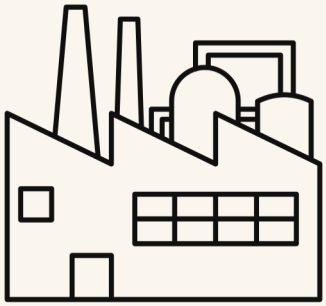
THE BRITISH INTERNATIONAL SCHOOL ABU DHABI

A NORD ANGLIA EDUCATION SCHOOL

EDEXCEL iGCSE Geography

Economic Activity and Energy Paper 2 Revision booklet.

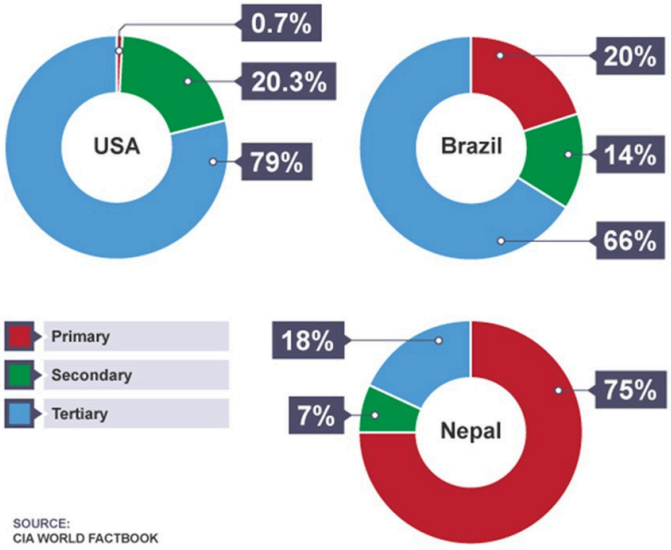
Student name



Economic Activity and Energy
Paper 2

1 Economic sectors - what is each one?

2 Explain the reasons for differences

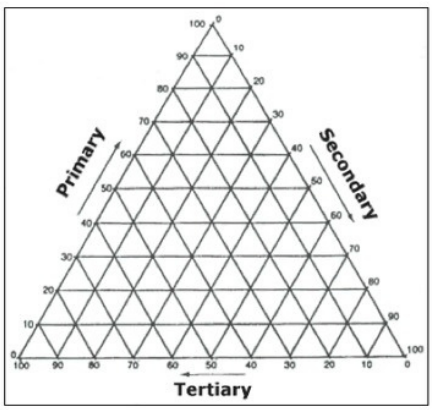


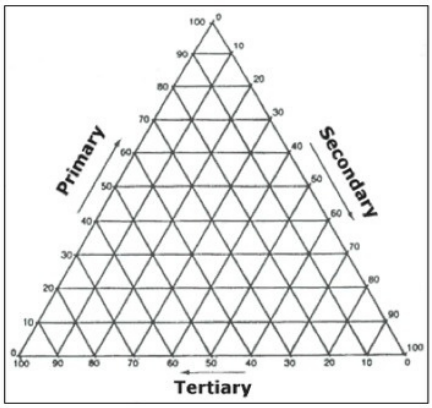
USA

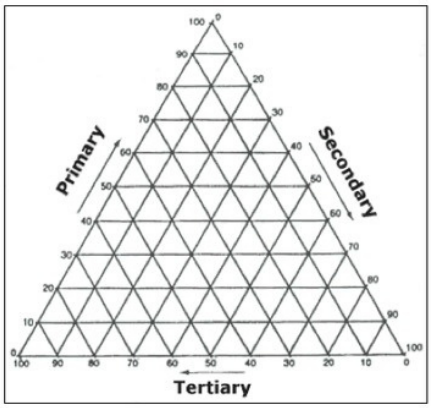
Brazil

Nepal

3 Draw triangular graphs using the data above







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Clarke - Fisher Model

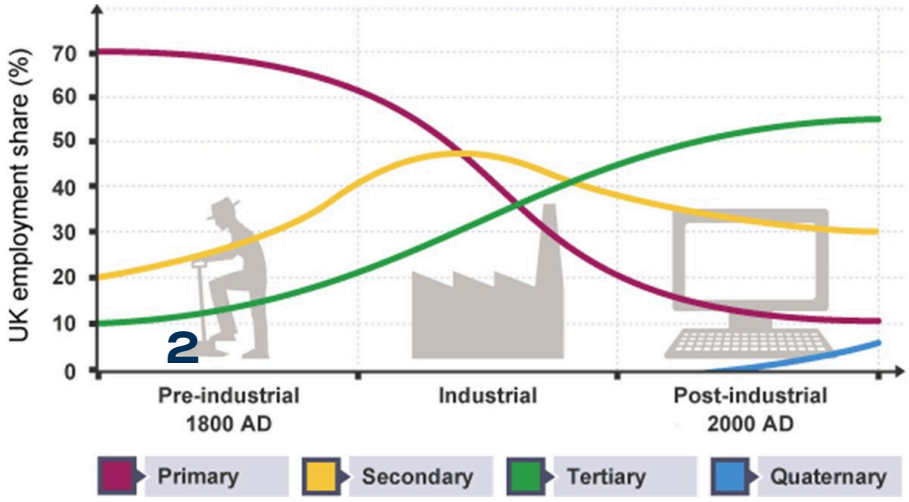
4

The model shows how pre-industrialisation, most people work in farming.

During industrialisation the % of people in primary services decreases (due to mechanisation). Secondary and tertiary thus grow.

As a country further develops the % of people in primary rapidly decreases, manufacturing is moved overseas, so the % in secondary also decreases. As education and development are high, the % in tertiary increases.

Some countries will not follow this as they will never go through industrialisation.



5 Reasons for the changing number of people employed in each sector

Availability of raw materials -
Raw materials like coal may run out. If this were to happen, primary jobs in the area would decrease and move away.

Globalisation -
Advances in technology may reduce the demand for labour. Eg in farming or manufacturing. This would mean that...

Mechanisation -
As machines increase in complexity, they can...

Demographic changes
As populations grow over time, we need more goods/services such as appliances, schools, hospitals. People also have a higher disposable income. People also become more educated and want to work in....

Government policies
Some governments are heavily involved - in China the government is trying to expand manufacturing (secondary). The UK government is trying to support agriculture (Primary) and is encouraging business to compensate for recent job losses in manufacturing as it moves overseas.

