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Strengthening solid leadership position

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Let me introduce you today to this nice world, this magical world of recycling of non-ferrous metals. And I think this is a business that goes really far back into the roots of Umicore. And at the same time, as also Bart already said this morning, it's more relevant than ever. And so why is that? I think just to give you three elements, the energy and mobility transformation, it's a material transformation and non-ferrous metals have a really important role to play there. Secondly, recycling of critical metals is key. Think sustainability, think resource scarcity. And last but not least, the element also Bart alluded to self-sufficiency in metals, in today's geopolitical environment, it's really a hot topic.

That to say that recycling in all that environment is part of the solution and we really have an opportunity to stand out. And that's why we present to you how we will strengthen our solid leadership position that we already have today, how we will strengthen that going forward.

What is this business group Recycling about? We have three business units in that business group. The first one is by far the largest. That's our Precious Metals Refining activity. That's roughly 75% of the revenues in the business group. And their strategic imperative going forward is to maximize the cash generation of the current assets. And at the same time, I will show you that we will invest in the future and that investment will both be a positive business case, but it will also be a game changer in environmental performance. We will further advance there massively.

The second business unit in our business group Recycling is Jewelry & Industrial Metals. So, what do they do? They recycle high-grade precious metal scraps, and they turn that scrap into semi-finished and finished products again for the jewelry industry, for investment products like gold bars, silver coin blanks and industrial products. So, their strategic imperative has basically not changed compared to what they do today. It's about maintaining their regional leadership for sustainable and resilient value creation.

And last but not least, we have what I would call the spider in the web. That's our Precious Metal Management. So what do they do? They do the delivery, the hedging and the trading of precious metals from our own refineries, from industrial partners and from banks.

In the remainder of the presentation, I will now focus and zooming into Precious Metal Refining, which is our largest business unit, and it will address two elements: Where do we play today? So, what is it about? And why do we have this solid leadership position? And the second part will be how do we strengthen that position going forward?

And megatrends, we addressed it already this morning. Megatrends are important supporting the Umicore business model, but especially also supporting the Recycling business group, for

a couple of reasons. Think resource scarcity. We need more materials in the world. The ores are getting depleted. We need more and more recycling to get these materials back. So, Recycling is surfing on that trend. Think CO2 footprints. For precious metals, for example, the CO2 footprint of recycled precious metal is more than 90% lower than from primary metals. And just the third point, think also the self-sufficiency in raw materials. For regions which don't have access to primary materials, like Europe, this is critical to come in this recycling loop. that's also why Europe is now pushing forward with legislation, green deal, Critical Raw Material Act. So that's supportive.

So we need circularity. We need to close the loop and we need to do that with a better environmental performance. And I believe you will agree with me that this is very close to Umicore's business model. So we serve on these megatrends and the business group Recycling is well-positioned there. So where do we play? And some of you were already asking that during the break as well, what metals and what portfolio?

We have a unique position because we recover 17 different metals, precious metals, but also secondary metals. And that's really unique, and we are the biggest one, by far, the largest one in the world. And as Bart mentioned, only one of such big refineries is used in the world. And we have that refinery. It's in our site in Belgium, in Hoboken.

The feed streams come from industrial byproducts on the one hand, and recyclables, end of life materials on the other hand. That market is already large. But given the trends in the megatrends, that market will also increase. Ores get depleted, more secondary metals come as industrial byproducts, we need more recycling to close the loop. So overall, this is a growing market and opportunity space for us to play.

We do not stop there. We will also open up our flow sheet for future end markets, but also to address certain supply streams that we do not take in today. So it provides an opportunity on the short term, but also on the future end markets, think electrolyzers, think fuel cells to get those metals recycled and it opens up for more nickel, for antimony, tin, also for more secondary metals. And that's clearly a growing market where we want to play. Which brings me to our business model. And there is a lot of information on this slide, but I think two key messages are on this slide.

One, we capture feeds along the whole value chain. From mines to end of life materials. And in each of these streams, we capture material and we cluster them in two categories: industrial byproducts, which represent roughly 80% of our feed, and end of life materials – recyclables – which is 20% of the feed. So we play along this whole value chain.

