

This concludes my comments, and I hand back to you, Marc.

Marc Grynberg - Umicore S.A. - CEO & Executive Director

Thank you, Filip. Before turning to your questions, I would like to wrap up the key messages from today’s presentation.

Umicore produced a strong performance in the first half with revenues up by 23% and recurring EBIT up
by 34% year-on-year. We generated revenue and earnings growth across all 3 segments with Energy &
Surface Technologies showing the most pronounced growth. This was due mainly to the significant
increase in sales of cathode materials for EV applications, combined with scale effects as we ramp-up new
capacity. While we are starting to reap the benefits of our growth strategy, we are now accelerating the
pace of expansion in Rechargeable Battery Materials as demonstrated by the recent launch of a EUR 660
million investment program to add capacity for cathode materials in China and Europe, which are the
largest and fastest-growing EV markets. Earlier this year, we raised close to EUR 900 million of fresh equity
which will be used to fund our ambitious growth plans. The success of this equity placement may be seen
as a vote of confidence from our shareholders in the strategy of Umicore and our ability to execute it
consistently.

Finally, I expect recurring EBIT for the full year to come in the range of EUR 510 million to EUR 550 million,
confirming the guidance I provided at the end of April.

With this, I would like now to open the call to your questions.

**Question And Answers**

A. (Operator Instructions) We can now take over first question from Charlie Webb from Morgan Stanley.

Charles L. Webb - Morgan Stanley, Research Division - Equity Analyst

Q. Just a few from me. First one, just a point of clarification with your increased participation in the
Chinese cathode entity, moving that up to 90% ownership. Has that had a positive effect on its
contribution to E&ST in the half year-on-year? Or was that already fully consolidated? That's the first
question.

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. Yes, maybe I'll address the questions one-by-one to make sure they are fresh in my mind. No, it has no
impact because the results were already fully consolidated at 100% since we owned the 70% already
before this transaction.

Charles L. Webb - Morgan Stanley, Research Division - Equity Analyst

Q. Perfect. Second question just on the metal price environment in PGMs and specialty metals, but also
in nickel and cobalt refining. If we look kind of into the second half sequentially, how should we be thinking
about those dynamics? Have you done any hedging? Or what would you expect in terms of the
contribution given some softening in the pricing as we move into the second half?

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. There are different considerations there because of some of the metals that you mentioned are
hedgeable and most of them are not. Plus, the secondary metals that we recover in Hoboken as well as
cobalt and rhodium are nonhedgeable. And so we have basically factored in our full year forecast range,
the most recent prices that we have seen in the market, which we consider as the best indication of the
market value. When it comes to hedgeable metals, it's fair to say that by this time of the year, a large
portion of the contracts for the second part of the year are hedged already and this has also been factored
in the forecast range that we confirmed today.
Q. And just a quick one, given your participation and kind of leading plan in cobalt refining. Given the strong demand, why have we seen such a kind of move down since April in that, given such strong demand for NMC materials? Have you got any sense as to what is driving that? Is it speculation? What is it that’s driving that move lower we’ve seen recently?

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. You know, Charlie, this is a market that doesn't offer the full transparency of a liquid paper market. So it is sometimes difficult to make out exactly what are the driving forces behind the sharp movements that we see. So some explanations there could be that on the supply side, a certain number of announced capacity increases are either coming onstream or due to come onstream very soon now. And on the demand side, we have seen a little bit of overstocking in the first part of the year. At the time prices were increased, consumers were not really sure about what direction the metal price was going and were concerned about further price raises. So it is not to be ruled out that today there may be a little bit of an inventory drawdown in some parts of the supply chain, which combined with the announcements on the supply side, may explain some of the recent price movements. But again, it is difficult to make out precisely what the reasons behind these movements are for the reasons I mentioned.

Charles L. Webb - Morgan Stanley, Research Division - Equity Analyst

Q. Sure. Understood. And then finally just one on working capital. As you know, there's always a double-edged sword on this one, so clearly metal prices like cobalt and nickel have been much higher, and so that's probably had a bigger effect on the working capital outflow as you ramp up your cathode production. How should we think about that for the rest of the year in terms of where that goes? Should we expect a further step up in working capital outflows in the second half as you ramp up that facility or is the worst behind us with some of the softening in pricing?

