

## BASF Roundtable Asia Pacific



**Sanjeev Gandhi**  
Member of the Board of  
Executive Directors

**Stephan Kothrade**  
**Gops Pillay**  
Presidents, Asia Pacific

**BASF Roundtable**  
**Asia Pacific**

London  
September 23, 2016

 **BASF**  
We create chemistry

**We create chemistry in Asia Pacific**

## Transcript – Presentation September 23, 2016

## Cautionary note regarding forward-looking statements



*This presentation may contain forward-looking statements that are subject to risks and uncertainties, including those pertaining to the anticipated benefits to be realized from the proposals described herein. Forward-looking statements may include, in particular, statements about future events, future financial performance, plans, strategies, expectations, prospects, competitive environment, regulation and supply and demand. BASF has based these forward-looking statements on its views and assumptions with respect to future events and financial performance. Actual financial performance could differ materially from that projected in the forward-looking statements due to the inherent uncertainty of estimates, forecasts and projections, and financial performance may be better or worse than anticipated. Given these uncertainties, readers should not put undue reliance on any forward-looking statements. The information contained in this presentation is subject to change without notice and BASF does not undertake any duty to update the forward-looking statements, and the estimates and assumptions associated with them, except to the extent required by applicable laws and regulations.*

## Agenda



### 1 | Keynote – Sanjeev Gandhi

---

### 2 | Asia Pacific – Gops Pillay

---

### 3 | China – Stephan Kothrade

---

### 4 | Summary – Sanjeev Gandhi

---

**Sanjeev Gandhi:** Good afternoon to all of you! You see some new faces here because you see the Asian team. Three of us are relatively new on the job. But you see the CVs in the folder, so I don't take the time to introduce.

The plan today is – we go through the agenda: I talk a little bit about the overall situation in Asia. Where are we coming from? What is happening today? Where do we want to go from here? Then I will hand it over to my two colleagues Gops, who will take us through his responsibility in Asia, which is everything but China, and Stephan, who will take us through his views of what is happening in China. Then I do a short roundup and summary. Then we have time, adequate time, for questions because I guess you will have a few.

## Key Messages



**Asia Pacific** is the **largest market for the production and consumption** of chemicals.

**BASF is well positioned in Asia Pacific** and is quickly adapting to the changing environment.

**“We create chemistry in Asia Pacific”** leveraging the growth opportunities in the market.



BASF Roundtable Asia Pacific, London, September 23, 2016

4

## What has changed in Asia Pacific?



**Slower growth** in **China** – rebalancing of economy towards consumption and services

**Low growth** in **large mature markets**

**Slight pick up** in **India** and **South East Asia**

**Overcapacities** in some **commodity product lines**

BASF Roundtable Asia Pacific, London, September 23, 2016

5

You will see this a couple of times. This is what we are going to focus on, our three key messages to you. Asia is already today the largest chemical market in the world. This is a trend that we are not going to see changing any time soon. It is a market which is extremely important for the industry and for our sector.

Obviously, there are challenges in Asia, all kinds of challenges: oversupply, margin pressure, over-investment, things like this. But despite that, it is extremely important to be in.

Given this changing environment – slow growth, new normal, all these buzzwords that we hear all the time – we in BASF have to adapt and we are adapting as we speak, the path forward, so that we are aligned and tuned to what is happening in the market and what we expect going forward.

We have – you are all familiar with this – the “We create chemistry” strategy. What we are doing in Asia is not developing a new strategy. The team in Asia is focusing on three key aspects, that is execution, execution, and execution. So, it is all about getting it done and delivering on what we expect and promised and contribute profitably to the group out of this emerging and fast growing market in Asia.

The last time we did this kind of event was a few years back, it was 2013. We had a lot of assumptions as to what is going to happen, forward-looking assumptions. Obviously, it was quite clearly proven that we do not have the crystal ball because a lot of things have changed since then in the environment in Asia and in the environment in which we are doing business there.

One of the biggest changes which has impact not just on our industry in Asia, but globally is what happens in China on the ground. We keep hearing about the new normal, about rebalancing of the economy, about reducing the exposure to manufacturing and increasing or strengthening the services segment, about a consumption-driven economy, rather than a “manufacture cheaply and export to the world” kind of model.

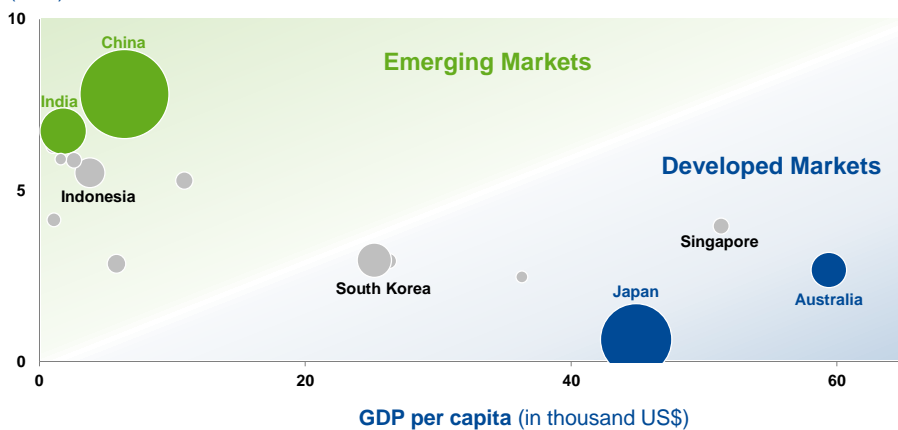
It is happening; we feel it, we experience this. We have been seeing this now for some time, a slowing of growth in China. So this is something that we can confirm and it is something that we see here as a challenge, but also as an opportunity for us to adapt. We are just in front of the 13th five-year plan, which will be released next year. Whatever will come out of this, the first signs are very encouraging for our industry. This gives us a lot of promise and opportunities and hope.

## Asia Pacific remains a diverse region



### GDP CAGR 2010–2015

(in %)



BASF Roundtable Asia Pacific, London, September 23, 2016 Source: BASF Size of circles indicate GDP 2015; all data refer to 2010 prices and exchange rates in US\$ 6

Asia is not one market. We are active in 16 countries and there are countries in Asia which are mature and not growing, even shrinking. There are some examples like Japan, Australia, Singapore. These are markets where we have a challenge to keep competitive and participate in the opportunities there to keep our business profitable and do the right things.

So it is not all the time about growth. This also means that we have to downsize sometimes, restructure, close assets which are no longer relevant in those mature markets which are still part of Asia, but they are not growing.

Then you have the opportunities coming out of South Asia, South-East Asia, which is quite exciting right now. We see some momentum building up there. We see pockets of excitement in terms of growth opportunities and, given our geographical region Asia, this is also somewhere where we participate very, very strongly and hope to take advantage of this.

Of course, overcapacities. On one hand, we have the scenario of low energy prices, low oil price, slowing growth and too much capacity being invested in some of these commodities, which leads to margin pressure.

That is a challenge that we have to tackle since we are part of that game and we are also in that part of the business what we call our Chemicals segment, quite big in Asia and active. These are some of the challenges that we face.

These are some of the major changes. There are many other smaller changes: FX impact, regulations, political change, all of that, things that you cannot anticipate when you write a forward-looking strategy. Hindsight is always 20/20 and now we know, these are some of the lessons that we have learned and take forward as experience and watch-outs for us.

As I said, there is no one Asia, there is no one China. This is an extremely diverse and complex region. What works in Japan need not work in Korea and may not work in Indonesia or Vietnam. This means that even though we are active in a region – we talk of Asia Pacific as one basket – our go-to channels to these different markets, whether these are the developed, slow-growing markets or the fast-growing emerging markets, have to be customized to local needs.

It is quite interesting, there are customers and partners also who consider us in most of these markets to be a local player. In China, for example, we are not called BASF, we are called Ba-Se-Fu. This is their version of our image in China. We are a very strong player in the Chinese market. Same in India, same in Korea, same in Japan.

But it is quite interesting: When we talk about Asia's challenges, Asia is not growing, this is not correct. There is no one Asia, it is a mix of a lot of countries and some are very exciting and some are challenging. It is an interesting mix of issues that we have there.

## Macroeconomic trends in Asia remain unchanged



- Asia: dominating global growth** (Image: Aerial view of a busy highway with many cars)
- China influence increasing** (Image: Shanghai skyline featuring the Oriental Pearl Tower)
- Demands of society and government** (Image: A large, dense crowd of people)
- Resource scarcity** (Image: A blue water droplet creating ripples in a pool)
- Urbanization** (Image: Nighttime view of the Petronas Towers in Kuala Lumpur)
- Competition for top-talent** (Image: A woman in a business suit looking thoughtful)
- Volatility, speed and uncertainty** (Image: A line graph showing fluctuating data points)



What does not change are the long-term global macro trends, which are also extremely valid in Asia. This is one of the drivers of our business plans going forward. This is what motivates us because each of those gives us opportunities in our business. There is no discussion about Asia dominating in contributing to global growth. I just heard a number: China and India contributed 60 percent or 65 percent of the global growth this year. We are not surprised. This is what is exciting for us because we are on the ground in Asia and we are taking advantage of this kind of opportunities.

The influence of China, globally, but also in our industry, already huge, will get bigger. You will see this. But the whole story is not only about China. We have also significant interests and activities outside China and Gops will talk a little bit about this.

Regulations. We are one of the most scrutinized and regulated industries in the world. There are all the time new challenges that we have to fulfil. Given the complexity of Asia, every country, every province has its own expectations of how we behave and our peers behave. That is a constant challenge to keep up with this, to keep up with standards, be compliant all the time and do the right things. But this is just one part of the complexity that we have to handle as a management team in that region with our organization.

Resource scarcity. Right now, it is a low energy, low oil, low gas price scenario. This will obviously not stay forever. It is not just about energy resources. We are talking about land. We are talking about water. We are talking about clean air. We are talking about housing, clothing – everything that we need for a population which is rapidly developing, increasing their standard and quality of live and having more and more expectations about how they and their future generations and their children would like to live.

All of that gives us opportunities. So that is also a very exciting trend here and it fits nicely with our “We create chemistry” strategy.

Urbanization. Huge opportunities because, as population moves from the hinterlands of these countries to bigger cities, there is need for housing, there is need for transportation, there is need for schooling, food. All of that is once again where BASF is offering these exciting solutions that we have.

Volatility, speed, uncertainty. This is today normal. We are never surprised what happens tomorrow, what happens next quarter, what happens next year. We have seen this all now. This is going to be the way it will stay. The so-called stability of the past is not something we bank on or plan on anymore.

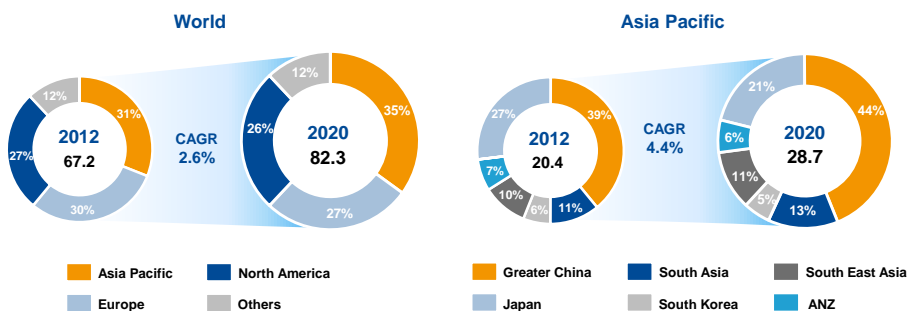
One of the biggest challenges we have is, of course: We are not the only smart kids on the block. We have competitors, we have peers, both Western and Asian and each of us is fighting for a limited talent pool. This is a huge challenge: hiring, training and retaining good people. We have more than 17,000 of those in Asia. It is a constant challenge that takes a lot of management attention. But we will also talk a little bit about this.

So, the macro trends in Asia do not change. We see slowing growth, but fundamentals are all still there and pretty exciting and strong.

