

## ENVIRONMENTAL POLICY

A responsible and forward-looking approach to environmental issues is an important factor in Liberty International's continuing success in the UK property industry. We recognise the mutual benefits of incorporating sustainability into our business strategies and of dealing appropriately with any impact on the environment caused by our operations.

In support of this, we are committed to:

- Maintaining high standards in respect of environmental matters.
- Meeting the needs of occupiers and shoppers.
- Integrating the concept of sustainability into our business.
- Applying best practice in the design, construction and management of buildings and their surroundings.
- Using materials from sustainable sources and as set out in our Environmental Guide, which detail, inter-alia, prohibited materials
- Complying with all legal requirements.

and where practical or relevant to the varying requirements of our business, we:

- Take account, through consultation, of the needs and aspirations of local communities and other stakeholders.
- Seek to reduce the Company's consumption of energy, water and natural resources in our multi-let properties to appropriate levels commensurate with the operational needs of the business and the requirements of occupiers.
- Help to reduce waste generation at our multi-let properties and increase the proportion recycled.
- Ensure occupiers and shoppers have efficient access to our properties and a practical choice of transport.
- Act as a 'good neighbour' and ensure that noise, nuisance and site-generated traffic are minimised.
- Seek to develop on brownfield land and ensure the efficient use of this land, thereby helping to revive the economic vitality of the area.
- Work with all stakeholders, be they employees, suppliers, retailers, investors or the local community, to improve environmental performance.

These policy commitments are supported by clear objectives and we aim to deliver continual improvement in environmental performance. As an aid towards meeting these policy commitments and objectives, we have provided our employees and consultants with an 'Environmental Guide' covering all aspects of our business.

In line with our Business Code of Practice we provide induction and training courses for our employees covering Corporate Responsibility (CR) related matters.

This policy forms part of our overall policy on Corporate Responsibility. The company strives continuously to improve its performance. Management systems and procedures are regularly reviewed to ensure that the company maintains its commitment to this policy.

# LIBERTY INTERNATIONAL ENVIRONMENTAL GUIDE 2007

This Environmental Guide has been prepared for use by all operating companies within the Liberty International Group, primarily Capital Shopping Centres and Capital & Counties. It will assist designers and managers assess the range of environmental issues.

Compliance with current legislation is essential together with adherence to the Company's Environmental Policy. It must be clearly demonstrable how the overall aims and objectives as set out in this document have been met. Any conflicts, discrepancies or divergences shall be raised at the earliest opportunity and guidance sought before proceeding.

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# 1 Introduction

In support of the Environmental Policy, the following guidelines have been produced to assist designers, managers and those involved in the construction process to assess a range of environmental issues. It is intended that this document will apply to all aspects of our business, covering development, refurbishment and on-going asset or operational management.

Designers, managers and those involved in the construction process may be asked to demonstrate how they have considered and satisfied the appropriate requirements set out in this guide.

The range of issues is potentially very wide, and whilst not all items are appropriate or relevant to every situation, the intention of this Environmental Guide is to establish the issues that should be considered as part of the application of the Environmental Policy.

## 2 Design and Construction Considerations

This section applies to contractors, designers and consultants employed by Liberty International as part of the design and construction process.

### 2.1 Acquisition

- Undertake environmental surveys, as necessary, of all new investments and development sites that cover *inter alia* land contamination, ecological sensitivity, archaeology, ground water and drainage, asbestos and other prohibited materials, and transport issues.
- Assess the need for control, monitoring or remediation of contaminated land and ensure the Company's requirements are met.
- Continue to ensure the efficient use of land to support regeneration and economic growth and maintain our development programme on brownfield land.

### 2.2 Design

- Base approach to building design upon meeting needs of potential occupiers, whilst taking into account the best of current practice in terms of environmentally sensitive design: promote designs that incorporate environmental good practice in terms of energy use, water use and materials conservation.
- Design retail and office developments to achieve a BREEAM rating of 'Very Good' or better.
- Design residential buildings to achieve an EcoHomes (or Code for Sustainable Homes equivalent) rating of 'Good' or better.
- Calculate life cycle costing for major energy consuming plant and equipment and evaluate the findings.
- Take all significant environmental factors into consideration at the design stage to ensure that the design team uses these criteria as part of the decision-making process.

