



We create chemistry

Presentation Environmental Catalyst and Metal Solutions (ECMS)

Transcript Speech

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[Title slide: Environmental Catalyst and Metal Solutions (ECMS)]

I have to say, this business is performing really well. It's performing well versus even what we expected when we did the carve-out. This business has been a source of inspiration, also for us on the Board. It shows what can happen when you have strong focus, strong entrepreneurs and a team fully aligned with one mission, with the right incentives. I will share a little bit why I feel so good about this business.

[Slide 2: ECMS: Global leader in mobile emissions catalysts and precious metals recycling]

One big pillar of this business is our automotive catalyst side, so light-duty and heavy-duty vehicle catalysts. Another very big pillar is PGM recycling. I will talk a little bit more about this because it is gaining more relevance now as we go towards sustainability and circularity. So, that's the PGM recycling business.

I was in this business, too, so I can tell you: There are also people here who identify themselves with PGM. For them, the main thing is metal, then chemistry. So they also have a very strong identification not only with their coworkers, but also with the business. They have strong PGM expertise and technology leadership. It remains a technology game, even now. People are thinking it's low growth, but actually it will be a technology game, also how we adapt going forward. I will show you this.

Strong customer relationships and the production setup – this is how we create value. The role is very clear: It's about earnings and cash. This is a hugely cash-accretive business for us.

[Slide 3: ECMS has delivered strong earnings in a volatile PGM price environment]

I'll show you how this business has performed in the last years. You see this EBITDA uplift. Part of it is linked to the PGM basket price below. But you see that, even when the PGM basket price dropped, we have been able to maintain this high, strong EBITDA. This is because we have grown above market in this business, around 1% above market. This 28% EBITDA margin is excluding PGM. So, it's a very profitable business for us and close to €1.7 billion cumulative cash flow in the last years. It's driven by efficiencies, optimization, strong margin management and strong market share gains.

[Slide 4: After successful carve-out of ECMS, we are well-positioned to deliver strong earnings & cash through the ongoing market transformation]

We also started the journey to a carve-out in 2022. It was an 18-month process that finished in 2023. This process was the first time we did this kind of carve-out. But it also allowed us to look at how we can make the structures fit for purpose for this business, which is quite different from our core businesses. We have dedicated IT systems and dedicated legal entities. We have set up different kinds of business processes.

I'm very proud of the team because a process like this can be very distracting. They also came up with their mission and vision and identity and culture. That's what has allowed them to really deliver this performance in this time frame. You also see the very ambitious targets that we have. We have good visibility to give these targets of growing three to four points above market. This is fantastic growth that can happen even in a declining market, keeping the EBITDA margin at a still very good mid-20 level.

And the cash flow, if you saw the last slide, was €1.7 billion. This is now another billion on top of that, so a very strong cash generation possibility for us in the coming years, which is how we unlock value in this business.

[Slide 5: Our strategic priorities for 2024 – 2028]

How do we do this? What's underpinning these targets that we have given ourselves and we feel confident about?

The first part is, of course, gaining share; I will talk a little bit about this. You also see this slightly lighter shaded area because I wanted to highlight: It's not just about growth. In this market, which is slow-growing, a lot will depend on what we can do on our own. So, there's a lot of cash optimization – which is the lighter blue – that is built in in terms of how we grow, how we become efficient. Roughly 60% is “optimize,” and then we have the “growth” part.

Then we have some optionality you see on the right. This is something for you to take a look at, also because we are not spending significant capex there. It's because of what's happening in hydrogen production and fuel cells, which also require precious metals. With our precious metals capability, we can also play this smartly in terms of low capex but with technology. This can be an optionality for us, an upside for us beyond 2028.

[Slide 6: Prolonged market outlook for automotive catalysts based on recent light-duty market dynamics]

Now, I come to the market and how we are winning, or, how we see our growth. This one slide shows you – I think Markus mentioned this can be a long sunset – how the change in EV penetration over the last year has influenced the catalyst market. The light blue line is what the outlook was for the catalyst market just a year ago. The dark blue line is what the projection is now. 100 million more catalyst units are now being projected until 2030 just because of this EV slowdown. We will go through these phases of continued volatility.

