

Department of Industry Science and Resources
Industry House
10 Binara Street
Canberra ACT 2601

To whom it may concern,

Re. Submission to Net Zero Fund: proposed design

I welcome the opportunity to contribute to the proposed design of the \$5 billion Net Zero Fund. Supporting the decarbonisation of large industry is good for Australian industry and manufacturing, good for communities that host manufacturing industry, and good for the environment.

Gas prices in Australia are soaring, and this has a significant detrimental impact on manufacturing businesses. In October 2025, the Australian Competition and Consumer Commission's report on the East Coast gas market states that retailer gas prices increased by 9% in the first half of 2025, compared to 2024.¹

Increases in gas prices impacts the viability of manufacturers,² including manufacturers in my electorate of Indi, putting local operations and jobs at risk.

The historically low price of gas, and its widespread adoption across the globe for industrial process heat applications, means it is still heavily used by the manufacturing sector. The slow update of renewables in this sector is also prolonging their reliance on gas. Australian industry accounts for 47% of Australia's final energy use, and 42% of this is used for process heat.³ However, excluding bagasse and wood waste, less than 1% of this process heat has been decarbonised.⁴

Industrial heat processes are complex and cost-effective decarbonisation of industry can be challenging. However, with the right information and expertise on renewable heat technology pathways and Australia's energy markets, it is possible for Australian manufacturers to adopt decarbonisation solutions that achieve significant energy savings, lower operational risk, and reduce reliance on gas.

¹ Australian Competition and Consumer Commission (2025), *Gas Inquiry 2017-2030*, <https://www.accc.gov.au/system/files/gas-inquiry-september-2025-interim-report.pdf>

² R Whitson (2025), ABC, *BlueScope chief demands urgent action on 'broken' gas market to save industry*, <https://www.abc.net.au/news/2025-10-08/bluescope-steel-mark-vassella-press-club-speech-on-gas-crisis/105856934>

³ ITP Thermal prepared for CSIRO (2025), *The Australian Industrial Process Heat Market: Towards Zero Emissions*, https://itpthermal.com/wp-content/uploads/2025/04/itpprocess-heat-report_final08042025.pdf

⁴ *ibid*

To address this expertise gap and support large scale industry to decarbonise, I make the following recommendation:

Recommendation 1: The Net Zero Fund should invest \$2 million to extend the Renewable Heat Industrial Decarbonisation Program (RHID) as a program led by the CSIRO for three years.

This submission addresses consultation questions one and three, regarding the types of projects that should be supported to achieve the Net Zero Fund's objectives, and how the fund can complement existing financing vehicles.

Renewable Heat Industrial Decarbonisation Program

The expert knowledge required to make informed and strategic investment into manufacturing decarbonisation technologies is a significant commercial barrier for manufacturers to pursue to these technologies.

The Renewable Heat Industrial Decarbonisation (RHID) Program, established by the CSIRO in 2023, provides objective, expert advice to companies on low-cost renewable heat technology options for process heat applications. This program is directly aligned with the Net Zero Fund's objective to support industrial facilities to decarbonise by investing in technologies and processes that reduce reliance on expensive gas and lowers facility emissions.

The RHID Program is technology agnostic, with a focus on deployment of commercially available renewable heat solutions. It supports technologies developed by Australian industry and has no linkages to CSIRO developed technologies or research and development activities.

The RHID program provides technoeconomic advice to companies on 'best-fit' renewable heat technology solutions for process heat applications at specific manufacturing sites. The Program focus is on technology solutions that deliver net energy savings, with low operational and integration risk, and with a clearly defined decarbonisation pathway. Once a RHID Assessment is completed, the Program then helps that company connect with engineers and technology developers.

