Slide 1 – Cover slide – Our approach to climate and water

Good morning and good evening. Welcome to Rio Tinto's 2020 sustainability seminar. There is absolutely no doubt that we are holding this session at an unprecedented time, as the world tries to contain COVID-19.

After carefully considering it, we decided to go ahead with this event - online rather than in person for obvious reasons - as we believe it remains important to discuss 'sustainability' issues, even at difficult times like these. It is a great opportunity for us to connect and continue the dialogue.

Today, we will explain why sustainability is core to our strategy. We will share our investment thinking and discipline in this area. And go into greater detail on our approach to climate and water. Both of these dimensions, along with health and safety, are key to our approach to sustainability.

Slide 2 – Cautionary statement

You are all familiar with this slide.

Slide 3 – J-S Jacques cover slide – – Our strategic approach
Slide 4 - Agenda

Slide 5 – Our purpose: as pioneers in mining and metals, we produce materials essential to human progress

At Rio Tinto, our purpose is clear: as pioneers in mining and metals, we produce materials essential to human progress. Rio Tinto provides the materials used in everyday life – such as copper, iron ore, aluminium and minerals.

Indeed, during this COVID-19 crisis many governments around the world have defined the mining industry as 'essential' given the important economic and social contribution we make.

Key to our strong financial performance and subsequent contribution to society is

sustainability, an important enabler of our strategy.

Our aim remains to perform today and transform for tomorrow. A tomorrow that will, no doubt, be very different from today. Under any future scenario, we remain certain that both a strong financial and sustainability performance will continue to serve our customers, communities and shareholders well.

Slide 6 – Navigating the impact of COVID-19

Let me start with a few comments on COVID-19, which is a human tragedy on a global scale. At Rio Tinto, we have five key focus areas:

- To maintain the health and safety of our employees and communities
- To deliver product to our customers, by protecting our assets
- To generate cash to maintain our balance sheet strength
- To manage our partnerships – with governments, customers, suppliers and shareholders
- And to stay resilient – as a business and as a team

All of our operations are currently running, and we continue to deliver products to our customers, and contribute to economies and communities. This is absolutely vital right now. Rio Tinto has introduced a number of measures, to protect our employees and assets. We have Business Resilience Teams in action across the business. We have introduced a number of health measures to protect our employees and communities, such as increased health and safety controls at all of our operations, a reduction in the number of fly-in fly-out employees at some of our sites and many of our teams are working from home.

Although there have been some inevitable impacts on our business, our aim is to remain resilient and to emerge from this crisis stronger. Rio Tinto's strong balance sheet and world class asset portfolio, means we are well positioned to do this.

Slide 7 – Pressures are growing in a 'New Era' of complexity

Let me share some views on how we see the world. For some time now we have talked about a 'new era' of complexity. One of growing political tensions, higher societal expectations, and technology disruption. These three interconnected forces remain highly relevant, and in many respects they have become even more so this year. Through this current health crisis we can see all of these dimensions at play, with different tension points.

Although, at Rio we do not see this era of 'complexity' as presenting just downside risk. There is plenty of opportunity as well. We have applied our 4Ps strategy across a number of future scenarios and under each of them, we believe we are well positioned for success.

I am confident we will continue to deliver:

- high quality products for our customers;
- superior value for our shareholders; and
- wealth for all of our communities in the years to come.

Underpinning our ability to do this is, sustainability.

Slide 8 – Our assets mirror global demand themes

Rio has a significant role to play in the transition to a low-carbon economy. Iron ore is an essential ingredient of steel, and steel is an essential material for human progress. There is no viable, low-carbon alternative as things stand. And in iron ore we have a world-class business delivering a 72% EBITDA margin in 2019.

Our Canadian aluminium business is at the bottom of the cost and emissions curve, thanks to our hydro base and sector-leading technology. It is well positioned to meet future market demands in North America.

Copper will play a key role in the energy transition, with renewables typically being more copper intensive. We are growing our copper exposure, through our existing pipeline and through exploration.

Looking to the future, we are also transforming our portfolio of products underpinned by world-class assets to support the transition to a low carbon economy. For example, we are the only large diversified company not mining coal or extracting oil & gas.

Slide 9 – We need an honest debate among stakeholders

There is no doubt that the conversation on sustainability is complex. As one example, let's take a step back and consider the transition to a low-carbon future.

There are no easy answers. There is no clear pathway right now for the world to get to net zero emissions by 2050. The ambition is clear but the pathway is not.

