

**Confronting Complexity:  
Evolving our approach to climate change  
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23 July 2019**

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**Embargoed until 9:30am UK time**

### **Introduction**

Good morning ladies and gentleman. I would like to acknowledge Members of the House of Lords, Ambassadors, High Commissioners and Agents General. It is a pleasure to be here today to talk about BHP's response to global warming.

It is somewhat symbolic to be in the UK, the birthplace of the industrial revolution that set the world on a new development path that created unparalleled commercial opportunity driven primarily by coal.

In the 1700s Britain produced two million tonnes of coal per year. As its application expanded, in line with economic progress, this number grew. And it was not just resources in the ground that led to success it was also the ingenuity of people like Abraham Darby, the first person to produce marketable iron from a coke-fired furnace. And like James Watt a Scotsman whose steam engine laid the foundations for far more powerful devices such as the internal combustion engine.

Fossil fuels drove the industrialisation of countries and economies and formed the foundations of the world we know today.

None of us - not companies, governments nor NGOs should ever forget that at the heart of resource utilisation lies the aspiration of people to improve their lives.

We don't burn coal or gas simply to use energy. We don't make steel to have stockpiles.

We do these things because we want the benefits that flow from their use: heat, light, mobility, materials and trade.

In all debates we must keep in our minds those who rely on the energy and materials which we produce. We must respect their aspirations for a better quality of life. But we must also face the challenges that come with these benefits. Because the world's dependence on fossil fuels carries risks with it that could be existential.

### **The challenge of using carbon**

Society's combustion of fossil fuels and industrial processes like steelmaking and agriculture have released greenhouse gases at rates much faster than at any other time in the geological past.

Previous events when CO<sub>2</sub> was added to the atmosphere more slowly and sometimes in similar amounts show us what may happen if we do not act.

These events coincided with mass extinctions and major rises in sea level. And they also suggest that future heating will more likely be towards the upper end of forecasts.

The evidence is abundant: global warming is indisputable.

The planet will survive. Many species may not.

This is a confronting conclusion but as a veteran geologist once said: “*you can’t argue with a rock.*”

As we have seen from activism and debates from schools to parliaments all around the world, we see this period as an escalation towards a crisis.

However the global response does not yet match the severity of the threat. In part because of the outright complexity of the problem. So we must tailor our response to address this complexity and start with an acknowledgement that solutions will take on a range of forms.

And that there is no one simple ‘silver bullet’.

Renewables, nuclear, hydrogen, long-term storage of electricity, coal and gas with carbon capture and storage (CCS), negative emissions technologies like re-forestation and biomass with CCS, and other approaches will all contribute to lower carbon outcomes.

Yet often to provide simple and sometimes self-serving answers, the contributions of any one solution can be exaggerated. Worse still, important trade-offs and unacceptable consequences, ignored.

Electric vehicles for example, are considered to be lower carbon than internal combustion engines. But if the power is generated from fossil fuels the emissions are just moved up the chain. Electrification alone does not deliver the changes necessary to reduce emissions from transport. That requires decarbonisation of the electricity supply.

There are similar trade-offs associated with renewables. While renewables are powerful levers for decarbonisation they compete for land which could be used for agriculture and urbanisation, or for conservation and leisure.

They produce more waste relative to some other sources of energy, and can cause local destruction of wildlife.

Renewables, like batteries, also require more mined resources, which is good for us, but perhaps not for others.

Similarly with reforestation. We can all agree it’s a proven means of carbon capture, but mass tree plantation may not always be welcomed by local and Indigenous communities and it too can lead to the destruction of wildlife.

There are also likely trade-offs associated with the replacement of single-use plastics with more carbon and water-intensive packaging, and of diesel cars to improve urban air quality.

There is an opportunity cost for any decision we make.

We must change the current storylines about how to address global warming.

We require an ‘*all of the above*’ approach.

### **The scientific perspective**

BHP has acted on global warming for over two decades. This is the right thing to do. It is also a strategic imperative for us to deliver long-term shareholder value.