Filip Platteeuw - Umicore S.A. - CFO

A. Yes, Charlie, as you kind of integrated in your question that will partly depend on metal prices. If I would have to give you a guidance, I mean, you have in metal prices and you have obviously increased the capacity coming onstream in Battery Materials so that will mean that we'll have a continued increase of inventories. I want to highlight again that it's really talking about inventories here as we need to, in a way, prime new lines that come onstream. So I would say we do expect for that reason further increase in working capital, I would hope and think not to the extent that we've seen in the first half year. You've mentioned that some of the metals have been trending down recently but ultimately, it will partly depend also on the evolution of the metal prices in the second half.

Operator - -

A. We can now take our next question from Wim Hoste from KBC Securities.

Wim Hoste - KBC Securities NV, Research Division - Equity Analyst

Q. I have 2 questions, please. So on Recycling, both of them. There is still the phrase in the press release about commercial pressure for some segments that was already also mentioned at the time of the full year '17 results, or even I think, that it was indicated that you kind of hoped it would temporary, although
it was at that point also clear that would not immediately reverse. So maybe can you offer a bit of additional insights about the temporary nature you now consider for that commercial pressure? That is the first question. And the second one is on the hedge book update maybe for 2019, have you recently locked-in additional volumes for certain metals and for 2019 already?

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. I mean, there is nothing new really in terms of competitive pressure on prices in certain supply segments or surplus segments, in a way. And I would still qualify this pressure as temporary in nature. The markets are changing over time. Now whether that changes on a quarterly basis, half yearly basis, annual basis, it's really difficult to make out now. But still, the experience shows that these effects are temporary in nature and with our ability to flex the mix of the raw material supply to a certain extent, indeed we can sometimes mitigate this type of pressure better than at other times. But again, I can only repeat what we said when we published the full year 2017 results, is that I see these movements as temporary in nature.

Filip Platteeuw - Umicore S.A. - CFO

A. And, Wim, this morning, for the second question, nothing really material to mention on the hedge book. We do have some hedges in place for next year, but we didn't make any material changes and as mentioned in the previous answer, the metal prices that have moved most are really in the unhedgeable metals. So nothing to mention specifically on that one.

Operator - -

A. We can now take your next question from Tom Wrigglesworth from Citi

Thomas P Wrigglesworth - Citigroup Inc, Research Division - Director and Chemicals and Basic Materials Analyst

Q. Two questions. The first is on ramped costs that may be going through both in the working capital. You've alluded to it, but I was wondering if you could try to dimensionalize the ramp-up costs that are impacting working capital but also maybe running through the P&L as well. And a second question, on the Catalysis business, could you elaborate a little bit on the margin evolution there, down year-on-year. Could you talk a little bit of the mix effects that are taking place, that have driven that margin development?

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. So I assume that your first question relates to the ramp of costs in Rechargeable Battery Materials where we're adding our production capacity. Is that right?

Thomas P Wrigglesworth - Citigroup Inc, Research Division - Director and Chemicals and Basic Materials Analyst

Q. Please, yes.

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. Okay. So, indeed, it is important to remind you and the audience that the ramp up of costs is not linear. And actually, the ramp up of any additional production capacity is not linear either. So we mentioned in the press release that we were starting to benefit from scale effects in Rechargeable Battery Materials as we ramped up new capacity. In the second part of the year, we will add capacity and we will also continue
with the preparation work to build the new greenfield site, which means that we will actually add more fixed costs. We'll start to add more fixed costs in the second part of this year than we have so far. So that's why it is important not to extrapolate too much on the linear basis, the kind margin growth that we have seen in Energy & Surface Technologies. In Catalysis, I would like to clarify that the main impact on margins that you see at segment level results from the acquisition of certain activities of Haldor Topsoe at the end of 2017. So these were not at the same level of margin and return on capital employed as the existing activities in Catalysis. So that explains the slight dilution in margins. So it's not so much an effect of the product mix. It is more an effect of these acquisitions, which we will now integrate further and will deliver more benefits in the future. On the mix side, I think we have explained that there is a mix effect in the European business of automotive catalyst where the market share of diesel engines has continued to decrease. So that creates short-term headwinds because the revenues and the margins on these catalysts are somewhat higher than for gasoline engines. In the long term, and medium and long term, it is important though to note that as we mentioned back in June, that Umicore will benefit from this change in the engine mix as we are better positioned in gasoline configurations and in electrified drivetrains as well.

