



ALL YOU NEED TO KNOW ABOUT... ♦ ♦ ♦

Paper
Two
Human
Geography
Case Studies



MISS MCGOWAN GEOG

ALL YOU NEED TO KNOW ABOUT... Rio

Location



Located in the Continent of South America

In Brazil on the South East coast

Next to the South Atlantic Ocean

North East of Sao Paulo

It is NOT the Capital city of Brazil



Global importance



Christ the Redeemer – world heritage site



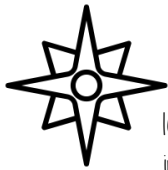
5 million visitors visit Rio for carnival



Held international events such as the Olympics 2016 and the World cup 2014.



Zones of Rio



The North Zone

Mostly poor neighbourhoods little appeal for tourists

Rio's international airport and main industrial area

1000 favelas, located in the North zone

The West Zone

New middle class neighbourhood,

Shopping areas, luxury apartments & tourist facilities

Site for the main Olympic stadium and competitor village for the 2016 games

The Centro Zone

The headquarters of huge Brazilian companies such as Petrobras

CBD and main shopping area

zone of interest due to its historic and cultural buildings

The South Zone

Richer and prettier part of the city with dozens of hills and mountains

Largest favela Rocinha looks down upon one of Rio's richest areas – Ipanema beach

Most of the expensive tourist hotels and restaurants are found here

Wealthiest district in South America

Challenges



In 2013, only 55% of the city had a local family health clinic. Budget shortfalls consistently affect the public healthcare system

In Rio only half of all children continue their education beyond the age of 14. Many drop out of school and some get involved in drug trafficking

Around 12% of Rio's population did not have access to running water. It is estimated that 37% of water is lost through leaky pipes, fraud and illegal access.

Many people living in the poorer parts of Rio de Janeiro get their electricity by illegally tapping into the main supply, which is extremely risky and dangerous.



Opportunities



The authorities tried to improve healthcare in the favela of Santa Marta Set - It is 13km to the nearest hospital. Doctors took a health kit into homes & were able to detect twenty different diseases and treat them. Infant mortality fell & life expectancy increased.

The schools of tomorrow programme aims to improve education young people in the poor and violent areas of the city. There are also practical skills based courses – it shows them what life can be like without drugs

Seven new water treatment plants were built between 1998 and 2014, and over 300km of pipes were laid. By 2014, 95% of the population had a mains water supply.

A new hydro-electric complex which increased Rio's supply of electricity by 30%. It took 6 years to build and cost over US\$ 2 billion.



Favela Bairro Project



In the 1990s, the Favela Bairro Project was set up by city authorities who had set aside £200 million

The plan included - replacing wood buildings and those built on dangerous slopes with larger (5x4m) brick houses, widening streets, laying pavements, laying water pipes and electricity cables, improving sanitation, providing health and sports facilities, using local residents as labour and provided them with job



ALL YOU NEED TO KNOW ABOUT... **TNC's In Nigeria**

Definition: A trans-national corporation operating in more than one country


Location


The oil industry in Nigeria is located in the Niger Delta region.



