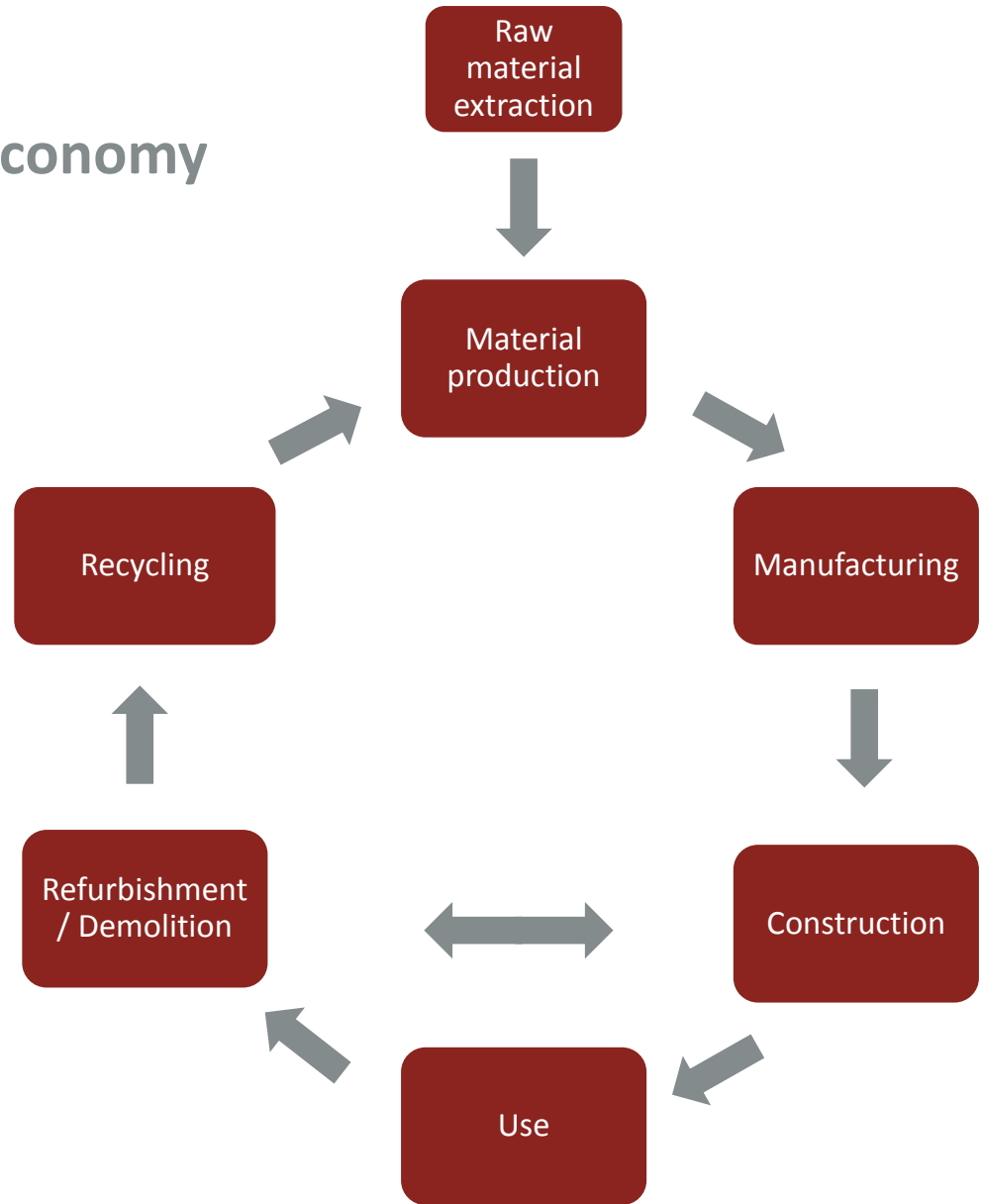


Built Environment Circular Economy

The construction and operation of the built environment currently accounts for **60%** of UK materials consumption and one third of all waste arisings.

Our approach, **Resource Efficient Construction**, drives financial savings as well as waste and carbon reductions.

