1 BASF Group

1.1 Overall business environment

Christian Faitz (Kepler Cheuvreux): Can you in any way qualify or – even better – quantify how much of your operations in China are affected by the lockdowns at present?

Dr. Hans-Ulrich Engel: We have businesses in China which are unaffected, and we have businesses which are heavily affected. I give you the example of our automotive catalysts business in China which, in the month of April – this is information from the beginning of this week –, has roughly, volume-wise, delivered 60% less bricks than in the prior-year month.

We have other businesses which are unaffected because they are not in a lockdown area, because they have access to the logistics they need, and also because their customers are not affected. But overall, it is difficult to quantify that effect at this point in time because we don’t have the full set of numbers that I would need to qualify it or quantify it.

But it is clear that, in the month of April, we will see a measurable effect from the lockdowns in China. The question is how this will continue going into the month of May.

Dr. Martin Brudermüller: Christian, maybe I quickly add on this. I think there is a deadlock position; the Chinese government cannot really escape from its zero-Covid strategy. They would have to ask for Western vaccines to mitigate the situation. That is a difficult situation for them to get out of.

On the other hand, I am quite sure they will take the appropriate measures to turn the situation around when it is getting really critical for China. But I think over the next weeks and maybe one, two, three months, it will be more difficult, and we will see that volumes will go down. I think the pictures with the ships in front of the Shanghai harbor tell us that this is already something that goes beyond China because parts will be missing in and out of China, which will have an impact on a global level.

On the other hand – and that is also China: Not only in our plants, but certainly with many other companies, we have employees who have not been in lockdown, taking their sleeping bag and everything they need. They sleep at the BASF sites now for four weeks. That commitment is to be seen nowhere else in the world and you could not imagine that in Europe.

So, they keep all our plants running; we don’t have a single one shut down at the moment. But as Hans said, you certainly have the supply chain and you have to coordinate with your customers. But I think it is very difficult to calculate or quantify that at this point in time.

Chetan Udeshi (J.P. Morgan): Can you remind us how much of BASF production is in Europe in terms of production capacity, the volumes, and how much of production today is in Germany?

Based on what you can see in your current order book, earnings environment, can you give us some sense of: Are you comfortable with what you see in terms of Q2 consensus or full-year numbers, which are probably at the low end of your guidance range, based on current trends?

Dr. Hans-Ulrich Engel: First of all, production in Europe is in the order of magnitude of 40% to 45% of global production. And Germany – this is a rough number that I am giving you – is 50% plus of the production in Europe.
The order book is strong, is solid, as Martin has already said in his speech. There are two weaker spots – one is automotive, for the known reasons. The other one is China. But as we said, with respect to China, when you read about China and the lockdowns there and you look at the order books, you don’t see the intensity of the lockdowns reflected in our order books. But that is something that may change.

The order book, as I say, is robust, solid. As always, we have a very good look for the next 30 days, which reflects about 60% of total orders. We then have for 30 to 60 days roundabout 30% in the order book. Looking at all of that, as I said, this is solid and robust with the two just mentioned exceptions.

Yes, we had a very strong quarter, no question about it. You can calculate the percentage compared to guidance. But I think what is important to see – the first two questions, your question and the question from Christian, already indicated that – is: There is so much uncertainty out there that, at this point in time, we simply said, we will stick to the guidance that we gave at the end of February.

1.2 Raw materials supply

Andrew Stott (UBS): You mentioned in your speech that you are looking at what you can do in the scenario that Germany is forced to allocate natural gas. You are also looking where, as you said, technically feasible, you can actually substitute natural gas. Can you talk more about that scenario planning? Is it shifting more to Antwerp and other sites? Are you building inventory at the moment? Just thoughts on what you’re actually looking at here as Plan B, Plan C, etc.

Dr. Martin Brudermüller: Maybe I start and focus on Ludwigshafen which is more than 70% of our gas usage in Europe. We have about 4% of Germany. We are the industrial user. You see enormous numbers here.

Just to give you an indication: About half of that is actually the energy production, i.e., steam and electricity in the cogen (combined heat and power) plants. Then the next largest product is actually ammonia, followed by acetylene for BDO and with that you have the large consumers.

