

13 April 2026

Select Committee on the Taxation of Gas Resources
PO Box 6100
Parliament House
Canberra ACT 2600

Committee Secretariat

SUBMISSION

Attached is the body of my submission to the select committee.

The submission is relevant to item (a) in the committee's terms of reference as it discusses possible changes to the tax treatment of Australian oil and gas resources to achieve a more appropriate return to the community for the extraction of these resources.

The submission argues that, rather than introducing ad hoc changes to the tax treatment, like taxing gas exports, immediate improvements to the design of our Petroleum Resource Rent Tax (PRRT) could be made by, in essence:

- reducing the uplift rate to just the long-term government bond rate (LTBR) for all cash flow losses from development/production expenditure given the likely very low or nil risk of losing PRRT deductions once a project reaches its development phase;
- for projects in the development/production phase, adding prior uplifted cash flow losses from exploration expenditure to the common pool that attracts the LTBR uplift rate for that phase; and
- removing the current provision that limits deductible expenditure to 80 per cent of a taxpayer's assessable PRRT receipts.

The resulting redesign would provide conceptually-sound ongoing PRRT design with minimal impact on investment decisions while delivering an appropriate return to the community for its oil and gas resources.

Yours faithfully

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Submission structure

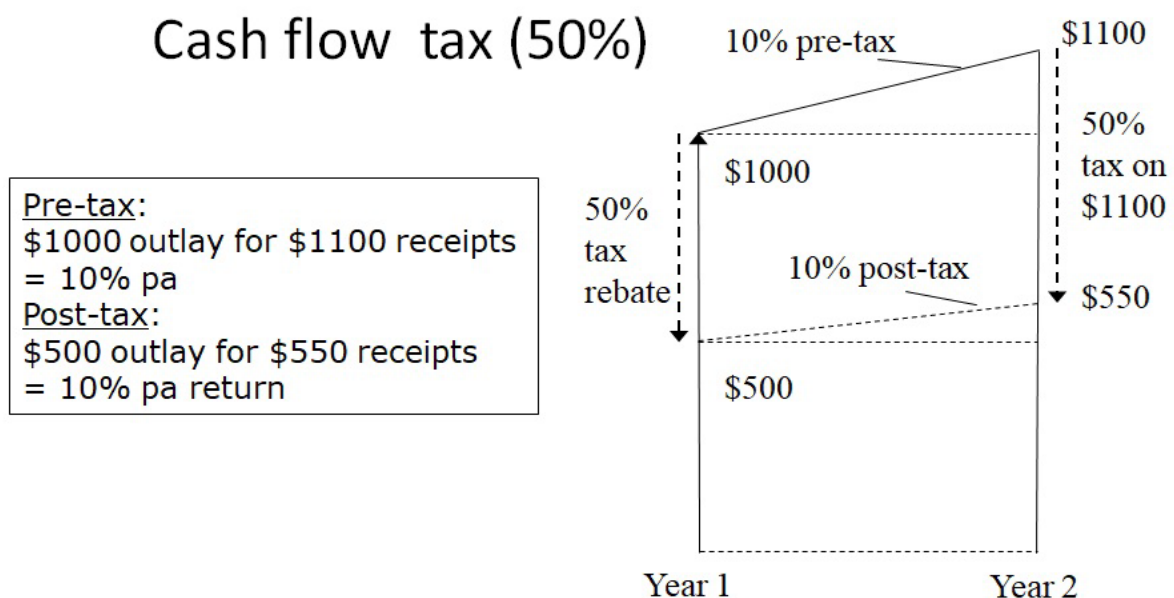
In looking at possible changes to the taxation of our oil and gas resources, the submission works through: tax principles; practical tax design; key historical design misconception and the resulting design defects in our Petroleum Resource Rent Tax (PRRT); and, immediate changes to PRRT design that would achieve a more appropriate return to the community for its petroleum resources.

1. Tax principles

Cash flow taxation offers the prospect of achieving balance between getting an appropriate return for the community for its oil and gas resources and not adversely impacting decisions to invest in accessing those resources.

