POLY4 market

Alex Schmitt

Tuesday 3 October 2023

Slide 1: Welcome

Good afternoon from me as well. I am Alex Schmitt, the chief marketing officer of our Crop Nutrients business, a proud member of our Crop Nutrients leadership team and a proud leader of our global solutions & marketing team. I have met some of you in my previous role as Head of Base Metals during the visit to our copper assets in 2017. I joined Anglo American in 2010 and led the transformation of Anglo American from a traditional dig-and-deliver sales approach to a customer-centric marketing approach, considered in the industry as one of the most significant transformations in the mining space. Before that I worked for 12 years in one of the most successful demand generation businesses – a leading strategy consulting.

Today we want to show you why we are so excited about this product, the market and its long-term potential.

We also want to dispel some of the rumours in the market about what POLY4 is (and what it is not), challenge the traditional way of thinking of the fertiliser industry and demonstrate why we cannot rely on opinions based simply on what has gone before.

And finally, tomorrow we want you to meet the team on the ground, including our agronomists who can really bring this to life for you.

Slide 2: Cautionary statement

Refer to cautionary statement in presentation slides.

Slide 3: Opening remarks

To frame the next 60 minutes of the presentation I would like us to think and imagine how the world will look in 2050.

What does 2050 mean to me? My 13 year old son will then be 40, in the middle of his life, probably just with a young family, and I am the wise grandfather to my grandchildren. The question for me really is, what will his and their world look like? And what can we do to make it a better place?

We are heading towards 2 billion more people to feed, the food systems need to produce 60% more calories in a significantly more challenging environment. For example, the extreme weather events in Germany are forecasted to reduce the yield of the German farming system by 7–10%. We need to grow the same amount of crops in the next 40 years, as in the last 8,000 years.

The world in 2050 therefore needs transformational thinking and requires real action on these transformational ideas.

Slide 4: Global market reach & experience

The good news is that industries and markets go through transformation, this is not a new phenomenon. Anglo American has deep and successful experience in bringing deep transformation in global markets.

1. We have experience in developing highly successful marketing strategies for globally desired premium product in diamonds, in De Beers.

2. Another example to think about is our platinum business, where through applications developed with partners in the industry, this has resulted in a significant increase in the size of the market in the last 30 years.

3. Lastly, closer to home for me is the Anglo American global marketing business, where we have created a customer centric business that understands customer needs and provides solutions to different customer industries.

Within this context therefore, we have a clear parenting advantage here for our Crop Nutrients business. Let me share a couple of specific examples:

1. Through the Anglo American marketing business today, we have the ability to ship, transport and manage global physical product flows and provide solutions to our global business-to-business (B2B) customer base (global reach).

2. We have a B2B customer engagement model where we understand needs and provide solutions that are enriched with ESG thinking (customer centric).

3. The business already conducts market development activities globally in the platinum markets for example – there are elements here which are transferrable and elements from which we can learn (innovation).

I would like to also tell you today about the deep scientific foundations we have laid down for our Crop Nutrients business:

1. We have run one of the largest and most sophisticated research/customer engagement programmes over the last 10 years.

2. We are working with more than 40 agronomists in more than 40 countries (and this is growing), who have joined us from the leading companies and agronomic powerhouses in the world.

3. We have done more than 1,800 on farm demonstrations across all major crops in all agricultural regions around the globe.

In my time I have not found one agronomist who was not convinced by the product, even from competitors. Although of course there are examples of when a trial does not work – such as if the field floods or where there was overnutrition of the top soil.

This deep scientific and customer engagement is the foundation of all our activities and what we are going to share today. So let's get into it.

Slide 5: Smart crop nutrition with POLY4

We will cover four chapters for today:

1. The fertiliser industry challenge

2. POLY4 – what it is and what it does

3. Our strategy to take this product to market

4. The "so what" of all this – the bit you want to model – price

Slide 6: The fertiliser industry challenge

Chapter 1 – the industry

Slide 7: Fertilisers are fundamental to food security

Nature provides a multitude of nutrients essential for healthy plant growth – 17 essential nutrients are needed.

It is the natural cycle of farming – where we harvest these nutrients in the form of crops, there is a need to replenish these in the form of fertilisers to turbo charge this process.

This is essentially what the fertiliser industry has done i.e. they have replaced the nutrients that are taken up by the harvest.

Traditionally, the industry has focussed on the three macro nutrients – Nitrogen, Phosphorus, Potassium (NPK). It has been successful. Fertilisers are responsible for 50% of global food production. Fertilisers, therefore, are food security.

However, we are reaching the limit of what has worked in the past and what the existing fertilisers can do. Also, the success of what we have done in the past has not come without its impacts.