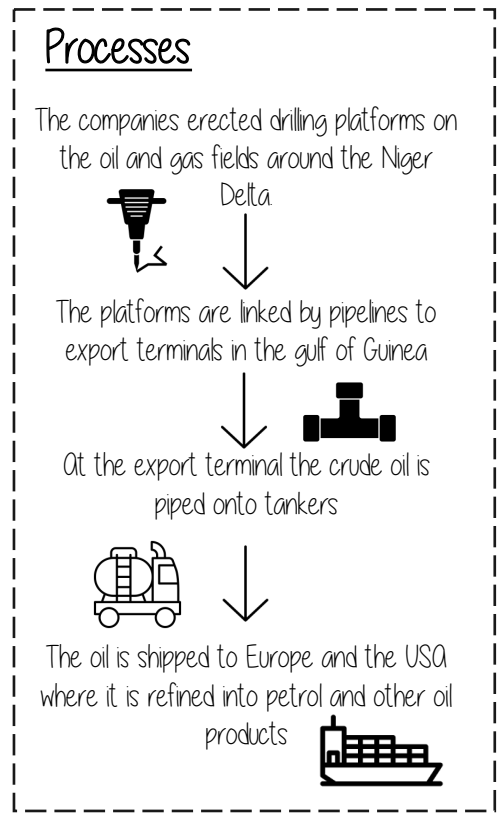
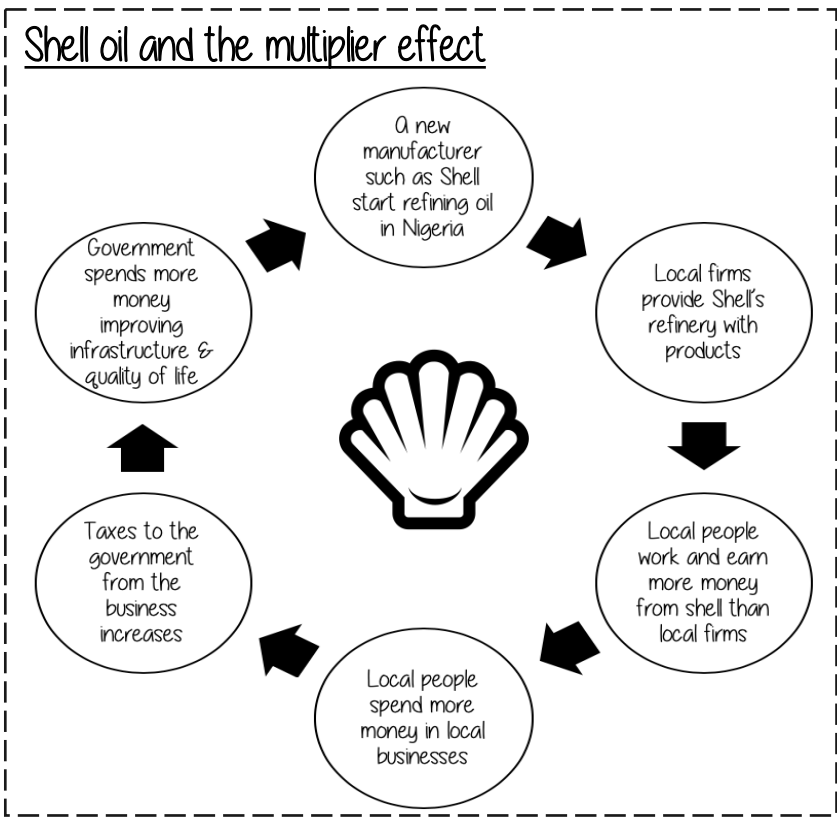
The Niger River, where it flows into the Gulf of Guinea.

Key facts


The oil boom in Nigeria took off in the 1970s 

Companies such as Royal Dutch Shell (UK), Chevron (USA), have interest in oil in Nigeria 

The Niger Delta region contains important wetland and coastal ecosystems.



Advantages of shell oil



- Shell provides direct employment for 65,000 Nigerian workers and a further 250,000 jobs in related industries
- Shell has invested huge amounts of money and expertise into extracting oil in the Niger Delta
- The managers of Shell bring knowledge and expertise to Nigeria
- Shell has supported the growth of Nigeria's energy sector through investment
- In 2018, approximately \$5.9 million was invested in educational scholarships in Nigeria
- Shell oil currently supports 27 health facilities in the Niger Delta, including three new ones built in 2009

Disadvantages of shell oil



- 9 million oil barrels spilt in the last 50 years causing water and soil pollution, 75% of rural areas have no access to clean water.
- Frequent oil flares send toxic fumes into the air.
- Poverty is increased due to pollution.
- Rumours that Shell fund militant groups who try to disrupt oil supplies.
- The pollution reduces fishing yields as fish die in oil spills
- Oil theft and sabotage are big problems. This reduces oil production and costs TNCs and the Nigerian government billions of dollars every year
- Oil spills from leaking pipelines damage farmland so crops no longer grow

ALL YOU NEED TO KNOW ABOUT... **TNC's In Brazil**

Definition: A trans-national corporation operating in more than one country


Location 


The oil industry in Brazil is mainly located on the East Coast.