This will require:

- Electrification of transport
- Energy and resource efficiency across the value chain
- Decarbonisation of energy generation
- Transformation of agriculture and land use, to name but a few

The global health pandemic creates another dimension to consider, around how to balance the delivery of the short-term economic stimulus which will be required with the action needed to meet climate goals. The challenge for the world and for the resources industry, is to continue the focus on poverty reduction and wealth creation, while delivering climate action. This will require effort and co-operation between businesses, consumers, governments and shareholders. There will need to be trade-offs. And there are very different views across countries, communities, politics and businesses.

What we need to have are honest conversations. Rio is committed to being part of this conversation.

Slide 10 – An integrated approach to sustainability

As I said at the outset, sustainability is absolutely vital to everything we do. It is the work of our assets, our commercial teams, and our entire business. It is about performance, not just nice words.

Our approach, has three key pillars. First, running a safe, responsible and profitable business. This means looking after the health, safety and wellbeing of our workforce, investing in our people, having clear expectations on human rights, environment, tailings management, and conducting business with integrity.

Second, collaborating to enable long-term economic benefits. This is about enabling the communities in which we operate, including many which have Indigenous groups. We contribute to social and economic development and are absolutely transparent in the taxes and royalties we pay to Governments.

Third, pioneering materials for human progress. Here we focus on our contribution to tackling climate change, while providing materials for the future.

All of this is underpinned by partnerships. Strong sustainability solutions cannot be delivered by us, alone. We think this is even more important in the current environment.

Slide 11 – Board endorses Group's climate ambition and emissions targets

Of course, performance in sustainability is key and measuring and tracking our delivery against our stated commitments is also a priority.

Responsibility for identification, evaluating and managing risks sits with employees and leaders working within a group-wide risk management framework.

This includes three lines of assurance:

- employees and business leaders;
- support functions; and
- internal audit.

Let me share an example, in relation to climate change. Our climate strategy sits within our business strategy and is led by Peter Toth, our head of corporate development.

The Board is responsible for endorsing our climate strategy, targets and policy. And our product group teams, supported by our Climate Change Centre of Excellence, are responsible for executing our climate plans. The Sustainability Committee monitors progress against our targets. And Incentive Plans for ExCo members and senior leaders include an element based on delivery of our climate change strategy.

Slide 12 – Strong track record on sustainability performance and climate

And we are making good progress. Let me give you some examples. In 2019, we had no fatalities at any Rio operation. This reflects the work of every one of our colleagues and contractors around the world, but we must maintain this and keep the focus.

We paid $7.6 billion in taxes and royalties globally in 2019 and made a direct economic contribution of over $45 billion. We work with 37,000 suppliers in more than 120 locations, with a total spend of around $17 billion in 2019. We also made $36m of voluntary community investments.

We also have thousands of retail shareholders. So, we are vital contributors to economies, communities, shareholders and supply chains.

Over the years we have been working hard to create wealth in a responsible and sustainable way. We have improved our environmental performance, reducing our global greenhouse gas emissions by 46% over the last 10 years. You will hear more today about how we will plan to further reduce our emissions to 2030 and to net zero emissions from our operations by 2050.

We also ended 2019 as number 2 on the global human rights index, just behind Adidas.

As I said earlier, for Rio it is all about performance, not just nice words. And in 2019, we demonstrated how sustainability is core to our strategy. With that, I will hand over to Peter.

Slide 13 – Peter Toth cover slide - Our climate strategy and plans

Thank you, JS. it's a pleasure to be here today even if only virtually. I'm Peter Toth, Head of Corporate Development and Strategy.

Slide 14 - Our climate change strategy is in four areas

As JS mentioned, I have overall responsibility for our climate strategy, which puts it firmly at the core of our business. There can be no strategy or business development conversation at Rio Tinto today without discussing its environmental impact. These factors now rate equally with other metrics such as commodity price assumptions, community impact, productivity or capital intensity, to name a few.

The 4 areas of our climate strategy are intuitive and simple, yet powerful, both individually and in combination:

- to produce the materials essential for a low-carbon future;

- to reduce the carbon footprint of our operations;
- to partner, in order to reduce the carbon footprint across our value chains; and
- to enhance our resilience to physical climate risks.

I'll cover all 4 but will mainly focus on our climate targets and our partnership approach. Our latest climate report released in February provides all the detail.

Slide 15 - Our commodity portfolio is positioned for a low-carbon future

As JS said, our purpose is to produce the materials essential to human progress, and we have a portfolio that is well-positioned for the low-carbon transition.

Iron ore in steel is a fundamental building block of both developing and developed economies through different stages of the industrialisation and urbanisation process. Aluminium is highly recyclable and widely used in energy-efficient transport solutions. Copper is a superior conductor supporting the electrification of the energy system from electric motors, wind turbines and solar panels and we are working on developing potential opportunities in lithium and other battery minerals critical to the storage of renewable energy.

