

Taking action on construction waste

06 May 2009

APSE Wales Housing and Advisory Group

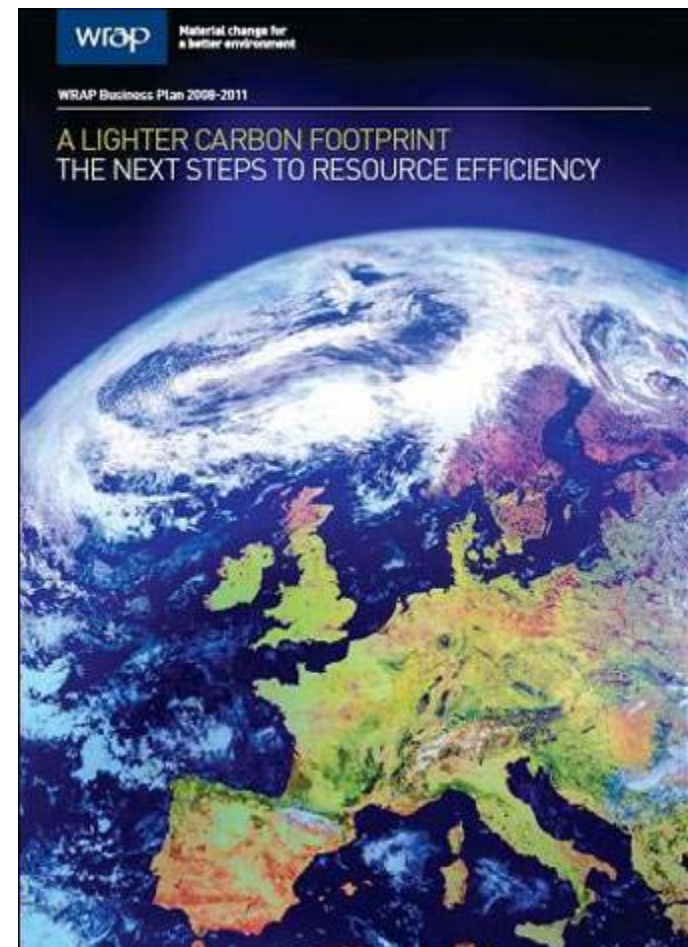
WRAP (Waste & Resources Action Programme)

Established in 2001 by Government to help deliver UK waste policy and meet targets set by the European Landfill Directive

- encourage and enable businesses and consumers to be more efficient in their use of materials and recycle things more often
- this helps to minimise landfill, reduce carbon emissions and improve our environment

Key Construction Programme objective

“to halve, by 2012, the amount of construction, demolition and excavation waste sent to landfill “



WRAP in Construction

WRAP works with...