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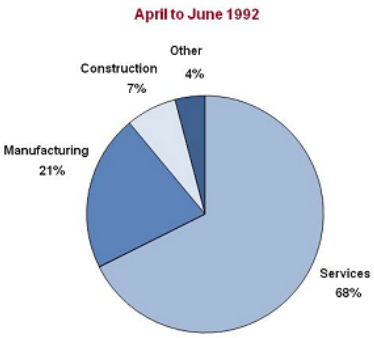
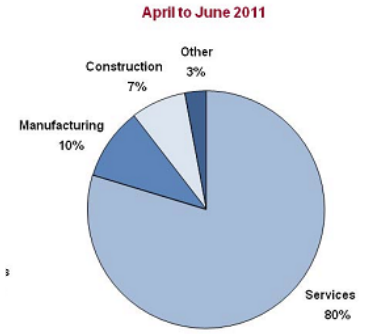
6 Factors affecting the location of economic activities

	What it needs.	How this can change over time
Commercial farming	Large amount of land. Suitable soil. Access to water. Close to where food may be eaten/ processed.	
Heavy industry (steel, boat building, chemicals)		Heavy industry may move overseas.
Light industry (making electrical goods/ processing food)	Needs a big and reliable source of power. May need to be near skilled labour. Large amount of flat land with access	May move to a purpose built industrial zone with good road links and services
Retail	Access... Customers....	Out of town.....
Research and development	Highly skilled workers. close to universities.	

7 Sector shifts - Named HIC - UK

Tertiary employment has grown from 68% to 80%. The secondary sector including both manufacturing and construction has fallen from 28% to 17% with other sectors , including in part primary employment falling slightly. Only 1% of people in the UK work in the Primary Sector. The UK's ecomomy has been structurally changing since the 1970s with a movement away from heavy primary and secondary industries such as coal and steel. These industries couldn't compete with the lower costs and better quality imports. As a aconsequence industrial regions like South Wales and Newcastle in north east England fell into social and economic decline. Successive governments pushed for tertairy industry to fill the void. The financial sector growth led to many tele sale services as well call centres being located in old industriual zones and with growing national wealth the service sector has continued to grow. With a highly educated population UK is a world leader in finance and technology-based quaternary industries.





