



## Coal seam gas royalties in Australian States & Territories

by Daniel Montoya

### 1. Introduction

On 6 January 2012, the ABC reported that "the New South Wales Government is currently reviewing the royalty holiday for coal seam gas developments."<sup>1</sup> It was further reported that the NSW Government has not released a timeframe for when a decision would be made. As of 17 January 2012, all onshore petroleum developments in NSW, including coal seam gas developments, enjoy a five year royalty holiday. After this time, royalties are imposed at an initial rate of 6% per annum, rising by 1% every year until reaching the top rate of 10% per annum.

"Petroleum" resources include oil and conventional gas, along with unconventional petroleum resources such as coal seam gas (CSG), tight gas and shale oil. CSG in Australia is regulated by the relevant State or Territory petroleum regulatory regime.

After a summary of the CSG industry in NSW, this e-brief compares petroleum royalty rates in all Australian States and Territories. The e-brief finishes with commentary from the Henry Tax Review on the use of royalties as a form of resource taxation.

### 2. NSW coal seam gas industry

CSG exploration and production is an emerging industry in NSW. Exploration is currently occurring in the Hunter region, Gloucester Basin, Gunnedah Basin, Southern Coalfield (near Camden) and the Clarence Moreton Basin in north eastern NSW. The [Camden Gas Project](#) is NSW's only operating CSG development. However, two other CSG projects have planning approval: the [Casino Gas Project](#); and the [Gloucester Gas Project](#). Planning approval is also being sought for a [CSG project](#) at Narrabri.

In 2011, NSW produced approximately 6% of its own gas demands. According to the NSW Government:

There are two options available to reinforce energy security by ensuring suitable future gas supplies – development of domestic NSW production and processing capacity or the construction of further transmission pipelines to access other sources such as CSG from Queensland. Industry is likely to adopt a combination of the two options.

There are reasons to believe that CSG in NSW has a similar potential as identified in Queensland, where the industry could generate over 18,000 direct and indirect jobs, increase gross state product by over \$3 billion and provide royalty returns of over \$850 million per annum. In NSW, CSG production is currently valued at around \$34.5 million per annum, but given the current estimates of potential NSW CSG reserves are larger than total natural gas reserves for Australia, there is potential for CSG production to exceed \$1 billion per annum by 2025.<sup>2</sup>

2,983 PJ of 'proven and probable' CSG are located in NSW. This figure represents the [best estimate](#) of commercially recoverable CSG. However, total CSG reserves in NSW may be as high as 155,000 PJ. To put this in context, NSW consumed 1,623 PJ of energy in 2009.

### Coal seam gas reserves in NSW (PJ)

Coal basin	Proved & Probable	Proved, Probable & Possible
Clarence-Moreton	461	1,655
Gloucester	721	895
Gunnedah	1,636	149,740
Sydney	165	(included with Gunnedah)
<b>Total</b>	<b>2,983</b>	<b>152,290</b>

### 3. Coal seam gas regulation

CSG industry regulation in NSW is summarised in a January 2011 Research Service [e-brief](#). Since its publication, several reforms have been introduced or proposed. Part 3A of the [Environmental Planning and Assessment Act 1979](#) was repealed in June 2011 and replaced with a [transitional planning regime](#). In December 2011, the COAG Standing

Council on Energy and Resources [announced](#) agreement on the development of a national harmonised regulatory framework for the CSG industry, to be released for consultation in September 2012.

In December 2011, the O'Farrell Government [extended its moratorium](#) on CSG 'fracking' until April 2012, pending the completion of an independent review process. There is also an ongoing NSW Legislative Council [inquiry](#) into the environmental, health, economic and social impacts of CSG activities.

### 4. Petroleum royalties

There are three main types of tax that can be used to charge for the exploitation of the community's non-renewable resources:

A **rent-based tax**, under which the government collects a percentage of the resource project's economic rent.