Clients - to encourage strong and effective client leadership

Designers – to put waste and resources on the design agenda

Contractors – to support waste management planning

Suppliers – to target recycled materials and packaging

Waste processors – to target higher levels of recovery



WRAP's Objectives

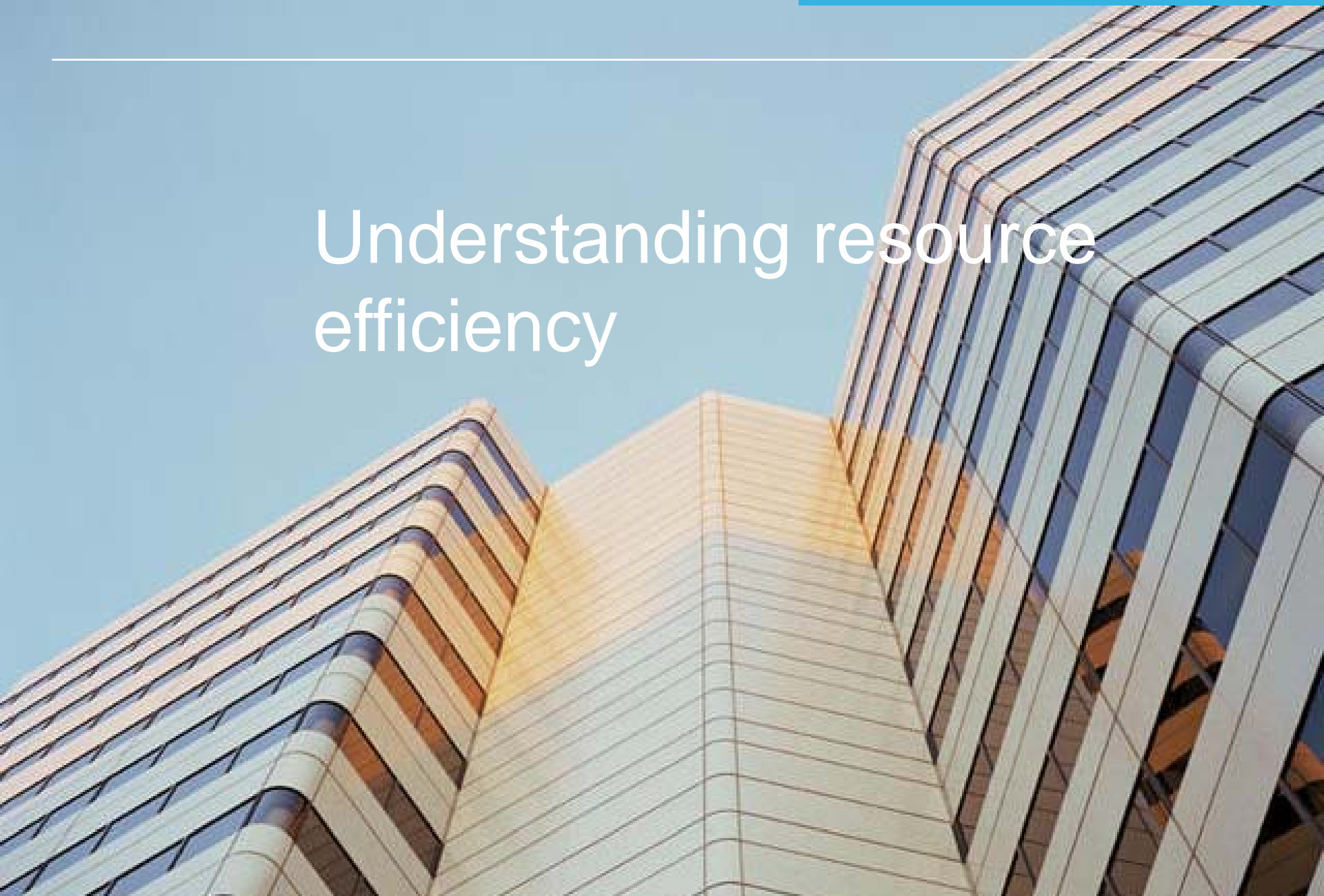
Obtain commitment from construction clients to reduce waste to landfill