Slide 8: Industry recognises we are reaching the limit of what existing fertilisers can do

We see this in this simple graph.

Fertilisers have enabled ever higher food production without the corresponding increase in arable land. Urbanisation, soil degradation and climate change are driving decreases in arable land, but the population is set to grow to 10 billion by 2050 and increasing wealth is also driving higher calorie consumption.

Farmers have been supplied with the same fertiliser products for decades and are struggling to get beyond typical industry yields – we are fast reaching the limit of what existing products and practices can do. On top of that, this is all being done against soils that have been overused – depleted but then restored with unbalanced chemically produced fertilisers.

A different approach to crop nutrition will be needed.

Slide 9: Industry, governments & consumers are recognising the need for change

The government and the industry have started to recognise this need for change, and I strongly believe consumers will do too.

Food production is responsible for the majority of greenhouse gas (GHG) emissions. However, there are other themes which are not so well recognised and not yet on the front pages. In particular, one theme where I want to draw your attention to is soil health.

1. Over farming and the fact that we have intensely and for prolonged periods of time mined the nutrients out of the soils have an impact. There is a global shortage of Magnesium and Sulphur in our soils. Noting that with improved air quality and less acidic rain, the main Sulphur deposition mechanism is significantly reducing in the future.

2. The soil quality has deteriorated.

3. The Food and Agriculture Organisation of the United Nations (FAO) claims that there are just 60 harvests left due to the loss of top soil – top soil is the foundation for any crop to grow.

4. To gain a centimetre of top soil, it needs thousands of years.

In summary, food security is absolutely vital, every society is only three meals away from chaos. Governments have been starting to respond, and so are consumers.

Slide 10: What is crop nutrition?

Before getting into what the solution looks like, let's get back to the basics.

What is crop nutrition?

You heard me say earlier that plants needs 17 chemical elements to grow, of which 14 come from soil, 3 come from air. Six of these are macro nutrients (Nitrogen - N, Phosphorus - P, Potassium - K, Sulphur - S, Magnesium - Mg, Calcium - Ca) and the rest are micronutrients. Even though they are spoken of differently, plants need all of them. Every single element has a specific purpose in the plant growing cycle.

Plants need the Right nutrients, Right quantity, at the Right time and the Right place. This is the 4Rs – a very fundamental concept in agronomy 101.

A fellow German, Justus Liebig, invented another very fundamental principle which is common knowledge and agronomy 101 – Liebig's law of the minimum. Plant growth is actually limited by the scarcest nutrients available.

Also important is to note that not all nutrients are taken up by the plant. Nutrient use efficiency and increasing this is a very important concept which we will come back and touch on again. The fertilisers nutrient release profile, the plants efficiency in using the nutrients, leaching and erosion all result in inefficiencies.

Slide 11: Farmers are constrained by existing fertiliser products

Plants need balanced nutrition. The farmer provides it through fertiliser products.

There is an important distinction between demand for nutrients and demand for fertiliser products. Plants require nutrients, demand for nutrients will grow with population growth.

Farmers are constrained by the available products on the market today. There has not been an innovative solution of size for the last 75 years!

The wheel on the right-hand side represents approximately ~500Mt of global fertiliser product tonnes sold every year. Inner circle are the nutrients, outer circle are the fertiliser products that supply them.

What you see is that the nutrients in POLY4 span four of the six key nutrients, as such POLY4 is from a nutrient perspective much more than Potassium and MOP!

And that is where we begin our journey. We have a better solution...

Slide 12: POLY4: A better solution

Chapter 2 – The Product

Slide 13: POLY4 sits at the intersection of global, industry & environmental megatrends

Duncan referred to the mega challenges that the industry faces. We call it the trilemma of the agriculture industry, and our partners and customers absolutely agree with this.

1. We need to increase food production and food security.

2. It needs to happen in an environmentally responsible way – with low carbon footprint and low waste. Ideally organically certified.

3. Lastly, it needs solutions to deteriorating soil health.

POLY4 has a significant part to play in solving these challenges. There is no other crop nutrition solution available that sits at the intersection of these global trends and provides a solution to the three mega challenges in the industry at the same time. We have a solution that increases yield and product performance, that has a less environmental impact by its nature and the way it is unearthed and due to the mineralogy, it has a positive impact on soil health. A true high performance and positive impact crop nutrition solution.

Slide 14: POLY4: Multiple key nutrients in a single granule

What is POLY4?

