



We create chemistry

Presentation Battery Materials

Transcript Speech

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[Title slide: Battery Materials]

Now I will switch to Battery Materials, which is a different story and a different playbook, but also a very exciting business.

For Battery Materials, there has been a lot of media coverage of the whole market: What's happening with the EV cars, the penetration? There is so much in the news about OEMs and everything that's happening. We also made some announcements. In Q2, we made some further announcements. Today, there will be no real news because you have already seen what we are planning to do. But I want to give you a little more context on how we see the market, how we see the opportunity, how we are playing this option. Hopefully, you'll get a better sense of how things look, also in terms of capital allocation going forward.

[Slide 2: We remain committed to long-term ambition of becoming a leading global CAM supplier]

I summarized this here, so there is no suspense for you about where I'm going here on batteries. Markus also mentioned this in his keynote in terms of direction of travel. We have fantastic assets, we have invested recently – and now we will focus on maintaining this capacity, growing with this capacity. We will not invest now in producing PCAM or in metals. We can strategically source these because supply options are now available. We will de-risk our growth path with all of these measures, including looking at collaborations along the value chain.

We still like the business. I think it's still a fantastic long-term growth opportunity if it's played well. Many things that are happening even play to our strengths right now because we have the assets we need. And when the market materializes, we can see when is the right time to think about the next steps.

We are also confident in this EBITDA margin, and I will address this a little bit later. This is a 30% EBITDA margin excluding metals. This business can be very profitable and is very profitable. This is why we are also playing this option.

[Slide 3: The EV market saw significant growth in the last five years with the highest adoption rate in China]

Maybe I'll step back now and talk about the market. Because it's good to have this context on what's happening here. I will go through a few slides which show you the market, which also informs how we are approaching it.

It's good to step back and take a look, just at the last five years. Right now, we are in this turmoil as if there are no EV cars being sold. But in the last five years, the number of EV cars produced annually has increased almost six-fold from where we were in 2019. Of course, the biggest change has happened in China. So, it's a very regional story. You can see from the right-hand side: In 2023, almost every third car was an EV car in China. In the last two months, almost 50% of the cars that are being sold there are electric. So, there is a very rapid electrification happening in China. Not so in Europe, in the United States and Canada. There the penetration rate in 2023 was 17% and 9%, respectively.

So, big growth. I think this is what has been driving all the announcements, all the capacity increases, etc.

[Slide 4: The momentum has slowed down significantly in 2024, especially outside of China]

Now, just in the last month, you see in this table on the top left what was forecast by S&P Global Mobility in January in terms of expected growth rates this year. China is more or less still there. But everywhere else is really in a very different place.

On the right-hand side, you see all the announcements of either sales not happening or delays in production or stoppages – on the OEM side as well as at cell and CAM producers. This is an industry-wide phenomenon: Everybody is adapting, adjusting and recalibrating. We did the same.

[Slide 5: We took decisive actions to adapt in light of recent market developments]

In June, we announced we had decided not to proceed with investing in a joint project for nickel-cobalt refining in Indonesia, which we had been evaluating. We also don't need to now, given the supply options that are now available for the metals.

We were also looking at investing in a large-scale refinery project in Spain. Now, as the demand is going to be pushed out, we have paused it. We have some time to think about it when we will go there. So, this is another investment where we do not plan to spend any capex here in the next four years. No capex allocation is planned for either of these projects in the next years.

[Slide 6: Long-term growth outlook remains valid, though adoption scenarios are different by region and uncertainties persist]

It's also good to look at the long term now because this truly is a long-term growth option for us. You see what the outlook looks like for 2030. Of course, this is also a forecast from S&P. There's a lot of uncertainty. Nobody really knows. I think we can draw the curves as we want a bit. But the direction is clear because the regulations are there. OEMs have made their bets, and the technology will move there. And this will still be a very substantial market. It will not be a straight line like it's shown here. It'll be a little bit bumpy, but the direction is very clear.

You see also that it will still be very strong in China, but the penetration rates will also be strong in Europe and North America. Maybe it'll be a few years later, but the direction is there.

[Slide 7: Cathode active material remains a significant growth opportunity with Europe and North America representing the majority of NCx markets]

For us, this also fundamentally represents opportunity for our cathode active materials because that is still the chemistry that drives the performance in the battery. You see, this is the reason why we got into this business. It's a once-in-a-lifetime fantastic growth opportunity for us.

Now you see also that there is a regional picture in terms of technology. The biggest debate that is happening on technology is LFP versus NCM: Which one is going to win? What is happening? You see that both will have a position in the market.

In China, it is strongly LFP; this gray bar is LFP. But in Europe and North America, the long-term projections show a substantial share of NCM, even though there will be also a position for LFP. We are very strong in NCM. We have the full range of NCM portfolio, from low nickel to high nickel. We continue to work on this, and this is where the high performance is needed, especially on the high nickel side. This is where our strength is.

[Slide 8: Recycling presents an attractive long-term opportunity, but significant recycling capacities will only be needed toward end of the decade]

Just briefly on recycling: Recycling, as you can imagine, is a matter of time. When you have all these cars on the road, then eventually these cars will come back for recycling. This will be a fantastic source for metals and raw materials. It will also be driven by regulations. It will also have benefits of low CO₂. All the desirable attributes fit very well with our purpose, with sustainability, revolve around recycling. This will come.

