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Climate Change Consultation
Department of Water and Environmental Regulation
Locked Bag 10
Joondalup DC, WA, 6919

Via email: climate@dwer.wa.gov.au

Dear Sir/Madam

Re: CLIMATE CHANGE ISSUES PAPER CONSULTATION

Roy Hill welcomes the opportunity to provide input through the consultation process on the Climate Change Issues paper via the Department of Water and Environmental Regulation.

We are happy to continue to work with the State Government in the interests of ensuring any resulting intention of the policy is workable for the mining sector. Should you wish to discuss this submission in further detail, please contact Sarah Blake, Manager Environment and Approvals [REDACTED].

Yours sincerely

[REDACTED SIGNATURE]

Julian Hill
GM Environment, Government Relations & External Affairs

Encs:



About Roy Hill

Roy Hill is an independent world-class integrated iron ore mining, rail and port operation in the Pilbara region with Western Australian majority ownership, chaired by Mrs Gina Rinehart.

The operation consists of:

- Mine, incorporating:
 - Conventional open pit, bulk mining operation from multiple production benches
 - 60 million tonne per annum (Mtpa) wet processing plant;
- 344 kilometre single line, heavy haul railway;
- Purpose built, dedicated two berth iron ore port facility at Port Hedland, capable of receiving, stockpiling, screening and exporting 60Mtpa (wet) of direct shipped iron ore as lump and fines; and
- Perth Headquarters and Remote Operating Centre.

Roy Hill has a defined mineralisation of approximately 2bt of +50% Fe iron ore of which 1bt forms the current +55% Fe mineral resource, enough to sustain a base case mine life of more than 11 years. Mining commenced in 2014, and current tonnages take into account mining depletion. With integrated mine, rail and port facilities, which have the current capacity to deliver 60 Mtpa – Roy Hill is one of the world’s major resource based operations, which will deliver enormous benefits to the broader community for years to come.

Roy Hill loaded its first shipment of ore for export on 10 December 2015 and has since loaded multiple shipments to its key markets in Japan, Korea, China and Taiwan.

Context

Our Chairman, Mrs Gina Rinehart’s mining entrepreneurial drive and passion has successfully unlocked economic opportunities to the benefit of thousands of West Australians both directly and indirectly.

Her vision to leverage Australia’s unique mining assets to benefit the future prosperity of all Australians can only be realised through the Australian Government’s creation of policies that encourage investment, business growth and jobs.

Roy Hill is subject to *Environmental Protection Act 1984*, *Mining Act 1978*, *National Greenhouse and Energy Reporting Act 2007* (NGER Act) as well as other legislation.

Submission and Responses to Questions

In this submission Roy Hill has taken the approach of, in some instances, responding to specific questions whilst in other circumstances, responding more generally to relevant themes. There are some instances where some themes in the Issues Paper are not directly responded to or addressed.

Generally, Roy Hill endorses the approach of the CME submission on Climate Change, in particular the need for a co-ordinated national government approach to take the lead, with the West Australian government's primary focus being one of supporting the national framework, taking responsibility for those aspects that are the sole responsibility of the State working together with the wider Australian policy framework.

Transforming Energy Generation

- **What are the main challenges for decarbonising Western Australia's electricity supply while ensuring adequate generation capacity, security and reliability?**
- **What are the most effective ways to overcome these challenges by 2030?**
- **Should the electricity sector make a pro-rata (or greater) contribution to Australia's national greenhouse gas emission targets?**
- **How fast do you think the transition of the electricity sector should occur?**

Economic Challenge

For existing power networks, the introduction of renewable energy is generally evaluated against the incremental cost of gas generation which typically becomes more efficient the higher the demand. As such, to remove load from a gas generation facility decreases the efficiency. This situation can be exacerbated if networks are "long" on generation by having too much capacity.

