

# Geo Factsheet



www.curriculum-press.co.uk

Number 178

## Leicester - Britain's First Environment City

### Introduction

Leicester became Britain's first Environment City in 1990. It gained this status in recognition of the environmental achievements made in the city, which include an emphasis on local sustainable development. A wide variety of organisations are involved, both from the public and private sector. At the Earth Summit in Rio in 1992, Leicester's Environment City development was placed among the world's top twelve local environmental initiatives. In 1996 it became one of only five cities to receive a European **Sustainable City Award**. All of this makes it a good case study of urban futures.

### Leicester Factfile

**History and growth:** Originally a Roman settlement on the Fosse Way, the city had a recorded population of 2,000 in the Domesday Book. Between 1820 and 1914, the population exploded as Leicester's role changed from a traditional market town to an industrial centre, reaching 230,000 by the end of the period. Hosiery and knitwear were important industries. Major social change took place after World War II. Immigrants, particularly from, India, Pakistan, Bangladesh and some from the Caribbean. These residents make a major contribution to the industrial and commercial life of the city, especially via the creation of small family businesses, some of which are part of the fashion and textile industry, both locally and globally.

**Population:** 280,000 approx. Leicester is the largest city in the East Midlands and the tenth largest in the country. Population peaked in the early 1960s (288,100 in 1961) and steadily declined in the later part of the 20th Century. However, it is expected to increase in the 21st Century. The city's thriving ethnic minority community accounts for more than a third of Leicester's population.

**Employment structure:** Manufacturing has retained its position as the largest source of employment in the city, absorbing 23.4% of the workforce compared with 14.96% for England and Wales.

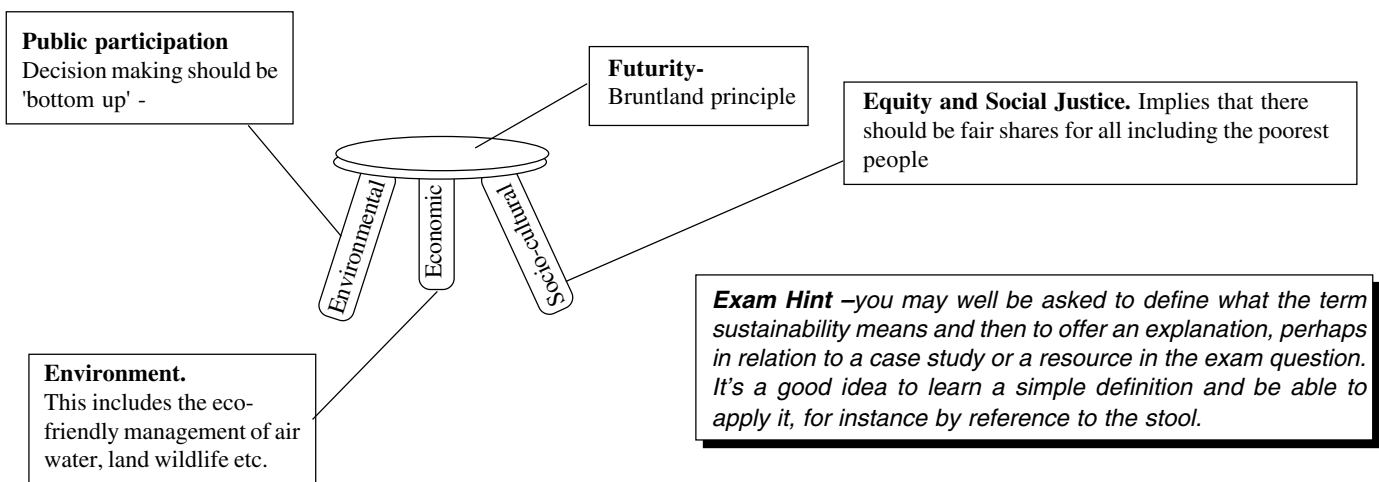
### What is Sustainability?

There are various definitions. Probably the best known is:

'Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.' (Bruntland, 1987)

An idea, which is often used to explain sustainable development, is the three-legged stool. It is often very difficult for a city as Leicester to combine environmental sustainability, with economic sustainability.

A failure to make any of the legs sustainable will not meet the Bruntland definition and will make the stool topple over.



