

BHP

Climate change briefing

Investor and analyst Q&A teleconference transcript – Session 2

11 September 2020

Introduction

TRISTAN LOVEGROVE (INVESTOR RELATIONS OFFICER, BHP)

Good morning and good afternoon to many of you. I'm Tristan Lovegrove and I'm joined by Mike Henry, our CEO, Johan van Jaarsveld, Chief Development Officer, and Fiona Wild, VP Sustainability and Climate Change. We're also joined by Huw McKay, our Chief Economist.

In a moment I'll hand over to Mike to say a few opening remarks. Before we move to Q&A, hopefully you've had a chance to see our slides and watch our video presentation on our website. During the Q&A session Mike will take each question and direct to the other speakers, as required. Over to you, Mike.

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

Thank you, Tristan, and thanks everyone for joining us this morning or this afternoon. We're really pleased to have been able to share the update on our approach to climate change, and I know for those of you that have had the opportunity to see the video that there was a lot of ground covered. But given the scale and complexity of the climate challenge we think that is absolutely necessary and appropriate.

Now, I do hope that once you've had the opportunity to digest the video and the other materials, and once we've had the opportunity to have this discussion today, that you will really come away with a sense for, firstly, the actions that we've taken to date and how strong those actions have positioned us in terms of the emissions that we control directly, but secondly, our absolute commitment to continuing to play our part and that we're taking real actions with real impact in terms of reducing greenhouse gas emissions.

Most recently, you will have seen the actions that we have taken in Chile to get ourselves onto the path to using 100% renewable energy in Escondida and Spence. We announced some similar actions in the Queensland Coal assets only in the last week or so that get us on the path with more renewables there. Then, finally, we announced a fairly significant innovative deal in shipping last week, which will see us with the world's first LNG fuelled bulk carriers.

Finally, I hope that you take away the essential nature of the commodities that BHP produces to the world on the path to decarbonisation. We will also have the opportunity to talk through how we think about capital allocation in our portfolio and you will see the portfolio's value upside in a decarbonising world. We look forward to working with shareholders, communities, customers and business partners to deliver the high growth, low carbon world to which we all aspire. With that, I will open it up to questions.

Questions and answers

DUNCAN SIMMONDS (WAVESTONE, ANALYST)

Good morning, Mike and team and thanks very much for the presentation and the work that has gone into the sustainability report. I guess if I could flip to slide 7 on the presentation, it's a pretty optimistic growth path, as you say, for much of your portfolio and you've spent a lot of time on future facing commodities.

But I wanted to discuss iron ore because if I look at, say, the data that you have there the market growth implies a materially better view than what you've talked about before and demand for that commodity and I wondered, given the resourcing endowment that you have there, are you likely to reorientate your investment profile to cater for this demand and seek further volume than you've talked about before? Thanks.

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

Thanks, Duncan. I will ask Huw to comment on this but I just want to provide a couple of comments on this. I just want to make it clear that the numbers that you see on slide 7 are the cumulative demand over the next 30 years relative to the past 30 years. Whereas I think the comments that you may be referring to, Duncan, talks about demand increases from today where, compared to some other commodities, we don't see that being quite as strong.

But we do see there being a lot more iron ore needed in aggregate terms over the next 30 years and given where we sit on the cost curve and our proximity to the key markets we're going to have a very attractive business in that period of time and I think in a decarbonising world there will continue to be strong demand for high quality iron ore, and you know the actions that we're taking to further improve the quality of our portfolio with more lump and higher Fe content. But, Huw, you might just want to expand on this a bit?

HUW MCKAY (VICE PRESIDENT MARKET ANALYSIS ECONOMICS, BHP)

Yes. Thanks very much, Mike. Thanks, Duncan. One of the fascinating things about the 1.5° pathway is that steel actually does a little bit better than you might think it would. It actually benefits from additional demand from the infrastructure of decarbonisation.

There I'm talking about spectacular growth in wind farms and turbines being very steel intensive and also the carbon capture and storage infrastructure, in particular the pipelines that actually move the captured carbon to storage facilities is a very steel intensive operation.

