

# IGCSE Geography Section B: Economic Activity and Energy



## Instructions:

- Please read each page carefully.
- All tasks should be attempted.
- If you find any task difficult you should speak to your class teacher.
- Use the checklist on the first page to track your progress.
- All Geography revision booklets must be completed and shown to your class teacher before the final exam.
- Page numbers refer to Edexcel International GCSE Geography Student book.

# PLC IGCSE GEOGRAPHY

What do I need to know?	<u>Traffic light</u>	<u>Revised?</u>
<b>SECTION B: ECONOMIC ACTIVITY AND ENERGY</b>		
<b>1. <u>Economic sectors</u></b>		
Define and illustrate primary, secondary, tertiary and quaternary sectors.		
Give example of different jobs types.		
Describe variations in sectoral balance between countries.		
<b>2. Sectoral change and informal employment</b>		
Describe how sectoral balance has changed over time (pre-ind/industrial/post-ind).		
<b>1. Case Study - sectoral shift in one HIC.</b>		
<b>2. Case Study- sectoral shift in one LIC</b>		
Explain the causes of informal employment and its characteristics.		
<b>3. Changing locations: quaternary and tertiary</b>		
Describe and explain the growth of tertiary and quaternary sectors with reference to causal factors (prosperity, new technology, accessibility, transport, government policy).		
<b>3. Case study - of the factors affecting the development and location of one hi-tech industry.</b>		
<b>4. Changing locations: manufacturing</b>		
Describe and explain global shifts in manufacturing.		
Outline the factors affecting manufacturing location change (TNCs, raw materials, labour, new technology, government policy).		
<b>5. Changing locations: deindustrialisation</b>		
<b>4. Case Study - a de-industrialised area to show the causes and consequences of change; and outline subsequent development in the area.</b>		
<b>6. Energy demand rising</b>		
Define primary, secondary, renewable, non-renewable and sustainable energy.		
Describe trends in global energy demand, and the pattern of global energy production and consumption.		
Illustrate the energy gap.		
<b>7. Finite energy and energy efficiency</b>		
Explain the need for energy efficiency.		
Outline the finite nature of some energy resources (coal, oil, gas, nuclear power).		
<b>8. Evaluating renewable and non-renewable energy</b>		
Outline the nature of renewable energy resources (wind, tidal, solar).		
Evaluate the relative merits of using renewable and non-renewable energy sources.		

# 1. Economic Sectors

The activities of the economy are split into 4 sectors

Task: Name and define each sector, giving examples.

The amount of money people are paid increases throughout the sectors. The average HIC farm worker earns \$19,000 whereas the average biochemist might earn up to \$88,450. This means there is a link: the amount of money a country makes (GDP/GNI) and the proportion of people working in each economic sector.

- (a) Study Figure 4a, which shows the production and sales of cars and vans in three regions in 2001 and 2011.

Region	2001		2011	
	Production (in thousands)	Sales (in thousands)	Production (in thousands)	Sales (in thousands)
Asia-Pacific	16 800	12 410	32 350	25 320
Western Europe	16 800	16 650	16 360	16 940
Middle East/Africa	770	840	2050	3370

**Figure 4a**

- (i) Which region's car and van industry has shown little change between 2001 and 2011?

(1)

- (ii) In which **two** regions did **production** increase between 2001 and 2011?

(2)

1

2

- (iii) Which economic sector does car and van **production** belong to?

Put a cross in the correct box.

(1)

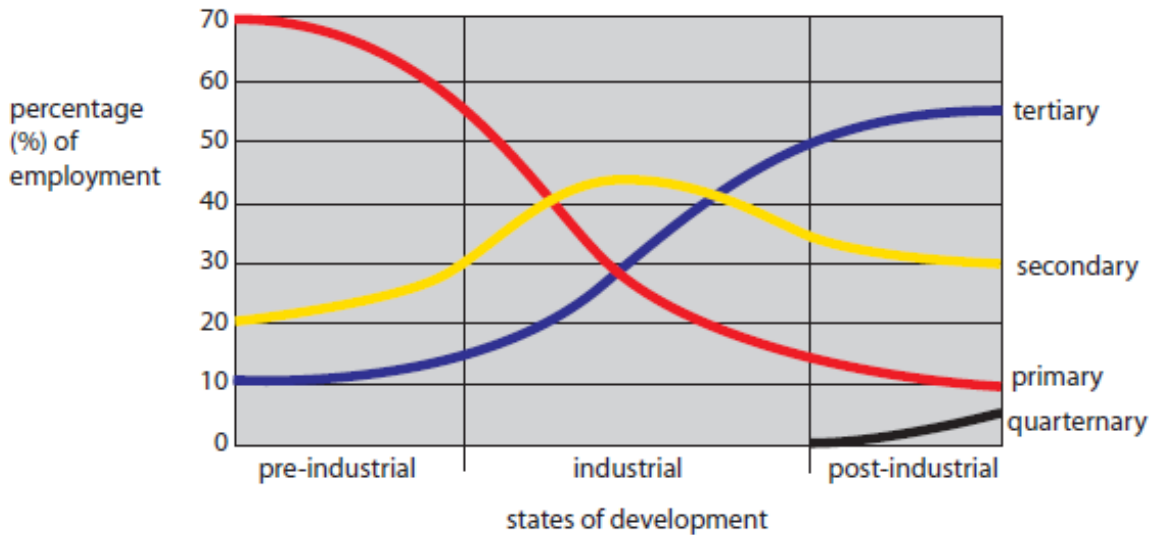
- A** primary
- B** secondary
- C** quaternary

- (iv) Name another economic sector **not** listed in (a)(iii).