The first thing is that we actually continue to and further accelerate the energy transformation or transition into renewables, because that would give us the opportunity to partially reduce utilization at the gas-fired power plants. That would be definitely helpful.

As I said, the big lever is ammonia because it is the largest consumer and a global commodity. Earnings are quite nice at the moment because ammonia is short. But that is also something where long-term one could think about buying ammonia, substituting own production. You could even go for green ammonia over time, which would reduce your CO₂ emissions and save investment cost. These are the kind of measures we are looking into.

The more trivial thing is actually, you look at your cogen plants today and, for example, find out: You have some 15% of the fuel which you can substitute directly, immediately by oil. You use all these kinds of levers: We have some turnarounds, so we shift the turnarounds to reduce the consumption.

And we have a technical limit, which is about 50% of the gas consumption in Ludwigshafen. If it would go significantly below that, it actually means that you have to shut down the site.
I made this very known and very transparent, I think for good reasons, because first, you as investors have to know about that because that’s a major risk. On the other hand, also the German government has to know it because they are the ones who would allocate the gas in certain scenarios. And they also know then what that means if BASF would not produce and what it would mean for the value chains.

In Antwerp, the site uses much less gas, but there it is even more pronounced, with roughly 50% of the gas consumed by ammonia. One of the key considerations short term and long term going forward will be actually the production of ammonia and how you arrange for that. But there are many levers, and I can only say: We are very happy that we have the wind park already. We are going for other projects. We have the heat pump project. That will all help us to reduce natural gas consumption.

I would have loved that we are one or two years further ahead, but I can only echo here what I said before: It is not possible to reduce the gas consumption by a large amount. That is something that we have to live with, the uncertainty, for quite a while.

**Andrew Stott (UBS):** Are you prepared to build inventory if customers require it, considering all the supply chain issues?

**Dr. Martin Brudermüller:** You always look into this. I think, as already in the pandemic, the coordination and the communication with customers has really intensified. People talk about and know about what they need, where they are concerned. And certainly, we try to adapt our stocks.

But I think also the customers have raised their stocks because of rising prices. They have been going for securing materials also over the recent months and weeks.

You can imagine that we are flexible enough to grab that opportunity.

**Jaideep Pandya (On Field Research):** What are your naphtha purchases, if you are purchasing any naphtha which is Russian origin? And how difficult or easy is it to replace that? Are you seeing any problems with regards to sourcing naphtha or, for that matter, LPG in Europe?

With higher ethane prices, higher LNG exports out of Europe, do you see a tough time for the global cracker landscape?

**Dr. Hans-Ulrich Engel:** Naphtha: When I look at the years, let’s take 2021 as a year. In 2021, we didn’t source any naphtha directly from Russia. We’re sourcing naphtha via traders in Europe. The Russian share in 2021 is in the high 30% range.

We never can say that exactly, but this is – if you think about the traders we are dealing with and their respective portfolios, where the ships are coming from – the order of magnitude was just short of 40% in 2021.

We’ve reduced this in the first quarter – maybe more specific: starting from the beginning of March – already by, let me put it this way, a measurable amount and the clear target is to reduce further and to get to zero Russian-sourced naphtha as quickly as possible. Our team in procurement is working on that heavily. We consider that as doable.

It’s a different situation than the situation that you have with natural gas in Germany and in Europe; you have a different market. Transportation is different, obviously by ship mostly and not by pipeline. So that is comparable actually to the oil situation, where it is also easier to become less dependent on Russian supply in Europe.
It comes or may come with higher prices for naphtha in Europe. When we look at Q1 and there, in particular, the month of March, we see that our cracker business in Europe is strong despite the naphtha prices, which are on an elevated level. I think on average we were at 900 dollars per ton in the month of March for naphtha. I hope that helps to put things in perspective.

### 1.3 Renewable feedstocks and green hydrogen

**Markus Mayer (Baader):** Given the new situation of very high oil and gas prices, have you also changed your timeline for becoming CO₂-neutral or switch to renewable sources like fermentation-based chemicals?

And also in this regard, have you also tried to get more renewable suppliers or are you pushing your own fermentation capabilities more in this direction?

You had also several thoughts in previous conference calls on green hydrogen and that hydrogen in general might become a business case for BASF. Given this very high energy cost level you have right now, do these business cases become now more economically sensible for you?