- Seek to select materials from sustainable sources where fit for their purpose and readily available in the United Kingdom.
- Seek to maximise design life of buildings by optimising the use of durable materials that last longer, reducing volume of waste produced over the buildings lifetime.
- Examine potential for the reuse of existing foundations.
- Consider use of prefabrication and standardisation techniques to minimise construction waste.
- Encourage design team members to have robust Environmental Policies.

### **2.3 Development & Refurbishment**

- Undertake an environmental impact assessment (EIA) on major schemes in line with statutory requirements and best practice guidelines e.g. Institute of Environmental Management and Assessment (IEMA) EIA guidelines.
- Undertake detailed dialogue with local interest groups.
- Undertake detailed dialogue with the local Planning Authority.
- Review transport requirements and opportunities.
- Ascertain rights of light and party wall matters.
- Assess archaeological impacts and the need for a study.
- Study and attempt to minimise the ecological impacts of the proposals.
- Review energy demand of any development and the potential for energy minimisation.
- Review waste minimisation and recycling opportunities during the construction and operation phases.
- Study water resources and ground water quality.
- Consider landscape and urban design issues.
- Consider materials to be used, taking into account those that are prohibited.
- Consider noise and vibration.
- Consider general nuisance and air quality.

### **2.4 Energy Use**

- Seek to maximise provision of natural lighting whilst minimising solar gain.
- Seek to optimise natural ventilation and aim to eliminate the need for mechanical ventilation where practicable.
- Examine low-energy HVAC systems and options such as heat recovery.
- Specify energy efficient lighting systems and controls. Consider incorporation of energy minimisation measures such as use of photocells or passive infrared technology to control lighting and water consumption.
- Assess non-carbon based energy resources for their commercial viability for new developments.

### **2.5 Materials Specification**

- Ensure prohibited materials (list appended) are not specified or used.
- Procure Forest Stewardship Council (FSC), or alternative equivalent certifying body, certified timber unless no alternative is available. Ensure that any hardwood timber specified for finishes etc. is not vulnerable / endangered.
- Minimise the use of all natural resources.

- Seek to optimise the use of natural finishes and reclaimed materials, where possible.

## **2.6 Water Conservation**

- Specify low-flow taps and showers.
- Specify low cistern capacity / dual flush WCs.
- Investigate the feasibility of grey-water recycling and rainwater harvesting in larger developments.

## **2.7 Site Ecology**

- Specify low water-consuming planting and landscaping.
- Aim to improve biodiversity by encouraging local flora and fauna in line with Local Authority Biodiversity Plans.

## **2.8 Construction**

- Seek to be a 'good neighbour' and ensure that noise, nuisance, dust and site generated traffic movements are minimised. Install mitigation facilities during construction/demolition for control of mud, dust and other nuisance emissions to the surrounding environment.
- Support initiatives in the construction industry such as the 'Considerate Constructors Scheme'.
- Encourage waste minimisation, and the separation and recycling of waste on site (see 2.9)
- Aim for 'just-in-time' delivery to reduce site wastage and storage issues.
- Consider transport requirements for site operatives. Produce a construction transport plan for very large-scale projects.
- Consider creating training schemes and job opportunities for local young people and unemployed.
- Employ contractors who have robust environmental policies and environmental management systems/practices in place.
- Ensure contractors employ appropriate measures to prevent incidents of pollution, such as land, surface water or groundwater contamination. Put in place appropriate pollution prevention and control plans to reduce the risk of, and respond to, pollution incidents.

## **2.9 Waste Management**

For large scale projects:

- Ensure contractors develop a site waste management plan during construction, covering the following issues (as a minimum):
  - A nominated individual responsible for waste management on site.
  - Reusing demolition materials where possible e.g. crushing waste aggregates on site to use as infill.
  - Asking suppliers to provide a take back service for construction material packaging e.g. pallets.
  - Storing materials carefully to avoid damage and wastage.

- Segregating and labelling recyclable waste on site.
- Minimising the generation of hazardous waste.

## **2.10 Supply Chain**

- Work in partnership with key suppliers to improve and implement the appropriate standards.
- If possible, aim to work with local suppliers.
- Use supply chain partners who have robust environmental policies and management systems in place.

## **3 Operational Considerations**

This section applies to centre managers, centre staff and those actively involved with building management in general.