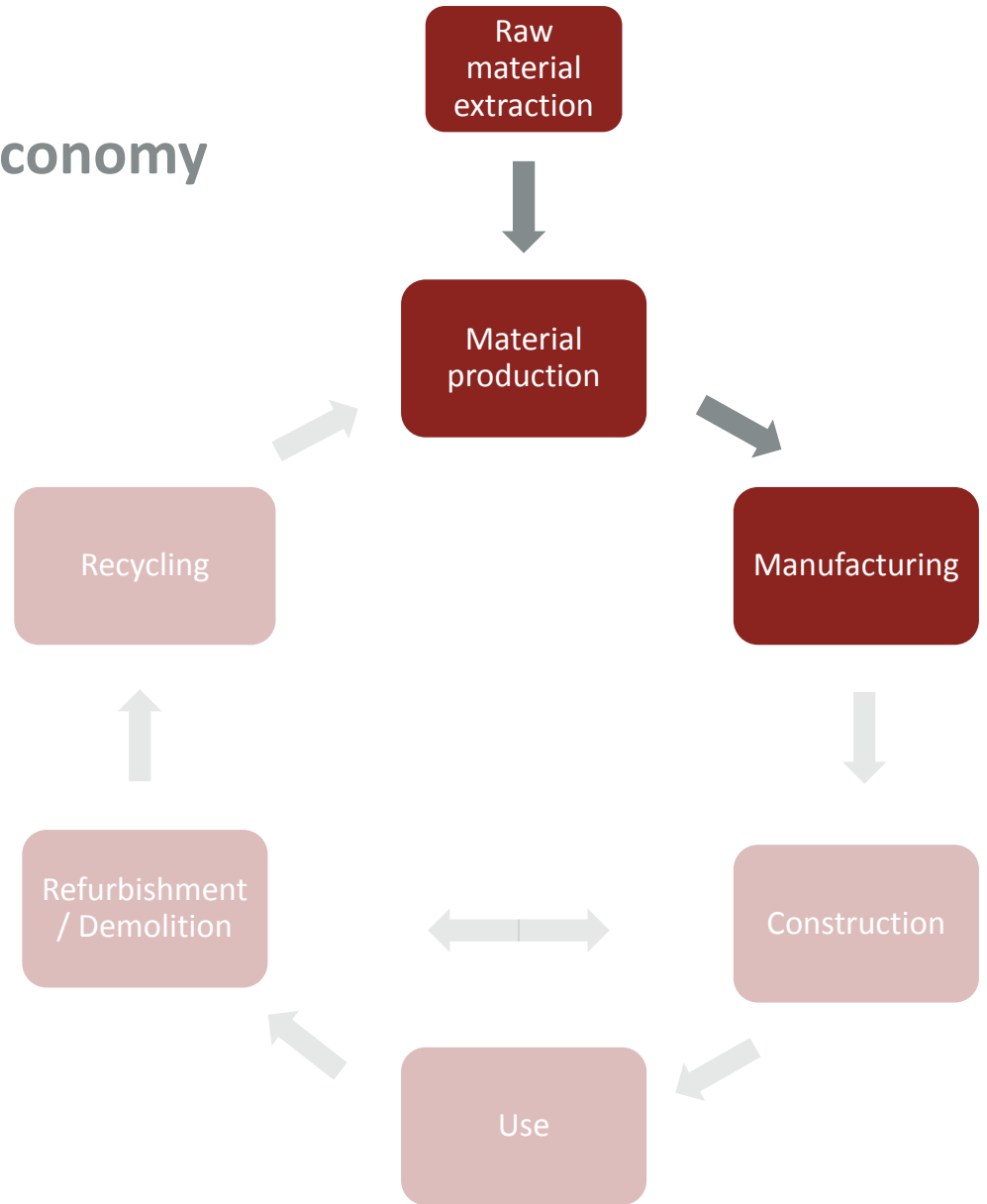
We do this by encouraging businesses to design out waste in construction, develop resource efficient products, minimise waste in refurbishment, and maximise re-use.



Built Environment Circular Economy

WRAP's **Resource Efficiency Reviews** support manufacturers of construction products to identify and implement improvements to their carbon, water and waste impacts.

Our reviews help manufacturers to review their processes from raw material right through to distribution.

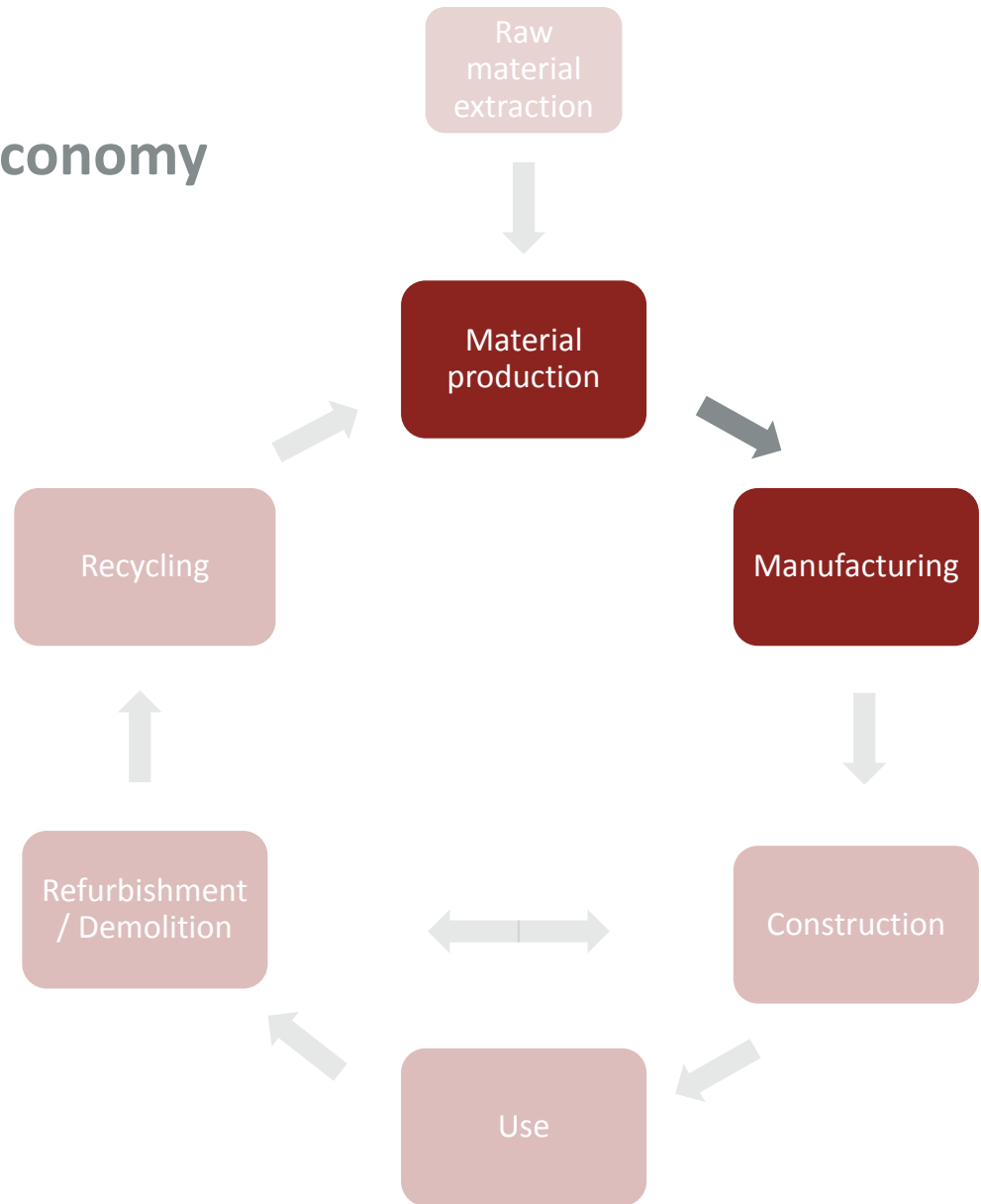


Built Environment Circular Economy

WRAP supports the construction sector to develop and deliver **Resource Efficiency Action Plans**. The plans for **Windows, Flooring, Joinery, Ceiling tiles, Plasterboard** and **Insulation foam** identify resource efficiency opportunities across the supply chain.

