Agenda paper: 2017-21

Purpose: Decision

Inquiry: 2018 Update

Prepared for meeting of: 26 July 2017

SHOULD THE COMMISSION CHANGE ITS TREATMENT OF BANNED MINERALS IN THE 2018 UPDATE?

REASON

In its 2015 Review report, the Commission said it would monitor developments in State mining policies to:

- ensure its mineral by mineral assessment was not influencing State behaviour
- check whether other minerals had become material
- ensure the mining revenue base it observed was consistent with average policy.

In that review, the Commission assessed mining revenue capacity on a mineral by mineral basis using States' value of production. States that banned the exploitation of certain minerals were assessed to have zero revenue capacity as they had zero production.

The Commission included coal seam gas and uranium royalties in its mining assessment despite there being bans in several States. Since the 2015 Review, more States have imposed bans on these minerals. They are now banned in a majority of States. This paper asks whether the Commission should change its treatment of banned minerals in the 2018 Update.

ISSUES

- Should States that ban mining be assessed to have zero revenue capacity?
- If a mineral is banned in the majority of States, should all States be assessed to have the same per capita revenue capacity?

RECOMMENDATIONS

Staff recommend the Commission:

- raise this issue with States in the 2018 Update new issues paper
- consider the issue once State comments have been received.

Contact officers Dermot Doherty, Jeffrey Evans

References

Agenda papers: 2017-15 Staff research paper — State mining policies

Staff Research paper 2017-04-S State mining policies

Confidentiality statement

This document contains the following confidential material:

- The Commission combines the Onshore oil and gas and the Other minerals components due to confidential data. This paper provides data separately for each, so all tables should be treated as containing confidential data.

Statement provided by Dermot Doherty.

CONTENTS

BACKGROUND **1**

TREATMENT IN THE 2015 REVIEW AND SUBSEQUENT UPDATES **2**

What is the average policy? 2
Applying the average policy to coal seam gas 2
Applying the average policy to uranium 4

SHOULD THE COMMISSION CHANGE ITS TREATMENT IN THE 2018 UPDATE? **5**

Implications for other assessments 7
Is a change in assessment warranted? 7
Recommendations 8

CONCLUSIONS **8**

ATTACHMENT A: NEW ISSUES PAPER DISCUSSION **9**

ASSESSING REVENUE CAPACITY WHEN A STATE BANS ACTIVITY **9**

BACKGROUND

1 Staff Research Paper 2017-04-S reported on developments in State mining policies since the 2015 Review. Table 1 reproduces information from that paper showing the differing State policies in relation to coal seam gas (CSG). It shows Victoria (in 2017), Tasmania (for five years from 2015) and the Northern Territory (in 2016) have imposed moratoriums or bans on unconventional gas mining.[1] Victoria (in 2017) also imposed a five year moratorium on onshore conventional gas mining.

Table 1 State policies in relation to coal seam gas

State	Policy
New South Wales	Freeze on CSG exploration and development. Buyback of licences. Narrabri gas project environmental impact statement lodged.
Victoria	Ban on onshore exploration for unconventional gas and hydraulic fracturing. Ban on conventional drilling until 2020.
Queensland	No restrictions. CSG makes up more than 90% of the State's natural gas supply.
Western Australia	No restrictions. Labor opposition says it will ban fracking across large parts of the Southwest if elected.
South Australia	No restrictions. Liberal opposition announced a policy for a 10 year fracking moratorium in the State's Southeast.
Tasmania	Ban on fracking. There is no onshore gas activity and no proposal for any.
Northern Territory	Independent scientific review. Moratorium on fracking.

Source: The Australian, Wednesday 8 February, 2017, page 11.

2 Since the 2015 Review, new governments in two States have reinstated bans on uranium mining. They were restated in Queensland in 2015 and in Western Australia[2] in 2017. These developments mean these two minerals are now banned in a majority of States.

3 In the 2015 Review, the Commission assessed mining revenue capacity on a mineral by mineral basis using States' value of production. States that banned the exploitation of certain minerals were assessed to have zero revenue capacity as they had zero production.