### **3.1 Property Management**

- Manage existing properties to achieve an appropriate environmental impact commensurate with their use.
- Undertake environmental reviews at all properties on a rolling programme.
- Undertake maintenance to ensure the efficient operation of the building's plant and equipment.
- Maintain a log of refrigerants used on each site: measure both the charge (kg) and type of refrigerant used in each item of refrigeration equipment on an annual basis. Work with service partners to ensure refrigerants (e.g. R22) are phased out along the timescales dictated by ozone depleting substances legislation.
- Work with occupiers in multi-let properties to help reduce waste generation and increase the proportion recycled.
- Encourage use of recycled materials and goods, where possible.
- Liaise with the Sustainable Transport Manager where appropriate to enhance and encourage sustainable modes of transport and access to all properties.
- On retail projects, work with retailers to implement environmentally sensitive building works as outlined in the appropriate Retailer Handbook.

### **3.2 Energy**

- Monitor energy consumption. Investigate and try to address the causes of any particularly high periods of energy use.
- Minimise energy use through active energy management and good maintenance.
- Encourage staff to switch off non-essential equipment out of hours, and ensure BMS time controls are set so as to minimise energy use.
- If possible, nominate an 'Energy Champion' at each site with responsibility for minimising energy use and raising awareness amongst staff and tenants.
- Communicate the importance of energy minimisation to staff on an ongoing basis.

### **3.3 Water Conservation**

- Monitor water consumption.
- Minimise water use through active management, use of low water fixtures, ongoing maintenance and awareness-raising.

### **3.4 Transportation**

- Work to implement site Travel Plans.
- Monitor key transport KPIs on a regular basis.
- Provide customers and staff with comprehensive information on local public transport (e.g. timetables) and cycle routes.
- Encourage car sharing, where possible, amongst staff and retailers.

### **3.5 Waste Management**

- Ensure waste management complies with all relevant environmental legislation, and ensure contractors comply with our standards. .
- Maximise provision of recycling segregation facilities on site, and only use landfill or incineration as a means of disposal as a last resort.
- Monitor waste production and recycling rates.
- Develop an annual waste management plan which details specifically how to achieve each site's recycling performance targets. This plan should contain specific actions and should assign individual responsibilities for their completion.
- Continually communicate the importance of waste segregation and recycling to staff, contractors, retailers, tenants and service partners.

### **3.6 Supply Chain**

- Conduct procurement activities in accordance with the Supply Chain Policy.

## **APPENDIX A: Materials Specification and Prohibited Materials**

Liberty International's policy is to avoid the use of materials that are believed to, or are proven to, pose a hazard, either by themselves or as a result of the manner of their installation, to the environment or the health of any person. In particular the Company will not specify substances that are not in accordance with the relevant British Standards or Codes of Practice existing at the time of specification.

Some specific materials which are, at the date of publication of this Environmental Guide, deemed to be hazardous/deleterious and are therefore regarded as "prohibited materials" are as follows:

- high alumina cement (HAC) in structural elements;
- wood wool slabs in permanent formwork to concrete or in structural elements;
- calcium chloride in admixtures for use in reinforced concrete;
- material containing vinyl chloride;
- hexavalent chromium and hexavalent chromium compounds;
- aggregates for use in reinforced concrete which do not comply with British Standard Specification 882: 1992 and aggregates for use in concrete which do not comply with the provisions of British Standard Specifications 8110: 1985;
- calcium silicate bricks or tiles;
- asbestos or asbestos-containing products of any type;
- lead, or any materials containing lead, which may be ingested, inhaled or absorbed in drinking water pipe work save as required by any relevant statutory requirement;
- urea formaldehyde foam or materials which may release formaldehyde in quantities which may be hazardous with reference to the limits set from time to time by the Health and Safety Executive (HSE);
- slip bricks;
- vermiculite plaster;
- polyisocyanurate and polyurethane foam;
- extruded polystyrene other than low-ozone depleting materials;
- materials containing Chlorofluorocarbons (CFCs), Hydrofluorocarbons (HFCs) or Hydrochlorofluorocarbons (HCFCs) or Halons (generally refrigeration equipment);
- pentachlorophenol (PCP) PCP sodium salt and other PCP salts and compounds;
- materials which are generally composed of mineral fibres either manmade or naturally occurring which have a diameter of 3 microns or less and a length of 200 microns or less or which contain any fibres not sealed or otherwise stabilised to ensure that fibre migration is prevented;
- Iberian slates;
- timber from non-sustainable sources and those considered to be 'vulnerable' or 'endangered'.
- natural peat.

From time to time this list may be amended as further regulations and/or guidance with regard to best practice in the procurement of building materials are published.