

A short guide to the
**Construction
Resources and
Waste Roadmap**



A roadmap is a tool that helps
us visualise...

... how to get from A

In England, **construction, demolition and refurbishment** activities produce around **33% of all waste**, with **inert waste** alone being **90 million tonnes**. About half of this waste is recycled from the demolition and excavation sectors and parts of the construction sector.

On top of that, construction and demolition waste is responsible for more hazardous waste than any other industry sector.

Around **380 million tonnes** of **resources** are **consumed by the construction industry** each year, suggesting that there is greater scope for waste reduction, reuse and recycling.

The government's Sustainable Development Strategy (*Securing the Future*, 2005) recognises that the construction sector has a particularly strong influence on the sustainability of UK consumption, through use and management of resources. But we cannot hope to address the industry's mounting waste problem in isolation.

Everyone agrees that, in order to minimise waste, we must work within the wider sustainability and production agenda – where waste issues are just one part of an overall life cycle assessment.

... to **B**

Our target is to **halve** the amount of (non-aggregate) **construction waste** produced **by 2015**.*

Prevention of waste will lead to the best improvements in terms of environmental impact and cost savings, so a **clear target** is for the industry to **reduce** the amount of construction **waste** produced in the first place (excluding demolition waste).

We'll measure our success in m³ waste/100m², or by wastage rates of products and materials.

We're also working to **halve** the amount of **construction, demolition** and **extraction waste** going to landfill **by 2012** as a result of re-use and recycling (excluding materials needed for landfill restoration).*

Some waste is unavoidable, but there are plenty of **opportunities** for **reuse** and **recycling**.

Our **over-arching aim** is for ...

... **resources** to be **used efficiently** and **recycled effectively**.

*From a baseline to be set during 2008.

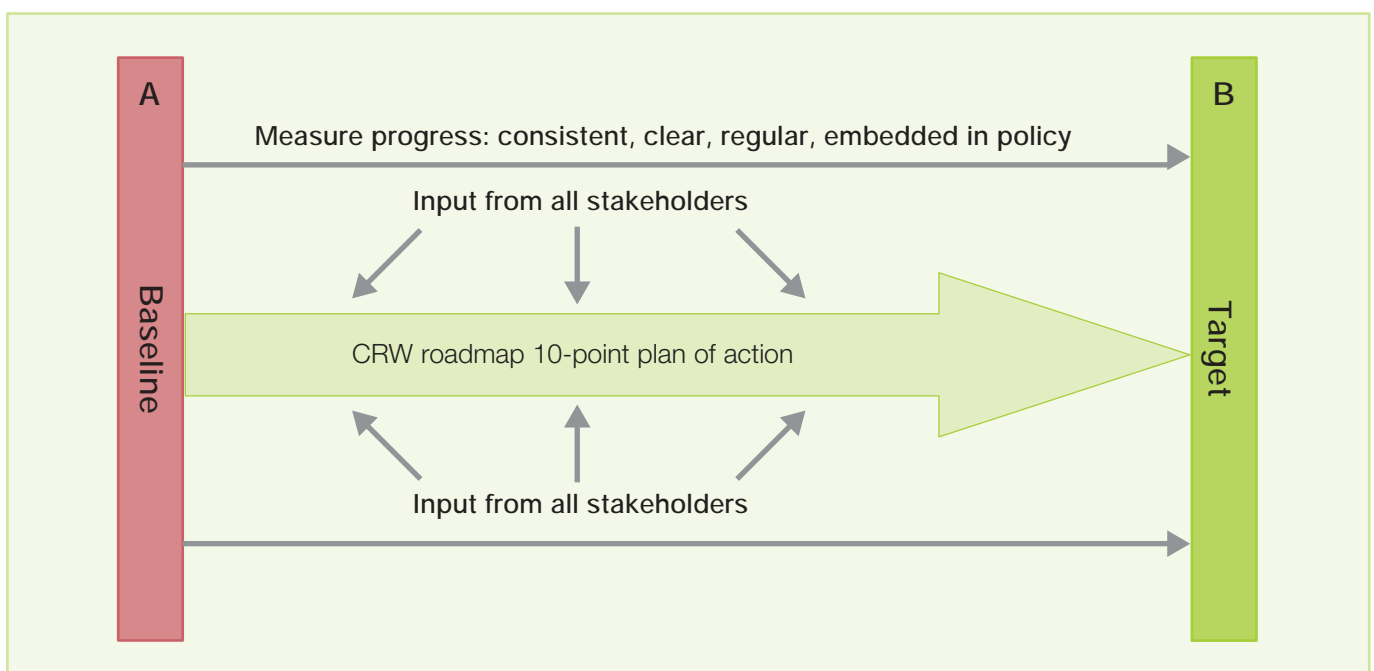
What is a roadmap?