An **income-based tax**, under which the government collects a percentage of a resource project's net income, thereby taxing economic rent as well as the normal return to capital invested in a resource project.

An **output-based royalty**, under which the government collects either a charge per unit of output (a specific royalty) or a percentage of the gross value of output (an ad valorem royalty).<sup>3</sup>

In Australia, onshore petroleum resources are taxed using ad valorem royalties at a rate set in State or Territory legislation.

#### 4.1 New South Wales

Petroleum (including natural gas and CSG) royalties are collected under

section 85 of the [Petroleum \(Onshore\) Act 1991](#). Clause 23 of the [Petroleum \(Onshore\) Regulation 2007](#) sets the petroleum royalty rates as follows:

(1) For the purposes of section 85(2) of the Act, the prescribed annual rate of royalty is as follows:

(a) for the first 5 years from the first commercial production date—nil,

(b) for the 6th, 7th, 8th and 9th years from the first commercial production date—6%, 7%, 8% and 9%, respectively, of the value at the well-head of the petroleum,

(c) for the 10th and subsequent years from the first commercial production date—10% of the value at the well-head of the petroleum.

The well head is the point where the petroleum reaches the surface. The 'well-head value' is the revenue from the sale of the petroleum after deducting costs incurred downstream of the well head.<sup>4</sup>

The 5-year holiday on royalty payments was not addressed in the [Second Reading](#) speech for the [Petroleum \(Onshore\) Act 1991](#). However, a possible explanation can be found in the rationale provided for introducing the legislation, namely that petroleum exploration had fallen over the previous three years. The administrative procedures contained in the Act were therefore established to create incentives for exploration and production.<sup>5</sup>

#### 4.2 Northern Territory

Division 5, Part III of the [Petroleum Act](#) levies a royalty on the production of petroleum in the Northern Territory. According to the [Territory Revenue Office](#):

Royalty is calculated at a rate of 10 per cent on the gross value at the wellhead of all petroleum products produced from the licence area. In general terms, this value is calculated by deducting allowable costs from the point that a market value can be independently established for the product (usually the point of sale) back to the wellhead.<sup>6</sup>

#### 4.3 Queensland

Petroleum royalties in Queensland are levied under the [Petroleum and Gas \(Production and Safety\) Act 2004](#). According to section 147(3) of the [Petroleum and Gas \(Production and Safety\) Regulation 2004](#), royalty is payable at 10% of the wellhead value. The wellhead value of petroleum is the amount that the petroleum could reasonably be expected to realise if sold on a commercial basis, less deductible costs (s 148).

#### 4.4 South Australia

Under section 43 of the [Petroleum and Geothermal Energy Act 2000](#), a 10% royalty rate is payable on the net post-wellhead sales value (wellhead value) of petroleum recovered at the wellhead after deduction from the gross sale value of certain expenses. According to the SA Government:

Deductible expenses are those directly relating to treating, processing or refining the regulated substance post-wellhead, or in conveying the regulated substance to the point of delivery to the purchaser (the wellhead value).<sup>7</sup>

#### 4.5 Tasmania

Under the [Mineral Resources Development Act 1995](#), petroleum and coal seam gas royalties are charged as follows:

For a petroleum lease for each \$100 of the gross value of petroleum at the well head: \$A12.00; and

For a lease for coal seam gas for each \$100 of the gross value of coal seam gas at the well head: \$A12.00.<sup>8</sup>

#### 4.6 Victoria

Under section 150 of the [Petroleum Act 1998](#), petroleum royalties are to be paid:

- (a) at the rate of 10% of the value of the petroleum at the well-head; or
- (b) if a different rate is specified in the licence under which the petroleum was extracted or recovered, at that different rate.

Section 152 sets out how value is to be determined:

The value at the well-head of any petroleum is the amount that the petroleum could reasonably be expected to realise if sold to a genuine purchaser less all expenses incurred, or to be incurred, by the holder of the licence under which the petroleum was extracted or recovered in treating, processing or refining the petroleum before delivering it for sale and in conveying the petroleum to the point of delivery to the purchaser.