## GDP in Asia Pacific is expected to outgrow other regions



Real GDP  
(in trillion US\$)



**Greater China:** Mainland China, Taiwan, Hong Kong, Macau  
**South Asia:** India, Pakistan, Bangladesh, Sri Lanka  
**South East Asia:** Singapore, Philippines, Vietnam, Thailand, Indonesia, Malaysia  
**ANZ:** Australia, New Zealand

BASF Roundtable Asia Pacific, London, September 23, 2016

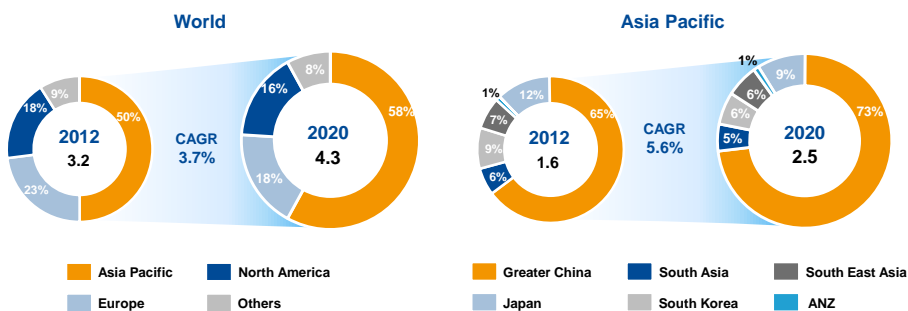
Source: BASF

8

## Asia and China continue to dominate global chemical production



Real chemical production (excl. pharma)  
(in trillion US\$)



**Greater China:** Mainland China, Taiwan, Hong Kong, Macau  
**South Asia:** India, Pakistan, Bangladesh, Sri Lanka  
**South East Asia:** Singapore, Philippines, Vietnam, Thailand, Indonesia, Malaysia  
**ANZ:** Australia, New Zealand

BASF Roundtable Asia Pacific, London, September 23, 2016

Source: BASF

9

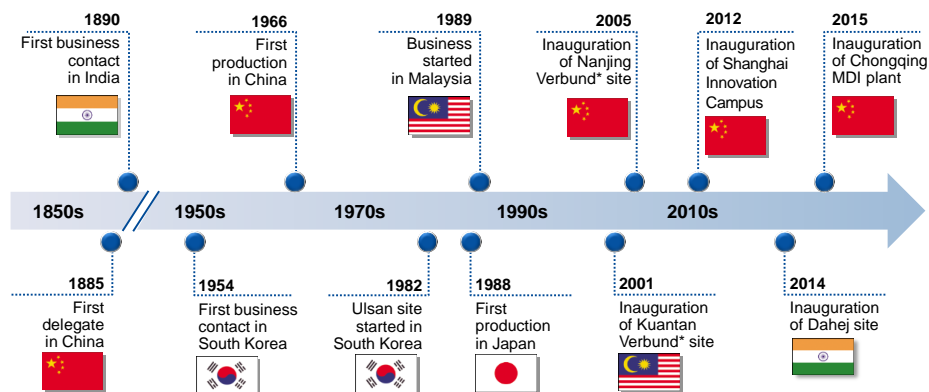
I talked about this, you know these numbers and I will not go into it. Asia is strong, Asia is driving growth. When you look into Asia, it is China, South and South-East Asia and these are the exciting growth drivers. Then we have, of course, the bigger economies like Japan and Korea, which are important, but are not growing as fast and their weight in future growth of Asia's GDP will stay flat or reduce. But this is not a surprise to anybody.

When we look into our own markets – I mentioned this already last year – Asia was more than 50, 52, 53, 55 percent of global chemical markets, so already dominating. The weight of Asia going down the line over the next years is going to become even stronger, even more important.

Chemical growth is strong in Asia and the weight of Asia in the global chemical markets is going to become stronger. When we dig into where the growth is coming from, you look at already the very prominent share of China in the Asian chemical market and then you see that this share even goes up further. So, China is going to become very, very important. It is already important now and it is going to become even more important.

That being said, the other emerging exciting markets like South Asia, South-East Asia, India, Vietnam, that's where a lot of good music is playing today. There are a lot of pockets of fun there.

## BASF is growing in and with Asia Pacific

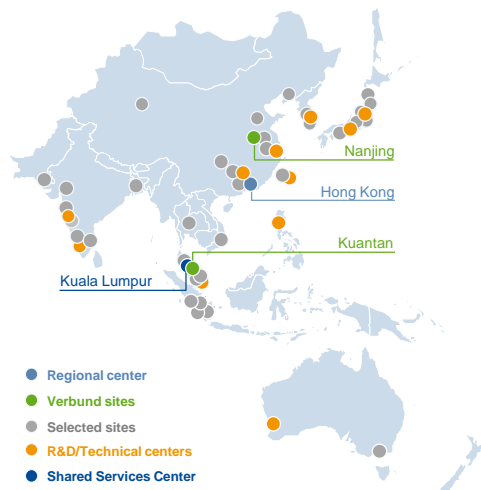


\* An integrated production complex where the manufacturing plants are interconnected to ensure that products, by-products and energy are used efficiently and intelligently and that costs and environmental impact are minimized.

BASF Roundtable Asia Pacific, London, September 23, 2016

10

## BASF in Asia Pacific 2015



BASF Roundtable Asia Pacific, London, September 23, 2016

BASF is active in **16** countries

Customers from **38** markets

Around **100** production sites\*

**>120** sales offices\*

**17,562** employees\*\*

**~€12.3 billion** sales\*\*\*

**~€0.9 billion** EBITDA before special items

\* Only selected sites and offices are depicted in this chart. Site and office numbers refer to companies of significant size where BASF holds a stake greater than 50%.

\*\* As of December 31, 2015

\*\*\* Sales by location of customer, not including BASF-YPC sales (€2.2 billion)

11

Where are we coming from? What have we done? We are 130+ years, 131 years active in China, 126 years now active in India. So we have been part of this journey, part of this story. We have been there for a long time. We are a Western company, but we are very, very local in all those 16 countries where we are active. As you see, those flags are not all red with the stars. We have invested and this is not everything we have done. These are just a selected few milestones. We have tried to balance our portfolio and wherever we have seen opportunities we have invested. Our philosophy still remains: We invest in the markets for the markets.

We are not a very strong believer – this does not mean we will not do this some day – of investing somewhere and trying to cater to the world. We prefer to be local and to behave locally in every market that we are active, whether it is with assets, with people on the ground, with resources, infrastructure, R&D, whatever it is. You see here a collection of investments and milestones. Some of this we will touch in detail. I will give you some updates on that. Then, if there are questions, we are happy to take them.

So, where are we? Last year, we were a roughly €12.5 billion company in Asia. That, by the way, is without our joint venture in Nanjing with Sinopec, BASF-YPC, which adds another roughly €2.5 billion on top. So, from a market share point of view, we are close to a €15 billion company. From an accounting, IFRS 10/11 point of view, we are a €12.5 billion company. We are active in 16 countries. We have more than 17,000 people. We have roughly 100, 107 sites, as we speak. We had close to €1 billion of EBITDA last year. Those little dots are basically our presence and activities in the entire region. Not everything is covered. We would not be able to fit it in. But some prominent ones are shown there.

## BASF is the only western chemical company amongst Asia's top 10



		Company		2015 Chemical sales in Asia Pacific (in billion €)	
1		Sinopec		41.4	External Sales – Chemical Segment
2		Formosa Group		32.6	4 related companies: FPC, NPC, FCFC, FPCC
3		ChemChina		31.9	Turnover – 4 related segments
4		Mitsubishi Chemicals		22.7	Net Sales – excluding healthcare & others, adj. for calendar year 2015
5		LG Chem		16.1	2015 sales revenue
6		Sumitomo Chemical		15.6	Net Sales – excluding pharma & others, adj. for calendar year 2015
7		Toray		12.6	Net Sales – excluding life science & others, adj. for calendar year 2015
8		<b>BASF*</b>		12.3	Sales by location of customers
9		Reliance Chemicals		11.4	External turnover – adj. for calendar year 2015
10		Mitsui Chemicals		10.5	Net Sales – adj. for calendar year 2015

Source: Company annual reports, BASF \* BASF would rank #7 with BASF-YPC sales included (€2.2 billion in 2015)

Where does that put us? It puts us amongst the top ten chemical peers in the region. We are the only western one there. But I don't like that term because I think we are as Asian as anybody else.

The numbers you see for some of our peers are only the chemicals portion of their business. In Asia we do not have Oil & Gas, so that is already obviously by default excluded. We have done that for some others. We are pretty proud of this position. We are a big player in the region. And it is important. Size does matter in some of our businesses – just to put this into perspective.

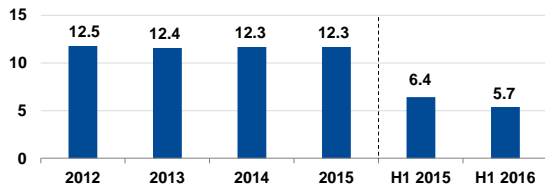
If you look at those flags, it nicely represents also the weight and the future importance of those markets like China, emerging India, but also, of course, Japan and Korea. So, that is quite a nice interesting mix of peers.

## BASF's performance in Asia Pacific



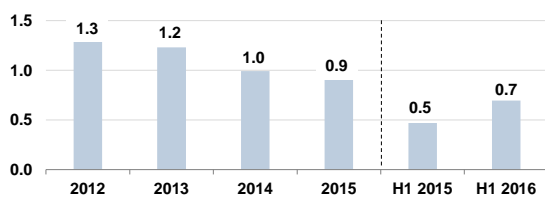
### Sales\*

(in billion €)



### EBITDA before special items

(in billion €)



BASF Roundtable Asia Pacific, London, September 23, 2016 \* By location of customer



- Stable volumes despite challenging environment
- Volume growth in China
- Increased share of products produced in Asia
- R&D platform set up
- Cost discipline



- Negative top-line impact due to portfolio pruning
- Overcapacities and low oil price impact prices and margins

13



That is a little bit of history. Why do we start with 2012 and not further back? Because that is when IFRS came into play and we did not want to have this kind of distortions. The message is: Top line we have not grown – very clear. We are flat, we are not growing. When you look at the bottom line, at the bottom of the chart, with the EBITDA numbers, we have been losing margin. That is a fact. We did not want it to end up like this. But this is what happened. But there are reasons and explanations for this.

Top line: With our constant effort on portfolio optimization we have done a lot of divestments and closures in Asia. That's roughly €1 billion of sales that we have given away over this period until 2015, either by divestments or by closures. So that is €1 billion out. The low oil price has a direct impact on our top line for some of our upstream businesses, but this impact is mainly 2015. That is a second reason for that. The third reason is, of course, overcapacities which lead to price pressure in commodities which then has also a direct impact on our top line.

If you look at the bottom line, margin loss is also then partly explained by the divestments that we have done, but is mainly coming from commoditization and increased competition in some of the bigger product lines that we have.

The good news is: Despite this difficult environment in the last few years in Asia, with the slowing growth in China and all of that we talked about, we have kept our volumes, we have even slightly grown volumes in China, which is good news. For some of our major product lines we have not seen market growth. So it is not that we have significantly lost market shares; we haven't. We managed to slightly improve our business and position in China. We have continued to invest. We have increased our production footprint on the ground. We have set up with a lot of effort a pretty impressive infrastructure in R&D in China. Some of you have visited our campus in Shanghai. It's an open invitation: Whenever you are in China, get in touch with us and Stephan will be happy to guide you through. That is a very impressive set-up we have there.

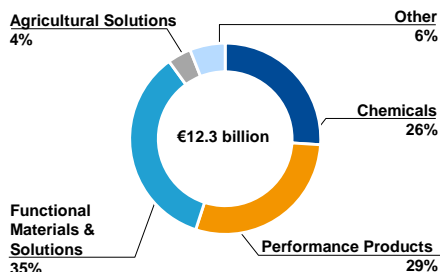
Of course, in this challenging environment, trying to keep our margins stable, we have worked a lot on efficiency and effectiveness and costs. We will talk a little bit about what we have done there.

The first six months of the year, we are quite pleased. We have done well. Our top line continues to decline. This is a direct impact of the full-year effect of the low oil prices on our top line. But in terms of margins, we have improved significantly. This is a combination of starting to fill up and ramp up our new capacities in the region and the work we are doing in terms of efficiency and effectiveness. That is the good news so far.