**Dr. Martin Brudermüller:** On the first one, I think we talked about this several times. The problem is in general: There is no way that the whole chemical industry can switch from fossil to bio-based raw materials because that would stretch all supply and you immediately have interference with food and feed markets. So that would be very difficult.

As we have said at the Investor Update in March with our example from Henkel, this is actually a customer-by-customer piece where you have customers that are very ambitious in sustainability and they push you and they do projects like this, and then you try to secure the volumes.

I would say, in general, for the one or the other solution, fossil-based may be increasing faster than the bio-based. So they’re giving in the one or the other area also a case where you could now step in. And that’s actually what some of the customers do, and we take then these mass balance approaches to facilitate that.

But I would not really say that there is a massive acceleration of that trend. There’s a lot of stuff going on with single customers, on single product lines. The most prominent and biggest one was this Henkel agreement. But after we announced the Henkel agreement, some of the competitors got a little bit nervous and stepped up and said: We want to do similar things. But I would not say that there is now a dramatic change.

Green hydrogen: That is also a very difficult situation because overall that is still very expensive. You might have seen in the news, at least here in Germany, there was a study done by the German government, I think, with Australian partners for green hydrogen. Actually, what they said is: With the full transportation cost to Europe, that would be actually 6.50 euros per kilogram of hydrogen. If you compare that to, in times before we had energy prices rising, something like 1.80 euros per kilogram in steam reforming. Now you are certainly significantly higher with the gas costs, but you see how big the gap is between those two.

There is no way at the moment, also with the capital you need to install all that and to be invested, that this really becomes a business case for which your customers pay. And this is why I said we are very much going to direct electrification. Hydrogen has a lower rank for us in terms of lever for reducing our CO₂.
And the big lever is actually green ammonia. This is what I mentioned earlier. These are the big volumes. Most of these 1 million tons of hydrogen BASF uses in the group worldwide is actually used for ammonia. So you could think about such kind of projects.

I think there are some areas in the world that are becoming interesting if you have solar energy at very low cost, maybe even gas in the future where you can use our methane pyrolysis. So that is definitely something worth looking into, with respect to European operations, to look into energy costs, but also the rising CO₂ costs.

That’s why we are not immediately jumping on this green hydrogen now. It’s in our considerations, but it’s not the primary lever on our way to decarbonize. I think that is also what we made clear at the Investor Update.

1.4 Wintershall Dea

Jaideep Pandya (On Field Research): What is your worst case or Plan B scenario for the Oil & Gas business? I appreciate you can’t IPO it right now, but if you can’t IPO it forever, what would that mean for BASF?

Dr. Hans-Ulrich Engel: On the Wintershall Dea side, as Martin said, the strategic decision is clear. We will find ways to implement that. An IPO in the current situation is obviously extremely difficult, not to say impossible, but I can guarantee you that we are working on that, and we will find a way to implement the strategic decision that BASF has taken.

Laurent Favre (Exane BNP Paribas): Another question on Wintershall Dea. It’s on the dividend which was cut to the statutory minimum of 6 million euros.

You said yourself that Wintershall Dea is not directly or indirectly sanctioned. I think there have been changes at the Board and at LetterOne as well. The financial performance is, well, I guess, pretty obvious to all of us.

I think Wintershall Dea said that a dividend could be reinstated depending on circumstances. I was wondering if you could shed a bit of light on whether it’s related to governance, operations or something else.

Dr. Hans-Ulrich Engel: A dividend decision was due, actually, as always, end of February. You know what kind of a situation we were in at the end of February. The decision was simply made to postpone the dividend decision to a later point in time.

I don’t know whether you participated in yesterday’s call of Wintershall Dea. You’ve seen and heard then what the cash position of Wintershall Dea is. I would describe that as rock-solid. I hope that we will have a bit more certainty with respect to overall developments economically, geopolitically, and that this will put the shareholders in a position to come to a conclusion on the dividend during, probably Q3, latest beginning of Q4 of this year.
1.5 Outlook 2022

Matthew Yates (Bank of America): You’ve left your guidance unchanged, which is totally understandable given the uncertainty out there. But specifically on the oil price assumption: If you were to mechanically move from 75 dollars to 100 dollars the barrel, do you think that would impact your profit guidance or is the tightness in the market sufficient to pass that through?

