



**Australian Government**

# **Review of the Petroleum Resource Rent Tax**

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Issues Note  
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# CONTENTS

Consultation Process .....	iv
Request for feedback and comments .....	iv
Purpose of the Review .....	1
Terms of Reference .....	1
Review Process .....	1
1. Taxing Australia's Oil and Gas Resources .....	2
1.1 Petroleum Resource Rent Tax.....	2
1.2 Crude Oil Excise.....	3
1.3 Commonwealth Petroleum Royalties .....	3
1.4 State and Territory Petroleum Royalties .....	4
1.5 Interaction between PRRT, Excise and Royalties .....	5
2. The Revenue Collected From PRRT, Excise and Royalties Australia's Oil and Gas Resources.....	6
2.1 The Revenue Raised From Oil and Gas Extraction Is Declining .....	6
2.2 Factors Influencing Revenue Collection.....	7
3. Issues Associated with the Design and Operation of the Petroleum Resource Rent Tax .....	9
3.1 Carry forward losses and uplift rates .....	9
3.2 Order and Transferability of deductions .....	11
3.3 Electing and Deducting the Starting Base .....	12
3.4 Coverage .....	13
3.5 Gas Transfer Pricing Arrangements.....	14
4. Issues Associated with the Design and Operation of the Crude Oil Excise .....	15
4.1 Coverage .....	15
4.2 Exemptions and Excise Thresholds .....	15
5. Issues Associated with the Design and Operation of Commonwealth Royalties .....	17
5.1 Output based Royalties.....	17
5.2 Royalty Administration .....	18
Issues for Comment .....	19
References.....	20

## CONSULTATION PROCESS

### Request for feedback and comments

Interested parties are invited to comment on the issues raised in this note by **Friday 3 February, 2017**.

While submissions may be lodged electronically or by post, electronic lodgement is preferred

### Closing date for submissions: Friday 3 February

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# REVIEW IN THE OPERATION OF THE PETROLEUM RESOURCE RENT TAX

## PURPOSE OF THE REVIEW

On 30 November 2016, the Australian Government announced a review into the operation of the Petroleum Resource Rent Tax (PRRT), crude oil excise and associated Commonwealth royalties to help better protect Australia's revenue base and ensure that oil and gas projects are paying the right amount of tax on their activities in Australia.

The review will advise the Government to what extent Commonwealth oil and gas taxes and royalties are operating as intended, having regard to the need to provide an equitable return to the Australian community from the extraction and sale of these resources without discouraging investment in exploration and development.

## TERMS OF REFERENCE

The Terms of Reference for the review, released by the Treasurer on 30 November 2016, are:

- The review will have regard to the need to provide an appropriate return to the community on Australia's finite oil and gas resources while supporting the development of those resources, including industry exploration, investment and growth.
- The review will examine the design and operation of the PRRT, crude oil excise and associated Commonwealth royalties that apply to the onshore and offshore oil and gas industry, having regard to economic conditions in the industry and trends over time.
- The review will also consider the impact of previous policy decisions on Commonwealth revenue.
- Drawing on international experience, the review will make recommendations to the Government on future tax, excise and royalty arrangements having regard to revenue adequacy, efficiency, equity, complexity, regulatory costs and the impact on the industry generally.
- The review will also examine other related matters.

## REVIEW PROCESS

The review is being led by independent expert Michael Callaghan AM, with the support of a Secretariat within the Department of the Treasury. The Secretariat comprises officers from the Department of the Treasury, the Australian Taxation Office and the Department of Industry, Innovation and Science. The Secretariat will also draw on expertise from across the oil and gas industry and academia as required. In addition to the invitation for submissions, the review team will consult widely with interested parties. The review will report back to the Government by April 2017 with its recommendations.

# 1. TAXING AUSTRALIA'S OIL AND GAS RESOURCES

In Australia, the Commonwealth and state and territory (state) governments generally own, on behalf of the community, petroleum resources and impose charges on oil and gas extraction to ensure that the community receives a benefit from their development. Charges on the extraction of resources in Australia include specific Commonwealth and state government taxes.

## 1.1 Petroleum Resource Rent Tax

The PRRT was introduced in 1988 and is designed to capture the 'economic rent' associated with the development of petroleum projects. A finite supply of high quality, accessible petroleum deposits means that there are pockets of petroleum resource projects offering the prospect of very high returns, well in excess of the returns necessary to attract commercial investment. Those high excess returns represent pockets of economic rent.

The PRRT was introduced because a number of inherent deficiencies were identified with the existing Commonwealth and state excise and royalties regimes on petroleum products. While these taxes are relatively easy to collect and difficult to avoid, they were seen to interfere with investors' search for the best returns as they are based on volume or value of production, rather than on the profitability of petroleum projects. This means profitable projects may end up paying the same amount of tax as marginal projects on a per volume basis. This could distort behaviour by discouraging exploration activity and investment in marginal projects which could result in some petroleum fields not being developed, which in turn could have a detrimental effect on the nation's overall productivity and long term growth.

Cash flow taxation is the conceptual underpinning of the PRRT. A cash flow tax applies tax to profitable investment outcomes and gives back to unprofitable outcomes in proportion to the rate of cash flow taxation. The PRRT taxes profitable outcomes, just like a cash flow tax, but does not provide general cash rebates for annual tax losses (negative cash flows). Tax losses are instead carried forward with uplift to be offset against the future positive cash flows of projects.