Many plants are in the Atlantic ocean

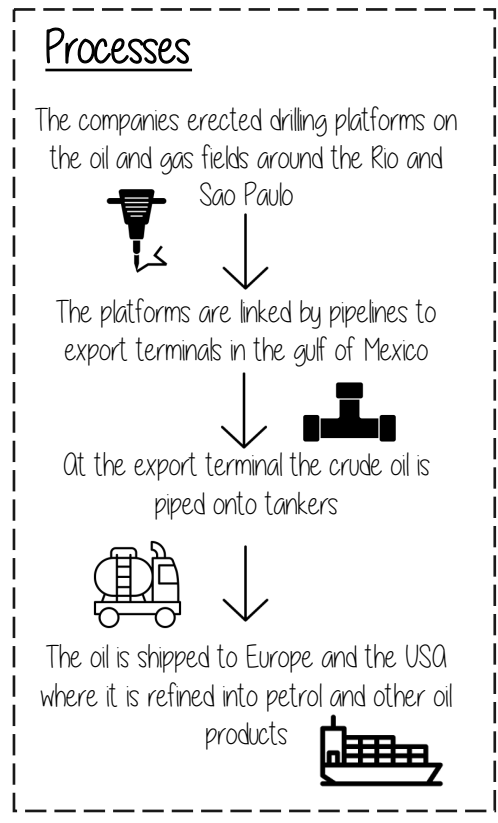
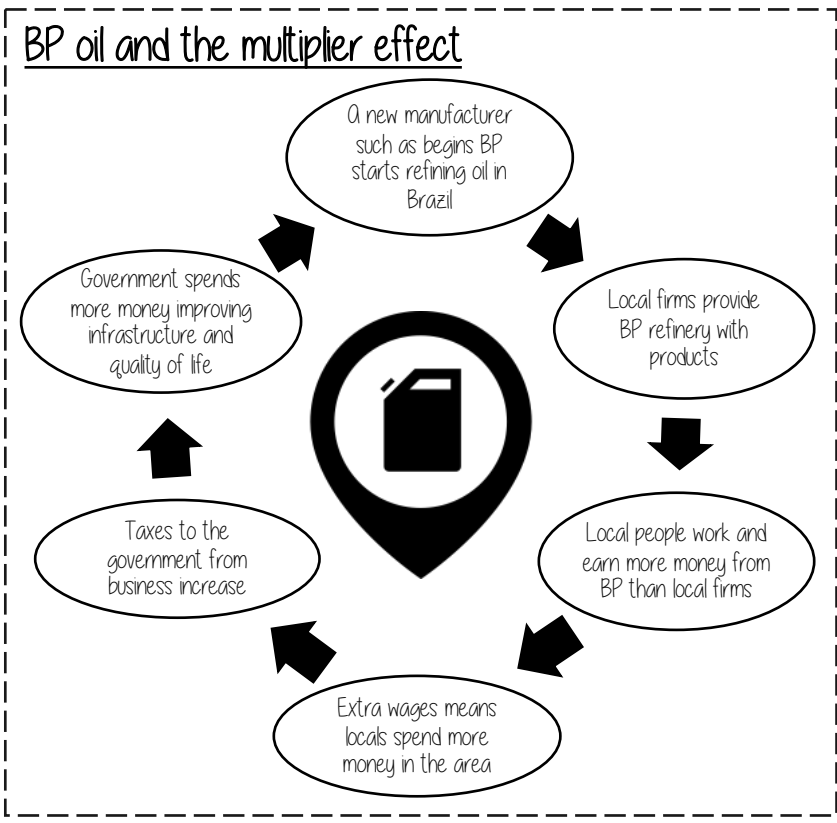





Key facts

The oil boom in Brazil took off in the 1950s 

 Brazil is the worlds 12th largest oil producer

Companies such as Chevron (USA) BP (UK) and Petrobras (Brazil) all have oil plants in the country 





Advantages of BP oil   

BP recruits 7000 employees across 15 states

Depending on the potential impacts identified, BP design environmental protection plans to put in place prevention measures

BP have recently announced plans to open 11 renewable biofuel sites in Brazil

BP Brazil invests in the training and development of locals

Disadvantages of BP oil  


In November 2011, 32,00-52,000 litres of oil spilled into the South Atlantic Ocean off to coast of Rio

Higher paid management jobs are often held by foreign nationals.