Furthermore, if power security is required the renewable energy capacity must be "firmed" for periods of no sunshine or low wind. Firming through battery storage is expensive. While the cost of batteries is rapidly declining their application as an energy storage device over a sustained period is currently cost prohibitive. As such, consumers are required to firm with 100% capacity in the form of non-renewable thermal generation. This can result in a duplication of capital and impact the economics of introducing renewable energy generation.

Geographical Challenge

A further challenge is that many of the highest electricity consumers are part of private networks. These networks are not connected, meaning if excess electricity is generated from renewables it may be wasted, limiting the economic viability of renewables or limiting the capacity that is installed. There are also many smaller remote operators that currently only have access to power via diesel generation.

Overcoming Challenges

The WA Government has a role to play and needs to have an "all-in" approach whereby efficiencies are applied to government infrastructure if it forms part of the lowest cost abatement for emissions reduction which is available.

The WA Government should consider investment in research, development and improvements in electricity storage technologies. The WA Government should have a focus on battery development and incentivise battery installation. If the access regime for the North West Integrated Service (NWIS) is delivered in a sensible way, this could be used to encourage the adoption of renewables such as solar, wind or batteries and the sharing these assets across multiple operations/ customers.

Industry Innovation

- **What measures have been implemented by your business to lower energy use or emissions?**

Roy Hill is committed to continual improvement, including exploring and adopting greenhouse gas reduction initiatives.

Roy Hill has implemented various initiatives to lower energy use and emissions. In terms of its main processing facility, this was supplied via gas, as opposed to diesel, from commencement of operations. Since this time, Roy Hill has connected various elements of its operation, such as its mine village, to the same power source to further reduce reliance on diesel.

In 2018, Alinta installed a 35 MW battery electricity energy storage system at the Newman Power Station which provides power to Roy Hill mine. The new battery system reduces the requirement for mechanical spinning reserve which consumes gas. The system demonstrates how storage can be coupled with gas generation to reduce fuel costs, replace diesel backup, and increase reliability.

In 2018 Roy Hill also transitioned our port facilities from temporary on-site diesel generation to grid connection via the north west integrated system (NWIS) through Horizon Power, which generates electricity from natural gas. Roy Hill has also installed small-scale solar in combination with batteries to displace diesel generation.

Roy Hill also continues to investigate and implement both large and small scale renewables where these are financially viable.

- **What are the barriers to decoupling energy use and emissions in the resources sector?**

Many of the highest electricity consumers are part of private networks. There are also many smaller remote operators that only have access to power via diesel generation.

- **Have you assessed the implications of the low-carbon transition for your business or sector? How are these risks disclosed to stakeholders?**

Roy Hill has assessed the implications of low carbon transitions and reported to stakeholders as required. This is part of a continually evolving approach.

- **What exemptions should apply to trade-exposed sectors in reducing our emissions?**

As previously indicated via Roy Hill's submission addressing greenhouse gas emissions assessment guidance dated 30 August 2019, *national jurisdictions* should be responsible for the emissions within their own borders and should not regulate emissions in other jurisdictions (Scope 3 emissions).

- **How can the Government of Western Australia foster clean industries and technologies?**

To promote generation via certain renewables the WA Government should encourage and incentivise industry collaboration. This could provide the type of economies of scale that can make central solar/wind generation available and viable to more consumers. This type of approach could also make hydrogen generation viable more quickly.

The WA Government however, needs to ensure that costs are maintained such that Australian businesses remain competitive with overseas providers. In addition, the WA Government needs to consider alternatives or replacement materials, where use of these could have a worse outcome if other opportunities exist overseas, for example.

Roy Hill believes that this is best conducted via a *national* framework that drives an economically efficient and effective approach to reducing net emissions. The national framework should:

- Adopt a whole of economy market-based mechanism which promotes lowest cost abatement;
- Establish a mature, liquid and affordable offsets market that includes international trading for certified / credible offsets;
- Ensure a single, national emissions account that is transparent and publicly available;
- Maintain the international competitiveness of trade exposed industries;
- Provide clarity and stability regarding assessment and compliance processes to enable industry to
- continue to invest with confidence; and
- Require State and Federal alignment, and bipartisan support.

