



BRIEFING

ERP2 bilateral meeting – 23 October 2024

Date:	22 October 2024	Priority:	High
Security classification:	In Confidence	Tracking number:	BRIEFING-REQ-0005567

Action sought		
	Action sought	Deadline
Hon Simeon Brown Minister for Energy	Note the contents of this briefing ahead of your meeting on 23 October 2024.	23 October 2024
Hon Simon Watts Minister of Climate Change	Note the contents of this briefing ahead of your meeting on 23 October 2024.	23 October 2024

Contact for telephone discussion (if required)			
Name	Position	Telephone	1st contact
Scott Russell	Manager, Energy Use Policy	9(2)(a)	✓
Nick Gillard	Senior Policy Advisor, Energy Use Policy		

The following departments/agencies have been consulted
Ministry for the Environment

Minister's office to complete:

Approved

Declined

Noted

Needs change

Seen

Overtaken by Events

See Minister's Notes

Withdrawn

Comments



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Purpose

To provide background for your bilateral meeting on Wednesday 23 October 2024, at 7:30pm.

Recommended action

The Ministry of Business, Innovation and Employment (MBIE) recommends that you:

- a **Note** the contents of this briefing, to support your meeting on Wednesday 23 October.

Noted

Scott Russell
Manager, Energy Use Policy
Building, Resources and Markets, MBIE

22 / 10 / 2024

Hon Simeon Brown
Minister for Energy

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Hon Simon Watts
Minister of Climate Change

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Background

1. You are meeting to discuss the second Emissions Reduction Plan (ERP2) ahead of the Cabinet paper's expected lodgement on 31 October 2024.
2. On 12 October 2024, the Minister of Energy agreed to include information on the ministerial biomass task force and strategic opportunities for additional industrial emissions reductions in the ERP2 energy chapter [BRIEFING-REQ-0004469 refers]. We have been working with other agencies to develop advice on implementing the ministerial biomass task force and other strategic opportunities, including how these could be reflected in ERP2.
3. We have placed particular focus on assessing Genesis' plans to use biomass to displace coal use at Huntly power station, which we understand the Minister of Climate Change would like to discuss at this meeting. This briefing has been drafted with support from the Ministry for the Environment (MfE).
4. This meeting is also an opportunity for you to discuss the importance of Huntly for electricity security of supply, particularly during the winter months and for dry years. Keeping the lights on is a key priority for the Government, and we consider this should be reflected in the work of the biomass taskforce.

Initial emissions analysis of Genesis' biomass plans for Huntly

5. On 16 October 2024, officials met with Genesis to hear more about their plans to deliver 300,000 tonnes of biomass in the form of torrefied black pellets to Huntly power station in Fiscal Year (FY) 2028. This commitment is roughly equivalent to typical use of coal in a non-dry year.
6. Officials' initial analysis suggests that delivering 300,000 tonnes of black pellets to Huntly in FY 2028 could result in 0.79 MtCO₂e emissions reductions in the second Emissions Budget period (EB2) and 1.97 MtCO₂e reductions in the third Emissions Budget period.

Key assumptions and limitations

7. The analysis is based on the following assumptions, all of which are based on Genesis' public statements:
 8. 300,000 tonnes of black pellets would be produced from 900,000 tonnes of wood waste used at Huntly each year from calendar year 2029 (the first full calendar year aligning with Genesis' stated objective to deliver in FY28).
 9. The cost is equivalent to coal on a Gigawatt hours (GWh) basis based on a future domestic supply.
 10. Biomass has a lower energy content than coal on a weight basis. Current testing suggests that 25 percent more biomass is required to achieve the same energy output as coal.
 11. The biomass Genesis intends to use will have an emissions factor that is likely to be at least 90 percent lower than their current use of coal. Final figures are not yet determined and will depend on additional emissions from transport and energy transformation.
12. The analysis is also subject to the following limitations:
 - a. This analysis has been done on a tight timeline and as such has not been integrated into the ENZ model, although we understand integration is not expected to change the results using the same input assumptions.

- b. The analysis represents a point in time and are subject to change as more information becomes available. As noted above, the assumptions underpinning these results rely on publicly available information. This is consistent with the wider approach to modelling in ERP2.
 - c. One of the key limitations of this analysis is the emissions factor for biomass pellets. The actual emissions associated with biomass pellets is not yet certain, and will depend on the production method of the pellets and any additional transport requirements. We will continue to monitor this situation as the technology and market develops.
13. MBIE officials have checked key assumptions with Genesis, who agreed they match their own expectations at a high level. However further work is needed to refine how we have captured Genesis' plans.

We propose including Genesis' Huntly biomass plans in ERP2

14. We consider that estimated emissions reductions from Genesis' Huntly biomass plans could be included in the ERP2 baseline. Note this approach comes with risks, given the quick turnaround of incorporating these assumptions. Officials will continue to work with Genesis over the rest of the week to refine our emissions estimates, with a view to including them in the ERP2 modelling.
15. The draft ERP2 Cabinet paper notes that in addition to existing policies, the Government is aware of emissions reduction projects by businesses that are not yet ready to include in this modelling. We consider Genesis' biomass plans to be an example of this.
16. We recommend ERP2 includes a short section as set out below, which highlights Genesis' work, our initial estimate of the associated emissions and a reference to the recently established ministerial biomass taskforce:
- a. Huntly power station, run by Genesis, is New Zealand's largest power station. Huntly provides back up power when we do not have enough renewable energy (for example, when the wind doesn't blow, the sun doesn't shine or the rain doesn't fall). One of Huntly's generation units currently runs on coal, which produced 1.35 MtCO_{2e} emissions from July 2023 to June 2024.
 - b. Genesis has a public goal of delivering 300,000 tonnes of biomass to Huntly power station by fiscal year 2028. Our initial estimates suggest this could deliver 0.79 MtCO_{2e} reductions in EB2, above what is currently included in the ERP2 modelling.
 - c. This is an example of the role biomass could play in the near future. The Government will establish a domestic ministerial biomass taskforce to take an economy wide approach to unlocking strategic opportunities within the sector to support emissions reductions and a secure supply of electricity.
17. Huntly plays a critical role in electricity security of supply, particularly during the winter months and for dry years. ERP2 should reflect biomass' potential role in supporting security of supply and energy diversification as well as achieving emissions reductions.
18. It will also be important for the ERP2 to outline that we are focussed on understanding the plans of these firms, and cautiously investigating the regulatory barriers preventing emissions reductions. We want to avoid raising expectations from these firms that the Government will make interventions in the market to subsidise their emissions reductions.

Next steps

19. Officials will continue to work with Genesis to:
 - a. refine our emissions estimates, with a view to including them in the ERP2 modelling ahead of lodgement next week
 - b. confirm final text for inclusion in the ERP2 publication.
20. Ministerial and Departmental consultation on the final ERP2 Cabinet paper closes on Tuesday 29 October 2024. MBIE will send the Minister of Energy's office an updated version of the energy chapter and suggested talking points for the 6 November Cabinet Economic Policy Committee.
21. Officials across MBIE, MfE and the Ministry for Primary Industries are developing advice on the biomass taskforce and propose briefing Ministers later this year.