Most of the profit that BP makes goes back to the UK rather than benefiting the Brazil This is called economic leakage.

ALL YOU NEED TO KNOW ABOUT... *Tourism In Jamaica*


MISS MCGOWAN GEOG

Location  In the continent of North America

Located in the Caribbean sea

Third largest Caribbean island

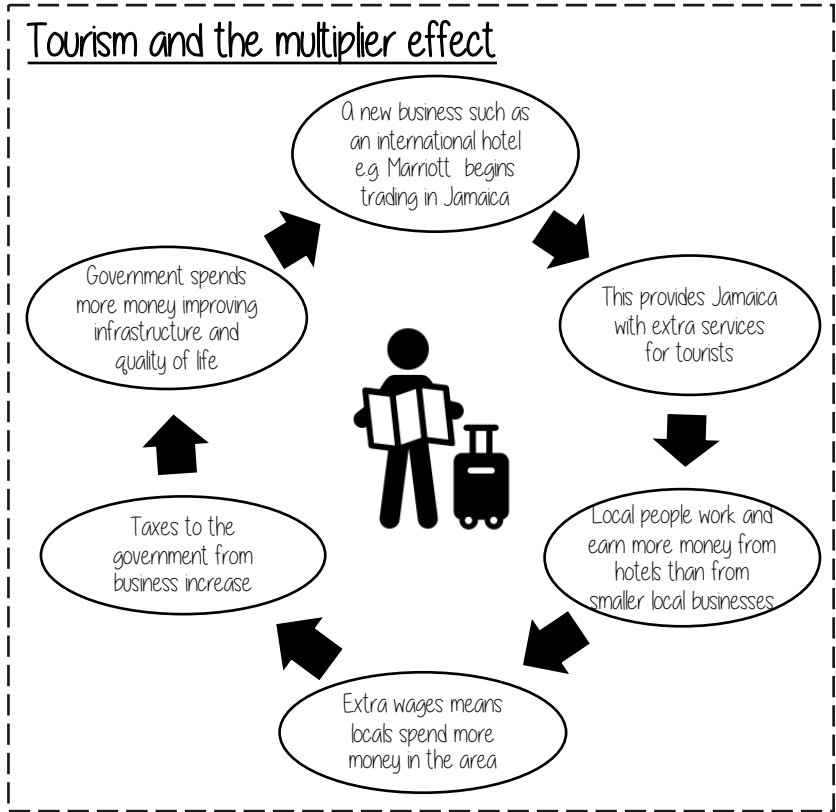
About 90 miles South of Cuba



Main tourist attractions

 Beach resorts at Negril
Blue Mountains National park
Great huts eco resort

 Deep sea fishing at Port Antonio
Caving at Cockpit county
Bob Marley Museum
National art gallery

Positives of tourism in Jamaica

 Cruise ship visitors of which there are 2.5 million spend an average \$70 per day



 Income from tourism is \$2 billion each year

Tourism is the main source of employment in Jamaica. It provides jobs for 200,000 people either directly in hotels, transport and tourist attractions or indirectly in shops & manufacturing.

Tourism has led to a high level of investment on the north coast where much of the country's tourism is centred.

New port and cruise liner facilities have been built at Trelawney together with new hotel accommodation.

In 2014 tourism contributed 24 per cent of Jamaica's GDP - one of the highest proportions of any country in the world. This is expected to rise to 32 per cent by 2024.

Negatives of tourism in Jamaica  

Improvements in roads and airports have been slower and some parts of the island remain isolated.

Mass tourism can create environmental problems such as footpath erosion, excessive waste and harmful emissions.

Large numbers of people live nearby tourist areas in poor housing with limited food supply and inadequate access to fresh water, health care and education.



There has been mass migration from inland Jamaica due to their being a lack of jobs in these areas.