POLY4 is made from a multi-nutrient natural mineral in a single granule. The nutrient elements themselves are not unique, they are applied today. Potassium (K), Magnesium (Mg), Calcium (Ca) and Sulphur (S) are all applied. By the way, POLY4 contains Sulphur in Sulphate form which is the state in which plants can take it up. Along with the Sulphate and the micro-nutrients, POLY4 in terms of nutrient content is comparable or even has a higher nutrient content than chemically processed legacy products.

What makes it different is that it is not just a bag of these different elements – its synchronous release of these macronutrients over sustained time scales is a significant and beneficial difference. You can see on the right-hand side graph, what it is not is a Potassium (K) product as some industry participants have suggested. That is – it is not a MOP or a SOP or SOPM, a too simplistic frame of mind.

On top – referring to the mega challenges and you could think about it as a matrix there is beside nutrient content another dimension – call it environmentally responsible/soil health dimension. Those legacy chemically processed fertilisers play on the left side of the matrix. POLY4 as a natural mineral, sustainably mined plays clearly in a different category, the category high nutrient content and low environmental impact. It is not just about input; it is about impact! The mineral and its production are distinct!

It is important though that we take the farmer perspective – note that there is not a singular description of a farmer though, so we need to be careful with this. There are over 600 million different farmers globally, from small scale farmers to extremely large commercial farmers, in different locations and with a very diverse set of personas.

Slide 15: Why is this good for farmers?

A farmer doesn't think in terms of one product – he thinks in terms of fertiliser programmes and crop rotations.

We have one example here for us to look at – a typical European farmer. They use a 3-year crop rotation programme. Crop rotations and multi-year fertiliser products are used around the world. A very common programme would be:

Year 1 – Winter wheat

Year 2 – Winter wheat

Year 3 – Potatoes

A very typical example – you can see in the grey bar below in the table a standard fertiliser practice over three years for this farmer. Out of the wheel that we saw in the previous slide, they would pick six different fertiliser products to apply. The combination of these products would provide the best in nutrient replenishment for their cropping programme. By the way, this is a standard practice globally, farmers think in crop rotations and fertiliser programmes, they are not thinking about one product vs another. For them it is about optimising the system.

This particular example means that the farmer has 12 applications in the three-year programme. Every year, they would need to use the fertiliser spreader to spread product four times. This costs the farmer approximately as a global average, US$15 per hectare every time. Further, he needs to purchase six different products. Through all this, there is a total 1,527kg of nutrients that they apply to the field.

Now in the POLY4 programme, in the blue bar below, there is one less application to do and the farmer gets a 13% higher nutrient application. That's why it is good for the farmer. Lower input and greater output through more nutrients provided.

Slide 16: Benefits beyond the nutrients: a better holistic solution for farmers

We have covered what the nutrients in POLY4 are and how farmers would use them. But POLY4 is more than its multi-nutrient content. It is a better, more holistic solution for farmers and brings a wealth of benefits to meet farmers' challenges (from an input fertiliser logic to an impact crop nutrition solution).

These are the major challenges, all matched by POLY4 benefits.

These product qualities and characteristics cannot be synthetically recreated. We have tried it ourselves and you do not get the same results.

Also – perception that farmers do not adapt to innovation or adopt new tech is wrong.

Previous generations of farmers already have – look at mechanisation, seed selection, irrigation, pesticides etc. New generations are even more open to innovation. Generational shift is a massive tailwind – example of the UK, where you can see it coming in the next 5-10 years: "Farmer" has a particularly old age profile as an occupation, with 42% of people in this role aged 60 years or older and 29% aged 65 years or older*. For the whole working population, around 11% of workers are aged 60 years or older and only 4.3% are aged 65 or older (UK Office for National Statistics).

I will talk you through each of these in turn now.

* Agriculture in the UK – Evidence Pack (Pages 2.3 / 2.4): https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1106562/AUK_Evidence_Pack_2021_Sept22.pdf.

Slide 17: Yield: a trial example

The first example looks at how POLY4 provides yield advantages.

Yield is a very common industry term which means the tonnages of crop harvested per area – and one the industry is paying for. The example we have chosen here is a European potato trial we have completed.

Potassium is an important nutrient for a good potato crop. As we touched on before, this Potassium can be provided through different products – typical programme can use MOP /

SOP (a low chloride solution) or you can include in your programme - POLY4. You can see on the right-hand side graph that when you compare the three on a like by like basis:

- MOP-based fertiliser programmes deliver 35 tonnes of per hectare
- SOP-based fertiliser programmes delivers an extra tonne and brings this to 36 tonnes per hectare
- POLY4 brings it even higher to 37 tonnes per hectare

This is the same methodology we have applied across hundreds of trials, over a multitude of regions and crops globally. We realised an average of 3-5% yield improvement.

Let's put this into perspective, for a farmer. Why does this matter to them and how?