If you look at 2030, we're still talking about catalyst units nearly matching 2020 levels. So, things are not going to fall off a cliff here. This shows us and the team: We have a long path here and we want to reap the benefits. Now, if we can grow above market, we are in a good position. That's what it's about: How do we gain share in this market? This is also something that we are focused on.

[Slide 7: We will be in #1 position globally in 2028 based on secured vehicle platform wins]

This is where the confidence comes from and why the team has performed well: In this business, it's not actually the P&L or the EBITDA that you see this year which really matters. What matters is that you are winning platform competitions. And these show up maybe two or three years later.

So, you have some transparency on what your market share will look like. The P&L is just showing the work you did a few years ago.

Here, based on the platform competitions we have already won, we will move from the number-two position in heavy-duty diesel to number one, and from number two in light-duty diesel to number one. We are a very strong number two in light-duty gasoline. And we will be able to sustain and maintain this.

That's a fantastic outcome, which is why I was saying this business has performed really well, not just from the P&L standpoint, but what is on the horizon. The reason is: It's all about technology. As you know, we also have fantastic joint ventures in Japan and Korea, which give us very good positions with these OEMs, the production setup, the customer proximity. All of this coming together and this focus "let's win and optimize" is what's driving the team.

[Slide 8: Growth lever: We leverage our technology know-how to achieve emission standards and lower cost of ownership for our customers]

Now I'll talk about technology a little bit because that is what we believe is still going to be a very big lever for us going forward.

You see, we have a fantastic track record, first as Engelhard and then as BASF. You know: Engelhard invented the catalytic converter. The team is also very proud of this. Then we had copper zeolite technology, our four-way catalyst. The tri-metal catalyst was at the time, as you saw on the slides, when we had high PGM prices. So, you can, of course, substitute metals and then bring prices down.

That's what we are constantly doing in technology. The real benefit for the customer is if you can create PGM savings. Then customers are willing to pay a higher premium on the catalyst itself. That's what we're always trying to do.

We got a big award for the tri-metal catalyst from Ford. I think they were the first ones to use it. Now, as the PGM prices have shifted, this is again good for us. Our technology teams are now working on rhodium. If you can have a catalyst with a reduced rhodium content, then you again create the savings for customers, and we are able to price it accordingly. This is our model. How can we continuously decrease the total cost of ownership for customers? And then we are able to extract value, even in this declining market with price pressure, which is sometimes the case.

The other factor pushing us to use more technology is that fuel and regulations are also getting more complex. You have fuel diversification, biofuels, other things coming up and more hybrid cars. This trend is actually also helping us. In many of the Western markets, people are moving to hybrid cars and hybrid cars have batteries and an IC engine. So, this also gives us a longer runway, but again

requires a different offering, a different product, a different catalyst. So, again technology comes into play. Technology is still a very strong element for us, and we do it in a very focused way.

[Slide 9: Growth lever: Repurposing assets to further strengthen #1 position in Indian market]

Another lever we are using is being in markets that are growing. The entire ICE market is also very regional. What's happening? You have to play a regional game, not a global game.

India is one good example. You see the number of catalyst market units in India and projected forward. This market is still underpenetrated just in automotive. And it's continuously growing. New regulations are coming. This is a very steep growth rate. This is not a declining market. And we are by far – by far! – number one in this market. You can see on the right-hand side our track record how our growth rate outperforms the market. We have won so many platforms there. This is why you see the smiling faces on the photo.

We are relocating and repurposing assets from other regions into India, which is also a smart way to consolidate. Instead of putting in more capital, we are repurposing, building very targeted local R&D and application labs. This will be our growth engine for the next years. We are also seeing it this year and last year; this continues to be a very strong market for us.

[Slide 10: We are well positioned to capture the peak of the ICE market while transforming our business to be best prepared for the declining phase]

Of course, we are also not saying the EV is not coming. We know electrification will come. So, we need to position ourselves – how we will play the long game. This is how the team has also crafted our value creation plan: We are not waiting; we are already shifting our steering levers. We are shifting from investing and building assets to asking: How do we repurpose?

Our capex will be significantly below depreciation and 35% lower than what we spent in the last five years. That's one shift we will make.

The second one I just mentioned and gave you an example is repurposing our assets. This allows us to improve our utilization rate. Rather than shutting down assets, we are repurposing them, improving our utilization and achieving strong margin management through the commercial as well as technology benefits that I explained.

