

Sustainable procurement resources for local authorities

Setting standards for waste and use of recovered materials in construction



Where to set procurement requirements:

**REQUIREMENTS
FOR SITE WASTE
MANAGEMENT PLAN**

**Reducing waste
and landfill**

“Closing the loop
on materials
efficiency”



**REQUIREMENTS
FOR REUSED AND
RECYCLED CONTENT**

**Using recovered
materials**

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Setting standards for waste and use of recovered materials in construction

The Government's Sustainable Procurement Action Plan (2007) sets as a principal goal the procurement of sustainably built and managed properties and roads throughout the public sector. The UK aims to be among the leaders in sustainable procurement by 2009 and construction has been identified as the top priority.

The Government's Sustainable Buildings Task Group has highlighted the three key areas where construction can reduce its environmental impact: the efficient use of materials, energy and water. The Sustainable Procurement Action Plan now calls on public bodies to set key performance indicators and clear minimum standards in their tender invitations and contracts.

Construction is the largest source of waste in the UK. In addition, it has the potential to use a range of materials that Councils want to recycle. So it makes sense for local authorities to set minimum requirements for site waste management and the use of recovered materials, both as procurement policy and within procurement documentation. The resulting good practice is typically cost saving or at least cost neutral.

WRAP (Waste & Resources Action Programme) has worked with various local authorities and other organisations to demonstrate what can be achieved. This guide outlines the tools and information available, free of charge, to help build capacity within procurement teams. These resources can be accessed through the construction pages of the East Midlands Centre of Excellence at www.emce.gov.uk, or directly from the WRAP web site at www.wrap.org.uk/construction/construction_procurement

Why take action?

As one of the construction sector's largest clients, local authorities have the opportunity to exercise their purchasing power in order to:

- demonstrate community leadership;
- respond directly to the sustainable procurement agenda;
- provide new opportunities for local and regional businesses; and
- contribute to sustainable development while driving down the cost of waste management and recycling.

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Who is taking action?

Construction clients, developers and planning authorities are increasingly setting requirements for reused / recycled content and site waste management on their projects.

Trailblazers include:

- Aberdeen, Bristol, Islington, Lancashire, Leeds, Newcastle, Sheffield and South Ayrshire, who have set requirements on major school PFI/PPP projects;
- Edinburgh, Gloucestershire and Leeds, who have included requirements in planning frameworks;
- the Scottish Executive, which has asked all public bodies in Scotland – including local authorities – to set a minimum standard for 10% recycled content in construction projects above £1M value;
- the regional development agency Yorkshire Forward, which applies the same standard to regeneration projects which it funds with local authority partners;
- Glasgow and the Shetland Islands, who have adopted Council-wide policies on recycled content;
- Dundee City Council, when procuring waste management infrastructure; and
- the Olympic Delivery Authority.

What projects are suitable?

Waste reduction, increased recycling and higher reused and recycled content can be targeted in all forms of construction, spanning infrastructure, new build, refurbishment and fit-out. Typical Council projects include schools, roads, waste infrastructure, leisure facilities, offices and regeneration projects.

Will higher recycled content increase cost or risk?

Increasing recycled content need have no impact on project cost or design. Many of the products with higher levels of recycled content are already mainstream, high-volume products that are cost competitive with, and subject to the same testing arrangements as, equivalent products containing less recycled material.

Project teams can identify suitable options by asking their supply chain. To assist this dialogue, WRAP maintains a database of the recycled content of commonly used construction products, available from www.wrap.org.uk/rcproducts.

CASE STUDY

Glasgow City Council

In 2005, Glasgow was the first local authority in the UK to adopt a Council-wide minimum requirement for recycled content in building works. For example, a requirement has been included in the contracts for twenty new primary schools. In one group of schools, 18,000 tonnes of material was recovered and re-used over three school sites in Glasgow, leading to a saving of £150,000.