#### 4.7 Western Australia

Onshore petroleum royalties are collected under the [Petroleum and Geothermal Energy Resources Act 1967](#):

The prescribed rate in respect of petroleum recovered under a petroleum exploration permit, petroleum drilling reservation or petroleum retention lease is 10% of the royalty value of the petroleum (s 142(2)).

Various exceptions are made, including the following under section 52, which deals with the determination of rate of royalty:

(1) Where an application is made for a primary licence, the Minister shall determine a rate or rates at which royalty is to be payable in respect of petroleum recovered under the licence, being a rate that is, or rates each of which is, not less than 5% nor more than 10% of the royalty value of that petroleum ...

(3) Where an application for a primary licence has been made and, before or after the grant of the primary licence, the applicant makes an application for a secondary licence, the Minister shall determine a rate at which royalty is to be payable in respect of petroleum recovered whether under the secondary licence, or, subject to section 142(6), under the primary licence, being a rate that —

(a) for tight gas is not less than 5% nor more than 12.5% of the royalty value of that petroleum; and

(b) for petroleum other than tight gas is not less than 10% nor more than 12.5% of the royalty value of that petroleum.

According to the WA Department of Mines and Petroleum, in practice:

The rate of royalty is normally set at between 10–12.5% of the wellhead value of petroleum produced.<sup>9</sup>

However, in July 2009 the WA Government reduced the royalty rate on tight gas from 10% to 5% for the following reasons:

“The tight gas industry is in its very early stages and the State Government needs to remove hurdles and encourage investment

in this area whenever it can,” Mr Moore said.

“Where an offshore petroleum producer may drill 10 to 20 wells, a tight gas producer needs to drill 200 to 300 wells to maintain production levels.”

The Minister said that tight gas, which was found in low permeable rocks and required special equipment for extraction, had enormous potential to become an alternative energy source for WA.<sup>10</sup>

## 4.8 Summary

### Petroleum royalties in Australian States & Territories

Jurisdiction	Royalty rate
NSW	The rate of royalty for the first five years of commercial production is nil; and for the sixth year 6%, rising by 1% each year up to 10% of the well-head value in the tenth year.
Northern Territory	10% of the gross value at the wellhead of all petroleum products produced from the licence area
Queensland	10% of the wellhead value
South Australia	10% of the net post-wellhead sales value
Tasmania	12% of the gross value of petroleum at the well head
Victoria	10% of net wellhead value of the petroleum produced
Western Australia	10-12.5% of the wellhead value of petroleum produced. In 2009, the royalty rate for tight gas was reduced from 10% to 5%.

## 5. Henry Tax Review

The 2009 Henry Tax Review analysed the taxation of non-renewable resources in Australia. The Review evaluated each type of potential resource tax - a rent-based tax, an income-based tax, and an output-

based royalty - according to three criteria: economic efficiency; the size, variability and timing of the return received by the government; and administration and compliance costs. The Review concluded that:

For non-renewable resources that are expected to generate significant amounts of economic rent, a rent-based tax is the most suitable charging mechanism, as the potential economic efficiency and revenue gains are likely to outweigh the higher administration and compliance costs of this tax compared with output-based royalties and income-based taxes.