Many of the jobs created are seasonal, so people can become unemployed.

Local employees are paid low wages, whereas managers from other countries tend to earn more.

Land for the massive hotels takes away land from farmers.

Ecotourism & community tourism

Tourists stay with locals in their homes, directly benefitting locals, and ecotourism.

There are also ecotourist lodges along the coastline. The features of these lodges include an approach to low or zero waste, solar panels to produce power, very low visitor numbers (many resorts have less than 16 lodges or huts) and recycling of water.

ALL YOU NEED TO KNOW ABOUT... Bristol

Location



Bristol is located in the south-west of England

Approximately 5km to the west of Swindon.



National Importance

Two universities – attracts students from around the UK

Two cathedrals – Bristol and Clifton



Located on the M4 corridor with good road and rail links to London



Global Importance



The largest concentration of silicon chip manufacture outside California

Around 700,000 cars from Japan

Germany and Korea are imported to Bristol's docks each year

Bristol airports links the city to major European centres

Positives and Negatives of migration to Bristol



Positive impacts



Mainly young people help balance an aging population
Hard working, motivated workforce
Contributing to the local and national economy



Negative impacts



Pressures on housing and employment
The need to provide education for children whose language is not English
Challenge of integration within community

Challenges



Filwood (south of Bristol) is in the top 10 % of the most socially deprived areas in the country

In Filwood in 2013 only 36% of students got top grades at GCSE, including English and Maths compared to 94% in Stoke Bishop

Social opportunities



Youthful population means there is a range of bars and nightclubs

Sport – Bristol has two professional soccer teams – City and Rovers and a rugby union team - all teams are developing their stadiums to provide a range of leisure and conference facilities

Shopping – The city centre had become outdated and people had begun shopping in the out of town retail park at Cribbs Causeway

Economic opportunities



There are 50 micro-electronic and silicon design businesses in Bristol
The following factors attract high-tech businesses to Bristol: a government grant of £100 million

Qardman Animations - based in Bristol. The studio has been well known for its films using stop-motion clay animation techniques e.g. Wallace and Gromit

Environmental opportunities



2015 Bristol awarded European Green Capital with a plan to achieve the following by 2020

Bristol plans to develop an integrated transport system linking different forms of public transport. The aim is to get people to travel using public transport instead of cars – reducing congestion

Urban greening – 1/3 of Bristol's is open space and more than 90% of people live within 350km of parkland and waterways.

Environmental challenges



Dereliction – Changes in the industry in Bristol have led to many industrial buildings becoming derelict

Artists wanted to improve the areas through public action and community art

Waste disposal – The city produces half a million tonnes of waste per year. The local government are reducing the amount of waste that has to be sent to landfill and reducing the amount of waste generated per household by 15%.

Temple Quarter regeneration



New bridge built across the River Avon to the site of the former diesel depot – This gives access to the New Bristol Arena (to be used for sporting events with up to 12,000 spectators)

Improved access in and around Bristol – Improvements to Temple Meads station to encourage more people to travel by train

Improved road layout with links to the rapid transport network and the Bristol-Bath cycle network

Enterprise zone status – 240,000m² of either new or refurbished buildings, creating offices, homes and shops. The target is to create 4000 jobs by 2020 and 17000 by 2037 e.g. Brunel's engine shed - A £17 million innovation centre is being created – home to high-tech, creative and low carbon sector companies

ALL YOU NEED TO KNOW ABOUT... JCB

MISS MCGOWAN GEOG

Location

World Head quarters in Rocester,
Staffordshire in the UK

About 20 miles East of Stoke-On-
Trent

About 25 miles West of Derby



Key facts

22 plants in 4 continents



Started in 1945- 1 man in a lock-up garage in Uttoxeter
(Joseph Cyril Bamford)

Now employs over 15,000 people and makes 279
different machines

How is JCB being sustainable



A 24-acre lake, containing 27 million gallons of water was dug out in 1968. Rare orchids grow on the banks of the lake. It also has substantial fish stocks of Roach, Bream, Carp, Perch and Pike in the lake and locals can be issued with fishing permits. Sir Anthony Bamford, the current chairman is committed to encouraging conservation.