I would probably also draw you to the differential between iron ore at 1.8x and met coal at 1.5x. Met coal is also resilient under this scenario but iron ore just does a touch better and that's because we do see some penetration of DRI in the highest ambition decarbonisation regions and, of course, that does benefit iron ore, particularly those higher grades.

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

So, Duncan, on the final part of your question around how we then think about investment into the iron ore business, no change from current plans, which are to focus primarily on bringing costs down, improving quality, producing reliably. Now, we do have the optionality within the business, or we're getting in place the optionality, to pursue more growth if market conditions warrant it.

But at this point in time we think the best strategy is for us to focus on really running the business well, maximising returns out of the capital that we already have invested in the business and focusing our growth efforts into future facing commodities, like nickel, copper and possibly potash.

DUNCAN SIMMONDS (WAVESTONE, ANALYST)

Mike, can I just push you just a little on that, if I could? I agree with you the market in terms of growth rate isn't likely to be as strong as the other future facing commodities. But in terms of aggregate tonne it will be. So if I could just push you on that a little bit, because I'm curious on why you will avoid given that, as you say, where you are on the cost curve, where you are compared to the market and then lastly your resource endowment?

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

So, Duncan, the other thing to note is the one slide that you see here is a scenario. It's the 1.5° scenario and it builds upon the scenarios that we've provided previously. So we aren't sitting here so making a call that this will eventuate.

What we're saying is that we think it's important that the world pursue this path, if the world gets on track. It's not currently on track to achieve this but if it were to get on track to achieve this, this is what we would see in terms of growth rates. That's why I referred to the point around optionality earlier in that if things change and the iron ore rates of growth escalate relative to the path that the world is currently on, then we do have the ability to pivot and grow further.

But for the time being, as we think through the different scenarios that are in front of us and we think of the relative risk and return of the opportunities that we have to invest, we're electing to prioritise other commodities and instead to run, as I said, iron ore very well and increase returns coming out of that business for the capital that we have invested.

But this is one of the great things about the BHP portfolio. Because of the big resources that we have we preserve optionality in the business. As we continue to assess how the world is unfolding we can make changes and we can take different actions. But for the time being focusing on maintaining the current iron ore business and really just driving harder on productivity.

DUNCAN SIMMONDS (WAVESTONE, ANALYST)

Thanks very much, Mike and, Huw, thanks very much as well. Appreciate it.

PAUL YOUNG (GOLDMAN SACHS, ANALYST)

Morning, Mike, Johan, Fiona and Huw again. Mike, can I continue the discussion on the Scope 1 & 2 strategy and specific actions that you're taking. I've got a few detailed questions digging into some of the specifics. First of all, just on renewables. You've announced that you're going with third party renewable providers at Escondida and Met Coal. Will you consider building renewables facilities, whether they be solar or wind, yourself?

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

So if you think about where we get our electricity from, Paul, it's a combination of off grid and then internal power generation, like in the Pilbara. At this point in time the focus is predominantly on securing renewables from others off the grid. I don't want to say that we wouldn't consider opportunities to build renewables on our own but it's certainly not an area of core business focus.

The reason I say that I wouldn't exclude it is because whilst the initial focus is on addressing power that we're buying off the grid, at some point we also have to think about what do we do with the power that is being generated in-house that is currently generated through gas? But there's also other discreet opportunities.

One of the things that we're looking at now that we've got a submission in on is a combined solar and hydrogen, green hydrogen facility in Nickel West. So there may be discreet areas where in order to meet power needs or to generate hydrogen to fuel other processes in our options we might consider it. But we're certainly not at this point looking at making it a business in its own right. Fiona, I don't know if there's anything, or Johan, anything else you wanted to add to this? No, all good.