All **plasterboard** manufacturers have set up take-back schemes and encourage segregation of plasterboard waste, aiming for:

- zero gypsum waste to landfill by 2025;
- zero manufacturing waste to landfill by 2015; and
- 50% of new construction waste recycled by 2015.



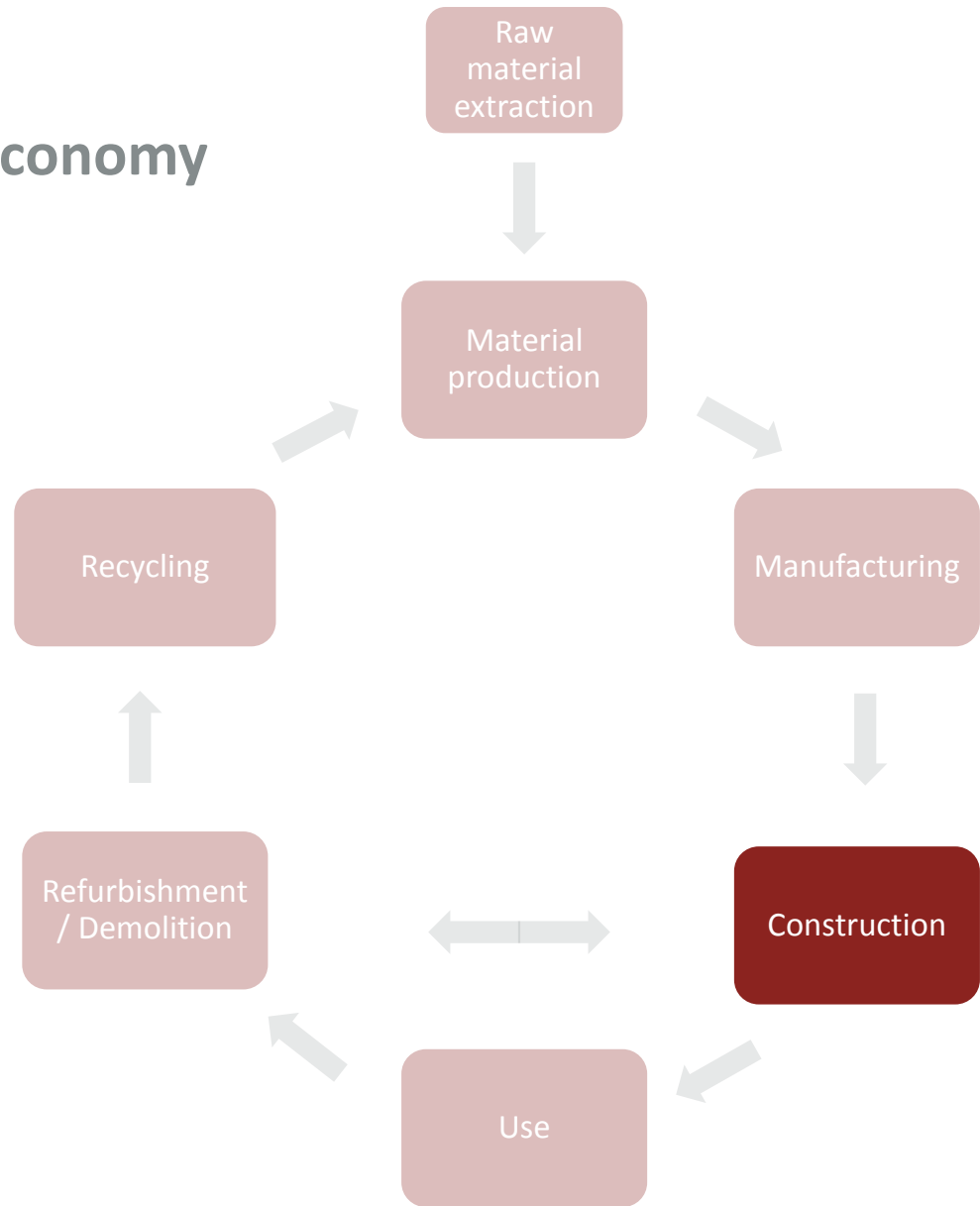
Built Environment Circular Economy

Construction Clients

Our standard procurement wording on reducing waste, promoting re-use and recycled content has influenced projects with an estimated construction value **in excess of £40 billion**.

NHS Greater Glasgow and Clyde set project requirements to reduce waste. The contractor Graham Construction, a signatory to WRAP's **Halving Waste to Landfill** agreement, was well prepared to meet these requirements. The results:

- **£90,100** net saving (0.8% of construction value);
- **900 tonnes** of waste avoided; and
- **97%** of waste diverted from landfill.