The second element, which sets us apart and which really makes us different or differentiates us from others is that we can be flexible in the feeds that we treat. Depending on opportunities in the market, we can optimize our feed for value, and we don't always have to go for volume. And that's truly unique. Most refineries, they are specialized in one mono stream. We have more than 200 different material streams coming in, and our commercial teams can really pinpoint or use opportunities in the market to optimize value.

And that's why you will see, if you go back historically, that the EBITDA margins of these units and that the ROCE numbers of these units are always high across the various economic cycles, because we can adjust that. And what is behind the fact that we can adjust it, that's our flow sheet, which is really one of a kind. And I want to illustrate that flow sheet to you.

[Video]

So, great flow sheets. And I personally have great memories to that because I was working in that plant 15 years ago and I was heading one of these unit operations and so a lot of connection to it. And even today, if I see how passionate these colleagues are to every day optimize that flow sheet and get it to work, it's really fantastic.

So this slide basically summarizes a bit and gives you some points why this is really one of a kind of a flow sheet. And let me walk you through these different elements. For the first points you see on the left, highly accurate sampling and assaying. So why is that so important? So what we treat in Hoboken are really low- grade PGM products. So that means sometimes there are only a few grams into a ton of material. So that's really not easy to sample and assay correctly. So it has to be 100% reliable what we do in sampling. Because in the end, based on that sampling, that's where the contracts are based on, that's how we define the value of that material, and we have developed there a rock solid reputation and we are recognized for that to be best-in-class. And that's also why our customers trust us so much. And that's why they bring their very expensive materials to us, why they trust us with the sampling and assaying.

So, it's really a key differentiator that we have in that plant to analyze these low PGM concentrated materials. Once we have analyzed it, you also have to do the same in your flow sheet. I tend to say you have to find back that needle in the haystack in the sampling and assaying, but that same needle you have to find back in your flow sheet. So we have the technology, we have the size, and we have the scale to do that. And that's unique. We have developed that over decades, that's the point to you most on the right. And that's why it's also so difficult to replicate for others because it's step by step. We have built that and now it's there. And we continuously keep on pushing the limits of that investment.

It's integrated metal and processing ecosystem to recover these 17 metals in the highest metal yields and with the faster throughput times, you need a lot of unit operations. We have seen that in the video and that's why we have also world leading metal recovery rates. So, we deliver industry-leading returns already over the past decades and we will continue doing that in the future.

So, this some data points, some – which I want to share with you. So we are the number one and we referred to it already, number one PGM and specialty refiner globally who can deal with that variety of supply. We are top three PGM suppliers in Europe. We are top five in terms of spent automotive and industrial catalyst recyclers. And with most of our customers we have

long-term relations, spanning more than 20 years. And that's very important for us because that's, again, shining through that element of trust, that reliability, that partnership over time.

So that brings me to the second part of PMR, where I want to show you how we will now strengthen that solid leadership position that we have today going forward. And for that, we will invest. So there is a capital element, but we will also make sure we drive performance further. So let's double click on these two elements.

First, on the capital, on the investment, so that's really – I'm very honored and very excited to announce here then today that we will have this proprietary hydro metallurgical flow sheet expansion where we invest into. And with that, we will pioneer the future of recycling. So in a way, it's another one of a kind because it's really based on proprietary knowledge. And it has a double win. So here, you see the first one. The first one is a game changer in environmental performance. We will strengthen the best-in-class environmental performance via that investment that gives us guaranteed compliance with the upcoming 2030 EU Ambient Air Quality Directive.

The second win is that we can do that with a very attractive, positive business case, the business case through which we can attract more profitable supply, we can have higher yields and improved throughput times. So, better commercial conditions and better return for us.

To give you some more details, we will increase our copper and nickel capacity. We will increase and reduce the PGM throughput times, so faster throughput of PGMs. We will expand the process window, meaning the 17 metals we have seen now become 18 metals, cobalt will be added to that as an 18th metal and that's important because it will again allow us to attract, to source certain material we cannot source today and we will have increased yields on the secondary metals like antimony and tin. So a double win with that investment.