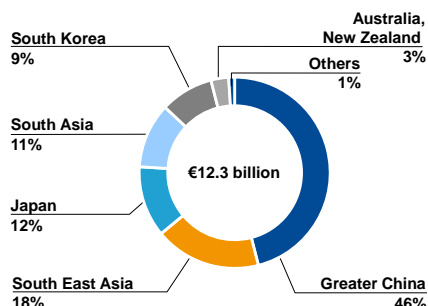
## BASF in Asia Pacific: Balanced portfolio



Sales\* by segment in 2015  
(in billion €)



Sales\* by sub-region in 2015  
(in billion €)



\* Sales to third parties by location of customer

Greater China: Mainland China, Taiwan, Hong Kong, Macau  
 South East Asia: Singapore, Philippines, Vietnam, Thailand, Indonesia, Malaysia  
 South Asia: India, Pakistan, Bangladesh, Sri Lanka  
 Others: Kazakhstan, Kyrgyzstan, Mauritius, Uzbekistan, Tajikistan, Turkmenistan

## Our strategy



<p><b>Market</b></p> <p>Grow sales faster than Asian chemical production</p>	<p><b>Innovation</b></p> <p>Accelerate innovation by utilizing new R&amp;D assets</p>	<p><b>Portfolio</b></p> <p>Continue to optimize our portfolio</p>
--	---	---

## We create chemistry in Asia Pacific

<p><b>Investment</b></p> <p>Selectively expand our local production network</p>	<p><b>People</b></p> <p>Attract, develop and retain talent</p>	<p><b>Excellence</b></p> <p>Drive profitable growth through excellence</p>
---	--	--

It is also quite interesting here, to just put this into perspective: There is always a tendency – because we have invested so much in the past – that we are very much commodity-heavy, upstream-focused in Asia. That is not really the case. If you look at the portfolio, 70 percent of our top line comes from our downstream businesses: This is Performance Products, Functional Materials & Solutions and Ag. So, this is a shift which has not happened overnight. It took a lot of years for us to build up our downstream businesses. Given that our top line has not really grown, we have grown the share of our downstream businesses in our portfolio. Right now, it is roughly 30/30/30, which is a very, very healthy mix and it is a nice hedge because then we play the value chains and we see where we can optimize and make the most out of this.

If you also look at our country portfolio, we are still below 50 percent of our business in China. So we do a significant portion of our business outside of China – something that we don't really talk about enough and today we want to make it a point to discuss that a little bit. So we see a lot of excitement in some of these markets, also outside of China. So it is not all China all the time for BASF in Asia.

You all know: We create chemistry. I did mention that what we do in Asia is basically under the umbrella strategy of the group. We focus on executing and delivering on the milestones that we aim for in the corporate strategy “We create chemistry for a sustainable future”. There is no new regional strategy. There is no regional strategy. We in the region are part of the group and it is our job in the region to deliver, execute and contribute to what we promised in terms of our global corporate strategy. But, of course, given the complexity of whatever we do there and the size, we have to focus and we have these six levers which are already something that we get from the past, where we say: We focus on markets, we want to grow in Asia above market growth. That is our clear target. We haven't done this in the past. But we intend to do this in the future and we will come a little bit to how we plan to do that.

Innovation. We have the infrastructure. We are still investing. We want to set up a new Innovation Campus. We will start this up in India next year. Gops will talk about this. We have now the resources on the ground. And now we want to start to cash in on them. So, that is going to be another clear target.

Portfolio. Constant endeavour to optimize our portfolio – industrial coatings that we gave up recently, textile chemicals that we gave up, our shares in the Shell joint venture in Singapore that we gave up. So it is a constant effort. The catalyst business, the polyolefins catalysts.

Investments. We want to continue to invest, but more selectively. The investments will drive profitable growth, which means: We want to invest in those portfolios where we see differentiation potential and higher margins.

That having been said, we do not say that we do not invest in the upstream businesses. We also do that wherever there are opportunities, but the clear focus and strategy is going to be building a production base downstream.

Excellence. We will talk a little bit in detail about this: constant efficiency and effectiveness initiatives in the region to become more and more competitive to correct our overheads and infrastructure to fit into this current challenging environment and, of course, 17,500 people which we want to grow as we invest and grow in Asia, managing them, hiring them, training them, retaining them, developing them and giving them opportunities. None of that would be possible without a team.

Market

# We participate in innovative and growing markets



Estimated CAGR 2015–2020 for selected industries, Asia Pacific



BASF Roundtable Asia Pacific, London, September 23, 2016 Sources: BASF, Smithers Pira (for packaging)

16

BASF is active in most markets. But there are a few where we really focus on because here we see exciting above-average growth opportunities in Asia. These are just a few examples.

Transportation. Vehicle manufacturing this year is looking really exciting. China is doing well. India is picking up. Thailand is doing okay. It is not just four-wheelers, it's two-wheelers because we have solutions everywhere. It is heavy vehicles. So, that is a clear focus of growth, as it is globally, more so in Asia.

Consumer products. We talked about quality of life, urbanization, more disposable income, people want to buy better cosmetics, better food, nutraceuticals, diapers, whatever it is, paints that don't smell, cars that are efficient, water that is clean, air that is clean. That is all BASF there. So, that is also very, very exciting.

Electronics. Electronics is Asia, Asia is electronics. It is all about what happens in Taiwan, China, Korea, Japan. So, that is a business that is innovated in Asia. It was created in Asia, innovates in Asia and then takes products out of Asia for the world – stuff that we have in our pockets, stuff that we use every day at home; there is BASF inside. Exciting.


Construction. Growing population, better quality of homes, infrastructure investments – exciting. It is a challenging market, but fundamentally sound for growth, different in different countries, but exciting for us.

Packaging. The new e-commerce tendency, the Alibabas of the world, the Flipkarts in India. We want to order online, products have to be shipped home, they shouldn't be damaged. You need packaging, but also more advanced packaging: coffee capsules, sachets, stuff like this – very, very exciting opportunities for BASF.

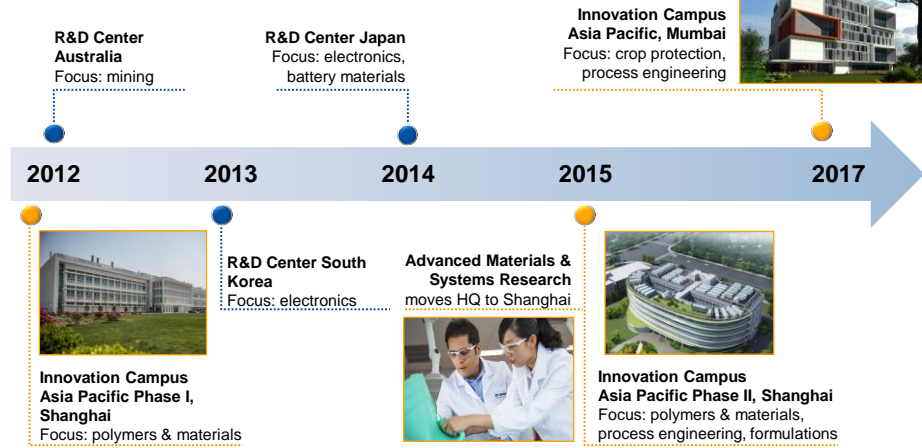
Agriculture. We have to feed that population. And so there are opportunities. That is a market where we also have a lot of excitement in the region. It is still small, which means we can expand our share – that is a good news in Asia –, increase our penetration, bring in all these products that we want to launch and grow above market.

**Innovation**

# R&D close to our customers: Our facilities across Asia Pacific




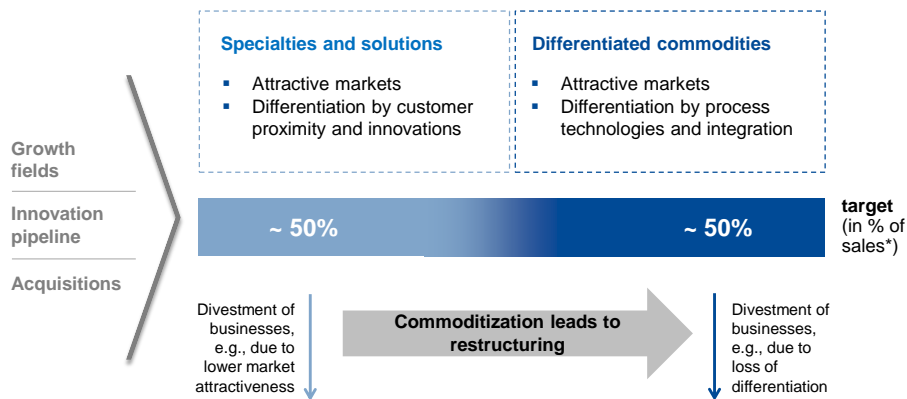
>900 R&D personnel in Asia Pacific\*



BASF Roundtable Asia Pacific, London, September 23, 2016 \* As of December 31, 2015

**Portfolio**

# Continuous global portfolio development

**Maintaining a balanced portfolio**

BASF Roundtable Asia Pacific, London, September 23, 2016 \* Excluding Oil & Gas sales

Let's talk a little bit about what we did with innovation. You are aware that we started up the second phase of our Innovation Campus in Shanghai, spent roughly more than €100+ million on that one. I just was two weeks back in that building that we have built in Mumbai in India. It looks small on the picture. It is massive if you visit it. It is five floors, iconic and state of the art. So, if any of you by chance is in Mumbai in the end of the first quarter, we will have an inauguration, we will invite our customers, the regulators, the governments and have a nice opening there – several hundred people working across the region in markets where it is relevant. So we do mining research and development in Australia. Where else should you do it? That is a hub for mining. We do electronics in Korea, a no-brainer. Battery materials we do in Japan. Of course, we have our two campuses in China and India where we work not just with our western partners who have also transplanted into Asia, but with the local champions, with the regional companies. And they are all the time coming to us and saying: Get me a solution. Help me comply with this and that regulation, China 5, ... 6, whatever it is, automobile, light weighting, everything.

We do materials research in Shanghai, we will do chemical research and ag research in India. These are global research centres, so they will also do work for the rest of the world, part of the global network. But, obviously, because they are based in Asia, we want to leverage this with our customers and partners. This is an exciting opportunity for us.

Portfolio. You have seen this before. Whether it is commoditizing specialties, differentiated commodities, solutions, systems – wherever we see challenges, where we cannot make a difference we are more than open to say: This business does not fit in our portfolio. At the right price, we are willing to give it to a different home where they belong. We have a lot of examples, good examples in the recent past.

So, it is a constant, constant endeavour, not just divesting portfolios, but also acquiring businesses, as we do recently, now with the Chemetall acquisition that we have announced.

# Portfolio development Asia Pacific



## Selected transactions with relevance to Asia Pacific



BASF Roundtable Asia Pacific, London, September 23, 2016 \* Full-year sales effect included Closing expected in 2016

# Investment

## Balanced asset base in Asia Pacific: Investments for profitable growth



### Selected major capex projects\*



- Investments 2012–2015: €3.0 billion (13% of BASF Group)
- Increasing focus on investments where BASF:
  - is technologically leading
  - has a competitive advantage
  - expects strong profitable market growth
- Target remains: ~75% own manufactured products by 2020 (today: ~55%)

BASF Roundtable Asia Pacific, London, September 23, 2016 \* Investments in property, plant and equipment (excluding acquisitions) \*\* Without China



What have we done in Asia? I mentioned roughly €1 billion of sales that we have given up. That impacts our top line. That is a whole list of stuff that impacts and has impacted our business in Asia. We have also acquired some and are in the process of acquiring roughly half a billion, which will come to our top line hopefully by the end of this year, because some of them have not been closed so far. But we expect that we should see the impact next year. So, it is a constant process: As we do this globally, we do this also in Asia.

What you have in the middle are our very strong partnerships with the local and regional majors. You see big names there, you see small names there. You see Petronas, you see Sinopec, but you also see the locals like Kolon Plastics, where we announced a joint venture in Korea for high-tech materials, or our partner Heesung in Korea or, in Japan, Sumitomo. That is just a snapshot. It is a constantly changing picture and maybe next year it looks different; we will see.

The blue is what we have already invested in: plants that are running, plants that we are ramping up as we speak. That is the work we have done in the last few years: 2012 to 2015 around €3 billion, capacity in the ground, in the markets, for our customers in the region. So, that is a lot of homework. We have now the space here.

The green is what we have in the pipeline, what is just announced, it is not everything; what we are planning to do as we start to build and start up in the next couple of years. But there is a bit of a shift. So, you see there are not too many of the new upstream commodity products that we are investing in. It is more about extending value chains, feeding consumer demand and going downstream.

Wherever we have a technical advantage – that goes without saying –, a strong competitive edge, a product that fits nicely into an existing Verbund, takes advantage of all the infrastructure that we have invested in, and extending the value chain and getting one step closer to the customer, those are the kinds of investment we always look for. All of those investments will help us to drive profitable growth because that is what we in the end intend to achieve. This target of 75 percent OMP is something we still want to keep. It is ambitious. But with the programme we have and whatever we have in mind in terms of ideas in the pipeline, we want to get as close to that one as possible.