By 2010, JCB had seen a 20% reduction in direct greenhouse gas emissions from gas and electricity, as a direct result of the actions taken - saving over 7,000 CO2 tonnes. This helped JCB achieve the Carbon Trust Standard - an industry first." — JCB 2019

Four of the sites JCB uses no longer send any waste directly to landfill and at their other facilities they continue to seek recycling routes for waste for currently does not have a recycling solution.

JCB are now Re-using where possible by-products of the manufacturing process. For example, surplus paint goes into making house bricks, and incoming packaging is used as external packaging.

JCB are introducing initiatives to encourage workers to car share, reducing the impact of our collective journeys to work.

JCB are looking at new technologies to move away from solvents in their processes.

How is JCB not being sustainable



JCB claim they have not sent any waste to landfill since 2013 however in small print on their website they state this does not include both metal and hazardous waste.

JCB machines have always been famous for their iconic yellow colouring. Over the years, some of the environmental hazards associated including to the environment and human health.

Even though JCBs 24-acre lake is now beneficial for the environment before it was created there was a natural ecosystem already existing and this was destroyed to make way for the lake.

ALL YOU NEED TO KNOW ABOUT... *The North-South Divide*

Location

The North is major cities such as Birmingham, Manchester, Hull, Newcastle, Glasgow and Edinburgh

The South is major cities such as Leicester, Lincoln, Gloucester and London



Key statistics



Life expectancy

Liverpool (N)	75.7
Cambridge (S)	79.5

Average house price

North	£137,000
South	£265,000

Government spending per person

London	£9176
Yorkshire	£7623

Average pay

North	24,000
South	28,000

% in poverty

North	18
South	21

HS2



HS2 (High Speed 2) – a £50 billion plan for a new highspeed rail line to connect London with Birmingham and then to Sheffield, Leeds and Manchester.

It may then be extended to Newcastle and into Scotland. The scheme is due to start in 2017 for completion in 2033.

It will create thousands of jobs in the Midlands and North of England

It is estimated that HS2 will help generate £40 billion for the UK economy



Local enterprise partnerships



Voluntary partnerships between local authorities and businesses. There are currently 39 LEPs in England.

Their aim is to identify business needs in the local areas and encourage companies to invest. In this way jobs will be created boosting the local economy

The **Lancashire LEP** will promote new businesses and create 50 000 new jobs by 2023.

In 2013 a Business Growth Hub was established to support small and medium-sized businesses.

£20 million of transport improvements are planned in cities such as Preston and Blackburn.

A £62 million BT investment will extend superfast broadband across 97% of the region.



Enterprise Zones



Since 2011, 24 new **Enterprise Zones** have been created

Their aim is to encourage the establishment of new businesses and new jobs in areas where there were no existing businesses. The government support businesses in Enterprise Zones by:

- Providing a new business rate discount of up to £275 000 over a five year period
- Ensuring the provision of superfast broadband
- Financial allowances for plant and machinery
- Simpler planning regulations to speed up establishment of new businesses.

Northern Powerhouses



In 2015 the government launched a new strategy for a 'Northern Powerhouse' to help balance the wealth and influence of London and the South East. This involves developing the economies of the major cities in northern England such as Liverpool and Manchester. Tourism, food and energy are to be developed in rural areas.

ALL YOU NEED TO KNOW ABOUT... **Science & Business Parks**

Location

They are often found on the edge of cities, like Bristol and Cambridge, where there is good accessibility. Many are located close to universities to attract graduates.



Definitions:



A **science park** is a group of science and technical research centres located on a single site.

A **Business park** is an area of land occupied by a cluster of businesses.

Growth Corridors

One area of fast economic growth following major transport routes.



UK's biggest industries



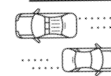
Research, e.g. universities, NHS, Environment Agency

Services, e.g. retail, doctors, teachers, engineers

Information technology, e.g. developing software or internet-based business

Finance, e.g. working in banks, giving out loans

Design features



Science and Business Parks are areas of industry that have grown up on Greenfield sites outside of major cities around the world. The land is less costly than in the cities and the access to transport routes is a prime consideration in their location. Often, Science and Business Parks have a large amount of green land to try to make it as pleasant a working environment as possible.