Farming is a low margin business – on average, they would be operating with a 10% margin. A 5% increase in yield therefore means a 50% increase in overall profits for the farmer. We have one of the largest customer studies with EU farmers. We have engaged with over 5,500 farmers to understand what the threshold is for them to change from current practices.

By the way, to the earlier point about farmers being innovative – more than 35% of farmers can be clustered as value buyers and innovators*. They want to find better solutions that improve yield. When you talk to these farmers, the 3% threshold of increase in yield will trigger a change in approximately 30% of farmers buying behaviour. This can be seen as representative across the sophisticated farming systems around the world.

* Data from a Kynatec study completed on behalf of Anglo American.

Slide 18: Superior in-field application

Let's move to the second one – the superior in-field application properties of POLY4.

You can see on the right-hand side image, to my earlier point, the mineral Polyhalite provides nutrients in a sustained release profile at a pace the plants need it in. Comparing to chemical fertilisers, the industry calls it flashing. They provide chemically processed and high concentration nutrients in the early stages. That is why the losses are such a large issue. The plant simply cannot take up the nutrients at that pace. Nutrient use efficiency comes down.

Polyhalite / POLY4 has a sustained release profile. It provides the nutrients when the plants need it – it gets taken up more slowly. With that, come multiple benefits:

1. Nutrient use efficiency – one we will see in more detail in the next slide.

2. This also allows the farmer the flexibility in application timing across the year – compared to flashing where every day matters.

One specific example we are looking into are applications in North America in autumn in places where the current practice is spring. The workload for the farmer is much lower in the autumn and this allows for the farmer to de-risk his operations massively.

Slide 19: Improved nutrient uptake by plant

The third point is about nutrient uptake.

Farmers pay for fertiliser and at the end, half of it on average is not put in use – it simply disappears in the water ways or in the air. Our product increases the nutrient use efficiency – obviously for the nutrients we provide – Potassium, Calcium, Magnesium and Sulphur. We are also seeing increase in nutrient use efficiency in Nitrogen and Phosphorus when applied

together with POLY4 as a part of the fertiliser programme. On average we are seeing nutrient efficiency increases of 5–7%!

We have farmers in our portfolio who claim that by using POLY4 as part of their multi-year restorative plans, they were able to reduce their Nitrogen rates significantly without incurring a yield penalty.

Slide 20: Balanced nutrition for a healthier plant

Same as for humans, balanced nutrition is important and essential for plants. It leads to healthier plants which leads to two main impacts:

The one of the left-hand side is about increased drought resilience in plants through use of POLY4.

You are looking at an example of a soya bean plant from a trial conducted by one of our partners in Brazil. You can see better, deeper and denser roots on the right-hand side plant using POLY4 in its fertiliser program. This means the plant can intake more water and be healthier in drier soil conditions.

On the right-hand side we want to show you examples of plant disease resilience through use of POLY4.

What you are looking at is a common disorder in tomato and other plants called blossom end rot caused by a deficiency of Calcium in soils. Calcium is a very important and underrated nutrient that needs to be applied. It is often applied through gypsum or limestone where it is not available for the plants to uptake. Through our product, the availability of Calcium for the plants is increasing significantly. For farmers globally, blossom end rot is a major issue – for a harvest like the one shown here, the farmer would get zero value - it is a total loss.

Slide 21: Better for the environment

The fifth point is that POLY4 is a better environmentally responsible solution to the farmer.

1. The first point here is that POLY4 is organically certified. That means organic or regenerative farmers can apply our product. There are not many solutions or alternatives in the market today. There is a premium attached to this as well.

Organic products require POLY4 as an organic solution which allows for us to capture some of the value, and it is a very fast-growing segment in the food market space. It means an exclusive market segment and a price premium. Organic food is now “mainstream” and growing. Further, organic-labelled food is higher priced. Both are tailwinds for organic-certified POLY4, a segment that legacy products cannot enter.

I was recently visiting one of our partner farmers in Spain, a pistachio and olive farmer. They do organic farming – and he said that they receive a 60–70% additional revenue per tonne of product (pistachio). There is of course a 20-30% yield compromise on the type of farming that they do but the practice still results in an overall 30% higher revenue line because they provide an organic product.

2. The second point is the low carbon nature of POLY4. This is not just against MOP, but let's think about other products that supply nutrients currently, i.e. SOP or Calcium Ammonium Nitrate. If you anticipate that POLY4 is a natural mineral vs. a synthetically produced POLY4 out of the existing wheel of available products, we are looking at 4-5 times more carbon

footprint to produce a similar product and that is of massive interest of food chain companies as they all made significant commitments towards net zero across their entire value chain until 2050 i.e.. Tesco, Sainsbury or Co-op (just to mention some UK based ones).