### Why is Environment City an Important Concept?

A response to the UN World Summit on Sustainable Development (Rio 1992, Leicester's Local Agenda 21 was a challenge to convert their sustainable ideas into practical action. A City that effectively pursues sustainable environmental management should improve the quality of life for its citizens, enhancing health, safety and general well being. It also accepts a responsibility not to cause environmental damage in other parts of the world.

Leicester has already benefited significantly from developing its role as an environmental pioneer. Several million pounds have been invested in Leicester on the back of the Environment City designation and it has developed an international reputation from its environmental work to date. It could be therefore considered to be Britain's Curitiba (Factsheet 151)

Fig 1. Leicester's Environment City Strategy

**The Strategy sets out the changes needed if the community living and working in Leicester is realistically to achieve an environmentally sustainable way of life.** Co-ordination and working in partnership are essential. Therefore, a core aim of the Strategy is to communicate environmental objectives and priorities, and to provide a catalyst for incorporating them into the priorities of local partnerships and organisations.

**The Strategy has been summarized as: A Vision for a Better Environment**  
**Leicester will:**

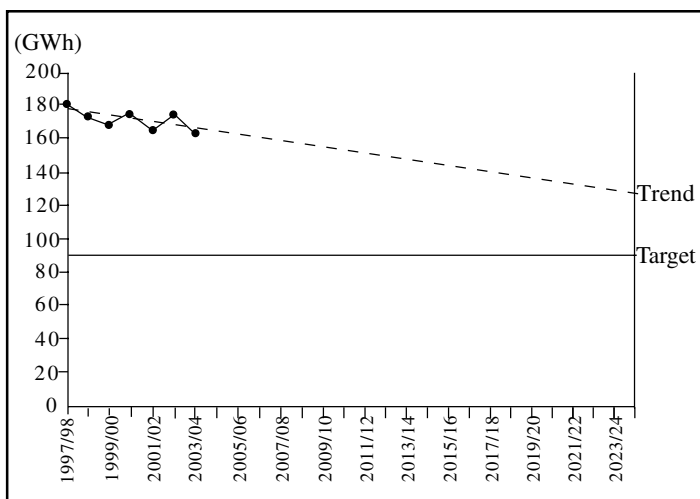
1. have high awareness and understanding of local and global environmental issues, such that actively caring for the environment becomes second nature.
2. have a clean and healthy environment, free from pollution to air, water and land.
3. have widespread local amenities and all residents and workers will have a choice of convenient and non-polluting transport options.
4. be highly efficient in its use of energy, water and resources, and ensure that what is used is sustainably produced without damaging the wider environment.
5. minimise waste production and seek to reuse or recycle all that does occur.
6. protect and enhance wildlife habitats in the city and ensure its actions have only positive impacts on wildlife in the wider world.
7. ensure that everyone in the city can access, use and enjoy an attractive local environment.

*more info: Leicester's Environmental Statement, 2003-2004. Leicester City Council, New Walk Centre, Leicester. www.environmentcity.org.uk  
www.leicester.gov.uk www.biffaleicester.co.uk (www.environ.org.uk)*

**1. The Environmental City Strategy Energy Efficiency**

- The City Council is committed to supplying **20% of its own buildings energy needs from renewable sources by 2020**. The refurbishment of municipal buildings in Leicester, with solar water heating has triggered a number of private schemes in the city.

Total Building Energy Consumption for Council Buildings in Leicester



- The **solar rental scheme** offers residents the chance to rent rather than buy expensive solar water heating systems. The rental cost is linked to the amount of money saved by not using gas or electricity to heat the water.
- **Fifty families** are set to receive free solar panels on their homes through the Braunstone Solar Streets project. The project will be used to show how renewable energy can be used to help alleviate fuel poverty in low-income areas. Residents will benefit from lower electricity bills as they generate their own power. This £500,000 project is being managed by Environ (Leicester's environmental charity) and funded by the Department of Trade and Industry.
- **The Green Doctor** offers householders a long list of environmentally friendly products free of charge during his visits. These items include low-energy light bulbs, insulation and draught-proofing.
- Energy Sense is a comprehensive **home energy advice and information service** available to all households. It is free and aims to reduce the amount of money spent on energy in homes every year.

