NSW Treasury

2025 GST Methodology Review

NSW Treasury Response to Draft Report mining addendum

20 September 2024

Acknowledgement of Country

We acknowledge that Aboriginal and Torres Strait Islander peoples are the First Peoples and Traditional Custodians of Australia, and the oldest continuing culture in human history.

We pay respect to Elders past and present and commit to respecting the lands we walk on, and the communities we walk with.

We celebrate the deep and enduring connection of Aboriginal and Torres Strait Islander peoples to Country and acknowledge their continuing custodianship of the land, seas and sky.

We acknowledge the ongoing stewardship of Aboriginal and Torres Strait Islander peoples, and the important contribution they make to our communities and economies.

We reflect on the continuing impact of government policies and practices, and recognise our responsibility to work together with and for Aboriginal and Torres Strait Islander peoples, families and communities, towards improved economic, social and cultural outcomes.

Artwork:
Regeneration by Josie Rose

Mining addendum to 2025 Draft Report

1.1 Context

- The Commission released its 2025 Draft Report on 5 July 2024. As part of the release of the 2025 Draft Report, the Commission included a chapter on the mining assessment, considering changes since the 2020 Review and implications for the assessment method.
- The Commission deferred release of its mining assessment GST distribution impacts until it received necessary data from states to analyse its draft positions relating to:
    - Splitting the coal assessment by price band,
    - Changing the capacity measure for brown coal, and
    - Changing the capacity measure for onshore oil and gas.
- The Commission released its mining assessment addendum on 29 August 2024.

1.2 NSW Treasury responses

- NSW Treasury has responded to the key mining revenue matters raised in the Draft Report as part of its main response in early August 2024. This submission should be read in conjunction with the initial NSW Treasury response to the Draft Report.
- This submission primarily responds to the Commission's addendum, though we reiterate some key matters from our Draft Report in this submission, particularly the appropriateness of the two-price band system proposed by the Commission compared to alternative methods. We also raise material concerns about the inconsistency between the Commission's Draft Report indicating a dominant state definition would not be implemented and the addendum instead proceeding to use the Commission's proposed dominant state definition.

NSW Treasury position:

- That the Commission has used the 'dominant state' concept, and their own definition, in assessing a split coal assessment, despite agreeing to not implement such a change for the 2025 Review and proposing to consult with states on an appropriate definition.

- The Commission responded to the dominant state concept in its mining revenue chapter on the Draft Report, determining that it would not implement a dominant state adjustment nor define the concept for the 2025 Review. We supported the Commission's position to not implement such an adjustment as part of the 2025 Review. Per the Commission's comments:

'The Commission has decided not to introduce an adjustment in this review. In preparation for the next review, the Commission will engage with states on the appropriate definition of a dominant state as part of further work on how the issue could be addressed'.[1]

[1] 2025 Methodology Review - Draft Report June 2024, Mining revenue, paragraph 30.

- However, in the mining addendum, the Commission has considered the dominant state concept (based on an as-yet agreed definition) as one of the two key concerns motivating its positions regarding a price band approach.
- We refer to our comments in our submission to the Commission's Tranche 1 consultation papers. The dominant state threshold, where a state has its revenue base share exceed its population share by 50 percentage points, remains entirely arbitrary. The Commission has presented no evidence for why a 50-percentage point difference is an appropriate or reasonable criteria for a dominant state. No state supported the Commission's dominant state adjustment in Tranche 1 consultation. Multiple states specifically identified the definition as being arbitrary, pertaining to the 50 per cent threshold.
- We are concerned that the Commission has reneged on its position to not introduce a dominant state concept or definition in the 2025 Review. The Commission has proposed to consult with states on an appropriate definition but has now determined that it will implement the dominant state test in the updated coal assessment. We disagree with the inclusion of dominant state testing in the assessment of coal, as this is inconsistent with all other mineral assessments.

NSW Treasury position:

- That the Commission's position on splitting coal incorrectly prioritises dominant state concerns over fiscal equalisation.

