# Framework for the consistent reporting of natural gas reserves and resources – Consultation Paper

## Attachment 1: Response template

**Stakeholder name: Esso Australia Resources Pty Ltd**

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| **Box 2.2 Questions on categories of reserves** | | |
| 1. | Do you agree that producers should be required to report on their 1P, 2P and 3P reserves estimates?<br>(a) If so, please explain how you would use this information and the benefit it would provide.<br>(b) If not, please explain why. | No we do not agree. As a publicly-traded company in the United States, ExxonMobil (EM) is required to report Proved (1P) reserves data on an aggregate basis to the US SEC. In accordance with this requirement, EM and Esso Australia Resources Pty Ltd (Esso) place extreme technical rigor on our Proved reserve calculations, per U.S. law. It should be noted that Proved reserves estimates are used for a number of external decisions. For example –<br>• Aggregate Proved reserves are a measure of future company production and earnings potential; hence are a consideration in public investment decisions.<br>• Proved reserves are also one variable in publicly-reported earnings calculations (via unit of production depreciation calculations) and these reported earnings influence public investment decision making.<br>• Project lenders often rely on Proved reserve estimates. When engaged in project financing, lenders require security that loans will be paid back in full. The security is usually in the form of a production forecast with a high certainty of being delivered.<br>While we may at times generate P10 / high-side estimates for select business purposes, we do not routinely maintain a database of 3P reserves and so are currently unable to provide these data. Developing a data base to curate and track 3P reserves would materially increase costs and be burdensome for the organization without equivalent benefit for market participants. 3P reserves estimates could be very misleading as they are a high-side outcome. More useful to prospective investors / customers is 1P reserves estimates which represent a high confidence estimate of future produced volumes. Like 3P reserves estimates, |

| | Questions | Feedback |
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| | | 2P estimates carry more uncertainty than 1P and can also mislead investors / customers as they are equally likely that the outcome will be less than or greater than the estimate provided. |
| 2. | Do you agree that producers should be required to break down their 1P, 2P and 3P reserves into developed and undeveloped reserves?<br>(a) If so, please explain how you would use this information and the benefit it would provide.<br>(b) If not, please explain why. | |
| 3. | Should it be mandatory for producers to develop 3P reserves estimates, or should the reporting of this information be optional as it is under the ASX Listing Rules and in other jurisdictions? | Per response to question 1, Esso believes developing and reporting 3P reserves estimates should be optional. |
| **Box 2.3 Questions on categories of resources** | | |
| 4. | Do you agree that 1C and 2C contingent resources should be reported?<br>(a) If so, please explain how you would use this information and the benefit it would provide.<br>(b) If not, please explain why. | Contingent Resources are contingent on one or more factors (economic, technical or otherwise). The feasibility of bringing contingent resources to market therefore varies greatly between different basins and fields. Given this complexity, it is not believed that market participants will be better able to forecast supply if Contingent Resources data were made available to them.<br><br>In addition, there are several areas of concern with regards to publication of Contingent Resources:<br>1. *Potential for misunderstanding:* Contingent Resources are not "like-for-like". Comparing Contingent Resources across suppliers, without the background knowledge required to understand what it would take to bring the relevant resource to market, will likely lead to confusion amongst market participants.<br>2. *Potential for misuse:* As a result of the inherent complexity of Contingent Resources, public disclosure provides the potential to misrepresent investment opportunities or other commercial activities.<br>3. *Inherent uncertainty of Contingent Resource assessments:* Contingent Resources are commonly assessed when only minimal technical |

| | Questions | Feedback |
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| | | information is available. As a result, 1C & 2C volumes will inevitably be associated with a much broader range of uncertainty than 1P & 2P volumes. This further increases the potential for misunderstanding or misuse.<br>4. *Additional regulatory burden:* In some cases, companies may not assess and internally report Contingent Resources. Esso Australia does not assess 1C. Any requirement to now publish Contingent Resources would therefore create an additional regulatory burden and cost on companies without a corresponding benefit for market participants. |
| 5. | Do you think it should be mandatory for producers to develop 1C and 2C contingent resource estimates, or should the reporting of this information be optional as it is under the ASX Listing Rules and in other jurisdictions? | Per response to question 4, Esso believes developing and reporting 1C and 2C resource estimates should be optional. |
| 6. | Do you think any other resource categories (e.g. 3C contingent resources or prospective resources) should be reported? If so, please explain how you would use this information and the benefit it would provide. | No: and further to our response to question 4, Esso doesn't currently evaluate / report 3C resources and does not believe 3C resource estimates should be reported. |
| **Box 2.4 Questions on gas field information** | | |
| 7. | Do you agree that information on the field's stage of development, the type of gas and the nature of the gas field should be reported?<br>(a) If so, please explain how you would use this information and the benefit it would provide.<br>(b) If not, please explain why. | |
| 8. | Do you agree with the categories that have been proposed for the field's stage of development, the type of gas and/or the nature of the gas field? If not, please explain why and what alternatives you would suggest. | |