Leicester City Council aims to meet its Energy Action Plan targets of reducing the city's energy use by 50% of 1990 levels by 2025.

## 2. Waste

Leicester City Council is a leader in waste management in the UK with the aim to recycle 40% of household waste by 2005.

The collection, treatment and disposal of waste is now linked by a single 25 year contract with Biffa, a subsidiary of Severn-Trent Water. In addition to a weekly wheeled bin collection and a weekly collection of glass, plastics and paper

Biffa's proposals for managing the city's waste also included:

- A new reception and **recycling centre at Bursom Industrial Estate** in Leicester, where steel and aluminium will be extracted from other waste
- A purpose-built anaerobic digester for composting the city's organic waste at **Severn Trent Water's facility at Wanlip** in Leicestershire
- Use of landfill sites at Welford and Wilnecote for all the waste that can't be recycled.

The company is also responsible for managing the city's bottle, paper and textile banks, and the two **community recycling centres** at Bridge Road and Islington Street. It promotes waste minimisation and recycling through city-wide public awareness campaigns, as does Leicester's environmental charity, **Environ**, which has established a green accounts programme that pays for things many people would normally throw away.

### Join Environ's Green Account Scheme and get cash for your trash!



You can get money for aluminium cans, aluminium foil, clean dry textiles and clothing, pairs of shoes, quality office paper and printer cartridges.

#### Who can join Green Accounts?

Any individual who wants extra cash in their pockets for holidays, extra spending money, or for their favourite charity. We also welcome applications from charities, community groups, schools, scouts, brownies....the list is endless!

Thirteen schools in inner-city wards of Leicester were given the chance to have a free recycling bank on their grounds and join the Green Account scheme through the **Cash for Trash project**.

All the household refuse that has not been separately collected for recycling will be ground down into smaller material by means of a 'ball mill' at Bursom. It can then be sorted and processed into metals for recycling, organic material for composting, paper and plastics which will be used as a fuel and the remaining 20% going to landfill.

The new composting facility at Wanlip Sewage Treatment Works, deals with the fine organic material produced by the Bursom recycling facility. Energy recovery through the capture of methane gas produced by the composting process and its conversion into electricity amounts to approximately 1.5 Megawatts - enough to power up to 1500 homes.

## 3. Air Pollution

Seven out of ten journeys to work are by car and at peak school travel times one in five cars is driving children on a school run. A Schools Travel Plan Officer has been appointed to help schools develop their own travel plans which encourage alternative forms of transport. Whitehall Primary School has developed a walking bus scheme and promoted 'walk-to-school' week. Forty new plans will be developed during 2004/2005 as well as a programme of child pedestrian and child cycling skills training.

The city council was the first to bring in roadside vehicle emissions tests in 2003. It is estimated that 75% of pollution is caused by 25% of vehicles. For 12 days each year the council plans to work with the police to randomly test cars, vans and other vehicles that use roads in the city. New regulations allow the city council to help drivers to meet emissions standards for their cars.

Roadside tests allow local authorities with declared AQMAs (Air Quality Management Areas) to levy fixed penalty fines on owners of vehicles who fail roadside emission tests or needlessly leave engines running while stationary (Fig2). If drivers have a recent MOT certificate or have the fault rectified within a time limit they will receive a reduced fine.

## 4. Transport

Leicester has a walking and cycling strategy and a bus priority programme. Schemes such as the Belgrave Corridor Project have shown the potential effectiveness of a sustainable transport infrastructure. Flowing traffic schemes constantly monitor pollution levels and traffic congestion around the city.

Leicester's cycle routes have been under continuous construction since 1985. The aim of these routes is to provide a cycleway network off and alongside the main road network. 100km of signed cycle routes are in use in the city and the network is being extended all the time. To encourage cycling in the city centre, the Bike Park has been opened in the Town Hall. More than 13,000 bikes use the Bike Park every year. At peak times, up to 500 bikes use the Bike Park every week. In addition to the Bike Park, more than 250 cycle parking facilities have been installed in Leicester. Business involvement has been important in rallying local support for cycling. The city council offers employers in the city a grant of up to £1,500 for providing cycling facilities to employees.

