

A. CARTOON ANALYSIS

1. Consider the cartoons.

- i. What does the cartoon depict? Who is represented in the cartoon?
- ii. What elements act as symbols for concepts, entities, people or groups, etc? What qualities or characteristics are associated with the elements depicted in the cartoon?
- iii. What issue does the cartoon raise? What message is the cartoonist trying to convey?

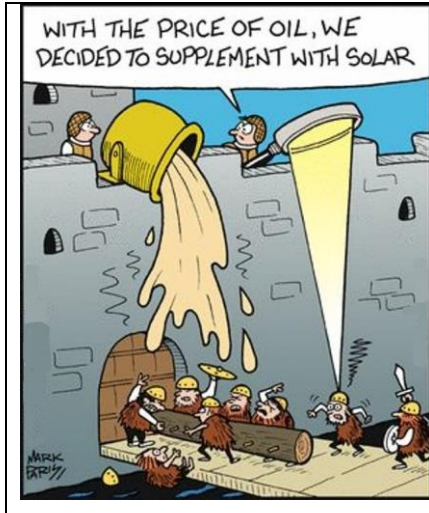


Figure 1

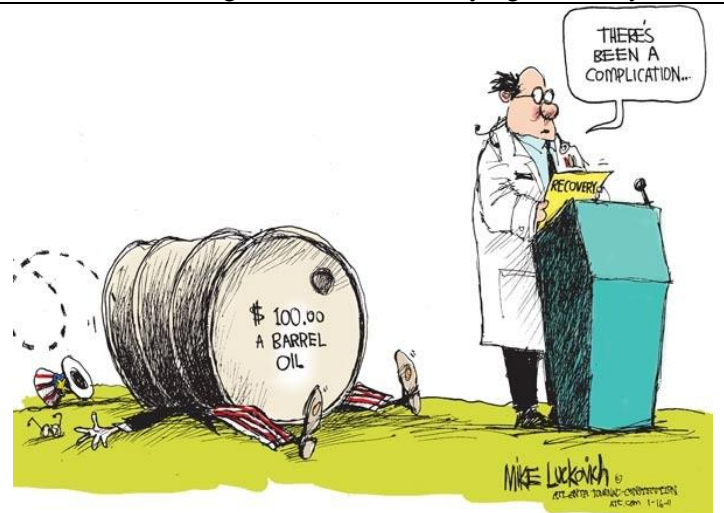


Figure 2

2. Place each verb/noun in an appropriate gap in the paragraphs.

represents	represent	shows	evoke
implies	symbolises	depicts	brings to mind
suggests	argues	implication	looks
seems	suggest	implying	

The first cartoon **1**.... a picture of a castle being attacked by soldiers dressed in medieval clothes. Two soldiers standing on the ramparts are defending the castle. One is pouring boiling oil over the assailants who are trying to break down the gate with a battering ram. He is also looking disapprovingly at his fellow soldier, who is using a magnifying glass to concentrate the sun's rays into a beam that is able to burn an enemy soldier's helmet. This soldier **2**.... to feel he needs to justify his actions, *for* he comments, "With the price of oil, we decided to supplement with solar." The medieval castle, its assailants' method of attack and its defence by pouring boiling oil or concentrating sunlight through a magnifying glass **3**.... a contrast between tradition and innovation. The boiling oil and its use **4**.... crude oil and the way it is used in today's society, and the magnifying glass **5**.... newer alternatives to oil. The comment **6**.... that the soldier is only using solar energy because oil has become too expensive, and the soldiers' facial expressions **7**.... reluctance to this change. The cartoon raises the issue of the impact of oil prices on the development of renewable energies. It **8**.... that the shift away from oil towards sustainable alternatives stems from market forces, **9**.... that alternative energy sources to oil will only be developed if the price of oil remains high.

The second cartoon **10**.... a man dressed as a doctor in a white lab coat with a stethoscope giving a speech on recovery. He is announcing that there has been a complication, and he **11**.... uncomfortable. Behind him is a barrel of oil that costs \$100, and it has rolled on top of and crushed another man, dressed in the colours and patterns of the US flag. The conjunction of the term 'recovery' and the barrel of oil costing '\$100' **12**.... a link to the economy. The man crushed by the barrel of oil **13**.... the United States of America and, by extension, its economy while the doctor **14**.... an economist or government official who is responsible for diagnosing problems in the US economy. The cartoon highlights the issue of the US economic dependence on oil. The **15**.... is that the high oil prices are crushing the US economy, and they are impeding its economic recovery.