Slide 22: Protecting a farmer's greatest asset – soil

The last point is about the soil health improvements that POLY4 bring. In my opinion, an underrated issue globally. This is the farmer's most important asset. This is what the farmer hands down to his future generations to come.

There is evidence in the US market – where depending on the soil health, you can today use it as collateral to secure funds and bank rate the collateral based on soil health. Through POLY4, its low Chloride content, its balanced nutrition characters and Calcium content, and its low salt index, it helps improve and increases soil health, in addition to providing nutrients the plant needs.

To give you a specific example. Today approximately one in five hectares of farmland globally are already affected by increased soil salinity (the big salt lakes/deserts). Growers in affected regions seek crop nutrition without adding to the salinity in their soils. POLY4 as an example has a 58% lower salt index than MOP and is therefore a safer product in those conditions.

Slide 23: video

Don't just take our word for it – farmers across the world are seeing the benefits of POLY4 to help address their wide-ranging challenges. Farmers want the product.

(refer to video)

Slide 24: Our commercial strategy

Chapter 3 – how are we bringing this to market?

Slide 25: A growing nutrient market

Let's start by talking about the market as it stands today. Fertiliser products have not changed for a long time. For the last 75-100 years, we haven't seen a significant change in the industry. We think POLY4 is this new and large-scale fertiliser solution that is needed. It is a low-cost supply of nutrients; however, it is difficult to shoehorn our POLY4 product into the legacy market structure.

The left-hand side graph shows the legacy market and its size today. You have probably seen this graph before, and it talks about Nitrogen, Phosphorus, Potassium, Sulphur, and Magnesium only. Please note, Calcium is not included in this graph. Also note that the tonnages mentioned here are nutrient tonnes, we spoke about product tonnes earlier which stands at approximately 500Mt per annum. The 180Mt referred to here is nutrient tonnes.

The market today consumes about 180 million nutrient tonnes. This is forecasted to grow to 250Mt by 2050 mainly driven by population increase up to that point*.

Potassium and the other nutrients are the faster growing part of this chart with around 2% per annum growth. Our nutrients that we supply through POLY4 are exactly these nutrients i.e. the Potassium and the other nutrients like Magnesium and Sulphur. So, in theory, the addressable market let's say is the blue highlighted parts of the graph or about a third of today's nutrient markets. That was our view in the beginning as well about the size of the addressable market.

I would like to give you two specific examples of why there is more opportunity than the graph may indicate as an addressable market.

1. The first one is that in the slide within the blue box. It is about serving latent needs with a solution created demand (market creation). Think about the mobile phones and the famous AT&T case study (size of the mobile phone market). A challenge the legacy industry is struggling with. The addressable market will increase by serving the needs of the industry better through a superior natural crop nutrition solution.
Closer to home: There is already a change from legacy commodity products to more sophisticated solutions that provide other solutions like SOP and SOPM. The availability of a better large-scale solution will increase this demand creation. Like the salinity example, I mentioned before, farmers with problems in salt levels will use such a solution.

2. The second one is that we obviously have the opportunity to think about how we can enrich our products with Phosphate and Nitrogen (Polyhalite as a platform product) to not only play in the blue parts but also participate in the grey parts of the graph as well – we will talk about this at a later point again.

So, the addressable market is one that will grow based on the future availability of better solutions and our own product development strategy.

How do we reach this market and the end customer. Let's go to the next slide and talk about this further.

* Source: International Fertilizer Association (IFA) – Product deliveries.

Slide 26: Global reach, high quality partners

How do we reach this market and our end customers?

We have long term partnerships in place globally – and by the way, this is very rare in the fertiliser industry. You can see the top five partners we currently have in the main jurisdictions we concentrate on:

- ADM in North America – an absolute agricultural powerhouse with a leading logistics system in NOLA.
- CIBRA in Brazil – a dynamic and very fast expanding business in Brazil which is already in the top five companies in the industry by volume.
- BayWa – one of the largest agri-business companies in Europe.
- IFFCO – is the largest farmer corporations in the world. Owned by 45 million farmers directly.
- Finally, Wilmar – the top fully integrated supply chain player in the agri-industry in South-East Asia.

We have not put all of our partners on this list – we have standing partnerships in Nigeria and South America as well and have not put their logos on this slide.