| | Questions | Feedback |
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| 9. | Is there any other gas field information that you think should be reported? If so, please explain why you think this is consistent with the objectives of the reporting framework. | |
| **Box 2.5 Questions on movement in 2P reserves** | | |
| 10. | Do you agree that annual movements in 2P reserves should be reported?<br>(a) If so, please explain how you would use this information and the benefit it would provide.<br>(b) If not, please explain why. | |
| 11. | Do you agree with the categories that have been proposed for the breakdown of movements in 2P reserves? If not, please explain why. | |
| 12. | Do you think there would be value in also requiring producers to report on annual movements in 2C resources?<br>(a) If so, please explain how you would use this information and the benefit it would provide.<br>(b) If not, please explain why. | Per Esso's response to question 4, Esso does not believe reporting of 2C resources provides a benefit to market participants and hence does not support reporting of annual movements in 2C resources. |
| **Box 2.6 Questions on contracted 2P reserves** | | |
| 13. | Do you agree that if the ACCC and GMRG's recommendation on contracted 2P reserves is implemented that:<br>(a) producers should be required to report the total quantity of 2P reserves that they are contracted to supply as total contract quantities under GSAs at a basin level? If not, please explain why.<br>(b) AEMO should be required to further aggregate the information if there are less than three producers operating in the basin? If not, please explain why. | Esso disagrees that producers should be required to report volumes under contract at any level of aggregation. In addition, for basins with a small number of producers (such as the Gippsland Basin where there are currently only four producers), Esso believes that basin-level public disclosure of contracted 2P reserves would enable market participants to be able to infer the contracted reserves of individual suppliers which would be competitively damaging. Accordingly, Esso believes that aggregating at least at the offshore Victoria level, for example, is needed to preserve commercial confidentiality and competitive positioning. |

| | Questions | Feedback |
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| **Box 2.7 Questions on other information** | | |
| 14. | Is there any other information that you think should form part of the reporting framework? If so, please set out:<br>(a) what the information is<br>(b) how you would use the information and the benefit it would provide<br>(c) why you think the inclusion of this information would be consistent with the objectives of the reporting framework. | |
| **Box 2.8 Questions on reporting standard** | | |
| 15. | Do you agree that the PRMS classification system should be used in the proposed reporting framework? If not, please explain why. | |
| 16. | Do you agree that the PRMS definitions set out in Box 2.1 should be used in the proposed reporting framework? If not, please explain why. | |
| 17. | Are there any other reporting standards or definitions that you think should be reflected in the reporting framework? | No |
| **Box 2.9 Questions on quantities and analytical methods** | | |
| 18. | Do you agree that reserves and resources should be reported on the basis of sales quantities? If not, please explain why. | Esso's preference is for any reserves and resources reporting to be completed on a consistent basis with US SEC (i.e. on a dry gas basis). |
| 19. | Do you agree that reserves and resources should be reported on a net revenue basis? If not, please explain why. | No, due to the fact that JV partners report and use different bases for future net revenue calculation, this could cause competitive harm and be misleading to the public. There exists the potential for the sum of the net numbers to exceed the gross basis. Esso's recommendation is that the field's operator should be responsible to report a gross 1P estimate for the field. |
| 20. | Do you agree that producers should be required to disclose the analytical method they have used to estimate their reserves and resources? If not, please explain why. | No, we believe such disclosures should be at the option of each company. Regardless of the methodology selected, companies will still be required to achieve the appropriate level of reasonable certainty to justify the recognition of reserves. |

| | Questions | Feedback |
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| **Box 2.10 Questions on reserves and resources reporting level** | | |
| 21. | Do you agree that the reserves and resources information set out in sections 2.2.1-2.2.4 should be reported at a field level?<br>(a) If so, please explain how you would use this information and the benefit it would provide.<br>(b) If not, please explain why and set out what reporting level you think should be adopted. | Esso does not agree that reporting should be at a field level. While geologic and engineering data are assessed at a reservoir and field level, aggregation of reserves data by basin or larger level reduces the range of uncertainty around the estimated reserves volumes. Normal fluctuations up and down for field level reserves are statistically muted by aggregation and will show a better picture of the overall reserves available.<br><br>With this in mind Esso would like to draw attention to four areas of concern with respect to publication of field-level Proved (P90) and Probable (P50) reserves:<br>*1.* *Inherent uncertainty in field-level estimates*: as noted above, Probable reserves are probabilistic estimates and by their nature are equally likely to increase or decrease over the life of a development. A wider range of variance is expected with increasing granularity (or decreasing degree of aggregation)<br>*2.* *Potential for misuse*: As result of item 1, increasingly granular public disclosure provides the potential to misuse or misrepresent investment opportunity or other commercial activities<br>3. *Competitive issues:* Field-level data may limit individual equity owner's competitive advantage (such as first mover advantage), may unnecessarily expose them to future liability, and may reduce the opportunity for future trade / sale, or other commercial negotiation by establishing a publicly posted value as an anchor point. Further, individual investors may be misled by not understanding the nature of a P50 value as described previously. When considering sales or purchases or unitization agreements, it could be advantageous for some companies to take a more optimistic or pessimistic position within the SPE PRMS guidelines to further their negotiation position, undermining the ACCC's purpose for publishing these data.<br>4. *Additional regulatory burden:* In some cases companies may not estimate Probable reserves by field on the basis that it is not necessary for internal reporting requirements. Any requirement to now publish Probable reserve |