The PRRT is assessed on a petroleum project basis and is levied at a rate of 40 per cent of a project's taxable profit. Taxable profit is calculated by deducting a project's eligible project expenses from the assessable receipts derived from the project. Deductible expenditure broadly includes those expenditures, whether capital or revenue in nature, which are directly incurred in relation to the petroleum project.

Where a project incurs deductible expenditure that exceeds its assessable receipts in a financial year, the excess is carried forward and uplifted to be deducted against future assessable receipts derived by the project in future years. PRRT payments are deductible for company tax purposes.

PRRT applies to profits generated from the sale of marketable petroleum commodities (MPCs). An MPC is defined as: stabilised crude oil, sales gas, condensate, liquefied petroleum gas, ethane, shale oil or any other product declared by regulation to be an MPC. Value-added commodities such as liquefied natural gas (LNG) and methanol are excluded from the regime.

The taxing point in relation to a particular petroleum project occurs where a MPC produced from a petroleum project becomes an 'excluded commodity'. In effect the point at which a

marketable petroleum commodity becomes an 'excluded commodity' delineates the boundary between 'upstream operations' which fall within the PRRT and 'downstream operations' which do not. In other words, it is this point that determines assessable receipts to be brought to account and which eligible project expenditures incurred are deductible in determining PRRT taxable profit.

An MPC becomes an excluded commodity when:

- it has been sold;
- after being produced, it has been further processed or treated;
- it has been moved away from the place of its production other than to storage site adjacent to the place of its production; or
- it has been moved away from a storage site adjacent to the place of its production.

From 1 July 2012, PRRT applies to oil and gas production onshore and offshore, including the North West shelf.

## **1.2 Crude Oil Excise**

In addition to PRRT, the Australian Government applies crude oil excise to eligible stabilised crude oil and condensate production from coastal waters, onshore areas, and the North West shelf project area in Commonwealth waters.

The rate of excise applied depends on the annual rate of production of crude oil and condensate, the date of discovery of the petroleum reservoir and the date on which production commenced. The first 30 million barrels extracted from a field are exempt from excise, and variable excise rates apply to annual production at different levels. A producer's excise liability is worked out by applying the relevant crude oil excise rate to the volume weighted average realised selling price (VOLWARE price).

## **1.3 Commonwealth Petroleum Royalties**

Offshore petroleum royalties currently apply to the North West shelf project area. The royalties apply on the value of all petroleum production (including gas) and is shared with Western Australia, with approximately two thirds of collections paid to Western Australia and one third retained by the Commonwealth.

The royalties are levied as a percentage of the wellhead value which is calculated by subtracting excise, allowances for post-wellhead capital assets and depreciation, and operating costs, such as processing and transportation, from sales receipts. The royalty rate for the North West shelf is set at between 10 per cent of the wellhead value for primary production licences and 11 and 12.5 per cent for secondary production licences.

In addition to North West shelf royalties, the Commonwealth also receives royalties from Barrow Island (a special onshore area), from some onshore production in Western Australia derived from pre-1979 leases, and from the Joint Petroleum Development Area with Timor Leste.

The Barrow Island royalty (Resource Rent Royalty) is shared between the Commonwealth and the Western Australian government at a ratio of 75:25. Petroleum produced within the Joint Petroleum Development Area is subject to fiscal terms outlined in a Production Sharing

Contract (PSC). PSCs are agreements between the parties to a petroleum extraction facility and the Australian and Timor Leste governments regarding the percentage of production each party will receive after the participating parties have recovered a specified amount of costs and expenses.

## 1.4 State and Territory Petroleum Royalties

Onshore royalties are levied on petroleum production and are collected by the states. The rate is generally set at 10 per cent of net wellhead value of production.

Table 1 is a summary of the tax regimes applying to each oil and gas region in Australia.

**Table 1 — Summary of Regimes Applicable to Each Region**

	PRRT	Excise	State Royalties	Commonwealth Royalties	Resource Rent Royalty (RRR)
<b>Commodities</b>	Any naturally occurring hydrocarbon (or naturally occurring mixture of hydrocarbons), whether in gaseous, liquid or solid state. Includes oil shale.	Crude oil and condensate	Any naturally occurring hydrocarbon (or naturally occurring mixture of hydrocarbons), whether in gaseous, liquid or solid state. <sup>(a)</sup>	Any naturally occurring hydrocarbon (or naturally occurring mixture of hydrocarbons), whether in gaseous, liquid or solid state.	Any naturally occurring hydrocarbon (or naturally occurring mixture of hydrocarbons), whether in gaseous, liquid or solid state. Excludes oil shale.
<b>Onshore b</b>	Yes (since 1 July 2012)	Yes	Yes	No	Barrow Island only
<b>Offshore</b>	Yes (since 1988)	North West shelf only	No	North West shelf only	No
<b>North West shelf (special offshore area)</b>	Yes (since 1 July 2012)	Yes	No	Yes. Shared with Western Australia <sup>(c)</sup>	No
<b>Barrow Island (special onshore area)</b>	Yes	No (replaced with RRR)	No (replaced with RRR)	No (replaced with RRR)	Yes (since 1985) <sup>(d)</sup>
<b>Bass Strait (offshore)</b>	Yes (since 1990-91) <sup>(e)</sup>	No	No	No	No

(a) Slight variations across states.

(b) Including within three nautical miles of the Australian coastline. The Commonwealth is also entitled to 40 per cent of royalties obtained by Western Australia from petroleum developments derived from pre-1979 leases which are located in the coastal waters region adjacent to Western Australia.