The partnership portfolio you see here was already built by Sirius to a large extent – what we have been able to do is a couple of things:

1. Intensified engagement and optimised the collaboration: we have spoken and engaged with the partners to understand if they have the same industry perspective as us and does POLY4 fit into their long-term strategic outlook? How can we work together to jointly build the capabilities to grow the market together? How can we align our interests better? And as such

we have been able to optimise a couple of our agreements with partners. As we are under Non-Disclosure Agreements (NDA) with our commercial partners, we obviously cannot share any contractual details. In principle the direction is towards more profit-sharing type of agreements with volume optionality, we participate more in the upside (as we are as well significantly more convinced about our product performance), and the volume optionality comes into play if we are able to work together and grow the market faster than planned.

2. We are working with the industry to find partners that have the same mindset to bring a sustainable and game changing product to the market and will grow our distribution partner portfolio over time.

Slide 27: Getting closer to the farmgate

The second key front for improving our partnership portfolio is that we see our distribution partners as the top of the Routes-to-Market (R2M) pyramid and are working with them by leveraging their platforms to penetrate the market more deeply and are getting together much closer to the farmgate to manage the full eco-system as effectively as possible.

You heard me saying before, I am a proud leader of our team of approximately 100 agronomy, market and customer experts. Through them, we are engaging with our downstream partners every day – we currently have ongoing engagements with 350 value chain partners, whether these are the top retailers in the USA (where they are often the centre of the real buying decision), the big distributors/co-ops in Europe, or the main blenders or mega farms in Brazil. We are working with them to understand their value chains and make them familiar with POLY4 and how we together can best introduce it. We are trying to demonstrate how they can work with their farming community to embed POLY4 into their farming programs and how they will make POLY4 a profitable – often the most profitable - and innovative addition to their portfolio of solutions.

We also work with over 570 influencers in the industry – this includes the major universities, farming associations, and academic research institutes. We want to absolutely make sure through this that the market understands the benefits that POLY4 brings at scale into the marketplace. Getting as close to the customer as possible.

Slide 28: Innovative downstream activation

We have applied different approaches to activate the market globally. You would consider some of these more as standard practices. Let's talk about some of these we are using:

1. Our agronomic foundation is strong through a wide program of on field demonstrations – we take these results and design deep farmer engagement programs. We will continue to build this database to understand our product's performance in different soil conditions and farming setups and transmit this through the setup.

2. We engage with the farmers in various ways, for example running farm days, directly or through our partners. We are organising ambassador programs – seeing is believing in the farming industry. This is an important principle in the farmer community. As we engage with farmers; we are segmenting growth across the globe. To enter the market with 13Mtpa of POLY4, we spoke about 600 million farmers earlier, we need to win around one to three million farmers out of the 600 million. We want to make sure we focus on the right segments, the right personas and the farmers that see the same value in the product that we see.

3. We are employing influencer activation – we are looking at how we can engage with universities, opinion leaders in the industry and they see things.

I would call these standard practice in the industry. Now let's talk about what else we are doing as a more holistic eco-system marketing approach.

1. We are working on advocacy programs, an area where we could leverage our global footprint as Anglo American. As one specific area of focus is the EU and their farm-2-fork strategy and what role our new category of a natural crop nutrition solution could play in contrast to the chemical fertilisers category. That is a new category of product that will support the politically intended transformation of the European agricultural industry.

2. Lastly, we are working on pull creation.

Our product is of great value to, and a superior solution for, consumers and consumer brand companies who have made massive commitments around CO_2 emissions reduction as an example. The top 50 consumer goods companies directly or indirectly control over 50% of global farmland. We are working with the likes of Tesco and other Consumer Packaged Goods (CPGs) to do on-field demonstrations to influence their sustainability requirements from the food supply chain.

You may have recently seen an announcement about our partnering with Tesco in the UK to design one of the biggest low Carbon fertiliser programs. The program is launched and driven by Tesco and its partners to meet their scope 3 emission targets.

Slide 29:

Our customers are as excited as we are for this product – here are their reflections on POLY4.

(refer to video)

Slide 30: Unlocking the full potential of POLY4

Chapter 4 – the potential and what this means – now to the bit you have all been waiting for:

• How much can you sell it for?

• How do we model the price?

This is not an easy one compared to, for example, the copper world, which is much easier. We can see the ticker, the price every minute. We even have a forward curve which we can use for our models.

POLY4 however, is a marketed product. How can we model this price. We have developed a methodology for this, and I would like to share it with you in this section.

Slide 31: Modelling POLY4 price

I am going to spend the next few slides building this out for you in steps.

We will start with nutrient content first.

1. Using a "commodity type" approach, so we will show you how to model each of the nutrients in POLY4 with reference to comparable market prices for the nutrients.