Investment

## Selected recent investments in Asia Pacific



### Aroma ingredients complex

Kuantan, Malaysia

- Total investments >€500 million
- Startup of first plants in 2016



### Automotive coatings

Caojing, China

- Second coatings plant within three years
- Startup planned for second half of 2017



### Highly reactive polyisobutene

Kuantan, Malaysia

- Capacity: 50,000 metric tons
- Startup planned for second half of 2017



### Chemical catalysts

Caojing, China

- BASF's first facility in Asia Pacific to produce process catalysts
- Startup planned for first half of 2017



### Mobile emissions catalysts

Rayong, Thailand

- New site to produce light-duty and motorcycle emissions catalysts
- Startup planned for first half of 2017

BASF Roundtable Asia Pacific, London, September 23, 2016

21

People

## Best Team: Excellent people, workplace and leaders



Learning Campus Singapore



- BASF is an attractive employer in Asia Pacific
- Attrition rate is significantly lower than peer average of 7%\* in the region
- Cooperation with leading universities to access talents and training
- Strong experience profile and tenure of senior executives

BASF Roundtable Asia Pacific, London, September 23, 2016

\* Source: Personnel & Social Reporting (PSR), HR Business Solutions, Mercer market data; Industry Benchmark 2012-14

22

Some examples: A lot of you have visited our site in Kuantan where there is a major investment programme on the way. The biggest one we have in Asia right now is not in China, but it is in Malaysia, with our joint venture with Petronas. As we speak, we are in the process of starting up the first plants. So, it all looks good there. But then we have also other interesting projects, our second coatings plant in Shanghai. The first one we started a couple of years back is sold out. It shouldn't be a surprise, automotive industry is doing well. We have already started building the second one. It will start up at the same site; so, once again, we take advantage of the infrastructure. We have a plot of land next door and we are building now the second one. All the synergies that come from it – we don't need a new warehouse, we don't need a new this and that, we have the same team operating –, all those synergies will hit us in the second and the third investments. This is a very smart way of how we want to build up these investments.

The highly reactive polyisobutene in Kuantan is another example: value chain extension, using the C4 molecule we have and stretching it down and going into specialty, which goes into the oil lubricants industry, eventually automotive.

Chemical catalysts is the first plant that we ever built in Asia. If Asia is the biggest market for chemicals, obviously, Asia is also the biggest market for chemical catalysis. So far, the market is catered out of our existing assets, rest of the world, we have nothing in Asia. So that is the first one we build to cater to our customers, not just in China, but across the region – short lead times, customized products and an effective and efficient delivery.

Then, of course, automobile catalysts, Thailand – exciting. For the two-wheeler, but also the four-wheeler it is the biggest market in South-East Asia. We build a new plant to cater to the two-wheeler market, which is very, very exciting. Thailand, Vietnam, these are the pockets of excitement for two-wheelers. This is also something that will start up next year.

So, that is just a selection of what we are doing right now. But you see this little shift in portfolio where we see more and more investments where we want to come closer to our customers.

People. People is something we are extremely proud of. We are a brand in Asia. We are able to attract talent. We have been ramping up our research centre in Shanghai. We are able to get top-notch Chinese scientists. We train them in our network and right now they do research for us in China, for China and for the world. We are able to do this because we are an attractive brand and people are willing to come and work with us. We have relatively low attrition rates. It is always a challenge. I talked about retaining talent: our network as we have in Europe, our connections to academia, universities. We are building this, learning from the experience here in Ludwigshafen to do that. We don't want to re-invent the wheel. The model works. So we just get the expertise and we start to develop that network in Asia.

And, of course, we have a very strong management team, a very strong Asian pipeline of talent. But this you should not be surprised about.

Excellence

## Excellence measures to enhance competitiveness and profitability



### Functional excellence

- Expansion of Shared Services Center Kuala Lumpur, Malaysia
- Improved efficiency in functional units

### Structural excellence

- Optimization of office space
- Consolidation of sites and legal entities

### Operational excellence

- Debottlenecking and technical improvement
- Increased raw material and energy efficiency

Asia Pacific is a significant contributor to the global Drive program

### Strong focus on efficiency and effectiveness

BASF Roundtable Asia Pacific, London, September 23, 2016

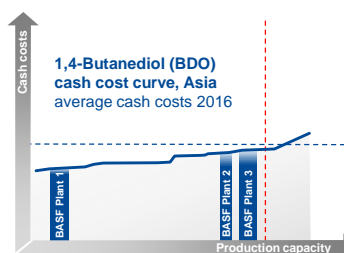
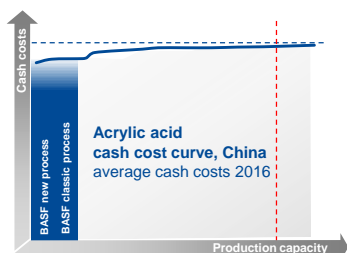
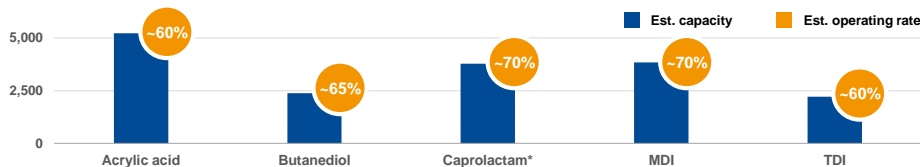
23

Excellence

## BASF benefits from attractive cost position in Asia in the Chemicals segment



Overcapacities in selected commodities will persist for some years  
(2016 industry capacities in thousand metric tons, operating rates in %)



BASF Roundtable Asia Pacific, London, September 23, 2016

Source: BASF estimates \* BASF does not produce caprolactam in Asia Pacific

24

Excellence. The focus here is on efficiency and effectiveness, cost elimination, cost that we do not need, infrastructure that we may have built up in the past, hoping for strong growth which did not come and we need to right-size ourselves. We do this with three levers, one of them being functional excellence: our back-office operations, functional efficiency. I have a bit of an example here, something we normally don't talk about, but something that I want to share with you.

Structural excellence. Just one example: We had two regional headquarters, one was in Singapore, one was in Hong Kong. I sit in Hong Kong, Gops sits in Hong Kong, Stephan sits in Shanghai. We said we don't need regional headquarters to be in Singapore. So that is cost we take out. We still keep our operations in Singapore, but we do not need to have regional headquarters there. Hong Kong is good enough. We can reach Singapore easily.

So these are the kind of fine-tuning, little things that we do. We are in a very expensive, very prime location in Hong Kong where my office is. This year we decided to give away two floors because of high rents. These are little things, but this is much smarter, better use for the money. So we try to be a little bit more modest with the kind of infrastructure we are building there. And we use that resource to build plants and research centres and attract better people rather than inflating a little bit our overheads. This is something we do not want to do.

Legal entities. We have a lot of these. Wherever we see opportunities to put them on a platform, to consolidate, to take cost out, to eliminate inefficiencies, duplications of functions we are doing this constantly and aggressively. That does not make us very popular, but it is the right thing that we have to do.

Operational excellence is something we are very good at. I share with you a couple of examples where we squeeze out from existing units and plants and teams more bang for the buck.

You know this slide: Overcapacities in selected commodities. We still are in that situation, whether it is acrylic acid, whether it is BDO, whether it is MDI, TDI, caprolactam. By the way, we do not produce it in Asia, we are a consumer of caprolactam. But you may have read, we recently announced here a restructuring in Ludwigshafen. We want to take out 100,000 tons of capacity in Ludwigshafen for capro. So, the pressure is there and these overcapacities and underutilizations have not significantly improved. But we see here kind of a bottoming-out. Why does that happen? Because there is very limited room for this to worsen further. There is not much left there. There is no air in this thing. So you see already some of the marginal peers that we have in the cost curves, starting to shut down or starting to run lower rates. We also see some first signs of some investments getting postponed.

This upstream commodity industry starts now slowly, but surely to correct itself. Will this happen tomorrow? I don't know. My expectation is: The sooner, the better. Whatever we could do to correct our own house we will. But this will stay a little bit painful. The good news, of course, is that, wherever we are active in those commodity portfolios, we are best in class, we are benchmarks. You will see some examples later from our commodity investments in China that we really perform extremely well in this kind of difficult environments.

## Excellence

## Shared Services Center Kuala Lumpur, Malaysia



- Key driver for efficiency and functional excellence for more than 10 years
- Competitive multi-functional services to more than 60 BASF companies across 16 countries in Asia Pacific
- Access to competent and multi-lingual talent from 12 nationalities in a relatively low-cost location
- Delivering reliable and standardized services in 7 languages at competitive and steadily increasing efficiency levels

BASF Roundtable Asia Pacific, London, September 23, 2016

25

## Asia Pacific contributes to BASF Group targets



### Financial targets of BASF Group for next years

- **Sales growth**  
Slightly faster than global chemical production
- **EBITDA growth**  
Well above global chemical production
- **Deliver attractive returns**  
Earn a significant premium on cost of capital
- **Remain a strong cash provider**  
Continuously generate high levels of free cash flow
- **Progressive dividend policy**  
We want to grow or at least maintain our dividend

BASF Roundtable Asia Pacific, London, September 23, 2016

26

I am not sure whether we ever talked about this. It is something I am very proud of. This is our little factory where we do functional work in Kuala Lumpur. It is one of our three back offices in the world, Shared Services Center in this fancy building there in KL. You see these huge halls with more than 700 people working every day in and out, highly efficient, highly professional, a young team. They do our pay roll, they do our accounting, they do our reporting, they do our procurement. And, basically we have taken out all those functions and costs from the countries like Japan, Korea, expensive Australia, India and we have put all of this together on these platforms. You have these groups working in these verticals – end-to-end processes we call them – and they are highly, highly efficient. It is impressive to see this. That is a place I love to go to because there is a spirit there where people want to get it done. We speak nine languages, twelve nationalities, we cater to 16 countries and we do this world-class, highly efficiently and effectively. It is once again an offer: If anybody is interested in visiting a world-class shared services centre, if you are in KL, let us know. It is something that we are really proud of.

So that is just one example of functional excellence and functional effectiveness where we really drive more and more of repetitive routine work out of our country organizations, out of our business units and into this platform and say: Country resources, business resources, you focus on getting the business done.

Just one example: Every sales organization was active in collecting our bills. But there was also a lot of effort spent in calling up and reminding because somebody forgot something, the closing didn't happen, whatever. We have now a small team who speaks nine languages, who sits here and calls all customers and says: You forgot to pay our bills.

Now the sales organization who spent their time doing that is now going out to get more business for us and creating more bills. This is just one small example. This is something we are very, very, very proud of.

You know the group targets. The strategy in Asia is to contribute to all of those group targets. We want to contribute with our growth above markets in Asia. We want to contribute profitably, which means also to the EBITDA growth, obviously deliver attractive returns, strong cash generation – a constant focus for us; and we in the region are proud that we also now start to contribute to this – and, of course, the dividend policy.

This was just a snapshot of what I wanted to talk about. I want to hand over now to Gops who will take you through a little bit more specifics about his roles and responsibilities in the region outside of China.

## Agenda



1 | Keynote – Sanjeev Gandhi

---

2 | Asia Pacific – Gops Pillay

---

3 | China – Stephan Kothrade

---

4 | Summary – Sanjeev Gandhi

---



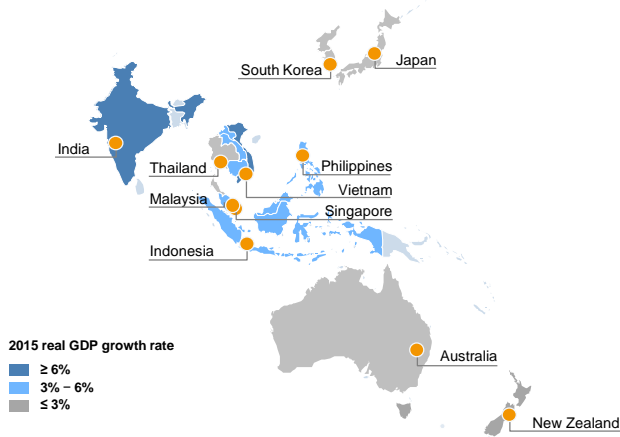
**Gops Pillay:** Thanks, Sanjeev. – Good afternoon, ladies and gentlemen! As Sanjeev has mentioned, we gave you a fairly good overview of what we are doing in Asia Pacific, also to talk a little bit about what is outside China, and Stephan will do a deep dive into China.

South Asia, South East Asia, ANZ

## Asia Pacific offers diverse business opportunities, also beyond China



Asia Pacific\* major markets real GDP growth 2015: 3.0%



Around **75** production sites

**>100** sales offices

**9,146** employees\*\*

**~€6.6 billion** sales\*\*\*

\* Excluding Greater China  
 \*\* As of December 31, 2015  
 \*\*\* Sales by location of customer

BASF Roundtable Asia Pacific, London, September 23, 2016

Source: BASF

28

South Asia, South East Asia, ANZ

## Growth industries



BASF Roundtable Asia Pacific, London, September 23, 2016

29

If you look at our footprint outside China, it is close to €7 billion. We have established quite a strong network, more than 100 sales offices. But, as Sanjeev has mentioned, it is not only about sales, it is also about having steel in the ground. It is roughly 75 different production sites and roughly 9,000 team members. I think this is really important.