(1)

## 2. Sectoral change and informal employment

Over time, the **relative importance** of the stages changes over time. The graph below shows this:



**Task:** Around the diagram, annotate the characteristics of the different changes over time (P93).

**Task:** Define the following terms in the boxes below:

Sector shift

Development pathway

Disposable income

Industrialisation

GDP

LIC/MIC/HIC

# CASE STUDY UK: DESCRIBE THE SECTORAL SHIFT OVER TIME IN HIC

(Graph: add primary, secondary,

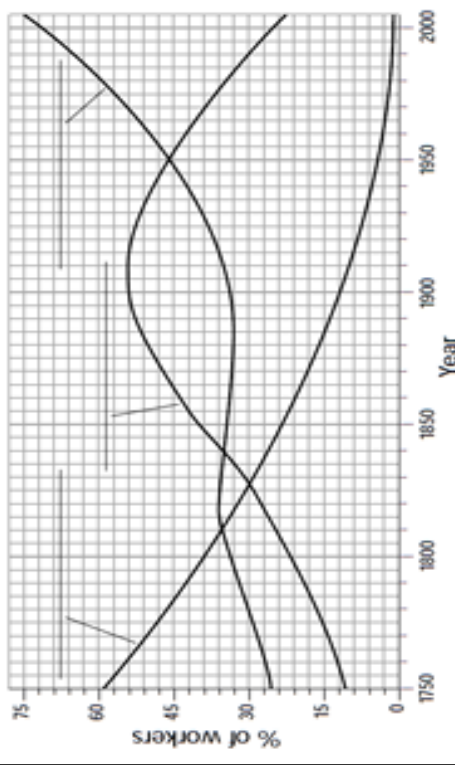
tertiary)

In \_\_\_\_\_ 60% of the workforce were in agriculture. The \_\_\_\_\_ sector was increasing due to the start of the \_\_\_\_\_ when products used in farming e.g. \_\_\_\_\_ were needed. This changed to the \_\_\_\_\_ of products needed for \_\_\_\_\_ such as \_\_\_\_\_ . People moved away from the \_\_\_\_\_ areas to \_\_\_\_\_ areas such as \_\_\_\_\_ .

By \_\_\_\_\_ less than \_\_\_\_\_ % worked in agriculture. Due to \_\_\_\_\_. The \_\_\_\_\_ sector declined as raw \_\_\_\_\_ declined and materials became too expensive to extract and there was competition in \_\_\_\_\_ due to cheaper costs e.g. lower \_\_\_\_\_ and less strict controls.

\_\_\_\_\_ which are not tied to a source of \_\_\_\_\_ material are increasing. They are found on the \_\_\_\_\_ of towns where land is \_\_\_\_\_ and there is more \_\_\_\_\_ e.g. \_\_\_\_\_ Science Park in \_\_\_\_\_.

How employment has changed, in Britain



Secondary industrial ploughs urban building  
manufacturing revolution mechanisation heavy industry Cardiff  
1750 rural ship docks

Post industrial outskirts 1970  
3 LICs space secondary mechanisation cheaper wages  
raw material footloose industry Newport Imperial

# CASE STUDY - INDIA: DESCRIBE THE SECTORAL SHIFT OVER TIME IN A LIC

Year	Primary %	Secondary %	Tertiary %
1973	44	17	39
2006	22	23	55

**Task:** Using the data above and the word bank below - fill in the gaps.

The majority of people in 1973 were employed in \_\_\_\_\_ with \_\_\_% due to \_\_\_\_\_ farmers. However the % has fallen by \_\_\_ by 2006. Both the secondary and tertiary have \_\_\_\_\_ in size. This is due to \_\_\_\_\_ moving from HICs as they are \_\_\_\_\_. The tertiary sector increased the most by \_\_\_% due to outsourcing of work such as call centres.

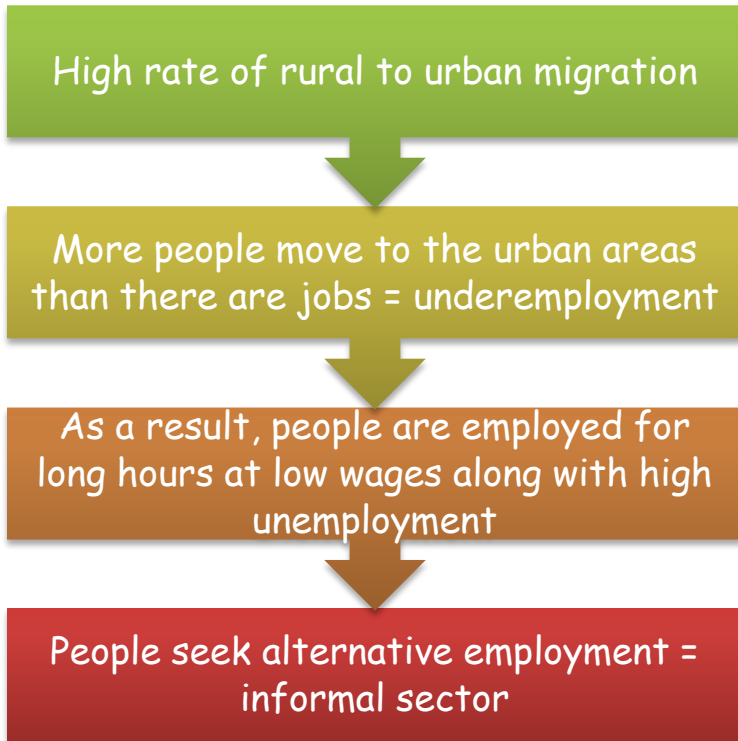
16	primary	subsistence	44	cheaper	22
	manufacturing	increased			

# The Informal Sector

**Task:** In the box below, define the term 'informal sector': (P97)

Why does the informal employment sector exist?

All of these are examples of informal jobs:



**Task:** In the box below, list some of the issues (problems) associated with informal employment. Categorise them as social and economic (or both) (P99):

Social	Economic	Socio-economic (both)



**Task:** In the box below, list some of the benefits associated with informal employment. Categorise them as social and economic (or both) (P99):

<b>Social</b>	<b>Economic</b>	<b>Socio-economic (both)</b>

(b) (i) What is meant by **informal employment**?