### The Bike Park offers

- Secure cycle parking in the largest secure bike parking facility in Britain. The Bike Park is staffed at all times.
- Shower and changing facilities enable people to wash and change before going to work and are available to users of the Bike Park and those who exercise in the city.
- Locker storage is provided for clothes and cycle gear. • Sales of parts and accessories.
- Repair and maintenance – an on site workshop enable routine and emergency work to be carried out while owners go about their business. The service includes recharging of bike lights, which encourages people to change from disposable to rechargeable batteries.
- Training 'Safe Cycling', 'Cycle Maintenance' and 'Buying the Right Bike' are a few of the courses intended to encourage the use of bikes.
- Promotion of cycling – a central point for information on all things related to cycling.

The bus strategy for Leicestershire aims to improve all aspects of the passenger experience. One bus can carry roughly 44 car drivers, reducing environmental and health problems. One reason for not using public transport is uncertainty about when it may arrive. By using STAR TRAK technology in the city, passengers know exactly when the next bus will arrive on routes fitted with the system. There was a major expansion of STAR TRAK in 2002.

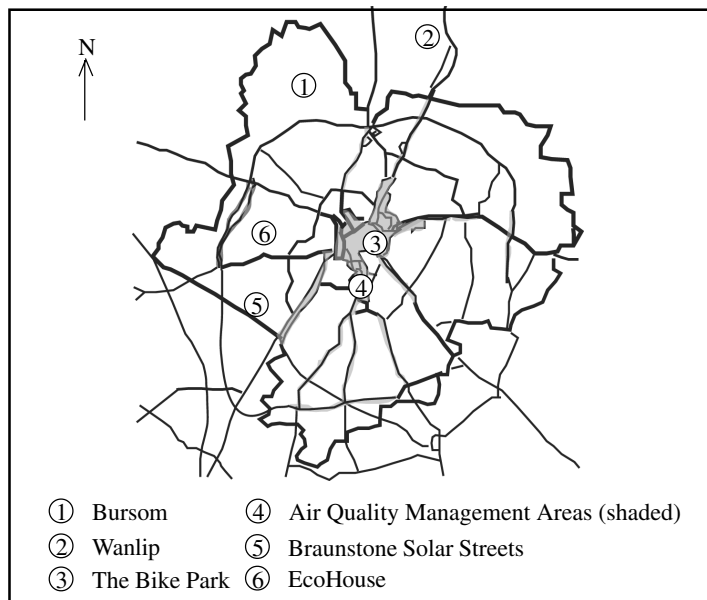
**5. The EcoHouse**

Leicester's environmental show home, demonstrates hundreds of environmental features and ideas, encouraging visitors to make green changes to their own homes and gardens. It encourages allotment gardening, so that city residents grow some of their own food.

**The Secrets of Soil Success** If you're a keen gardener but cursed with poor soil, the EcoHouse gardener, Rob Carter, will be on hand on Sunday to show you how to assess your garden soil and more importantly, how to improve it. You can also learn all about which vegetables grow well together and how to get the best results from your veggie plots.

The EcoHouse helps allotment societies to apply for grants to improve site facilities and enable more people to enjoy growing their own fruit, vegetables and flowers. There has been work with societies, to enhance their site's value for wildlife, with hedge planting, pond creation or new coppice plantations where appropriate. The location of the major schemes is shown in Fig 2

**Fig 2. Scheme location map**



**European Environmental Standards**

The European Commission produces a number of environmental directives each year, reflecting the importance of this issue across European nations. In general, the UK falls behind some of the environmental standards set by many of the other EU member nations and faces pressure to improve and match these standards. Environmental sustainability is one of the core objectives for the EU, which is committed to promoting it through their policies and programmes. Environmental sustainability is formally recognised as a priority in its structural fund programme.

A good example of 'joined up thinking' with a strong sustainability theme is the Aalborg Charter and Commitments – a European initiative that challenges cities to 'sign up' to a shared vision and a series of objectives. The initiative began as the Charter of European Cities & Towns Towards Sustainability approved at the European Conference on Sustainable Cities & Towns in Aalborg, Denmark on 27 May 1994.

Leicester signed up to the Aalborg Charter in 1994 which committed the city to developing a vision for sustainable development for its people. The Commitments represent the next stage (10 years on) by expanding upon the original vision and principles. Leicester signed up to the Commitments in 2004 and the expectation is that these will be used to guide the update of Leicester's Strategy.