4 There have been concerns expressed by some States and some media that the Commission's treatment of banned minerals provides a disincentive for States to mine minerals and an incentive for them to ban minerals. That is, Queensland is being

[1] Unconventional gas is gas formed in complex geological formations. The term 'unconventional' refers to the methods used to extract the gas. Forms of unconventional gas are shale gas, tight gas and CSG.

[2] The new government will allow three uranium mines approved by the preceding government to proceed. http://www.abc.net.au/news/2017-03-27/uranium-mines-will-be-allowed-to-proceed-labor-minister-confirms/8389622

penalised for mining CSG while most other States ban it — on the basis that any revenue benefits it accrues may simply be offset by a reduction in its GST share. The issue is prominent in submissions to the Productivity Commission inquiry.

5 This paper asks whether recent developments, culminating in these two minerals being banned by a majority of States, warrant a change to the treatment of banned minerals the 2018 Update.

TREATMENT IN THE 2015 REVIEW AND SUBSEQUENT UPDATES

What is the average policy?

6 The Commission set out its approach to average policy in its 2015 Review report:

> Average policy now reflects the average of what all States do, regardless of how many States make a zero effort. If even one State does something (raises a revenue or provides a service), that becomes a part of what States do collectively on a weighted basis, but only if an assessment will have a material impact on the GST.[3]

7 This means that if any State raises revenue from a mineral, that revenue would be included in the equalisation budget and assessed if material. The effect of State bans is to limit the amount raised, thereby affecting the materiality of any assessment.

Applying the average policy to coal seam gas

8 Table 2 shows the level of CSG royalties in the 2017 Update.

Table 2 Coal seam gas royalties, 2017 Update

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total
	$m	$m	$m	$m	$m	$m	$m	$m	$m
2012-13	0.9	0.0	26.2	0.0	0.0	0.0	0.0	0.0	27.1
2013-14	0.7	0.0	30.8	0.0	0.0	0.0	0.0	0.0	31.5
2014-15	0.5	0.0	25.9	0.0	0.0	0.0	0.0	0.0	26.4
2015-16	0.8	0.0	21.7	0.0	0.0	0.0	0.0	0.0	22.5

Source: State data returns.

9 The low level of royalties meant a separate CSG assessment was not material in the 2015 Review.[4] Staff recommended including CSG royalties in the Onshore oil and gas component. Their share of component revenue was between 15% and 20%.

---

[3] Report on GST Revenue Sharing Relativities, 2015 Review, Volume 2 — Assessment of State Fiscal Capacities, Chapter 1, page 9.

[4] In the 2015 Review, an assessment was material if it redistributed $30 per capita or more for a State.

10 Revenue capacity for this component was assessed using value of production. States that banned CSG mining had no production and were assessed to have zero revenue capacity. States with bans tend to justify them on environmental and political grounds. Assessing a zero capacity for these States would be consistent with treating 'bans on environmental grounds' as average policy.[5]

11 Table 3 shows the materiality of the Onshore oil and gas component in the 2017 Update. It moved $130 million compared to an EPC distribution.

Table 3 Redistribution of the Onshore oil and gas component, 2017 Update

Redistribution	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
Dollars million	59	47	-23	17	-102	4	3	-5	130
Dollars per capita	7	8	-5	6	-59	8	8	-20	5

Source: 2017 Update.

12 In the 2017 Update, Queensland queried the Commission's CSG assessment. It said it was assessed to have CSG capacity, whereas States with bans in place were assessed to have zero capacity. It said Queensland was making an above average effort in this area and queried the policy neutrality of the Commission's approach.

13 The difficulty of making an assessment is that there is no policy neutral measure of State capacity. If we use actual revenue, it advantages States that ban mining because they have no revenue. Similarly, if we use value of production, it advantages States that ban mining because they have no production. We could use the value of known deposits, but that is not what States tax.

14 Nevertheless, staff compared the 2017 Update Onshore oil and gas assessment with separate assessments of CSG and the remaining Onshore oil and gas royalties. The latter were assessed using value of production. The CSG royalties were assessed using three different capacity measures:

- the value of CSG production[6]
- Geoscience Australia data on the value of known reserves[7]
- the value of coal production.