The chart below shows how a 50% 'pure' cash flow tax (CFT) applies to a petroleum resource project where \$1000 capital expenditure in Year 1 produces \$1100 in Year 2 from any annual net receipts produced and the sale price of the resource's production licence (a 10% pa return).

Under the CFT: the \$1000 Year 1 negative cash flow (or CFT loss) attracts an immediate \$500 rebate (\$1000 times 50% tax rate); and, the \$1100 positive cash flow in Year 2 requires \$550 of tax payments (\$1100 times 50%). The \$500 Year 1 rebate comes either directly from government (providing what is termed 'immediate full loss offset'), or from the writing off of the Year 1 loss against positive cash flow from the taxpayer's other investments in the cash flow tax net. Post-CFT, \$500 in Year 1 to get \$550 in Year 2 means the project's 10% pre-tax return is maintained by the CFT, thereby minimising the impact on investment decision-making.



From the perspective of an investor using an unchanged 10% discount rate, no net tax is payable at all on the planned investment in the chart: discounting at 10% the \$550 of tax at end Year 2 back to end Year 1 gives \$500 – the amount of tax savings at that time.

Under the CFT, only expected cash flows in Year 2 that produce a return higher than 10% over the year would be viewed as being taxed by the investor applying a 10% pa discount, or 'hurdle', rate in

decision-making. The government is relying on the commercial nous of investors to achieve a net gain in tax revenue for the community.

2. Practical petroleum resource tax design

Governments typically don't embrace providing tax rebates for annual cash flow losses. CFT with its up-front government rebates – with no losses then carried forward – are replaced by 'resource rent tax', or RRT, design that has the losses carried forward year by year with interest ('uplift rate') applied. The uplifted, compounded amounts are deducted from later positive cash flows, seeking outcomes equivalent to up-front CFT rebates.

In circumstances where there is little or no risk of losing RRT deductions, it is appropriate that the RRT uplift rate should ideally be set at the risk-free LTBR. The 2017 Petroleum Resource Rent Tax Review ('Callaghan review') refers to a range of government and academic sources supporting uplift at LTBR in these circumstances.²

Design of the Resource Super Profits Tax (RSPT), proposed in 2010³ but not pursued, had its uplift rate set at LTBR even though it was to apply to a wide range of mining activities. That is because the RSPT came with government assurance that, in the event that later positive cash flow was insufficient to absorb accumulated uplifted losses, the government would provide delayed (and uplifted) cash rebates. There was therefore no risk that deductions for cash flow losses would be lost completely.

In contrast, cash rebates for eligible closing-down expenses aside, the Petroleum Resource Rent Tax (PRRT) does not provide delayed cash rebates for unutilised cash flow losses. PRRT uplift rates are set higher than LTBR because of the risk that uplifted carried-forward losses will be lost completely. Nevertheless, the Callaghan review observes that (p 72):

“... once developed, rare would be the (still risky) project that could not utilise PRRT deductions uplifted at LTBR.”

Attachment B to this submission uses a hypothetical petroleum project in its development/production phase with the PRRT uplift rate set at LTBR because later positive cash flows are sure to absorb all the uplifted losses. The ultimate tax savings shown in the attachment from this absorption of uplifted losses, when discounted back at the 'risk-free' LTBR, match what would have been an up-front cash rebate under a CFT. That creates a risk-free asset equivalent to an implicit loan from the investor to government for the CFT rebate equivalent, a loan sure to be acquitted by later positive project cash flows.

The analysis in the attachment seeks to make clear that this risk-free LTBR implicit loan should be dealt with quite separately from the risky cash flows of the petroleum project with a 15% pa pre-PRRT return. And, consequently, when there is no risk of losing PRRT deductions the uplift rate, set appropriately at LTBR, should not be confused with the project's 15% pre-tax return or investors'

² Callaghan M, Petroleum Resource Rent Tax Review: Final Report (Callaghan review), Australian Government, April 2017, p 65. Available at <https://treasury.gov.au/review/review-of-the-petroleum-resource-rent-tax/final-report>.

