

**LEGISLATIVE COUNCIL**  
**Question On Notice**

**Tuesday, 11 October 2016**

**4463. Hon Robin Chappie to the Leader of the House representing the Minister for Energy**

- (1) What is the department's total spending in the energy portfolio on new capacity in terms of renewables versus fossil fuels, over the last two terms of Government?
- (2) What is the department's total spending on upgrades to renewables versus fossil fuels, over the last two terms of Government?
- (3) What is the department's total spending on maintenance?
- (4) What resources are currently devoted across all departments to the extraction of fossil fuels – in terms of full time employees and grants, compared to renewables?
- (5) Has the department undertaken any modelling on reaching different Renewable Energy targets beyond the 20 per cent by 2020?
- (6) If no to (5), why not?
- (7) Why does Western Australia not have a renewable target when other States with less good sun and wind resources have ambitious targets, for example Victoria 40 per cent renewables by 2025, South Australia 50 per cent by 2025, Queensland 50 per cent by 2030 and ACT 100 per cent by 2020?
- (8) What is the current emissions profile for Western Australia?
- (9) How much will all the LNG projects coming online lift Western Australia's emissions profile by, in metric tonnes per annum and percentage?
- (10) Has any modelling been done on the impact of Western Australia's LNG and other fossil fuel projects on Western Australia's current national target of reducing emissions by 5 per cent?
- (11) If no to (10), why not?
- (12) What is the current emissions profile for every power station in Western Australia?
- (13) For the answer to (12), is this information publicly available?
- (14) If no to (13), why not and when will it be?
- (15) What is the current air pollution profile for every power station in Western Australia?
- (16) What modelling has been done or resources devoted to a phase out plan?
- (17) If none to (16), why not and are there plans to do so in the future?

**Answer**

(1) Total Renewable	\$984,242,783
Total Non-Renewable	\$753,030,950

(2) **Horizon Power**  
 Renewables (capital) = \$12.5M  
 Fossil Fuel (capital) = \$100.6M

**Synergy**

Synergy carries out regular maintenance and efficiency upgrades to all plant. It is estimated that costs for capacity upgrades have totalled \$11 million. To provide exact costs and to compare these costs would take considerable time and resources away from core Synergy business.

(3) Synergy  
\$1,020,487,093

**Horizon Power**

Network + Generation total spend is \$190.3 M

(4) This question should be directed to the Minister for Mines and Petroleum.

(5) Yes

(6) Not applicable

(7) The Government of Western Australia is committed to supporting a greater uptake of renewable energy. The introduction of additional renewable energy capacity on Western Australia's isolated network must be carefully managed, with due consideration being given to its effect on the cost, reliability and security of electricity supplies in the State.

(8) Based on 2014 data (the most recent available), the sectoral breakdown of Western Australia's greenhouse gas inventory, expressed in million tonnes of carbon dioxide equivalent (Mt CO<sub>2</sub>-e), is as follows[1]:

Sector	Emissions (Mt CO <sub>2</sub> -e)
Stationary energy	49.3
Transport	13.3
Fugitive emissions from fuels	5.2
Industrial processes and product use	5.4
Agriculture	8.7
Waste	1.6
Land use, land use change and forestry	2.6
<b>TOTAL</b>	<b>86.1</b>

[1] Commonwealth Department of Environment, 2016. *State and Territory Greenhouse Gas Inventories 2014*. Accessed 17 October 2016 (<http://www.environment.gov.au/system/files/resources/319ea5f4-e3d9-4af1-97eb-2a4ba661713e/files/state-territory-inventories-2014.pdf>).

(9) This question should be directed to the Minister for State Development.

(10) This question should be directed to the Minister for State Development.

(11) This question should be directed to the Minister for State Development.

(12) The Department of Finance's Public Utilities Office does not collect emissions data for individual power stations. This information is commercially confidential, with individual

liable entities only being required to report their emissions to the Commonwealth Government under the *National Greenhouse and Energy Reporting Act 2007*.

(13) No

(14) The publication of emissions data for individual liable entities is a matter for the Commonwealth Government.

(15) This question should be directed to the Minister for Environment.

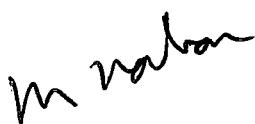
**(16-17) Synergy**

Synergy is committed to driving efficiencies, reducing state-funded operating subsidies and transforming the business. Synergy will continue to act in the State's best commercial interests in meeting its Large-Scale Renewable Energy Target requirements.

**Horizon Power**

Horizon Power has commissioned a priority project (system blueprints) that looks at the optimal time to integrate high penetration renewables in all of its 36 systems. The project is essentially an economic study that estimates the future cost path of various generation technologies with the advent of falling Photovoltaic (PV) and battery prices, comparing these to the costs of existing infrastructure. This determines the best time to switch from current infrastructure to a higher penetration of renewables. The outcomes of each projection is used and referenced in all business investment decisions.

The system blueprints project has recently completed, and is embedded into the business as usual. In addition to this, accountabilities for maintaining and enhancing this modelling have been included into two PTE roles.

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