PAUL YOUNG (GOLDMAN SACHS, ANALYST)

Okay, thanks Mike. Interesting on Nickel West there. That was actually one of my questions down the list. A second question Mike is actually on the back of the trolley assist question which I asked on the previous conference call and you're just looking at probably Escondida being the logical choice being a deeper pit and you're already switching to renewables. I've got a question maybe just on the economics around trolley assist as you see it and the technology as it goes forward. Is there anything you can share with us as far as, you know, for this technology to be NPV positive, what sort of carbon price and/or oil price combination do you need to make that technology viable.

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

Well so we're hoping to make it viable without needing to rely upon those things but that requires the ongoing work with the OEMs to improve the base technology. So ideally we will get there without needing to rely upon regulation or some high price on carbon, but it's not something that we need to make the decision on in the next few years so we see it as being something that will be, to the extent we deploy trolley assist, towards the back half of the decade rather than the front of the decade. The OEMs have, well certainly some of them, have specific plans in place around technology development and we're also working the ICMM.

GLYN LAWCOCK (UBS, ANALYST)

Good morning Mike. I just wanted to see if you could elaborate a little bit on your plans for oil and gas emissions. Are you thinking carbon sequestration or offsets through plantations and what is BHP's position on that, because I mean obviously one completely captures and annihilates it and the other one still means we emit CO2? So just wondering what the Company's stance is there. Then the second question is just also the Company's position on your suppliers and customers. Will you take a position or a stance if they don't adapt or adopt emission reduction strategies? Would you go as far as to actually use that as a vetting process for both suppliers and customers? Thanks.

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

Sure, okay. Look, let me answer the second one first Glyn and then I'll come back to the first one where I'll say a few comments and then I'll pass to Fiona. On suppliers and customers, we're not in a position or we don't feel that we can tell our customers what to do and the same with suppliers. However, I think there's a reasonable degree of overlap between the way a company thinks about ESG, including climate change and the overall risk profile that we would see with them. We constantly assess both on the supply side and the sell side, the customer side, the customer profile and how we think about them in terms of attractiveness as a customer.

One of the things that of course we would be aware of and would build into our overall thinking around the attractiveness of the customer or supplier would be their approach on ESG more broadly. So not just specific to climate change, but climate change would be one parameter on that. I wouldn't want to say though that it will be as black and white as to say if a customer doesn't have a specific strategy in place that we would not sell to them, but I also don't want to give the impression that we're blind to this, because we're not. It's just it's part of a holistic assessment.

On oil and gas emissions, a couple of things to say here. One, we do have a strong focus on CCUS. You'll see a lot of the work that we have underway with the universities, with knowledge centres and with the Otway Basin project focused on CCUS. It's an area where we believe we have got particular technical expertise to bring to bear on it and of course it's something that's already a feature of the oil and gas industry.

Fiona, there might be a few things you want to say to build on that.

FIONA WILD (VP SUSTAINABILITY & CLIMATE CHANGE, BHP)

Yes, sure. Thanks very much Glyn. Just on the suppliers and customers point that Mike mentioned, I totally agree. I think with suppliers we can outline our expectations around how suppliers may be managing climate related risk and the sorts of actions and disclosures they're making. With customers I think about it more around aligning strategic intent, particularly when it comes to the development of partnerships. What we're looking for is customers who have the same strategic intent around their scope one and two emissions reductions as we do around our scope one and two and scope three, because that's where we find that rich fertile ground for partnerships to work together to decarbonise across the value chain.

On oil and gas emissions themselves, so in terms of the operational emissions from oil and gas inside BHP, they're actually a relatively small part of our portfolio. As the speech and also the slides have outlined, the vast majority of our scope one and two emissions come from electricity and diesel and oil and gas make up a very, very small component of that. Where we largely see the emissions from oil and gas is around process heat and things like gas in the use of turbines. So, we are looking at opportunities to reduce it and looking at opportunities particularly around hydrogen in that area on scope one and two.

In terms of what you've mentioned about natural carbon solutions and CCS. The natural carbon solutions area is, or natural climate solutions, is an area we've been thinking about for a while now, since about 2015. Understanding how we can potentially stimulate the market more broadly for these natural climate solutions and also now particularly the role they may play in generating offsets that we could utilise to offset our scope one and two. CCUS is slightly different. I see our focus on CCUS not in terms of offsetting or reducing our operational footprint, but the role that CCUS can play in reducing those scope three emissions.

