



How benchmark data can be used by planners



construction resources & waste platform

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Site Waste Management Plans and SMARTWaste Plan

Site Waste Management Plans (SWMPs) are a legal requirement for all construction projects over £300,000 in England. These plans are designed to encourage better waste management practices, reduce the cost of waste disposal and decrease waste crime such as fly-tipping. The legal responsibilities for a SWMP lie with the client and the principal contractor.

SMARTWaste Plan is BRE's free, web-based tool which helps users to plan, implement and review their SWMPs. The tool includes an integrated waste measurement tool and downloadable templates. There are currently over 3,000 companies registered to use SMARTWaste Plan, including 17 of the top 20 construction contractors.

Performance Indicators produced

Data has been collected from BRE's SMARTWaste Plan and SMARTStart tools about completed construction projects. Both tools collect project information including floor area and project value and detailed information about the type, amount and destination (e.g. recycled, recovered, reused, landfilled) of waste produced.

Data from completed projects that met criteria for floor area, project value and waste arisings has been analysed and the following performance indicators produced:

- > Volume of waste (m³) / 100m² of gross internal floor area
- > Tonnes of waste / 100m² of gross internal floor area
- > Volume of waste (m³) / £100,000 of project cost
- > Tonnes of waste / £100,000 of project cost

Table 1: Performance Indicators for new build construction projects

Performance indicators for projects completed by 28-2-10						
Project Type	Number of projects data relates to	Average m ³ /100m ²	Average Tonnes/100m ²	Number of projects data relates to	Average m ³ /£100K	Average Tonnes/£100K
Residential	260	15.8	16.8	260	13.3	14.6
Public Buildings	15	22.3	28.5	16	8.5	11.1
Leisure	22	14.4	13.4	21	11.8	12.3
Industrial Buildings	14	12.8	19.2	16	13.1	14.7
Healthcare	41	15.8	15.6	38	9.8	9.8
Education	116	17.6	20.6	115	8.6	10.0
Commercial Offices	46	18.4	18.3	46	8.6	8.9
Commercial Retail	47	17.9	20.2	49	14.0	17.3
Total number of projects	576			594		



Table 2: Benchmarks for new build construction projects

Tonnes/£100K	Standard	Good	Best
New build residential projects	16.3	10.6	5.7
Other new build projects	16.2	10.3	5.3

Average performance indicators for different project types are updated every three months. These benchmarks are used on the waste benchmark calculator tool on SMARTWaste Plan to help with forecasting waste arisings. The benchmarks for projects completed by 28-2-10 are shown in Table 1.

Benchmarks

The range of the Performance Indicators has also been reviewed for these completed projects. The lower quartile has been assigned as 'best practice', the next quartile assigned as 'good practice' and the top two quartiles assigned as 'standard practice'. These can provide benchmarks for the industry to start improving their performance and moving from standard to best practice. These benchmarks for standard, good and best practice for new build projects completed by 28-2-10 are shown in Table 2.

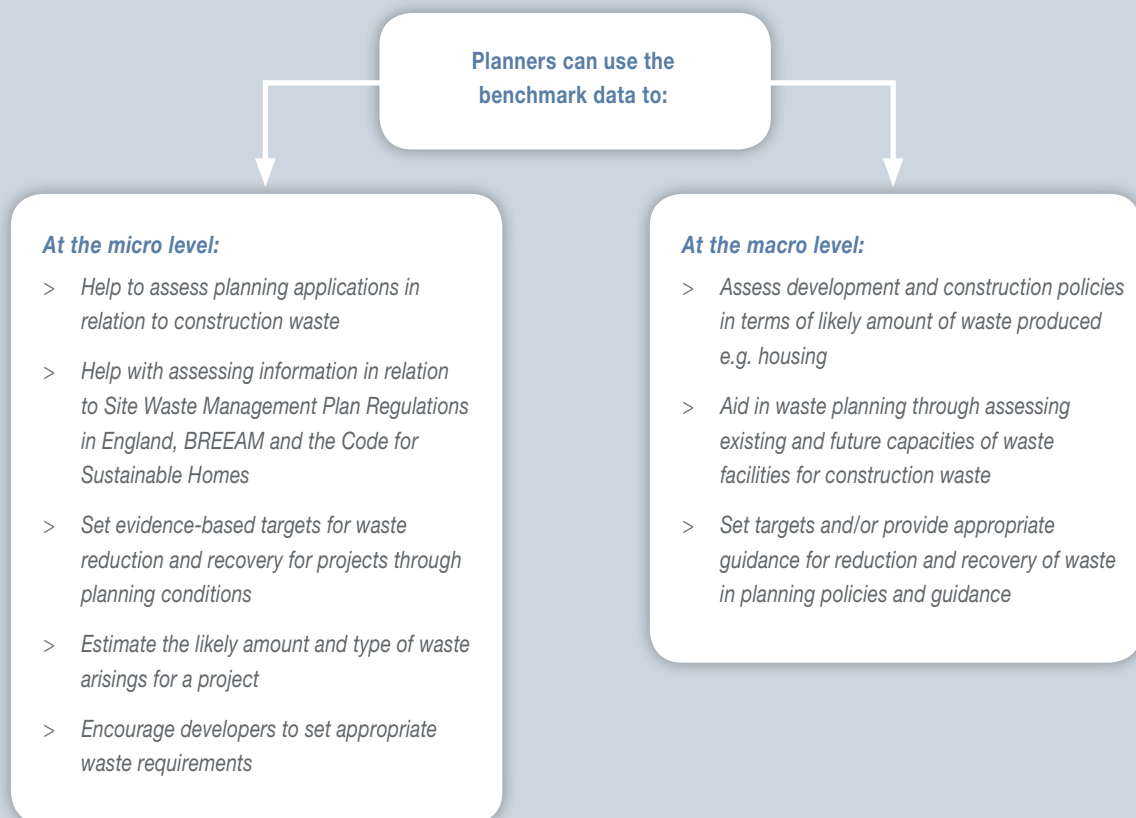
How the data can be used by planners

The benchmark data produced can be used in different ways by all parts of the construction supply chain. For planners the data can be used as shown in Diagram 1 below.

Benefits of planners using this data include:

- > Help with implementing and enforcing the Site Waste Management Plan Regulations in England
- > Provide appropriate targets, guidance and advice for planning applications
- > Contributes to the quality and protection of the local environment through planning policies
- > Protect resources through the minimisation of waste and better recovery of materials
- > Aids with commitment to sustainability

Diagram 1: How the data can be used by planners



Further information on **SMARTWaste** Plan and our training services can be found at www.smartwaste.co.uk