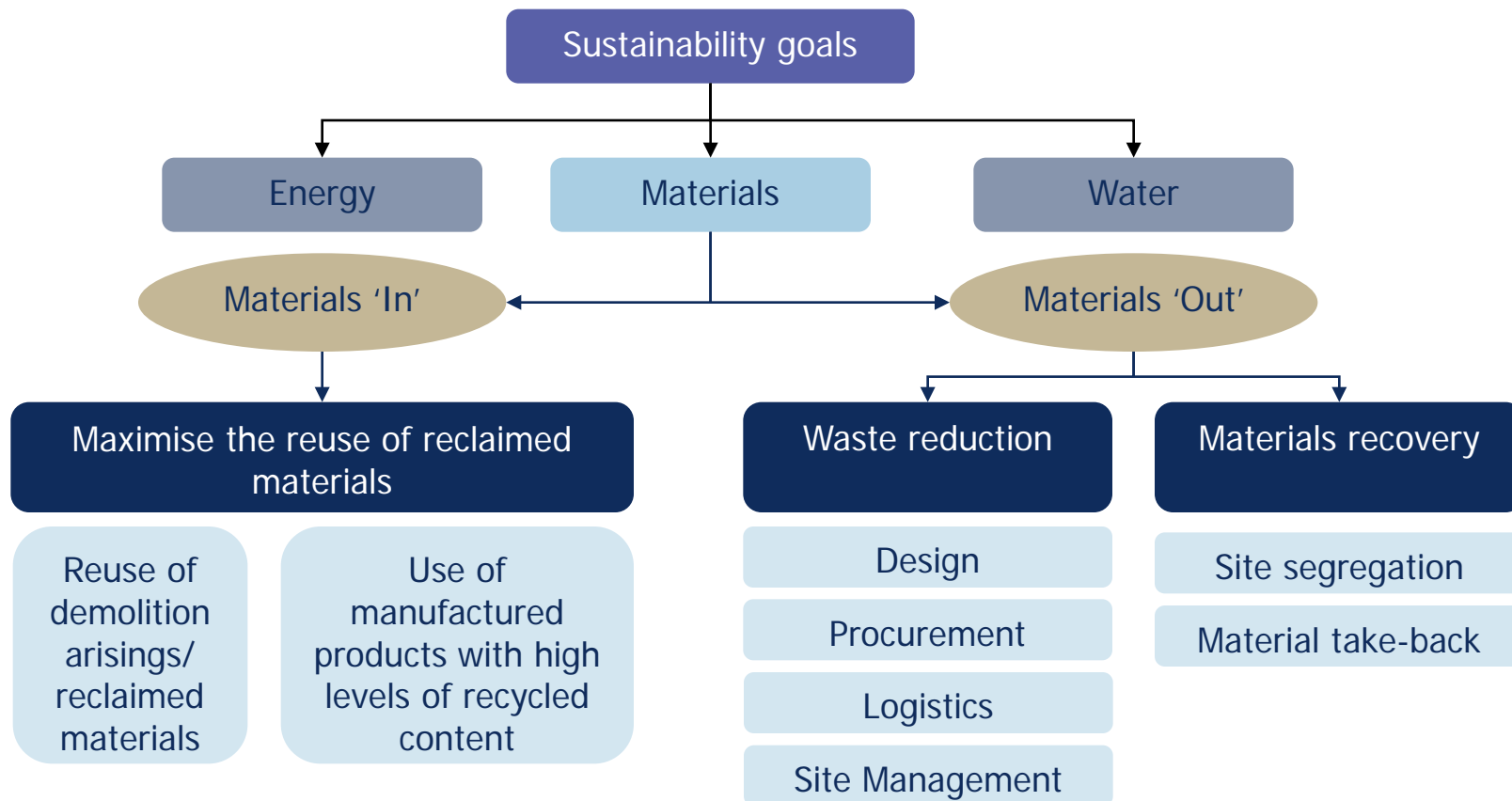
This is achieved by:

- set a target for reducing waste to landfill;
- embed the target within corporate policy and processes;
- set corresponding requirements in project procurement and engage with the supply chain;
- measure performance at a project level relative to a corporate baseline; and
- report annually on overall corporate performance.

Understanding resource efficiency



Materials Efficiency as part of Sustainable Construction



Demolition

wrap

Material change for
a better environment

Linking demolition and new build – a step by step guide

The efficient use of materials in
regeneration projects

Pre demolition audit – assess the quantity and type of available materials (and the value (£))

Demolition Recovery Index (DRI) – KPI that assesses the proportion of materials that are reused (not landfilled)

Retained Materials Index (RM) – The proportion of materials retained on site

The 'Regen Guide' contains model procurement wording for client teams

Recycled and reused content

Recycled content.

The proportion, by mass, of recycled material in a product or packaging

Defined by ISO 14021 (Standard on environmental labels and declarations)

Recycled content by value.