- While we disagree with the Commission's consideration of dominant state issues, as it is not in line with the Commission's Draft Report position, we nonetheless feel compelled to respond to the Commission's analysis of dominant state concerns.
- Throughout its assessments, the Commission is required to manage a balance between its core goal of achieving equalisation and accounting for its four key supporting principles. In doing so, the Commission has been clear and consistent in prioritising fiscal equalisation above the supporting principles.
- At its core, the question for the mining assessment is one of aggregation (which addressed policy neutrality and reduces dominant state issues) versus non-aggregation (which better achieves fiscal equalisation). The Commission has typically preferred non-aggregation to appropriately prioritise equalisation.
- The Commission supports non-aggregation (or "mineral by mineral") as this approach recognises differences in value between minerals which allow for states to extract higher rates of royalties for some minerals than others. Aggregation obscures differences in revenue capacity between states, which subsequently worsens the fiscal equalisation outcome of the assessment.
- The Commission's prioritisation of fiscal equalisation has been further evidenced by other decisions made regarding the Mining assessment. For the 2025 Review, the Commission considered and then decided against implementing any dominant state adjustment to address policy neutrality concerns. In doing so, the Commission has allowed for dominant states to exist in other mineral assessments, including the iron ore and gold assessments.
- However, when it comes to the coal assessment, the Commission appears to be prioritising the supporting principle of policy neutrality over fiscal equalisation. The Commission's position on fixed bands has made coal the only assessment where the dominant state issue has been central in designing the assessment.
- The Commission must continue to prioritise fiscal equalisation over policy neutrality if its assessments are to be internally consistent and if its methods are to accurately capture differences in state fiscal capacities.

- Furthermore, the Commission should not make the mistake of determining a dominant state occurrence always represents a genuine policy neutrality issue. Per the Commission's supporting principles, a dominant state issue would only represent a policy neutrality issue when[2]:
    - The state's policy choice directly influences its GST share.
    - The Commission's assessments create incentives or disincentives for states to choose one policy over another.
- When the Commission is evaluating the dominant state issue in the split coal assessment, these key components of the policy neutrality question should be central. It is not enough to merely identify the existence of a dominant state as evidence of a policy neutrality issue.
- In the case of coal, prices fluctuate to such a degree that dominant state designation is likely to be temporary and limited to specific price bands in specific years. This is especially the case when Queensland's dominant state status is marginal. It is highly unlikely that states could genuinely 'game' their GST shares by adjusting their policies given such uncertainty.
- Additionally, under NSW Treasury's preferred average two-band model, a state would not know the average price of coal to be incorporated in the assessment. States will not be able to effectively design royalty policies to influence their GST outcomes under a moving average price band approach.
- For these reasons, a price-band based mining assessment is unlikely to create any more meaningful incentives for shaping state royalty policy than the existing approach. As a state cannot effectively respond to the assessment, the Commission's price band approaches do not necessarily incentivise or disincentivise a state to change its existing coal royalty policies.

Draft Commission position:

- To split the coal assessment by price band.
- Use 2 price bands, above and below $200 per tonne.

- The Commission has clearly identified its preference to use a price band approach to recognise and separate coal of different value (thermal and metallurgical, excluding brown). In its addendum, three main price band approaches were identified and broadly considered: fixed two-price band, fixed three-price band, and an average two-price band. The Commission also implicitly includes the existing method, as the default for when fixed price bands do not produce a split assessment.
- The Commission undertook testing and comparison on both fixed price band approaches, though did not undertake testing on the average price band approach, as the Commission did not request this data from states. The testing of comparative approaches should have been undertaken based on more years than the three selected by the Commission.
- The Commission identified two key concerns from states with the price band approach.[3] These regarded the possibility of price bands:
    - Increasing the likelihood of a dominant state in a particular price band, with implications for policy neutrality, and
    - Introducing an effective APC assessment when a price band comprises only one state's production.

