

**Integra South East Energy Recovery Facility
EPR BJ7107IJ
Report on Energy Consumption and Production 2016**

1.0 Introduction

This document represents the Report on Energy Consumption and Production for Integra South East Energy Recovery Facility (Portsmouth ERF) submitted to the Agency in accordance with Condition 4.1.10 and 4.1.11 of Environmental Permit BJ7107IJ:

Condition 4.1.10:

“By 31st of January each year the operator shall submit in writing to the Agency an annual report on the energy consumption and energy production of the Permitted Installation”.

Condition 4.1.11:

The report required by 4.1.10 shall include the following: a) a review (with regard to BAT) of opportunities for increasing the overall energy efficiency of the Permitted Installation over the coming year, b) progress with those opportunities identified in the previous annual report and, c) Energy produced per tonne of waste processed including details of parasitic load and exported energy”.

2.0 Review of Opportunities for Increasing the Overall Energy Efficiency of the Permitted Installation over the Coming Year

- Site Energy Champion – continue to progress with the installation of PI and low energy lighting
- Investigate the utilisation of plant hot water for domestic water supply
- Reduce parasitic load – introduction of energy efficient motors
- This list is not exhaustive and other opportunities may arise throughout the coming year

3.0 Progress With Those Opportunities Identified in the Previous Annual Report

- Energy Champion – where the opportunity arises PI and low energy lighting will be fitted
 - In progress – approximately 90% complete
- Install direct 11kV feed to neighbouring business site
 - Under discussion with neighbouring client and smart energy team
- Solar Panels – investigate installation on weighbridge and main building roof space
 - No current viable options

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- Investigate the utilisation of plant hot water for domestic water supply
 - Not economically viable therefore discontinued.
- Reduce parasitic load – introduction of energy efficient motors
 - All possible options to reduce load have been completed

4.0 Energy Production and Parasitic load

The energy production per tonne of waste, parasitic load and exported energy are summarised in Table 4.1

| Table 4.1 : Energy Summary | |
|---------------------------------------|-------------|
| Energy Consumption per Tonne of Waste | 0.07 MWh |
| Total Exported Energy | 110,014 MWh |
| Parasitic Load | 15,404 MWh |