(c) These royalties are shared with Western Australia according to the formula set out in the *Offshore Petroleum and Greenhouse Gas Storage Act 2006 — Section 75* (approximately one third to the Commonwealth, two thirds to Western Australia).

(d) Shared between the Commonwealth and Western Australia 75:25.

(e) Production in Bass Strait changed from a royalty/excise regime to PRRT in 1990-91.



## **1.5 Interaction between PRRT, Excise and Royalties**

Commonwealth and state resource tax payments are creditable against the assessable receipts of PRRT projects. This ensures that petroleum projects are not subject to double taxation. Such resource taxes include crude oil and condensate excise.

Payments of resource taxes are converted to a deduction equivalent by dividing the value of the expenditure by the PRRT rate. The converted amount is then deducted against the assessable receipts of the project. Resource tax expenditures that are not used in a given year are uplifted at the long term bond rate plus 5 percentage points.

## 2. THE REVENUE COLLECTED FROM PRRT, EXCISE AND ROYALTIES AUSTRALIA'S OIL AND GAS RESOURCES

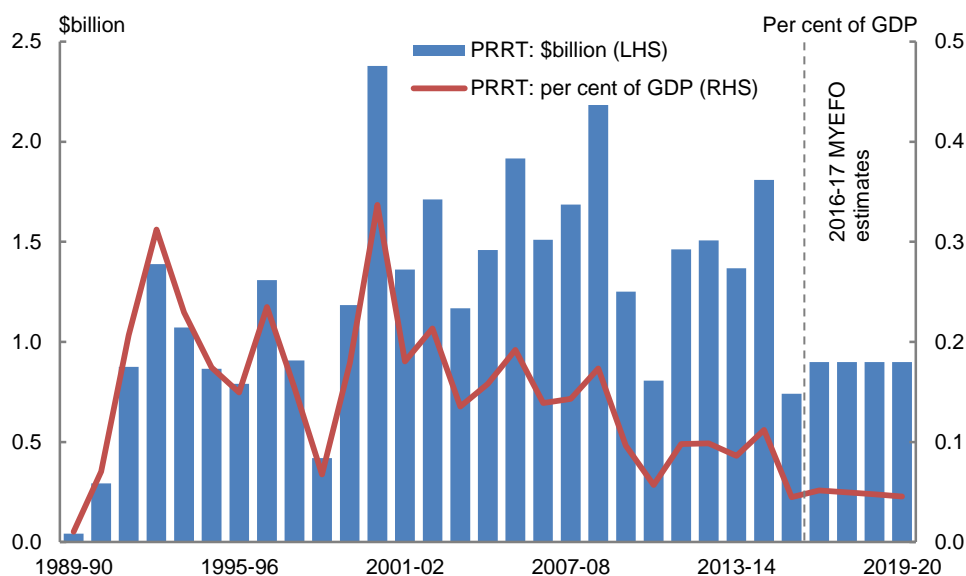
### 2.1 The Revenue Raised From Oil and Gas Extraction Is Declining

#### 2.1.1 Petroleum Resource Rent Tax

The PRRT is designed to capture profits after a return on the costs of development of a project has been realised. Oil and gas projects have long lead times and involve significant capital investments before any revenue is realised. The design of the PRRT means that projects do not pay tax until all their prior eligible expenditures have been deducted.

Throughout the 1990s and early 2000s, PRRT receipts averaged around 0.2 per cent of GDP, peaking at almost \$2.5 billion in 2000-01. From 2002-03 to 2015-16, PRRT receipts have been lower as a proportion of GDP, averaging around 0.12 per cent of GDP. Receipts are forecast to be around 0.05 per cent of GDP (around \$900 million) per year over the forward estimates. Chart 1 illustrates PRRT collection and forecasts. The reduction in receipts from PRRT reflects subdued oil and gas prices, declining production in mature fields and large amounts of deductible expenditure from the recent investment boom.

Chart 1 — PRRT Collections and Forecasts

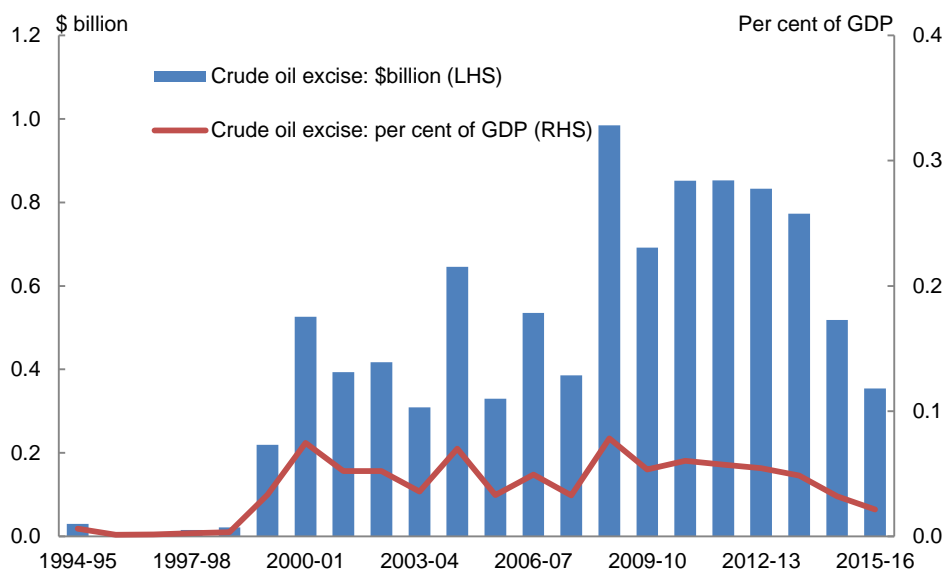


#### 2.1.2 Crude Oil Excise

Crude oil excise collections have varied over time due to past policy decisions that have altered the regime, including the introduction of a tax exemption for the first 30 million barrels of production (introduced in 1987), a past exemption for condensate production (between 1977-2008), and the various excise rates that exist depending on when the resource was discovered.