---

5 Recently, the Western Australian Environmental Protection Agency rejected two iron ore mines in conservations areas. It said the areas provided specialised habitats for plants and animals and once mined, could not be restored.

6 For some States, the Commission imputed the value of onshore oil and gas production (including CSG) by dividing the revenue raised by their legislated rate of tax. Queensland was one of those States.

7 Geoscience Australia (GA), Australia's identified mineral resources 2009, GA, Canberra, p. 22, viewed 16 December 2010, http://www.ga.gov.au/image_cache/GA16805.pdf and 'Coal bed methane fact sheet', Geoscience Australia website, viewed 9 February 2011, http://www.australianminesatlas.gov.au/education/fact_sheets/coal_bed_methane.jsp.

15 Table 4 shows a separate assessment of CSG was not material[8] and it would not have been practical to separate it from the Onshore oil and gas component. Staff provided that advice to Queensland.

Table 4 Redistribution of onshore oil and gas component, various options

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
(a) Redistribution	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
2017 Update	7	8	-5	6	-59	8	8	-20	5
Separately assessing CSG	7	8	-5	6	-58	8	8	-20	5
Based on known reserves	7	8	-5	6	-58	8	8	-20	5
Based on coal value of production	6	7	-2	6	-59	8	8	-20	5
(b) difference									
Separately assessing CSG	-0	0	-0	0	0	0	0	0	0
Based on known reserves	-0	0	0	0	0	0	0	0	0
Based on coal value of production	-1	-0	2	-0	0	-0	0	0	0

Source: Commission simulation.

Applying the average policy to uranium

16 Since the closure of the Ranger mine in the Northern Territory in 2015, Australia has only four operating uranium mines[9], all are located in South Australia. Table 5 shows the estimated level of uranium royalties in the 2017 Update.

Table 5 Estimated uranium royalties, 2017 Update

	NSW	Vic	Qld	WA	SA(a)	Tas	ACT	NT(b)	Total
	$m	$m	$m	$m	$m	$m	$m	$m	$m
2012-13	0.0	0.0	0.0	0.0	20.1	0.0	0.0	0.0	20.1
2013-14	0.0	0.0	0.0	0.0	17.5	0.0	0.0	0.0	17.5
2014-15	0.0	0.0	0.0	0.0	17.3	0.0	0.0	0.0	17.3
2015-16	0.0	0.0	0.0	0.0	27.8	0.0	0.0	0.0	27.8

(a) The level of uranium royalties were estimated by applying South Australia's legislated rate to the value of its uranium production.
(b) Uranium mining in the Territory is taxed by the Commonwealth.
Source: State data returns.

8 Compared with the existing assessment, a separate assessment of a mineral would need to change at least one State's GST shares by $30 per capita to be considered to be material.

9 They are the Olympic Dam, Beverly, Four Mile and Honeymoon mines.

17 The low level of royalties meant a separate uranium assessment was not material in the 2015 Review. Staff recommended including uranium royalties in the Other minerals component. Their share of component revenue was between 3% and 5%.

18 Revenue capacity for this component was assessed using value of production. States that banned uranium mining had no production and were assessed to have zero revenue capacity.

19 Table 6 shows the materiality of the Other minerals component in the 2017 Update. It moved $251 million compared to an EPC distribution.

Table 6 Redistribution of the Other minerals component, 2017 Update

Redistribution	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
Dollars million	147	93	-75	-80	-10	-10	10	-75	251
Dollars per capita	19	15	-15	-30	-6	-19	24	-306	10

Source: 2017 Update.

20 Staff compared the 2017 Update assessment of Other mineral component with separate assessments of uranium and the balance of minerals in that component. Both parts were assessed using the relevant value of production. Table 7 shows a separate assessment of uranium was not material[10] and it would not have been practical to separate it from the Other mineral component.

Table 7 Redistribution of other minerals component, various options

Redistribution	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
2017 Update	19	15	-15	-30	-6	-19	24	-305	10
Separately assessing uranium	19	15	-15	-30	-6	-19	24	-305	10
Difference	0	0	0	0	-1	0	-0	1	0

Source: Commission simulation.