What is also important is what we don't produce. We don't mine coal or extract oil & gas and remain the only major in the resource sector without fossil fuel in its portfolio.

We believe that fossil fuels will increasingly be substituted for renewable energy as the world transitions to a low carbon economy.

In contrast, there is little room for substitution for the products we produce, and as the low carbon transition gains pace, we expect increased intensity of use for these materials both in industry and society. While at different stages of their life cycles, all our products are critical materials to human progress and play a key role in the low carbon transition.

Slide 16 - 70% of scope 1 & 2 emissions are from our aluminium business

Let's take a look at Rio's carbon footprint. Over 70% of our scope 1 & 2 emissions are from our aluminium business. Both alumina refining and aluminium smelting are energy intensive, high temperature processes.

Most of our remaining emissions are from our mining operations, driven mostly by power generation and diesel consumption in our rail, trucks and mining equipment.

So, improving energy efficiency has been an important driver of our efforts to tackle emissions to date.

Since 2008 we have reduced our absolute emissions at our managed operations by 46% - this represents a reduction of 18% when excluding divestments including coal. We have also reduced the carbon intensity of our managed operations by 29% over this period. As you can see a lot of hard work has already been done and most of our assets have reached a very competitive level of carbon intensity.

While this is a great place to be, it also means that any material improvement in emissions intensity will be challenging without future technology breakthroughs.

Slide 17 - We are already a very large user of renewable energy

Aluminium smelting requires significant amounts of electricity so our aggregate electricity consumption is much higher than our peers. However, 76% of the electricity consumed by our managed operations comes from renewable sources. This is, on average, around three times the proportion of renewable electricity in the grid globally today, primarily to our high use of hydro-power.

We continue to look for opportunities to further increase our share of renewables across the business. Last year, we shut the coal-fired power plant at our Kennecott copper mine in Utah and are instead purchasing renewable energy certificates, reducing the operations' annual carbon footprint by 65% – or the equivalent of about a million tonnes of carbon dioxide. While renewable energy credits and offsets

remain an abatement of last resort for us, the appropriate use of high quality offsets can, and will, play a role in our abatement strategy.

Slide 18 - Our businesses are already low on respective intensity curves

We spent a significant amount of time in 2019, developing industry intensity curves for all our commodities, along with marginal abatement curves for all our assets and projects.

What we found was that most of our assets sit comfortably in the bottom half of industry carbon intensity curves, or have a pathway to get there (such as in our copper business). This is the direct result of better energy efficiencies and a higher proportion of renewable energy usage than our peers. In Canada, for example, the emissions from our smelters are only 2.3 tonnes of CO2 per tonne of aluminium, around 80% below the industry average of over 12 tonnes.

Slide 19 - Rigorous analysis of mitigation options informed our targets

We have also completed asset-by-asset analysis of mitigation options to inform our 2030 targets and long-term decarbonisation pathways. We have conducted detailed assessment of around 60 projects, and are continuing to develop marginal abatement cost or MAC curves for each asset and project in our portfolio. As you can see, many of the more cost effective opportunities involve energy efficiency focused projects, as well as replacing natural gas with renewables, mainly in the Pilbara. These projects sit below the line in the NPV positive area of the MAC curve and while they might not always meet our typical investment hurdles, they are NPV positive. Our MACC analysis developed a project pipeline for each asset, product group, geography and the company as a whole. This will help guide our capital allocation decisions, both bottom up and top down.

We then reviewed different combinations of the most technically and commercially feasible projects that achieved Group-wide absolute reductions of between 5% and 35% by 2030. Our 2030 target of 15% does not include early closure of any of our assets.

The Pacific Aluminium assets, as you know, are challenged and we are working with governments, regulators and other stakeholders to get them on a sound commercial footing.

Of course, our target is based on our current analysis of technically and commercially viable projects, and this is expected to change over time – as climate policies are implemented regionally and globally, and as low-carbon technologies are developed and commercialised. As noted earlier we will continue to update our MAC curve analysis and will look for opportunities to bring forward abatement options wherever possible.

Slide 20 - Committed to being part of the solution to climate change

As you know, our 2030 targets are to reduce our absolute emissions by 15% and our carbon intensity by 30%. In total, we expect to reduce emissions by around 4.8 million tonnes per year by 2030. Implicit in these targets is the assumption that organic growth between now and 2030 will be carbon neutral overall.

To help achieve our targets, we expect to invest around one billion dollars over the next five years in climate-related projects. And our long-term ambition is to achieve net zero emissions across our operations by 2050. Nigel will provide more detail on our long-term decarbonisation pathways and some interesting technology developments to support these initiatives.

