

PAEC Inquiry into the 2017-18 Budget Estimates – Questions taken on notice and further information agreed to be supplied at the hearing

Minister Noonan, Resources, Friday 19 May 2017

Question 8

Regarding the CarbonNet project:

- a. Please explain the causes of delays to the project.
- b. Were these delays caused by the department or the companies involved in the project?
- c. Please provide evidence of the success of carbon capture and storage (CCS) to the Committee.

(Pages 7-8 of the Resources portfolio transcript)

Response A & B

Delays to the CarbonNet project were due to regulatory processes related to obtaining Greenhouse Gas Assessment permits.

Earlier this year, following discussions between the Victorian and Commonwealth Governments, the CarbonNet project progressed to the next stage of activities (Stage 3).

Response C

CCS is being explored as part of a suite of solutions with the potential to mitigate greenhouse gas emissions and address climate change.

In 2014 the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Synthesis Report ⁽¹⁾ found that most climate models could not meet the required targets without CCS.

In 2014 ClimateWorks⁽³⁾ found that CCS could assist Australia to pursue pathways to deep decarbonisation and reach its target of net zero greenhouse gas emissions by 2050.

Globally, there are 17 large-scale CCS projects across a range of industry sectors operating with a further five under construction which demonstrate that CCS is technically feasible at commercial scale (GCCSI 2017) ⁽⁴⁾. Specific projects include:

- the Sleipner CCS project in Norway has been in operation since 1996
- Boundary Dam in Canada, began operations in 2014
- commercial scale CCS projects for Al Reyadah Steel Industries in Abu Dhabi and Shell's Quest Hydrogen project in Canada commenced operations in 2016
- Tomakomai in Japan began operations in 2016
- the Petra Nova project in Texas commenced operations in 2017.
- the Archer Daniels bio ethanol CCS project in Illinois commenced operations in 2017

PAEC Inquiry into the 2017-18 Budget Estimates – Questions taken on notice and further information agreed to be supplied at the hearing

- Chevron's Gorgon LNG project in Western Australia.
- the CO2CRC's Otway Storage Demonstration project has been running since 2008 in Victoria.

- 1) <https://www.ipcc.ch/report/ar5/>
- 2) <http://www.iea.org/etp2017/summary/>
- 3) http://climateworks.com.au/sites/default/files/documents/publications/how_australia_can_prosper_in_a_low_carbon_world_web_version_-_september.pdf
- 4) <https://www.globalccsinstitute.com/projects>

PAEC Inquiry into the 2017-18 Budget Estimates – Questions taken on notice and further information agreed to be supplied at the hearing

Question 9

In relation to the extractive industry risk-based work plans, please indicate why a regulatory impact statement was not undertaken at the time of their introduction.

(Page 11 of the Resources portfolio transcript)

Response

Risk-based work plans were introduced under amendments to the *Mineral Resources (Sustainable Development) Act 1990* passed by the Victorian Parliament in February 2014. The amendments came into force in December 2015. Detailed requirements for the content of risk-based work plans are prescribed in the *Mineral Resources (Sustainable Development) (Extractive Industries) Amendment (Risk-based Work Plans) Regulations 2015*.

A Regulatory Impact Statement (RIS) was not prepared for the Regulations because the economic burden on industry of new risk-based requirements was not expected to be significant (being well below the Commissioner for Better Regulation's indicative threshold of \$2 million per year). Risk-based work plan requirements apply only for new work plan applications, or where an existing authority holder seeks to vary an approved work plan. Economic burden was estimated based on consultation with industry and historical application data.

PAEC Inquiry into the 2017-18 Budget Estimates – Questions taken on notice and further information agreed to be supplied at the hearing

Question 10

What is the estimated number of tonnes of extraction industry construction material required each year to meet the population pressures facing Victoria?

(Page 12 of the Resources portfolio transcript)

Response

The best currently available information to forecast future extractive resources demand in Victoria is the *Demand Analysis of Extractive Resources in Victoria* (Ernst & Young, 2016). This is summarised in the table below:

| | Year | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2030 | 2040 | 2050 |
|--------------------------------------------------------|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------------|
| Forecast extractives requirements (millions of tonnes) | Baseline | 46.4 | 47.6 | 48.9 | 50.2 | 51.5 | 52.9 | 54.3 | 50.7 | 51.9 | 53.2 | 54.5 | 61.6 | 69.9 | 87.8 |
| | High Demand | 55.7 | 57.1 | 58.6 | 60.2 | 61.8 | 63.5 | 65.2 | 60.8 | 62.3 | 63.8 | 65.4 | 73.9 | 83.8 | 105.3 |
| | Low Demand | 37.1 | 38.1 | 39.1 | 40.1 | 41.2 | 42.3 | 43.5 | 40.5 | 41.5 | 42.5 | 43.6 | 49.2 | 55.9 | 70.2 |

Forecast extractive material requirements: millions of tonnes of extraction industry construction material forecast to be required per year in Victoria (Source: Ernst & Young, 2016).