The beauty of CCUS is that it can be applied across multiple sectors, particularly around natural gas processing where you do tend to see the majority of CCUS project already in place, but also importantly in steel. As Mike mentioned, the focus for us around CCUS is around capitalising the development of our technology and economic cost so it can be deployed more quickly, because to be honest, you don't get to two degrees without CCUS, let alone to 1.5.

DUNCAN SIMMONS (WAVESTONE, ANALYST)

Just thinking about the portfolio again Mike and just the future facing commodities, copper and nickel. If we think about the portfolio and options at the moment that you have there and particularly in copper, how should we envisage your, I guess, strategy going forward to take advantage of that strong growth that we're talking about? I guess and how important are partnerships in that in terms of developing resources?

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

Yes, so great question Duncan. So we want more copper or more copper options I should say because one of the elements of our strategy in both copper and nickel frankly will be to see if we can innovate our way through to creating more options and recovering more copper out of the resources that we already have, because technically BHP is not short copper. It's short options to develop more of that copper economically. So, there will be a strong focus on innovation, but of course we're not solely reliant upon that.

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We also have a strong focus on exploration. You have seen the recent success that we have had on that front with Oak Dam, but we'll be looking to do more on the exploration front as well. We have also had a focus on partnerships, so that's a good callout, and that is in what we have termed early stage entry. That can be exploration farm-ins, it can be taking early positions with companies that have good prospects and so it's really going to be this multifaceted or multipronged approach to how we go about creating more options within what we already have or securing more options.

Now, notwithstanding the fact that we want more, of course we are already going to see more coming out of the Spence Hypergene project, which will see first production this year. We have the potential opportunity with Resolution, the joint venture with Rio in the US, and potentially we continue to look at other options to expand at Olympic Dam and then Oak Dam beyond that. So, we do have some options within the current portfolio, but we'd like to create and secure more.

DUNCAN SIMMONS (WAVESTONE, ANALYST)

Just a follow up on Oak Dam Mike. Are you close to giving us some more information about that region and how that's evolving?

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

We will come out with further information later in the year Duncan on the latest drilling results. Yes, and I don't know, Tristan, have we given a specific timing on that? Okay, so later this year some time, but having just recently completed the third round of drilling.

GLYN LAWCOCK (UBS, ANALYST)

Good day Mike, thanks again. Can't let you get off too easily. Hey Mike, all over the press this morning is comments that this spend on climate change and emissions and everything will be at the expense of dividends to shareholders. Could you just clarify maybe a little bit - yesterday you said the spend over the next decade could be in the order of \$2 billion to \$4 billion. How much of that do you think would go through as OpEx versus CapEx, because clearly, you know, I'm just trying to understand.

Your policy is very clear when it comes to dividends, minimum of 50% of underlying earnings, so depending on how you treat the spend is where it would impact the dividends. Or are you thinking more holistically that the way the press interpreted is that dividends could take a back seat to emission spend? I just wanted to make sure I understand how we should think about all the spend that's going to happen and has to happen to achieve the targets you put out there. Thanks.

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

Sure. Glyn, so I'm going to pass to Johan but I just want to make a headline comment. That is that the spend that we are investing in climate change is going to create value for shareholders. I mean and I think we've tried to make that case very strongly here, that this path is one that creates more value for the portfolio and for shareholders, but I might just ask Johan to talk more specifically about the capital allocation framework and that specific point that you raise.

JOHAN VAN JAARVELD (CHIEF DEVELOPMENT OFFICER, BHP)

Yes, thanks Mike and morning Glyn. I have a few additional comments to make on this. We said it's \$100 million to \$200 million over the next five years per year. It's also part of the \$2 billion to \$4 billion over the decade, so that's not in addition to the \$2 billion to \$4 billion. I mean the way we said we'll approach the emissions reduction spend here that we have committed to is to prioritise it at the same level as we would say asset integrity and maintenance capital spend. That is just an indication of how seriously we take this.

