PERTH SEAWATER DESALINATION PLANT

**1308. Hon DIANE EVERS to the minister representing the Minister for Water:**

I refer to the minister's response to question without notice 1274 about the Perth seawater desalination plant in Kwinana.

(1) What quantity of electricity, in megawatt hours, is used to produce each megalitre of desalinised water?

(2) What amount of greenhouse gas emissions is associated with this energy consumption?

(3) What proportion of the electricity used is supplied by gas and what proportion by renewables?

(4) What is the plant's estimated greenhouse gas efficiency in comparison with the efficiencies of other comparable projects that produce a similar product?

(5) What proportion of the plant's greenhouse gas emissions are offset by carbon credits accredited under the National Carbon Offset Standard?

**Hon ALANNAH MacTIERNAN replied:**

I thank the honourable member for the question. The Minister for Water has provided the following answers.

(1) In 2018–19, 3.6 megawatts of electricity was used to produce each megalitre of desalinated water.

(2) In 2018–19, the total annual greenhouse emissions was 98.6 kilotonnes $CO_2$ equivalent, as reported under the 2018–19 National Greenhouse and Energy Reporting scheme.

(3) The Perth seawater desalination plant is supplied as part of the Water Corporation portfolio's electricity supply. The proportion is dependent on the generation mix within the electricity grid.

(4) There is no benchmark for greenhouse emissions for desalination plants. The Perth seawater desalination plant's energy efficiency was world's best practice at the time of construction. Through a process of continuous improvement, energy efficiency measures are identified and implemented.

(5) The plant operates in accordance with the environmental conditions set in 2003. These conditions do not require that greenhouse gas emissions are offset through carbon credits under the National Carbon Offset Standard.