SHOULD THE COMMISSION CHANGE ITS TREATMENT IN THE 2018 UPDATE?

21 Under its Update protocols, the Commission can change assessment methods in an update, provided it discusses the change with States before implementing it. The question is whether the Commission would wish to consider a possible change to its treatment of banned minerals in this update.

[10] This outcome reflects that the effective rate of uranium was similar to the effective rate of the balance of other minerals.

22 The Commission could:

- defer the issue until the 2020 Review
- ask staff to raise the issue with States in the New Issues paper for consideration in the 2018 Update. After its consideration, an option would be to defer the issue until the 2020 Review
- decide to change its treatment and ask staff to raise the issue with States in the 2018 Update New Issues paper prior to implementing a change.

23 Attachment A sets out the discussion staff would include in the New Issues paper if the issue is to be raised with States.

24 Staff Research Paper 2017-04-S said the Commission would review what average policy was in the 2020 Review. This would include what average policy meant in cases where States banned an activity. In these situations, there is no policy neutral measure of State capacity. In considering this issue, the Commission will need to balance policy neutrality and fiscal capacity considerations. The paper foreshadowed the Commission might:

- estimate the missing value of production for the States that banned a mineral
- assess zero capacity for States that banned a mineral (the current approach), or
- assess States to have equal capacity in relation to the banned mineral. This would be implemented by applying an equal per capita (EPC) assessment.[11]

25 The current approach and an EPC assessment[12] are easy to implement. Estimating the missing capacity is more difficult. It would require staff to estimate the value of production for States that have banned an activity. It would also involve a departure from the principle of 'what States do' and may imply that the Commission's assessment was based on what the Commission considers States could or should do.

26 Table 8 shows the change in the 2017 Update had an EPC assessment been applied to CSG and uranium. It shows an EPC assessment of either mineral would not have materially changed the Mining revenue assessment.

---

[11] Normally, an EPC assessment has no effect on State's GST shares. However, moving from the existing assessment to an EPC assessment would have an effect (see Table 8).

[12] Under this approach staff would ask States to provide their coal seam gas and uranium data separately. We would create a new Mining revenue component and include the royalties there. This component would be assessed EPC.

Table 8 Change in GST distribution if States are assessed to have the same capacity for CSG and uranium, 2017 Update

Redistribution	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Redist
	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc	$pc
Coal seam gas	-1	-1	5	-1	-1	-1	-1	-1	1
Uranium	-1	-1	-1	-1	13	-1	-1	-1	1

Source: Commission simulation.

Implications for other assessments

27 Mining is not the only area affected by States bans. Western Australia bans poker machines outside its casino; the Northern Territory does not impose land tax. Even within a mining context, unwinding State bans will be complicated. New South Wales bans uranium mining but not uranium exploration. In 2012, Western Australia banned coal exploration near the Margaret River township. This month, New South Wales purchased a controlling interest in a coal exploration licence to prevent an open cut coal mine on prime agricultural land in the Liverpool plains.

28 Any solution should have a consistent approach to a State decisions to ban activity and thereby forego the revenue that would be generated by that activity. Any solution should also limit the scope for States to 'free ride' or game the HFE system.

29 The difficulty is that there is unlikely to be a single assessment approach that will work in every case. In situations where the majority of States ban an activity and revenue raising is low (CSG and uranium mining) the solution might be to assess every State to have the same per capita revenue capacity (an EPC assessment). This solution might not be appropriate where bans affect a small portion of the taxable activity (such as the New South Wales and Western Australia partial coal bans). Similarly, it may not be the best solution when only one or a minority of States ban the taxable activity (such as land tax in the Northern Territory).

30 Given the bans on the exploitation of certain minerals are not currently material, the Commission could defer consideration of this issue until the 2020 Review.

Is a change in assessment prior to 2020 warranted?

31 The Commission may consider a change in the assessment approach is warranted if it judges its average policy approach does not work in a policy neutral way in the presence of bans. However, the 2015 Review approach is based on the materiality of an assessment. Table 8 showed a change to a separate assessment or an EPC assessment was not material. On that basis, staff do not consider a change in the Mining assessment method is required before the 2020 Review.