“Overall, our policy commitment to recycled content is being responded to very positively by the construction industry and this is being reflected well within the tenders.” Amanda Waugh, Glasgow City Council



Will good practice take a lot of effort?

Most of the potential to increase recycled content can be achieved with just the top five to ten 'Quick Win' product substitutions for that project. These Quick Wins can be easily identified by designers and contractors using WRAP's Recycled Content Toolkit. The toolkit can be accessed via www.wrap.org.uk/rctoolkit.

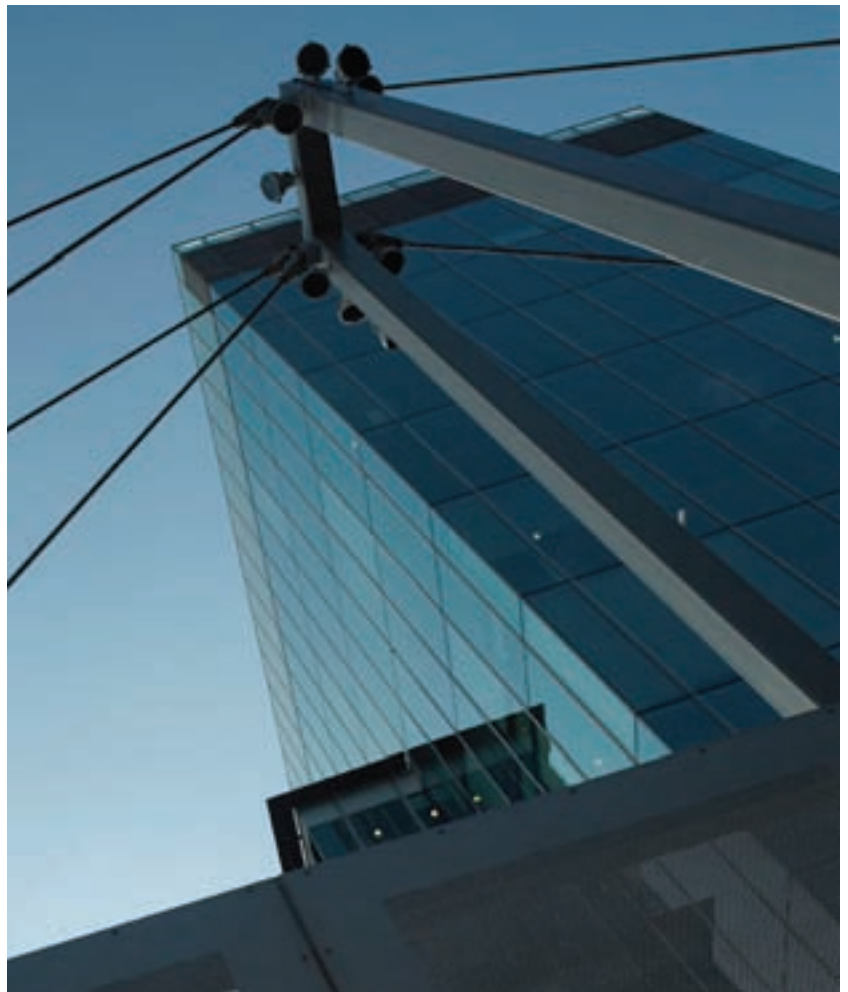
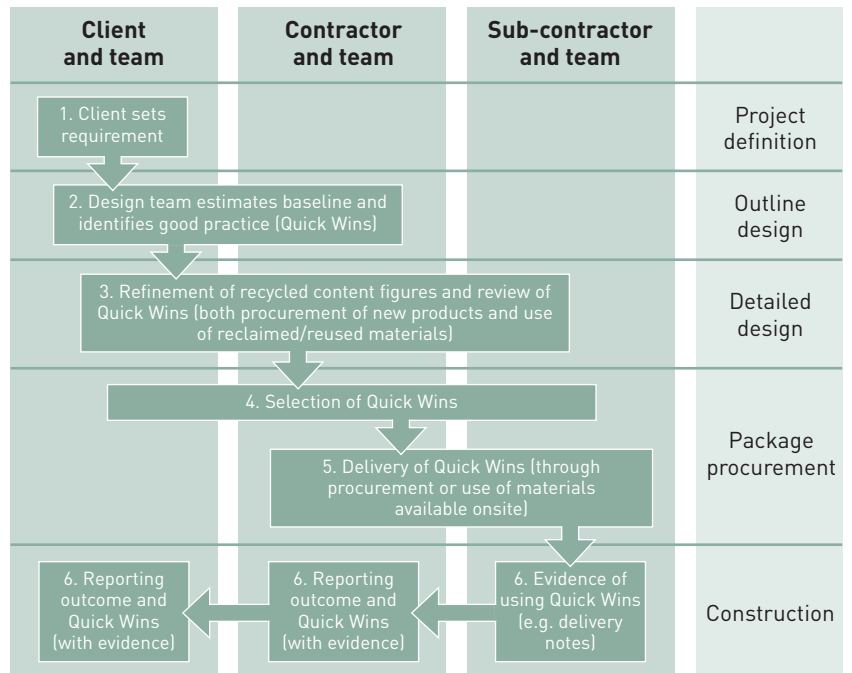
Contractors should already be complying with Duty of Care for site waste. Managing this process more carefully to reduce and segregate waste takes little additional effort and can significantly cut the costs of over-ordering, spoilage, waste disposal and Landfill Tax. Developing site waste management plans (SWMPs) early in the procurement process will help identify the waste reduction potential as well as improving materials recovery and recycling on site. For guidance on good practice, project teams should visit www.wrap.org.uk/construction/on_site.

