

ATTACHMENT G2 – ENERGY EFFICIENCY

As much of the energy consumption at the facility is tied to use of mechanical plant handling, placing and/or compacting the imported soil waste, significant improvements in energy efficiency over the lifetime of the proposed recovery facility will be limited unless there is

- (i) there is significant improvement in the fuel efficiency of mechanical plant and site vehicles over the operational life of the facility
- (ii) viable, lower costs alternatives to diesel fuel become commercially available over the operational life of the facility.

Notwithstanding this, efforts will be made where possible to reduce electrical power consumption at the site office, weighbridge office, canteen and staff welfare facilities and by pumping equipment at the quarry floor and proposed wheelwash facility.

As part of its established Environmental Management System (EMS), Roadstone has developed procedures to

- promote awareness about benefits of energy efficiency and of the level of energy consumption at each of its facilities / locations;
- encourage internal benchmarking of energy consumption against other Roadstone / CRH facilities; and
- encourage compliance with, industry best practice on how to improve energy efficiency.

A copy of the relevant EMS procedure (EMS 19) is provided under cover of this Attachment.

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Roadstone Ltd.	
ENERGY EFFICIENCY GUIDELINES	Doc. No.: EMS / 19
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1.0 PURPOSE

The purpose of this document is to outline procedures Roadstone Ltd has in place in order to achieve more efficient energy use.

2.0 SCOPE

This procedure covers all aspects of energy use within Roadstone Ltd. including usage and cost of electricity and fuel.

3.0 PROCEDURE

MONITORING OF ENERGY

- 3.1. Energy consumption for the entire location is assessed by reviewing recent energy bills on a monthly basis by location manager.
- 3.2. Where fitted sub meters are read on a regular basis to assess what large energy consuming machinery uses.
- 3.3. Energy saving initiatives are identified where possible and objectives set, from this estimated savings can then be calculated.

BEST PRACTICE GUIDELINES FOR ENERGY EFFICIENCY

- 3.4. Implement the discipline of switching off idle plant when not required for production.
- 3.5. Review location tariff with ESB Regional Customer Engineer to ensure that optimum tariff is in use.
- 3.6. Ensure minimum demand during hours of Winter Maximum Demand Reduction Incentive.
- 3.7. Schedule running of intermittently used plant to avoid build-up of Maximum Demand.
- 3.8. Fit timer on the quarry de-watering pump to minimise Maximum Demand and to maximise use of cheaper Night Rate.
- 3.9. Fit daylight sensing controls on external lighting.
- 3.10. Fit high-efficiency bulbs in internal and in external lighting.
- 3.11. Fit automatic controllers to feeders of secondary & tertiary crushers to obtain optimum loading.
- 3.12. Reduce reliance on low-efficiency compressed air when designing plant - (for ram actuators, etc.).
- 3.13. Record mobile plant fuel consumption per mile/tonne-mile/hour etc. & report to drivers.
- 3.14. Compare energy use at Location with other Roadstone Wood Ltd. location with assistance of Half-year & Full-year Unit Cost Reports.

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- 3.15. Use combined CRH Group requirements to achieve best purchase of fuels.
- 3.16. Compare Location energy use with Best Practice within CRH.
- 3.17. In relation to control of energy use, maintain plant & equipment, deal promptly with malfunctions, train staff.

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