

2 February 2024

**Mr Anthony Lean**  
**Secretary**  
**NSW Department of Climate Change, Energy, the**  
**Environment and Water**

Dear Mr Lean,

**Renewable Fuel Scheme – Rule 1 Consultation Paper**

A proudly Australian company with balance sheet strength, Fortescue is a global leader in large-scale, ultra-efficient and highly complex developments with a proven track record in developing and operating assets in remote and isolated locations. Fortescue has a strong focus on decarbonisation, evidenced by its industry leading target to achieve real-zero carbon emissions across our terrestrial mining operations by 2030. Through our business unit, Fortescue Energy, we are establishing a global portfolio of renewable energy, green hydrogen and derivatives, battery system and green technology projects and operations that are at the forefront of the global energy transition.

Fortescue Energy welcomes the opportunity to provide comment on the New South Wales (NSW) Government's Renewable Fuel Scheme (RFS) – Rule 1 consultation paper. Fortescue Energy strongly supports the introduction of the draft rule of the RFS as an incentive scheme to assist the scale and maturity of the nascent green hydrogen industry in NSW. Schemes such as the RFS will assist the industry bridge the 'green premium' gap between fossil energy and green energy while we transition to decarbonised energy systems.

Our primary concern with the proposed draft rule is the consideration to expand the RFS to fuels beyond green hydrogen. While we principally support the scheme's expansion, we are concerned that this may result in the existing scheme and target being diluted to capture a broader fuel set. This could undermine the RFS original intent to support green hydrogen deployment and domestic demand as other fuels may be cheaper in the short to medium term. These other fuels, usually biologically based, will likely not achieve the same carbon abatement in the long term as a robust green hydrogen production sector in NSW would, further impacting the RFS objectives. If the scheme is to be expanded, this must be through the creation of a separate biofuel target or a reservation of at least the current target for green hydrogen and its derivatives and a dramatically increased overall target.

NSW is a key market for Fortescue Energy as we seek to establish green hydrogen projects across the east coast of Australia. We look forward to working with the NSW Government to establish the green



hydrogen industry for domestic supply in NSW, building towards a green energy export scale industry. Please see below for responses to the proposals and questions raised in the discussion paper.

**Proposal 1: Renewable energy is the “eligible renewable energy sources” as defined in the forthcoming ‘GO Act 2024 (Cth).**

1. Do you support the proposal?

Yes.

2. What is your feedback on the proposal?

No feedback.

3. What risks may be associated with the proposal?

None.

**Proposal 2: Product GO certificates will be required to create renewable fuel certificates.**

1. Do you support the proposal?

Yes.

2. What is your feedback on the proposal?

No feedback.

3. What risks may be associated with the proposal?

Delays to the GO legislation.

**Proposal 3: The eligible production method is the electrolysis of water using renewable electricity.**

1. Do you support the proposal?

Yes.

2. What is your feedback on the proposal?

The eligible production method should not be expanded to include fossil fuel derived hydrogen. This would risk the climate agenda of the NSW Government as carbon capture technology has not been successful at capturing emissions at a rate satisfactory to address climate change.

3. What risks may be associated with the proposal?

The price reductions targeted for green hydrogen production under the NSW Hydrogen Strategy will rely heavily on NSW achieving reductions in renewable energy prices, which we believe will be achieved by NSW enabling the faster deployment of large-scale renewable generation developments, supported by successful implementation of the Commonwealth Capacity Investment Scheme.

**Proposal 4: The RFS emissions boundary is the hydrogen "production boundary" as defined in the forthcoming 'GO Act 2024 (Cth)**

1. Do you support the proposal?

Yes.

2. What is your feedback on the proposal?



For transparency, the voluntary tracking of emissions beyond the production boundary may give customers further information on the emissions profile of the certificates they are procuring.

3. What risks may be associated with the proposal?

None.

**Proposal 5: The Local Use Factor is 1 for all green hydrogen produced in NSW.**

1. Do you support the proposal?

Yes.

2. What is your feedback on the proposal?

It is critical that future local use factors do not exceed 1. Any green hydrogen used outside of NSW must be derated below 1. This will ensure that the RFS target is not diluted through additional certificates being created artificially by local use.

Further, how will local use be classified for green hydrogen that is used in the production of downstream green fuels and/or products such as ammonia. Will this product also be required to be consumed within NSW?

3. What risks may be associated with the proposal?

The use of green hydrogen in the transport sector may cause difficulties for ensuring local use factors are appropriately applied. Heavy haulage may see these fuels being consumed across the border in Queensland or in Victoria. A refuelling station on the border may present complexities that need to be worked through.

**Proposal 6: Green hydrogen must have a minimum purity of 99.9 volume percent at the point of exit from the RFS emissions boundary.**

1. Do you support the proposal?

Yes.