Let me now outline how our response has evolved and describe a number of new measures. Measures grounded in science, commerce and policy.

In October last year the International Panel on Climate Change (IPCC) released a Special Report on Global Warming of 1.5 Degrees. Its key message was that the projected physical impacts and risks of global warming are much worse at 2 degrees than 1.5.

At higher levels of heating hot extremes, heavy precipitation and drought become more prevalent. The risks to wildlife - to whole species - increases.

The impacts are expected to be uneven across the planet. And to disproportionately affect lower income regions and populations who have contributed least to global warming.

To protect these people and reduce the risks of social discord and geopolitical disharmony. Any transition to a lower carbon world should look to avoid major increases in the price and unreliability of energy and materials. And for any Green New Deal to be fair it should aim to improve the lives of the poorest and of those who have benefitted least from globalisation.

Use of emissions-intensive products from the resources industry have contributed significantly to global warming. Those emissions related to BHP's business come from three sources. Scope 1 and 2 emissions from electricity consumption and diesel use at our operations, and scope 3 emissions from our value chain.

We have been setting targets since the 1990s to reduce greenhouse gases from our operations. 2017's emissions were below those in 2006 and we have set a new target to cap 2022 at 2017 levels.

Our long term goal is to achieve net zero emissions from our own operations.

Next year we will set a medium-term, science-based target for the decarbonisation of BHP operations, which will reflect the goals of the Paris Agreement.

And we won't stop at the mine gate we will also increase our focus on scope 3 emissions. These emissions are generated as customers transport, transform and use our products to serve the needs of billions of people and they are almost forty times higher than the emissions from our own operations.

Although the majority of scope 3 emissions related to our products come from the production of recyclable goods. For example, the steel in a car body can be re-used multiple times, while the petrol burned in its engine is 'single-use' only.

We will still push for efficient use of all our products as part of our overall decarbonisation strategy and plans. For that we must take a product stewardship role for all emissions across our value chain.

And commit to work with the shippers, processors and users of our products to reduce scope 3 emissions. Those who enjoy the benefits of our products should be able to do so with less and less impact.

To measure our stewardship of BHP's products in 2020 we will also set public goals to address scope 3 emissions.

It is clear from the IPCC's 1.5 degree report that we all must work to prevent more greenhouse gases from entering the atmosphere and to remove some CO<sub>2</sub> that is already there.

Nature-based solutions are one way that avoid carbon being released by de-forestation. And we have invested in multiple projects to target this. We developed the world's first Forest Bond with the International Finance Corporation and launched it here in London in 2017.

Compared with those from power generation and transport the considerable emissions of greenhouse gases from agriculture and industrial processes have been somewhat under-examined and targeted.

To drive action on the capture of carbon from industrial processes we have initiated a number of partnerships. Over the past three years we have worked with Peking University to identify policy, technical and economic barriers to CCS deployment for the steel sector. Since CCS is the only short to medium-term solution that can materially reduce these emissions.

We also invest in direct air capture. We recently made a US\$6 million equity investment in Carbon Engineering Limited. Their innovative technology has the potential to deliver large-scale negative emissions by removing CO<sub>2</sub> from the atmosphere.

We are also joining Responsible Steel, a group of steelmakers, customers and civil society representatives which aims to reduce emissions from the sourcing and production of this vital material.

These partnerships are not optional they are essential and more are required. Participants across our entire value chain must come together.

### **The commercial perspective**

Global warming is a problem grounded in science, and there must also be a commercial element in our response.

Earlier I said I believe - like most scientists - that global warming will tend towards the upper end of forecasts. I also concede there is a case that it may not and that the impacts may be less severe.

But it is still prudent risk management to protect against the downside.

At BHP, our scenario planning and risk management help to reduce uncertainty and maximise returns. The challenge is to develop a strategy that works across a range of plausible, yet divergent, scenarios.

Our climate portfolio analysis was released in 2015. And set a new standard within the resources sector. It outlined how we use scenarios to evaluate the potential impacts on our portfolio of a 2 degree world.