However, as Mike said, to characterise this just as spend, money out the door just to achieve some target, is not really the correct way of thinking about it. I mean we're thinking about this as investing. Many of these projects as they mature, even on the current wide range of outcomes because the technology is still immature for some of them, we can see positive NPVs.

The last point on this is that some of this investment is also timed to coincide with the natural cadence of fleet replacements that we have to do. As the technologies mature and some of these technologies get incorporated on say the next truck fleet as the truck fleet gets replaced, that is by and large an investment that we would have had to make anyway.

I think the characterisation that this is going to directly compete with dividends is not entirely correct, and since a lot of this is investments that will actually generate a positive return for shareholders and at the same time reduce OpEx at some assets, I think that is a good story for dividends in the long run.

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

Glyn, I understand why some of the press have written it in that way, and it's because of the point we make that this gets treated the same as maintenance capital or ranks at the same level in the capital allocation framework as maintenance capital. In a single period, so let's say over the course of one year, because we're investing and that we see the returns over ensuing years, could somebody make the argument that somehow, it's been prioritised over dividends? Yes, but in terms of overall dividends over a period of time, we expect that this spend, as I said earlier, creates value for shareholders.

GLYN LAWCOCK (UBS, ANALYST)

So, I guess, Mike, it's very simple, if you look at the way the accounting works, yes, it will be capitalised in the early years so it won't impact the dividend because that's predicated on the long earnings but eventually you have to amortise that spend back, which will impact dividends, but as you say, it's a positive-returning investment from your point of view.

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

Yes, exactly.

PAUL YOUNG (GOLDMAN SACHS, ANALYST)

Hi again, Mike. I have a question about Johan's comments just then about truck replacement program and trying to dovetail that with the next fleet replacement program with the new technology coming through. Am I thinking about this in the right way about that effectively your objective is to fit this new technology or the spend within the medium-term or long-term sustaining CapEx guidance for these businesses? If iron ore is \$4 a tonne through the cycle, if met coal is US\$8 a tonne and Escondida you don't guide to but let's call it \$500 million a year of sustaining capital, thereabouts, that we shouldn't actually be incorporating this \$100 million, \$200 million of spend over and above that within the medium-term sustaining capital guidance for these businesses?

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

Johan, do you want to have that one then I'll provide comment.

JOHAN VAN JAARVELD (CHIEF DEVELOPMENT OFFICER, BHP)

I think, Paul, good to make a distinction between the \$100 million to \$200 million, which is for the next couple of years, the next five years or so, and at the backend of the decade where we see - as the diesel abatement projects, which is really what you will be referring to now, as they mature those are the ones that we're saying will dovetail with fleet replacement because that's the smart thing to do. There's obviously a risk here that you could destroy value if you run too fast before the technology is properly matured. I don't know if that answers your question.

PAUL YOUNG (GOLDMAN SACHS, ANALYST)

It probably doesn't. I know you don't guide out beyond the medium term, but I don't know Mike, have you got any further comments?

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

Yes. Paul, what I was just going to say is that - obviously, we'll be replacing fleet on an ongoing basis but there will be a fairly big period of fleet replacement, starting, from memory, around FY27. What we're trying to work towards, together with the OEMs, is something that says okay, when it comes time to make the decision around replacing that fleet in FY27, we want the choice - coming back to your point around well, is it sustaining CapEx or is it new CapEx, we want to be able to view it as sustaining CapEx.

So, rather than spend \$500 million on replacing with current technology, we would spend that instead on replacing it with trolley-assist trucks or within pit crushing and conveying. Where we are right now is we're still in the study phase and the development phase. We're developing the technology, we're studying the options, looking at how we can go about optimising the optics of both, but that's the position that we would like to be in when it comes time to make those decisions around how we replace fleet in that FY27 period.