Find out more at www.wrap.org.uk/construction

Built Environment Circular Economy

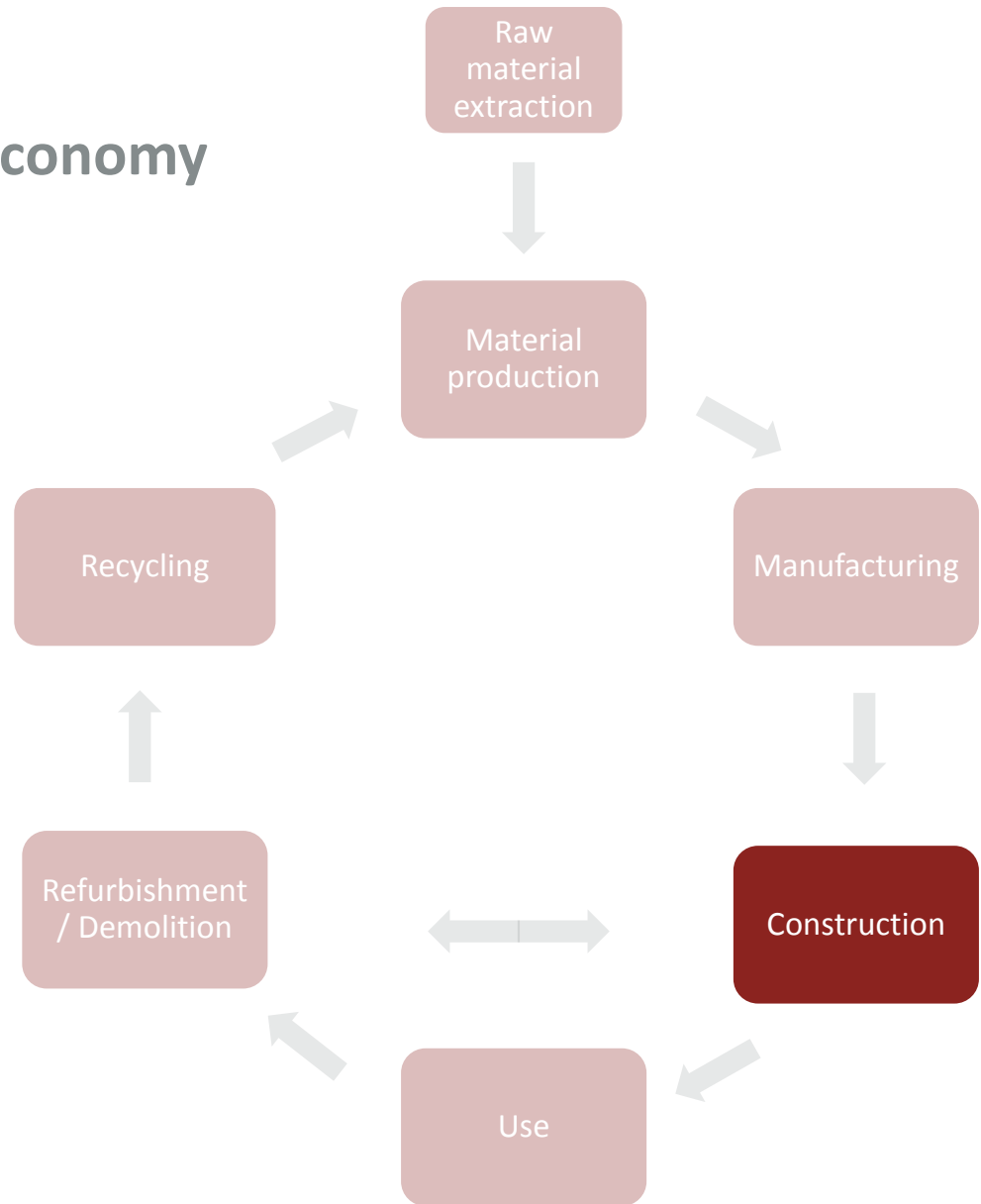
Designers

WRAP has developed guidance and tools for design teams.

Using WRAP's three-step **Designing out Waste process** we helped project teams to apply the key principles of Designing out Waste and identify design opportunities that could be implemented in their project.

For **Birmingham Schools** project this highlighted ways to:

- reduce total project costs by **£206,784**;
- reduce waste by **7271 tonnes**; and
- reduce embodied carbon by **1,004 tonnes**.