- How are the paragraphs structured in functional moves? What is the purpose of each move? What verbs are associated with each functional move?
- In what way do the thematic choices contribute to the coherence and development of the paragraph? What is the function of 'for'? (See Powerpoint presentation & Grammar file)
- Each cartoon highlights a relation of cause and effect. What are they? How are they realised in the verbal mode of the paragraphs?

6. WRITTEN ASSIGNMENT 1

Each paragraph in 2. is an example of the analysis stage of an analytical response (see Grammar file). Below is a cartoon that was published in conjunction with a video in May 2018. (Source: <https://www.youtube.com/watch?v=38aoOi6I3BU>)

Write a one-paragraph analysis of its meaning. Follow the functional move structure above.



Figure 3: Rising oil prices

B. DATA DESCRIPTION (WHOLE & PARTS) & EXPLANATION

- Use the expressions in the first box to complete the paragraph on oil reserves published in 2005 (p.2).
- Use the expressions in the second box to complete the paragraph on oil reserves from 2011 (p.2).

over	held	just	exhaust	around	stand	holds sway over	has
------	------	------	---------	--------	-------	-----------------	-----

brought	as	continued	if	and	in contrast	according to
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- REFERENCE, SUBSTITUTION & ELLIPSIS. What do the highlighted expressions refer to?
- Both these texts are multimodal. Is one mode – visual (graph & table) or verbal (text) more important than the other?
- In what way are the two data commentaries similar and different? Why? How is this reflected in the language?
- A data commentary for presenting the results of a study typically consists of four moves.

Presentation	Creates a link between the verbal commentary and the visual image and states the content of the visual image.
Summary/general trend	Aggregates elements to make a general statement about dominant trend or whole.
Descriptive highlights	Selects a few meaningful elements from figure to illustrate main trend. May select elements that are exceptions to the main trend (outliers). May convert raw figures into percentages or fractions. May compare and contrast key information from figure.
Explanation Or Interpretation	Explains what caused the trends or exceptions, relative shares, etc. Explains/predicts the significance/impact of the trends, relative shares, etc. for a larger phenomenon.

Identify the moves in the two data commentaries. Not all moves may be present. (See grammar file p. 52)

Oil reserves

The Economist, 23 June 2005

The world's proven oil reserves _____ at just under 1.19 trillion barrels, reports BP in this year's Statistical Review of World Energy. _____ 60% of this oil is in the Middle East. Saudi Arabia _____ 262.7 billion barrels of oil or 22% of proven reserves, by far the biggest share _____ by one country. But at **its** 2004 rate of production, Saudi Arabia will _____ its reserves before Iran, in second place, with 132.5 billion barrels. Iraq _____ almost 10% of the world's proven oil reserves; Kuwait _____ over 8%. Outside the Middle East, Venezuela and Russia each _____ 6%.