That's our direction of travel for this business, in terms of how we will position and steer ourselves for this phase of decline in the industry.

[Slide 11: We are #1 in spent automotive catalyst recycling, which enables closed-loop offerings and PGM profit optimization]

Now I switch to another part of the business, which is also a fantastic business but a little bit in the background.

You see on the left-hand side: This is the market growth rate for spent automotive catalysts, the catalysts when the cars go to a junkyard. These catalysts still have a lot of value and come back to the market for recycling. This is growing at a really good rate of 6%. And we are number one when it comes to automotive catalyst recycling

If you think of a mid-sized mine, how much metal is coming from such a mine? We are equivalent to that amount of metal that we are creating just from recycling. We can meet 70% of our own demand through recycling, which is a fantastic position to be in because it reduces all kinds of supply risk, is low CO₂, and gives us more flexibility in how we interact with the market.

It's not only about getting access to the metal. There are a lot of ways now to maximize profit with this physical metal you have: You can do it via trading, in liquidity, in risk management. You can offer services to customers. So, this is what we have been doing for many years. We have a fantastic unit which is focused not only on getting the recycling metal, but how to benefit from it at all the steps in the value chain.

On the right-hand side you see the new brand, Verdium, that we have now launched in the market. It's the first time we have a brand for a metal. Verdium is for circular metal, completely recycled, low CO₂. We are offering this to customers, and they are curious. This is a process that we have created, for which we can give a certificate. So, it's fully assured that this is circular.

[Slide 12: Growth lever: Recent expansions will support further growth in spent automotive catalyst recycling]

To foster this growth – because we see the value of this circularity and the future growth there – we have also made some investments in refining in recent years. This is Seneca. It is one of our key sites for refining, where we have also invested to insource some of the refining that was done externally. It also gives us more profit, more flexibility and builds the infrastructure for the future. We did a very small acquisition for some assets in Sweden.

When you do recycling, sometimes you also get substrates which you have to process. You need different capabilities. We can now, for example, process silicon carbide substrates in Sweden and feed them to our refinery.

We are also well invested here and won't need to do any investments in these assets or expansions for the next few years. But now we will benefit because these are in-house and we can have better margins and better leverage going forward.

[Slide 13: We optimize our standalone structures to maximize value]

I come to our third lever, which I previously mentioned, how we are optimizing our standalone structures. I'll give you a bit of an idea of what we are working on in terms of driving cost efficiencies. There are always – I think this was a question yesterday too – things you can do better, on procurement and other things. Of course, we will do this.

But now, we are also able to look at the business processes in the standalone structure. Are they fit for purpose for this kind of business? Here, we have done a lot of the homework in the carve-out. The cost might even go up at first during the carve-out because you're trying to create something. But this work is behind us now. Now we will benefit, and we will optimize going forward.

We are through the carve-out cycle and now we are working on “optimize, optimize, optimize”. That's where we go in terms of optimization. You see the 10% to 15% across the board.

This is a high-PGM business. It is also a big item on the balance sheet. So our focus here is: How we can further reduce our receivables, our working capital, our inventories? There are also many different ways from a financing standpoint that you can do this. So, this is another thing we are working on, and this is what gives us confidence in our target of cumulative cash flow of around €2.7 billion over the next four years.

[Slide 14: Growth option beyond 2028: Leveraging our PGM competency in hydrogen and fuel cells]

This is purely an upside. We think, okay, we have something very valuable: our core competency dealing with precious metals. There's all this work that is happening in the production of PEM electrolysis membranes. These membranes are coated with catalysts. Here we can see if we can partner with other players who are making these membranes, to provide this know-how. We have some partnerships we have recently announced. But you see here: In the whole business we have reduced capex, and within that, it's a small number – less than 5% of capex allocation – that's needed to expand in this market. So, it gives us a good optionality going forward.

But this is something that can be of value for BASF at a later stage, as this business is shifting long term into a different direction.

[Slide 15: We are unlocking value in ECMS]

That's my last slide. Hopefully you can see why our focus is on unlocking value in ECMS. We have already been doing this in the last years. Going forward, we have the visibility to drive it and create the cash flow. And we remain open if there are other options. But otherwise, we have a great team and good hands to drive this forward.