Slide 21 - CO2 emissions across the aluminium and steel value chains

The third area of our climate strategy is to partner to reduce the carbon footprint across the value chain. While the carbon footprint of our operations is around 32Mt of CO_2e, we operate within value chains which have significant scale and global reach. They also include processes that are highly energy and carbon intensive - such as aluminium smelting and steelmaking. Around 9% of the global carbon dioxide emissions are from steel production and the Aluminium sector accounts for around 3% of the total.

Our approach to managing emissions depends on our level of influence. We can obviously address the impact of our own operations and can also influence our non-managed assets through our joint-venture arrangements. This is the boundary for which we have set targets to 2030 and stated our ambition to reach net zero by 2050.

Our Scope 3 emissions are primarily from our customers processing iron ore into steel and bauxite into alumina and into aluminium. Realistically, our ability to directly influence our customers' emissions is limited - it is even difficult to accurately quantify their emissions – and so our strategy is to work in partnership across these value chains.

Slide 22 - Scope 3 reduction pathways are commodity specific

Let me give you a bit more detail about our approach to scope 3. The diversity and make-up of Rio Tinto's portfolio enhances the resilience of our business as our materials are essential to the low-carbon transition.

Some energy and extractives companies that do produce fossil fuels are setting scope 3 targets or goals. They can do this because they are able to switch from high-carbon to lower carbon products, for example, from oil production to natural gas or renewables, or allow for the decline of their fossil fuel production and resource base over time. As we do not produce fossil fuels we cannot switch or substitute the products in our portfolio to lower carbon options, or rely on the decline of reservoirs, resource bases, or the actual production and sales of fossil fuels.

It is technically feasible to reduce carbon emissions from the production of steel, for example by replacing metallurgical coal with hydrogen or using carbon capture and storage. However, these are not technically or commercially viable options today.

And, importantly, even if they were, there is no substitute for iron ore in the steel value chain.

It's worth emphasising that the low-carbon transition in the aluminium and steel sectors is a transition away from using carbon-based energy sources or reductants. It is not a transition away from the use of bauxite or iron ore itself.

So there is much less scope for substitution of our products, apart from some expected increases in the use of scrap and recycling, but within availability and quality constraints.

We recognise the need to reduce carbon emissions across the value chain, and, although it isn't appropriate or practical for us to set targets, we are taking action.

As JS mentioned, we think the best solutions to the climate challenge will come from global collaboration. This is why we are working with partners, who can be customers, suppliers or even competitors, across the value chain, to reduce emissions through innovative and focused partnerships.

Slide 23 - Our partnership with Baowu / Tsinghua University

For example, in 2019, we entered into a partnership with Baowu and Tsinghua University in China. Together, we are developing and implementing new methods to reduce carbon emissions and improve environmental performance across the steel making process.

Our aim this year is to:

- use the Rio Tinto and Tsinghua University joint research centre to explore long-term commercial pathways to low-carbon steel;
- manage tailings risks and explore ways to reduce, re-process and generate value from mineral and other waste; and
- hold a partnership forum to bring together our climate leaders to focus on decarbonisation over the full value chain.

We are already making progress, and while we can't disclose much more today, we will update you later this year.

Slide 24 - The world's first carbon-free aluminium smelting process

Turning to some concrete examples. In 2018, in partnership with Alcoa and with support from Apple and the governments of Canada and Quebec, we announced ELYSIS. This is the world's first carbon-free aluminium smelting process, using inert anodes in place of carbon.

Our ELYSIS technology can eliminate all direct greenhouse gases from the traditional aluminium smelting process, and in December 2019, Apple purchased the first commercial batch of aluminium from ELYSIS. Nigel will talk about Elysis in more detail in a minute.

Elysis is just one example of the type of partnership bringing together multiple stakeholders from the private and public sector to develop breakthrough low-carbon technology. Many similar collaborations will be needed and government support may also be necessary to support development and commercialisation.

Slide 25 - Physical Risks

Finally, the fourth area of our climate strategy is to enhance our resilience to the physical risks of climate change.

As a mining company we operate in diverse geographies where the best deposits can be found, we operate from ice bound Northern Canada to the Gobi Desert.

We therefore have extensive experience in preparing for and managing extreme weather – be this water scarcity or the impacts of tropical cyclones. We consider these climate-related risks over the life of our operations, from the way we design, develop, operate and eventually close and rehabilitate projects.

In our climate report last year, we described our assessment of our assets and projects where we operate with chronic and acute risks of climate change.

In this year's report, we highlight the range of controls in place to manage the threat of extreme weather. These controls help to keep our people safe and allow our

operations to return to normal capacity with mininal financial impact, as quickly as possible after an event.