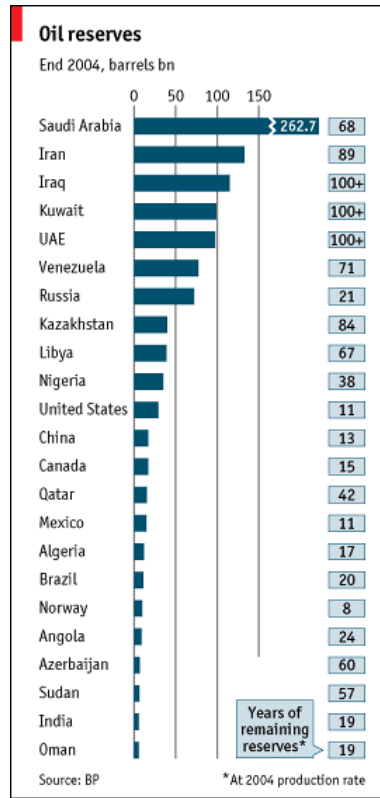


Figure 4: Oil reserves

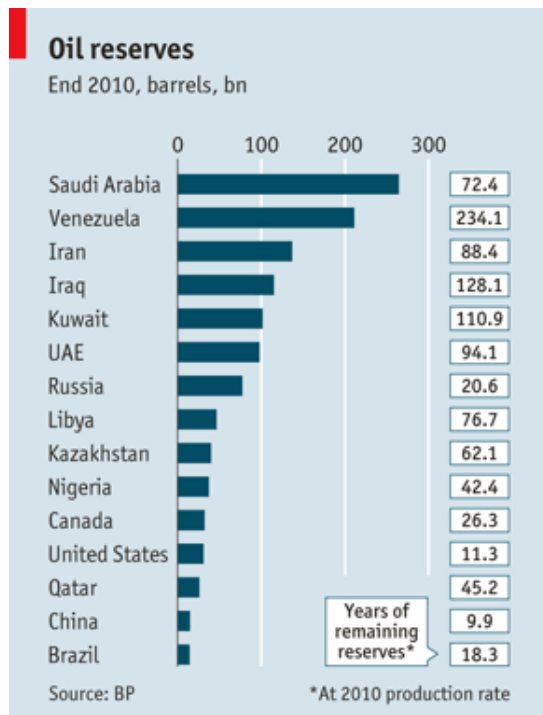


Figure 5: Oil reserves

Oil reserves

The Economist, 9 June 2011

_____ BP, an oil company, the world's known reserves of oil rose by 6.6 billion barrels during 2010, _____ increases in reserves in Brazil, India, Russia, Colombia, Uganda and Ghana outstripped declines in Mexico and Norway. **This** _____ the amount of oil that could, in theory, be extracted under existing technological and economic conditions to 1.38 trillion barrels. Over half the world's oil reserves are in the Middle East, with Saudi Arabia having just under a fifth of the global total. _____ China _____ to pump out oil at the rate it did last year, **it** would exhaust **its** reserves in under a decade. _____, Venezuela could keep pumping oil at its current pace for another two centuries _____ still have **some** left over.

C. DATA DESCRIPTION (WHOLE & PARTS) & EXPLANATION

Student A (page 13)

1. When
2. What
4. What
6. When
8. Where
10. How
12. What
14. What
16. What

Student B (page 14)

1. When
3. How much or What
5. What
7. What
9. What
11. When
13. Why
15. Who
17. Who

Reference expressions in the text in *italics* will need to be unpacked to make the questions clear.

C. DATA DESCRIPTION (WHOLE & PARTS) & EXPLANATION

1. Use the prompts on page 2 to generate questions in order to obtain the information missing in the text.

You will need to unpack the reference expressions in *italics* in the text to make your questions clear.

Source: <http://www.ukpia.com/docs/default-source/default-document-library/ukpia-briefing-paper-understanding-pump-prices-2017.pdf?sfvrsn=0>

STUDENT A

Understanding Pump Prices

Background

The price of fuel at the pumps is a subject that attracts a lot of debate, particularly when 1. _____.

But there are numerous elements that make up the price of a litre of petrol or diesel, primarily:

- Government duty and tax
- The cost of petrol and diesel on the open market - cost of product
- The costs and profit of the wholesaler and retailer - Retail/Ex-Refinery spread.

The other factors affecting the price include 2. _____.

Duty and tax accounted on average for 70% of the pump price in 2016. Figures 1 and 2 (below) show the typical breakdown of a litre of unleaded petrol at the 2016 average UK major brand pump price of 109.19p.

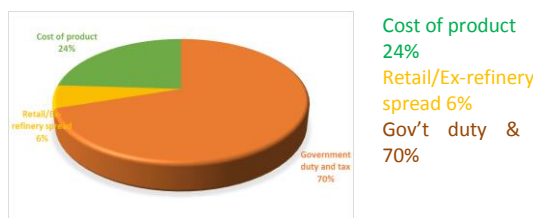


Figure 1: Average Pump Price Breakdown 2016 (%) (Source: Wood Mackenzie)

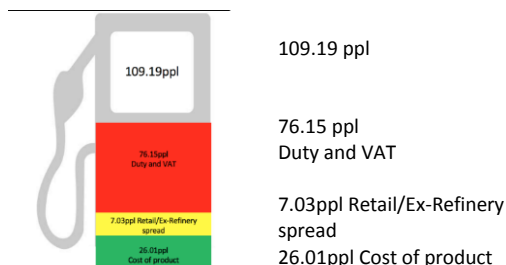


Figure 2: 2016 Average pump price breakdown (p/litre) (Source: Wood Mackenzie)

Government excise duty

Excise duty was charged at the fixed rate of 56.19p until 1st April 2010 when *it* was increased to 4. _____ until 1st September 2010 and to 58.19p per litre on unleaded petrol and diesel until end of December 2010. On top of this VAT was charged at 17.5% in 2010. On 1st January 2011, *duty* was increased by 0.76p per litre and then reduced by 1p per litre to 57.95 6. _____. On the other hand, VAT chargeable on the total pump price increased from 17.5% to 20% on 4th January 2011. This large tax component has the effect of diluting changes in underlying crude and product prices, because these still remain a smaller proportion of the total price.