Dr. Martin Brudermüller: That is this balance between strong demand and pricing power. We promised you in the last call that we are heavily going for price increases. I am actually quite proud what the BASF team did. You see in the Q1 numbers, we have significantly increased prices everywhere, also downstream where we said we are delayed by the pricing mechanisms.

You ask now if we are going to have these high oil prices for longer and what that would mean. It would strongly depend on the demand. If the demand continues to be strong and there is maybe shortage and we have a reasonable or good demand/supply, then actually I think you can also live with these high raw materials prices, energy prices. The customers don’t like it, but they will pay for it.

If, on the other hand, the demand would really go down because we would run into a recession in Europe, due to Ukraine and Russia being 8% of GDP and the shortages and the supply chain disruptions would take down GDP globally significantly, then certainly the pricing power at the absolute level where we are will be going down. Then the resistance of the customers will go up.

But currently, I would say: Yes, no one likes it, but we are actually quite successfully handing over. It certainly starts very quickly in the Chemicals and Materials segments. That's why they also contributed so much in this environment.

But again, I'm really happy – and we promised this to you: We have also made significant inroads in the downstream segments to increase prices. As long as the economy is not collapsing and we don't get into stagflation, where you have a strong inflation paired with growth going down, then I would say that has a good chance to go on for quite some months.

Mubasher Chaudhry (Citi): Could you provide some comments around the gas price assumption that you’re making for the rest of the year?

Dr. Hans-Ulrich Engel: We do this strange thing in Europe: We look at gas prices in euro per megawatt hours. I'll build the bridge in a second while I try to build it to dollars per million BTU. We’ve seen in euro per megawatt hour gas prices at a level of 85 low and 360 intraday high. So that translates in U.S. dollars per million BTU to something in the order of magnitude of round about 100 dollars per million BTU high and 25 dollars per million BTU low.

Now, giving a reliable gas price forecast for the remainder of the year in the current situation is almost impossible. We have a base case assumption, which I will not disclose here because a month from now you may call me a fool because I told you what kind of gas price basic assumption we are using.

But I hope that the kind of volatility that I just described lets you understand how difficult it is to forecast gas prices in the current environment.

Dr. Martin Brudermüller: And everything depends on whether we can hand it over. That’s the critical point.
2 Segments

2.1 Chemicals

**Andreas Heine (Stifel):** Chemicals: At least I was most surprised seeing that segment being so strong in Q1. Looking at the margins, what you see in the second quarter, how do they develop sequentially?

**Dr. Martin Brudermüller:** Maybe a quick comment on the margins in the chemical arena: First of all, if you look at all our crackers, they actually run in their very high 90s, so a very, very strong utilization, which underlines the order book and also the demand in the market.

If you take a single product like for example acrylic acid, margins have been coming down a little bit from the peak. But if you compare that with the five-year average margin, you are still at a very, very high level. The same is also true if you look at MDI and TDI, particularly for MDI. This is still trading close to the areas where we have been last year. That really shows that it is this underlying demand which is still very strong and which really allows you to pass on all the increases from the raw material side as well as from the energy side.

Certainly, if you look into several of the products, whether this is ammonia, whether this is cyclohexane, benzene, toluene – you know all these products –, they have actually increased significantly in price.

But based on the strong demand, you can really pass on the increases and partially, in the one or the other case, also hold the margins. April margins in the Chemicals segment are still very high.

2.2 Materials

– no specific questions –

2.3 Industrial Solutions

– no specific questions –
2.4 Surface Technologies

Peter Clark (Société Générale): You talked about the strong demonstration of pricing downstream. If I take Coatings, your 3.9% Q4 to 8.6%, it’s very apparent there. It suggests to me you’re even getting traction on the auto OEM side now quite significantly, but you’ve still got some catch-up.

So, I’m just wondering where you see the inflection point on the margins in something like Coatings. You talked about pricing power for the next few months. Will, looking at the second half, maybe margins be turning on the Coatings side?