Case Study: Mars Petcare Wodonga

The value of the RHID Program was recently demonstrated in my electorate of Indi. Over the next two years Mars Petcare are implementing a range of technology solutions that will see their Wodonga site become the first large-scale, steam-based food manufacturing facility in Australia to deliver a 100 percent renewable energy solution for their process heat and power needs.⁵

One way this is being achieved is through their current deployment of an electric Thermal Energy Storage (eTES) system that takes advantage of renewable energy arbitrage, by converting low-cost grid-connected renewable power into stored high temperature heat. This eTES system,

⁵ Australian Trade and Investment Commission (2025), *Mars Petcare Australia steams ahead with new concentrated solar thermal plant*, <https://international.austrade.gov.au/en/news-and-analysis/success-stories/mars-petcare-australia-steams-ahead-with-new-concentrated-solar-thermal-plant>

manufactured in Australia, is generating process steam and reducing the site's gas consumption.⁶

Another technology to be deployed at the Mars Wodonga site is a Concentrated Solar Thermal (CST) system that uses parabolic troughs to generate and store multiple hours of high-temperature process steam. Once completed in late 2026, the CST system will reduce the site's natural gas consumption by up to 50%.⁷ The remaining 10% of the site's gas consumption will be achieved through the purchase of locally produced hydrogen that will be inserted into the existing gas network.⁸

The renewable heat activities undertaken at Mars Petcare Wodonga have received significant in-kind contribution from CSIRO through their RHID Program. The RHID program helps manufacturers like Mars Petcare Wodonga to save money, improve their global competitiveness and decarbonise to reduce emissions.

Expanding the RHID Program

The RHID is an existing CSIRO program, established under the auspices of the ARENA funded Australian Solar Thermal Research Institute (ASTRI). ARENA funding for ASTRI ends in January 2026. Given the cessation of ASTRI, the CSIRO has not sought to promote the RHID Program, managing it as a pilot initiative on a first come basis. RHID Program assessments have been provided free of charge to companies under ASTRI, consistent with Australian government policies to support Australian industry competitiveness and productivity, and to accelerate industrial decarbonisation. To date, the CSIRO has undertaken over 40 site-based RHID Assessments, all of which have identified renewable heat solutions that reduce energy costs, operational risk, gas consumption and site-based emissions.

Interest in the RHID Program has now increased to the point where I understand CSIRO needs to formalise and provide more resources to the Program. Every week, new companies are approaching the RHID Team for assistance. With the Program at full capacity, based on current resourcing, and with existing program funding ending in January next year, these companies are being put on hold.

Extending funding for the RHID Program will support the advice provided to industry on decarbonisation technologies.

Recommendation: The Net Zero Fund should invest \$2 million to extend the Renewable Heat Industrial Decarbonisation Program (RHID) as a program led by the CSIRO for three years.

I understand that \$2 million over 3 years would allow the CSIRO to expand the Program and complete an additional 50 RHID Assessments, targeting net annual energy savings of over \$40 million, 6 PJ in reduced gas consumption, and accelerated deployment of Australian manufactured renewable heat technologies.

⁶ *ibid*

⁷ *ibid*

⁸ Mars (2024), *Mars Wodonga to be Australia's first large-scale steam-based manufacturing*, <https://www.mars.com/en-au/news-and-stories/press-releases-statements/mars-wodonga-australia-solar-thermal-plant>



I have had this policy costed by the Parliamentary Budget Office, attached as Appendix A.

I call on the Government to use the Net Zero Fund to expand the RHID. This program is directly relevant to the intended program outcomes from the Net Zero Fund, represents good value for money, and will support Australian industry decarbonisation of process heat manufacturing.

In achieving these outcomes, the Program will directly assist Australian manufacturing businesses to reduce their reliance on expensive gas in a way that's great for business, jobs, the environment, and our local economy.

Yours sincerely,

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Extend the Renewable Heat Industrial Decarbonisation Program	
Party:	Independent Member for Indi
Summary of proposal: The proposal would provide \$2 million over 3 years to increase funding to the Renewable Heat Industrial Decarbonisation Program (RHID), a Commonwealth Scientific and Industrial Research Organisation (CSIRO) led program. The proposal would be non-ongoing and start from 1 July 2025.	

