



**SUSTAINABLE
CONSTRUCTION
GROUP**

**GUIDANCE
FOR
PROJECT SPONSORS
AND
PROJECT MANAGERS**

Introduction

February 2006

FOREWORD TO GUIDANCE NOTES SERIES

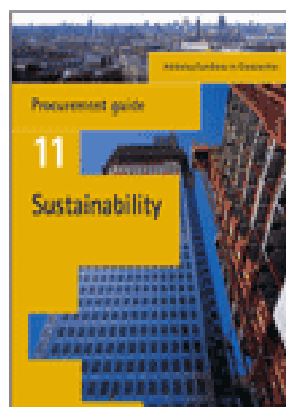
The Sustainable Construction Group was set up in December 2004 to issue guidance to Project Sponsors and Project Managers in relation to sustainable construction. Central Procurement Directorate chairs the group and membership includes representation from Centres of Procurement Expertise and Government Construction Clients in Northern Ireland.

The work of the group is guided by the [Policy Framework for Construction Procurement](#) and in particular the following two documents, which set targets and objectives:

- [Sustainability Action Plan](#)
published by the Government Construction Clients Group
- [Achieving Excellence in Construction Procurement Guide 11: Sustainability](#)
published by the Office of Government Commerce in March 2005.



**Sustainability
Action Plan**
(PDF 137kB)



**OGC Guide 11:
Sustainability**
(PDF 1,130kB)

The Sustainable Construction Group will, from time to time, issue advice and guidance on many of the issues discussed in these documents and other measures required to implement sustainability in construction. The objective will be to provide examples of good practice and sources of useful information, to ensure consistency of practices across the public sector and to measure performance in respect of the Government's targets.

The Procurement Board has endorsed these Guidance Notes for implementation by Departments, Agencies and Non-Departmental Public Bodies in all future projects.

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INTRODUCTION

What is Sustainable Construction?

Sustainable construction can be considered as an investment in the future. Through conservation of energy, water and natural resources by re-use, recycling, innovative design and the minimisation of waste and pollution we can meet our needs without compromising the needs of future generations.

The promotion of sustainable construction is a major part of the Government's policy on Sustainable Development, which recognises that our economy, environment and social well being are interdependent.

Sustainable construction is the set of processes by which a profitable and competitive industry delivers built assets (buildings, structures, supporting infrastructure and their immediate surroundings) that-

- enhance the quality of life and offer customer satisfaction;
- offer flexibility and the potential to cater for user changes in the future;
- provide and support desirable natural and social environments; and
- maximise the efficient use of resources.

In summary, sustainable construction is about building, engineering and refurbishment projects that promote environmental, social and economic gains now and for the future, helping to create a better quality of life today and for generations to come.

Development of Sustainable Practice

Sustainable construction is about creating infrastructure and construction methods that are environmentally friendly, don't heavily rely on our rapidly diminishing resources and conserve virgin materials. It is also about minimising waste, pollution, noise and traffic and providing a safer working environment for all involved in construction, maintenance, use and eventual removal of buildings or structures.

Good design is at the heart of sustainable construction. The adoption of environmental quality standards such as [Building Research Establishment Environmental Assessment Method \(BREEAM\)](#), [Civil Engineering Environmental Quality Assessment \(CEEQUAL\)](#) or the [National Health Service Environmental Assessment Tool \(NEAT\)](#) will stimulate the consideration of sustainable issues at the early stages of project development, when significant benefits can be obtained by innovative design or consideration of alternative methods of project delivery.

There is often the perception that "green" or sustainable features will increase the cost of projects. Whilst, this may sometimes be the case in relation to initial capital costs, experience is showing that good environmental practice results in good economic performance in the short and longer term. Reducing the use of energy and water not only benefits the environment by conserving resources and reducing pollution, but will also result in substantial cost savings over the lifetime of the building or structure. The costs of energy and water are likely to rise significantly in the future, so these savings are almost certain to be greater than currently predicted.

Practical examples of sustainable projects are well known and include such measures as the re-use of crushed aggregates on site, harvesting of rainwater for flushing toilets, the use of ground energy for heating of buildings, re-use of road planings in asphalt production, natural ventilation and

harnessing solar energy in buildings, sewage treatment by reed beds and many other innovative schemes. At the same time, many historical projects and practices may have delivered sustainable results before we even considered what sustainability meant. The economics on many large road schemes and site developments, for instance, led to cut and fill balances that ensured best use of the available materials on site.

Re-use of existing buildings or structures will help reduce the demand for natural resources but will also reduce the emissions and nuisance from construction activities and the associated traffic. Minimisation of waste through good design and control of waste disposal will also encourage better use of resources and help relieve the pressure on our overburdened landfill facilities.

REFERENCES

Useful Links

www.aggregain.org.uk

This website is the sustainable aggregates information service from the Waste & Resources Action Programme (WRAP)

www.breeam.org.uk

The BREEAM standard promotes sustainable performance in building design.

www.carillionplc.co.uk

This website gives examples of best practice in the preparation of site waste management plans.

www.ceequal.org.uk

The CEEQUAL scheme assessing the environmental quality of civil engineering projects – a civil engineering equivalent to BREEAM for buildings.

www.ciria.org.uk/recycling

This database gives details of recycling centres and suppliers in various areas of Great Britain.

www.ehsni.gov.uk/environs/wastemanager/regulations_dutyofcareshtml

Waste Management Duty of Care Code of Practice, Section 5, Checking Up

www.ehsni.gov.uk/environment/wasteManage/regulations_specialtest1.shtml

This link gives the latest information on the Hazardous Waste Regulations (Northern Ireland) 2005. They replace the Special Waste Regulations (Northern Ireland) 1998. Environment & Heritage Service will be publishing a Guide to the new regulations soon.

www.environwise.gov.uk

Environwise offers UK businesses free, independent, confidential advice and support on practical ways to increase profits, minimise waste and reduce environmental impact.

www.ice.org.uk/knowledge/downloads_waste.asp

The Demolition Protocol

www.investmentbelfast.com/downloads/Higher%20Recycled%20Product%20Options%2005b.pdf

This document is a useful resource for searching out products with recycled content.

www.nhsestates.gov.uk/sustainable_development/content/neat.html

NEAT is the NHS Environmental Assessment Tool developed by NHS Estates in association with BRE.

www.niwasteworks.com

This website has been developed by Invest Northern Ireland in collaboration with Wake up to Waste. Part of the website has information on registered carriers and licensed facilities to take waste.

www.netregs.gov.uk

Netregs gives simplified guidance for contractors to comply with current environmental law including the Waste Management Duty of Care Code of Practice. The guidance includes the following construction processes:-

- Construction Site Investigation
- Demolition
- Construction Pipes and Tunnels
- Construction Harbour Works
- Construction House Building
- Buildings
- Building Refurbishment
- Airport Work
- Dam Construction
- Construction Roads/Rail
- Construction Road Works
- Construction Rail Maintenance

www.qpa.org

The website of the Quarry Products Association.

www.smartwaste.co.uk

A system of tools to help the Construction Industry to identify cost savings, improve productivity and demonstrate continuous improvement through:-

- Waste benchmarking
- Identifying key demolition products for reuse or recycling
- Identifying key waste products for reuse and recycling

www.wrap.org.uk

WRAP (the Waste and Resources Action Programme) is working to promote sustainable waste management throughout the UK.

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