Find out more at www.wrap.org.uk/construction

Built Environment Circular Economy

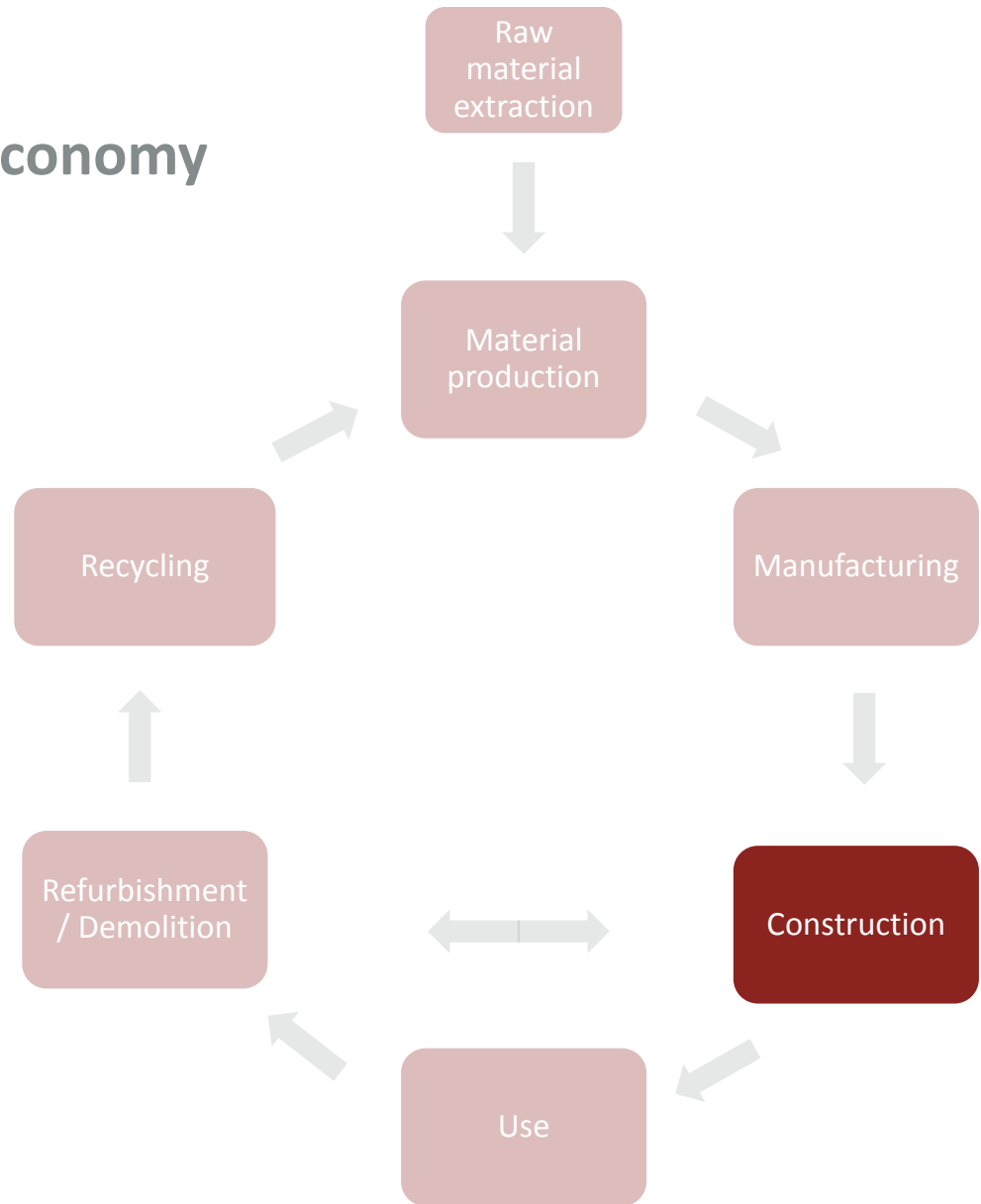
Principal Contractors

Our Construction Commitment, **Halving Waste to Landfill**, was a huge success. Over 800 companies made the pledge to reduce their waste.

The **Leadbitter Group** benefited from involving the supply chain in waste reduction to minimise the impact of construction.

“Halving Waste to Landfill provides financial savings, enhanced reputation as a sustainable contractor and, of course, a reduction in the environmental impacts”

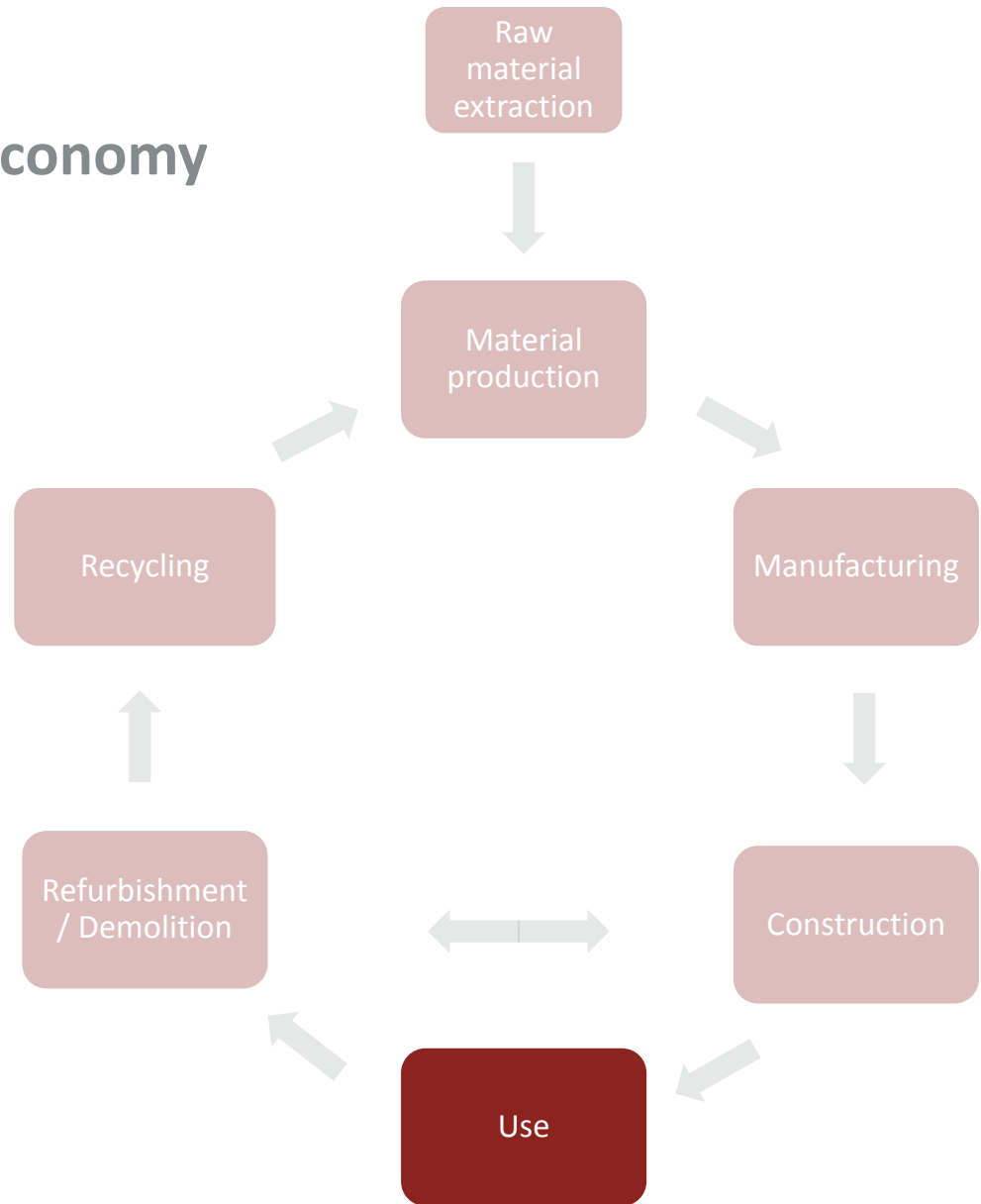
Kim Shepherd, Leadbitter Group Technical Manager



Built Environment Circular Economy

Our new **Resource Efficient Scotland** programme is committed to improving energy efficiency for businesses across Scotland.

We will deliver practical advice and support on waste, material resource use, energy and water efficiency – focussing on the implementation of resource efficiency measures, including advice around finance and how to access it.