Roy Hill takes the view that this is best achieved by the Australian Federal Government having primary responsibility for implementation of such a framework. Any sub-national schemes have the potential to result in duplication and increased costs of abatement. The WA State Government should support the National framework. Decision making processes need to promote the production of materials which drives a lower emissions global economy and not, for instance, restrict the production of minerals in WA, which could result in production in other jurisdictions or nations with lower environmental standards and consequently higher emissions (otherwise known as carbon leakage).

Future Mobility

- **What are the barriers to purchasing a low-emissions vehicle for your household or business?**
- **What can be done to facilitate the uptake of electric and other low-emission vehicles in Western Australia?**
- **How can we further encourage use of public transport and active transport, such as walking and cycling?**
- **How can we ensure that Western Australia isn't left behind in the transition to cleaner transportation?**

Currently there are no mass-produced electrically powered or engine large trucks that are efficient and suitable for operation at mine sites. Based on Roy Hill's consultations, the current cost of conversion is prohibitive with an overall capital cost which is circa three times as much as the diesel powered equivalent. In addition, the range of electric vehicles is not commensurate with diesel alternatives.

The use of diesel-fuelled trucks is extensive at mine sites as part of mining operations. Roy Hill suggests that the WA Government should encourage the research and development of efficient/suitable electrically-powered engines for such trucks with relevant manufacturers, which could lead to a large displacement of the use of diesel over time. The Australian Government should also consider how to incentivise industry to take up use of such trucks, given that such a change would lead to industry not then receiving the diesel fuel rebate which is currently in place.

Regional Prosperity

- How will climate change affect your regional community?
- What steps can we take to further enhance the resilience of our regions and our primary industries?
- How can we support the agricultural sector to participate in the low-carbon transition?
- What opportunities do carbon offset markets present for Western Australian land managers, including Aboriginal groups?
- What matters should the State Government take into account in developing a strategy for carbon farming in Western Australia?

The WA resources sector is a key contributor and often a primary employer, in regional communities. In some regional areas where the resources sector operates however, there is an absence of diversity in the economic base, which can leave regional communities more vulnerable to the inevitable commodity price cycles experienced in the resources sector. Roy Hill supports increased diversification of regional communities as a means through which to improve their resilience.

Waste Reduction

- What areas can we target to further reduce greenhouse gas emissions from waste?
- What can households, businesses and government do to reduce their waste and compost more?

Roy Hill suggests the WA Government encourage industry collaboration in the shared use of waste reduction facilities such as energy recovery facilities or tyre recycling facilities, utilising Pilbara hubs.

Resilient infrastructure and businesses

- What are the key climate risks for the primary industry or resources sectors?
- Do you currently assess the impact of physical climate risks on your business, assets or infrastructure?
- Is there information which would assist you to do this better?
- What are the best ways to enhance the resilience of public and private infrastructure?

Roy Hill generally designs, purchases and maintains equipment to be resilient through certain climatic conditions, however this is based on information and forecasts available. Increasing the accuracy of climatic information and forecasts will greatly assist with this design and maintenance work.

The WA Government, in cooperation with the Bureau of Meteorology and other Commonwealth agencies (such as CSIRO) could potentially develop a detailed climatic model or install an extensive weather monitoring network. This information should then be made publicly available to ensure the greatest use by the greatest number of people and companies, thereby supporting the State's overall resilience. An initiative such as this would support more than just the resources sector.

In addition, consistent and straightforward government expectations for the planning, rehabilitation and closure with respect to climate risks would be appropriate. In particular, the Paper explains that expenditure on dealing with matters like increasing fires is still almost wholly spent on dealing with the events and their aftermath. Better general planning and acts which abate or reduce the effect of such events is supported by Roy Hill.