One last important note, before I wrap up. Last year we also created a new Energy & Climate Change Centre of Excellence within Rio Tinto. This adds to our other established Centres of Excellence in surface mining, underground mining and processing.

The key role of the new Centre of Excellence is to support the execution of our climate change strategy. On that note, let me now hand over to Nigel Steward who will provide more colour and will also update you on how we are harnessing new technologies to meet our climate change targets.

Slide 26 - Nigel Steward cover slide – Technology to tackle the industry's challenges

Slide 27 – New Energy and Climate Change Centre of Excellence key enabler of successful execution of our climate change strategy

Thanks Peter and hello everyone. I'm Nigel Steward, Head of Group Technical, Processing. As Peter just mentioned, in September 2019 we created the new Energy & Climate Change Centre of Excellence.

The key role of the Centre of Excellence is to bring to bear and coordinate the talents across the company to support our operating assets in delivering Rio Tinto's Climate change targets and our longer term ambition of being carbon neutral by 2050.

So how are we coordinating the climate change network across the Group? Through the Centre of Excellence, we are supporting the integration and execution of energy and climate change strategy. We are embedding the new emissions target within the business and tracking performance. We are working with the assets on energy productivity and finding value-accretive methods to re-power with renewables. We are developing technology roadmaps linking operations to viable technology solutions and partners both pre-2030 and beyond. We are supporting the assets to

develop their abatement project pipeline and manage access to the abatement fund. And, we are identifying opportunities to make recommendations on the use of offsets

We also have a key role to play in finding and coordinating external partnerships that support the development and implementation of technology solutions particularly in areas where technology pathways do not currently exist.

Slide 28 – Technology key to achieving net zero by 2050

Technology will be a key enabler of our ambition to be net-zero by 2050. Our asset-by-asset reviews in 2019 identified technologies of interest. I'll talk to you shortly about our thinking around further decarbonising the Pilbara electricity network and our surface mines.

But firstly, let me give you an overview. Technology has a key role to play in making our existing assets, which have many years of operation ahead of them, more efficient and productive. Improving the fuel efficiency of our fleet reduces costs and emissions. But efficiency can only be a transitional step as we need to find a way to transform our operations to forms of zero-emission energy.

As Peter said, renewable energy technology is already prevalent in our business today. However, our pathway to zero emissions requires further repowering with renewables. This must be done in a way that reduces costs and maintains security of supply. Integration technologies and storage will be critical to the success of achieving a higher penetration of renewable energy.

Then there is Elysis carbon-free aluminium processing and our work on further decarbonising surface mines – and I will talk about each of these.

Lastly, there are 'hard-to-abate emissions' which include the heat and steam used in our alumina refineries and in our Iron & Titanium processing sites. Whilst there are existing technologies like concentrated solar or geothermal, they are not currently available or practical at our existing sites but these remain as technologies of interest.

Technologies like hydrogen or plasma torches, which can use renewable energy, may provide a pathway to replacement of fossil fuels for heat and steam. This technology is at an early stage of development and deployment and our focus is on understanding development and deployment timelines and looking for opportunities to pilot some of these technologies in our operations in the coming years.

Our long-term ambition is to reach net zero emissions by 2050 and, as Peter said, we expect that high-quality offsets and removals will form a component of the decarbonisation strategy. However, we appreciate the concerns about the integrity of some forest carbon offsets, so in 2020 we will start by assessing the potential to develop carbon offsets at our own sites.

Slide 29 – We have a pathway to decarbonising our electricity network in the Pilbara

Let me talk now about our thinking for the Pilbara both short term and longer term.

Ultimately, we are investigating ways to transition our Pilbara electricity network to renewable energy whilst maintaining a secure and low-cost supply of electricity to our mines and ports.

We completed a technology options analysis in 2019, which outlined a pathway to decarbonise the Pilbara over a series of project stages.

We have announced stage 1, comprising a 34 megawatt solar PV facility at Koodaideri and a 45 megawatt, 12 megawatt-hour battery energy storage system at Tom Price.

Stage 2 studies commenced in 2020 and are investigating additional renewable energy and battery projects like this. Wind monitoring has commenced in two locations.

Stage 3 is more conceptual at this stage and includes a higher penetration of renewables, large scale energy storage, and also diesel substitution in our mobile fleet.

A staged approach allows us to manage risk, lets us build capacity and learning, take advantage of future technology cost reductions, and manage our gas positions.

As more and more intermittent energy sources are connected to a network, the challenge to maintain security of supply increases.

Rio Tinto owns and operates its network, and has fast response open cycle gas turbine technology as our source of energy. This gives us an advantage, allowing us to manage the intermittency risk, as we stage development of the network transition to renewable energy.