2. What is your feedback on the proposal?

No feedback.

3. What risks may be associated with the proposal?

None.

**Proposal 7: IPART will only accredit green hydrogen producers to create renewable fuel certificates.**

1. Do you support the proposal?

Yes.

2. What is your feedback on the proposal?

No feedback.

3. What risks may be associated with the proposal?

None.

**Proposal 8: For the production of green hydrogen:**

**Renewable Fuel Scheme – Rule 1 Consultation Paper**



- **electricity emissions must be zero by matching the electricity use with an equivalent number of renewable energy certificates**
- **direct combustion emissions must be less than 2.5% of total production emissions.**

1. Do you support the proposal?

Yes.

2. What is your feedback on the proposal?

Requiring the Accredited Certificate Provider to report on their production emissions will assist the NSW Government to track overall emission reductions achieved by the green hydrogen sector. This should be a simple requirement as the GO certificates will display these emissions.

3. What risks may be associated with the proposal?

None.

**Proposal 9: Renewable energy certificates:**

- **only include certificates eligible under the GreenPower Program Rules**
- **involve the surrender of certificates through an accredited GreenPower product.**

1. Do you support the proposal?

Yes.

2. What is your feedback on the proposal?

No feedback.

3. What risks may be associated with the proposal?

None.

**Proposal 10: The number of renewable fuel certificates is calculated using Equation 1.**

1. Do you support the proposal?

Yes.

2. What is your feedback on the proposal?

No feedback.

3. What risks may be associated with the proposal?

The rounding of certificates is pragmatic but may need to be paired with a quarterly or an annual true up process.

**Proposal 11: The duration of the production period is not less than the Product GO batch period and not greater than 12 months.**

1. Do you support the proposal?

Yes.

2. What is your feedback on the proposal?

No feedback.



3. What risks may be associated with the proposal?

None.

**Proposal 12: The sites listed in clause 9.4 of the draft RFS rule can only create renewable fuel certificates for producing green hydrogen above their annual baseline production.**

1. Do you support the proposal?

Yes.

2. What is your feedback on the proposal?

No feedback.

3. What risks may be associated with the proposal?

None.

### **Future work**

1. What are your general comments on the future work items?

### **Expanding the RFS**

We do not support an expansion of the scheme if it will result in a dilution of the original scheme's intent. The RFS is a key action in the NSW Hydrogen Strategy to increase green hydrogen production in NSW. If the current scheme is expanded to include biofuels, with the same production targets, the ability for it to support green hydrogen production will be significantly limited, or even removed entirely. Green hydrogen in the short-term, is likely to be one of the more expensive fuels that is considered in expanding the scheme so would naturally become the lowest priority for certificate generation to meet the schemes liability. By focusing on green hydrogen only, supply of that new fuel will increase supporting a more rapid decrease in cost and as a result, faster economic and emissions reduction benefits to NSW.

Establishing a separate target for biofuel production would support this sector and achieve additional decarbonisation while protecting the integrity of the original green hydrogen support mechanism. Further, if the scheme is expanded it should not be restricted to biofuels only and must consider synthetic fuels from a non-biological origin such as e-sustainable aviation fuel (eSAF).

### **Other production technologies**

We do not support the expansion of the scheme beyond green hydrogen. Green hydrogen is the only production method that guarantees zero emissions from the production method and supply chain. If carbon capture technology and upstream methane leakage advances to the point where the emissions are entirely captured, green hydrogen will have likely achieved or surpassed it in cost parity.

### **Stacking with other State or Federal incentives**

We support the ability for the RFS incentives to be stacked with other State or Federal incentives. It is very unlikely that the RFS revenue alone will support a scaled green hydrogen project to achieve financial close.



The cost of renewable energy and capital costs for these projects are still well beyond what is realistic to expect consumers to pay as a green premium compared to their fossil alternatives. Increasing supply sooner is therefore vital and stacking of government support is integral to achieving this and ensuring project viability.

### **Time of use matching**

Requiring renewable energy matched to hydrogen production would place a financial barrier on an industry already facing substantial commercial challenges. International regulations seeking to implement strict temporal correlation have recognised this challenge and if they are implementing temporal correlation, they will require it towards the end of the decade and will grandfather projects that invest ahead of this requirement. Our focus should be transitioning Australian grids to a significant penetration of renewable energy where temporal correlation delivers reduced benefits comparatively to the cost.

Thank you for the opportunity to comment on this consultation. If you would like to discuss any of the issues raised in this submission or to arrange a briefing, please contact [tom.parkinson@fortescue.com](mailto:tom.parkinson@fortescue.com) or me on the below details.

Yours sincerely

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**FORTESCUE ENERGY**