(2)

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(ii) Outline **two** causes of informal employment.

(4)

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2 .....

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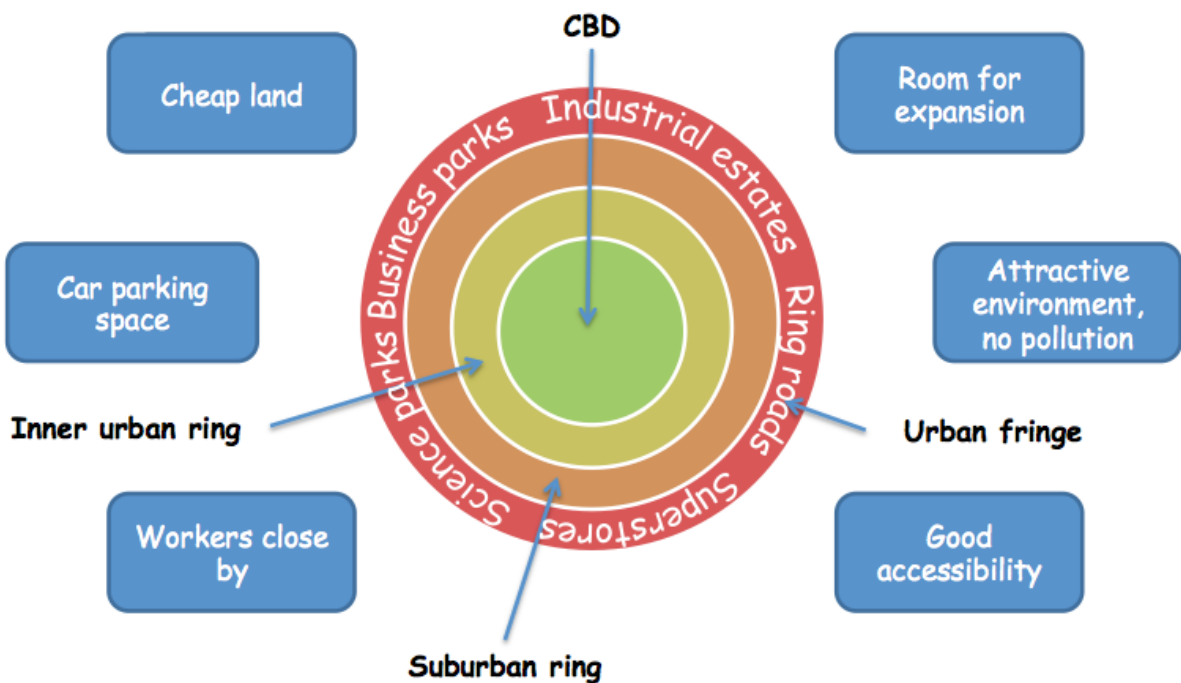
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### 3. Changing locations: quaternary and tertiary

Moving along the development pathway means that countries are able to:

- Afford better social services (schools, medical centres, hospitals, libraries).
- People earn more money meaning they can afford the basics (food, clothing).
- People have money left after the basics - disposable income - to spend on holidays and consumer goods.
- Technologies mean that people have different entertainment needs.

Countries such as the UK and Germany with ageing populations have a strong demand for tertiary and quaternary activities. The spending power of over 65s contributes strongly to the economy.



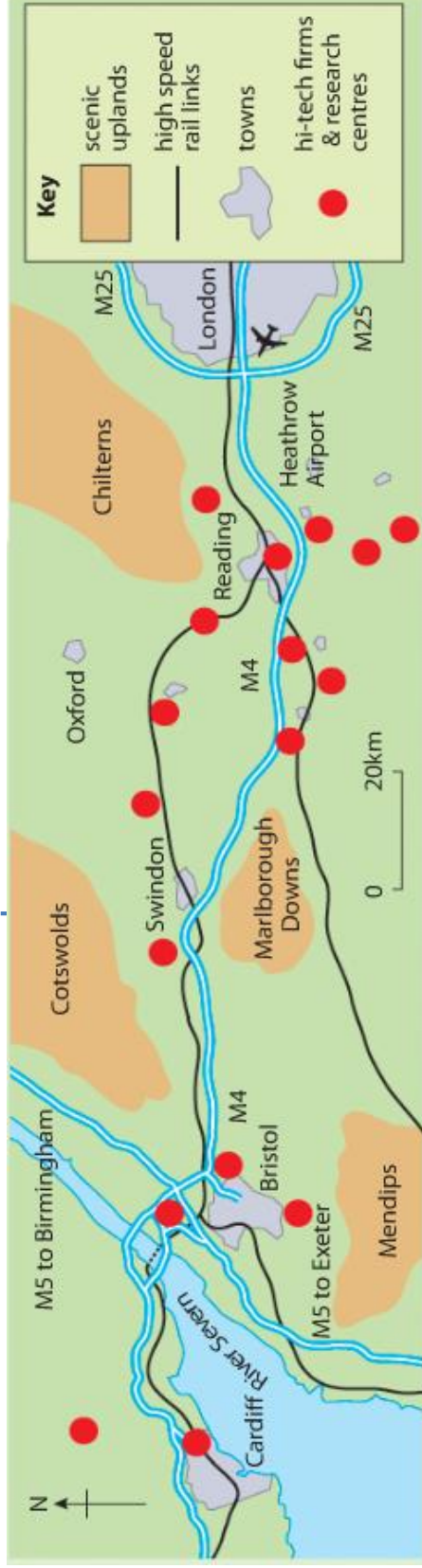
A feature of HIC cities is 'decentralisation'. This means that economic activities are increasingly found on the rural/urban fringe.