[2] 2025 Methodology Review – Commission's position on fiscal equalisation, supporting principles and assessment guidelines, paragraph 42.

[3] 2025 Methodology Review – Mining revenue addendum, paragraph 8.

- We contend there is a third key concern the Commission has not included – the extent to which a specific price band approach appropriately recognises state revenue raising capacity from coal.
- While all three price band approaches produce a better equalisation outcome than the existing aggregated coal method, a comparison of the equalisation outcome of each approach should have been a key consideration for the Commission. It does not appear to have been the case.
- Per the Commission's addendum, '*more price bands would better reflect the differences in state capacities to raise revenue from high value and low value coal*'.[4] This approach produces a better equalisation outcome, yet the Commission provides minimal comment on this. The Commission instead focuses on secondary issues, such as data confidentiality and policy neutrality, both of which should clearly be subsidiary to the core goal of achieving fiscal equalisation.
- The Commission should produce a significantly more transparent comparison of all options. The Commission has only presented the disadvantages of the fixed three-price band approach and the proposed New South Wales average-price approach relative to the fixed two-price approach, while making no substantial comments on the clear advantages of both methods in better assessing state fiscal capacities.
- In response to the Commission's addendum analysis, we evaluate each approach put forward by the Commission for a clearer comparison of the positives and negatives of each approach. Table 1 provides a comparison of three different price band approaches, explicitly identifying potential advantages and disadvantages of each option. We note that, realistically, other approaches are also feasible but we have limited our analysis to the approaches outlined in the Commission's paper.

[4] 2025 Methodology Review – Mining revenue addendum, paragraph 18.

Table 1: Advantages and disadvantages of potential price band approaches

Fixed two-price band	Fixed three-price band	Average two-price band
Advantages		
• Simple data request. • Less susceptible to data confidentiality issues than fixed three-price band approach. • Less susceptible to dominant state issues than the fixed three-price band approach.	• Simple data request. • **Better and more consistent equalisation outcomes than the fixed two-price band approach.**	• Simple data request. • Not susceptible to data confidentiality issues. • Will not necessarily give rise to a genuine policy neutrality issue, even if a dominant state emerges in the assessment. • Fully responsive to movements in coal prices and subsequent revenue raising capacity. • **Ensures equalisation will be achieved in every assessment year and produces better equalisation outcomes than other approaches.**
Disadvantages		
• Will not always split coal, even if there is a material divergence in prices (does not always achieve equalisation). • Least responsive to movements in coal prices and subsequent revenue raising capacity. • **Worse equalisation outcomes than the other approaches.** • Can still produce a dominant state outcome, even if less susceptible. The impact on equalisation will be worse.	• Will not always split coal, even if there is a material divergence in prices (does not always achieve equalisation). • Less responsive to movements in coal prices and subsequent revenue raising capacity, though more than fixed two-price band. • More susceptible to data confidentiality issues than other approaches (still relatively low) • More susceptible to dominant state issues than other approaches (one instance in Commission testing)	• 2-step data request. • Will always split coal, even if there is not a material divergence in prices. • Can still produce a dominant state outcome, even if less susceptible.

- As per the Draft Report and the mining addendum, the Commission identifies a fixed two-price band approach is its preferred approach. The advantages noted by the Commission are that it is simple and less data intensive, it is less susceptible to data confidentiality issues, and it is less likely to produce dominant state issues. The Commission does not consider the disadvantages of this approach compared to the fixed three-price band or average-price band approaches.
- We consider each of the Commission's findings as well as our own in the paragraphs below.