It also demonstrated the resilience of our portfolio as we continue to shape it for electrification, decarbonisation and reforestation.

Our iron ore, metallurgical coal, copper and nickel provide the building blocks for electric vehicles and renewables. Our potash fertiliser options could promote more efficient and more profitable agriculture and alleviate the increased competition for arable land from re-forestation and negative emissions technologies.

In line with the goals of the Paris Agreement and the recent work of the IPCC, we will update our climate portfolio analysis in 2020. We will evaluate the potential impacts of a broader range of scenarios and a transition to 'well below' 2 degrees.

Transparency is essential to inspire others' confidence in our progress with decarbonisation and to create awareness of all the trade-offs. BHP was a founding member of the Task Force on Climate-related Financial Disclosures. And one of the first companies to align reporting with all of the Taskforce's recommendations. In January of this year we were recognised as a leader in climate disclosure and the only resources company to achieve an 'A' rating from CDP.

We also align executive remuneration to emissions performance. For many years performance against emissions targets has been considered in BHP's executive remuneration plans. From next financial year we will clarify and strengthen this link and further reinforce the strategic importance of action to reduce emissions.

There is great potential for technology to reduce the risks of global warming provided we invest ahead of time so we're ready.

BHP invests in CO<sub>2</sub> removal measures like CCS, direct air capture and forestation. We also reduce CO<sub>2</sub> emissions from our own operations through the use of renewables and electrification.

We must, and will, do more.

That is why I am pleased to announce today BHP's Climate Investment Program a US\$400 million commitment to reduce Scope 1, 2 and 3 emissions.

Over the next five years this program will scale-up low emissions technologies that decarbonise our operations. It will drive investment in nature-based solutions and encourage further collective action on scope 3 emissions.

We hope that greater commercial success of these investments will breed even greater ambition and create even more partnerships to respond effectively to the climate challenge.

### **The policy perspective**

While science and market forces are key policy too has a critical role to play.

Throughout my career have witnessed the benefits of liberalisation. It spurs trade, economic growth and exchange of ideas across nations. Now more than ever we require policy direction to guide a response to global warming.

This spirit has been evident here in the UK. It was one of the first countries in the early 2000's to develop a nationwide emissions-trading scheme that laid the foundations for others to adopt carbon pricing.

I welcome the recent bipartisan response to the Committee on Climate Change which demonstrates a unity of purpose and is a catalyst for a longer-term development of policy.

I also applaud the European Commission's recent proposal to achieve net zero emissions by 2050.

Climate change is not a sovereign issue it is a global one. It requires a coordinated global response. That is why we are part of the World Bank's High Level Commission on Carbon Pricing and Competitiveness.

It is also why BHP is active in the global climate policy debate. And looks for ways to add cost-effective decarbonisation to national policy frameworks.

Single solutions are likely to fall short. While we endorse a carbon price this is not enough in isolation.

A diverse approach is required based on technology-neutral regulation and leadership that creates sound and rigorous awareness of the trade-offs and full-cycle carbon-footprints of our actions and purchases.

All producers businesses and retail customers must grasp our and their impacts and responsibilities and come together with governments to address this emerging crisis.

We cannot just back the horse with the best PR campaign. Instead we require a considered and orderly transition to a lower carbon world in which resource companies, like BHP, have both critical expertise and a key role to play and hence are worthy of continued investment.

### **Confronting complexity from all angles**

To conclude there is no single solution to global warming. A complex problem calls for a multi-modal attack that considers science market forces and policy.

That is the approach BHP has adopted for decades and which guides what I have announced today.

- Targets and goals for our operations and value-chain, which include links to remuneration
- Scenario analysis and disclosure
- And a US\$400 million investment in reductions in emissions across the value chain.

We believe as a set of collective measures they can have a real impact.

An 'all of the above' solution *barely* gets us there. All emitters, resource companies, customers, consumers must play their part together with governments to meet the climate challenge.

This is what BHP stands for and I strongly urge others in our position to do the same.

It is the right thing to do, it makes good business sense, a concerted global effort is required and the future depends on it.