Our ownership also provides us with easier pathways for network expansion, which will be necessary as we move to electrify our fleet.

Slide 30 - ELYSIS – developing direct GHG-free aluminium smelting

As Peter mentioned earlier, we are actively pursuing a breakthrough on direct greenhouse gas free aluminium smelting through our ELYSIS joint venture with Alcoa.

The ELYSIS technology uses what are known as ‘inert anodes’ – replacing the traditional carbon anodes in the smelting process with proprietary materials.

Currently when a carbon anode is consumed in the process of electrolysing alumina to aluminium, it releases greenhouse gases along with other by-products such as perfluorocarbons, carbon monoxide, sulphur dioxide and nitrogen oxides.

Using an ‘inert anode’ separates alumina into its two elements: aluminium and pure oxygen without the release of any greenhouse gasses in the smelting process

Due to the design of the anode, and the fact that it is not being consumed, this technology has the potential to reduce the operating costs of aluminium plants while increasing their production capacity.

The technology has been producing metal at research scale since 2009 and as Peter said the first batch of ELYSIS aluminium was purchased recently by Apple.

ELYSIS is now working to further develop and scale up the technology, so that it can be retrofitted into existing smelters or used for new ones.

The new ELYSIS Research & Development Centre is under construction at Rio Tinto's Complexe Jonquière in Quebec, Canada - the site of our Arvida smelter, Vaudreuil refinery and Arvida Research and Development Centre.

Slide 31 – Surface mining in 2030 – the mine of the future

The decarbonisation pathway of our surface mines is one of the key areas of focus. In 2019, we developed a group-wide technology road map for our surface mines.

Low-emission technologies, such as electric or hydrogen trucks, are emerging. Commercially deployable technology is likely to take some years to develop and we are working with our suppliers directly, and through partnerships like the ICMM's Innovation for Cleaner Safer Vehicles programme to accelerate development and deployment of these technologies.

Currently we have a large capital investment in our current fossil-fuelled fleet. So we continue to ensure that we use these assets efficiently and find ways to reduce emissions. In the Pilbara we have repowered our haul trucks with the very latest in fuel efficient engines.

At the end of 2019, we have passed the halfway mark of this multi-year US$100m programme converting around 230 haul trucks. The trucks will also be fitted with a fuel saver control strategy delivering a total fuel saving of 11% compared to the original configuration. We are also taking this a stage further by trialling duel-fuel retrofit technology on haul trucks that offer even further reductions in greenhouse gas emissions.

In late 2019, we began a trial of a mobile surge loader at our Kennecott copper mine. It is an integrated hopper and loading bin that accepts ore directly from the loading unit. We expect to see a 50% increase in loading unit productivity, and 98% accuracy in loading trucks, again enabling a reduced carbon footprint.

I will now hand over to Theresia Ott to talk about the management of water resources.

But in summary it is only through technology that we will tackle the challenge of decarbonising our business and indeed tackle the important task of carefully managing water and other environmental challenges. We will do this with dedicated investment in our own expertise and through partnerships with others. Thank you.

Slide 32 – Theresia Ott cover slide – Our approach to water

Slide 33 - We operate in areas of water scarcity and surplus

Thanks Nigel and hello everyone. I'm Theresia Ott, Chief Advisor Environment. At Rio Tinto, we see ourselves as the stewards of water as a shared resource. We recognise the importance of water to our neighbours living in the watersheds in which we operate, as well as its importance to the environment.

We support the International Council on Mining & Metals' position statement on water stewardship. Since 2019, we have been reporting our practices against the commitments outlined in this statement. These include; applying strong and transparent water governance; managing water at operations effectively; and collaborating to achieve responsible and sustainable water use.

Most of the questions that we have received from investors regarding water pertain to how we manage our consumption in areas of water scarcity such as Oyu Tolgoi in Mongolia, Kennecott in the US and the Pilbara in Australia.

Based on the 2019 Global Water Assessment Tool of the World Business Council about 40% of our managed sites were assessed as operating in a "water stressed"

environment. However, none of these sites were locally assessed as having its operations impacted by water availability.

The majority of our sites are in fact in sub-tropical or tropical locations. Places such as Madagascar, tropical north-eastern Australia or Canada.

So context is everything when it comes to managing water, and the abundance of water does not mean there is no risk if not managed correctly.

This is why at Rio Tinto, our approach to water stewardship centres around a set of four water risk themes:

The first is water as a resource, and its availability for our operations, our host communities, and the environment.

The second consideration is water quantity and quality, to ensure that we effectively mitigate the impacts that our operations could have on water flows and water quality. This is particularly relevant when we are surrounded by water, for instance in tropical regions like our mineral sands operation in Madagascar, where separation and treatment before discharge are paramount.

