

# **GATE Inaugural International Conference 20 - 21<sup>st</sup> April 2005**

## **National Library of Wales - Llyfyrgell Genedlaethol Cymru**



Llywodraeth Cynulliad Cymru  
Welsh Assembly Government

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#### **Sustainable Development / Construction procurement policy**

#### **Background information for delegates**

#### **The National Assembly for Wales**

#### **Y Cynulliad Cenedlaethol Cymru**

#### **Legislative status of the Assembly**

In July 1997 the UK Government introduced proposals for devolution in Wales which were endorsed in the referendum of September 1997. UK Parliament established the National Assembly for Wales with some devolved powers in July 1999. Later Acts of Parliament have given further powers to the Assembly.

The Assembly receives money from the Treasury of the UK central Government and decides on its priorities for spending this money. The Assembly develops policies and approves secondary legislation that reflects the needs of Wales.

Decisions are made by politicians (Assembly Members or AMs) who are accountable to voters in Wales through elections, held every four years.

Wales is part of the UK. The Secretary of State (Minister) for Wales and Members of Parliament (MPs) from Welsh constituencies continue to have seats in Westminster. Laws passed by Parliament in Westminster still apply to Wales.

The Assembly has devolved power to make and implement policy for:

- ancient monuments and historic buildings
- culture, sport and leisure, tourism
- economic development, agriculture, industry
- education and training
- environment, planning, transport and roads
- health and health services
- housing, local government, social services
- Welsh language policy

Examples of the important decisions that the Assembly can make are:

- developing education, training and learning in Wales
- developing and funding health services in Wales
- administering European funds including the Objective One programme
- administering funding for local government in Wales
- developing housing policy, including homelessness
- sponsoring bodies that protect and conserve the environment
- developing a transport framework for Wales
- promoting agricultural schemes and rural development
- developing schemes to promote the culture and heritage of Wales
- developing information and communication technology in Wales
- establishing schemes for sustainable development and equality of opportunity

### **Welsh Assembly Government Llywodraeth Cynulliad Cymru**

The Welsh Assembly Government is responsible for developing and implementing policies and programmes for all issues that have been devolved to Wales. The First Minister, the Rt. Hon. Rhodri Morgan AM, leads the Assembly Government and chairs a Cabinet of eight other Ministers. All Ministers are accountable to the Assembly and its Committees.

#### **Ministers**

The 60 Assembly Members delegate their executive powers (the making and implementing of decisions and laws) to the First Minister, who is elected by the whole Assembly and usually represents the largest political party.

The First Minister in turn delegates responsibility for delivering the executive functions to Assembly Ministers, who form the Cabinet. The Cabinet makes many of the Assembly's day to day decisions, and its Ministers are responsible for individual subject areas such as health and education. The Cabinet is accountable to the rest of the Assembly, which scrutinises all its decisions and actions.

#### **Sustainable Development**

The National Assembly for Wales has a binding legal duty to pursue sustainable development in all it does. This is built into its constitution through section 121 of the Government of Wales Act. How it does this is set out in the Sustainable Development Scheme and Action Plan:

#### **Sustainable Development Action Plan 2004-07**

<http://www.wales.gov.uk/themessustainabledev/content/review/action-plan-scheme-e.pdf>

The National Assembly for Wales is required by law to make a Scheme that states how it will promote sustainable development in the exercise of its functions.

In the Action Plan the Minister for Environment, Planning and Countryside writes: "This new Action Plan ... sets out key actions that we believe will constitute a 'step

change' in delivering sustainable development in Wales. I would like to thank the many organisations and individuals who have given generously of their time, ideas and enthusiasm throughout the process. We have used this input to ... generate a new set of top ten commitments..... “

Some of these top ten commitments are related to construction and building:

*We will specify in all contracts for new or refurbished public buildings procured by or for the Welsh Assembly Government, that the design achieves as a minimum, the BREEAM 'very good' standard and the BREEAM 'excellent' standard wherever possible. We will work with Local Authorities to help them achieve similar standards for new and refurbished public buildings for which they are responsible.*

*We will also introduce the EcoHomes environmental assessment process and set energy efficiency standards significantly above that currently required by building regulations for all new homes built in Wales by Registered Social Landlords using Social Housing Grant.*

*To help to make our communities exemplars of sustainable development, we will: between now and 2007 work with developers, construction clients and funders, the Design Commission for Wales and Constructing Excellence to ensure the built environment meets our sustainable development goals;*