What level of recycled content is easily achievable?

We know from case study evidence that 10% recycled content by value for the project overall (i.e. not per product) is widely achievable. Indeed, many buildings exceed 10% even without explicitly trying to increase recycled content. By adopting the most significant Quick Wins, levels exceeding 15-20% are common.

What do I need to do?

The process of delivering higher recycled content begins with setting a requirement at the start of the procurement process, as shown in the diagram.



To set a requirement, local authorities can include the following wording in project procurement documentation – specifying a minimum outcome and requesting good practice:

‘...at least 10% of the total value of materials used should derive from recycled and reused content in the products and materials selected. In addition, show that the most significant opportunities to increase the value of materials derived from recycled and reused content have been considered, such as the top ten Quick Wins or equivalent, and implement good practice where technically and commercially viable.’

While the 10% benchmark could be considered modest, its aim is to instil the process of measuring and considering recycled content within the project. The additional requirement to achieve ‘good practice’ ensures action even if the baseline level of recycled content for the selected design is shown to be greater than 10%.

Template wording is available from WRAP for use in corporate policy statements, project briefs and pre-qualification processes, and subsequently in tender, appointment and contractual phases. Different procurement routes are covered, including both ‘traditional’ and design & build. See the detailed guidance documents available from www.wrap.org.uk/construction/construction_procurement

- Setting a Requirement for Recycled Content in Building Projects; and
- Recycled Roads – A step-by-step guide to local authority procurement.

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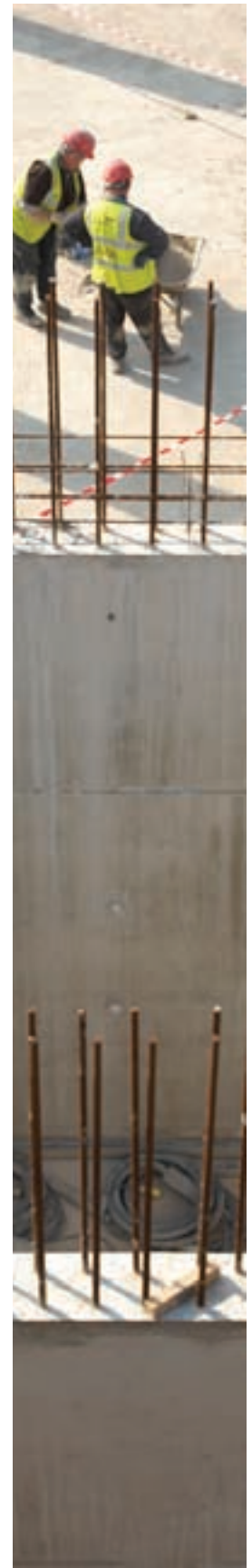
In 2008, legislation is anticipated to come into force that will require projects to have basic site waste management plans in place.