**Task:** In the box below, describe the activities that might be found on the rural urban fringe (P101). In addition, remember that not all tertiary activities are found in urban areas (e.g. tourism)

# Case Study: The M4 Corridor - Location of High Tech Industry

Task: On this side, describe the features of the M4 corridor - brief history, types of industries, names of companies. (P104)

On this side, explain the factors that have lead to the concentration of high tech industries in the area (P105).



## 4. Changing locations: manufacturing

**Task:** In the boxes below, define these key terms:

Global Shift
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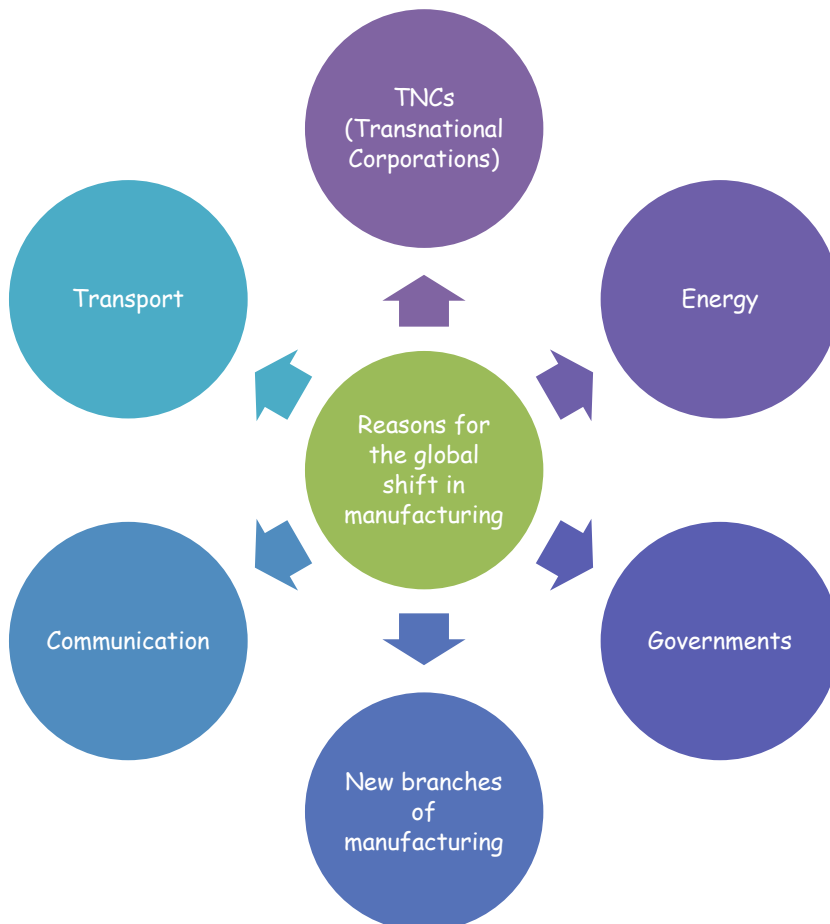
Manufacturing
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TNC
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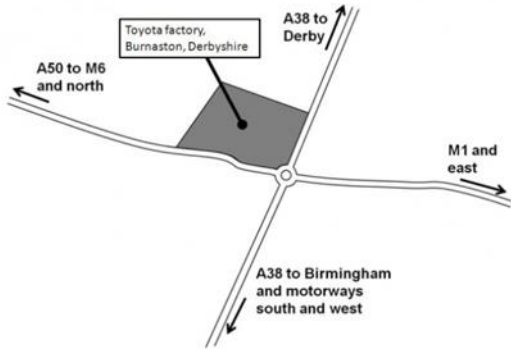
The majority of the world's manufacturing is concentrated in a small number of countries - 50% of the world's manufacturing occurs in three: the USA, China and Japan.

The *Global Shift* has meant that manufacturing has shifted from HICs to LICs - this is for a variety of reasons - not just cheapness!

**Task:** In the diagram below, annotate the reasons for the global shift (P104)



## Industrial location change: TNC - Toyota in Derby



### Why did Toyota choose Derby?

- Large area of land available at Burnaston site.
- In the EU so tax free exports of finished goods to Europe.
- Easy access to Birmingham where many car part industries are located.
- Easy access to A50 which joins the site to the other Toyota factories in North Wales.
- Local workforce available with experience in engineering and engine manufacture through Rolls Royce and Bombardier.
- Government gave subsidies for the project.
- Derby City Council bought a stake in the company.

The factory has brought many positive impacts to the city of Derby.

The creation of jobs at the factory has meant that these workers are spending money in the local economy allowing local shops and services to remain open.

The company is keen to ensure it has a positive image within the local area and so sponsors local events and teams such as Derby County.

Many other companies who supply Toyota have also set up factories in the area, again providing jobs.

Apprentices and training programmes are available with Toyota increasing local education levels.

Some people have been unhappy about the factory coming to Derby and there have been some negative impacts.

The land used was greenfield land and took away local farm land.

The factory itself is very large and many consider it an eyesore.

The A50 road was widened and a new roundabout built to ensure reliable transport to the factory, this has created loss of land and large amounts of air and noise pollution.

Some local buildings were lost such as the pub.

TNCs are great because they bring in foreign currency and prestige to a local area, however...

- They can pull out at any time leave a large void of jobs.
- Decisions which are made about the area are taking place in Japan.
- To begin with the highest paid jobs went to Japanese managers.
- Areas can become over reliant on the employment - for example when the recession hit not as many cars were being bought and therefore not as many produced, hours at the factory were cut and the whole local economy suffered.

**Task:** Use the information on the previous page to complete the following sections.

<p>Describe the location of the Toyota factory.</p>	
<p>Explain why this was a good site.</p>	
<p>Explain the positive impacts the factory has had.</p>	
<p>Explain the negative impacts the factory has had.</p>	
<p>What are the issues of having a TNC in your area?</p>	

(b) Study Figure 4b, which shows the location of the Toyota UK car production factory.