Operator - -

A. We now take our next question from Mutlu Gundogan from ABN AMRO.

Mutlu Gundogan - ABN AMRO Bank N.V., Research Division - Analyst

Q. A couple of questions, first on Energy & Surface Technologies. You said it yourself, the margin is up significantly year-on-year. Can you tell us what the biggest drivers are behind that margin expansion? And do you think that this is a sustainable level or actually there's even upside further?

Marc Gryenberg - Umicore S.A. - CEO & Executive Director

A. Okay. So there are a number of drivers behind the margin expansion. One and one of the largest, if not the largest, is the volume growth in cathode materials for rechargeable batteries as we have added the capacity and the demand is very strong for EV, for the fast-growing EV market. So that is one. Second factor as I mentioned a moment ago, is that we are starting to benefit from scale effects coming from that new capacity. Although you have to bear in mind that this should not be extrapolated because the ramp up of costs is not linear. And as we will continue with the preparation of investment into greenfield site, the ramp-up costs will increase in the second half of this year. And the third effect that is to be the third driver and not the last, is actually the strong demand that we have seen across, nonbattery applications in the Energy & Surface Technologies segment, whether it's for the industry (inaudible) by the Cobalt & Specialty Materials business unit or in Electroplating, we have seen strong demands and volume growth across these applications. And last but not least, as also we mentioned a moment ago, we benefited from favorable prices, in particular in the recycling, refining and distribution activities. And again, considering the recent trends that we have seen in certain prices such as the cobalt price, this margin expansion should not be extrapolated necessarily to the second half of the year, nor in the longer term. So when it comes to the question about how sustainable that is, I think you have to consider these various elements that mean that the margin evolution is not and is not going to be linear.

Mutlu Gundogan - ABN AMRO Bank N.V., Research Division - Analyst
Q. Understood. And then sticking to Energy & Surface Technologies, the returns, obviously because of the higher margin, returns also look very -- a very positive development. Just wondering, what is the drag in capital employed from the investments that you’re doing in Rechargeable Battery Materials? So, would you be able to split out the capital employed that at the moment or in H1 was not contributing to revenues and was not creating any earnings?

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. No. I think that's not something that we would want us to do because I think it would be an endless exercise in a way because the capacity expansion will continue. And so I don’t think this is something that we could draw any conclusions from. And suffice to say that we are quite happy with the kind of return on capital employed that we have in that segment, despite the very significant CapEx program that we are going through.

Mutlu Gundogan - ABN AMRO Bank N.V., Research Division - Analyst

Q. Okay. That's unfortunate. So maybe then on Catalysis. I mean, the guidance is clear. Just wondering, in terms of the second half, do you mean that revenues will increase also excluding acquisitions?

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. We are not breaking that down. So I think suffice to say that the revenues will increase in Catalysis, both on a year-on-year basis and sequentially.

Mutlu Gundogan - ABN AMRO Bank N.V., Research Division - Analyst

Q. Okay, okay. And then my final question on Recycling. So in the second half, will the volumes be higher compared to the first half? So what I’m wondering is, which effect will be bigger? Is it the ramp-up that you will be doing or is it the shutdown towards the end of the year?

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. No. I mean, the exact timing of the year of the shutdown is not yet firm and so that will depend a little bit on the exact start date of the shutdown. But in theory, no. The shutdown effect cannot be compensated by the ramp-up. And that's why we mentioned explicitly in the communication this morning that we were banking on a year-on-year increase and did not mention a sequential increase.

Mutlu Gundogan - ABN AMRO Bank N.V., Research Division - Analyst

Q. Understood, understood. So there is a chance that the shutdown will be part 2018, part 2019?

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. It's a bit too early to tell in a way. We'll see. I would like to add one maybe perspective on your earlier questions about the drag on capital employed. Having said that we are quite happy with the return on capital employed that we have in the segment considering the very heavy investment program. I think it's a bit of a unique situation that we have of being able to generate such returns in a business that is growing that fast and requires so much capacity addition at the same time. So that's what I really meant with that statement.