Proportion of the overall value of the materials in a product or building that is derived from recycled content



Why take action?

- Improve performance against our core responsibility and sustainability goals without incurring a cost premium.
- Meet the requirements of planning authorities.
- Provide a competitive edge through differentiation.
- Align commitment to recycling and good practice.
- Drive down the cost of waste management and recycling.
- Satisfy the values held by employees and respond to and pre-empt changes in public policy.

Who is taking action?
Construction clients, developers, public bodies and planning authorities are increasingly setting requirements for reused and recycled content on their projects.

Trailblazers include:

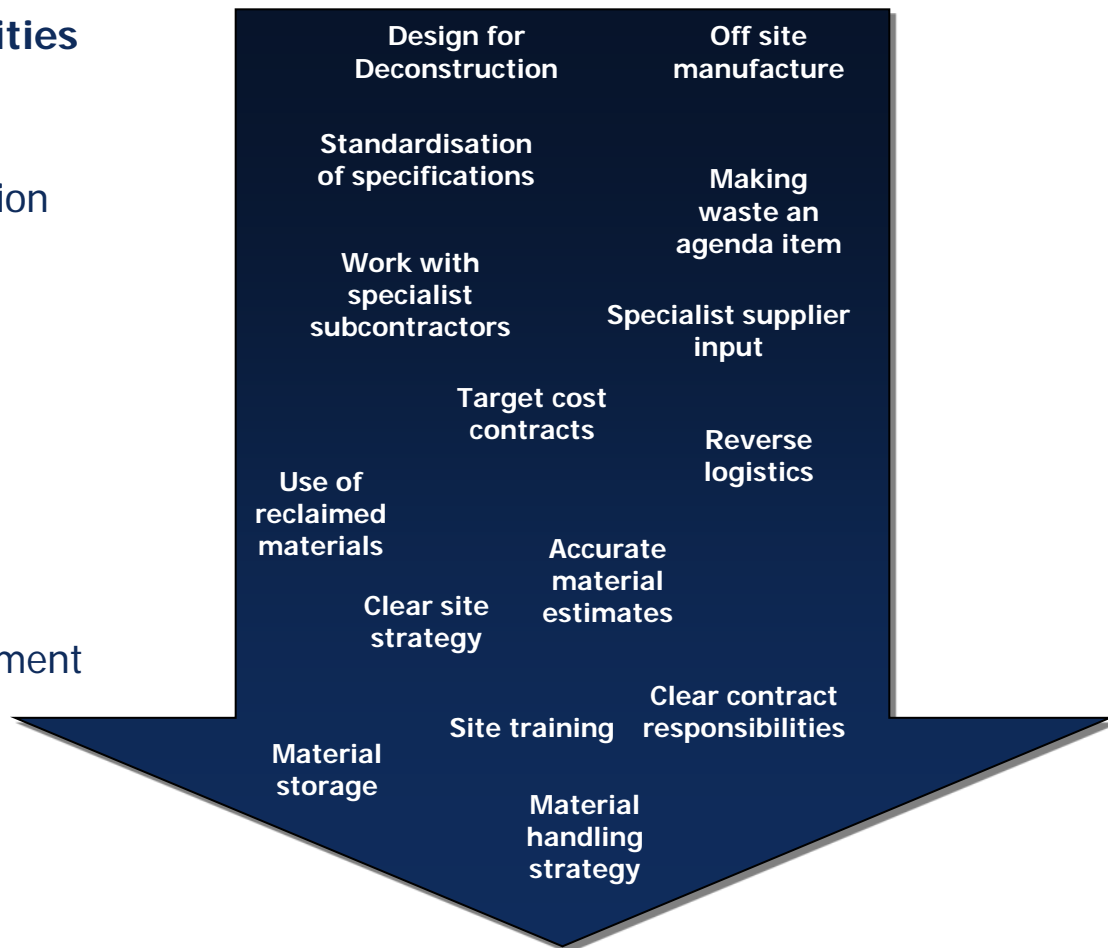
- British Land, Harmerston and Stanhope
- Skanska
- Mark & Spencer and John Lewis Partnership
- Scottish Government
- Northants and Central Procurement Directorate
- Wendy House Bristol
- Yorkshire Forward
- Defence Estates
- Building Schools for the Future
- National Offender Management Service
- Rapson Group Regeneration Company
- Southmead and Hillingdon Hospitals
- Leeds Metropolitan University and
- Bristol, Leeds, Newcastle and Wigan City Councils.