³ Australian Government, Australian Treasury, *The resource super profits tax: a fair return to the nation*, 2010. Available at: <https://catalogue.nla.gov.au/Record/4942197>.

associated hurdle rates. The Callaghan review's Box 4.1 (p 73) accords with the analysis in Attachment A.

3. Key misconception

From the Callaghan review and analysis in Attachment A, it is clear that expected rate of return – or hurdle rate – employed in commercial project assessment is a very different concept from PRRT uplift rates which ideally reflect the risk of losing PRRT deductions. Witness the single LTBR uplift rate under the RSPT across both the high-risk exploration phase and lower-risk production phase of resource projects – because there was no risk that RSPT deductions would be lost in either phase. And, reflecting the above observation of the Callaghan review, it can be argued that there is very low or even nil risk that PRRT deductions of our large scale gas projects – once approved for production – would not ultimately be fully offset against future positive cash flow.

And yet, a common misconception is that PRRT rates should be set on the basis of project hurdle rates rather than on the risk of losing PRRT deductions. That misconception was repeated across submissions to the Callaghan review. Such an approach may – and probably has – ensured the PRRT has not hindered investment in our petroleum reserves. But it has not ensured an appropriate return to the community for its resources.

4. PRRT design defects from misconception

The misconception regarding uplift rates has had a strong hand in some key changes to design of the PRRT.

The initial PRRT design – which came into effect in 1988 – employed a single uplift rate, LTBR + 15 percentage points, despite vast differences in the risk of losing PRRT deductions in the exploration phase (with its high chance of being unsuccessful) and the development/production phase (with early deductions almost certain to be offset against later positive cash flow). Moreover, views that the single uplift rate was, in any case, too high were later vindicated, particularly when the LTBR fell from what was then unusually high levels.⁴

In 1991, exploration expenditure was able to be transferred to taxpayers' other projects and the uplift rate for the development/production phase was reduced to LTBR + 5 percentage points (consistent with reduced risk of losing PRRT deductions). Consistent with standard practice, that reduced uplift rate only applied to losses from future development/production expenditures of existing projects. But, the reduced uplift rate did not apply to uplifted losses entering the development/production phase of new projects.

- Losses from own-project and transferred exploration expenditure continued to attract uplift at LTBR + 15 percentage points (uplift at the GDP deflator for very old exploration expenditure aside) even when a project entered its development/production phase.
- And, losses from exploration expenditure continued to be uplifted at that rate while losses from development/production expenditure were written off from available positive cash flow before the exploration losses despite exploration losses attracting the higher uplift rate.

⁴ A point that, incidentally, argues for uplift rates to set on the basis of LTBR times a factor.

- As explained in the Callaghan review⁵, this design had a major lessening effect on PRRT revenue, particularly for liquefied petroleum gas (LNG) projects with their high development expenditures and long lead times before production commences.

Following the Callaghan review, the uplift rate for future exploration expenditure was reduced to LTBR + 5 percentage points, the same as for development/production expenditure. Thus, a single uplift rate now applies in both phases, as with the original design, despite the vastly different risk of losing PRRT deductions in the two phases. And the legacy prior exploration expenditure with its uplift at LTBR + 15 continues to compound along.

Finally, as a result of perceptions of insufficient PRRT revenue being generated, from July 2023 deductible expenditure was limited to 80 per cent of a taxpayer's assessable PRRT receipts. Ensuring that PRRT is paid on at least 20 per cent of PRRT receipts led to an immediate increase in PRRT revenue from 2023/24, notably from major LNG projects. This ad hoc change is not consistent with conceptually-sound resource taxation based on principles of cash flow taxation – but understandable given the reduced PRRT revenue caused by the historical design misconception regarding uplift rates.

5. PRRT redesign

Rather than respond again with further ad hoc changes, this is an opportunity to learn from past PRRT design flaws. PRRT design changes could be made that are consistent with the principles of cash flow taxation and therefore able to provide a stable, tax-neutral base for investment decisions while providing an appropriate return to the community for its petroleum resources.