Mutlu Gundogan - ABN AMRO Bank N.V., Research Division - Analyst
Q. Yes. I agree and that's also why I asked the question because if we [would cling] for the investment, it would tell us what the underlying returns are of your business. But I guess, you don't want to share that with us?

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. No, I don't disagree with you, Mutlu, but considering the fact that we do not see a near-term end of the growth and therefore, we see a continued investment requirement to keep pace with the growth in the market. That's the reason why we don't want to go there.

Operator - -

A. We can now take our next question from Sebastian Bray from Berenberg.

Sebastian Christian August Bray - Joh. Berenberg, Gossler & Co. KG, Research Division - Analyst

Q. I would have 2 please. The first is on the extent of capacity expansion within cobalt refining. Is Ordeg the only facility where this is done or could we expect some incremental volume increase moving into 2019 and 2020? As in, are there any further plans to expand cobalt beyond what it already has been expanded by? And I suspect there won't be a percentage number you can give me for this, but what has been the magnitude of the expansion? The second question is more a strategic one. It looks as if Umicore, would likely on a net-net basis because of this investment in batteries, be free cash flow negative for the foreseeable future. Why continue paying a dividend if this is the case?

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. So, Sebastian, can we clarify your first questions because you talked about cobalt refining and at the same time if I am not mistaken, you mentioned Ordeg, which is a...

Sebastian Christian August Bray - Joh. Berenberg, Gossler & Co. KG, Research Division - Analyst

Q. Sorry, Ordeg, the -- I think it's -- sorry, it's the name of the facility, is it in Belgium, where you do the cobalt refining...

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. Sorry, the site is located in Olen in Belgium.

Sebastian Christian August Bray - Joh. Berenberg, Gossler & Co. KG, Research Division - Analyst

Q. Pardon me.

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. No problem. I just wanted to make sure that I would answer the question properly. So the capacity addition in cobalt refining in Belgium is relatively modest in size, in a way. And because it was to a large extent an upgrade program with some expansion of capacity so that is not of a size that is likely to change completely the face of the business. And indeed as you have anticipated, we’re not quantifying these effects in tonnages or in percentage terms. Yes, and then your second question on the dividend side, on the dividend policy. I would not necessarily infer that we’re going to be cash flow negative for the foreseeable future or cash flow negative or deemed to be cash flow negative this year. And indeed, we
have now initiated a large additional investment program. Please bear in mind that our recycling activities or catalyst activities and many of E&ST activities too are starting or are continuing to generate quite a bit of cash flows. And the evolution of our results, I believe, warrants a continuation of our dividend policy. And indeed, we can afford to maintain a large and ambitious CapEx plan, at the same time as very significant R&D programs and dividend payments and some returns to the shareholders at the same time. So I don't see a conflict in terms of capital allocations between these 3 elements for the foreseeable future.

Operator - -

A. We can now take our next question from Ranulf Orr from Redburn.

Ranulf Orr - Redburn (Europe) Limited, Research Division - Research Analyst

Q. The first one is just on your guidance in E&ST. I think, previously you'd said growth will be more pronounced in H2 and now you're saying, I think, revenue should be higher. This suggests in fact the percentage growth could be a lot a lower in H2 than in H1. So I was just wondering if you could explain what's changed there?

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. Yes. I think nothing has changed. The reality is that nothing is linear. And I think it's important to keep that in mind for every business at every point in time. So a linear extrapolation doesn't work and has never worked in our business, and I don't think it works much better in many other businesses outside of Umicore. That's how you should read that.

Ranulf Orr - Redburn (Europe) Limited, Research Division - Research Analyst

Q. So just to confirm, you're no longer expecting growth in the second half to be higher than the first half?

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. I'm not saying that. I'm just saying that I would avoid linear extrapolation in terms of the pace of growth.

Ranulf Orr - Redburn (Europe) Limited, Research Division - Research Analyst

Q. Okay. Sure. And then my other question is, I was just wondering around any market update you might give at Q3, sort of similar to what you provided at the AGM in Q1? Would there be anything similar around that time?

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. Well, if there is anything specific or new to be reported, then we would do that. If there is nothing significant or no deviation at all from what we are saying now, we will probably not come up with an update.