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8 Sector shifts - NamedHIC - Vietnam

The graph shows the change in employment structure in Vietnam since 1990. The Tertiary sector has almost doubled from 18% to 33%. The secondary sector has grown from 9% to 15% and the Primary sector including both agriculture and mining has fallen by almost a quarter from from 73% to 52%. Political and economic reforms launched in 1986 have transformed Vietnam from one of the poorest countries in the world, with per capita income below $100, to a lower middle income country within a quarter of a century, with per capita income of $1,130 by the end of 2010. In 1986, Vietnam launched a political and economic reform that introduced the transition from a centralised communist economy to a "socialist-oriented market economy." The government gave incentives to private businesses and activley looked for foreign investment. By the late 1990s, the success of the business and agricultural reforms were very evident. More than 30,000 private businesses had been created and the economy was growing at an annual rate of more than 7%. A number of important factors have led to Vietnam's economic, these include:

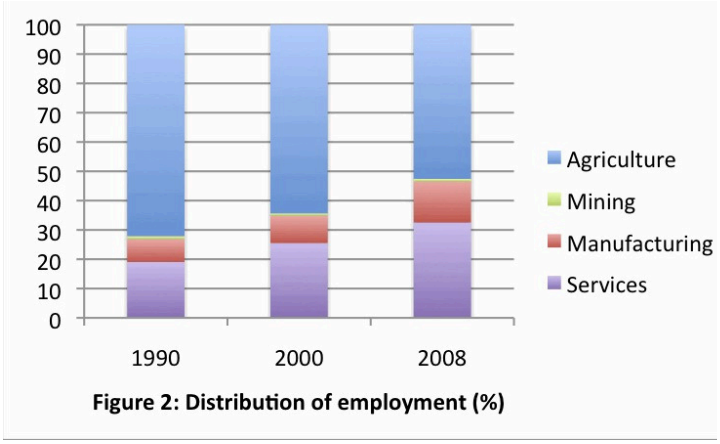

Figure 2: Distribution of employment (%)

- A strong socially oriented political system that has developed a strong educational system
- An opening-up to free market policies and the global economy through an export approach in primary and secondary goods
- Low cost, highly skilled labour with strong female participation
- Strong governance
- High levels of foreign direct investment within the Asian global region

9 The Informal economy

The informal economy is....

The informal economy is caused by...

Economic development	Rural- Urban migration
In LICs or developing countries, skill levels are low, this means that...	People leave rural areas to move to urban areas in the hope of....

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10 Informal economy - named megacity - Mumbai - Dharavi

Dharavi slum is located in Mumbai in India. There are a million people crammed into one square mile in Dharavi. At the edge of Dharavi the newest arrivals come to make their homes on waste land next to water pipes in slum areas. They set up home illegally amongst waste on land that is not suitable for habitation. In the wet monsoon season these people have huge problems living on this low lying marginal land. Many of the people here come from many parts of India as a result of the push and pull factors of migration.

Advantages of informal employment

- It creates jobs and livelihoods for people
- It provides wealth and means for living, which improves peoples' lives.
- It is very flexible and adaptable to market needs and changing tastes
- It's full of creativity and entrepreneurialism
- It's linked to formal sector industry as a market and as as part of the commodity chain
- It contributes significantly to national economies

Disadvantages of informal employment

- It is unregulated and can be dangerous with poor working conditions noise and pollution
- It employs children from the poorest families and so takes them out of education
- It doesn't pay tax directly into government funds
- It doesn't provide long term social or economic growth
- It produces fake and counterfeit goods, which undermines formal industry
- Its goods may not be produced to the highest health and safety standards