Crude oil excise receipts averaged around 0.05 per cent of GDP from 2000-01 to 2011-12 but have been declining since 2012-13. Receipts from crude oil excise are expected to remain subdued due to the weaker oil price outlook. Chart 2 illustrates crude oil excise collections.

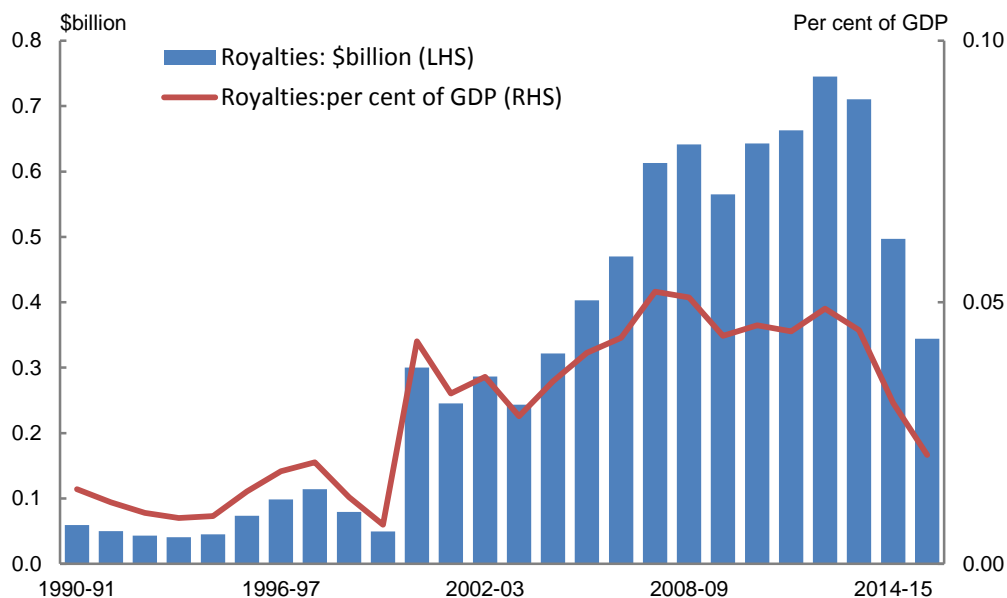
**Chart 2 — Crude Oil Excise Collections**



### 2.1.3 Commonwealth Royalty Collections

The Commonwealth receives royalties for petroleum production in the North West shelf, Barrow Island, from some onshore leases in Western Australia (developed before 1979) and the Joint Petroleum Development Area. From 2000-01 to 2011-12, the Commonwealth share of royalty collections averaged around 0.04 per cent of GDP. However, revenue collections have been declining since 2012-13.

**Chart 3 — Commonwealth Royalty Collections**



## 2.2 Factors Influencing Revenue Collection

Revenue receipts from the PRRT, crude oil excise and royalties are influenced by the price of oil, levels of investment and production. In addition, PRRT receipts are also influenced by the level of deductible expenditure that producers hold.

## Public Commentary

There have been a number of public comments on the revenue collected from the oil and gas industry under the PRRT, excise and royalty regimes. The focus has been on the decline in PRRT revenue collections while gas exports are growing significantly.

A revenue comparison done for the International Transport Workers' Federation by the Tax Justice Network reported:

By 2021, Australia's LNG export volumes are predicted to exceed those of Qatar, reaching 103.72 cubic meters (bcm) while Qatar's output falls to 101.7 bcm. The Australian Government is expected to receive only \$0.8 billion in PRRT revenues in 2019-20, or 1.97 per cent of LNG export sales. At the same time, the Government of Qatar is forecast to collect \$26.6 billion in royalties from LNG exports, equivalent to a share of 23.35 per cent.

International Transport Workers Federation (2016). "Australian LNG Exports to Boom, Tax Revenue is a Bust". ITF Briefing Paper, September 2016, p. 1.

In response to such comments, the oil and gas industry have indicated that the PRRT is operating as intended and has contributed to attracting significant investment in the oil and gas industry. Deputy Chief Executive of the Australian Petroleum Production and Exploration Association, Mr Noel Mullen, commented:

Some activists, unions and journalists are claiming the Australia is not collecting enough from LNG projects under the petroleum resource rent tax (PRRT). These critics say that the investment costs that oil and gas developers can offset before any profit tax is paid are too generous. But oil prices rise and fall. The current low oil price – to which LNG prices are linked – means that there is now little profit against which to write off that expenditure.....PRRT gives a strong return to the nation when oil and gas prices are high. And it keeps projects operating when prices are low. By smoothing out these highs and lows it also encourages investment. Eventually, oil prices will rise again – as they always do – and over time the new generation of LNG projects will pay off their development costs. They will deliver substantial PRRT payments, in addition to the other tax, excise and royalty payments that they are already contributing.

Mullen, Noel (2016). " PRRT Attacks are Poorly Defined". APPEA, 18 October 2016.