Operator - -

A. We can now take our next question from Nathalie Debruyne from Degroof Petercam.

Nathalie Debruyne - Banque Degroof Petercam S.A., Research Division - Analyst
Q. Basically all my questions have been answered, but I would just like to get some clarification from your side with regard to the expansion program in Rechargeable Battery Materials. So you announced that tripping of capacity initially, if I understand correctly, it has been commissioned at the end of last year and now it's starting to contribute. Can we assume that it fully contributed in the first half of this year or not? And then finally, where are you with regard to that [six-fold] increase in capacity? Can we assume that it will be fully commissioned by the end of this year?

Marc Gryenberg - Umicore S.A. - CEO & Executive Director

A. Natalie, it has become difficult to establish a clear distinction between the several investment waves. And I would, therefore, prefer to guide you back towards the statement that we made earlier this year in terms of capacity projection for next year and capacity projection for 2021. So what we said is that by 2021, we should reach at least 175,000 tons of cathode materials' capacity. And that in 2019 for the full year, we would expect to reach 100,000 tons of sales of cathode materials. So I think that's a better proxy than trying to reconcile what is happening now with the waves in which we have announced the capital expenditure program. Suffice to say also that we are very much on track in terms of adding newer capacity, and we are continuing to add the capacity in the existing sites in Korea and in China in the second part of this year, while at the same time, preparing for the construction of the greenfield site in China and in Europe.

Nathalie Debruyne - Banque Degroof Petercam S.A., Research Division - Analyst

Q. All right. Okay, fair enough, I was just trying to get some clarity on that one. But if I can follow-up on that, have you seen in the markets major expansion programs coming from other NMC players? We have seen announcement from, who was it, LG looking at joint ventures to launch new capacities. Have you seen major plans coming in?

Marc Gryenberg - Umicore S.A. - CEO & Executive Director

A. Actually, since we commented on that at the end of April and also in June during the Capital Markets Day, there hasn't been anything major actually happening in the market in terms of new capacity additions.

Operator - -

A. We can now take our next question from Adam Collins from Liberum.

Adam Robert Collins - Liberum Capital Limited, Research Division - Analyst

Q. Yes hi, sorry about that. I had 3 questions please. Firstly, could you give us some sense of what the impacts on revenues and profits was from ForEx? Secondly, in relation to Haldor Topsoe, are you in a position to give us any sense of what the contribution to revenues was from HT? And could you just clarify something, I think I heard at the CMD, which is that very roughly HT doubles your revenues in HDD? And then finally, just some guidance on the drivers to the working capital increase. Are you in a position to help us understand to what extent that was about investments in relation to the capacity additions and how much was related to the impact of higher metal prices in relation to the pass through of raw materials?

Filip Platteeuw - Umicore S.A. - CFO
A. Yes, I can maybe start with the first one. So first, ForEx was a headwind clearly, as you've seen in other European companies, so for us ForEx we didn't talk about it because of the type of growth rates that you see. But ForEx for us is a headwind, without it, our results would have been higher. Quantifying I wouldn't want to do but you've seen that in other companies quite substantial, so for us it was also meaningful. On the working Capital, it's going to be very difficult to provide you any more details and to try and split it up between the investments and the prices because in a way they both go together. So suffice to say that it's really a combination of actually 3 factors, I would say. You have the investments. So the new lines coming onstream, you need to fill these lines first of all with inventory and then you obviously have the invoices coming from them. But that again, you see receivables and payables are quite imbalanced. Secondly, metal prices, everything that flows through. And then thirdly also a good demand, Marc mentioned that also in the non-RBM businesses we have a firm demand also with a good pricing environment and that is also included in the net working capital increase of Energy & Surface Technologies. So it's not only RBM-based, but it's really a mix of the 3 and to split them out honestly it's not easy and we would prefer not to do that.

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. Let me address your other questions, Adam. No, we are not going to give a breakdown of the revenue contribution from Haldor Topsoe. But what I can clarify though is that the acquisition of their heavy-duty diesel catalyst business is by far not doubling our revenue base in heavy-duty diesel. And so this is a smaller addition to the HDD franchise of Umicore. And Umicore was a much larger, much larger player in HDD than Haldor Topsoe to start with.