Population and resources 11

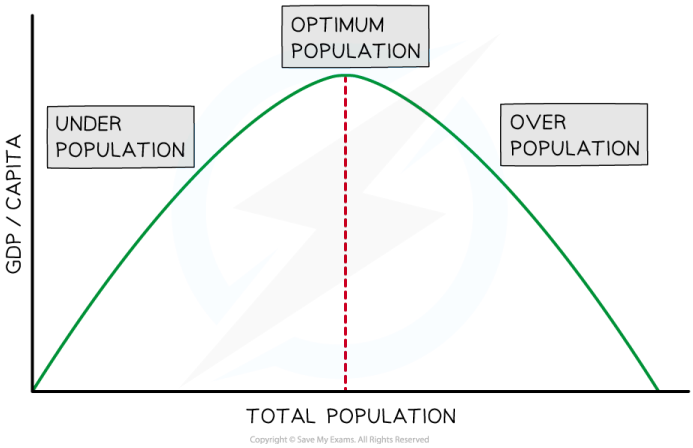
Economic activities all involve the use of resources and energy. The rate at which resources & energy are used depends on two main factors:

- The population size
- The rate of development

Each country/area has a **carrying capacity**, which is the maximum number of people (population) an area's resources can sustain

The population that results in the highest standard of living is the **optimum population**:

- There are not so many people or so few resources that the standard of living falls There are enough people to
- develop the resources of the country



Over population is...

Under population is...

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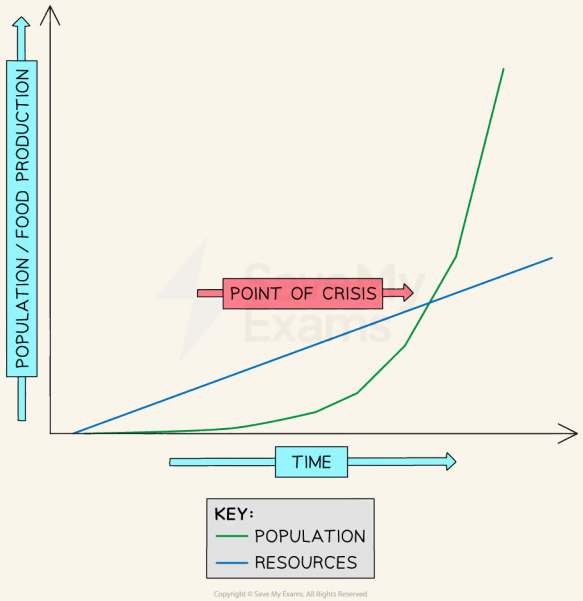
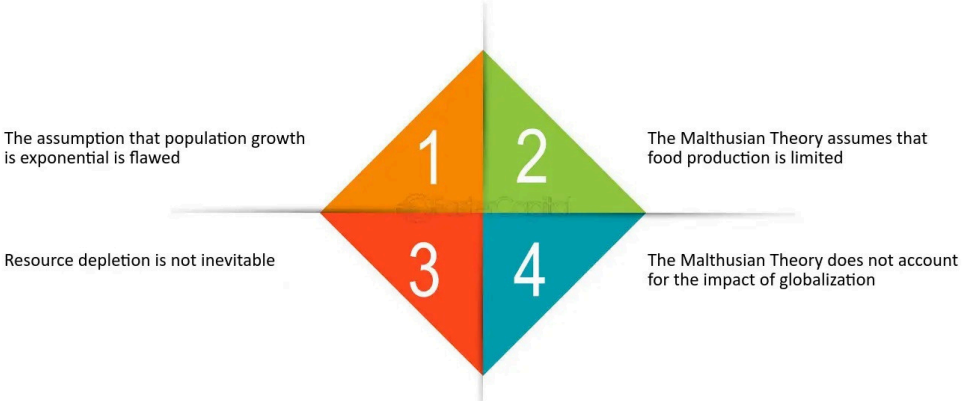
12 Population theories

MALTHUS

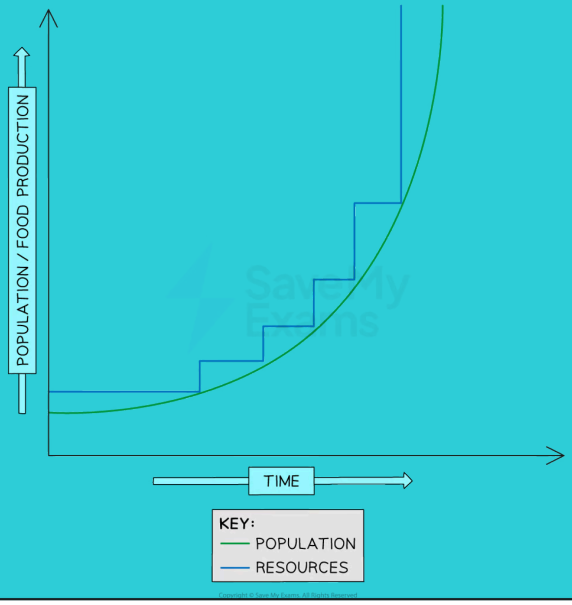
He believed that...