Again, this is the outlook here. The timing might be here or there, but it's huge growth that will come. And we need to start in a smart way without too much capex – but in a smart way – to position ourselves there. I will show you how we are planning to play this.

[Slide 9: Our mid-term strategic priorities]

Now I will switch from this context of the market and what's happening. Yes, we have a short-term disruption or short-term slowdown. This also allows us to play differently, de-risk our path; the long-term path is still valid.

I will now switch to our focus. We will focus on these three things that I mentioned in order to strengthen our positions with customers going forward.

[Slide 10: With our setup and existing state-of-the-art assets, we are well-positioned to meet customer demand over the next years]

I'll start with the first one. This is a map where you see our positions. I'll start on the left. We started almost 10 years ago with a small position in North America. We built a plant there. Actually, it has a personal connection for me because at that time I was in the U.S. and we had an Argonne National Laboratory IP license for NCM and that's all we had. Then we started this journey of: How can BASF play on this?

That is how we started. But then we had fantastic collaborations in terms of expansion. We did a JV with TODA in Japan, which got us access to a lot of technology know-how in production. The trick here is how to make things. This is a fantastic joint venture partnership that we started with, which gave us assets as well as customers in Japan.

Then we expanded that model in China, too. We did a JV with Shanshan where we are also the majority owner. This, again, has given us a fantastic set of capabilities. I was there a few weeks ago and the people there have been in batteries for 20+ years. They're not just showing up now and trying to figure out batteries.

This location is the center of a lot of EV technologies and battery technologies. It's fantastic: labs, application know-how, people running assets. They have created assets from generation 1 to 2 and 3. We have state-of-the-art assets now.

Now we have built another state-of-the-art plant in Schwarzheide, which is coming online this year.

We have 190 kilotons of capacity and are well positioned in all regions. We have R&D centers and application labs, also in all regions. We have roughly a billion euros in sales, 2,300 employees. In the past years, we have spent €1.1 billion on capex to build some of these assets. So, we are well invested for now.

Now we can really fill these assets. Our customers are working with us on qualifications in all regions. Our number-one mission now is to leverage these assets and meet the demand for the next four years.

[Slide 11: We have built a foundation for battery recycling that will enable us to expand in the future]

In recycling, we also have our black mass production at Schwarzheide, where we built our CAM plant. Black mass is basically made from the production waste that's coming from different production areas. We are able to turn this into black mass, which can then be refined to extract metals.

It's a small plant, but we have now tested it, and it works. We work with customers. It allows us to work with recyclers, with collectors, with partners, also in a closed-loop system. You see some of the names there. This is allowing us to set up the ecosystem as this market will develop and we will position ourselves, so that when the time comes, we can scale on a bigger recycling facility. This will likely be beyond 2028. So, that's our mission: CAM and recycling.

[Slide 12: Strategic sourcing for metals & PCAM ensures secure, resilient and competitive supply while decreasing capital requirements]

Now, PCAM and metals. PCAM is a precursor for the CAM step. All this downturn actually also has some benefits for us. We now have a lot of options available to us to strategically source PCAM – we have some capacities to produce it, but we can also source it from the market.

The same thing with metals. We have relationships now and there is enough supply available. So, we have a unit which is dedicated to sourcing this in a strategic way from the market – building relationships and sourcing metals responsibly. You see all the NGOs and associations we work with, so we are also sourcing metals in an audited way, in a sustainable way, with the right partnerships. Of course, these are criteria that we also use for our own investments.

That's our focus here. Of course, the benefit of this is that we can now avoid any capex in these steps which are not our main mission right now. And we are able to do this via strategic sourcing.

[Slide 13: We will de-risk our future growth path by continuing to adapt to market conditions & assess collaborations along the value chain]

Finally, if you put all of this together, this is our approach to de-risking the business setup that we have already spent money on. We have the option to grow, but now in a very de-risked way. We are not planning any significant capex for the next four years because all of this has been invested. We will now grow and fill the assets.

We will also be open for collaboration along the value chain. And – as Markus also mentioned – we have done this throughout the whole build-up of this business. It's happening in the industry. So, we will continue to look at it; maybe there are also opportunities to do things here.

Of course, our biggest mission for the team is finishing the customer qualifications. We have a very good, strong pipeline in all regions with different kinds of customers. This is what we believe will start showing up in the next years.

I have also spoken with the Battery Materials team. As you can imagine, this has also been a big change for them, just like everybody in the industry, compared with a year back. I can tell you: All of them tell me that if they got a chance again to work in a business like this, they would definitely do it – because it's a once-in-a-lifetime chance to participate in this kind of transformational journey. The team is very agile, and they love what they're doing. We have gained a lot of experience in building plants. They're all keen to push things further, do things in a more efficient, better way. There is still a lot of innovation possible here. This is what gives us confidence, also that we can reach these EBITDA margins once we have good utilization.

[Slide 14: We remain committed to long-term ambition of becoming a leading global CAM supplier]

This is my last slide on Battery Materials. Here, our focus remains on how to de-risk our path forward. We have fantastic assets. Now our path is to see where this goes. Then we will look at options along the way.

I will now switch to another fantastic business which is benefitting from the slowdown in EV, which is our ECMS business.