Waste reduction

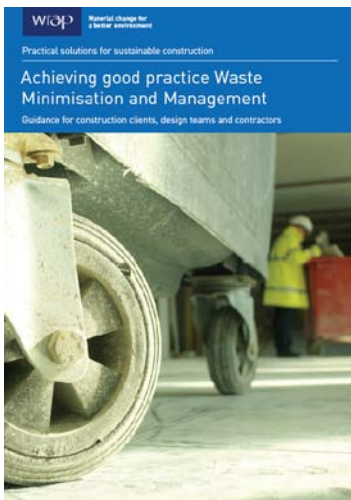


Key Opportunities exist in:

- Communication
- Design
- Procurement
- Logistics
- Site Management

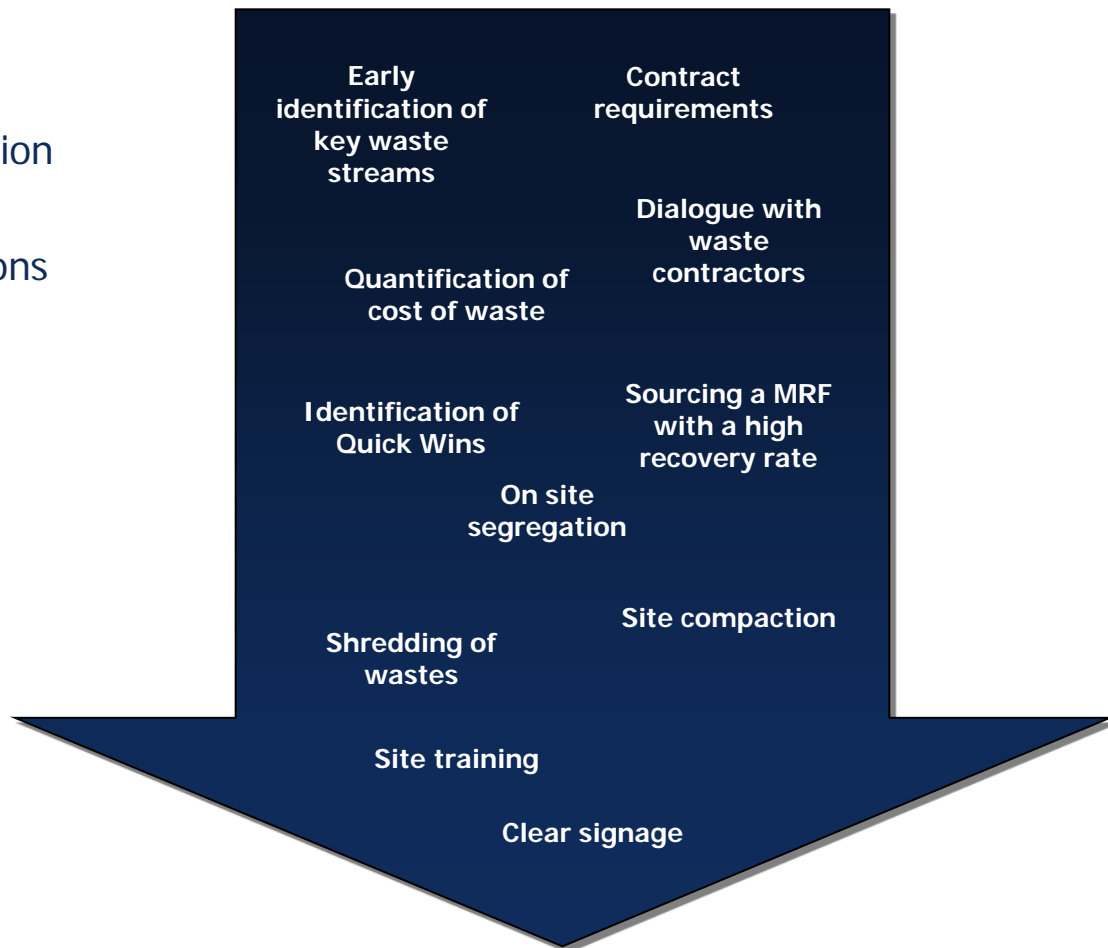


Waste management



Key Drivers

- Legal obligation
- Cost reductions
- Safer site
- Faster programme



Site Waste Management Planning

Site Waste Management Planning

Managing waste and resources on a project
to deliver reductions in waste sent to landfill



SWM Plan

Document containing waste
forecasts and actions plans
(legal requirement in England)



Why Take Action

▪ Financial

- Waste is expensive and becoming more so

▪ Environmental

- Limited landfill capacity
- Reduced materials extraction
- Carbon reduction

▪ Sector-wide

- Demonstration of leadership and CSR
- Sector-wide initiative delivers greater impact