And another action is related to timber in construction;

*We will promote greater use of indigenous Welsh grown timber in construction, initially through the Pren Cymru 'AXIS' ERDF project that aims by 2006 to develop Welsh timber products for the social housing construction market;*

Building Research Establishment (BRE) environmental assessment methods: BREEAM and EcoHomes: BREEAM (BRE Environmental Assessment Method) is the world's most widely used means of reviewing and improving the environmental performance of buildings. Since its launch in 1990 BREEAM has been increasingly accepted in the UK construction and property sectors as offering best practice in environmental design and management. EcoHomes is a version of BREEAM that provides an authoritative rating for new, converted or renovated houses and apartments.

## **Wales and International Sustainable Development**

Wales is a partner in two regional networks that promote sustainable development:

*Network of Regional Governments for Sustainable Development (nrg4SD) – the only established voice for regional governments who promote sustainable development at the international level.*

*Sustainable European Regions Network-* the Network has produced a number of recommendations and looks to explore new approaches to sustainable regional development in co-operation with the European Commission and European partner regions. See [www.nrg4sd.net](http://www.nrg4sd.net) or [www.sustainable-euregions.net](http://www.sustainable-euregions.net)

## **Sustainable Development and the United Kingdom**

The National Assembly for Wales is the only administration in the United Kingdom that has a statutory duty to promote Sustainable Development, but the UK Government and other devolved administrations are also promoting the principles of Sustainable Development.

The administrations in Wales, Scotland, Northern Ireland and Westminster work together to promote sustainable development in the UK and internationally. The four administrations have devised a new approach to Sustainable Development, set out in their shared UK Framework *One Future: Different Paths* published on 7<sup>th</sup> March 2005.

At the heart of the framework are 5 principles: living within environmental limits; ensuring a strong, healthy and just society; achieving a sustainable economy; promoting good governance and using science responsibly.

Four priorities for UK-wide action are set: Climate Change and Energy; Sustainable Consumption and Production; Natural Resource Protection and Environmental Enhancement; Sustainable Communities.

The Welsh Assembly Government joined the UK Government and the devolved administrations in Scotland and Northern Ireland to establish the UK's Sustainable Development Commission, which acts advises government and reports to all four administrations.

The Sustainable Development Commission in Wales is the Welsh Assembly's independent advisory body on sustainable development.

<http://www.sd-commission.org.uk/wales/>

## Sustainability and the New Assembly Building



The design brief requirements for the building in terms of meeting the Assembly's constitutional requirements for sustainable development were:

- BREEAM "excellent" rating
- Design life of 100 Years
- Use of indigenous materials
- Minimise energy consumption and waste
- Application of renewable technologies
- To be "exemplar" in terms of sustainability

In order to meet these objectives the design of the building uses natural ventilation and passive systems to heat and cool the building and to maximise the use of natural light.

### *Earth Heat Exchanger System*

The ground is used as a heat source and sink in the form of earth heat exchangers, coupled with heat pumps to reduce the size of conventional boilers and dispense with the need for chillers. The ground source heat pump system (GSHP) will also provide low grade heat which can be used for the underfloor heating system.

### *Biomass Boiler*

In order to reduce the carbon dioxide emissions for heating to a minimum the building will use wood (biomass) as a combustion fuel source. The boiler will be able to use wood chip and pellets which are available locally.

### *Natural Ventilation*

To reduce the building's overall energy consumption, natural ventilation has been incorporated as the primary source of ventilation in most of the building. It has been possible to eliminate air-conditioning to all the offices and other similar areas.

The Debating Chamber, Committee Rooms and public Galleries are served by a mixed-mode ventilation system which offers both natural ventilation and air-conditioning. The use of these passive and natural ventilation systems will reduce running costs by 30-50% over the 100 year life of the building.

### *Lighting Design*

The objectives of the lighting design are to provide a suitable, functional, economic and aesthetic lighting scheme throughout the Assembly building by using mostly natural daylight. Energy efficiency is achieved by controls that balance natural and artificial lighting and by minimising higher light outputs where not necessary.

### *Use of materials*

The sustainability of the building is further increased by the selection of materials used in the construction of the building. *Where possible, subject to EC Procurement regulations, indigenous materials are used.* Materials are selected by considering 'value for money', 'initial costs' and 'whole life costs' over the 100 year life.

### *Environmental Assessment*

The building will achieve a Building Research Establishment Environmental Assessment Method BREEAM rating of "Excellent".