Simpler and less data intensive

- We do not agree with the Commission's framing of the fixed two-price band approach as less data intensive and simpler than other methods, particularly the average-price approach. To the extent that this is true, it is trivial. The Commission's position implies other approaches are materially more data intensive or complex. We consider this fundamentally misleading.
- We are uncertain how the Commission concluded other approaches are so data intensive that it is a clear disadvantage, particularly when the Commission did not request the data from states for the average-price method. Had it done so, we would have provided feedback about the availability and timeliness of such data.
- The required data for a 2-step process is readily available and is significantly easier to produce than existing data requests across a range of assessments. Given the complexity of data in other assessments, we are uncertain why simplicity is implied as a defining factor in this case.
- Furthermore, it has been standard practice for the Commission to query and test state data through annual assessment processes, often requesting update or amendment as appropriate. Such a 2-step (or more)

process represents an insignificant imposition on states. It is unreasonable that the Commission would prioritise avoiding a trivial increase in state effort over fiscal equalisation.

- All three approaches offered by the Commission are simple and low in data intensity. Minor differences between them should have little to no bearing on which method is to be preferred.

Fewer data confidentiality concerns

- The fixed two-price band approach is identified as less susceptible to data confidentiality issues. This follows the general rule that fewer price bands are less susceptible, and more price bands are more susceptible. We broadly accept this rule in comparing with the fixed three-price band method, though consider data confidentiality concerns can be readily overcome if the Commission worked with states on this matter. The key point remains that more price bands would produce a better equalisation outcome.
- Critically, an average two-price band approach is not susceptible to data confidentiality concerns. The Commission does not identify this as an advantage of this approach over the fixed two-price and three-price band approaches. We are uncertain why this benefit has been overlooked.

Less susceptible to dominant state issues

- The Commission considers the fixed two-price band to be the least susceptible to dominant state issues. We evaluate this against both the average-price band approach and the fixed three-price band approach.
- ***Comparison to average-price band*** – In the mining addendum, the Commission identifies that it *'prefers the fixed 2-band approach over the average 2-band approach because it is likely less susceptible to dominant state issues.'*[5] We disagree with the Commission's claim and contend that it has not been evidenced.
- The Commission has based this assertion on a single instance across only three years, while coal has been at historically anomalous prices, rather than on any extended analysis of coal prices. The Commission could ask states for historic data to test the reasonableness of the proposed assessments against historic trends over the past thirty years, rather than rely on a short-term outlier spike in prices.
- It is straightforward to consider scenarios where either approach results in dominant state issues. Notably, if only one state produced coal at prices above $200 (i.e. Queensland's higher quality metallurgical coal), a dominant state issue can potentially emerge under the fixed two-price band approach. However, the Commission has not undertaken analysis on the actual likelihood of this occurring compared to the moving average price band approach.
- Conceptually, the average price approach results in roughly equal proportions of coal above and below the average price threshold. Given both New South Wales and Queensland have both types of coal, this will lead to both states being represented in both price bands.
- Under the fixed band approach, there is no such mechanism leading to roughly equal proportions of coal in each band. This method is therefore susceptible to outliers or, given certain price distributions, bands with only a small amount of coal in them. Under such scenarios, dominant state dynamics can easily emerge.
- We do not, therefore, consider that either method is more or less susceptible than the other to dominant state issues. The Commission should not assert the fixed approach is *likely* less susceptible to dominant state issues and should review the logic underlying its analysis. There is insufficient evidence that either approach is less susceptible than the other to dominant state issues.
- Furthermore, while the average-price approach may have potential dominant state issues, we contend that this would not produce policy neutrality issues, which should represent the actual underlying concern of the Commission. Unlike for the fixed price threshold, a state cannot know the impact of its policies when based on a moving average price threshold. This means that a state's policy choices cannot directly influence or target its GST share under this approach.

[5] 2025 Methodology Review – Mining revenue addendum, paragraph 22.

- Generally, it seems to be the case that policy neutrality concerns are far less significant where dominant state status is fleeting or fluctuating on a yearly basis, as well as where the dominant state issue is restricted to a single price band within a single year. Such a situation is clearly different in nature to examples of state dominance across other minerals, where the status is entrenched and driven by the distribution of mineral resources rather than unpredictable fluctuations in their price.
- ***Comparison to fixed three-price band*** – We acknowledge that the fixed two-price band approach would likely be less susceptible to dominant state issues than the fixed three-price band approach. Fewer and larger price bands would generally result in fewer instances of dominant state issues. However, while fewer price bands may decrease the likelihood of a dominant state, they would likely worsen the impact of a dominant state (i.e. a greater proportion of production value would be captured by the dominant state). This is not acknowledged by the Commission.
- For its testing of the three-band approach, the Commission identified that a dominant state arises in one band for one year (above $300 band for 2022-23)[6]. The Commission also identified that there were no instances of a price band only including one state's production.