I think one of you asked me around lunch what makes BASF so sustainable. For me, it's a very simple answer I give to my kids or my family. It is consumption. As long as there is consumption, the products we are making are used to make lives better, as Sanjeev has spoken about. Also it is about focusing on attractive markets.

That brings us to the growth industries that Sanjeev mentioned earlier on. What I will try to do is to highlight a few of these examples where the chemistry from BASF acts as a strong enabler, so to give you a little bit of a better feel for what we do for a living.

Consumer products

## AMOREPACIFIC: Customer collaboration in the personal care segment



- Personal care (retail) market estimated at €384 billion globally in 2015, and expected to grow >7% per annum until 2020\*
- AMOREPACIFIC is the No. 1 beauty and personal care company in South Korea
- BASF is a leading supplier of diverse products, including UV filters, emollients, and effect pigments
- BASF and AMOREPACIFIC have strong cooperation projects to develop ingredients such as bio-actives and hair care polymers

BASF Roundtable Asia Pacific, London, September 23, 2016

\* Source: Euromonitor

30

If you travel to Asia Pacific, especially to Tokyo or Seoul, you find excellent cosmetics. The women like to be well groomed. I don't know about your wife or your girlfriend. My wife uses only products from Shiseido in Japan. I tried to convince her about Amorepacific, but she was not so convinced. But this is one of the rising stars. It's an example of a local champion in Korea we have partnered with. If you look at the market that this company is active in, it is roughly €384 billion. This is growing more than 7 percent. Remember: These are high-value products.

Again, we always talk about BASF being upstream. This is a good example what Sanjeev also mentioned about being downstream. These are products that also enhance the brand of a company like Amorepacific. I think this is a very good example of where you can partner, not in terms of just selling a product, but also working with a customer, a partner and actually doing launches together and saying: Could I give you more functionality, more functionality in terms of a UV filter, more functionality in terms of how a skin could look? That means less oily or a little bit more of a glitter.

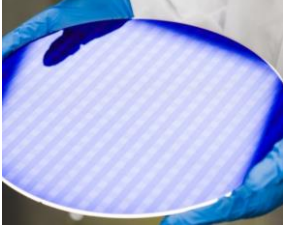
These are things that are, I would say, a little bit more sexy, but also hold us in a very good stead in this market segment. This type of business is very sustainable.

Electronics

# Innovation in Information and Communication Technology (ICT) hub



## Focus on semiconductors and displays



### Semiconductors

- Ultra-pure process chemicals
- Formulations for cleaning, etching, plating and polishing

- ### Displays
- Pigments for color filters
    - Light stabilizers
    - Photoinitiators
  - Flexible display materials



### Target markets in Asia

- China, Taiwan, South Korea, Singapore, Japan

### BASF R&D and production at customers' doorsteps

- BASF Electronic Materials R&D Center Asia, in Suwon, South Korea
- Production in Taiwan, China, Singapore, Malaysia
- Local application labs in Taiwan and China

### BASF provides reliable products for most advanced technology nodes

- Ultra-pure process chemicals for 10 nanometer scale processors
- Advanced formulations tailored to customer needs and increasing technology requirements
- Future developments: Anti-fingerprint hard-coat and scratch-proof over-coat, materials for flexible displays

Stef, I think you said it: Please turn all your telephones off. – But I think most of us have at least two telephones. If you think about the uses of electronics, the numbers are startling. By 2020, you are talking about 24 billion electronic devices. But I am not so sure whether they factored in two or three devices per user. I think, this is the worst case scenario.

If you look at us as a company, we are focusing predominantly on two key segments: semi-conductors and displays. Sanjeev hinted to this earlier on: Asia is electronics, electronics is Asia. We have basically the production footprint that actually enables us to participate in these markets. If you think about electronics, it is very fast moving. If you specifically talk about semiconductors, we can talk about a very tangible example: If you put your telephone on and you try to google something, you want it as fast as possible. If you look at our ultra-pure process chemicals, this is a key enabler to get this process speed up. But also, at the same time, there is less power consumption.

So, these are things that are very close to our heart. And to be in Asia, you also need not only the production facilities, but you also need the research facilities, e.g. our laboratories in Korea. You know the big names in electronics. They are very much Korean-based. By having our laboratories and R&D, global R&D setup, based out of Korea, in Seoul, this know-how is very important to connect with the researchers of customers and gives us this critical mass.

Talking about displays and smartphones, it is always interesting because we are a little bit behind in the value chain. If you talk about smartphones and if you talk about the high resolution, this is none other than colour filters. To make the colour filters, you need pigments – not any type of pigments, but ultra-fine pigments, what gives you the resolution.

For these smartphones, you also need light stabilizers, photoinitiators to fix these small circuitries onto your minute phone. If you bought, for example, the new iPhone 7, it is fundamentally different from the previous models. It means also flexible display materials because also design for electronics is becoming more and more important. It is not only about functionality, but it also has to look a bit more in fashion. I think, this is also an area where we are able to participate.

On the backside of electronics, which we actually don't talk about so much, is also our plastics portfolio. That also goes into the smartphone area. I think, overall electronics industry is a very attractive and well-positioned industry for BASF.

Transportation, Electronics and others

## Growth through high technology materials



Ultrason® facility, Yeosu



Engineering plastics compounding plant, Yesan



### Serving growing industries with high-performing specialties from South Korea

- **Plant for Ultrason® polyarylsulfone, Yeosu**  
Supplying the automotive industry and membrane producers
- **Engineering plastics compounding, Yesan**  
Supplying the automotive, electronics and electrical industries
- **JV with Kolon Plastics for polyoxymethylene (POM), Gimcheon**  
Serving the automotive and electronics industries, from 2018

BASF Roundtable Asia Pacific, London, September 23, 2016

32

Agriculture

## Innovating for diverse markets



### BASF Agricultural Solutions

- Crop Protection: Asia Pacific is 28% of the global market, but only 9% of BASF sales
- BASF's €3 billion global Crop Protection pipeline will benefit farmers in Asia Pacific
- ~250 new products for Asia Pacific by 2020

### Japan, Australia, New Zealand

- Modern, consolidated farming, requiring high-value innovation
- Good business potential for protection of high-value fruits and vegetables in Japan and field crops in ANZ

### China, India, ASEAN

- ~400 million smallholder farmers seeking innovations to increase yield and quality
- Upside potential, particularly for rice, fruits, vegetables and plantation crops
- Myanmar: new and rapidly growing market

BASF Roundtable Asia Pacific, London, September 23, 2016

33



For those that have been to South Korea: South Korea is a very interesting place. One thing that always strikes out if you travel to South Korea is really the penchant for new technology, efficiency. We have established this manufacturing hub in South Korea where we are manufacturing, for example, Ultrason, which is a very special high-technology material. When I say special, it is a pretty inert material that can be used with food contact. So that means, for plumbing, for fancy coffee machines, but on the other extreme also in automotive parts.

Coming back to the picture that Sanjeev mentioned about the key industries, we have a product line like Ultrason made in South Korea that goes into multiple segments: transportation, consumer goods, construction. So what are you doing? You are establishing economies of scale. It is not only for South Korea, but it is also for Asia Pacific and global. This is really one such example.

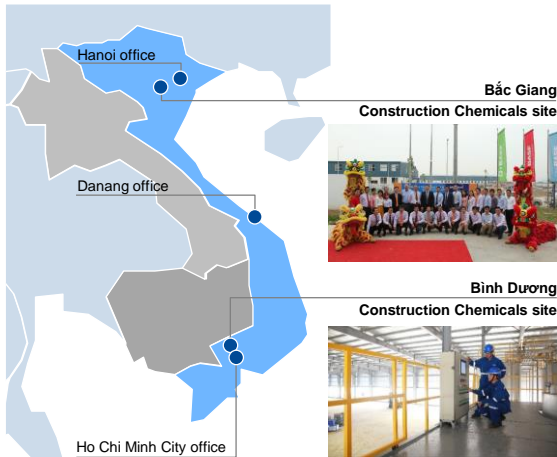
Another such example: Sometimes it is not only about doing things alone. Sanjeev also hinted to partner management and he mentioned Kolon. Here, we basically have established a joint venture for POM, which is polyoxymethylene, which is used for industrial plastics. So, here we have the economies of scale and this molecule is used mainly in construction, again transportation and consumer goods, so multi-segments. With this sort of approach, you can leverage your production footprint, you can leverage multiple markets and also leverage your know-how.

One thing that is quite finite are resources. It depends on which report you read. By 2025, we are talking close to 10 billion people on this earth. Sanjeev spoke about urbanization; we have a high urbanization. You need more food. In our ag portfolio, if you look at the market size, we are talking already in Asia of a market size of roughly €14 billion in 2015. We have the potential to grow much faster. Of course, if you look at the markets in Asia Pacific, we have a mixed bag. We are having Japan and Australia being much more mature. China is more or less 50 percent. Then you have South-East Asia that is growing very rapidly.

If you look at our ag portfolio, it is also about leveraging our global presence. We have a pipeline of roughly 3 billion in actives. In Asia, we plan until 2020 to have another 250 new launches. These launches will position us very well in crops that we are traditionally not active in. This is an exciting space. If you look at the next four or five years, we are basically pretty optimistic to participate e.g. in high-value crops, like in Australia, which we never did in the past.

Construction

# Capturing opportunities in growing markets



- The construction sector is growing rapidly and is an important contributor to Vietnam's GDP
- BASF has invested in two plants for the production of advanced grades of admixtures
- Landmark projects include the Nội Bài T2 Airport and the Nhật Tân Bridge

BASF Roundtable Asia Pacific, London, September 23, 2016

34

South Asia

# India: Improving macroeconomic environment



**Reforms**

- Labor laws
- Land acquisition
- Goods and Services Tax
- Education and skill development
- Digitalization of financial platforms

**Infrastructure**

- Roads and railways
- Power
- Agriculture (e.g., irrigation, soil health, warehousing, new technologies)



**Ambitious initiatives**

- "Make in India"
- "Skill India"
- "Digital India"
- "Smart cities"

**Macroeconomics**

- Moderate inflation
- Lower trade and fiscal deficit
- Increased Foreign Direct Investment
- Reduced subsidies

**Political stability**

- Modi party in majority in the Lower House
- Improved position in the Upper House

**Better business environment and increased Foreign Direct Investment;  
Expected improvement of GDP growth by 1-2 percentage points**

BASF Roundtable Asia Pacific, London, September 23, 2016

35

Coming to something that is very close: infrastructure, construction. When driving into the city, I noticed that there is a lot of construction around London. A lot of these products that we supply go into construction, but not only in terms of residential property. What is really a very sustainable business for us which people forget is infrastructure. So you don't want to mess around with a bridge. You don't want to mess around with a dam. You need products that are spec'ed in by the architect. Once BASF products are spec'ed in, we have a very sustainable business ramp-up over a period of time.

If you look at emerging markets, Vietnam is a very good example. In Vietnam, we had quite a small business. Over a period of about four years we have more or less trebled our business, overall BASF's footprint in Vietnam. One of the enablers were the construction chemicals. If we look at these emerging markets, there are huge opportunities for us. If you look at again, a country like Vietnam, where people say, it is emerging much smaller emerging, it's 6.5 percent growth. If you look at infrastructure, it is overproportional, around 15, 16 percent growth. Then, if you take the hypothesis that BASF products are spec'ed in into the first infrastructure projects and it works and you have a case study of four or five years, we have a sustainable business again.

India: It is a very, very interesting economy. My boss comes from India. I sort of came from India many years ago, coming from South Africa. When Modi came into power, there was a lot of excitement, rock-star type of excitement. Unfortunately, the developments were not to expectations.

I will talk about this a little more in detail. But if you look at the growth rates we see in India right now in the first two quarters, this is very, very encouraging. Also, what is really interesting: There is real reform. If I speak to Raman, who is our CEO for the listed company BASF India, the sales tax reform is the fundamental change that was passed through parliament. Depending on which report you read, you are talking about a GDP increase of 1 to 2 percent. I think this is very significant.

Again, alluding to the infrastructure projects: If infrastructure projects become a reality, already you are having stimulus for new investments. That leads me to what we are doing in India.