Such design would involve the following.

- Maintain the uplift rate of LTBR + 5 percentage points for exploration expenditure.
- Reduce the uplift rate for development/production expenditure to just LTBR given the very low or nil risk of losing PRRT deduction once a project reaches this phase.
- When a project enters the development/production phase, immediately add prior uplifted expenditure to a common pool that attracts the LTBR uplift rate for that phase (GDP deflator uplift for very old exploration expenditure could be retained, if desired).
- For projects already in the development/production phase, all current uplifted expenditures could be similarly pooled.
 - This would result in significant bring-forward of PRRT revenue from major gas projects which have benefited from many years of generous treatment from design flaws.
 - The current 80% deduction limit would also be removed to provide conceptually sound ongoing PRRT design.

Beyond these changes, Attachment B to this submission discusses additional, more esoteric redesign of the interface between PRRT and income taxation. This redesign would bolster the tax-neutrality properties of the PRRT in the presence of subsequent income taxation.

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⁵ Callaghan, above n 2, pp 76-80.

Attachment A: LTBR versus investor hurdle rate as basis for PRRT uplift rate

Table 1 illustrates the application of 40% PRRT on a hypothetical petroleum project where PRRT uplift is set at the steady 5% long-term government bond rate (LTBR) to achieve the equivalent of a \$400 CFT rebate for the up-front \$1000 cash flow loss in the table.

The project's pre-tax return is 15% pa (shown in Column (d) of the table) which means it might be just viable for an investor using a 15% hurdle rate for project assessment. It may seem that the PRRT's uplift rate should not be set at LTBR but at a level that at least matches the investor's 15% hurdle rate to ensure that the investor proceeds with the project. After all, the project's post-PRRT return (shown in Column (e) of the table) is 11.5% pa, below the investor's hurdle rate. But, were 15% uplift rate applied, there would be no tax payments at all in Column (f).

TABLE 1⁶

Cash flows of stylised petroleum project subject to 40% PRRT with LTBR uplift rate (a)

Year	Capital expenditure (b) \$	Net receipts (c) \$	Pre-tax cash flow (d) \$	Base after loss uplift (e) \$	PRRT payments (f) \$	Post-PRRT cash flow (g) \$	Cash flow after pure tax (h) \$	Cash flow (g) less (h) (risk-free asset) (i) \$
0	1000		-1000	-1000		-1000	-600	-400
1			0	-1050		0	0	0
2			0	-1103		0	0	0
3		780	780	-378		780	468	312
4		662	662	265	106	556	397	159
5		219	219	219	88	131	131	0
Return pa			15%			11.5% (j)	15% (j)	5% (j)

- (a) Negative cash flow compounded forward at 5% LTBR.
- (b) Only capital expenditure is \$1000 up front.
- (c) Gross receipts from product sale less operating costs.
- (d) Column (c) less Column (b).
- (e) Prior year negative cash flow uplifted by 5% LTBR plus pre-tax cash flow this year.
- (f) 40% times any positive tax base after loss uplift (Column (e)).
- (g) Pre-tax cash flow less tax payments in Column (f).
- (h) Pre-tax cash flow in Column (d) times 60% or the cash flow that would have resulted from a 40% CFT reducing all positive and negative cash flows immediately by 40%.
- (i) Aggregate post-PRRT cash flow less post-tax cash flow if a CFT were applying – that is, Column (g) less Column (h).

⁶ Taken from Table 4, p 46, in Mayo W, *Taxing resource rent: concepts, misconceptions and practical design*, Kyscope Publishing, 2013. Available at www.kyscope.com.au.

- (j) The return of aggregate post-tax cash flow is reduced below pre-tax return, requiring the splitting of aggregate post-PRRT cash flows into risky (Column (h)) and risk-free (Column (i)) components.