### **3. ISSUES ASSOCIATED WITH THE DESIGN AND OPERATION OF THE PETROLEUM RESOURCE RENT TAX**

#### **3.1 Carry forward losses and uplift rates**

In Australia, oil and gas projects generally require significant upfront capital investments and have long lead times before production begins. This means that producers face negative cash flows from eligible expenditure incurred on a project long before they have the revenue stream to counter these negative flows.

The PRRT is levied on the taxable profits of a project, but there is no refund when the producer is making a PRRT loss from a project. As noted previously, PRRT losses are preserved and carried forward and uplifted so that they can be used as a deduction against future assessable receipts from the project in later years. The uplift rate preserves the value of the project's PRRT losses, substituting for the lack of an immediate refund. The uplift rate also includes a premium to compensate for the risk that the project may never get to use its losses.

The uplift rate applied to augment or maintain the value of undeducted eligible expenditure depends on whether general project or exploration expenditure is involved, and the time at which the expenditure is incurred. The general PRRT uplift rate was initially set at the long term bond rate plus 15 percentage points. The uplift rate for general expenditure was reduced from 15 percentage points to 5 percentage points for general project expenditure after 1 July 1990.

Table 2 contains further information on uplift rates. These uplift rates influence the amount of tax that will ultimately be paid by the project.

#### **Public Commentary**

The uplift rates in the PRRT system have been described by some commentators as overly generous and providing more compensation to a project than is necessary to reflect the risk that this expenditure may not be utilised.

The Australia's Future Tax System Review noted:

Although the current PRRT collects a more stable share of rents in varying economic conditions, it fails to collect an appropriate and constant share of resource rents from successful projects due to uplift rates that over-compensate successful investors for the deferral of PRRT deductions. For example, an uplift rate of the long term bond rate plus 5 percentage points (currently 11 per cent in total) applies to general expenditure. On average, this rate is higher than the corporate bond rate, which is a useful proxy to compensate investors in the absence of a full loss offset.

Australia's Future Tax System Review (2009). "Australia's Future Tax System: Report to Treasurer". Commonwealth of Australia, December 2009, p. 227.

Dr Craig Emerson, resource economist and designer of the original PRRT, has noted:

The original deductions for exploration activities could be 'too generous' and concessions granted by the Howard Government in the mid-2000s may have undermined the regimes integrity.

Mather, Joanne (2016). "Petroleum Resource Rent Tax Architect Says Deductions Could be 'Too Generous'". *Australian Financial Review*, 1 December, 2016.

Mr Ken Willett, a specialist in economic and policy issues in exploration and mining, noted:

Setting a high carry-forward rate to compensate for inadequate loss offsets would tend to favour low risk investments and very large companies with low costs of capital and better loss offset opportunities. In those cases, overcapitalisation or "gold-plating" may be induced.

ACIL Tasman (2012). "Review of Australia's Offshore Petroleum Exploration Policy". Prepared for Commonwealth Department of Resources, Energy and Tourism, 3 January, 2012, p. 186.

The provision of two widely differing carry-forward rates for exploration expenditure is problematic for four reasons. First, the analytical bases for these rates are not known, and rate selection appears to have been arbitrary. Second, each rate could encourage too much exploration investment in some cases and discourage activity in other cases. Third, it could be expected that exploration activity undertaken within 5 years of the date of lodgement of data required for the grant of a production licence would involve less risk and uncertainty than earlier exploration, but the allowed carry-forward rate is much higher in the former case. Fourth, it is possible that the provision of a zero real (GDP deflator) carry-forward rate for early exploration may have been selected to offset the tendency of work program bidding and highly conditional tenure to cause too much exploration, too soon, but it would be better to attack the cause of the problem, the flawed tenement regime, rather than a symptom. Setting a low carry-forward rate would discourage activities involving high risk and uncertainty, not just provide an offset to the adverse resource misallocation and associated resource rent dissipation effects of the tenement regime.

ACIL Tasman (2012). "Review of Australia's Offshore Petroleum Exploration Policy". Prepared for Commonwealth Department of Resources, Energy and Tourism, 3 January, 2012, p. 186-187.

The test for PRRT deductibility does not use the concept of 'necessarily incurred' which is used for income tax purposes. On the broader question of the scope of deductions, the *Policy Transition Group (PTG) Report to the Australian Government on New Resource Tax Arrangements* provided advice on deductible expenditure under the PRRT. The PTG stated:

While it is not within the PTG's terms of reference to make recommendations in respect of the design of the PRRT, other than in relation to transitioning projects, the PTG advises that the test for deductibility could be amended to one of expenditures necessarily incurred in carrying on activities in relation to a petroleum project (upstream of the taxing point) from 1 July 2012.

Policy Transition Group (2010). "Policy Transition Group Report to the Australian Government: New Resource Tax Arrangements". Commonwealth of Australia, 2015, p. 105.

The PTG also recognised the PRRT meaning of exploration is different to the income tax meaning of exploration and said:

While it is not within the PTG's terms of reference to make recommendations in respect of the design of the PRRT, other than in relation to transitioning projects, the

PTG advises aligning the definition of exploration expenditure under the PRRT to that under income tax.

Policy Transition Group (2010). "Policy Transition Group Report to the Australian Government: New Resource Tax Arrangements". Commonwealth of Australia, 2015, p. 105.