Built Environment Circular Economy

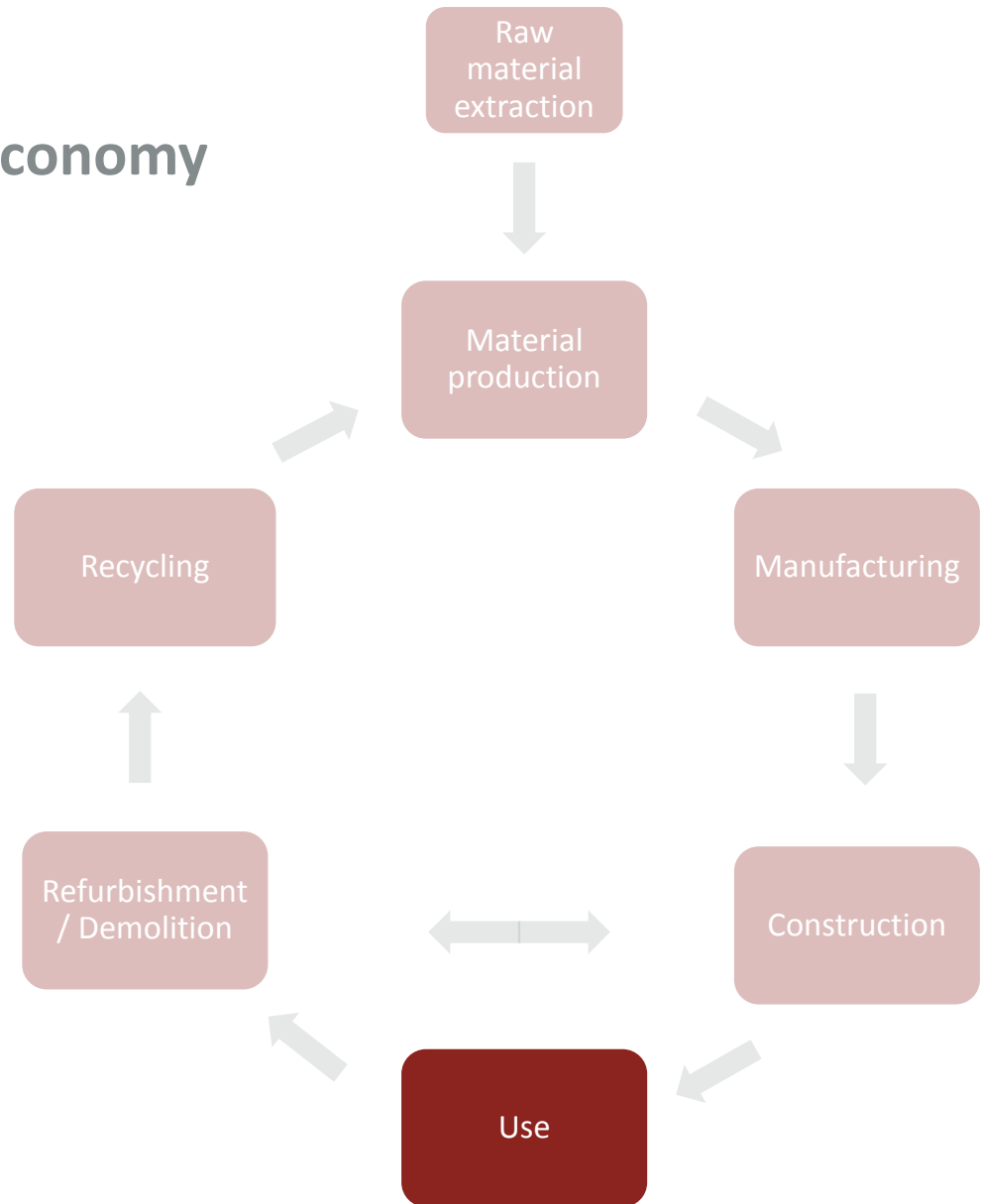
WRAP works with the Facilities Management clients and contractors to identify cost and waste savings, promote best practice and optimise the procurement of resource-efficient goods and services.

We have initiated over 20 **Resource Optimisation Reviews** across the private and public sectors – identifying **£1m in annual savings** and **over 800 tonnes** of carbon savings.

This includes:

- BBC Media Village, TV Centre and Broadcasting House **£94,000**
- Loughborough University: **£84,000**
- Scottish Government: **£89,000**
- BP North Sea HQ: **£103,000**

Find out more at www.wrap.org.uk/fm



Built Environment Circular Economy

WRAP's **Home Improvement Sector Commitment** aims to improve the resource efficiency of products.

