

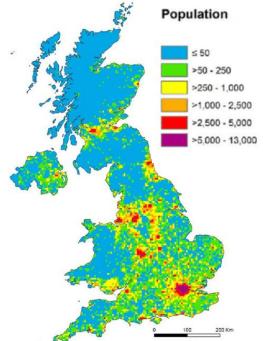
### **Urban Growth in the UK**





### **UK Population Distribution**

The UK is one of the most urbanised countries in the world. Approximately 82 per cent of people live in towns and cities. The choropleth map below shows population density in the UK.



- The average population density is around 260 people per km<sup>2</sup>
- Population density varies considerably, from over 5000 people per km<sup>2</sup> in parts of London to fewer than 50 people per km<sup>2</sup> in northern Scotland.
- Population density is high in across England, particularly in the south and east.
- The highest densities are focused on the major cities regions e.g. London, Manchester and Glasgow.
- The lowest densities are in the north and west of the UK, especially in the uplands of Wales and Scotland.

# The Location of Sheffield



Sheffield is located South Yorkshire, in the north of England.

It is the 4<sup>th</sup> largest city in the UK. The city was constructed at the lowest bridging point on the River Don and Sheaf.

# Aberdeen Dundee North Sea Newcastle upon Tyne Sunderland Carlisle

- Most major towns and cities are located in England, with few in the west and north.
- Cities are relatively evenly spread out in the south of England. They are relatively clustered in the north dur to the concentration of heavy industry and manufacturing.
- Many cities in the industrial heartland of northern England witnessed a slow population growth.
- Cities in the south and east have grown due to the growing service sector.

### Why did Sheffield Grow?

Two main factors were important to Sheffield's success as a city. These were:

- The city was constructed at the lowest bridging point on the Don and the Sheaf.
- The city became part of the industrial heartland of the UK in the 18<sup>th</sup> Century based around it's steel production.

### Sheffield, the importance, opportunities, challenges and solutions



### **Migration to Sheffield**

- During the industrial revolution, the population dramatically increased with people migrating from nearby rural communities.
- With the attraction of working in the large steelworks or mines, international migrates from Ireland, Pakistan and the Caribbean came to work in Sheffield from 1900-1960.
- More recently, refugees have arrived from Syria and Irag. Also Sheffield has attracted thousands of students from the UK & abroad.



### **International Importance**

- Sheffield Universities attract a number of international students from China and India.
- Sheffield is a world leader in the creation of specialist
- Sheffield is known as The Outdoor City and hosts international climbing events.



### **National Importance**

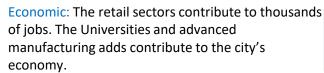
- Sheffield is renowned for education and has 2 major universities.
- Sheffield is known as the City of Sport and has national sports venues such as Ponds Forge, the EIS, two popular football clubs and is known as the home of British climbing.
- Sheffield has the largest theatre complex outside London in the UK. Sheffield is famous for music and has a number of music venues in the city.
- Sheffield is famous for steel. Although steel is not mass produced today, Sheffield is still a world leader in the creation of specialist steel.
- Sheffield is the Outdoor City.
- It also has more trees per person than any other in
- It has world-leading academic and advanced manufacturing capabilities including the Advanced Manufacturing Research Centre (AMRC).

Social: House prices have increased along with



### **Opportunities**

Social: Sheffield has various cultural attractions such as the Crucible Theatre & museums. Also Meadowhall is very popular with shoppers.



Environmental: Sheffield is described as being the greenest city in Europe. It's close to the Peak District and has various open spaces (i.e. the Peace Garden) for residents to enjoy.



Economic: Closure of the steelworks and factories

**ଢ**ୁੰ **Challenges** 

caused large scale unemployment. Poor transport connections to large economic hubs such as London and Manchester.

Environmental: Urban sprawl has led to increased pressure and decline of greenfield sites around the city.

Decline left brownfield/ derelict sites in concentrated areas in the city.



### **Urban sustainability in Sheffield**

Reasons for regeneration: 1980s economic decline left many abandoned and derelict brownfield sites.

Area became a hotpot for street crime, drug misuse and sex work. Parts of Kelham Island (where people live) were • some of the most deprived in the UK.

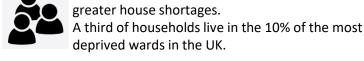
### Features of sustainable urban living in Kelham Island:

- Energy conservation- solar panels, south facing windows on new homes, homes are well insulated.
- Water conservation- new homes have water butts to save rainwater.
- Waste recycling-homes are fitted with recycling bins to separate waste.
- Creating green space-homes are being built around central green spaces

### Urban transport strategies in **Sheffield**

- Sheffield has an integrated transport network meaning you can get on a bus, tram and train easily to get to your destination.
- Sheffield Ofo Bike Scheme (2017 2018) Launch in 2017, as a dock less cycle hire programme using app and Bluetooth technology where bikes could be hired and left anywhere around Sheffield.

The scheme was eventually removed from the city due to high levels of vandalism.





# **Urban Issues and Challenges**

Sustainable Urban Living - Freiburg quiz







### (All) Key Terms



**Sustainable energy supply** – Energy that can be used well into the future without affecting future generations.



**Renewable energy sources** – An energy resource that cannot be exhausted.



**Solar energy** – Electricity generated by solar panels.

## Background

Freiburg is a city in the south of German. In 1970 the local government set the goal of urban sustainability.

### Why?

- Freiburg has one of the youngest populations in Germany.
- The old town is cobbled, which reduces traffic in the city.
- The city is situated in the Black Forest.

### Water and Energy

- The city plans to be 100% renewable energy powered by 2050 by reducing consumption by 50% and increasing energy efficiency.
- 10m kw of electricity produced from solar energy every year as the area is very sunny.
- The wastewater system allows rainwater to be retained, reused or seep into the ground.
- Grey water used within homes.
- Flood retention basins store excess water from the River Dreisam.

Social Planning – decisions take into account people's needs and includes local people in the planning process.

Economic Planning – providing people with employment opportunities e.g. green industries employ 10,000 residents.

**Environmental Planning** - ensures that resources are not wasted, and the environment is protected for future generations.

### **Waste recycling**

- Energy for 28000 homes is provided by burning waste.
- Annual waste disposal has reduced from 140000 tons to 50000 tonnes in 12 years.
- More than 88% of packing waste recycled.
- 350 community collection points for recycling.
- Collection of garden waste and organic food, which is used to generate gas in a biogas digester.

### **1** Creating Green Space

- 40% of the city is forested.
- 44% of the wood from the city's forest is used for timber, with 75% growing back within a year.
- 56% of forests are nature conservation areas.
- The River Dreisam is unmanaged and allowed to flow freely, providing natural flora and fauna habitats.
- Only native shrubs and trees are planted in 600 hectares of parks.
- 44000 trees have been planted in parks and streets.