Cost of product

Crude oil is traded 8. _____ and from it a whole variety of products are derived, including petrol, diesel, aviation fuel and heating oil. Whilst there is a connection between the underlying price of crude oil and pump prices, the internationally traded price of petrol and diesel and the \$/£ exchange rate are major influences on pump prices. ... Historically, crude prices have worked through to product prices and, as an indication, a \$2 per barrel change in the price of crude oil has translated on average to approximately 1p per litre in the pump price, at a constant \$/£ exchange rate. Prices of products refined from crude oil have often moved 10. _____ in the short term,

reflecting supply and seasonal demand. For example, demand for petrol and diesel tends to rise during the summer, while demand for heating oil/gas rises in the winter. *The latter* can affect the price of 12. _____, which are closely related products in terms of composition. The tighter supply position for diesel is also another influencing factor. Typically, there is also a time delay between movements in the unrefined crude oil market and the cost of the product at the pumps. The crude oil has to be sold, transported, refined and distributed to the retailer. ...

Retail/ex-refinery spread

The third element is represented by the cost and profit of the wholesaler /retailer, often referred to as 14. _____. This covers:

- Costs of transport to a storage terminal/depot, storage, and distribution to a filling station.
- Marketing and promotion costs.
- Costs of operating the filling station and staff.

The remaining spread has to provide a return to the supplier of the fuel and the retailer operating the filling station. The retail/ex-refinery spread is strongly influenced by market conditions. Figure 4 (below) illustrates the fuel margin over the last 20 years and the trend since 1996. *This* shows that fuel retailing has become increasingly 16. _____, driving the move to higher volume sites. The retail/ex-refinery spread is not the final profit that the retailer makes, it is simply the difference between the cost of the wholesale price of fuel on the open market and the selling price on the forecourt, from which, as mentioned, a range of costs have to be deducted. Of the approximately 4,500 major oil company branded sites in the UK, more than half are owned by independent retailers. The retailer usually has an exclusive supply contract with an oil company limited by law to a maximum of 5 years' duration.

2. Answer the questions on page 6.

C. DATA DESCRIPTION (WHOLE & PARTS) & EXPLANATION

1. Use the prompts on page 2 to generate questions in order to obtain the information missing in the text. You will need to unpack the reference expressions in *italics* in the text to make your questions clear.

Source: <http://www.ukpia.com/docs/default-source/default-document-library/ukpia-briefing-paper-understanding-pump-prices-2017.pdf?sfvrsn=0>

STUDENT B

Understanding Pump Prices

Background

The price of fuel at the pumps is a subject that attracts a lot of debate, particularly when **1** _____. But there are numerous elements that make up the price of a litre of petrol or diesel, primarily:

- Government duty and tax
- The cost of petrol and diesel on the open market - cost of product
- The costs and profit of the wholesaler and retailer - Retail/Ex-Refinery spread.

The other factors affecting the price include exchange rates, competition, commercial objectives of the filling station owner or operator, as well as seasonal factors. Duty and tax accounted on average for **3**. _____ of the pump price in 2016. Figures 1 and 2 (below) show the typical breakdown of a litre of unleaded petrol at the 2016 average UK major brand pump price of 109.19p.

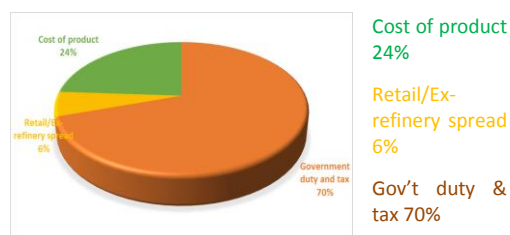


Figure 1: Average Pump Price Breakdown 2016 (%) (Source: Wood Mackenzie)

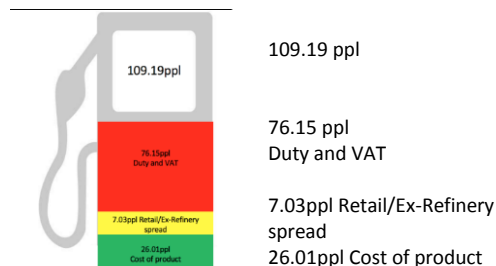


Figure 2: 2016 Average pump price breakdown (p/litre) (Source: Wood Mackenzie)