2. We then consider that not all farmers pay for all these nutrients currently. We will explain how we have modelled an implied price for POLY4 based on nutrients in blends that farmers do

currently pay for. Important: this is at no extra cost to the farmer. This is a "plug & play" scenario, which is almost a "fallback" position for the product.

That all talks to the nutrient content.

But as we have seen, POLY4 is more than the sum of its parts and brings farmers a wealth of other performance and sustainability benefits. In the POLY4 chapter we took you through six key product characteristics that will drive the premium. They all have a value attached to them, and we will walk you through an example of one of the key benefits – yield – and what it means for the POLY4 price.

We will then bring together the nutrient build and the performance benefits to put the price potential into perspective.

Slide 32: Nutrient build-up pricing

First, is the "commodity type" approach which gives you a price for each nutrient in the product by reference to the implied market price for the nutrient. Let me walk you through this example.

Let's start at the bottom:

• Potassium – MOP reference price is adjusted here for the potassium content in POLY4 – works out to 35% of the nutrient value.

• Our product is not only a Potassium source but a low-Chloride Potassium source – we use the SOP price here as reference which is another low Chloride Potassium source.

• Sulphur – farmers use Ammonium Sulphate which is a Nitrogen and Sulphur source in the market. We take this price, remove the Nitrogen-value from the product and use this for our Sulphur content pricing in POLY4. This forms about 30% of our nutrient content value.

The three nutrient values – Potassium, Sulphur and low Chloride values are reported by Argus and CRU.

• For Magnesium, we use Kieserite price which is a Magnesium and Sulphur source. Same logic as before, we take out the Sulphur content to make sure we are not double counting. Important to note that this price is not reported to the same extent as the first three, and we get pricing signals from the market.

• Lastly, Calcium is a similar logic as well where we take a reference price and adjust it for our content. We normally do not consider the Calcium price in the full nutrient value.

At today's spot prices, this would value POLY4 at $290/t FOB at Teesside. This is the full nutrients value, and you would rightly point out that a customer is not going to pay for all the nutrients in POLY4. This is right, let's look at this closer in the next slide.

Gives you a tool to build a price model. In the appendix there are further details on the calculation and reference prices.

Slide 33: Blend substitution implies $170/t POLY4 price for the same nutrients at no extra cost to farmer

We have to assume that farmers pay for the nutrients they use.

Let's take an example – here you see 15-15-15-6 blend in this example, and we can go through the blend substitution logic that we apply. It is important to note that we have completed this exercise for the most used 70 blends across the industry, on different crops and different jurisdictions.

Taking this example, in the 15-15-15-6 blend, they use Urea as the source for Nitrogen, they use Ammonium Sulphate for the Nitrogen and Sulphur source, they use DAP for Phosphorous and MOP for the Potassium source. In comparison, if you see the blend with POLY4, and if you provide this to the farmer without any extra cost to them, how much would the POLY4 price be and we net that back from there to FOB at Teesside.

You will notice that there is a bit more Urea in the new blend, and that there is still a bit of MOP in the blend – our product does not replace MOP completely but replaces a part of it. Additionally, about 30% POLY4 is added in.

Using this same logic modelled globally for the 70 different blends we have evaluated, we arrive at an average price of US$170 per tonne long term price for 13 million tonnes.

With this method we are not considering here that the farmer is receiving additional nutrients in the blend – there is now Magnesium and Calcium included in the blend – important nutrients for the farmer. Strictly, scientifically speaking, POLY4 blends are an upgrade not just a substitution.

Slide 34: POLY4 delivers significant benefits beyond its nutrient content – taking yield as an example

Now the second part of the pricing: benefits beyond nutrients. Let's take the potato example again - as farmers are paying for yield.

35 tonnes per hectare changes to 37 tonnes per hectare for the farmer. That is two extra tonnes per hectare for the farmer compared to MOP. A 5% yield uplift for the farmer.

With a crop price of US$130 per tonne of potato, the farmer realises an increased profit of US$260 per tonne for his two extra tonnes.

You see the POLY4 application is 0.4 tonnes of POLY4 per hectare – this translates to a value add of US$650 per tonne to POLY4.

Now obviously, the farmer needs to get most of this value add. A part of this also goes to the distributor. Based on industry benchmarks, we assume a 33% pass through to the producer. Which means that in this particular example, the pass through potential for POLY4 is US$200 per tonne.

We have taken this methodology and applied it to our yield study work and insight database across the globe. You can see that on the right-hand side.

This is huge for a farmer. Their typical profit margin is ~10-15% depending on the types of crops they produce. A 3-5% increase in yield would bring them a ~50% uplift on their bottom line.

A 50% uplift in farmer profits is equivalent to around US$300 per tonne on POLY4. Whilst this varies across regions and crops, that is the average at a global level.