Delivering a split assessment

- The Commission claims that a disadvantage of the average-price band approach is that it would '*deliver a split assessment even where there was not much divergence in price between high value and low value coal.*'[7] While it is not clear what has been determined to be 'much' divergence in price, our view is that the Commission's analysis of this risk is one-sided and incomplete.
- It is true that under the average-price method there is a risk that a split assessment will occur even where prices are similar. However, it is also true that under a fixed-price method there is a risk that an aggregate assessment will occur even where prices materially diverge. Further, a fixed-price method can *also* result in a split assessment despite similar prices in the specific case that the prices, while similar, fall either side of the fixed threshold.
- In considering these potential issues, the Commission should have regard to both the likelihood and impact of their occurrence.
- Based on historical coal prices, it is far more likely that there will be differences in thermal and metallurgical coal prices than that they will converge in price for any extended period of time. Thermal and metallurgical coal prices are almost always materially divergent. As per our Draft Report response, metallurgical coal averages prices of 1.8 times higher than thermal coal and has a price premium floor of 1.2 times higher than thermal coal, excepting the historic anomaly of two quarters in 2022. This is reflected in Figure 1.

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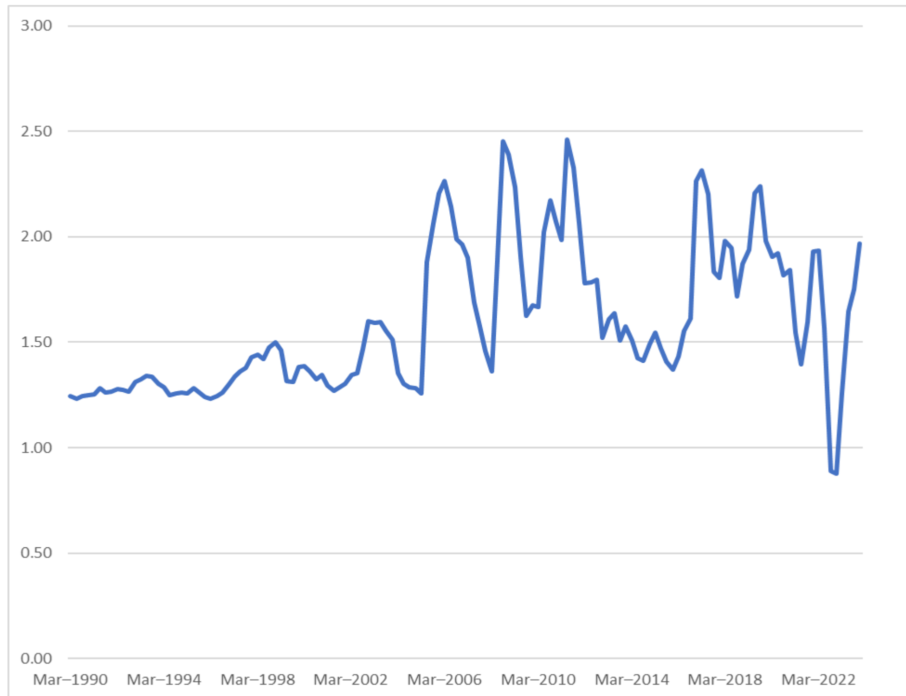
[6] 2025 Methodology Review – Mining revenue addendum, paragraph 10.

[7] 2025 Methodology Review – Mining revenue addendum, paragraph 21.