Operator - -

A. We can now take our next question from Geoff Haire from UBS.

Geoffrey Robert Haire - UBS Investment Bank, Research Division - MD and Equity Research Analyst

Q. This is Geoff Haire from UBS. I just wanted to ask a couple of questions. First of all on the Energy & Surface Technologies business, I was surprised given the capacity uplift you're saying the depreciation was the same in the first half of this year as it was last year, so EUR 30 million. And will that -- do you expect that to change as we move into the second half and into '19 as you bring that new capacity on and could you help us understand where the depreciation could get to for the E&ST business? Also could you just comment on, obviously you had [exit] disposal in recycling. You had growth both in sales and profit. But was all of that down to the ramp-up of capacity that you have done of the new capacity? And then finally just coming back to the working capital again. Given the capacity build-up you see in NMC and the flat metal price environment, I'm assuming that we should be modeling fairly large increases on working capital every year because of the ramp-up you're going to see in that new capacity? Or is that the wrong way to look at it?

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. So on the D&A depreciation, I mean, if I look at the full group, we're at the 6 first months of the year at 103, so it means that for the full year, you should be looking like something like 200-plus of depreciation charge and indeed, it will increase going forwards. To split up a segment, it really depends on when you commission lines. You've seen that in terms of CapEx, the first half was a high number, but compared to the full year, forecast was relatively modest and we see an acceleration in the second half which also
means that you will have some acceleration, although modest still this year I think, but you will have an acceleration and also in depreciations as you start to depreciate those new lines. So I would say, indeed an increase in D&A and the first half did relatively moderate, but that will gradually increase over the next semesters. And then net working capital, the modeling side. So I think we have given you the different drivers. If you split them out, as you increase capacity, as you add new lines, indeed there's a mechanical aspect that you increase your inventories. Obviously, we work towards again in terms of receivable/payables to keep the balance there. Take note of the fact that the other elements, metal prices, you'd say, okay, that's your assumption. And then you have the growth in the nonbattery businesses. I want to repeat that again. E&ST has seen a nice performance also in the non-RBM businesses and there obviously, demand is linked to working capital. So if you model that, you model RBM, but you should also take an assumption then on CSM. What I would maybe say on working capital issue, if you track the working capital with the turnover, because again when you take the driver of Umicore it's not so much the revenues, it's the turnover because that includes all the pass-through metals. If you track that metric, which we always do very closely, you will see that the metric actually is pretty stable compared to what we've seen, for example, at the end of last year. So an increase in working capital linked to the new lines being added in RBM from an inventory point of view and then you take your assumption, I would say, for metal prices and for the other non-RBM businesses.

Geoffrey Robert Haire - UBS Investment Bank, Research Division - MD and Equity Research Analyst

Q. And the question I had on recycling?

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. Can you repeat the question, please, Geoff.

Geoffrey Robert Haire - UBS Investment Bank, Research Division - MD and Equity Research Analyst

Q. Yes. So you said excluding the disposals, you said you have a 5% top line growth in Recycling and a 13% growth in EBIT. I just wondered, is that all due to the ramp up of the new capacity that you're currently doing for this year?

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. It is mostly a result of the ramp up of capacity, taking into account that there was pricing pressure so that on the commercial side, this was less favorable. But volume-wise, yes. There has been a significant effect from the ramp-up as anticipated. And next to that, we also had the EBIT uplift in revenues in Jewellery & Industrial Metals business and to a lesser extent, in Precious Metals Management.

Geoffrey Robert Haire - UBS Investment Bank, Research Division - MD and Equity Research Analyst

Q. Okay. Can I just follow-up on that? Have you got more than 50% of the new capacity ramped up or is there more to come than we've seen this half, in the next half?

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. As I mentioned on previous occasions, this is a gradual process so that's continuing to take place. And so nothing different from what I have mentioned on previous occasions in that respect. So things are very much on track.
Operator - -

A. We can now take our next question from Chetan Udeshi from JPMorgan.

Chetan Udeshi - JP Morgan Chase & Co, Research Division - Research Analyst

Q. Just a few questions, maybe 1 or 2. Just to clarify on the comments previously to not assume a linear progression in terms of margin. Marc, are you suggesting then that we should be expecting E&ST margin second half to be lower than in first half? Or are you suggesting that the pace of your linear increase should be not assumed as same as what we saw in first half? That's the first question. And second question maybe the answer is probably no, but I just sort of checking again. Can you give us some sort of a rough steer on what is the sort of tailwind you might have seen from just higher cobalt, nickel or pricing in E&ST. Just to understand what is the underlying improvements, excluding those businesses so that we can take that out of the equation and just focus on the core bit within E&ST in terms of just leverage? And last question is just on metal pricing in general coming down, some of that may be hedged by you guys. But how much of that can be offset by say the currency turning more favorable as well? So what is the sort of a net delta between the 2?