### 3.2 Order and Transferability of deductions

Under the PRRT, assessable receipts are reduced by eligible deductible expenditure, incurred in accordance with the deduction ordering rules, to determine the PRRT taxable profit. The current tax system has ten categories of deductible expenditure, each with different uplift rates. In addition, some categories of expenditure are transferable, meaning they can be transferred between projects, rather than being quarantined to the project in which they were incurred. There are number of conditions that must be met before the expenditure can be transferred – first, the project receiving the transferred expenditure must have a notional taxable profit, second, the entity can only transfer so much transferable exploration expenditure to reduce the taxable profit of the receiving project to zero, and third, a common ownership rule must be satisfied.

Table 2 outlines the order of deductions.

**Table 2 — Order of Deductible Expenditure in the PRRT**

Category of Deductible Expenditure	Description	Uplift Rate
Class 1 ABR — general expenditure	General expenditure before 1 July 1990, less than 5 years before production licence came into force.	LTBR+15%
Class 1 ABR — exploration expenditure	Exploration expenditure before 1 July 1990, less than 5 years before production licence came into force.	LTBR+15%
Class 2 ABR— general expenditure	General expenditure after 1 July 1990, less than 5 years before production licence came into force.	LTBR+5%
Class 1 GDP factor expenditure	General expenditure and exploration expenditure (before 1990) incurred more than 5 years before production licence came into effect.	GDP deflator
Class 2 ABR — exploration expenditure <b>TRANSFERABLE</b>	Exploration expenditure incurred after 1 July 1990, less than 5 years before production licence came into effect.	LTBR+15%
Class 2 GDP factor expenditure <b>TRANSFERABLE</b>	Exploration expenditure incurred after 1 July 1990, more than 5 years before production licence came into effect.	GDP deflator
Resource Tax expenditure	Commonwealth, state and territory imposed resource taxes, divided by 40 per cent.	LTBR + 5%
Acquired exploration expenditure	The exploration component of the 'look back' method of determining the starting base.	LTBR+15% for 5 years following May 2010, LTRB +5% thereafter
Starting base expenditure	Recognising the value of projects brought into the PRRT regime in 2012.	LTBR+5% in most cases
Closing down expenditure	Eligible undeducted payments to close operations are credited.	-

ABR is augmented bond rate, GDP is gross domestic product, LTBR is long term bond rate.

The order in which eligible expenditure is deducted and the transferability of certain types of expenditure can have an important impact on the amount of PRRT a project pays over its lifetime. For example, expenditure that is not transferable (such as general project expenditure) appears higher in the order of deductions because it is confined to the project, maximising the chances that it will be used. Conversely, transferable expenditure that attracts a higher uplift rate (some types of exploration expenditure) are further down the order of deductions, meaning that they will generally be able to be uplifted for longer. This

can shield a project from tax for longer than if these expenditures were deducted first. This makes some deductions more valuable than others.

### 3.3 Electing and Deducting the Starting Base

On 1 July 2012, the PRRT was extended to all onshore projects and the North West shelf project area. This meant that existing onshore projects that were not subject to PRRT became liable for PRRT.

A key feature of the extension of the PRRT to onshore projects and the North West shelf project was that transitioning projects were entitled to a 'starting base' to shield a company's historical investments and limit the impact of the changes on investments already undertaken. The starting base is an additional amount of deductible expenditure that recognises the value of the investment by a producer in a petroleum project before the extension. The starting base is immediately deductible once a petroleum project has a production licence in place.

The starting base can be calculated using three different methods: a market value method; a book value method and a look-back method. The starting base includes most tangible and intangible assets related to a project interest, as well as interim expenditure of a capital nature which was incurred between the time the starting base was valued and commencement of the extension. The provisions for determining starting base amounts are not a permanent feature of the PRRT, but are a key transitional feature.

Like general expenditure and exploration expenditure, the starting base is a category of expenditure that is deductible against the project's assessable receipts. Any undeducted amount is similarly carried forward and uplifted to preserve its value. The unused amount is uplifted at the long term bond rate plus 5 percentage points in most cases. The starting base is only deducted after all other categories of eligible expenditure has been deducted, except closing down expenditure.

#### Public Commentary

In the context of the introduction of the Minerals Resource Rent Tax, Professor Michael Crommelin from the University of Melbourne commented on the inappropriateness of allowing the starting base to be calculated on a market value basis:

That approach is absolute anathema to the very concept of a resource-based tax. It just gave the companies what the tax base would otherwise have been. Its destroyed the tax base. The companies can, having obtained these valuations of these assets at that time, deduct a fixed percentage of those valuations until 2037. So they have very substantial deductions for the next 24 years which effectively erode dramatically the tax base as it would otherwise be for the MRRT. So far as the PRRT is concerned, the arrangement is the same but the practical consequence is probably much less significant because you don't have existing onshore petroleum investments at anything like the scale that you have for the iron ore mines and the coal mines. So in simple terms, the option given to the companies of the market value approach to valuation of starting based assets destroyed the tax base of the MRRT. It hardly comes as a surprise then that the returns from that tax have not only been small but are not projected to rise dramatically at least in the foreseeable future.

Grattan Institute (2013). "Mineral Resource Rent Tax—Will It Work?" Transcript, 30 May 2013, p. 4.



### 3.4 Coverage

As noted, the PRRT is levied on the recovery of all MPCs from Australian waters including stabilised crude oil, sales gas, condensate, liquefied petroleum gas, ethane and shale oil.