| | Questions | Feedback |
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| | | data by field would therefore create an additional regulatory burden on companies, and in the case of smaller entities which do not have the internal expertise, may also impose significant additional specialist consultancy costs. Additional costs reduce profit margins, thereby limiting companies' ability to reward shareholders and employ workforce in pursuit of new opportunities |
| **Box 2.11 Questions on the frequency and timing of reporting** | | |
| 22. | Do you agree that the frequency of reporting should be annual? If not, please explain why. | Esso is comfortable with annual reporting. |
| 23. | Do you agree that producers should also be required to report on any material changes in reserves and resources estimates that occur within the year?<br>(a) If so:<br>i. do you think there should be any limitation on the requirement to report changes (for example, should the requirement be limited to changes in reserves and resources that are advised to the ASX and/or government agencies, or should it be limited to material changes in reserves and resources)?<br>ii. do you think the threshold for material changes should be set at +/-10% or do you think another threshold would be more appropriate?<br>(b) If not, please explain why. | Further to our response to question 21, Esso is not supportive of intra-year reporting of material changes in field-level or basin-level reserves and resources. The proposed 10% material change threshold would require frequent reporting imposing an additional regulatory compliance burden. |
| 24. | Do you think that all producers should be required to report their reserves and resources as at a fixed date? If not, please explain why and the option you believe should be employed. | Esso believes the lowest cost and most practical approach is to allow producers to determine the date that they report (noting that foreign-listed entities will usually have different reserves reporting dates to locally-listed companies). |

| | Questions | Feedback |
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| **Box 2.12 Questions on evaluation requirements** | | |
| 25. | Do you agree that reserve and resource estimates should be required to be prepared by, or under the supervision of, an independent qualified evaluator? If not, please explain why. | Esso strongly disagrees that reserve and resource estimates should be prepared by / under the supervision of an independent qualified evaluator as:<br>• Esso is confident in the integrity of its current process. Esso utilises highly-qualified employees to estimate reserves.<br>• The requirement would be overly onerous and cost prohibitive (indicatively A$2M for first evaluation and A$1M per year thereafter)<br>• The requirement is potentially competitively damaging where Esso's data, processes and systems are proprietary<br>• The requirement is unnecessary as we don't foresee it changing Esso's reserves and resources data. |
| 26. | Do you think that any other evaluation requirements (e.g. a requirement to obtain an independent audit) should be implemented? | Refer response to question 25. For the same reasons, Esso does not support any other evaluation requirements. |
| **Box 2.13 Questions on compliance costs** | | |
| 27. | What incremental costs do producers expect to incur in complying with the reporting requirements proposed in sections 2.3 and 2.4? | Refer response to question 25.<br><br>Cumulatively, proposed reporting obligations will necessitate a significant implementation and training effort. For example, many of the proposed disclosures require a degree of granularity not currently present in our reporting and consolidation processes. This will necessitate costly changes to these systems. We believe data disclosures that go beyond what companies use to manage the business on a day-to-day basis are inherently excessive. |
| 28. | Do you think there are any refinements that could be made to the proposed reporting requirements in sections 2.3 and 2.4 to further reduce compliance costs or the regulatory burden, whilst also ensuring the requirements are fit for purpose and achieves the objectives set out in section 1? | Esso proposes that compliance costs could be significantly reduced by limiting reporting to 1P, allowing each producer to determine its annual reporting date, no requirement for independent evaluation / oversight and reporting at a basin rather than field level. |