Criticism of Malthusian Theory



BOSERUP



She believed that...

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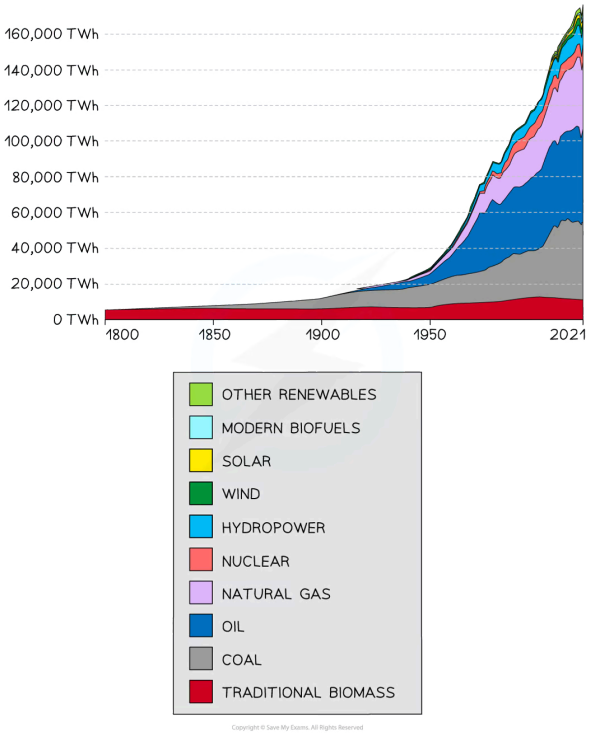
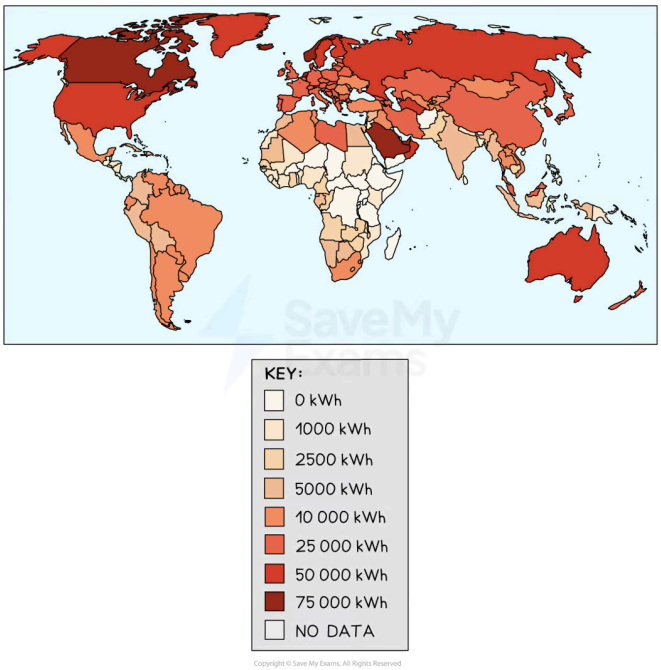
13 Energy demand.

- **Population growth** and development are the two main causes of the increase in **energy demand**:
  - The higher demand for food leads to more intensive farming which requires more energy for machines, light and heat
  - Increasing industry requires energy for heating, lighting and machinery
  - There is more transport all of which requires energy in the form of petrol, diesel or electricity
  - Urbanisation increases with development increasing domestic appliances, heating, lighting
  - Increased wealth means people buy more appliances and technology which require energy
  - **Advances in technology** in energy production and in appliances
    - New technology in energy production means more energy sources are available including nuclear energy, advances in renewable energy
    - Technology advances in wider society affect demand





Countries with high energy demand are usually HICs, this is because...

Countries with low energy demand are...

Energy gap - where there is not enough available energy to meet demand.

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14 **Non-renewable energy resources** are finite and will eventually run out.