32 This issue could become more pressing if the assessment of a banned mineral was to become material. Staff Research Paper 2017-04-S noted that Queensland's 2016-17

Mid-Year Fiscal and Economic Review projected its petroleum royalties (which include CSG royalties) would increase from $36 million to $250 million over the next five years. Staff will continue to monitor the materiality of a separate CSG assessment. The issue could become more pressing given its prominence in submissions to the Productivity Commission inquiry.

33 Staff recommend the Commission raise the issue with States in the 2018 Update. This would allow the Commission to consider the issue in the update and to decide whether a change in its assessment method is required and, if so, whether it should be made in the update or deferred until the 2020 Review.

Recommendations

Staff recommend that the Commission

- raise this issue with States in the 2018 Update new issues paper
- consider the issue once State comments have been received.

CONCLUSION

34 In the 2015 Review, the Commission included CSG royalties in the Onshore oil and gas component and uranium royalties in the Other minerals component. This reflected the application of average policy in that review.

35 The capacity measure for Mining revenue was the value of production. States that banned CSG or uranium had no production and were assessed to have zero revenue capacity. This may be consistent with treating bans as average policy on environmental grounds. However, not every ban is for environmental reasons.

36 The Commission could assess:

- States that ban an activity to have zero capacity (the current approach),
- all States to have the same per capita revenue capacity (an EPC assessment), or
- the missing value of production for States that ban an activity.

37 The low level of royalties means neither an EPC assessment nor a separate assessment of CSG or uranium would have produced a materially different outcome in the 2017 Update. Thus, the issue could be deferred until the 2020 Review.

38 Given the issue is prominent in submissions to the Productivity Commission inquiry, staff propose raising it with States in the 2018 Update New Issues paper. That paper is due to be despatched to States in mid-August.

ATTACHMENT A: NEW ISSUES DISCUSSION

ASSESSING REVENUE CAPACITY WHEN A STATE BANS ACTIVITY

1 In the 2015 Review, the Commission introduced a mineral by mineral assessment for Mining revenue. It used value of production as its revenue base measure for each mineral. At the time the Commission was aware some States had bans on the exploitation of certain minerals. Under its assessment method, those States would be assessed to have zero capacity because they had zero production. The Commission did this because bans did not have a material effect on the mining assessments.

2 In the 2017 Update, Queensland asked about the treatment of coal seam gas (CSG). It said it was being penalised for mining CSG while most other States banned it — on the basis that any revenue benefits it accrued were offset by a reduction in its GST share.

3 Staff Research Paper 2017-04-S discussed this issue. In that paper, staff said:

- the current bans in relation to coal seam gas and uranium do not have a material effect on the Mining revenue assessment
- the Commission would review what average policy was in the 2020 Review.

4 In that review, the Commission will consider what average policy means in cases where States ban taxable activity. In such situations, there may be no policy neutral measure of State capacity. In the Staff Research Paper, staff foreshadowed the Commission could:

- estimate the missing value of production for the States that banned a mineral
- assess zero capacity for States that banned a mineral (the current approach), or
- assess States to have equal capacity in relation to the banned mineral. This would be implemented by applying an equal per capita (EPC) assessment.

5 The current approach and an EPC assessment[13] are easy to implement. Estimating missing capacity is more difficult, it would require staff to estimate the missing value of production for States that have banned an activity. This might be viewed as a departure from the principle of 'what States do' and may imply a mining assessment based on what the Commission considers States could or should do.

6 Any solution will need to involve a consistent approach to State decisions to ban mining activity and to forego the revenue that would be generated by that activity.

---

[13] Under this approach staff would ask States to provide their coal seam gas and uranium data separately. We would create a new Mining revenue component and include the royalties there. This component would be assessed EPC.

Any solution will also need to limit the scope for States to ‘free ride’ or game the HFE system by banning activity.

7 The Commission seeks State views on:

- whether this issue should be reconsidered in the 2018 Update
- if so, how the Commission should assess revenue capacity in situations where some States ban some or all mining activity?

8 For those States that currently ban mining activity, the Commission is also seeking information on its reasons for imposing the ban.