Now, Johan made the point that if we try to accelerate this stuff too quickly, we can destroy value. That's because if we went to try to convert existing fleet or retire existing fleet even though it has remaining life on it, in favour of something else, then obviously that's suboptimal from a capital perspective, and it may be suboptimal from a technology perspective because we would be going with the beta version rather than something that is a little bit more proved up.

PAUL YOUNG (GOLDMAN SACHS, ANALYST)

No, that really helps, Mike and Johann. That's useful. Second question, Mike, I had is on green hydrogen. I know you mentioned this before about Nickel West potentially looking at a combined solar/green hydrogen option. I'm curious - is that something you're looking at also at Olympic Dam over the long run?

Also, just on how much work you've done on green hydrogen economics. CapEx at the moment is, if you look at I guess other plants that are being thrown around on economics, early days of \$1000 per kilowatt equivalent and green OpEx of about \$6 per kilo for hydrogen, but clearly the capital intensity and OpEx has to come down quite significantly to make these investments NPV positive. Have you done any work on what sort of CapEx and OpEx combination on green hydrogen we need to see before this technology is actually viable?

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

We have done a tonne of work on it, a lot. We've got people who are really all over this. Now, broadly, if we talk about OpEx, we think that it's realistic to expect that we'll see cost come down to \$1 to \$2 per kilogram within the next decade or maybe 10 to 15 years. We do think that the opportunity to bring cost down is quite significant, but for it to make substantial inroads into some of our key processes, or end use processes for our commodities, it is going to require some support through carbon pricing as well.

Now, there are opportunities to use green hydrogen in our industrial processes. Fiona, I don't know if there's anything that you want to say on this, but you mentioned some of the things that we're looking at earlier.

FIONA WILD (VP SUSTAINABILITY & CLIMATE CHANGE, BHP)

Yes. Just to add to what Mike said, we have launched a consortium, the green hydrogen consortium with FMG, Anglo and Hatch earlier this year which is looking at the opportunities for green hydrogen technologies to be deployed in mining and resource operations more broadly. As Mike said, we're really focusing on Nickel West at the moment, but I think one of the great benefits of this focus that we have across the organisation is we can learn from what we can see at Nickel West and then potentially look to apply it more broadly.

I would also say that the focus of much of our work in the steelmaking sector when we look at our scope 3 goals will also look at the opportunities to improve the efficiency of the blast furnace route through things like oxygen blast furnace and also partial injection of hydrogen. There is an opportunity for us to look at hydrogen both in terms of our operational emissions footprint but also the potential for hydrogen to reduce the emissions in the blast furnace route too.

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

The one that's most advanced at this point, Paul, is the one at Nickel West, but we will be looking at options to do something similar at some of our copper opportunities but we don't have anything specific to say on that at this point.

PAUL YOUNG (GOLDMAN SACHS, ANALYST)

Okay. Thanks, Mike. Two last ones from me, and they're quite specific. First of all, just on the draglines in the Bowen Basin. Can you actually run the draglines on renewable energy? The second one is on the trains in the Pilbara. Is that also wrapped up in the I guess switch away from diesel engines and are you potentially looking at as technology develops running those on hydrogen fuel cells and/or LNG?

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

Look - Fiona - my recollection is that with draglines, because of the particular nature of their power demand, it's a little bit harder to run them off - certainly off of batteries but we'll continue to look at whether there's an opportunity there for us to progress them as well. In the case of trains, we have looked at hydrogen previously and the economics for the hydrogen-based locomotives did not look attractive. Fiona, I don't know if you have anything on the latest on that. It will be part of what we're looking at, Paul. I just don't have the specifics on the exact technology that's looking most promising at this point. Fiona, anything to add?

FIONA WILD (VP SUSTAINABILITY & CLIMATE CHANGE, BHP)

No, I don't have a huge amount extra to add, suffice to say that the announcement we made about the eastern Australian coal assets, earlier this week I think it was, is looking to reduce the emissions there by 50%. I'm not entirely sure of the role of the draglines in that but certainly we could always come back with some more information there if necessary.