In fact, the 11.5% pa post-PRRT return is misleading in the situation depicted in Table 1 where the compounded and uplifted losses in Column (e) are eventually fully absorbed by the project's later positive cash flow. Certainly, a CFT-style cash rebate of \$400 is not provided up front for the \$1000 of Year 0 cash flow loss. But, a PRRT uplift rate of only LTBR (assumed 5% in the table) is needed to ensure that the investor receives the equivalent of the CFT rebate in delayed terms. That equivalence may be thought of as an up-front \$400 risk-free loan by the investor to the government, a loan which is sure to be repaid via reduced PRRT payments.

Thus, the 11.5% return is misleading because it comes from combining the 5% risk-free loan to government with the risky project flows that have the 15% pa return shown in Column (d). Sound project assessment requires the flows of the investor's risk-free loan to government to be excised from the aggregate post-PRRT flows in Column (g). That is achieved in somewhat circular fashion:

- Because the \$400 loan to government is equivalent to an up-front CFT rebate, excising its flows from aggregate post-PRRT flows should result in flows matching those had a 40% CFT been applied to the risky project rather than a 40% PRRT with LTBR loss uplift.
- Applying a 40% CFT to the project's pre-tax Column (d) cash flows is shown in Column (h), its 15% pa return matching the risky project's pre-tax return, as expected.
- Subtracting the equivalent of post-CFT cash flows in Column (h) from aggregate post-PRRT flows in Column (g) gives the investor's risk-free loan to government in Column (i), with its return of 5% pa matching the LTBR of 5% pa, as expected. This shows that of the \$780 and \$556 aggregate PRRT savings in Years 3 and 4 (in Column (g)), \$312 and \$159 come from the savings that represent a repayment of the implicit loan to government for the lack of an up-front CFT rebate.

Attachment B: Possible additional PRRT redesign

Further possible refinement of the PRRT is highlighted by Table 1 in Attachment A of the submission that illustrates the operation of the PRRT with LTBR uplift applied to a hypothetical project in its development/production phase.

Australia's PRRT applies before income tax. Currently, the PRRT and subsequent income tax are blended by having PRRT payments – like the two payments in Column (f) of Table 1 – simply deductible for income tax purposes.

Alternative blending of PRRT and income taxation would be less distortive of investment decision-making in circumstances where the risk of losing PRRT deductions is essentially nil.⁷ As with the sound approach to assessment of project viability discussed in Attachment A, separated post-PRRT tax flows for the risky project (as if a CFT, rather than the PRRT applied) would be computed – as in Column (h) in Table 1. Those flows would feed directly into income tax assessment.

While the investor in Table 1's project would only be able to write off \$600 of capital investment in Year 0 for income tax purposes (rather than \$1000), the investor would only be assessed for income tax purposes on 60% of the net receipts in Column (c). PRRT payments would no longer be deductible

In addition, the risk-free asset in Column (i) of Table 1 would ideally be subject to income taxation, reducing its 5% pa return in Table 1 to 3.5% pa for an investor on a 30% tax rate. In the likely event that the risk-free asset is not separately assessed for income tax purposes, the uplift rate would ideally be after-income tax LTBR (LTBR cut by the investor's income tax rate), not LTBR – indirectly producing the required 3.5% return for the 30% tax investor.

Exploration expenditure would continue to be immediately deductible for income tax purposes.

Under this additional refinement, with flows equivalent to post-CFT flows feeding into income taxation, the tax-neutrality properties of the PRRT would be completely uninfluenced by income tax design. Compared to current blending of PRRT and income tax, the refinement would reduce investment distortions and likely lower the overall PRRT and income tax impact on investors (with the size of the lower impost reduced the greater the generosity of income tax design).⁸

As with the setting of LTBR as the uplift rate in the development/production phase, where the risk of losing deductions is not negligible, this refinement is not practicable.

⁷ For details of this additional redesign see Mayo W, "Combining resource rent and income taxation for neutral impact", *Australian Tax Forum* 34 (3), 2019, pp 585-627. Available at www.kyscope.com.au.

⁸ Mayo, above n 7, pp 601-603.