Government excise duty

Excise duty was charged at the fixed rate of 56.19p until 1st April 2010 when it was increased to 57.19p until 1st September 2010 and to 58.19p per litre on unleaded petrol and diesel until end of December 2010. On top of this VAT was charged at **5**. _____ in 2010. On 1st January 2011, duty was increased by 0.76p per litre and then reduced by 1p per litre to 57.95 on 24th March 2011. On the other hand, VAT chargeable on the total pump price increased from 17.5% to 20% on 4th January 2011. *This large tax* component has the effect of **7**. _____, because these still remain a smaller proportion of the total price.

2. Answer the questions on page 6.

Cost of product

Crude oil is traded on international markets and from it a whole variety of products are derived, including petrol, diesel, aviation fuel and heating oil. Whilst there is a connection between the underlying price of crude oil and pump prices, **9**. _____ are major

influences on pump prices. ... Historically, crude prices have worked through to product prices and, as an indication, a \$2 per barrel change in the price of crude oil has translated on average to approximately 1p per litre in the pump price, at a constant \$/£ exchange rate. Prices of products refined from crude oil have often moved independently of each other in the short term, reflecting supply and seasonal demand. For example, demand for petrol and diesel tends to rise **11**. _____, while demand for heating oil/gas rises in the winter. The latter can affect the price of diesel and aviation fuel, which are closely related products in terms of composition. The tighter supply position for diesel is also another influencing factor. Typically, there is also a time delay between movements in the unrefined crude oil market and the cost of the product at the pumps. **13**. _____

Retail/ex-refinery spread

The third element is represented by the cost and profit of the wholesaler /retailer, often referred to as the retail/ex-refinery spread. This covers:

- Costs of transport to a storage terminal/depot, storage, and distribution to a filling station.
- Marketing and promotion costs.
- Costs of operating the filling station and staff.

The remaining spread has to provide a return to **15**. _____.

The retail/ex-refinery spread is strongly influenced by market conditions. Figure 4 (below) illustrates the fuel margin over the last 20 years and the trend since 1996. This shows that fuel retailing has become increasingly a low margin business, driving the move to higher volume sites. The retail/ex-refinery spread is not the final profit that the retailer makes; it is simply the difference between the cost of the wholesale price of fuel on the open market and the selling price on the forecourt, from which, as mentioned, a range of costs have to be deducted. Of the approximately 4,500 major oil company branded sites in the UK, *more than half* are owned by **17**. _____.

The retailer usually has an exclusive supply contract with an oil company limited by law to a maximum of 5 years' duration.

6. Consider the information in figure 6.

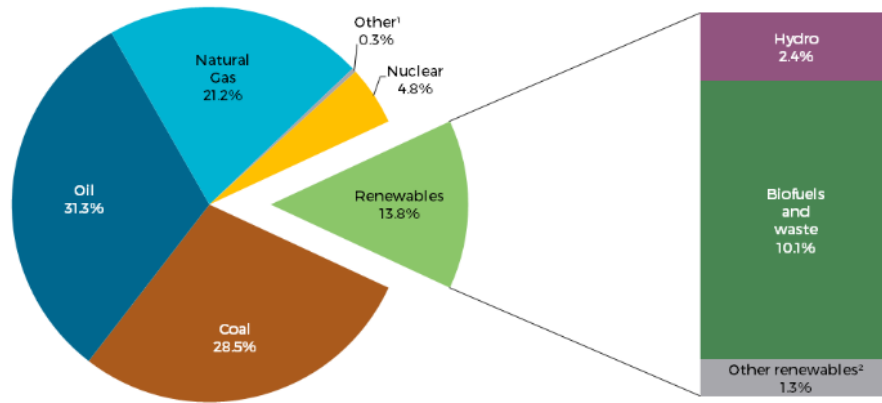


Figure 6: 2014 Fuel shares in world total primary energy supply

Source: <https://emis.vito.be/nl/artikel/renewable-energy-continuing-increase-market-share>

a. Complete the hierarchical structure of the field for Fuel shares in total primary energy supply (Figure 6).