India

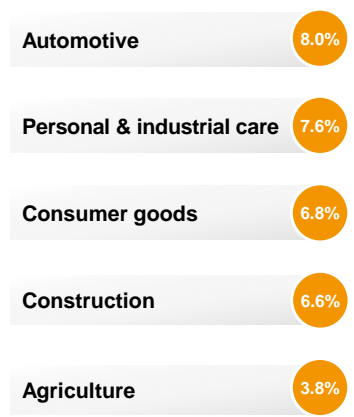
# Expanding BASF's footprint to grow with downstream industries



**Investments in India**  
2014–2017: around €260 million



**Serving downstream growth industries\***




BASF Roundtable Asia Pacific, London, September 23, 2016

Source: BASF \* Estimated CAGR 2015-2020

India

# Dahej production site




**Products**

- Dispersions
- Surfactants
- Polyurethanes

**Selected customer industries**

- Automotive
- Consumer appliances
- Construction
- Home and personal care
- Architectural coatings

**Target markets**

- India
- South East Asia
- Middle East

BASF Roundtable Asia Pacific, London, September 23, 2016

We have already invested roughly €260 million. This is, as we speak, steel in the ground. I would like to focus a little bit on the automotive industry because, I think, also Stephan will speak about it in China. Globally we have roughly about 91 million units, which is very attractive. In India right now, if you look at infrastructure, which is not ideal, in 2015 already 3.7 million units were sold. This is expected to rise roughly to 6 million units by 2020. We serve this automotive space with catalysts, coatings, plastics from local production because we have steel in the ground. We basically established partnerships with strong automotive companies. In addition, we have access not only to product sales, but also joint innovations, which is holding us in very good stead moving forward.

Also, it is not only about the steel in the ground, it is also about the Innovation Campus. This is something Sanjeev alluded to earlier on. I talk a little bit more about it because it is not only about the hard way; it is also about the soft way.

I would like to home in a little bit on our most recent investment, which is in Dahej, which is a large chemical production complex in Gujarat. This was inaugurated in October 2014, an investment in the magnitude of about €150 million. This is a manufacturing hub that is focusing predominantly on downstream value-adding activities.

On this slide you see a variety of industries: automotive, consumer goods, construction, home and personal care, architectural coatings. If you want to look at it at a very high level, aggregated level, we expect this market to be roughly US\$500 billion by 2020. What is really interesting with this is: We have this hub and we can participate in all these industries mentioned. So, again, if you look at transportation in India: If you had to bring in products, your customer intimacy is not as strong. With this concept, we have a much better customer intimacy.

India

## Innovation Campus Mumbai



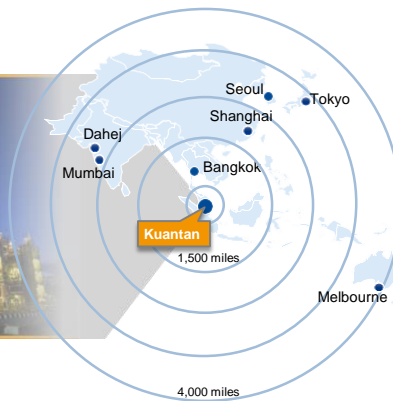
The BASF Innovation Campus Mumbai is part of a 100% BASF-owned entity.  
BASF Roundtable Asia Pacific, London, September 23, 2016

- An important hub for BASF's global R&D network
- Startup of 20,000 m<sup>2</sup> facility in 2017
- By 2020, around 300 scientists will collaborate globally and regionally
- Target industries: crop protection, performance chemicals, resins and coatings, personal care

38

Malaysia

## Kuantan – strategic hub in South East Asia



### Kuantan Verbund site

#### Plants

- 11** fully integrated plants
- 7** plants under construction

#### Investment

- ~€720** million (initial)
- ~€560** million (from 2011)

- Employees\***
- >845**

Talking about the Innovation Campus, this is an investment roughly around €50 million for about 20,000 square metres of, call it, infrastructure. But the important thing is not the infrastructure alone. Do we have the right talent to use this infrastructure not only for projects for India and Asia Pacific, but also for the globe? This Innovation Campus will focus predominantly on crop protection and process development. Stephan will talk a little bit about what we do in China.

All in all, to summarize India: We have got steel in the ground, as a catalyst for innovation. Thirdly, we are active in industries that are growing above average with customers that know us.

So I would like to move on a little bit to Kuantan. For those who are not familiar with our footprint in Kuantan in Malaysia: We have established a 60:40 joint venture with Petronas in 1997. We have invested more than €720 million to establish eleven fully integrated production plants. This is very much speaking to the Verbund that all of you know that we talk about in Ludwigshafen. As we speak, we have another €560 million in execution which will bring another seven plants under construction.

What is also interesting about the location of Kuantan? It is in a hub for South-East Asia and also China and North Asia. Within a radius of roughly 4,000 miles, you have access to two billion people. Remember what I mentioned: Consumption is always good for BASF.

So, from a strategic hub point of view, this is very well located. We have now the critical mass. We want to grow this footprint in terms of business footprint at least by 5.5 percent until 2020.

Kuantan

## Serving different industries and customers throughout Asia



### BASF PETRONAS Chemicals is well positioned to serve markets in Asia Pacific

- Access to 15 countries
- Serves 600+ customers
- Efficient supply chain management for shorter lead times and tank operations close to customers
- Benefit of ASEAN Free Trade Agreement

BASF Roundtable Asia Pacific, London, September 23, 2016

\* Polyvinyl butyral

40



Again, it is not only about what we do as a company, about putting steel in the ground. You need market segments you want to participate in. I want to really highlight a little bit that. In terms of Kuantan, it is not as if we do not know the customers. We have more than 600 customers. It is about 15 different countries we serve on this hub. I would like to highlight e.g. the most recent investment, which is aroma ingredients. Aroma ingredients is a very interesting type of business because you are getting a precursor. The precursor citral is used to make other products. It goes into flavours and fragrances. If you think about flavours and fragrances, this market is growing in Asia roughly by 6 percent per annum. If you look at the market today, it may not sound as big as upstream numbers, but it is €6 billion. And we are the only one that established this sort of integrated complex at Kuantan. Why Kuantan again? Integrated. We have access to raw materials. We have the C4 stream that we can actually take downstream and create more value.

This is really important for you to understand because in the businesses we are involved in it may appear that anyone can do it. It may appear that, okay, you have a molecule, produce a molecule and sell a molecule and then you will have five competitors. This example shows you: You have a little bit higher barriers to entry because you have a little bit more complexity, not just in terms of the chemistry, but also in terms of how you put it together.

I would like to share with you a video to reflect a little bit of the complexity. After that, I will hand you over to Stephan who will talk about China.

(Video)

## Agenda



1 | Keynote – Sanjeev Gandhi

2 | Asia Pacific – Gops Pillay

3 | China – Stephan Kothrade

4 | Summary – Sanjeev Gandhi

BASF Roundtable Asia Pacific, London, September 23, 2016

41

Greater China

## Third largest market for BASF globally



China nominal GDP growth 2015: 6.9%



- Chemical market becomes more competitive
- China chemical production 2020: US\$1.7 trillion; around 70% of Asian real chemical production
- Chinese per capita income to double 2020 versus 2010
- Sustainability becomes differentiating factor supported by 13th five-year plan (2016–2020)
- Chemistry will enable innovations in downstream industries

BASF Roundtable Asia Pacific, London, September 23, 2016 Source: National Bureau of Statistics of China

42

**Stephan Kothrade:** Ladies and gentlemen, you have seen the impressive movie. Putting new plants on the ground, that is something BASF is very successful in. We know how to do it. We also know how to start up the plants and how to operate them safely and very efficiently. This also holds true for China, not only for Kuantan.

China is indeed now what we are going to talk about in the next section. What is our strategy in China? How is the Chinese market developing? These questions I would like to answer to you now in the next 20 minutes.

When I talk about China today, it is Greater China, meaning mainland China, Taiwan, Hong Kong and Macao. This market represents the third most important one for our company.

China still is the key market in Asia. This absolutely holds true for BASF, but also for the chemical industry overall. Certainly, we all know that growth rates have been slowing down, competition got tougher, we have a tougher market environment in general. You all hear about the overcapacities. All this is a reality we have to face, certainly. But at the same time, please don't forget that the absolute GDP growth in China last year was more than US\$515 billion. This equals the GDP of a country like Sweden. So, there is an enormous potential.

When we look into the market fundamentals, the underlying fundamentals of what we see in China, we can say: They remain unchanged. The 13th five-year plan of the Chinese government will bring some new pace for the country's economy with a very strong focus on innovation and sustainability. Later on, I will elaborate a little bit on what it means to us: innovation and sustainability in terms of growth opportunities.

Here on the map, you can see that the growth between the Chinese provinces is divided. It is a very mixed picture. To the north east, you see the so-called rust belt – some weak provinces that are not growing really anymore to a great extent. But then, there is a very big number of provinces growing up to 9 percent and you see hotspots like Fujian or Chongqing where the growth is even higher than 9 percent.

But, of course, it is not only the growth that is important. It is the quality of the growth. It is sustainable growth. We see increasing domestic consumption, consumers, the new urban middle class is becoming more sophisticated. They want to have higher standards of living. They need fresh air, clean water; they request it. They want to have access to affordable transportation, to health care, housing and they deserve it. This is creating business opportunities for us.

At the same time, we see a trend from simply "made in China" to "created in China". So, our customers, our partners are also becoming more sophisticated. All this translates into business opportunities for us. We believe, we clearly expect that sustainability will become a major differentiating factor in our industry in China because innovations in chemistry will enable sustainable solutions in downstream industries. This makes then sustainability and innovation crucial factors for profitable growth.

Greater China

## BASF's extensive network guarantees access to major local markets



- Legend \*\*\***
- Asia Pacific headquarters
  - Greater China headquarters
  - R&D and Technical Centers
  - Verbund site
  - Production site
  - ▲ Sales office

### Mainland China, Hong Kong, Taiwan

- 25 major wholly-owned subsidiaries
- 5 major joint ventures
- 24 production sites
- 20 sales offices
- 8,416 employees\*
- €5.7 billion sales\*\* in 2015 (excl. BASF-YPC, Nanjing)

BASF Roundtable Asia Pacific, London, September 23, 2016 \* As of December 31, 2015 \*\* By location of customer \*\*\* Some sites are not shown due to scale. 43

As BASF, we are very well prepared to capture future growth in the country. Here you see our footprint. We have built a very extensive network throughout the country. Shanghai is home to our Greater China headquarters, it is also home to the Innovation Campus Asia Pacific that we inaugurated recently. A second very important location is Nanjing where we operate together with our partner Sinopec our largest joint venture, the Nanjing Verbund site. But Nanjing is also the location of a wholly-owned site for specialty chemicals. Later on, I will look more into the way how these two sites are connected and create value for BASF.

These two sites are just the cornerstones of our network. On top of that, we have, of course, a much wider presence. We speak here about 24 production sites across the country and 20 sales offices. Why 20 sales offices? We want to be very close to our customer. Customer intimacy is becoming more and more of a way how you can differentiate yourself from competition. Out of the 8,400 people that work for BASF in Greater China, roughly 1,000 are in marketing and sales and ensure this kind of customer intimacy.

The sheer size of the market in China alone would make it very attractive. But it is also a maturing market as I mentioned. It is becoming more sophisticated. This is the most interesting part. During the period of the 13th five-year plan, which is 2016 till 2020, we still expect the GDP in China to grow by around 6.5 percent, a very high number. The key industries that contribute to our growth and will also contribute to our growth in Greater China in the future you see here on this slide: electronics, consumer goods, nutrition and health, and transportation.

What comes on top is that we see new regulations and also government investment in some sectors such as high-speed rail that will even help to accelerate growth in these areas.

We have been investing heavily in China; you all know this. We still continue to invest in China because we believe in the future of this market. When we invest into new plants and acquisitions, then we focus especially on these key industries. Also, when we invest we keep always three factors in mind and that is technology leadership, the market growth we expect and, clearly, competitive advantage, ways to differentiate from the rest of the crowd.

Greater China

## Growth industries




BASF Roundtable Asia Pacific, London, September 23, 2016 44

Greater China

## Selected investments between 2015 and 2017 catering to growth markets




**Focus on investments where BASF is technologically leading, has a competitive advantage and expects strong profitable market growth**

BASF Roundtable Asia Pacific, London, September 23, 2016 45

Let me give you some examples. You see all the investment projects here on the slide. One highlight is the electronics industry. Gops already mentioned what it means in the region. Now specifically in China, it is also very important to us.