**Acknowledgements;** This Factsheet was researched and written by Frank Mugglestone - who lectures at New College Telford. Curriculum Press, Bank House, 105 King Street, Wellington, Shropshire, TF1 1NU.

**EMAS (Eco-Management and Audit Scheme)** is a challenging European standard for environmental management. Some of Leicester City Council's quantified targets, monitored annually by EMAS, are in the list below:

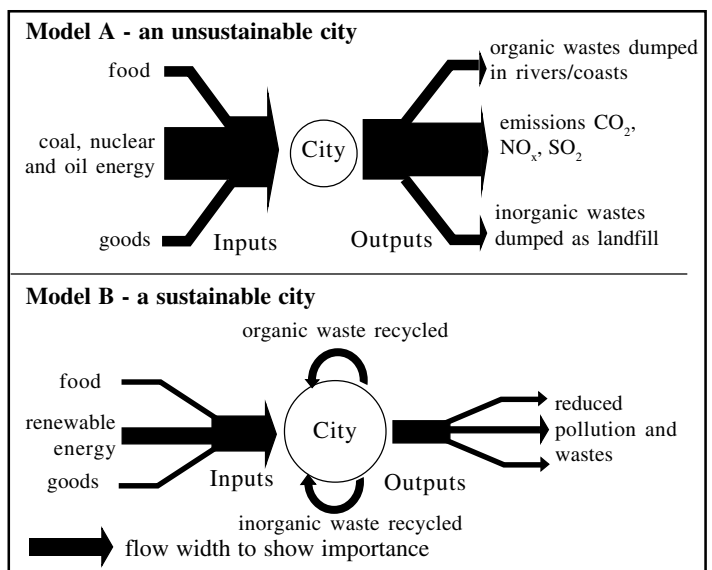
- Reduce the Council's total building energy consumption to 50% of the 1990 level by 2025
- Increase the council's use of renewable energy to 20% by 2020
- Reduce the fuel used by staff vehicles at work by 5% from 2001 - 06
- Reduce NO<sub>2</sub> short term exposure so as not to exceed 200mgm<sup>-3</sup> more than 18 times per year. Long term exposure – annual mean should not exceed 40mgm<sup>-3</sup>
- 4% reduction of 2001 car trips to the city
- 25% reduction of 2001 proportion of car trips to school by 2011
- 40% of City Council waste to be recycled by 2005
- 40% of household waste collected in 2005 to be recycled
- Reduce potable water used in council buildings by 5% of 2000 levels by 2005
- 98% of paper purchased in 2003 to be 100% recycled post consumer waste
- Sites of Importance for Nature Conservation to be maintained at 1999 levels.

**Conclusion**

Many people in the UK would not know that Leicester was Britain's first environment city. A with many successful sustainable strategies, local bottom up, small scale developments form the 'core' of the scheme. Together they have led to very important progress, giving a better quality of life to Leicester's multicultural population.

**Practice Questions**

The diagrams below show two models for cities



- (a) Use examples to explain some of the problems associated with Model A cities (4)
- (b) Use examples to suggest three ways in which managers could move toward Model B. (6)
- (c) With reference to specific examples, examine how urban areas may be made sustainable. (10)

(a) Model A cities require huge quantities of energy, fuel and food in order to survive. They are heavily dependent upon private cars, fuel for heating, air conditioning etc. London would be such a city. The result is a whole series of by-products, issues of landfill, air pollution and land used for dumping. (b) Use of renewable supplies of energy e.g. wind farms in California, Braunstone's solar streets. Use of recycling systems e.g. Zabalce of Carru, weekly collection of recyclable waste from households in Leicester. The green accounts cash for trash project. Use of composting systems e.g. Wanlip provides electricity for 1,500 homes from composting. Reduction of pollution e.g. electric buses in Curitiba and cycle tracks and the Bike Park in Leicester. Ecofarms or city farms to supply food for the city e.g. Braintree. (c) Could tackle any aspects of sustainability from the three legged stool model. Any of the measures described in this Fact sheet could be used here. Wider issues of urban design, population planning, health care, empowerment of communities could all be made relevant. If you wanted to do this in the context of Leicester there is information available on the websites below. The City Council one would be quite useful for the empowerment leg of the stool.