Thirdly, we focus on ensuring that our dewatering practices, where we have to remove water to access orebodies, have minimal impact on ecosystems. An example here would be pumping water from our iron ore mines in the semi-arid environment of the Pilbara.

Finally, we work to minimise the need for ongoing water management post-closure. For example preventing reactive materials leaching into the surface or ground water. This is something of particular focus in our copper operations.

Slide 34 – Our water targets – focussing our efforts

We have had a water target programme since 2009 and our latest set of targets represent a maturing of our approach. The key focus is now on a Group-wide target that aims: to increase disclosure to a site-by-site level; to help improve the

awareness of water use in our industry; and to drive good water stewardship across all assets. The dataset from this programme will help us drive future targets to further build resilience in the face of climatic shifts.

In addition, water stewardship targets at six sites have been selected to address specific issues that require improvement in our business. These targets are based on a deep dive of the four water risk themes across the portfolio and represent a prioritised set of activities:

1. At our Pilbara Iron Ore business in Western Australia, we aim to complete six managed aquifer recharge investigations by 2023. These are studies into how to best re-establish groundwater levels following mining.
2. At the Oyu Tolgoi copper operation in Mongolia, we aim to maintain average annual water use efficiency at 550 litres per tonne of ore to concentrator, from 2019 to 2023.
3. At our Kennecott copper operation in Utah, by 2023, we are targeting a 5% reduction in imported water per tonne of ore milled at the concentrator, compared with the 2014-2018 baseline of 1,487 litres per tonne.
4. In the Northern Territory of Australia, ERA's Ranger uranium plant will achieve its total processed water inventory treatment volume plan by 2023. What this means is that all the processed water currently held on site will be treated to enable release to the natural environment.
5. Our QMM heavy mineral sands operation, in sub-tropical Madagascar, is currently developing a new site water management approach, which will be implemented by 2023.
6. And finally, by 2023, Queensland Alumina Limited will complete water-related improvement projects based on their 5-year environment strategy. These will include infrastructure upgrades and checks, and work on surface and groundwater interactions.

To give you a bit more flavour, let me highlight two case studies…

Slide 35 – Case study: Oyu Tolgoi, Mongolia

Oyu Tolgoi is located in the arid, water-scarce environment of the southern Gobi desert of Mongolia.

When we designed the operation, one essential aspect was to ensure that we did not impact other water users, such as the nomadic herders.

The advanced design of our tailings thickener sees water volumes required to process the copper at half the industry average, with the recycling of more than 80% of that water.

Importantly, we draw our water from a deep aquifer of non-potable, saline water that has no connection to the shallow aquifers used by herders.

Also, as part of our engagement with local communities we have restored collapsed and unusable herder wells and installed additional wells where this was not possible.

Finally, to ensure transparency, we involve local communities in our water monitoring activities.

Slide 36 – Case study: Pilbara Iron Ore

At our iron ore business in the Pilbara in Western Australia, groundwater impacts associated with mining below the water table are a key focus for us.

We are carefully studying ‘managed aquifer recharge’ as a potential method to help with water management in the Pilbara.

This requires a thorough understanding of how water flows through, and is stored, underground, as well as how underground water is replenished.

Our work includes a number of field tests of this process across the Pilbara operations and the outcome of these will inform the implementation of aquifer management programmes across the business.

To conclude then, first and foremost, we recognise the importance of water to the communities and environment in which we operate.

As well as rigorous management of daily water use in our operations, we are committed to carefully managing these resources over the life of operation. We are also increasing the disclosure of our water use for investors and other groups and have set clear targets for the focus areas in our business.

I will now hand over to our CFO Jakob Stausholm who will talk you through our investment approach.

Slide 37 - Jakob Stausholm cover slide – Our investment approach

Slide 38 - Our commitment - $1billion climate related spend in five years

Thank you and welcome to everybody listening today. I am delighted to join you today, as sustainability is a topic that is close to my heart.

At Rio Tinto, our purpose is to produce the materials essential to human progress. We also want to be part of the solution to global challenges such as climate change.

You have just heard from JS, Peter and Nigel that we are taking a bottom-up, asset-by-asset and numerical approach to meet our 2030 targets and long-term decarbonisation pathways.

As the CFO of Rio Tinto, I am pleased to tell you that what we are doing as a company on climate change and sustainability – so far - goes hand in hand with sound economics and shareholder value.

In February, we announced that we will spend $1 billion in the next five years on climate-related expenditures. This includes, research and development, emissions reduction and climate resilience projects.

Some of this will be expensed as opex and some will be capex. A portion of this we will undertake ourselves, but we will also work with partners on some of these initiatives.