PAUL YOUNG (GOLDMAN SACHS, ANALYST)

Okay. That's really helpful. Thank you.

DEREK IP (BMO GLOBAL ASSET MANAGEMENT, ANALYST)

Hi, Mike. Hi, Fiona. Hi, Johann. One quick comment and one question from me. In the past year, we had the great opportunity to work with you guys on this strategy through the climate action 100+. I always have to say that it is really a positive experience so far and we're really happy for you guys to see the [unclear] of this.

I guess my question is on the assumptions that you have built in on CCUS and afforestation. We all know that this is unnecessary, on a 1.5 degree especially. My question is around the optionality you have built in for your portfolio and we want to [unclear] that price fatigue doesn't happen as projected in the future. What do you have to do to reach 1.5 from a BHP perspective and in what kind of timeframe do you have to make such a decision? Thank you.

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

Derek, I apologise. I found it a little bit hard to hear what you were saying, so if I can just paraphrase. I think you were asking that for our assumptions on what's required to achieve 1.5 degrees, the role that afforestation and CCUS play in that, and if those weren't to occur then what we need to do. Is that correct?

DEREK IP (BMO GLOBAL ASSET MANAGEMENT, ANALYST)

Yes, correct, and also timeframe for you to make decision for the options.

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

I see, okay. So, Huw, maybe if you can just talk about some of our assumptions in the 1.5 degree world around CCUS and afforestation and then either Huw or Fiona, if you can speak to if those don't happen then what are the implications for us and when would we - what would be the decisions that we need to take.

HUW MCKAY (VICE PRESIDENT MARKET ANALYSIS ECONOMICS)

Okay. Thanks very much, Mike and thank you for the question. You're right that there are many different pathways that can get you to 1.5 degrees. Why we have selected this one is it gives us the best combination of concrete action and plausibility with respect to both land-use systems, which is the afforestation question; technological readiness; and policy frameworks. We feel it's the most likely combination of all of those things.

If you want to overturn one of those very large assumptions, such as the CCUS assumption, you will need to replace that with another technology, which is just as effective, in providing the economic development that the world requires that feeds the global population and continues to provide the right amount of energy services. That's a very high threshold to meet.

So, if you do not afforest, you will take away bioenergy CCS from the system, which is really a pillar of every one-and-a-half-degree pathway that I see, which is plausible. We also buttress our efforts with the technique of expert elicitation. Expert elicitation means we take every assumption which is critical, we send it to an independent panel of experts and we ask them to come back with their probabilities of each individual assumption and the rolled-up outcome.

I would be very, very unhappy if we had to abandon one of those big assumptions, because the challenges of an alternative would actually be quite bleak. So, I'll leave it on that note and pass to Fiona.

FIONA WILD (VP SUSTAINABILITY & CLIMATE CHANGE, BHP)

Sure. Thanks very much, Huw. Thanks, Derek, for the question and also for your feedback on the report. It's been very, very helpful.

I guess on CCS and reforestation or afforestation, if we don't see what we would need to see to get onto a 1.5-degree pathway. There is, obviously, a role for BHP in advocacy and demonstration in both of those areas. So, particularly around CCS. I think there is a really important role for us to play in building the case for CCS and why it is such a pivotal technology. Not just in terms of natural processing where you tend to see most of the CCS application currently, but it really importantly, in the steel sector and other industrial sectors where there are very, very few alternatives to significantly reduce emissions at scale in the near to medium term.

So, CSS is a technology that can reduce emissions today, but it does face some hurdles. Predominantly, I would say around acceptance of the technology as a viable climate mitigation tool. So, there's a really important role for us to play there in terms of advocacy.

The second thing around CCS, is the role that we can play in demonstrating that it can be done. Getting projects on the ground. That's certainly an area of focus for us in our Scope 3 goal. So, we are looking for opportunities to work with partners in our value chain to demonstrate that CCS can be applied, particularly in the steel sector. You will have seen a number of things that we've done, leading up to this point, for example, our relationship with Peking University to understand the role that CCS can play to reduce emissions in the steel sector in China.