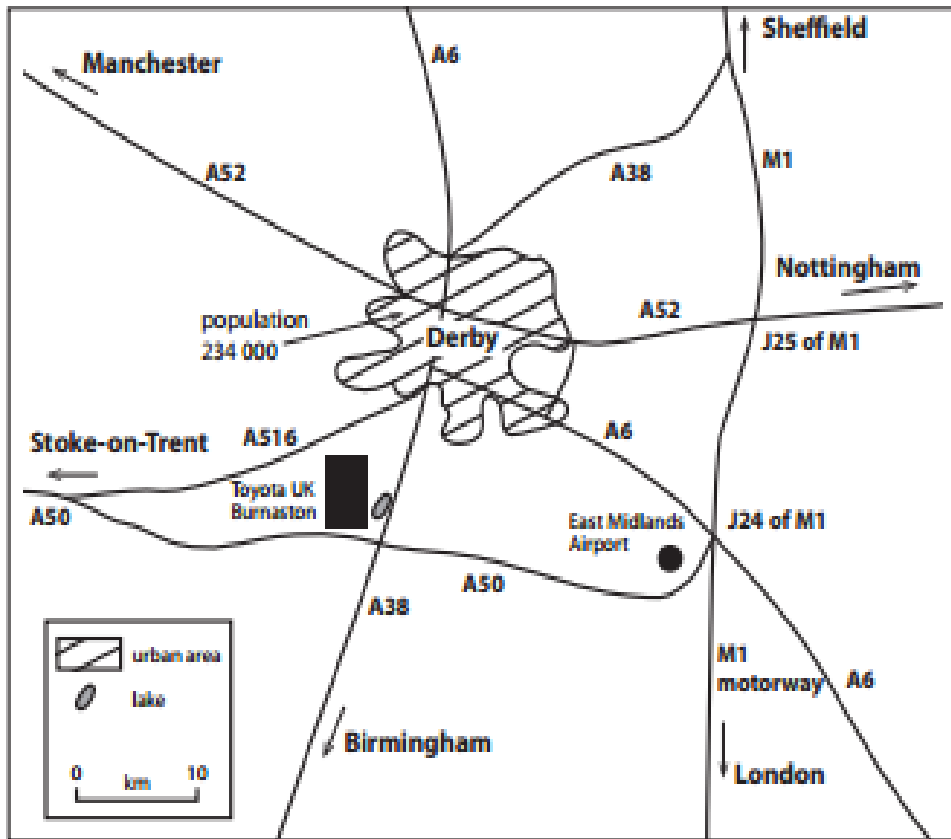


Figure 4b

(i) Suggest why Toyota UK chose this location for its car production factory.

(6)

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Question Number		Indicative content
<b>4(b)(i) Type 1 item</b>		A range of location decision-making factors are evident from Figure 4b. These include the road network of M1 and A-roads giving access to major cities, the nearness to East Midlands Airport, land on the urban fringe of Derby .... Accept other valid non-map offerings e.g. area's engineering tradition ..
Level	Mark	Descriptor
<b>Level 1</b>	1-2	Expect either a short list of relevant factors identified or one factor developed/expanded e.g. nearby city so large population providing workforce
<b>Level 2</b>	3-4	Expect either a long list of relevant factors identified or some development of two factors or one factor very well developed.
<b>Level 3</b>	5-6	Expect at least two well-developed/expanded factors with clear expression of a decision-making process and of locational advantage.

**Task:** Using the mark scheme, get your teacher or parent to check your answer and give you a score out of 6.

WWW:

Reason 1

Reason 2

EBI:

Reason 1

Sign:



## 5. Changing locations: Deindustrialisation

**CASE STUDY:** Causes, consequences and subsequent development of an area (E.g Bradford/ Detroit)

**Task:** Use your case study notes or text book to complete the following sheet. **\*Must include data / evidence.**

Reasons for decline	Map
Impact of the decline Social-economic	Impact of the decline Political and environmental
How it was redeveloped Social  Economic  Environmental	Success? With reasons...  Yes  No

**Task:** Read the following mark scheme and give the exam answer on the next page a mark out of 9. Use a highlighter to identify the causes, consequence and subsequent developments.

Question Number		Indicative content
<b>4(c)</b>		<p>This item calls on knowledge and understanding of a required case study of a de-industrialised area.</p> <p>Candidates are expected to name an area (eg Corby, Sheffield ...) and refer to principally the consequences of their de-industrialisation which has led to the need for redevelopment. Some reference to the causes (e.g. foreign competition; exposure to market forces; old technologies ...) has relevance but the crux of the answer should relate to consequences (e.g. derelict land; mass male unemployment; multiple social deprivation; government initiatives to build on brownfield sites ...). These consequences should constitute the key reasons sought.</p> <p>Some legitimate reference to the nature of subsequent and recent developments after the de-industrialising phase e.g. tertiary and quaternary activities on brownfield sites is to be expected.</p> <p>Credit any other reasons of a more positive nature i.e. locational advantages for the new industries e.g. close to motorway; large open spaces of cheap land ...</p>
Level	Mark	Descriptor
<b>Level 1</b>	1-3	Expect a limited response which considers the topic in a broad and generic manner, either identifying in outline the subsequent developments with some inference as to need for redevelopment eg sports facilities on old factory sites, or some reference to factors behind the recent developments.
<b>Level 2</b>	4-6	Expect some attempt to discuss the subject. The nature of the subsequent developments in a named area should be made with some examination of the reasoning behind the recent developments. A number of clear developed reasons, especially "negative" factors based on need to redevelop the area.
<b>Level 3</b>	7-9	Expect a sound discussion based on case study material which has both the causes/consequences (reasons) of de-industrialisation and subsequent developments presented, perhaps in terms of appropriateness ie "positive" reasons based on the suitability of the area for the recent developments. Expect detail and evidence related to the named area.

(c) Discuss why one named de-industrialised area has become a focus for redevelopment.