Together with Alcoa, we will invest C$55 million on R&D related expenditure for the Elysis JV over the next three years.

Recently, we also approved $98 million in capex related to renewable projects at our newest iron ore mine, Koodaideri, which is under construction in the Pilbara.

Slide 39 - Rigorous bottom-up approach to investments

You heard earlier that R&D spend and capital projects have been identified on a bottom-up basis by our Energy & Climate Change Centre of Excellence, Corporate Strategy and our Product Group teams to identify emissions reduction opportunities across our assets.

We have assessed around 60 projects in detail and developed marginal abatement cost curves for all our major assets.

From these 60 projects, we have selected those where it is technically and commercially feasible to achieve completion within the next 10 years.

Collectively, these projects are expected to deliver a 15% reduction in absolute emissions and 30% reduction in emissions intensity by 2030.

These projects undergo the same financial and investment analysis as all our investments. And so far, all of these are NPV positive. Whilst they may not be as profitable as some of our usual mine or infrastructure projects, they are all above our cost of capital and will continue to be subject to the very robust Rio Tinto capital allocation framework.

Slide 40 - …with spend on climate integral in our capital allocation

We have been, and will continue to be, very disciplined in allocating capital expenditure. Of the portion of the $1 billion climate expenditure that is capital, some will be sustaining capital but there will also be replacement and growth capex.

The investment in renewable power options at our Koodaideri project is a good example of the latter. Each project, though, will be slightly different. The Koodaideri renewables projects for example, were part of a new mine development for which an investment in power would be required. Here, we also had the benefit of existing infrastructure, which provided complimentary firming to the renewables.

The capital portion of the $1 billion spend has already been included in our current capex guidance. Finally, I would like to note that this $1 billion is for the next five years and we will need to spend more in the following five years to get to the 2030 target.

Slide 41 - Sustainability supports our resilience and our competitiveness

As I highlighted at our results presentation in February and our Investor Seminar in October of last year, Rio Tinto has a great starting base with regards to sustainability.

As JS and Peter have outlined, we do not extract fossil fuels, around 76% of the power we consume is from renewables, and our assets are at the bottom of CO_2 intensity curves for their respective industries.

In 2019, we were able to further improve this position for both Kennecott and Escondida by switching to renewable power at both these assets so their position will improve during 2020.

Our assets are characterised by long mine life and very competitive cost structures, which drives unique resilience and create value to our shareholders and society at large.

This is expressed by consistently high payments of dividends and royalties & taxes combined with significant employment, offered directly and through our suppliers.

Our integrated, bottom-up and numerical approach to further improving the emissions of our business will protect and improve this starting point and further enhance our resilience.

I will now hand back to J-S to conclude the presentation.

Slide 43 – Summary – J-S Jacques

Thank you Jakob.

Slide 44 – Our climate and water targets

So, in summary. You will have seen today that our ambition is clear. On climate, to get to net zero by 2050. This is a massive undertaking. It means all our future growth will need to be carbon neutral. And we will need new technologies and partnerships to deliver it. We do not have a roadmap right now but we are working on it.

Our 2030 targets are based on detailed analysis. An additional 30% reduction in emissions intensity from our operations. An additional 15% reduction in absolute emissions from our operations. It comes on the back of a 46% reduction in greenhouse gas emissions since 2008.

Our targets were developed through detailed marginal abatement cost curve analysis (MACC), asset-by-asset. But of course we will try to do better and more quickly. We believe it is now about action and results.

Indeed, that is why we will invest a further $1 billion in climate change over the next five years to support our work and that of our customers and suppliers. Like the $100 million Pilbara renewable investment that we have announced. Like technology breakthrough initiatives, such as Elysis. These projects will be delivered with the support of our new Energy & Climate Change Centre of Excellence group, which we established late last year.

Our new water targets will help us to be better stewards of this precious resource, whether in areas we operate where water is scarce or regions where it is plentiful.

Water is vital. It is important to communities and we understand its importance. We have set our plans and targets carefully and accordingly.

Slide 45 – As pioneers in mining and metals we produce materials essential to human progress

So, in closing, We have a clear purpose. As pioneers in mining and metals, we produce materials essential to human progress and to a low-carbon transition. And sustainability is a key enabler of our strategy and financial performance.

Financial performance is absolutely fundamental to sustainability. Indeed, at the heart of our approach to sustainability is profitability. Our track record in this area is strong and we intend to continue to deliver. We will be part of the solution.

Rio is well placed. We are a resilient business – in terms of portfolio and performance. We have a clear strategy to perform and transform. And we will continue to sustainably deliver for our stakeholders day-in-day-out.

ENDS