Costing overview

The proposal would be expected to decrease the fiscal and underlying cash balances by around \$2 million over the 2025-26 Budget forward estimates period (see Table 1). This impact reflects an increase in departmental expenses.

The proposal would not be expected to have an impact beyond the 2025-26 Budget forward estimates period. A breakdown of the financial implications (including separate public debt interest (PDI) tables) over the period to 2035-36 is provided at Attachment A.

The Parliamentary Budget Office (PBO) has not made any assessment as to whether the specified funding would be sufficient to meet the objectives of the proposal.

Table 1: Extend the Renewable Heat Industrial Decarbonisation Program – Financial implications (\$m)^{(a)(b)}

	2025-26	2026-27	2027-28	2028-29	Total to 2028-29
Fiscal balance	-0.8	-0.6	-0.6	-	-2.0
Underlying cash balance	-0.8	-0.6	-0.6	-	-2.0

(a) A positive number represents an increase in the relevant budget balance; a negative number represents a decrease.

(b) PDI impacts are not included in the totals.

- Indicates nil.

Key assumptions and Methodology

This proposal is capped at a fixed amount, not indexed and spread over 3 years from the date of commencement. Departmental expenses are as specified in the proposal. It is assumed that no funds allocated to a given year are left unspent.

Financial implications were rounded consistent with the PBO's rounding rules.¹

¹ <https://www.pbo.gov.au/for-parliamentarians/how-we-analyse/pbo-rounding-rules>

Data sources

Commonwealth of Australia (2025) *Pre-election Economic and Fiscal Outlook 2025*, Commonwealth of Australia.

Attachment A – Extend the Renewable Heat Industrial Decarbonisation Program – Financial implications

Table A1: Extend the Renewable Heat Industrial Decarbonisation Program – Fiscal and underlying cash balances (\$m)^(a)

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	Total to 2028-29	Total to 2035-36
Expenses													
<i>Departmental</i>													
CSIRO - RHID Program	-0.8	-0.6	-0.6	-	-	-	-	-	-	-	-	-2.0	-2.0
Total (excluding PDI)	-0.8	-0.6	-0.6	-	-	-	-	-	-	-	-	-2.0	-2.0

(a) A positive number for the fiscal balance indicates an increase in revenue or a decrease in expenses or net capital investment in accrual terms. A negative number for the fiscal balance indicates a decrease in revenue or an increase in expenses or net capital investment in accrual terms. A positive number for the underlying cash balance indicates an increase in receipts or a decrease in payments or net capital investment in cash terms. A negative number for the underlying cash balance indicates a decrease in receipts or an increase in payments or net capital investment in cash terms.

- Indicates nil.

Table A2: Extend the Renewable Heat Industrial Decarbonisation Program – Memorandum item: Public Debt Interest (PDI) impacts – Fiscal and underlying cash balances (\$m)^{(a)(b)}

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	Total to 2028-29	Total to 2035-36
<i>Fiscal balance</i>	..	..	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.9
<i>Underlying cash balance</i>	..	..	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.2	-0.9

(a) As this table is presented as a memorandum item, these figures are not reflected in the totals above. This is consistent with the approach taken in the budget where the budget impact of most measures is presented excluding the impact on PDI. If the reader would like a complete picture of the total aggregate, then these figures would need to be added to the figures above. For further information on government borrowing and financing please refer to the PBO's online budget glossary².

(b) A positive number for the fiscal balance indicates an increase in revenue or a decrease in expenses or net capital investment in accrual terms. A negative number for the fiscal balance indicates a decrease in revenue or an increase in expenses or net capital investment in accrual terms. A positive number for the underlying cash balance indicates an increase in receipts or a decrease in payments or net capital investment in cash terms. A negative number for the underlying cash balance indicates a decrease in receipts or an increase in payments or net capital investment in cash terms.

.. Not zero but rounded to zero.

² [Online budget glossary – Parliamentary Budget Office \(pbo.gov.au\)](https://pbo.gov.au/)