

# **SUSTAINABLE DEVELOPMENT**

## **Introduction**

Sustainable Development is the achievement of a better quality of life through the efficient use of resources, which realise continued social progress while maintaining stable economic growth and caring for the environment.

As part of Central Government's strategy for more sustainable construction, a number of areas have been highlighted for consideration to encourage the development of sustainable construction within the construction industry;

- Re-use existing Built Assets
- Design for Minimum Waste
- Aim for Lean Construction
- Minimise Energy in Construction
- Minimise Energy in Use
- Do Not Pollute
- Preserve and Enhance Biodiversity
- Conserve Water Resources
- Respect People and the Local Environment
- Set Targets for the Measurement and Monitoring in Order to Benchmark Performance.

As part of their ongoing commitment to sustainable development, the following objectives are typical for government:

1. All timber to be procured from sustainable sources as per UK Government Timber Procurement Policy evidenced by the provision of suitable certification.
2. Design to provide a minimum 20 year life.

3. Reduce the overall energy consumption, water consumption and production of waste of refurbished buildings by 25%.
4. Projects to set as an example of Best Practice in Sustainable Construction and Development

## **Design**

Consideration should be given to the following within the design;

- The Project should actively contribute to the Governments Targets to reduce CO<sub>2</sub> emissions as set out in the Governments Plan for Action Document.
- Developments should use energy efficiently. They should consider use of renewable sources of energy or energy efficient systems that deliver a facility with lower running costs and environmental impact.
- Enable accurate monitoring of energy consumption and emissions.
- The design should comply with latest best practice and codes of conduct for the use of materials, fuels or gases that may be harmful to the environment.
- The design should enable easy access and use of the building in accordance with DDA requirements.
- The design should be assessed in terms of Whole Life Cost as laid out in OGC Procurement Guide 7 Whole Life Costing.
- The design should use materials which have a low environmental impact, and consider the impact of the completed project within the local environment.

## **Procurement**

Consideration should be given to the following within the procurement of materials and services;

- All timber to be procured from sustainable sources as per UK Government Timber Procurement Policy evidenced by the provision of suitable certification.
- Wherever possible (whilst maintaining the design brief) to re-use existing materials or elements of the building.
- Use of materials that can be recycled, and materials that have been recycled.
- Management of the supply chain to ensure that all Suppliers, Manufacturers and Contractors are actively implementing the requirements of sustainable development. What evidence is available to support this?

## **Construction**

Consideration should be given to the following within the construction phase of the works;

- Waste Minimisation and management. The design should ensure that there is minimal waste during construction, operation, any future refit as well as demolition.
- Packaging should be reduced to a minimum. Use should be made of prefabrication and other methods that minimise the need for packaging.
- A Waste management plan is to be submitted to the Client Team for comment.
- Waste to be segregated and disposed of in the appropriate manner ie. re-use, recycling or the like wherever possible. This process should be fully auditable.
- How will energy and water use be minimised during the construction of the works?

- Plans to be in place to minimise and monitor air, water and noise pollution.