So the total investment amount will be €400 million. We are now in detailed engineering. The amount we took in the plan is €300 million, because that's the amount we will spend till 2028 out of the total of €400 million. The investment will be value accretive and the payback of that investment is now six years. So it's a positive business case, which has also a huge game changer in environmental performance.

Let's look then at that second pillar of performance and give you some elements there. First, I want to mention operational and cost excellence, that's what we do every day. Operational excellence is that's why we have metallurgists, chemists in the plant working on debottlenecking the activities, on improving the yields every day. Cost excellence, that's about gross profitability. How can we keep our cost as low as possible? How can we compensate for elements like inflation to improve our cost competitiveness over the years to come.

The second pillar is top line measures. There, I really like to mention Nexyclus. That's really a label we introduced last year, and it's a label for guaranteed recycled content. So if you buy material under the Nexyclus label, we guarantee you that that material is coming from 100% recycled. And there is a market for that and we see that market picking up over the coming years. We expand our services beyond the refining and recycling services we deliver today. And we work on the quality of earnings, meaning optimizing for value over volume, meaning looking at win-win with new customers to attract new attractive volumes.

And last but not least, we heavily invest in technology and digitalization, automation and digitalization. Here you see an example of a robotization of our sampling and assaying. It helps to reduce costs, to work on this cost excellence. It also brings robustness. It brings accuracy, reliability of installation. And important as well, it's the foundation for artificial intelligence, which we already use today. And I will come to that on the next slide as well, in environmental applications, but also already in the process plant.

We have a goldmine of data, Bart called it that way. So we will use that goldmine of data to do these process optimizations and we see a lot of potential and we are already tapping into a lot of potential via that. And the last point on performance, which is really very close to our heart, is our world class environmental performance, which is driven by advanced technology and let me give you here three examples.

First, real-time environmental monitoring. What does it mean? It means that today we have basically on a second per second basis, we know what emissions we have in the plant. And we do not only know how much it does emit, but we also analyze immediately the composition. And that does two things. We can immediately have feedback on what we do, and we can also trace back the source of that emission, so that we can also remediate it going forward. We couple that to weather forecasting tools, Al models on top of that, so that we have now even a tool which we call smart logistics. And with that, the model can predict which activities we can turn on and off depending on the weather conditions to really minimize the emission of the plant. And that's one of the elements of the examples of where Al is already fully active and in place.

The second example is state-of-the-art technology. That's where we invested the last year quite a bit. Examples being encapsulation of the lead refinery, installing windscreens and other investments that really reduce the emissions of the plant. And last but not least is the creation of the green zone to really help to create a sustainable coexistence of an industrial area with a residential area very nearby. On top of all the other measures, we also make sure there is a certain separation of that guaranteed, which, of course, further helps the quality of life around this production plant. So, with that, we continue to raise the bar and we are really committed to remaining the world's most efficient and environmental friendly refinery. And we do that for the environment. But it has also a business component because customers will come to us because we are the most environmental friendly. Other competitors might not fully live up to the expectations. Like I mentioned, the EU 2030 air quality directive. So, we see also this as a competitive advantage next to our duty to have the best possible coexistence with our neighborhood.

Let's come back to the financials, where I now come back to the business group Recycling. So, this is not only precious metal refining, this is the whole together with JIM and precious metal management. Our revenues towards 2028 will be €800 million. We will have very strong EBITDA numbers, with 35%. And our ROCEs will be over 40%. Well knowing that in those years of the plan, we will invest heavily in that proprietary hydro metallurgical installation. And still, we reached these ROCE levels. The CapEx is €600 million, including that investment and the free cash flow still remain extremely strong with €400 million over the plan.

That brings me to the takeaways for Recycling. I think three elements I would like you to really take home. Strong leadership position. We have that unique market position. We have that possibility to go for value over volume and thereby serve the different economic cycles and use the opportunities in the market to keep our EBITDA levels high. We see significant market opportunities, we serve on these megatrends. And we invest for the future. We stay ahead of the curve via this proprietary hydrometallurgical investment that we plan to do.

Thank you very much for letting me introduce to the magical world of the Recycling. And now, I would like to hand over to Veerle for Specialty Materials.