SAVING MONEY, RESOURCES AND CARBON THROUGH SMARTWASTE

Katherine Adams, Margaret Blackwell and Amanda Holt





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EXECUTIVE SUMMARY

SMARTWaste Plan is an online tool that was developed by BRE to help users to prepare, implement and review their site waste management plans. This report provides an overview of SMARTWaste Plan, the new smartER tool and how the data it collects can be used. Since SMARTWaste Plan was introduced in 2008, data on over 8000 completed construction projects have been collected and this information has been used to produce a range of benchmarks and performance indicators. This report

provides detailed performance indicators of waste arisings (related to project value or floor area) for both newbuild and refurbishment projects. These performance indicators will be of interest to clients, contractors and planners, and information is provided on how the data can be used. The report also provides case studies showing how the tool can provide an overall view of all company projects and how it has helped users to reduce the time spent on recording data and producing reports, thereby saving money.

1 INTRODUCTION TO SMARTWASTE

1.1 SITE WASTE MANAGEMENT PLANS REGULATIONS 2008

The Site Waste Management Plans Regulations[1] were introduced in England on 6 April 2008. The regulations state that it is a legal requirement for all construction projects in England with a project value over £300,000 to have a site waste management plan (SWMP), with a more detailed plan required for projects over £500,000. These plans are designed to encourage better waste management practices, improve materials resource efficiency, reduce the cost of waste disposal and reduce waste crime such as fly-tipping. Both local authorities and the Environment Agency have the power to enforce SWMP implementation. A compliant SWMP is required to meet the requirements of the Code for Sustainable Homes^[2] and BREEAM[3]. The NHBC Foundation, in association with the Waste Resources Action Plan (WRAP), has produced detailed guidance for effective SWMPs^[4].

1.2 SMARTWASTE PLAN

SMARTWaste Plan is a free software tool designed by BRE to help users to prepare, implement and review their SWMPs and to measure waste arisings. It is available via the SMARTWaste website at www.smartwaste.co.uk. In addition to the SMARTWaste Plan tool, the website contains a range of information to help companies with all aspects of resource efficiency including:

- the new smartER tool for measuring energy and water use on site and the procurement of certified timber
- pre-demolition audits including case studies
- benchmarking information to help users compare their performance with that of other companies
- · details of training courses and events
- a link to the BREMAP tool, which allows users to locate nearby waste management and recycling/reclamation facilities.

SMARTWaste Plan has been developed using elements of other BRE tools, namely SMARTStart and SMARTAudit. SMARTStart, launched in 2002, is an online tool that helps users to measure waste arisings and produces performance indicators for waste arisings. This has been further developed to provide the integrated waste measurement tool used in SMARTWaste Plan. SMARTAudit is a tool used by trained auditors to identify the type and amount of waste products generated on site, the processes causing the waste and the cost of the waste. It is usually used in combination with CALIBRE^[5], which is a site efficiency and productivity measurement tool also available through BRE.

SMARTWaste Plan has nine easy-to-follow steps to help users to meet all the requirements of the SWMP legislation, which cover:

- responsibilities
- waste minimisation
- forecasting of waste types and amounts
- waste management options
- · duty of care
- training and communication
- reviews
- monitoring waste arisings (in volume or tonnes) and how much has been reused, recycled, recovered and sent to landfill.

SMARTWaste Plan is widely used throughout the UK. Since it was launched in 2008, over 7000 companies (including over 70% of the top 50 UK contractor companies), over 11,000 individual users and over 13,000 projects (of which more than 8000 have now been completed) have been registered (Figure 1).



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