The third area around CCS, I'd say, is around regulation. So, there are some very supportive regulatory regimes for CCS around the world, but we could see some more support there particularly in terms of how the long-term storage of CO² is managed. So, there's the opportunity, I think, for us around CCS to really catalyse the deployment and the uptake of CCS to the scale that we would need to get on track to that 1.5 outcome.

On reforestation and afforestation, it's a similar story. So, it's around that policy advocacy. So, being very heavily involved in how people understand, for example, the REDD+ mechanisms and what the new version of REDD+ might look like under the Paris Agreement. It's about directly investing in projects that can demonstrate the voracity of these mechanisms, in terms of the offsets that can be generated. But, really importantly, those co-benefits that these projects can deliver. So, for example, in the Alto-Mayo project that we developed in Peru, where you do see offsets being generated and benefits delivered to the local communities.

More broadly, I think there is a role for BHP to play in terms of market stimulation and encouraging more investment in these types of finance-related mechanisms, related to natural climate solutions. So, for example, back in 2016 we worked with the IFC to launch the world's first forest bond and now we're pioneering work on novel financial mechanisms to finance forest initiatives.

So, I think, there is a really important catalytic role that BHP can play in both CCS and in reforestation and afforestation to ensure strong regulation, strong advocacy and also demonstrate that these projects can work on the ground.

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

So, Derek, I'll just close off by saying, going to the final point you raised, which is by when do we need to make decisions. Unfortunately, I can't really give you a specific time, other than to say that the scenario - the deeper scenario analysis that we do is constantly revisited. Then we regular go back and say, okay, how are we seeing the world evolving relative to those scenarios. Are there any implications for us in terms of the portfolio? So, it's an ongoing process.

You've seen some of the results of that ongoing process in our recent results presentation where we're continuing to tend to the portfolio both in terms of where we want to grow, but also where we see opportunities to reshape specific parts of the portfolio like we've elected to do with some of the coal assets.

TRISTAN LOVEGROVE (INVESTOR RELATIONS OFFICER, BHP)

We've just reached the end of time. So, Mike will probably say just a couple of words. But thank you everyone for taking the time to dial in and ask the questions and those else who are on the line. Feel free to send any questions, if you have any, to the IR team if we haven't been able to answer your questions.

With that, Mike, any other words?

MIKE HENRY (CHIEF EXECUTIVE OFFICER, BHP)

Thanks everyone for joining. Very happy to have been able to share the detail that we've shared with you this week. Please keep the questions coming. We look forward to continuing discussions on this very important topic. I would really encourage everybody who may not have yet had an opportunity to do it to look at the presentation because you'll see in there some, what I think, are some pretty significant stats. Including the current emissions intensity footprint of BHP, which is not something that's arisen by chance. It's the result of many years of effort now, but on Scope 1, 2, the emissions that we control, we are positioned very well.

Yes, we're saying we're going to carry that further on the path to get to net-zero by 2050. We will - we're committing to a further 30% reduction between now and 2030. We're backing that up with some tangible actions, some of which have already been announced.

Then, in the case of Scope 3, we understand the role that we have to play and we think that we have specific capability, know how, expertise to bring to bear on that. If we can combine that with the leverage that we have in specific industries and in specific points in the value chain, we want to be able to amplify our impact through the way that we engage with others. The two areas we've called out specifically are steel and maritime. But it doesn't end there. We also have other efforts under way through investments in new technologies and through the work that we do on the advocacy front that Fiona was just speaking about and our collaboration with universities on technologies that can be applied more broadly.

So, lots of proof points in the past. Further strong actions being committed to now and this is something that we'll be measuring ourselves against year in year out. I'm confident that we're going to have impact. This is, ultimately, going to be a good thing for BHP from a value perspective. Because as our scenarios have outlined, the greener the world becomes, the better it is for BHP. Well, you've heard us speak about future facing commodities and what we want to do to grow our exposure to the transit de-carbonisation and electrification.

So, thanks everybody for joining. We look forward to further discussions on this in future.

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