The PRRT is not levied on petroleum products extracted from the Joint Petroleum Development Area shared between Australia and Timor Leste. Additionally, value added products such as LNG and methanol are generally outside the scope of the regime, and these are considered 'excluded commodities'. An MPC becomes an excluded commodity when it is sold, or further processed, or moved away from its place of production. This delineation between an MPC and an excluded commodity is known as the 'taxing point' or 'PRRT ringfence'. Effectively, this means that the gas that is ultimately used to make LNG can be taxed under the PRRT, but the final product is not – that is, the natural gas production phase is taxed under PRRT, while the conversion of gas to liquids phase is not taxed.

In most cases, the producer's revenue will be the consideration received from the sale of the MPC. However, in some cases, an MPC does not become an excluded commodity via a sale (so there is no observable price) but rather it undergoes further processing to another product as part of an integrated process, and a price is received for the processed product (for example, the LNG). In this situation, because there is no observable arm's-length price for the MPC at the taxing point, the PRRT requires that assessable receipts be based on its market value. With LNG, as there is no Australia-wide market hub that can help determine a fair price for the gas, a transfer price must be calculated for the cost of gas that is used to make LNG. Gas transfer pricing rules, known as the gas transfer price methodology, allow a transfer price can be determined. Issues relating to these rules are discussed in section 3.5.

The Department of Industry, Innovation and Science estimates that the value of new Australian gas projects is around \$200 billion. However, despite strong growth in the sector, the amount of revenue being generated by oil and gas is falling.

#### Public Commentary

Dr Diane Kraal from Monash University has noted that the PRRT regime was designed during a time when oil was more profitable than gas, and that the current tax system is not fit for purpose when it comes to ensuring a return for gas resources:

"Back then it was oil from the Bass Strait, and up north, and oil is much more profitable than gas. Gas is unlikely to generate those super profits that triggered the imposition of the PRRT back then." Dr Kraal said one way for the Australian people to get a return on their own assets, the natural gas, is for the Federal Government to levy a royalty at the start of production.

McHugh, Babs (2016). "Petroleum Resource Rent Tax Made for Oil, Not Gas, Says Resource Tax Specialist". ABC Rural, 30 November, 2016.

The appropriateness of the PRRT for floating LNG (FLNG) has also been raised. In 2014 the Economics and Standing Committee of the Western Australia Legislative Assembly released reports on its inquiry into the economic impact of FLNG on Western Australia and made a number of recommendations regarding the implications of FLNG for the PRRT regime. Some of the issues raised during the inquiry included whether all the expenditure associated with the development of FLNG could be offset against a project's PRRT liability, as they could relate to 'downstream operations' which are beyond the PRRT boundaries of the project. It was also raised whether there was the potential for large amounts of gas to be left in fields following extraction using FLNG technology. The Committee recommended:

The Western Australian Government urges the Commonwealth Government to re-examine the tax treatment of the development costs of FLNG and the valuation of the vessel.

Economics and Industry Standing Committee, "The Economic Impact of Floating LNG on Western Australia: Volume 1. Report No 2". Western Australian Legislative Assembly, May 2014, p. xxi.

### 3.5 Gas Transfer Pricing Arrangements

The gas transfer pricing methodology to calculate the arm's length price of gas feedstock (the MPC) used for LNG processing is contained in the PRRT regulations. It is important to know the transfer price of the gas at the taxing point so that PRRT liability can be calculated.

Under the gas transfer pricing methodology, there are several methods for calculating a transfer price. The first method is an Advance Pricing Arrangement. An Advance Pricing Arrangement is an agreement between the ATO and the producer regarding how the transfer price will be calculated. The second method is a Comparable Uncontrolled Price. A Comparable Uncontrolled Price is a price for sales gas or natural gas that was obtained for a sale in a market that the ATO Commissioner is satisfied is a relevant market, or a comparable commercially negotiated arm's length price. If there is no Advance Pricing Arrangement and no Comparable Uncontrolled Price, a third method may be used. The third method is the Residual Price Method. The Residual Price Method uses a combination of a netback approach as well as a cost plus approach to determine the notional sale price for the gas.

#### Public Commentary

The Australia's Future Tax System Review made the following observation on the gas transfer pricing methodology:

The PRRT may also fail to collect the appropriate share of rents when the gas transfer pricing regulations are applied. The regulations provide a framework for determining the price for gas in the case of an integrated gas-to-liquids project and include a residual pricing method. Essentially, the residual pricing method applies an arbitrary cost of capital allowance uplift (long term bond rate plus 7 percentage points) and splits in half the rents associated with the integrated process between the upstream and downstream processes.

Australia's Future Tax System Review (2009). "Australia's Future Tax System: Report to Treasurer". Commonwealth of Australia, December 2009, p. 227.

Dr Diane Kraal has noted a lack of transparency in how the methodology is applied:

The large accounting firms interpret the [gas transfer price methodology] for their clients' integrated gas-to-liquids projects, but the workings are not available for community scrutiny.

Kraal, Dianne (2016). "Call for Review: Petroleum Resource Rent Tax Gas Transfer Pricing". Monash Business School, Business Insight, 23 May, 2016.

## 4. ISSUES ASSOCIATED WITH THE DESIGN AND OPERATION OF THE CRUDE OIL EXCISE

### 4.1 Coverage

Stabilised crude petroleum oil and condensate produced onshore or within three nautical miles of the Australian coastline is subject to a production excise. Crude oil and condensate produced offshore in the North West shelf project area is also subject to a production excise. However, production in other offshore areas and on Barrow Island (a special onshore area) is not subject to production excise. On Barrow Island, a Resource Rent Royalty is charged instead of excise and royalties.

All types of gas (including LNG) are not subject to production excise.