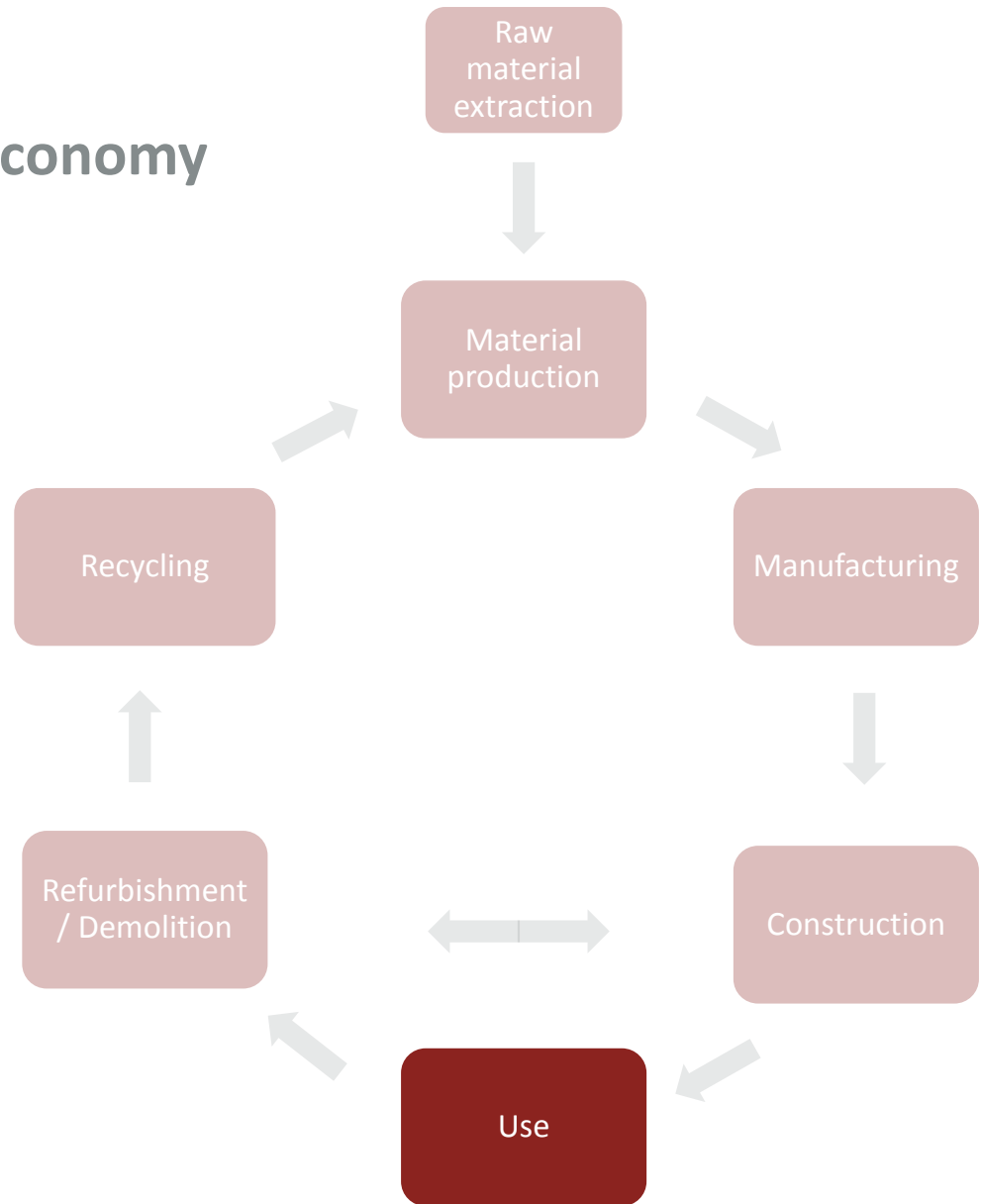
Signatories are working together to:

- reduce packaging by 15%;
- reduce waste to landfill by 50%; and
- help consumers to recycle more.

Our work on **Water Using Products** aims to **save consumers money** and **reduce water demand** through increasing the sale of water efficient bathroom products.

Our consumer research is supporting UK retailers and bathroom manufactures to develop universal messaging to encourage their customers to look for and purchase water efficient products.

