

**WRITTEN QUESTION TO THE MINISTER FOR THE ENVIRONMENT
BY DEPUTY M. TADIER OF ST. BRELADE
ANSWER TO BE TABLED ON TUESDAY 16th JULY 2019**

Question

Does monitoring of emissions of greenhouse gases from the Energy from Waste (EFW) plant currently take place; if not, will the Minister explain why not; and if so, will the Minister provide a monthly breakdown of the amount of greenhouse gases emitted from the EFW plant in the past 5 years?

Answer

Jersey's emissions data is collected and audited by Aether; a company who annually compile the UK's emission data on behalf of the UK Government. They are reported back on gov.je¹ with a dedicated infographic and the emissions from the Energy from Waste plant (EfW) are included under 'energy supply', as the EfW is categorised alongside on-island power generation from La Collette, both being the Island's source of indigenous power generation. The EfW operates in accordance to the Waste Management Licence issued under the Waste Management (Jersey) Law 2005.

All emissions calculations are carried out by sector and in accordance with the International Panel on Climate Change Common Reporting Framework Guidelines 2006. Disaggregated emissions data is supplied back to the Government of Jersey two years in arrears. This delay is universal and due to the very thorough international auditing of emissions.

Emissions are calculated based on a variety of data such as: the amount of imported products and fuels (e.g. petrol, diesel kerosene etc); the number of vehicles and annual journey lengths and driving conditions; the numbers of livestock locally.

Carbon emissions arising from Energy from Waste plants are dealt with very specifically under the Kyoto Protocol. Carbon emissions factors are applied to the amount of municipal solid waste that enters the EfW. The factor takes into account that there are emissions from only the proportion of carbon emitted from non-biogenic material. Biogenic carbon, i.e. carbon that arises from 'recently photosynthesised' or 'non-fossil carbon' such as food waste, is excluded from the auditing process as biogenic carbon is not a greenhouse gas.

Aether advises that the carbon factor used for the Jersey GHG inventory is the UK inventory carbon factor that has been calculated using analysis by Department for Environment Food and Rural Affairs (DEFRA) on waste composition, and thus changes from time to time based on their analysis of the composition of municipal solid waste. In 2016, the carbon factor was 111.13 kt/Mt CO₂ and was applied to the annual tonnage of municipal solid waste entering the EfW. It would be possible to calculate the monthly emissions by taking monthly volumes of MSW and applying this carbon factor but it has not been possible to do this in the time available.

In addition to greenhouse gas reporting, emissions from the EfW are also monitored as part of the EFW Waste license. These are recorded by a continuous emission monitoring system (CEMS) which monitors the following compounds for each boiler.

- Oxides of nitrogen
- Particulate matter
- Sulphur dioxide

¹ <https://www.aether-uk.com/Resources/Jersey-Infographic>

- Total organic compounds
- Hydrogen chloride
- Carbon monoxide

Stack testing of metals and dioxins and furans is also carried out by the EFW team twice a year. The purpose of this monitoring is to ensure compliance with emission limit values (ELV) as specified in the license and not on total quantities.

I would like to extend the opportunity for the Deputy to receive a briefing on emissions from the EFW from officers if he would find that helpful.