Coal

Advantage to people...

Advantage to environment...

Disadvantage to people...

Disadvantage to environment...

Oil

Advantage to people...

Advantage to environment...

Disadvantage to people...

Disadvantage to environment...

Gas

Advantage to people...

Advantage to environment...

Disadvantage to people...

Disadvantage to environment...

Uranium

Advantage to people...

Advantage to environment...

Disadvantage to people...

Disadvantage to environment...

Shale oil/gas

Advantage to people...

Advantage to environment...

Disadvantage to people...

Disadvantage to environment...

Economic Activity and Energy Paper 2

15 **Renewable energy resources** are infinite and will not run out.

Solar

Advantage to people...

Advantage to environment...

Disadvantage to people...

Disadvantage to environment...

Wind

Advantage to people...

Advantage to environment...

Disadvantage to people...

Disadvantage to environment...

Hydroelectric HEP

Advantage to people...

Advantage to environment...

Disadvantage to people...

Disadvantage to environment...

Geothermal

Advantage to people...

Advantage to environment...

Disadvantage to people...

Disadvantage to environment...

Biomass

Advantage to people...

Advantage to environment...

Disadvantage to people...

Disadvantage to environment...

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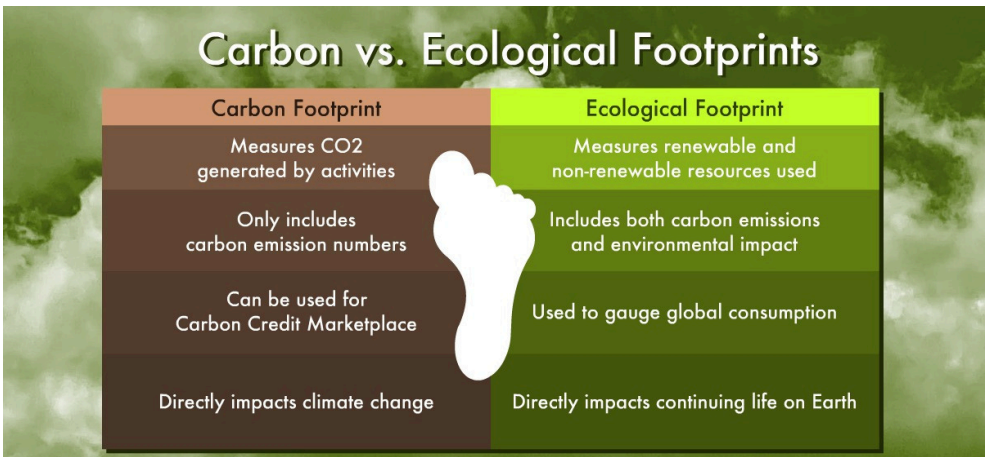
16 Carbon and ecological footprints



17 Sustainable management

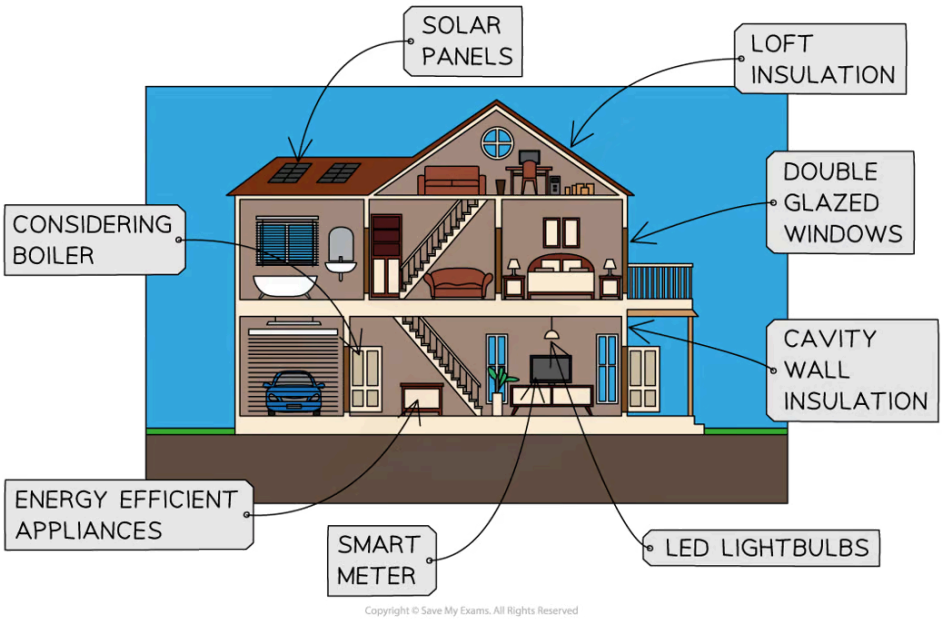
Sustainable energy management is essential:

- to ensure future generations are to have the energy resources they need
- to limit climate change
- to ensure no energy gap

Non-renewable sources will at some point run out so need to be used carefully

As supplies start to run out prices will increase this will mean:

- economic development is harder as profits will decrease
- countries with an energy surplus become more powerful
- countries with an energy gap pay more to import energy



Ways to manage in the home

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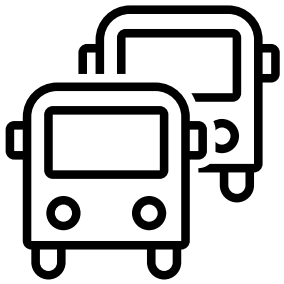
18 Sustainability in industry

Tesco has....

19 Sustainable transport - Curibata



Bi-articulated busses....

Bus routes...

Tubular bus stops...

Bus lanes

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20 Energy case study HIC - UAE

The UAE has 7% of global proved oil reserves, about 100 billion barrels. The UAE is currently transitioning from an electricity generation system nearly 100% powered by gas power plants (2010) to 100% powered by solar, other renewables and nuclear in order to substantially reduce its carbon emissions. It is also rolling out electric vehicle charging infrastructure. As a small country, it has huge a huge energy demand, mainly due to high temperatures - AC and high car usage.

The UAE has massive solar generation potential and want to increase solar production to 25 per cent by 2030 and 75 per cent by 2050.

The UAE is installing nuclear power plants to meet its electricity needs. As of October, 2022, three reactors (out of 4) in the Barakah nuclear power plant are finished, loaded with fuel, and operational. Once all 4 reactors are fully operational they will provide about 5600 MW, or about 25% of electricity energy in United Arab Emirates.

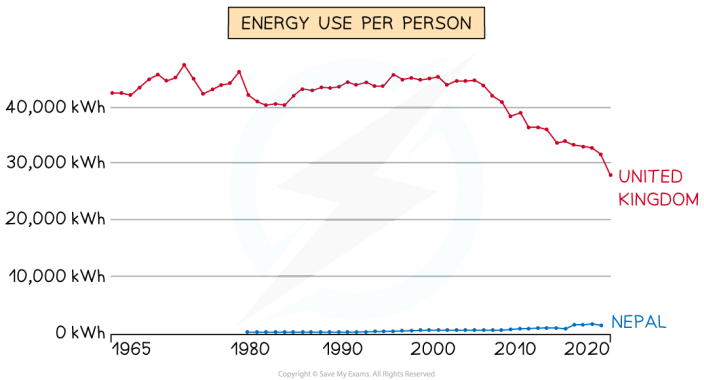
21 Energy case study LIC - Nepal

Fact flie

Population who live in towns -

Describe the energy demand -

Current energy production; The main source of energy for 82% of the rural population is fuelwood. In urban areas, the use of fuelwood is 36%
Nepal has no suitable coal, oil or gas reserves so these have to be imported
98% of all electricity in Nepal is generated through hydropower



Plans for energy production; Ruma Khola micro-hydro

- Completed in 2009
- Provides electricity for the town of Darbang and five neighbouring villages
- It supplies energy for 22 industries including:
  - metal workshop, furniture manufacturers, a cement block manufacturer, a noodle factory, poultry farms and dairy farms
- Built and operated by the community the micro-hydro plant was funded using grants from the government with support from the World Bank
- The loans are paid back using money that the community pay for the electricity supply
- It has improved the standard of living in the communities
- Reliance on kerosene and fuelwood has reduced and emissions have fallen
- Deforestation has decreased

1000 micro-hydro plants have been built so far in 52 districts.

Trial wind schemes are also being built in the Khathmandu valley.

Cost is a huge barrier