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| **Box 3.1 Questions on the manner in which reserves are to be estimated** | | |
| 29. | Do you agree that producers should be required to estimate their reserves on the basis of forecast economic conditions? If not, please explain why. | Esso is supportive of use of a common forecast basis (publicly-available price and forex, escalation forecast). |
| **Box 3.3 Questions on gas price assumptions to be used for uncontracted reserves** | | |
| 30. | Do you think that:<br>(a) Producers should be responsible for determining the forecast gas prices they will assume when estimating uncontracted reserves and required to disclose these assumptions (i.e. Option 2)?<br>i. If so, please explain why.<br>ii. If not, please explain why.<br>(b) Producers should be required to use a mandated common gas price assumption when estimating uncontracted reserves (i.e. Option 1)?<br>i. If so, please explain why and set out:<br>a. the benefits you think this would provide over the producer-determined assumptions?<br>b. how you think the forecast common gas price assumption should be determined?<br>ii. If not, please explain why.<br>(c) Producers should be responsible for determining the forecast gas prices they will assume when estimating uncontracted reserves and not required to disclose their assumptions (i.e. Option 3)?<br>i. If so, please explain why and set out how do you think this option would address the concerns outlined in section 3.1?<br>ii. If not, please explain why. | Esso is supportive of and prefers Option 1 as this is a common basis for all producers to use and allows common comparison across companies.<br><br>Esso is strongly opposed to Option 2 as it would involve disclosing highly sensitive corporate assumptions relating to future expectations of – amongst other things – international crude prices and Asian LNG prices.<br><br>Esso is open to Option 3, though it is not our preferred option. |

| | Questions | Feedback |
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| 31. | If Option 2 is implemented, do you think that the disclosure requirements in section 3.6 will impose sufficient discipline on producers, or do you think the gas price assumptions used by producers should be required to satisfy a test that would be overseen by the AER? If you think the gas price assumptions should be subject to a test, please set out:<br>(a) what form you think the test should take and if the test should apply to the gas price assumptions or the method used to determine the gas price assumptions<br>(b) how you think the test should be enforced by the AER (for example, should the AER have the power to require producers to re-estimate their reserves using an alternative price assumption). | Refer response to question 30 above.<br><br>Rather than have a regulatory process to test / re-state price assumptions, the use of a common mandated gas price would be preferred. |
| **Box 3.4 Questions on gas price assumptions to be used for contracted reserves** | | |
| 32. | Do you agree that the gas price assumptions underpinning contracted reserves should be based on the prices specified in the relevant GSAs? If not, please explain why. | |
| 33. | Do you agree with the ACCC's proposal to allow producers to account for the operation of:<br>(a) price escalation mechanisms when determining the prices to apply under the relevant GSAs over the forecast period? If not, please explain why.<br>(b) contract extension provisions if the GSAs are likely to be extended and the prices (or pricing mechanisms) to apply in this period have already been determined? If not, please explain why. | |
| **Box 3.5 Questions on the disclosure requirements for gas price assumptions** | | |
| 34. | Do you agree that producers should be required to disclose the following information when reporting their reserves estimates? | Per response to question 30, Esso does not support disclosure of gas prices – or a gas price range – used to estimate 2P reserves. |

| | Questions | Feedback |
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| | (a) The gas price range within which there would be no material change in the 2P reserves estimates, which is to be reported at a basin level for each of the following five years and generally for subsequent periods (with the range to be based on the price assumptions used to estimate uncontracted reserves).<br>(b) The sensitivity of the 2P reserves estimates to a +/-10% change in the gas price range reported under (a).<br>(c) A description of the method used to determine the gas price range and any other assumptions that have been made when determining the price range.<br>(d) An explanation of any changes that have been made to the gas price assumptions from the previous year and why the changes were made.<br>If not, please explain why. | It would be more administratively burdensome to introduce these analyses. |
| 35. | Do you agree with the proposal to require producers to report the gas price range:<br>(a) for each year over a five year period and generally thereafter? If not, please explain why.<br>(b) for uncontracted reserves only? If not, please explain why.<br>(c) at a basin level? If not, please explain why. | Per response to question 30, Esso does not support disclosure of gas prices – or a gas price range – used to estimate 2P reserves. |
| 36. | If producers are required to report the gas price range within which there would be no material change in 2P reserves, what materiality threshold do you think should be adopted for this purpose and why? | Per above. |
| 37. | Do you agree that the threshold for measuring the sensitivity of the reserves estimates should be 10%? If not, please explain why and what alternative threshold you think should be applied. | |

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| 38. | Is there any other information that you think should be disclosed about the gas price assumptions? If so, please explain what the information is and why it is required to meet the objectives set out in section 1. | |
| **Box 3.6 Questions on compliance costs** | | |
| 39. | What incremental costs do producers expect to incur in complying with the proposed reporting requirements set out in sections 3.4-3.6? | High-level estimate of A$100k per year on the assumption that the submission date is concurrent with existing SEC reporting obligations (calendar year). |
| 40. | Do you think there are any refinements that could be made to the proposed reporting requirements in sections 3.4-3.6 to further reduce compliance costs or the regulatory burden, whilst also ensuring they are fit for purpose and achieves the objectives set out in section 1? | Per response to question 30, Esso believes producers should be responsible for determining the forecast gas prices they will assume when estimating uncontracted reserves but not be required to disclose their assumptions. |