Typical industry pass throughs to the producer are about 20-50%. A prudent 30% assumption is US$100 per tonne of POLY4 back to us, with around 20% retained by the distributor and 50% retained by the farmer. The value capture percentage increases based on downstream

integration, i.e. a fully integrated producer could capture up to 50% but that comes with time and market development.

Farmers pay for yield because they want the return – there is a willingness to pay. They get a better return, it is not just revenue.

Slide 35: Unlocking the full value potential of POLY4

Now let's put all of this together in this staircase graphic.

The left side is the nutrient value, remember we assume about US$170 per tonne for this based on the blend substitution logic – there are no extra costs to the farmer, he receives the same nutrients he is used to. The nutrients that the plants need – and this at 13Mtpa, we calculate at US$170 per tonne long-term real prices.

Now let's move to the right, we anticipate the crop yield increase, we take a very conservative 20% of the potential here. This is how we arrive at US$190 per tonne.

• We have not yet relied on the complete US$100 per tonne.

• We have not relied on the commercial optimisation journey we are going on as well. We also have not targeted particular segments where the soil and the crops massively gain from the use of POLY4. We would, of course, be able to target and make these a reality when it comes to commercial sale, but we do not rely on it today. However, we do recognise that there is an upside of about 50% in this bucket.

• Sustained release products get a premium in the market, between US$40–60 per tonne.

Let's move to the third part of the graph – where we have a more sustainable solution:

• We have not relied on this value currently either, we have not considered this as a part of our price assumptions.

• The world is not going to move to organic completely, but we see that the organic nature of POLY4 will bring more value. Currently the market sees approximately US$30 per tonne organic premiums and is expected to grow.

• CO_2 benefits – would use the example here that we expect our footprint to be 4-5 times lower than synthetic equivalent POLY4, and based on today's EU Emissions Trading Scheme price that would imply ~$20/t advantage in Europe. That will only trend upward and we expect there will be similar benefits in other markets over time.

These sources of strategic upside value do not apply for all market segments and require time to be recognised and we believe that they are achievable in the long-term for some markets. Having compared to a commodity world, having those strategic upside value pools is another significant advantage of Woodsmith.

Rest assured, whilst for the project economics we are not relying on the right-hand side, we are going for it with all we have!

Slide 34: Commercial strategies: focus on high value demand

Let's look at our commercial strategy in consolidation, there are four steps we are looking at:

- The first one is the obvious one, we can produce product with a low cost base and sell at the US$170 per tonne based on a "plug and play" logic into blend substitution. A

good starting position but we will go a lot further, as this would not be a good place for us to stop.

- The second one is that we need to capture the value that the superior quality of POLY4 and its performance is creating across the value chain.
- We spoke a bit about the third one – the product differentiation. We want to use and treat POLY4 as a platform product, it does not have Nitrogen and Phosphorous in it. But there is nothing stopping us from including these into the mix – agronomically, introducing Nitrogen into a Sulphur – sorry better Sulphate - product like POLY4 would be very wise as they support each other in various areas, ie. POLY4 has a product with higher density -for example, compared to Urea which has a very low density and is difficult to spread, a joint granule with POLY4 clearly has application benefits.
- Lastly, we will work with the industry to create customer centric innovations as enabling activities for demand generation, whether this means engaging with the food value chain and supporting them in their challenges or engaging with the soil health partners to explore synergies and create the demand for POLY4 as a soil health improving product.

Slide 35: Wrap up

Slide 36: Smart crop nutrition with POLY4

In summary, I want to remind you with what I started with - what the future will look like in 2050.

With the industry challenges we are seeing, we cannot keep doing what we have been for the last few decades. Industry, governments, the food chain and the consumers are asking for a better solution. Here it is - POLY4, sits at the intersection of these mega trends. It is solving these mega problems and enabling a future through a more sustainable solution.

It is a single source of plant nutrition with superior physical and agronomy qualities. We are producing it at scale. It is not just MOP / SOP or another product from the wheel of legacy fertilisers. From input fertiliser to an impact crop nutrition solution.

We are working with the industry partners to unlock the full potential that this opportunity brings us. Obviously, we are modelling it conservatively just now, but we have plans to capitalise on the strategic upside opportunities in the market.

I started the presentation referencing my 13-year-old son. What I find the most fascinating thing is this thought about making a true difference to the future generations - it not only drives me, our solutions and marketing team, or us in Anglo American Crop Nutrients, it drives our partners, our customers, our farmers and it drives all of us in Anglo American.

I hope that we have given you a lot of food for thought and challenged the traditional way of thinking of the industry and our product.

With that, happy to move to questions.

END