### 4.2 Exemptions and Excise Thresholds

No excise is payable on the first 4767.3 megalitres (30 million barrels) of stabilised crude petroleum oil or condensate from a particular field. This exemption was introduced in July 1987 with the objective of encouraging the development of oil discoveries.

In addition to the 30 million barrel exemption, there is also an annual production threshold. A producing field will need to exceed this annual production threshold before it pays excise. The annual threshold varies depending on when the petroleum field was discovered. These production thresholds are outlined in Table 3. In addition the excise rate also varies depending on the level of production. These rates are outlined in Table 4.

There are three categories of oil for excise purposes:

- **old oil** is oil discovered and in production before 18 September 1975
- **intermediate oil** is oil discovered before 18 September 1975, but not developed as of 23 October 1984, and
- **new oil** is oil produced from naturally occurring discrete accumulations discovered on or after 18 September 1975.

**Table 3 — Annual Production Thresholds for Crude Oil and Condensate Excise**

	Old Oil	Intermediate Scale Oil	New Oil	Condensate
Annual Production Threshold (megalitres, approximate)	200	300	500	500

**Table 4 — Crude Oil and Condensate Excise Rates**

<b>Annual Crude Oil Sales</b>	<b>Old Oil</b>	<b>Intermediate Scale Oil</b>	<b>New Oil</b>	<b>Condensate</b>
<b>Annual Production Tranches* (megalitres)</b>	<b>% of VOLWARE</b>	<b>% of VOLWARE</b>	<b>% of VOLWARE</b>	<b>% of VOLWARE</b>
0 to 50	0	0	0	0
Over 50 to 100	0	0	0	0
Over 100 to 200	0	0	0	0
Over 200 to 300	20	0	0	0
Over 300 to 400	30	15	0	0
Over 400 to 500	40	30	0	0
Over 500 to 600	50	50	10	10
Over 600 to 700	55	55	15	15
Over 700 to 800	55	55	20	20
Over 800	55	55	30	30

\*Exceeding the 30 million barrel threshold.

## 5. ISSUES ASSOCIATED WITH THE DESIGN AND OPERATION OF COMMONWEALTH ROYALTIES

### 5.1 Output based Royalties

Petroleum royalties based on volume or value of production can discourage investment because they apply regardless of project profitability. However, royalties also provide more revenue certainty as they can provide government with an upfront, constant stream of revenue. Royalties are simple to administer and ensure that the community receives a contemporaneous return for the exploitation of non-renewable resources.

#### Public Commentary

The Australia's Future Tax System Review was critical of output based royalties:

Output-based royalties discourage investment and production because they are levied irrespective of the costs of production. Consequently, investors receive a lower post-tax return from a more expensive operation because costs are not recognised for tax purposes. This is particularly important for risky projects. Output-based royalties can therefore result in some economically viable projects not proceeding.

Australia's Future Tax System Review (2009). "Australia's Future Tax System: Report to Treasurer". Commonwealth of Australia, December 2009, p. 222.

Output-based royalties typically have low administration and compliance costs because they are calculated as a percentage of the value of production or as a specific charge per unit produced. Hence, output-based royalties may be an appropriate charging mechanism for those non-renewable resources where the administration and compliance costs are likely to outweigh the potential efficiency and revenue gains from a rent-based tax.

Australia's Future Tax System Review (2009). "Australia's Future Tax System: Report to Treasurer". Commonwealth of Australia, December 2009, p. 225.

Professor John Freebairn has commented on the relative merits of a royalty and a resource rent tax such as the PRRT. He concluded that:

There is not an unambiguous case for superiority of a resource rent tax versus a royalty in Australia. Detailed information about the relative costs of different mines, the importance of investments in exploration and in cost reductions over time, and the mobility of these investments across countries and other industries is required to quantify the trade-offs. It cannot be assumed that the ideal efficiency of a resource rent tax will be translated into practice. Simplicity, together with similar effects in collecting revenue from non-residents, favours staying with the status quo until more specific and believable data on key parameters becomes available.

Professor John Freebairn (2015). "Royalties or Resource Rent Taxes?" Tax and Transfer Policy Institute, 10 December 2015.

## **5.2 Royalty Administration**

On 28 November 2016, the Australian National Audit Office (ANAO) published a report on its performance audit in the Department of Industry, Innovation and Science on the 'Collection of North West shelf Royalty Revenue'. The ANAO identified areas for improvement in the administration of royalty processes for the North West shelf Project and these were acknowledged by the Department.

## ISSUES FOR COMMENT

Against the background of the material contained in this issues note, and having regard to the terms of reference for the review, comments are invited on the following issues:

- The overall performance of the PRRT, excise and associated Commonwealth royalty arrangements and whether they are operating as intended.
- The reasons for the decline in petroleum taxation revenue including the impact of conditions in the industry and features of the tax regimes .
- The appropriateness of the following design features:
  - The treatment of carry forward losses and the level and structure of uplift rates under the PRRT.
  - The transferability of deduction for the PRRT.
  - The test for and scope of deductible expenses under the PRRT.
  - The starting base arrangements in the extension of the PRRT in 2012.
  - The order of deductions for the PRRT.
  - The application of the PRRT to gas projects and floating LNG.
  - The gas transfer pricing arrangements under the PRRT.
  - The coverage and rate of crude oil excise.
  - Thresholds for exemption from crude oil excise.
  - The coverage of associated Commonwealth output based royalties.

The review team will be seeking to discuss these matters with interested parties.

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