For non-renewable resources expected to generate low rent and where the administration and compliance costs are likely to outweigh the potential efficiency and revenue gains from a rent-based tax, output-based royalties may be an appropriate charging mechanism.<sup>11</sup>

In light of this evaluation, the Review made the following recommendations:

**Recommendation 45:** The current resource charging arrangements imposed on non-renewable resources by the Australian and State governments should be replaced by a uniform resource rent tax imposed and administered by the Australian government that:

(a) is levied at a rate of 40 per cent, with that rate adjusted to offset any future change in the company income tax rate from 25 per cent, to achieve a combined statutory tax rate of 55 per cent;

(b) applies to non-renewable resource (oil, gas and minerals) projects, except for lower value minerals for which it can be expected to generate no net benefits. Excepted minerals could

continue to be subject to existing arrangements if appropriate;

(c) measures rents as net income less an allowance for corporate capital, with the allowance rate set at the long-term Australian government bond rate;

(d) requires a rent calculation for projects;

(e) allows losses to be carried forward with interest or transferred to other commonly owned projects, with the tax value of residual losses refunded when a project is closed; and

(f) is allowed as a deductible expense in the calculation of income tax, with loss refunds treated as assessable income.

**Recommendation 46:** The resource rent tax should not provide concessions to encourage exploration or production activity at a faster rate than the commercial rate or in particular geographical areas, and should not allow deductions above acquisition costs to stimulate investment.<sup>12</sup>

## 6. Conclusion

The 2009 Henry Tax Review can be said to provide a Commonwealth perspective on the taxation of non-renewable resources. The issue is currently under review in NSW, where the Government's preferred approach remains to be determined.

<sup>1</sup> ABC News, [CSG royalty 'holiday' under review in NSW](#), 6 January 2012 [online - accessed 16/01/2012]

<sup>2</sup> New South Wales Government, [NSW Government submission](#), NSW Legislative Council General Purpose Standing Committee No.5 Inquiry into Coal Seam Gas, September 2011, p7

<sup>3</sup> Ken Henry, [Australia's Future Tax System: Report to the Treasurer - Part Two](#):

[Detailed Analysis, Volume 1 of 2](#), December 2009, p221

<sup>4</sup> NSW Department of Primary Industries, [NSW minerals & petroleum - royalty](#), no date [online - accessed 16/01/2012]

<sup>5</sup> This royalty regime was first introduced in clause 26 of the [Petroleum \(Onshore\) Regulation 1992](#). According to the Department of Primary Industries' website, this regime only applies to titles granted or renewed after 21 August 1992: n4. Petroleum produced under a title granted prior to 21 August 1992 incurs a royalty of 10% of the 'well-head value' of the petroleum under section 32 of the [Petroleum Act 1955](#). Given the maximum duration of a petroleum mining license issued under the 1955 Act is 20 years, after 21 August 2012 the royalty regime contained in the Petroleum (Onshore) Regulation 2007 will apply to all petroleum titles.

<sup>6</sup> Territory Revenue Office, [Petroleum Royalty](#), 2006 [online - accessed 16/01/2012]

<sup>7</sup> Department of Manufacturing, Innovation, Trade, Resources and Energy, [Royalties and Fees](#), 8 November 2011 [online - accessed 16/01/2012]

<sup>8</sup> Department of Infrastructure, Energy & Resources, [Fees, Rents and Royalties](#), 1 January 2012 [online - accessed 16/01/2012]

<sup>9</sup> Department of Mines and Petroleum, [Petroleum Royalties](#), 16 January 2012 [online - accessed 16/01/2012]

<sup>10</sup> Department of Mines and Petroleum, [Media Release: Easing of royalties rates on tight gas foreshadows boost to domestic supply](#), 24 July 2009

<sup>11</sup> Ken Henry, n3, p225

<sup>12</sup> Ken Henry, n3, p231

Information about Research Publications can be found on the Internet at the:

[NSW Parliament's Website](#)

Advice on legislation or legal policy issues contained in this paper is provided for use in parliamentary debate and for related parliamentary purposes. This paper is not professional legal opinion.

© 2012

Except to the extent of the uses permitted under the *Copyright Act 1968*, no part of this document may be reproduced or transmitted in any form or by any means including information storage and retrieval systems, without the prior written consent from the Librarian, New South Wales Parliamentary Library, other than by Members of the New South Wales Parliament in the course of their official duties.

ISSN 1838-0204