The UK government is driving forward a challenging programme of sustainable development. One of the key tools it is using to do this is the ‘roadmap’.

A roadmap involves three main concepts:

- shared ownership and responsibility – providing the opportunity for stakeholders to work together to achieve change
- planned interventions over time – setting targets and a challenging timescale to achieve stronger and swifter change
- continuous improvement – providing focus and direction for innovation.

The key objective of a roadmap is to build a critical mass of enthusiasm and commitment from stakeholders based on the evidence, the need to act and the policies and interventions required to achieve the desired outcome.



About the project

The CRW roadmap has been developed following extensive industry consultation and engagement, including:

- a gap-analysis of existing support initiatives
- a series of short research projects to plug immediate gaps in understanding and data
- the Big Ideas workshop, which explored future scenarios.

Full details of the supporting research are provided in the main document Construction Resources and Waste roadmap and its associated annexes, which can all be downloaded as PDFs from the Construction Resources and Waste Platform (CRWP) website or www.bre.co.uk/wastestrategy.

Work is on-going to: implement the recommendations of the roadmap; keep up the pace of change by raising industry awareness; and provide necessary technical support. For the latest news on joint BRE and AEAT activities, go to www.crwplatform.org.uk.

The CRW roadmap will be updated during 2009.

Who's involved?

Everyone needs to work together to achieve our targets:

- The **construction industry**, their **advisors** and **trade bodies**, throughout the **supply chain**, including: clients; product manufacturers and distribution; design; procurement; construction; demolition; refurbishment; and resource management companies dealing with construction materials.
- Defra and others in **central, regional** and **local government** who are responsible for construction and resource-related policies and support.
- **Government agencies** and **delivery partners**, especially those funded to help the construction sector to be more resource efficient.

Which way now? ... a ten-point plan

1. Understand where we are now

It is often said that you can't manage what you can't measure. How can we hope to cut waste if we are unsure how much we are generating?

So we need to gather good quality, easily comparable data and use it to: set baseline data at national, regional, sector and product levels; measure performance consistently; and understand the long-term supply and demand for demolition products in times of changing construction techniques.

2. Be consistent

Waste is just one aspect of the wider environmental impact of construction. We need to develop consistent and transparent methods of measuring life cycle impacts relating to waste production and resource management.

3. Take responsibility

Waste is everyone's problem – the whole industry needs to take responsibility for its actions, through voluntary commitments. That means considering waste at all points in the supply chain.

4. Lead by example

Government-procured projects represent an excellent opportunity to lead the way, by ensuring that the wide range of project partners all play their part in waste minimisation.

5. Keep on learning

Resource efficiency is a relatively new addition to construction-related training courses; so there's a lot of catching up to do. From now on, all professional training courses should include modules on resource efficiency.

6. Strengthen the Code

The Code for Sustainable Homes is already a good example of how we can remove uncertainty over future performance requirements for energy and water consumption. But the current version is less challenging about the efficient use of other resources. Future versions of the Code should address this too.

7. Measure the carbon

Counting the carbon impact is a good way to help people make environmentally sustainable choices. In future, cutting carbon may also have financial benefits. So we urgently need to develop accurate measurement techniques that can count the carbon impact across the whole life cycle of a product.

8. Count the costs

Whole life costing is another proven technique that helps decision-makers. But current methods of calculating whole-life costs do not always take account of waste and disposal. New costing techniques will help everyone make better long-term decisions.

9. Reduce and re-use

Although recycling will always have its place, it's always better to avoid waste in the first place. Reduction of waste, and reuse of materials, should be at the heart of future policies, commitments, education activities, and targets.

10. Simplify support

A key message from industry stakeholders is that there are too many providers of business support about resource efficiency.

Support for the construction sector needs to be simplified. This could be achieved by drawing up clearer boundaries between key areas of activity, and greater co-ordination between service providers.

**Projects that aim to address these points
are already underway**

About the authors

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Project partners:



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