Figure 1: Ratio of Metallurgical and Thermal Coal Price



* Source: Department of Industry, Science and Resources

- We conclude, therefore, that the likelihood of the average-price approach creating a split assessment even when prices are similar is low. On the other hand, the probability that a fixed two-price approach with the threshold set at $200 will result in a combined or aggregate assessment even when prices diverge is relatively high.
- Data for the last 10 years indicates that price bands of above and below $200 would have resulted in thermal and metallurgical coal being in the same price band in 15 out of 40 quarters despite metallurgical coal being priced on average twice that of thermal coal in these 15 quarters. In these cases, the price bands proposed by the Commission would not accurately reflect obvious differences in fiscal capacities between states.
- Further, under the average-price approach, in the unlikely event that prices converge, it does not follow that a split assessment necessarily leads to a materially different outcome compared to a combined or aggregated assessment. That is, a split assessment is not inherently problematic. The key question remains whether equalisation is being achieved.
- The Commission’s preferred fixed two-price method would fail to deliver a split assessment even when there is significant divergence in price between high value and low value coal, if prices do not neatly align to the Commission’s chosen price threshold. This would seriously misstate states’ fiscal capacities. As we have demonstrated, this can occur regularly based on historical prices.
- Any consideration of the disadvantage of having a consistently split assessment under the average-price approach must be weighed against the disadvantage of the more likely scenario of failing to recognise material differences in states’ revenue raising capacities under the fixed price approach. Yet the Commission has not explored this issue in its addendum.
- The Commission cannot design its assessment based on avoiding unlikely events; in this case, a method delivering a split assessment even when there is not ‘much’ price divergence, despite prices almost always being divergent historically. This is especially true when the alternative will likely result in a poorer equalisation outcome, as is the case here.

Fixed versus moving bands

- In its analysis, the Commission calculated an average coal price of $100, $293, and $332 for the three assessment years. None of these average market prices are reflected in the Commission’s use of a fixed two-

price band, which will fail to respond to the revenue raising capacities implied by the annual average coal price. This could result in no split assessment, even where there is a material divergence in prices between states.

- In contrast, a moving average approach would accurately reflect the nature of the fiscal capacities between states in all years. This would be the case for all three years tested by the Commission, while the $200 fixed band does not in any year represent the actual coal market. The average-price method's responsiveness to market realities is one if its key benefits.

