

# Sustainable Development

## Why me?

**A brief guide to sustainable  
development and why it is relevant  
to facilities managers.**



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# What does “Sustainable Development” mean?

The key definition of sustainable development was set out in 1987 by the UN Environment Commission under Gro Harlem Brundtland:

**Sustainable Development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.**

**It refers to social, economic and environmental issues.**

**Sustainable Development is a way of trying to address the problems we face:**

- 1 Climate change
- 2 Voracious demand for natural resources
- 3 Unequal access to resources
- 4 Waste
- 5 Loss of biodiversity
- 6 Damaging transport policies

## 1. Climate Change



Over the past 100 years global mean temperature has increased by 0.6 °C.

Europe's temperatures have gone up by 1.2 °C.

The 1990s was the warmest decade over the past 150 years.

By 2100, temperatures are projected to increase by 1.4 to 5.8°C .

Warming could lead to a significant rise in the level of the world's oceans, submerging low-lying coastal areas completely.



## **Climate Change: reasons**

Most scientists believe that the gases emitted as we burn coal and other fossil fuels are the most likely reason for warming.

Gases contribute to the “greenhouse effect” as they accumulate in the atmosphere, trapping the outgoing heat radiated from the surface of the earth.



Horses are rescued by the RSPCA in flood water near Betws Y Coed in North Wales, February 4, 2004.

## **Climate Change in the UK**

Climate change is related to increased flood risk, through rising sea levels and more stormy weather.

Around 5 million people, in 2 million properties, live in flood risk areas in England and Wales.

Figures for annual damage from flooding could rise from the present level of £1 billion to £25 billion (worst case).

## **Climate Change: what we can expect here**

### Changes in Seasons

- Warmer drier summers
- Milder, wetter winters
- Rising sea-levels

### More Extremes

- More very hot days
- More intense downpours
- Possible more storm events in winter

UK Climate Impacts Programme – Evidence to Parliamentary Enquiry into Climate Change, April 2004

# Climate Change – our future

## Wetter winters:

- More flooding
- Damage to property from heavy rain
- Rain overwhelming storm drains and gutters
- Difficult access to land for animals and machines

## Dryer Summers

- Reduced waters supply
- Increased demand for water – hose pipe bans, etc.
- Not enough water flow to dilute pollution
- Soil shrinkage – buildings and pipes crack
- Wild fires

## **2. Voracious demand for natural resources**

Rapid development is damaging or using up natural resources in many parts of the world.

This growth has not been offset by the conservation of environmental resources for future generations.

### **3. Unequal access to resources**

The poorest of the world have less access to the world's resources and less ability to prevent damage to their environments.

While we are using more resources than ever before, many parts of the world are struggling to find such basic things as drinking water.

Socially, people may not have access to education. Economically, people are resources which may be exploited.

One of the key concepts of sustainable development is that we need to take care of all our resources:

- social
- economic
- environmental

## 4. Waste



Household waste is a small proportion of the mountain of waste generated each year.

Waste streams will probably increase over the next decade.

## 5. Loss of Biodiversity

Biodiversity means the rich variety of life forms in nature.



Natural habitats, ecosystems and species are often poorly understood and ignored by government and industry.

Many of the world's different plants and animals are under severe threat of extinction.

Not just exotic animals -- a wide range of UK species are under threat.

Many species are lost already.

## 6. Transport



Our current transport system poses growing threats to environment and human health.

Transport is the fastest growing consumer of energy and producer of greenhouse gases in Europe.

Urban air quality in cities is poor.

Roads and railways are cutting natural areas into ever-smaller pieces, threatening the existence of wild plants and animals.

**Yes, it's grim.**

**But what has it got to do with my work doing the facilities management for my charity?**

People who undertake facilities management have the potential to make a difference.

We purchase and manage resources for our organisations.

The way we operate can have an impact on the problems we face.

The next pages look at some of the ways we can make a difference.

## Managing Buildings

In industrial countries, buildings in use or being built are the biggest single indirect source of carbon emissions generated by burning fossil fuels.

- They account for over 50% of total emissions
- If you add the cost of transporting materials used in buildings, the UK Government estimate is 75% of total emissions

Buildings are also a major user of raw materials, including stone, timber and many other materials.

## Purchasing

The materials we use for our buildings and in our day-to-day activities have environmental and social impacts

- their extraction
- the way they are processed
- how far they are transported
- how they are used
- how we dispose of them.

In addition, we can make decisions about the kind of employers and suppliers we are happy to deal with.

## Resource Use and Waste

We use resources and generate waste in our day-to-day activities.

### Resource Use

Only 4 litres of the 150 litres of drinking water per person consumed per day is used for drinking.

Increased water use also means increased energy use - in supply, in heating and in waste.

### Waste

It takes 17 trees to make 1 tonne of paper.

Of the 2.4 million tonnes of domestic and commercial waste disposed of each year by local authorities, nearly 34% or 509,000 tonnes is paper.



## **Loss of Biodiverstiy**

We may manage land as well as buildings, and we can make decisions about how we manage our green spaces.

We can make decisions about what kind of materials we buy.



## **Transport**

We can affect people's choices about transport by where and when we hold meetings, the facilities we make available for non-care users.

## **What are we doing about it?**

The Charities Facilities Management Group is working to produce a model policy statement on Sustainable Development.

This policy will be available for charities to adopt and to use as a guide to working towards sustainable development.

We are also working to produce a guide to resources available to help you get started.

The next section on this website is a presentation by Luce Black of Save the Children which looks at some of the principles of sustainable development in action.

Website:

<http://www.upkeep.org.uk/cfm/sustainability.htm>