## **Government's procurement policy on timber**

With regard to procurement of goods and services by the Assembly for its own purposes, it follows the procurement guidance produced by UK central Government.

The Government's guidance for procurement and specification of building works recommends that Government departments should obtain only sustainably produced timber and products such as joinery, furniture and veneers. Suppliers must provide documentary evidence that timber has come from sustainably managed sources; that the timber has been lawfully obtained and has come from forests and plantations which are managed to sustain their biodiversity, productivity and vitality, and to prevent harm to other ecosystems and any indigenous or forest-dependent people.

A copy of the model specification is on the 'Greening Government Operations' web site at: <http://www.environment.detr.gov.uk/greening/general/general.htm>

It is not possible to specify timber which is only certified under the Forest Stewardship Council's scheme because only a small proportion of timber is FSC certified and it is unlikely that Government could meet all its requirements from this source alone. Another reason is that this might discriminate against other equally valid schemes and therefore contravene public procurement rules.

DETR's publication 'Towards more sustainable construction: green guide for managers on the government estate' recommends that timber should be considered for constructing floors, partition walls and wide span beams.  
(<http://www.environment.detr.gov.uk/greening/land/land.htm>)

## **‘Building Regulations’**

The Building Regulations are made under the Building Act 1984 and apply to Wales and England. They ensure the health and safety of people in and around all types of buildings and provide for energy conservation, and access to and use of buildings. Most building projects must comply with them.

The ‘*requirements*’ with which building work must comply are grouped under fourteen ‘parts’. The ‘parts’ deal with individual aspects of building design and construction ranging from structural matters, fire safety, and energy conservation to hygiene, sound insulation, and access to and use of buildings. The ‘*requirements*’ set out the broad objectives or functions which the individual parts of the building design and construction must achieve.

## **The ‘Approved Documents’**

Practical guidance on ways to comply with the functional requirements in the Building Regulations is contained in a series of Approved Documents which are to be read alongside each of the fourteen ‘parts’ in Schedule 1 to the Building Regulations.

Each document contains guidance on the performance of materials and building work in order to comply with each of the requirements; and practical examples of how to achieve compliance for the more usual building situations.

The guidance in the documents is not a statutory requirement. Building work can be designed and constructed in other ways as long as it complies with the relevant *requirements*.

Approved Document A	Structure
Approved Document B	Fire Safety
Approved Document C	Site preparation and resistance to moisture
Approved Document D	Toxic Substances
Approved Document E	Resistance to the passage of sound
Approved Document F	Ventilation
Approved Document G	Hygiene
Approved Document H	Drainage and waste disposal
Approved Document J	Combustion appliances and fuel storage systems
Approved Document K	Protection from falling, collision and impact
Approved Document L1	Conservation of fuel and power in dwellings
Approved Document L2	Conservation of fuel and power
Approved Document M	Access to and use of buildings
Approved Document N	Glazing -safety in relation to impact, opening and cleaning:
Approved Document P	Electrical safety

For approval of plans, there are two types Building Control Service:

- local authority Building Control Service
- independent approved inspectors

*Approved inspectors* are private sector companies or practitioners and are approved for the purpose of carrying out the *Building Control Service*.

**Welsh Assembly Government : ‘Planning Policy Wales’**

Land-use planning policy in Wales is contained in 'Planning Policy Wales' (March 2002) which provides the strategic policy framework for the preparation of local planning authorities' development plans. This sets the framework for planning policy in Wales, and contains guidance on building design, supplemented by Technical Advice Notes (Wales) (TANs).

### **Promoting sustainability through good design**

"Good design can protect the environment and enhance its quality, help to attract business and investment, promote social inclusion and improve the quality of life. Good design should be the aim of all those involved in the development process and should be encouraged everywhere. This applies to all development proposals, at all scales, from the construction or alteration of individual buildings to larger development proposals".

"The design process should promote the efficient use of resources, including land. *It should seek to maximise energy efficiency and minimise the use of non renewable resources* and the generation of waste and pollution. Ways to achieve this include, for example, site selection and treatment".

## **Planning Policy Wales Technical Advice Note 12: Design**

### **Resource Efficient Buildings**

"Many aspects of design such as built form and fenestration affect the resource efficiency of buildings. The following factors may be relevant:

- *use to be made of material with reduced energy inputs (sustainably produced timber, locally manufactured or recycled materials (e.g. bricks); and*