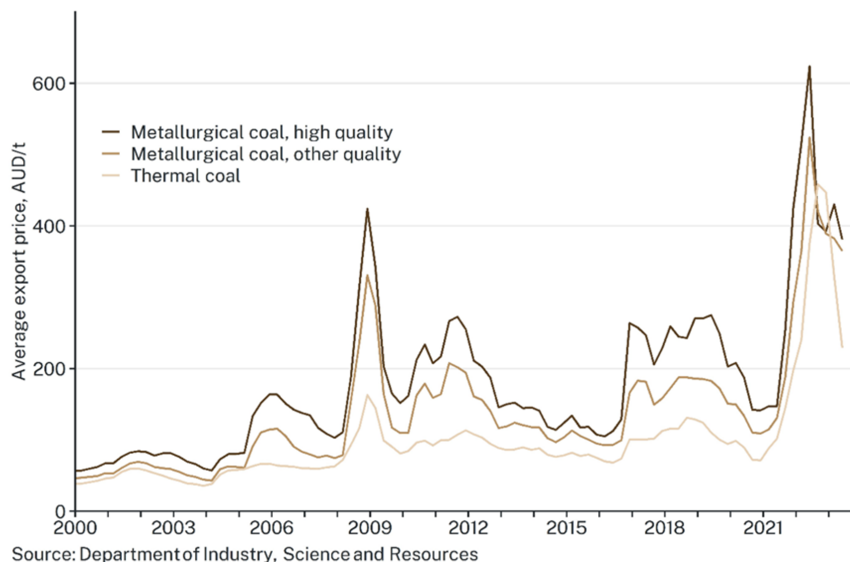
Poorer equalisation outcome

- The key issue with the fixed two-price band is that relative to both other approaches, it produces the least assessment of state revenue capacities. The equalisation outcome should be treated as the primary consideration in determining the appropriate method, before then assessing secondary principles. The Commission has not done so.
- As the Commission recognises, when implementing fixed price bands, having a greater number of bands will produce a better equalisation outcome as it better reflects the revenue raising capacity of states. Further, while the average approach will only include two price bands, it will also guarantee a better equalisation outcome than any fixed price band approach because it is responsive to market dynamics and effectively splits high and low valued coal.
- We consider the Commission must reassess its three proposed approaches to implementing a price band assessment by ensuring that equalisation is the primary point of comparison, rather than subsidiary advantages and disadvantages of each approach.

Default to aggregation

- As per the Commission's analysis, in the first assessment year (2020-21), all value of production fell within the lowest price band and the assessment defaulted to an aggregate coal assessment.[8] This aggregation occurs under the fixed three-price band approach for 2020-21 as well, though it would not occur using the average two-price band approach.

Figure 2: Historical coal prices, A$/tonne



[8] 2025 Methodology Review – Mining revenue addendum, paragraph 12.

- As demonstrated in Figure 2, there is a significant divergence in prices between thermal and metallurgical coal for 2020-21. There is an evident difference in the revenue raising capacity for states, based on the type of coal each produced. However, as a fixed price band of $200 has been implemented, the Commission's approach implies there is no difference in states' revenue raising capacities based on the type of coal produced, despite the price divergence.
- Defaulting to aggregation is not appropriate when there are major price divergences between different types of coal. The Commission should be aiming to achieve a split assessment to reflect revenue capacities.
- The Commission does not provide any comment on the relative merits of allowing the assessment to default back to an aggregate coal assessment. As defaulting back to aggregation only produces worse equalisation outcomes, we contend it is insufficient for the Commission to not comment on this matter.

Summary

- While we support the Commission's decision to split coal, as this appropriately recognises the difference in revenue raising capacities between states, we consider that the Commission has opted for the price band approach that produces the most inconsistent and inaccurate equalisation outcomes. Though this is a clear improvement over the existing method, the opportunity remains for the Commission to properly prioritise equalisation.
- We do not support the Commission's preferred fixed two-price approach nor its justification for preferring this method. The Commission has seemingly determined that a marginally advantageous increase in simplicity and an untested but assumed reduction in susceptibility to a yet-to-be-agreed dominant state definition is preferable to a more consistent and correct assessment of fiscal capacity.
- The Commission must revise its position and present a more comprehensive comparison of the available options. Our view is this will reveal that both of the other approaches clearly produce a better equalisation outcome than the Commission's preferred option and that the improvement in fiscal equalisation should be prioritised over other minor issues raised by the Commission.
- The Commission must also request additional data from states to undertake its 2-step average process, which is neither a material nor intensive request of states.

Draft Commission position:

- To split brown coal from black coal.
- To assess brown coal capacity as actual per capita.

- The Commission has proposed to implement a separate assessment for brown coal, which requires the capacity to differentiate between coal types. We consider that this supports the position that separating for all coal types is possible, not just for brown coal.
- We note that this means the larger coal assessment no longer includes brown coal. As the Commission has supported the establishment of a separate assessment for brown coal, this is functionally implementing an actual per capita assessment for Victoria. Consequently, the assessment is clearly characterised by a dominant state.
- This is partially informed by difficulties including brown coal in a price-band assessment of coal, given it effectively does not have a pricing structure relative to other minerals. Nonetheless, we note the Commission's readiness to accept a dominant state scenario is consistent with the Commission's treatment of all other minerals, prioritising fiscal equalisation over other concerns.
- NSW Treasury is comfortable with the removal of brown coal from the broader coal assessment, based only on practical considerations, provided the Commission does in fact implement its proposed changes to the coal assessment. In the event that the Commission does not implement a price-band or coal-type approach for

remaining coal types, then brown coal should be assessed together with all other coal, consistent with what would be the implied preference for aggregation.

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