Senate Economics Legislation Committee

Future Made in Australia Bill 2024 [Provisions] and the Future Made in Australia (Omnibus Amendments No. 1) Bill 2024 [Provisions]

Responses to Questions on Notice from Senator David Pocock on 29 August 2024

1. **Has Chevron ever paid royalties for gas exported from Gorgon and Wheatstone?**

The Gorgon and Wheatstone natural gas facilities are developing gas reserves located in Commonwealth waters. They are therefore subject to the Commonwealth Petroleum Resource Rent Tax (PRRT) regime. Please see the answer to the question below regarding comment on Chevron Australia's PRRT payments.

Chevron Australia has also paid royalties and excise over past years and decades through its WA Oil asset, its Thevenard Island oil asset, and as a one-sixth participant in the North West Shelf Joint Venture.

2. **Has Chevron ever paid PRRT for that gas?**

Chevron Australia and its joint venture partners in Gorgon and Wheatstone have invested more than A$81 billion of capital expenditure to the Australian economy since 2009 and on average A$2.8 billion of annual operating expenditure, supporting direct jobs and livelihoods for over 4,100 people each year.

Over the same timeframe, Chevron Australia has contributed more than A$15 billion in taxes and royalties (including A$4.2 billion company income tax for 2022; and A$3.5 billion company income tax for 2023), which can be used to fund critical public infrastructure and assist the government in supporting investment in large scale energy transition.

As provided in questions on notice to the Senate Economics Legislation Committee's public hearing into the provisions of the *Treasury Laws Amendment (Tax Accountability and Fairness) Bill 2023* in April this year, based on pricing, production, and foreign exchange rate assumptions, we expect to pay A$850 million to A$950 million in PRRT in relation to the four years starting 1 July 2024, noting that the Wheatstone project commences having a liability under the legislation from 1 July 2025.

3. **How much gas has been sold over the past five years from Gorgon and Wheatstone?**

Over the past five financial years approximately 125 million tonnes of Liquefied Natural Gas (LNG) has been sold from the Chevron Australia-operated Gorgon and Wheatstone gas facilities.

This represents around 6.5% of the world's LNG supply or approximately a third of Australia's LNG exports. This gas provides critical energy supply to international customers across the Asia Pacific region – many of whom are Australia's closest trading and security partners.

In addition, the Chevron Australia-operated Gorgon and Wheatstone gas plants produce approximately 45 per cent of the gas supplied to the Western Australian domestic market – fuelling the state's powerhouse mining sector, critical minerals processing, and electricity generation for households.

4. **If there is an accident or incident at Gorgon CCS who is liable? What indemnity and liability is provided by State and Commonwealth Governments?**

   As Operator of the Gorgon gas facility, Chevron Australia is responsible for the operation of the Gorgon Carbon Capture and Storage (CCS) System over its 40 plus year life. Chevron Australia is required to manage and monitor the injected reservoir carbon dioxide during operations and for a period of at least 15 years after the cessation of the injection project.

   In 2009, the Western Australian and Commonwealth Governments agreed to provide a limited post-closure indemnity to the Gorgon Joint Venturers.

   In accordance with the terms of the Indemnity Agreement, both the Western Australian and Commonwealth Governments need to be satisfied that the matters specified in the agreement have been met before an indemnity will be provided (including that there is no significant risk to the environment or human health and safety).

   A copy of the Indemnity Agreement is publicly available here: 2728.pdf (parliament.wa.gov.au)

5. **What percentage of lifecycle emissions, including Scope 3, are injected at Gorgon?**

6. **What are the total life cycle emissions from Gorgon?**

7. **What were the total reported emissions from Gorgon last year?**

   Given the similarity of these three questions, to avoid duplication, the information set out below seeks to respond to all of the questions rather than respond to each question individually.

   Gorgon Carbon Capture and Storage

   Gorgon's environmental approval conditions require the injection of Reservoir Carbon Dioxide which is defined as greenhouse gas (GHG) Emissions that are separated (from natural gas or the products produced from extracted hydrocarbons) in the acid gas removal units and expected to be subsequently injected underground.

   More than 10 million tonnes of Reservoir Carbon Dioxide has been injected to date with more than 100 million tonnes expected to be mitigated over the life of the Gorgon CCS system. More information on Gorgon CCS can be found here:

   carbon capture and storage | chevron australia — Australia.chevron.com

   Net Zero by 2050 Requirements

   In recent years, the Western Australian Minister for Environment has determined new GHG conditions for Gorgon. These conditions require Gorgon to reduce its net Scope 1 GHG emissions (Reservoir and Non-Reservoir) to net zero by 2050.