(9)

Name of area: South Wales

South Wales used to be a centre point of industrialisation and mining; however, due to the ~~excess~~<sup>exhaustion</sup> of raw materials, competition over seas meaning it is cheaper to import than extract the raw materials and the increased transport costs, it de-industrialised.

This de-industrialisation resulted in many factors which saw it become a focus for redevelopment. The environmental quality of the area fell, unemployment was high and there was also a high rate of depopulation. It was suffering economically; the lack of investment and employment led to a lack of quality social services such as housing, and facilities.

In order to combat the struggling situation the government invested £400 million in the Top Wales programme which encouraged business to locate in South Wales to provide jobs for many. ~~off~~<sup>over</sup> 90,000 jobs were created, and businesses such as Ford Motors and Sony opened large HQs in South Wales. This area was also designated a 'redevelopment valley area', in which the government is restoring the environmental quality, putting large retail parks and large manufacturing plants there. This has led to a large ~~decrease~~ decrease in unemployment (decrease of 22%) and has made Cardiff ~~the~~ one of the 5 top destinations in the UK. ~~The construction~~ The money invested in ~~the~~ redeveloping and re-imagining the area resulted in an increase in tertiary activity and ultimately economic development in the area.

Task: Score /9  
this score.

Give two reasons why you have awarded

1:

2:

**Task:** Now read the examiners report below

### **Question 4 (c)**

This is a case study item as per the specification. Some candidates offered good case study detail e.g. South Wales, East London, Consett. These were suitable examples that had experienced de-industrialisation and so allowed the candidates to write about its causes and consequences as the question intended. These candidates scored well as their answers dealt with why the area needed to be redeveloped. Those who wrote about the regeneration activities scored less well on the grounds that that was not the question. Other weaker answers were either generic with no place information or looked at why developments are taking place in LICs ( e.g. shanty towns), ignoring the description, de-industrialised.



**ResultsPlus**  
Examiner Comments

This is a well explained case study of the decline of heavy industry in South Wales and covers causes and especially, consequences e.g. unemployment. It explains why it has become an appropriate place for re-imaging and regeneration as well as offering some detailed knowledge and some detailed knowledge of the region with reference to improvements being undertaken. This is Level 3; 9 marks awarded.



**ResultsPlus**  
Examiner Tip

Important to determine/identify what needs to be discussed in such questions

**Task:** In your own words describe how you can achieve 9 marks in this question.

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**Task:** On the next page complete your own version of the exam answer containing your own case study.

(c) Discuss why one named de-industrialised area has become a focus for redevelopment.

(9)

Name of area: \_\_\_\_\_

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**Task:** Using all the resources, give your answer a mark out of 9.

Final score /9

# 6. Energy demand rising

Task: In the boxes below, define the following energy key terms (P106):

Primary Energy

Secondary Energy

Renewable Energy

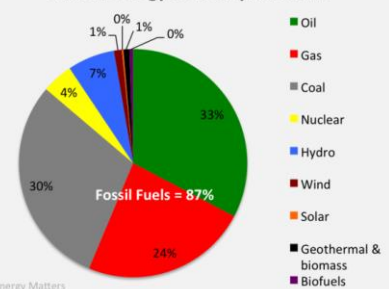
Non-Renewable

Sustainable energy

Energy consumption

Energy demand is just that - how much energy is required by the global population. Energy demand is constantly rising. In the box below, list some of the reasons why energy demand and consumption are rising (P106/7):

Global energy consumption 2013



On the map below, annotate the areas where energy is **produced**, and what types are produced there (P107 + own research).



Middle East - Oil production

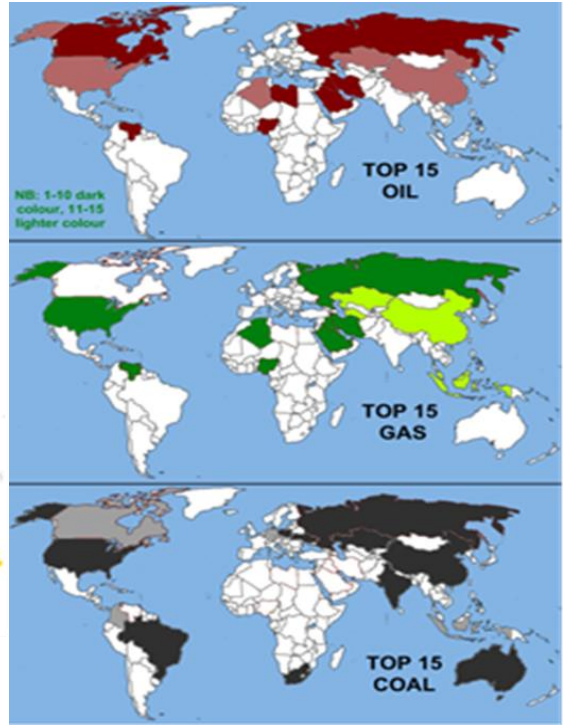
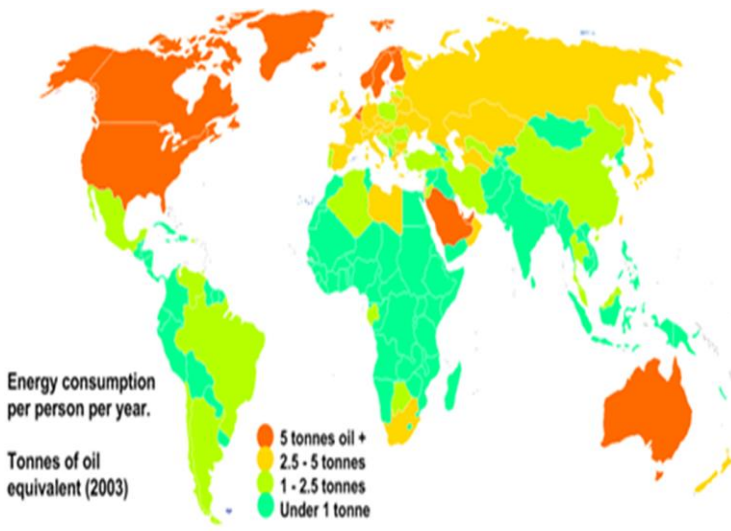








Task: Use the maps and your answers on the last two pages to compare and contrast the supply and demand of global energy.