- Positive contribution to public policy

The role of WAG?

National Target – Zero waste to landfill by 2050

**Consulting on Site Waste Management Plan Legislation –
expected spring 2010**

Awaiting publication of waste strategy for Wales

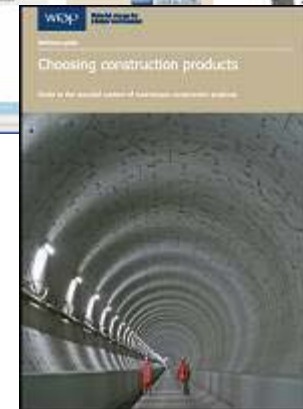
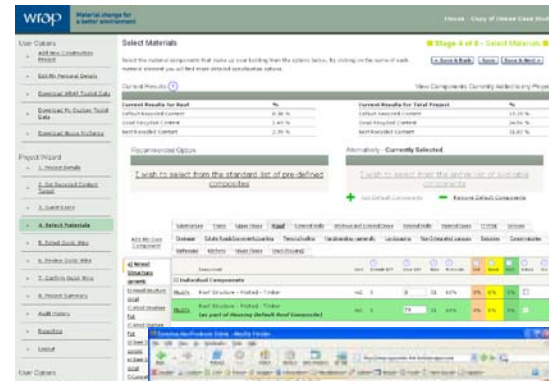
**Supporting CEW & WRAP to drive improvements in
construction**

WRAP Resources

The background of the slide is a low-angle photograph of a modern building's facade. The building features a complex, geometric design with multiple levels of overhanging balconies or walkways, creating a series of sharp, angular lines. The facade is composed of light-colored panels, possibly metal or stone, with dark window frames. The sky is a clear, pale blue, and the overall lighting suggests a bright, sunny day.