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. Chetan, I will leave the third question to Filip because this is the most complicated question and I would be at odds dealing with it. Joking aside, let me address the first question on the nonlinearity of margins. What I really meant indeed was to caution you against extrapolating the growth rates in margins. So it's really the margin expansion that should not be extrapolated that's important indeed. And I hope that clarifies the matter. In terms of the impact of the cobalt and nickel prices on margins and on the bottom line, no, this is not something that we want to separate out of the rest because we believe this is a full part of the underlying business model and margin model of Umicore. As you know, recycling and refining activities are supporting the downstream product businesses, whether it's in Rechargeable Battery Materials where we promote a closed loop or in other applications served by the segment. So I don't think it would be the right thing to do to separate that out, and we typically don't do that. I think it's important indeed to note that there was a positive impact of higher cobalt prices in the first part of the year and that the extent of that effect may not be the same in the second part of the year, obviously, as prices have started to trend down again recently. And then I will hand over to Filip for the question on metals and currencies.

Filip Platteeuw - Umicore S.A. - CFO

A. My answer may sound simplistic compared to the complexity of the question because we don't know, obviously. What I would say is that typically these metals tend to move more quickly than ForEx moves, that's one thing. And the second element I would put into the equation, if you look at the metals we're talking about, they're not really having a very strong correlation with the Euro dollar. So they move because of supply-demand equations and market sentiment more than on ForEx evolution. So I would expect that changes in metal prices in these metals can be higher than the changes you would expect in ForEx. But for the rest, your guess is as good as ours in terms what the ForEx currency rates will do in the second half.

Marc Grynberg - Umicore S.A. - CEO & Executive Director
A. Yes. Actually, if I may add. The complexity of the question is because we're dealing with approximately 20 metals within the group on the refining and recycling side with the minority of them being hedgeable and a majority not hedgeable, and we're dealing with, let's say, practically 10 major currencies in the group. So the number of currencies and metals typically do not move in sync. I mean, the metal movements are not in sync. The currency moves are not in sync. So the number of permutations that you may have is huge and is indeed difficult to make out, whether one of the effects will offset the other one. We can hope that statistically speaking because we’re dealing with a large number of currencies and a large number of metals, this will be the case. But that is not certain.

Operator - -

A. We can now take our next question from Gunther Zechmann, from Bernstein.

Gunther Zechmann - Sanford C. Bernstein & Co., LLC., Research Division - Research Analyst

Q. Can I just follow-up on the margin evolution in your Catalysis business? You flagged the impact on margins from the Haldor Topsoe business. Is that something that you expect to be above divisional average margin, once you harvest the synergies from that deal? And secondly on that, can you give a time frame when you'd expect to earn your cost of capital on that acquisition?

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. Yes. Clearly, we're more looking at indeed the return on capital employed than the EBIT or EBITDA margins when we make acquisitions. And indeed, we expect to have improvements over time in margins resulting from the synergy effects, which are going to be, to a large extent, revenue synergy effects resulting from the combination of the 2 portfolios of technologies. While it is difficult to give an exact time line, typically I can say that we look at the acquisitions that are immediately earnings accretive and value accretive. So over and above the cost of capital in the medium term being a time frame of, let’s say, 3 years. This is the typical time frame that we have in mind when making such acquisitions.

Gunther Zechmann - Sanford C. Bernstein & Co., LLC., Research Division - Research Analyst

Q. And Haldor Topsoe would fall within that as well, just to be clear?

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. Give or take, a few months, indeed, this is the kind of time frame that could apply to that acquisition like it would to other cases.

Operator - -

A. We can now take our final question from Mutlu Gundogan from ABN AMRO.

Mutlu Gundogan - ABN AMRO Bank N.V., Research Division - Analyst

Q. Just a few follow-up questions. First on the guidance. Just wondering why you have not provided a more narrow range as you have done in earlier years? I have a few more small questions, should I ask them one by one, Marc?