It is an industry that will grow at more than 6 percent annually. We have recently strengthened our presence in Taiwan where we have production facilities, an application testing centre and research and development resources. These assets are not only serving the local market in Taiwan – you know that Taiwan is one of the major hubs for the electronics industry – but also the region and, of course, Greater China. Also in Greater China we have activities on the ground for electronic materials and very soon we will start up a new plant for electronics grade sulfuric acid, still in the fourth quarter of this year.

Another very important market is the personal care market. Here, again, we are investing into an expansion of capacities for waxes and emollients in Jinshan; that is a site south of Shanghai. These products go into skin care, baby and child care, deodorants and oral care. It is a good example where you see that the new urban middle class in China having a higher income now also is starting to buy better-quality products. They want the same kind of quality cosmetics and care products we are used to consume in the Western world.

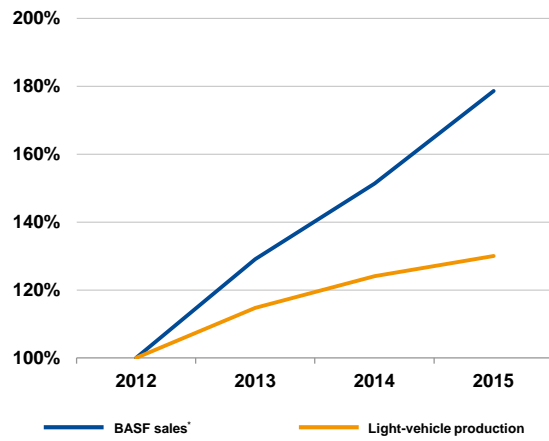
A third example I would like to mention is the automotive industry. It is a very important one, of course. You see we have built plants for resins, coatings and engineering plastics that cater to the automotive industry. You also see one of the acquisitions we announced recently: We are going to acquire the company Guangdong Yinfan. That is an automotive refinish coatings maker in Southern China, in Guangdong Province. We expect closing quite soon. It also caters to this industry.

Greater China

## BASF growing strongly with automotive industry in Greater China



Index 2012 = 100%



### Strong performance

- Light-vehicle production increased by 30% from 2012 to 2015 (CAGR 9%)
- BASF sales to the automotive industry increased by 80% in the same period (CAGR 21%)
- China is a significant contributor to BASF Group sales to the automotive industry

### Market dynamics

- China is the largest electric vehicle market, supported by policy incentives
- Increasingly stringent standards for vehicle emissions, fuel quality and VOC emissions

BASF Roundtable Asia Pacific, London, September 23, 2016

\* Excluding precious metals and refinishing



Let's have a closer look at automotive in China. China is already the largest car-producing country in the world. From 2012 to 2015, the automotive production in the country has grown by 30 percent. That is really impressive. In 2015, approximately 24 million light vehicles were produced. As BASF, we even outperformed this market growth because our sales to the automotive industry grew by 80 percent in the same period of time, as you can see here.

Of course, the new normal in China will also affect the automotive industry. So, growth will slow down somewhat. But overall, we expect still something like 5 percent on the medium to long term, at least till 2020, which means that by 2020 there will be 30 million cars. That will be a very impressive production figure.

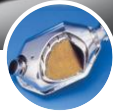
If we look ahead into the future, it is not only about production figures. There is a lot of dynamism in the market. There are trends that have the potential to reshape the entire industry landscape in automotive. This holds true in particular for China because if you think in terms of new energy vehicles, electric vehicles, China has become the largest market of the world. It is especially the Chinese OEMs and not the multinational players that are ahead of competition in this market. Total production may reach even 1.5 million new energy vehicles by 2020 and we want to be a part of this new market.

A big concern in China is air pollution. You all know from time to time the reports you get from Beijing, from Shanghai. But this also holds true for other cities, tier-2 cities like Guangzhou, Nanjing, Wuhan and other cities you may never have heard of. People are concerned about it. They complain. The government takes this very seriously and there is now a very strict regulation and stringent regulation for vehicle emissions. It is being ramped up.

The same applies for fuel quality standards. They are also becoming higher. And we have even very strict regulations for the car manufacturing process, e.g. when we paint the cars in the workshops: low VOC, low odour and the guarantee not to pollute the air. These are factors that are increasingly important in China.

Greater China

## Innovation projects with China's rising star original equipment manufacturers (OEM)



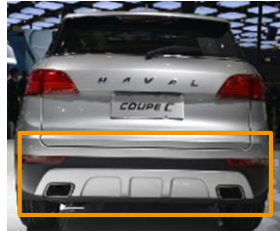
### Emissions catalysts system



Partner: Geely

**BASF solution:**  
Advanced EMPRO™ emission catalyst

**Key contributions:**  
Reduced use of precious metals; meets new regulations



### Rear bumper baffle



Partner: Great Wall Motor

**BASF solution:**  
Ultramid®

**Key contributions:**  
High heat resistance, weatherability, lightweight



### Low-VOC steering wheel foam



Partner: ChangAn

**BASF solution:**  
Elastofoam®

**Key contributions:**  
Low VOC, low odor, outstanding physical properties including sun resistance

All this, again, we can translate into opportunities for BASF because BASF is best in class when it comes to collaboration, cooperation with local car manufacturers. This really differentiates us from many others. We are helping them especially through innovation projects. On this slide here you can see three examples.

We are a global leader in catalysts. We have unsurpassed expertise in the development of technologies for emission control. For Geely, one local Chinese OEM, we developed a new three-way catalyst technology that, on the one hand side, meets all the new standards, regulations in China, but at the same time the use of precious metals could be reduced. So, it is a sustainability story. But it is also an efficiency story. This really made us now a very important partner for Geely also for the future when they are launching new cars.

Another important aspect is weight reduction, light-weight solutions to meet the fuel economy standard in China. All the Chinese OEMs are struggling with it. Here you see an example with Great Wall Motors. Great Wall is the leading SUV producer in China. They wanted to get a light-weight solution for the rear bumper baffle which used to be made out of metal and now in engineering plastic, of course, it can be much lighter. You can imagine, because this baffle is so close to the exhaust gas pipe, it needs to be very resistant against heat. At the same time, we need to make sure that under a long-term UV exposure the colour will not fade. We found a solution, BASF's Ultramid. It is now applied in the SUVs in China.

Last but not least, a very interesting example with the company ChangAn, based in Chongqing, by the way. They have very strict standards for low VOC and low odour in the car interior. Why that? Well, in China, car buyers don't like the smell of a new car. This is a completely different pattern from what we see in other countries. There are national standards to control the odour and ChangAn even went a step further and set stricter standards. We had to really deep-dive into the root causes to find a solution. Now we have developed a foam e.g. for steering wheel applications that meets all the requirements and passed all the tests successfully. Now ChangAn is also using this same material not only for the steering wheel application that was the original target, but also for acoustic foams. So, it is a real success story.

Greater China

## Innovate in Asia Pacific for Asia Pacific and the world



### Acronal® ECO series for better indoor air quality

- Low VOC acrylic dispersions for interior paints that meet growing consumer demand and stricter environmental regulations
- Add-on functionalities: “stay clean” and “non-stain stick” tailored for Asian customers



### Sokalan® HP 20 technology for first “super-concentrated” detergent in China

- Special polymer that enhances whiteness and compatibility performance in detergents

BASF Roundtable Asia Pacific, London, September 23, 2016

48

Greater China

## Innovation Campus Asia Pacific in Shanghai supporting growth industries



- Phase II opened in Q4 2015
- Focus on research on advanced materials and polymers
- Integrated into global R&D network
- Global HQ for Advanced Materials & Systems Research
- Total investment (phase I & II): ~€145 million
- Close cooperation with customers, materials scientists, technical and business experts
- First regional design consultation center in Asia Pacific, assisting designers in various phases of product development



BASF Roundtable Asia Pacific, London, September 23, 2016

49

But, very important, it is not only the automotive industry we are collaborating with. We also have several other key industries where we bring innovation to the customer or where we launch jointly with the customer innovation to the market. One example is also related to odour and low VOC. It is not only important that there is no emission of volatile organic compounds in the car interior. You also don't want to have this in your home when you decorate, when you paint your home.

You need special dispersions and special formulations for paints to avoid the odour. But what we realized is, because of the different climate conditions in Asia, you cannot simply go to the shelf and take a solution that works very well in the US, the UK or in Italy. You have to develop it together with a partner. At the same time, we also, of course, tried to provide additional features, benefits with this kind of product. So, we developed now dispersions for stain-resistant interior paints that avoid the odour and are low-VOC.

Blue Moon, a company you never have heard about, I guess, is the leader for liquid detergents in China. We have now a strategic partnership, a strategic research partnership with this market leader. They came to us and wanted to develop a highly concentrated liquid laundry detergent that at the same time has a very high whiteness performance. Experts know, this is quite difficult because for the whiteness performance you need a special kind of polymers. But these polymers, if the liquid is too concentrated, will precipitate and the formulation will not be stable. When you use it at home, then the application is not what it should be.

Now, we also looked into that. We developed a product, Sokalan HP 20. With this kind of new product, we really managed to bring together with Blue Moon the first highly concentrated, high whiteness performance liquid laundry detergent to the market.

Why are we innovative in China? Why can I show you today all these successful examples? It is very simple: Because we started very early to invest into innovation capabilities in the country. On purpose I say innovation capabilities, and not just R&D capabilities because, yes, you need the assets like this flagship project, our Innovation Campus Asia Pacific, which you can see here on the pictures. But you also need to invest into your team. You need researchers, you need Chinese, Indian, European, American scientists, technicians. You bring them together. You train them abroad. They bring their expertise back to Shanghai. Then you really can gradually build up such a centre of expertise as we have it in Ludwigshafen where we started doing research 150 years ago.

It is not only researchers. The next success factor is: You have to have a very close link, a very good connection between sales, marketing and researchers. You have to bring in industrial designers, customers and academia. That is what we really do to make sure that what we develop – the solutions, the products we bring to the market – really suits the local market and not just copies something out of the shelf what we sell elsewhere and try to be successful in China. This formula might have worked ten years ago. It is definitely not the right formula now. Now you have to do it tailor-made. We clearly believe: The combination of a strong local production footprint and a strong local R&D footprint is what will drive our business growth in the future.

Greater China

## Commodity businesses in China: Strong asset base




### MDI, Chongqing

- Capacity: 400,000 metric tons
- Startup in August 2015
- Best quality in the market
- Located in one of the fastest growing regions in China
- Plant utilization temporarily limited by feedstock constraints

**Ramping up to supply growing market demand and BASF's downstream businesses**

BASF Roundtable Asia Pacific, London, September 23, 2016

50

Greater China

## Commodity businesses in China: Focus on cost and technology leadership




### Acrylics complex, Nanjing

- Two world-scale plants
- Cost leadership through best-in-class proprietary BASF technology
- High asset effectiveness and advantages at Nanjing Verbund site
- High utilization in a challenging market
- Realized efficiency gains:
  - run-time extension
  - higher throughput
  - lower energy consumption

**Best technology and Verbund enable profitable operations, in a tough environment**

BASF Roundtable Asia Pacific, London, September 23, 2016

51

Chongqing, I mentioned this city. It is a city of superlatives. The GDP of the city equals the GDP of Ireland. The city has 30 million inhabitants. So, it is more like a country than just a city or a province. GDP growth: 11 percent last year. It is a powerhouse. Besides being a very big consumer market, Chongqing is also a hub for some of the major industries that are relevant to us: electronics, automotive, engineering, robotics. All these industries require chemistry, of course.

Let me give you two really mind-blowing figures and facts: 30 percent of the global production of tablet computers come from Chongqing. If you take the current car production figure, it is 2.8 million just in the city. This is more than Spain. Forecast is that, by 2020, we talk about 4 to 5 million cars annually.

From that, we can really state: It was a right decision for us to invest into MDI in this western province of China. Certainly, we will see a strong and sustainable growth and there will be more investments in the future as well. We have to consider not only to do it in Shanghai and Nanjing, but really to continue moving west.

Despite margin pressure and overcapacities which we see in many areas, upstream chemicals can be successful. We see it now – in BASF China. I would like to give you a different example. I mentioned Nanjing. We operate there our Verbund site BASF-YPC, our joint venture with Sinopec. At this site, we now have two world-scale acrylic acid plants. In acrylic acid, we definitely have the best-in-class technology.