Similarities

Differences

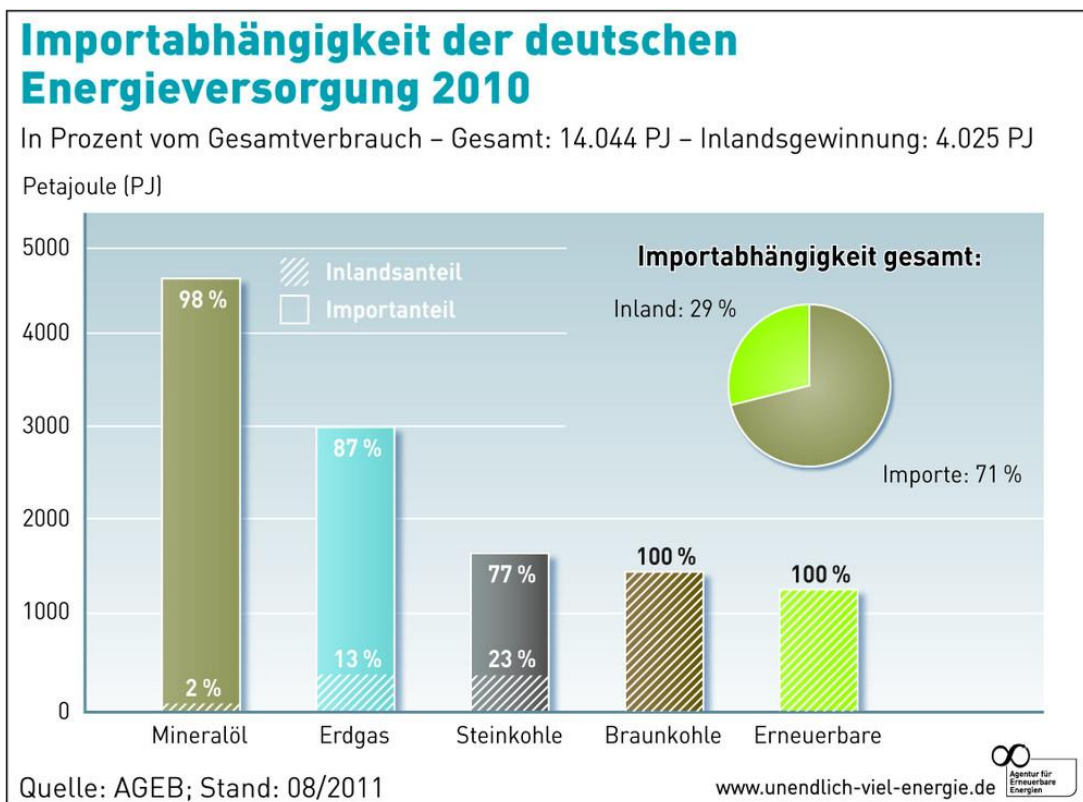
# 6. Energy demand rising

**Task:** In the box below, define the term Energy Gap (P108):

Energy Gap

Many European countries have energy gaps. This is because energy is widely traded among the different countries. The import and export of energy (including electricity and gas) can provide a big income for the countries exporting energy. For example, Germany imports a lot of its electricity from France.

**Task:** Annotate the diagram below to explain why Germany has an energy gap. Translate the energy types if you need to:





Question Number	Indicative content	
<b>4(c)</b>	<p>This item requires understanding and explanation (reasons for) the rising demand for energy either globally.</p> <p>Economic development is associated with a rising demand for energy via increased manufacturing, service provision, transport availability and domestic use (e.g. heating and cooling ...). Increased domestic use results from advances in living standards. Increased economic production creates a rising demand for energy.</p> <p>The other basic cause of the rising demand is increase in population.</p> <p>The combined effect of rising population and economic development is rising energy demand which can create an energy gap i.e. the difference between a country's level of energy demand and its ability to produce enough energy to meet this level from its own sources.</p> <p>Accept generic responses across all spatial scales if well explained. Reference to smaller scale examples may be used to support points.</p>	
Level	Mark	Descriptor
<b>1</b>	1-2	Expect basic factors identified e.g. manufacturing; population increase etc. or offer some minimal development of one factor if only one identified.
<b>2</b>	3-4	Expect an outline of the essential explanation. May cover population increase or economic development well or offer both in an outline way. Some degree of development of relevant factors in the response.
<b>3</b>	5-6	Expect thorough explanation, including development of the two basic factors i.e. population increase and economic development. Answer should offer coherence e.g. rising living standards as part of economic development etc. and range. May include examples of basic factors and refer to energy gap.

**Task:** Using the mark scheme, get your teacher or parent to check your answer and give you a score out of 6.

WWW:

Reason 1

Reason 2

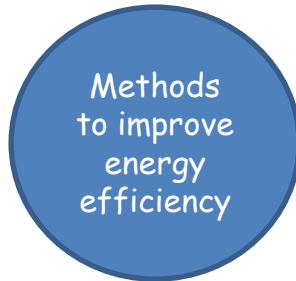
EBI:

Reason 1

Sign:

## 7. Finite energy and energy efficiency

Task: On the diagram below, describe and explain the different methods of increasing energy efficiency. Categorise your ideas as either local, national or global:



### Case Study: The Energy Situation in the UK

Task: Fill out the table below looking at how energy supply, demand and consumption has changed over time in the future, and what predictions have been made (P109/10)

Past Energy Policies:	Present Energy Policies:	Future Energy Policies:

## 8. Evaluating renewable and non-renewable energy

In the box below, summarise **two** sources of **non-renewable** energy. Include status, description, main producers, uses and advantages/disadvantages (P110):

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In the box below, summarise **two** sources of **renewable** energy (P112):

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For both renewable and non-renewable, you need to weigh up the advantages and disadvantages of their uses. On the seesaws below, list the advantages and disadvantages of both renewable and non-renewable (P110-112):

Renewable

Non-renewable

Renewable

Non-renewable

Advantages



Disadvantages

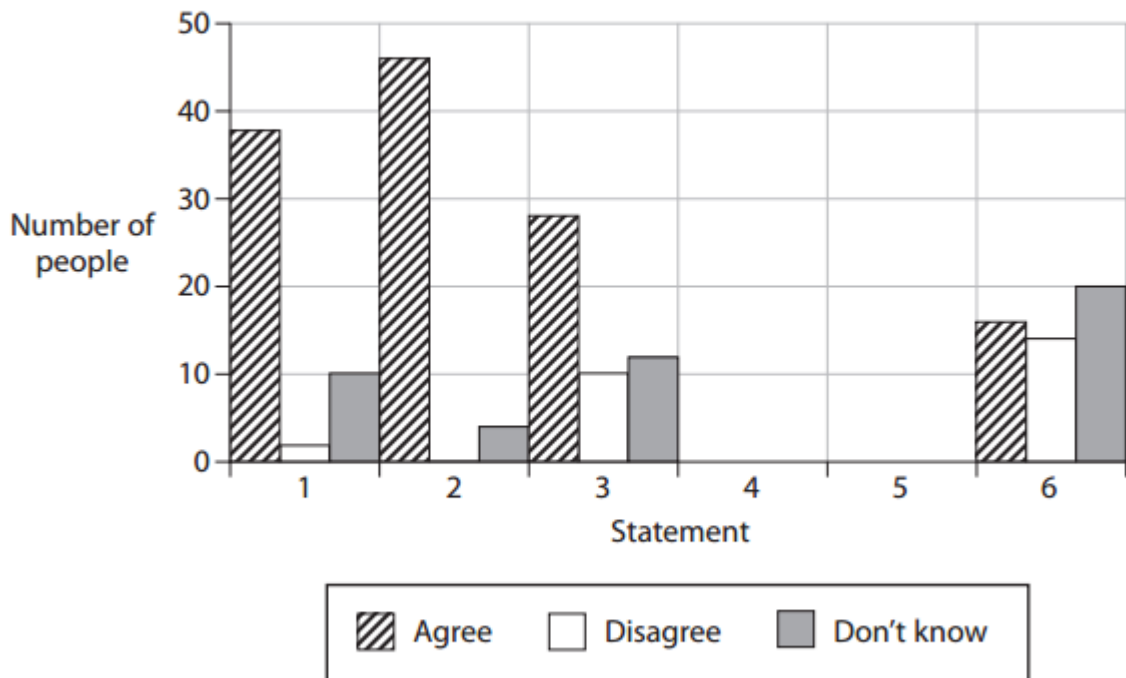
(c) Study Figure 4b, which shows the results of a questionnaire survey of 50 people on their views about the use of renewable and non-renewable energy.

	<b>STATEMENT</b>	<b>Agree</b>	<b>Disagree</b>	<b>Don't know</b>
1	Using renewable energy will slow down global warming	38	2	10
2	Cleaner air will result from using renewable energy sources	46	0	4
3	Renewable sources are not as efficient at producing energy as non-renewable sources	28	10	12
4	Renewable sources, e.g. wind farms, can be visually unattractive	20	25	5
5	Extracting non-renewable energy, e.g. coal, can be dangerous	40	6	4
6	Renewable energy offers a more sustainable future	16	14	20

**Figure 4b**

(i) Complete Figure 4c for statements 4 and 5 on Figure 4b.

(2)



**Figure 4c**





Question Number		Indicative content
4(c)(ii) Type 1 item		The question is assessing data analysis and evaluation skills and is expecting better candidates to be able to go beyond the simple bar by bar reading and delve into the broad pattern of the renewable versus non-renewable debate. Max of Level 1 for those simply writing out the general view per statement. Be aware that candidates might go for a list approach where a developed conclusion worthy of 2 marks (therefore, 3 such conclusions = Level 3). Accept some commentary on nature of questionnaire survey (e.g. sample size of 50...) Overall the respondees like renewables (esp. re warming & clean air) but there are some mixed feelings and a strong don't-know element over efficiency, sustainability and unsightliness. Own fieldwork conclusions suggestive of L2 & L3.
Level	Mark	Descriptor
Level 1	1-2	Expect comments to focus on a statement by statement approach e.g. most thought renewables help with global warming ....
Level 2	3-4	Expect some reference to the broad pattern in the type of energy source debate e.g. renewables generally popular; five statements support renewable use; pros and cons of both renewables and non-renewables... Expect a good range of statements referred to and some reference to numbers in support or otherwise.
Level 3	5-6	Expect genuine attempt to draw overall conclusions e.g. renewables supported on environmental grounds but their inefficiency recognised. Numerical support for conclusions will be given and the degree of support or otherwise referred to (e.g. almost everyone thought - 46/50 - renewables offered cleaner air...) Top responses will also notice large numbers of undecided e.g. statement 5, and may attempt to justify views expressed (e.g. mining accidents re statement 5). May compare with own fieldwork findings.

Examiner's report: On the whole, however, item (c)(ii) was answered well with many candidates accessing Level 2 marks and typically offering a statement by statement approach.. Those reaching the top level used Figure 4b data, including the undecided responses and made reference to the broad pattern of change with generic conclusions and commentary. Greater use of fieldwork findings would have further enhanced the quality of answers.

Task: Using the mark scheme, get your teacher or parent to check your answer and give you a score out of 6.

WWW:

EBI:

Sign: