



Urban Issues and Challenges



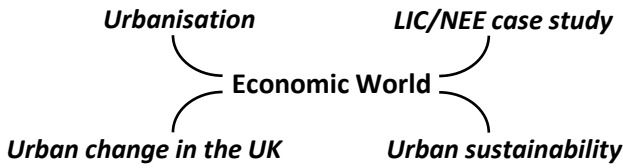
Sustainable Urban Living - Freiburg

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quiz



The Big Picture



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 Germany. 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.



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.



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.



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.



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.