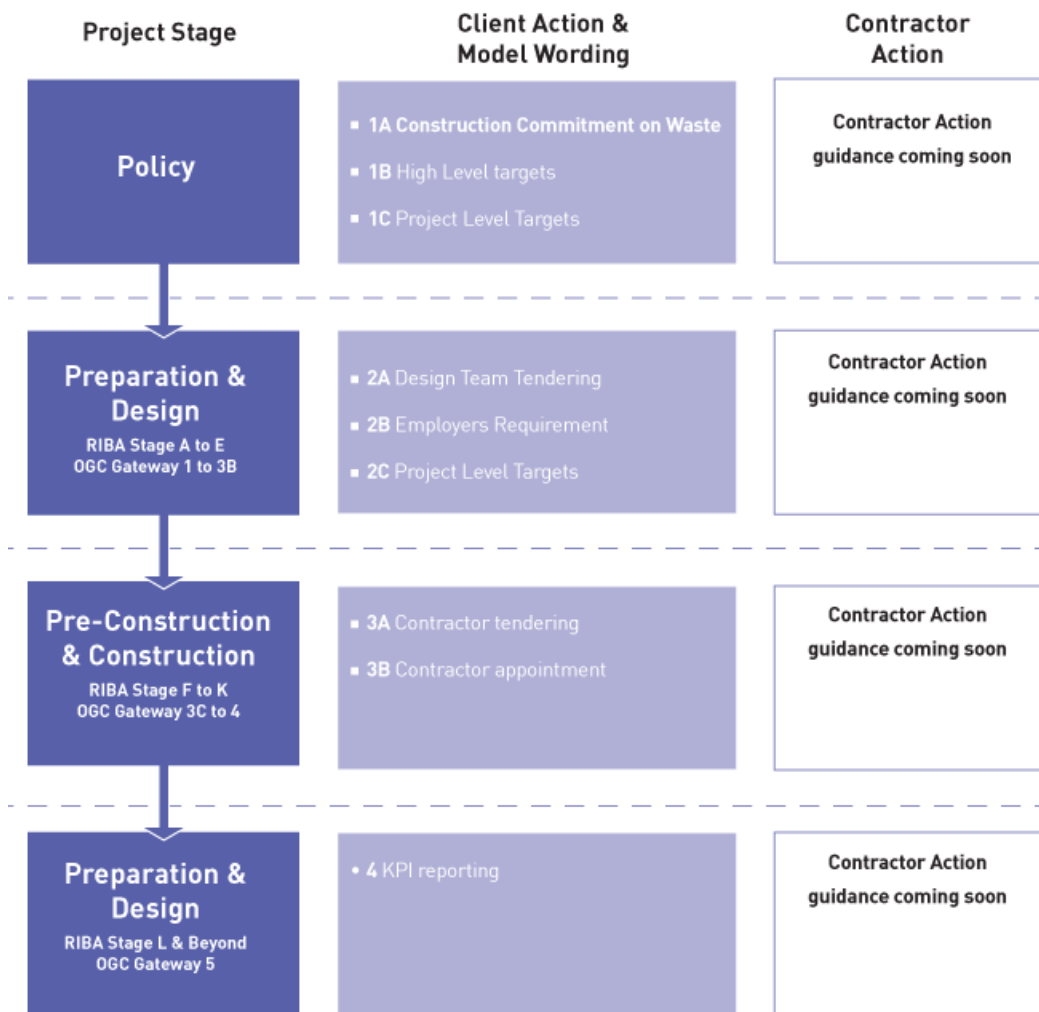
Resources available from WRAP

- **publications** on standards and benchmarks of good practice
- **exemplar wording** for pre-qualification questionnaires, briefs and contracts
- **SWMP Template**
- **on-line Net Waste tool** for calculating performance and opportunities
- **On-line learning** interactive modules for using the net waste tool
- **case studies** covering all types of construction
- **training packages** and in-house delivery for RC and SWM procurement, toolkit use and SWMP implementation



All available from www.wrap.org.uk/construction

Procurement Guidance



Solving the problem

Strong client leadership

- Put resource efficiency on the agenda – make it an issue
- Put requirements into contract
- Ask for robust Site Waste Management Plan
- Pursue higher levels of recycled content

Ask for data

- Data collection maintains a focus on the issue
- Ask for total tonnes of waste, and total waste sent to landfill
- Link wastage to cost – how much is this really costing you

Talk to your supply chain

- Who are your waste contractors? What can they do to help?
- Understand the barriers – what can you do to help?
- What are the opportunities to reduce packaging?