Dr. Martin Brudermüller: If you look at the segment numbers here, the price increases and, I think, we explained the Surface Technologies and the particular situation over there. All the others, in particular the downstream, really did a good job: 21% in Nutrition & Care, Industrial Solutions with 19%.

In the Coatings area, yes, we were able to significantly increase our sales and have been raising prices due to higher raw material costs. But certainly, if you have a lower number of cars produced, your pricing power is more limited. This is exactly what I said. It goes hand in hand.

If I just take the numbers here, from IHS Markit, who actually expect 80.6 million cars to be produced, it is roughly a 6% increase. The fact is that year to date it is minus 5%. So with that, you see basically that a lower number of cars is produced. And with that, the pricing power in Coatings is limited. They increased because everyone knows that there are higher prices for everyone. But you could not really increase to significantly increase your margins.

I think in that particular business you’re talking about for Coatings, it will only come if eventually the limitations for car production are reduced because then it’s improving again. And then you certainly have pricing power. This is the “magic formula” which is now evident in automotive from the production numbers, but that is also true for all the different segments.

But what you can actually see, also emphasizing the words of Hans, when it comes to order books and such: We would not have been so successful in all the other segments if there would not have been strong demand.

Peter Clark (SG Corporate and Investment Banking): So, what you are suggesting is: The auto OEM pricing is still very sluggish compared to the other two bits of that business.

Dr. Martin Brudermüller: Absolutely. This is the area where this is most difficult for the reasons I mentioned.

2.5 Nutrition & Care

– no specific questions –
2.6 Agricultural Solutions

Matthew Yates (Bank of America): You had a nice 10% year-on-year increase in profits in Agricultural Solutions. But given the backdrop we have of crop prices, I’m not sure if you would have hoped for even more profit growth.

Are you seeing any sort of demand destruction on the crop protection side as farmers allocate money towards fertilizers? Or is there any issue here around timing and perhaps we’re going to have a strong Q2 to look forward to in Ag?

Dr. Hans-Ulrich Engel: With respect to price and price increases, there is a 7% price increase. We have roughly 10% volume increase. So with respect to demand destruction due to increased fertilizer prices, increased other input costs that farmers have to digest, I think there is a strong appetite going into the season in the northern hemisphere based on everything that we can see on the farmers’ side.

This is explained by the development of the soft commodity prices. If you look at soy prices, wheat prices, corn prices, all on an elevated level, actually partly on higher levels than what we’ve seen in the years 2012 through 2015, I think despite the really strong increases on input costs, that’s a good background for a strong Agricultural Solutions business at BASF.

I think Q1 has shown that. Q1 with a 60-million-euro improvement on EBIT before special items basis, from around 800 to more than 860 million euros, comparing to a very strong quarter already in Q1 of last year, is a good proof for what the business can deliver in the current environment.

Andreas Heine (Stifel): In Agro, there is quite some wording on the crop protection side, but in the first quarter, the seed business is most important. Could you give some insight what you see in price and volume for your most important seed areas? So canola, cotton and vegetables, please.

Dr. Hans-Ulrich Engel: With respect to the Ag business and there in particular seed: a very strong start in Q1 with the seed business both with respect to top line and with respect to earnings. So a good, strong development there. As I say, better than what we had in Q1 of 2021.

One thing comes to mind that I should have said when one of the earlier questions came on the Ag business. With respect to seed, this is obviously primarily a Q1 business. The remainder of the Ag business, the good old crop protection business, is Q1 and Q2 business. Timing can always play a role. That’s something that I forgot to say.

But with respect to your question on seed: a good, strong business, better than in Q1 of last year. This is actually the big part of the season in Q1 for Ag, northern hemisphere.
3 Closing remarks

**Dr. Martin Brudermüller:** First of all, I think, you saw we really started strong to the year. I hope you also saw that we keep a cool head in this situation. I think this is what you have to have.

You also know that the BASF team is always at its best performance when we are in crisis mode. So be assured that we really leverage everything we can within the sites, within the regions, also within the value chains. That’s also the time when you are very close to your customers. We can see that also by the responses from our customers, our satisfaction on the customer level. Nevertheless, they have to pay high prices, at a very, very high level. For that reason, I think, we are now driving a little bit by sight, so we have to see how things develop. But I think there’s also good reason to assume that the next months to come could actually be very strong.