Business Parks also tend to have very close links to a major research institution, probably a university.

Cambridge business park



Cambridge is fast emerging as one of the UK's main hubs for high tech industry.



The business park was opened in 1972 by the university's Trinity College.



Over 1500 information technology and biotechnology companies are now based there.



Cambridge is a perfect location for the types of hi-tech, often quaternary industries that locate there. The M11 offers a very quick route to London and beyond. Stanstead airport is 30 minutes down the motorway, along a **growth corridor**.

Many of the high-tech companies in Cambridge began as small start-up businesses, formed by university graduates who wanted to stay in the city when they finished their degrees. Some of these businesses like the biotech company Abcam have grown into successful companies (it is now worth £1 billion, employing 200).

ALL YOU NEED TO KNOW ABOUT Freiburg

Sustainable city

Definition of sustainability

Meeting the needs of the future without compromising the needs of today

Location

Freiburg is located in South West Germany

A historic jewel in the middle of the Black Forest



Key facts

Population of about 220,000 people.

In 1970 it set the goal of focusing on social, economic and environmental sustainability.

Situated in the heart of the major Baden wine growing region

Social sustainability



There is a focus on providing people with affordable housing
Local people are involved in urban planning at both local and city level

Sites for building are considered by the local council and interest groups.

Cycle and walking paths aim to encourage exercise and healthy living

Economic sustainability



Many jobs have been created in the research and manufacture of solar technology

More than 10,000 people are employed in 1500 environmental businesses in the city

The city is a popular place for people to attend conferences on sustainability. This provides jobs for the local people.

Environmental sustainability



Financial rewards are given to people who compost their green waste and use textile nappies.

Local people are encouraged to invest in renewable energy.

The city uses biogas to provide energy for 28,000 homes.

The city has more than 88% of packing waste recycled

44,000 trees have been planted in parks and streets to provide more green spaces but to also reduce pollution.

Rainwater is retained and reused to reduce the amount of water used

Traffic management strategies



The city has integrated public transport strategy (ITS) which is updated every ten years.

The tram network is an important part of the ITS, as it provides cheap and accessible public transport.

There are 400km of cycle paths with 9000 parking spaces for bikes.

Areas of the city have restrictions on car parking spaces. A car park space in one area cost £20,000.

Successes

Tram journeys have increased by over 25,000 in one year, while car journeys have reduced by nearly 30,000.

ALL YOU NEED TO KNOW ABOUT...

Chambamontera Micro-hydro scheme

MISS MCGOWAN GEOG

Location



Chambamontera is a small Andean mountain community in the north of Peru.



Key facts

The community is very remote and isolated from the rest of the country

The population of Chambamontera survives largely on subsistence farming (farming for oneself and/or family).

Until recently the community had no electricity to supply power for equipment, lighting or heating

Funding for the scheme



The scheme was supported by the charity Practical Action.

The cost was \$51000 which was partly funded by Japan but the community had to pay for part of it

The average cost per family was US\$750 which they funded by credit.

High rainfall, steep slopes & fast flowing rivers make this area ideal for exploiting water power as a renewable source of energy

Advantages to the scheme



SOCIAL



Local people involved at all stages

Healthcare improved as electricity allows storage of medicines

Electricity for schools

Training of local people to operate the technology gives them skills



ECONOMIC



Cheaper electricity than a large HEP scheme

Uses local skills and cheap technology

60% of people said their income had increased



ENVIRONMENTAL



Avoids flooding large areas, which takes away farmland

Avoids burning wood from local trees for fuel

Replaces fossil fuel use

Disadvantages to the scheme



SOCIAL



Poor people have to pay for metered electricity

Some villages have doubled in size, creating population pressures



ECONOMIC



Demand for electricity is variable

Initial capital cost is high for a small village, £500 per household

Some specialist equipment had to be imported



ENVIRONMENTAL



Small storage dam is needed which alters the flow of the river and spoils the scenery