Marc Grynberg - Umicore S.A. - CEO & Executive Director
A. Yes, maybe let me address this one first. And for some reason, I had anticipated that question and I checked, and it depends on how you look at it because in absolute euros, you're right, the guidance that we provided in prior years at this time of the year would be somewhat narrower. Let's say, by possibly EUR 10 million. Now in relative terms, so in percentages, this range is narrower than any range we have provided in the past at the time of the half year results. It is down to 7% of the earnings. So while in the past, it was closer to 8% or 10% of the earnings. So it depends on how you look at it. I believe that given the size of Umicore today and the size of the earnings, that this range is narrow enough in relative terms.

Mutlu Gundogan - ABN AMRO Bank N.V., Research Division - Analyst

Q. Okay. Can I maybe comment on that one because historically, obviously, your earnings were much more dependent on Recycling, which could be more volatile. And as you progress throughout the year, towards the end of the year, you've got more visibility with your hedges. So I always thought that the narrowing of the guidance was maybe tied to that. Now in Catalysis and especially in Rechargeable Battery Materials, which is having a bigger weight within the company these days, don't you have more visibility than in Recycling? So shouldn't that allow you a more narrow guidance?

Marc Grynb erg - Umicore S.A. - CEO & Executive Director

A. I think there is no general rule, Mutlu, and we are factoring in a large number of parameters when defining the guidance range. And it is difficult to give you a more precise answer to that question. There are so many parameters at play that I believe that the range at this point in time is quite narrow and quite precise.

Mutlu Gundogan - ABN AMRO Bank N.V., Research Division - Analyst

Q. Okay. Second question is on the Chinese cathode entity where you've increased your stake. Can you talk a little bit about that? So was that already possible? Did something change? How did the pricing come about? A bit more color would be appreciated.

Marc Grynb erg - Umicore S.A. - CEO & Executive Director

A. No, the timing of that transaction is clearly related to the fact that a significant injection of capital is required to build the greenfield site in China. And it is more appropriate to do that in the configuration where we have a much higher stake in the company. So speed is of the essence in these type of investment programs and in these type of market environments. And so this transaction will allow us to gain speed in executing the next step of expansion.

Mutlu Gundogan - ABN AMRO Bank N.V., Research Division - Analyst

Q. Understood, understood. And then a few nitty-gritty questions, it's on the associate lines, so both the associates in Energy & Surface Technologies as well as Element Six Abrasives was down year-on-year. Now I thought that the associates line in energies was mainly tied to cobalt and nickel, so I would have expected that to do well in the first half. And then with Element Six, I thought most of that business was related to the oil price, so I would have expected a higher result year-on-year, but both are down. Can you talk about why that hasn't happened?

Marc Grynb erg - Umicore S.A. - CEO & Executive Director
A. So on the first element, so there is nothing particular to mention in terms of the associates in the Energy & Surface Technologies. There is nothing particular to report in that respect.

Filip Platteeuw - Umicore S.A. - CFO

A. No, don't forget that this typically the net result that is taken into account, so it's not really necessarily reflecting the operational performance. So nothing really specific. And on Element Six, we've given you some color in the press release. Clearly, the oil and gas business was down quite significantly compared to last year and part of the reason for that was some stocking by customers that clearly happened towards the end of last year. So they are suffering from that. Element Six is, let's say, another strategic interest that we have, it does make an important difference in our P&L because there, net result was down pretty significantly compared to last year.

Operator - -

A. That will conclude our Q&A session for today. I'd like to turn the call back over to the gentleman for any closing or additional remarks.

Marc Grynberg - Umicore S.A. - CEO & Executive Director

A. Okay. No, thank you very much for attending this morning's conference call and for your questions. And as usual, we will be available to address follow-on questions. However, in that respect, I would like to ask you to bear with us and that you also understand that our Investor Relations team is working with half of the usual staff today. So if it takes a bit longer to answer your follow-on questions than usual, do not to read anything else between the lines. It's just that the staffing is not as it was in our previous period for a temporary period of time, so everything will be back with us in early September. So if you would please keep that in the back of your mind that would be highly appreciated. And with that, I would like to close the call today and again thank you for your participation and talk to you soon. Bye-bye.

Operator - -

A. Thank you. That will conclude today's conference call. Thank you for your participation, ladies and gentlemen. You may now disconnect.