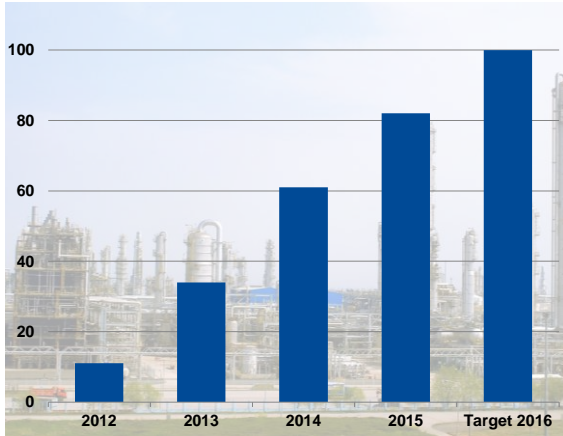
That means, if you have a fully integrated site with a very well-trained, experienced team and you have access to competitive raw materials and you have best-in-class technology, you certainly have a superior cost position. But still we want to improve. It is not that we say, hey, fantastic, we are happy. We constantly work and continue to squeeze out more product out of the same plant through slight adjustments. We are still making progress on the learning curve. So, we extend runtime. We reduce the periods of time we need for planned shutdowns. We have higher throughput, lower energy consumption. All this translates into more output at lower cost. That is the way how we try to operate in all our upstream businesses. Acrylic acid is just one very good example.

Greater China

## Cost advantage via Verbund and operational excellence: BASF-YPC, Nanjing



**Accumulated annual savings**  
(in million € p.a.)



- High utilization rate in oversupplied Chinese market
- Powerful platform for further success/Verbund extension
- Leading cost position in major product lines

BASF Roundtable Asia Pacific, London, September 23, 2016

52

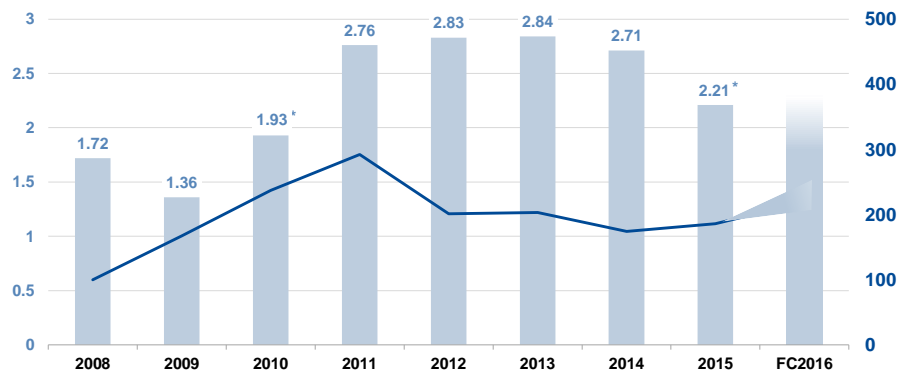
Greater China

## Verbund site Nanjing: EBITDA continuously on high level



**Sales**  
(in billion €)

**EBITDA**  
(indexed)



Consistently profitable with reliable dividend payments

BASF Roundtable Asia Pacific, London, September 23, 2016 \* Impacted by scheduled site turnaround

53



Let me talk more about the Nanjing Verbund site. You know our Verbund concept: The by-products of one plant are the raw materials for the neighbouring plant. You also have energy integration to save primary energy, reduce primary energy consumption. You save logistic costs etc.

Because we saw that times would get tougher already in 2012, we launched in Nanjing a big operational excellence program. You see here how over the years the annual savings, sustainable savings grew over time. We target €100 million. We are very close to achieving this target. You see that, in 2015, it was already more than €80 million; now, we are already above €90 million. At the end of the year, the €100 million seem to be very, very realistic.

It is not only production. It is a very comprehensive, holistic approach. It includes marketing and sales, procurement, administration, logistics, utilities. This makes it possible to achieve these impressive figures.

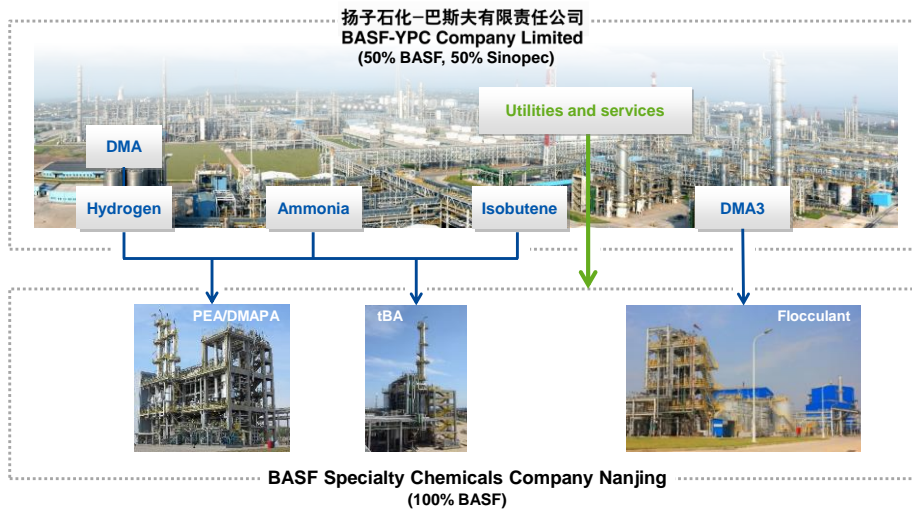
“What is the outcome?”, you may ask. Well, it is very simple: BASF-YPC has a very high utilization rate. This year, last year, the year before, even in the toughest times of over-capacities, these plants are running at a high rate because we are cost-competitive.

Let me share some financial details with you on BASF-YPC. You can see here, the EBITDA remained consistently on a high level, even though we went through this very difficult period of time. Last year, you have to know, we had a planned site turn-around. The entire site came to a halt, all plants. This is something we have to do every five years. By the way, most competitors do it every four years. It is requested by authorities. Now, in BASF-YPC, because we have such an excellent track record in terms of environmental protection, health and safety, we are allowed to do this every five years – again an advantage we enjoy compared to other players.

We have the backward integration; you see the outcome here. The outlook this year is a positive one. I am happy. I don't share the figures with you; please understand it. But there will be a significant improvement even compared to last year.

Greater China

# BASF Specialty Chemicals benefits from Verbund at growth site in Nanjing


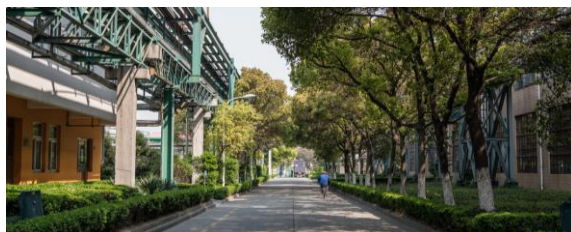



BASF Roundtable Asia Pacific, London, September 23, 2016

54

Greater China

# Sustainability in China: dialogue and partnerships with stakeholders

### BASF sets standards for...

- occupational and process safety in China
- distribution safety
- environmental protection and promotion of sustainability along the value chain



### BASF actively engages via...

- regular stakeholder dialogues, including NGOs
- community advisory panels
- publication of integrated annual reports encompassing economy, society and environment, since 2009



BASF Roundtable Asia Pacific, London, September 23, 2016

55

Nanjing, I mentioned already, is not only home to BASF-YPC and the Verbund site. We also operate there a specialty chemicals site. But this site is not stand-alone. It is just 300 metres from the Verbund site, from the JV. We have pipeline connections. That means that the major raw materials – you see them here on the slide – plus utilities like steam, pressurized air etc. are supplied from BASF-YPC to our specialty chemicals site. That is a priceless advantage.

We have synergies in terms of maintenance and logistics where we work together. This shows you that the Verbund advantage also works across the fence and is not just limited to the joint venture activities.

So, connectedness is key. Connectedness is also very important when it comes to a completely different area and that is our engagement with stakeholders. I mentioned already: BASF is a role model in China for EHS. We hear this very often from the government. We receive delegations from Beijing, from Shanghai, Nanjing, from many municipal governments, even from provincial governments where we don't have any assets in the ground, because of our reputation. They come to us to learn how we operate plants, how we ensure safety, how we minimize emissions. We very openly and proactively share our knowledge to make sure the industry will become more aware of what is possible and become more responsible because it is our interest that the entire chemical industry in China becomes safer and more responsible in terms of environmental protection.

The trust we have built over the years is a very big advantage. You may have heard that it is getting more critical in China, more difficult to get permits and approvals when you want to set up a new plant. For us, this is still possible because of this trust and because of this track record.

I give you just one example: BASF was the first company in China that introduced the use of double-hulled tankers on Yangtze river for the transportation of chemicals. When we came there, there was no double-hulled tanker at all. So we had to convince logistics companies to invest into these ships. Then we also gave the positive examples. In the meantime, our example has become a standard and it was also converted into a regulation in China. This is an example how we really were a forerunner in EHS.

We also are very transparent. We report every year on the three pillars of sustainability. One of the reports you can see outside when you leave this room later. We have NGO dialogues, we have community advisory panels. This will help us to always get and keep our license to operate. There is stricter regulation coming. I strongly believe that the playing field will get level for all of us. There will be no differentiation when it comes to rules and law enforcement between local players and us in the future. This will play into our hands, as we are already living up to the highest standards anyway.

## Agenda



1 | Keynote – Sanjeev Gandhi

---

2 | Asia Pacific – Gops Pillay

---

3 | China – Stephan Kothrade

---

4 | Summary – Sanjeev Gandhi

---

This brings me to the end of my presentation. Instead of giving you now a summary for Greater China, I would like to hand back to Sanjeev because he will give you the bigger-picture summary for the region.

## Path forward



### BASF is well positioned to capture profitable growth in Asia Pacific

- Enhance collaboration and co-creation with **customers**
- Leverage local **R&D** close to customers
- Continue active **portfolio management**
- Further develop **production base** and achieve OMP\* ratio of ~75% by 2020
- Continue to attract, develop and retain local **talent**
- Focus on operational **excellence** and cost management

BASF Roundtable Asia Pacific, London, September 23, 2016

\* Own Manufactured Products

57

## Key Milestones



**Growth** Above chemical production in Asia Pacific

**Investment** Around €3.5 billion until 2020, focusing on expanding **regional asset footprint**, to support **profitable growth**

**Innovation** Delivering solutions for **leading customers** in Asia Pacific

**Excellence** Contributing around €250 million to global **DrivE** program from the end of 2018 onward

BASF Roundtable Asia Pacific, London, September 23, 2016

58

**Sanjeev Gandhi:** Thanks, Stephan and Gops. We are at the end. I do a short summary of what we have discussed and then we take questions.

Going forward, what is going to be the focus? Our clear target is driving profitable growth. How are we doing this? Working together with our customers – you have seen some examples: international customers, local customers, regional champions –, leveraging our presence, our assets, the R&D capabilities and the innovation drivers that we have because there is a clear need for this and partners and customers appreciate this.

Portfolio management is going to be a constant effort. What is going on around in our industry obviously also has an impact on us. This is something that we review more or less regularly.

The OMP ratio of 75 percent is still an aspiration; it is a target. We continue to invest. The quality of investment is slightly different, but we focus on trying to get as close as possible to that one.

Operational excellence, cost management is something we do now; it is extremely urgent. We already see first positive results here.

Then we have the people topic that we have discussed several times.

Some numbers, if you are interested, to take away: Growth will be, as I said, above chemical production in Asia. You know where we are. You know what is chemical production in Asia. You can do the maths.

We intend, as we have announced earlier, as part of the global corporate capex plan, to take our fair share of capex in Asia Pacific, which boils down to something like €3/3.5 billion which we are investing now and we have the pipeline to do so until 2020. The focus is clearly on building the regional asset platform and driving profitable growth.

Innovation. We have talked a lot about this. We have the infrastructure. We now make that pay back to us and our partners.

The excellence number out of Asia, which goes into the global DrivE programme, you know about this: We said, from 2016 until the end of 2018, we want to add €1 billion to our bottom line with efficiency and effectiveness measures. The share of Asia is 25 percent. We are well on track. Already the first major impacts are coming this year; those are the low-hanging fruits which we see in our P&L. We intend to continue this in the next couple of years.

## Key Messages



**Asia Pacific** is the **largest market for the production and consumption** of chemicals.

**BASF is well positioned in Asia Pacific** and is quickly adapting to the changing environment.

**“We create chemistry in Asia Pacific”** leveraging the growth opportunities in the market.





Once again, the key messages: We are a significant player in the largest chemical market in the world. We intend to remain there, strengthen our position and take advantage of all these favourable tendencies that we have which help us drive our growth going forward.

We are adapting. The environment is not easy. There are no quick wins. It is challenging. All that effort to bring a column from Nanjing to Kuantan is something not everybody can do. We have the competence, we have the experience. We have the resources to get the thing done. We intend to do this and, of course, live the strategy, focus on execution, execution, execution, get it done, deliver value and contribute to making BASF an even more successful company.

Thank you very much for all your attention. We are open for questions.