   The approved Gorgon Greenhouse Gas Management Plan is publicly available and can be found here:

   gorgon-gas-treatment-plant-greenhouse-gas-management-plan-230224.pdf (chevron.com)

Gorgon is also required to reduce its net GHG emissions under the Australian Government's Safeguard Mechanism.

Reported Emissions

Each year, the Clean Energy Regulator (CER) publishes facility level emissions data for the previous financial year which includes reported covered GHG emissions for the Chevron operated Gorgon gas facility.

This data is publicly available and can be accessed here: https://cer.gov.au/markets/reports-and-data/safeguard-facility-reported-emissions-data#safeguard-facilities-data-2022%E2%80%9323

In addition, and in accordance with its State and Federal environmental approvals, Chevron publishes an annual Environmental Performance Report for Gorgon in November each year. This publicly available report includes the volume of Reservoir Carbon Dioxide removed and injected for the previous financial year.

The table below outlines Gorgon's reported Scope 1 emissions for each financial year since the commencement of injection (2019) and the volume of reservoir carbon dioxide removed and injected in those periods.

Year	Scope 1 emissions	Reservoir Carbon Dioxide Removed	Reservoir Carbon Dioxide Injected
2019/20	6,263,348 tCO2e	3,856,511 tCO2e	2,707,092 tCO2e
2020/21	8,365,831 tCO2e	3,169,705 tCO2e	2,170,594 tCO2e
2021/22	8,336,476 tCO2e	5,044,308 tCO2e	1,646,150 tCO2e
2022/23	8,191,308 tCO2e	5,049,189 tCO2e	1,717,841 tCO2e

Note: Scope 1 emissions data for 2023/24 will be published by the CER in March 2025 and volumes of reservoir carbon dioxide removed and injected in 2023/24 will be published by Chevron in November 2024.

Scope 3 Emissions

As the Gorgon and Wheatstone facilities supply both the Australian domestic market and the international market, these third-party indirect emissions may occur across multiple global regions. A large percentage of LNG produced is sold internationally under long-term contracts. This long-term export market is primarily Japan, with some exports to other countries including South Korea. These indirect emissions would be direct emissions for the end consumers and would also have to operate under other regulatory regimes, Australian, Japanese, and South Korean, to manage their emissions and any associated impacts.

Applying contemporary guidance on estimating emissions, the current estimate of Gorgon scope 3 GHG emissions associated with transport and third-party end use of products is 49.8 MTPA CO2-e. These downstream indirect emissions are outside of Chevron Australia's operational control and are subject to the regulatory regimes in the jurisdictions where the emissions occur.

For the purposes of estimating scope 3 GHG emissions the following key documents and inputs were used:

- emissions factors sourced from IMO Resolution MEPC.245(66) and IPCC AR5 100-year global warming potentials (GWP);

- emissions from third-party use of products were calculated in alignment with methods in Category 11 of IPIECA's Estimating Petroleum Industry Value Chain (Scope 3) Greenhouse Gas Emissions, including product quantity and fuel-specific higher heating values, and the CO2, CH4 and N2O combustion emissions factors for each fuel type;
- evaluation based upon production data from a representative year (15.6 MT net LNG), applying API compendium methodologies and factors, and IPCC AR5 100-year GWP;
- transport emissions estimated from shipping fuel consumption scaled for a representative year of production.

8. What are the estimated lifecycle emissions from the J-IC Project?

The Jansz-Io Compression Project (J-IC Project) was always contemplated as part of the approved life of the Gorgon natural gas development. Its purpose is to enhance the recoverability of the Jansz-Io field to maintain the delivery of gas to Gorgon and in turn ensure reliable supply of domestic gas and LNG to consumers. Gas from the Jansz-Io field is low in reservoir carbon dioxide and is currently the source of all domestic gas from the Gorgon gas facility.

Jansz-Io compression operations will not increase the average annual emissions footprint for the Gorgon gas facility beyond approved levels.

As the J-IC Project involves the addition of infrastructure in an already producing gas field, it does not increase the production capacity of the Gorgon gas facility.

As outlined above, net Scope 1 emissions from Gorgon are projected to decline from current levels to net zero by 2050 in accordance with the facility's state environmental approval conditions and the federal Safeguard Mechanism.