

**LEGISLATIVE COUNCIL**

**Question on notice**

- 6 AUG 2013

Tuesday, 11 June 2013

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

I refer to page 18 of the Strategic Energy Initiatives Directions Paper, under the heading "Regional and sector electricity demand forecasts in Western Australia", and for each of the proposed magnetite mines in the Mid West region, I ask:

- (a) how much diesel fuel will be used for transport per year at peak operational capacity;
- (b) how much energy will be required to be generated per year to keep the mine at peak operational capacity;
- (c) what proportion of that energy will be generated from renewable fuel sources; and
- (d) what is the total estimated annual greenhouse gas emissions when operating at peak capacity?

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**Answer**

- (a) Mining operations do not provide specific data on fuel consumption. Commonwealth Government information compiled for the Energy Efficiency Opportunities Program (2008-09) indicates that, on an energy equivalent basis, diesel use for haulage and electricity generation represented 17 per cent of total energy consumption in the mining sector.
- (b) The Department of Mines and Petroleum has advised that, given uncertainties around development schedules of specific mines, per tonne benchmark energy consumption figures are more relevant than output based figures. Energy use for the production of magnetite concentrate output is about 95 to 125 kilowatt hours per tonne.
- (c) Mining operations located in the Mid West region connected to the South West Interconnected System will receive the same proportion of renewable energy as all other grid-connected consumers. This is currently about 9 per cent of total electricity supplies.
- (d) The National Greenhouse and Energy Reporting (Measurement) Determination 2008 states that average emissions from electricity purchased from the South West Interconnected System are 0.82 kilograms of carbon dioxide equivalent emissions per kilowatt hour. This equates to about 80 to 100 kilograms carbon dioxide equivalent emissions per tonne of magnetite concentrate output.

*M Nahan*