Find out more at www.wrap.org.uk/diy

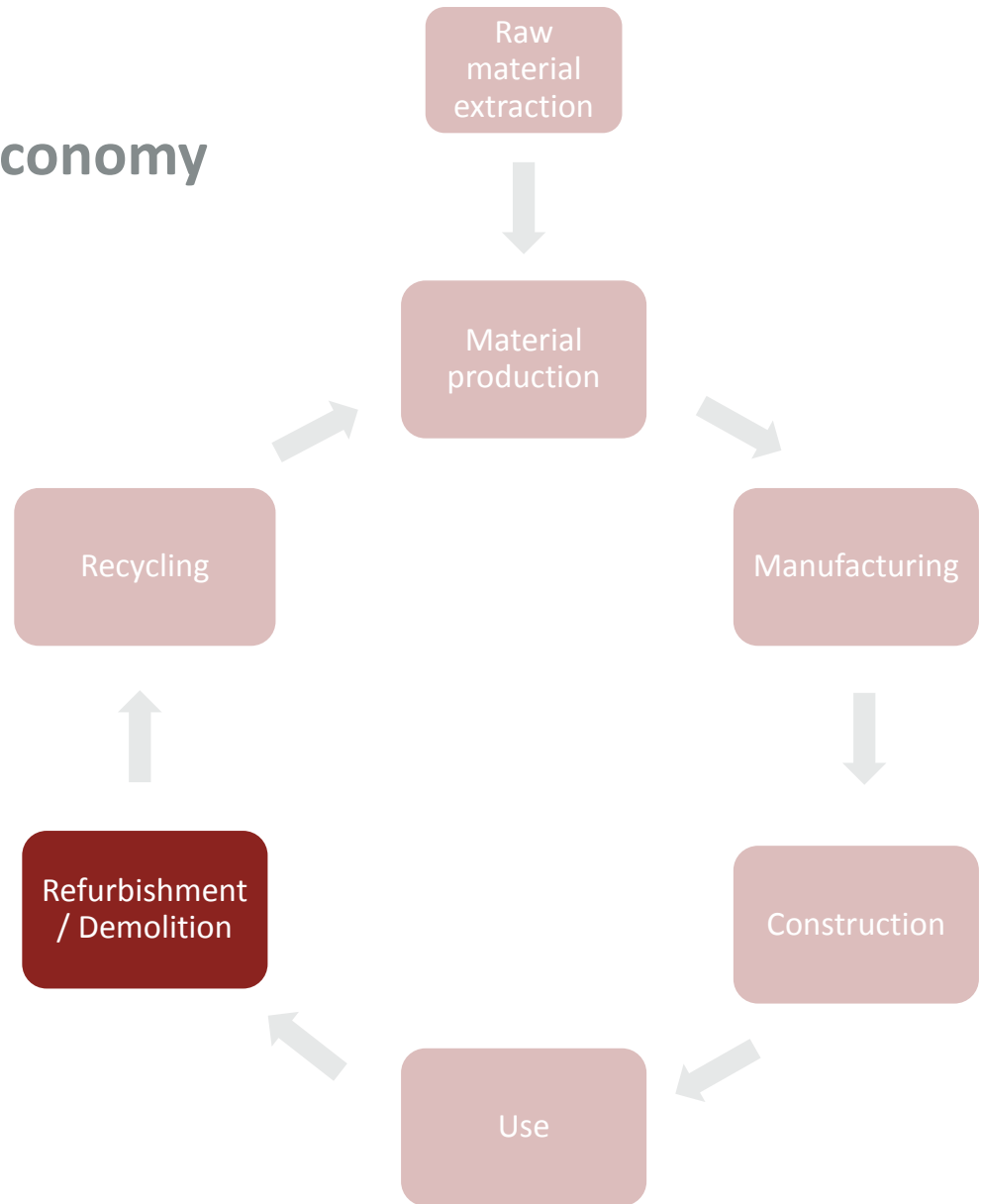


Built Environment Circular Economy

Designing for deconstruction and flexibility, and maximising the recovery of resources from demolition has economic as well as sustainability benefits.

Resource efficiency in the **refurbishment** focuses on 'greening' the UK's existing domestic, commercial and industrial buildings. Our work on refurbishment looks at fit out and minor and major refurbishment as well as improvements in key product categories.

Our step by step guidance linking **demolition and newbuild** presents a framework for regeneration projects.

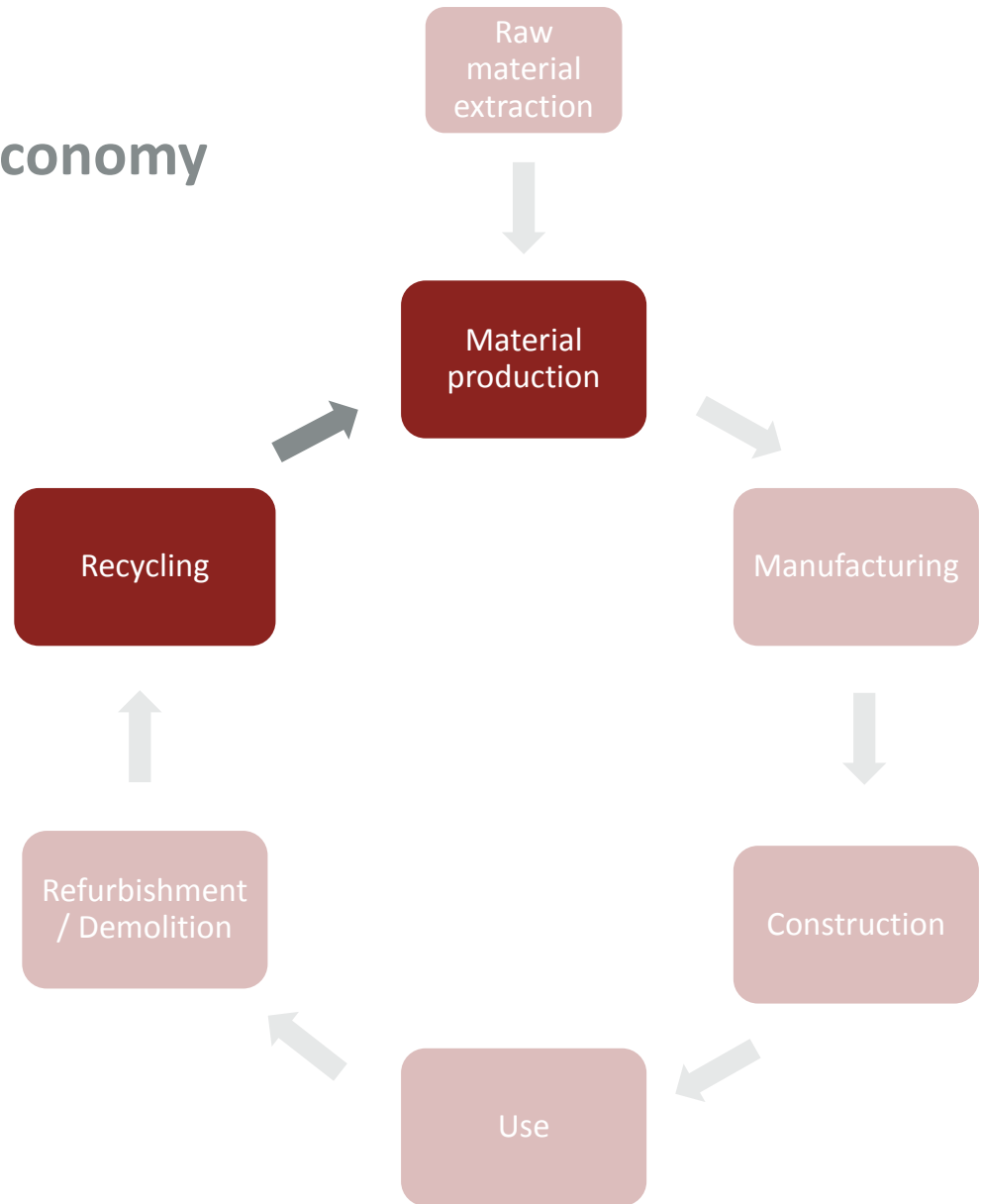


Built Environment Circular Economy

Using recycled content is one key way to minimise materials impact and divert waste from landfill – helping suppliers and contractors contribute to a more sustainable construction industry.

WRAP's **Quality Protocol on the Production of Aggregates** helps turn waste into a reusable, quality-controlled material. The protocol has reduced the use of at least **36.5m tonnes** of primary aggregates*.

Our **Recycled Aggregate Supplier Directory** launched by Zero Waste Scotland and **Recycled Content Database** help instil confidence in buyers of products with recycled content.



Built Environment Circular Economy

WRAP supports and is actively engaged in the delivery of the construction industry's low carbon vision.

By addressing the built environment loop as a whole we can identify synergies and bring together different parts of the supply chain to deliver the most effective outcomes.

Working with these key stakeholders we will continue to champion sustainable products and approaches, and help the sector to embed them as standard practice.