Local authorities should also include tender requirements for waste management – asking contractors to measure, reduce and segregate waste, increase recovery rates and thereby reduce landfill.

For example:

‘...we require a Site Waste Management Plan (SWMP) to be developed from the pre-design stage to inform the adoption of good practice waste minimisation in design, and for the SWMP to be implemented in all construction site activities in line with good practice published by WRAP. The SWMP is required to set targets for waste reduction and recovery based on an assessment of the likely composition and quantity of waste arisings and identification of the most significant cost-effective options for improvement (Quick Wins). This should be supplemented by information on how the targets will be achieved during construction activities and how the actual levels of waste reduction and recovery will be monitored for comparison with the targets set.’

In 2008, legislation is anticipated to come into force that will require projects to have basic site waste management plans in place. The role of procurement is to encourage good practice and the associated cost savings – beyond the regulatory minimum.



CASE STUDY

Bristol City Council

The first project in the Building Schools for the Future programme to reach financial close is worth around £120 million. Bristol City Council included a minimum requirement for 10% recycled content within its Invitation to Negotiate (ITN), and subsequently agreed KPIs and targets for waste reduction, recycling and recycled content in its Strategic Partnering Agreement.

“Market research identified a range of mainstream construction products offering above-average recycled content at competitive prices. As a result, we had the confidence to set a requirement in our tender specification for 10% recycled content for the project as a whole without prejudicing our budget. This is important in helping the Council and its schools ‘walk the talk’ on sustainable development.” Chris Wiseman, PFI Project Manager, Bristol City Council

CASE STUDY

Site waste management

Amec has estimated the true cost of a skip to be 16 times the cost of skip hire, reflecting the value of the wasted materials. Taylor Woodrow studies on live projects have shown average savings of 3% of build costs, or 20% of material on site, and these could be achieved without significant investment costs. Simons Construction have reduced waste to landfill by 60%, cut disposal costs by 40% and reduced overall waste levels by 20% as a result of basic segregation of wastes.

How WRAP can help

The following resources are available free of charge:

Procurement guidance

Practical guidance on the procurement process, including model clauses to incorporate in project briefs, tender and contract documentation.

Case studies

A range of case studies demonstrating good practice readily achievable across various types of construction.

Good practice guides

Advice for project teams on site waste management, demolition and recovery of waste materials, and guidance on ‘Quick Wins’ in using higher recycled content.

Product information

Information on how to use recycled materials and a searchable database of mainstream products with recycled content commonly used in construction.

Toolkits

Web-based tools to help project teams exceed requirements for recycled content and specify the use of recycled aggregates.

Training

In-house workshops and tutorials for procurement practice, the Recycled Content Toolkit and development of Site Waste Management Plans, provided selectively to support decisions on major capital expenditure.

WRAP works in partnership to encourage and enable businesses and consumers to be more efficient in their use of materials and recycle more things more often. This helps to minimise landfill, reduce carbon emissions and improve our environment.

Disclaimer

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Waste & Resources Action Programme

The Old Academy
21 Horse Fair
Banbury, Oxon
OX16 0AH

Tel: 01295 819 900
Fax: 01295 819 911
Email: info@wrap.org.uk

Helpline:
0808 100 2040

www.wrap.org.uk/construction

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