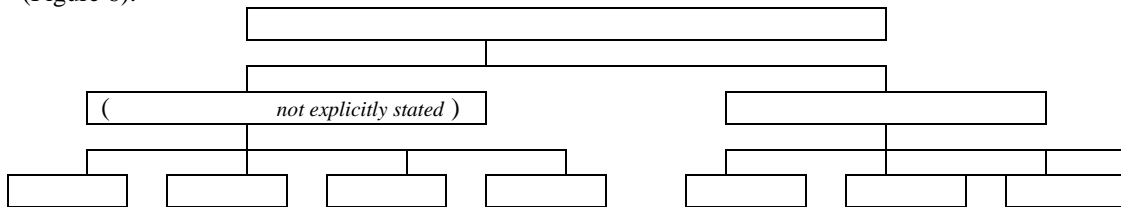


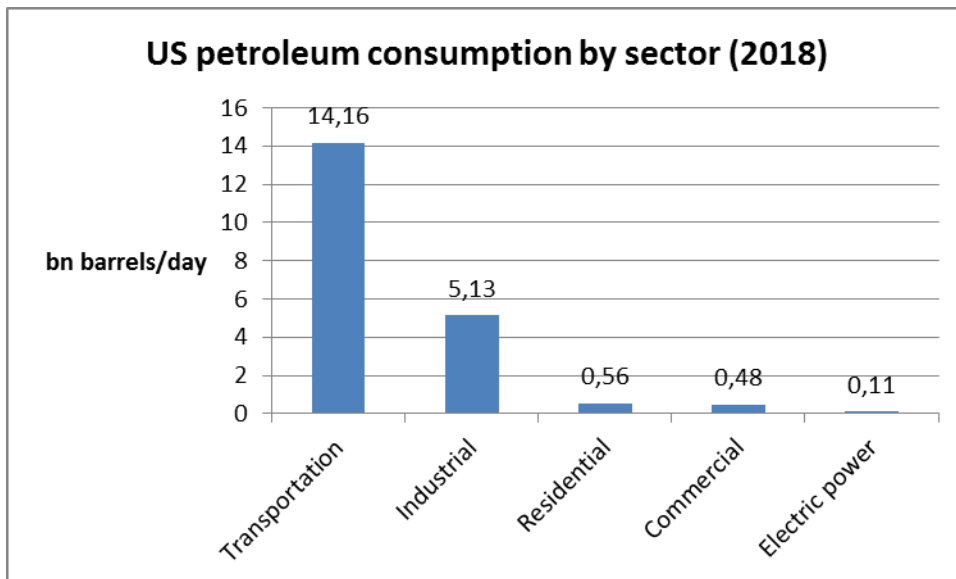
Figure 7: Taxonomy of field for Fuel shares in world total primary energy supply

b. How could the field taxonomy be elaborated to introduce another level?

c. Write the first three moves of a data commentary for figure 6. (max. 3 - 5 sentences).

7. WRITTEN ASSIGNMENT 2

Consider the following figure.



Source: <https://forthewind.wordpress.com>

Figure 8: US petroleum consumption by sector (2018) in bn barrels/day

Describe the information in Figure 8, above. Follow the first three moves of a data commentary. (max. 3 - 5 sentences). Draw the hierarchical structure of the field for your paragraph.

D. KEY INDICATORS

1. Mark each term below at an appropriate place on the following chart and legend.

- | | | |
|---------------------|------------------------|--------------------------|
| 1. solid line | 5. to level off | 9. to dip slightly |
| 2. dotted line | 6. to remain constant | 10. to fall dramatically |
| 3. broken line | 7. to reach a plateau | 11. to slump |
| 4. to rise steadily | 8. to fluctuate wildly | |

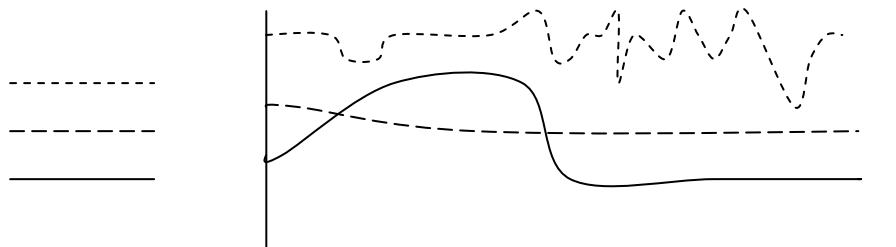


Figure 7

2. Listen to the text and plot the information on the graphs.

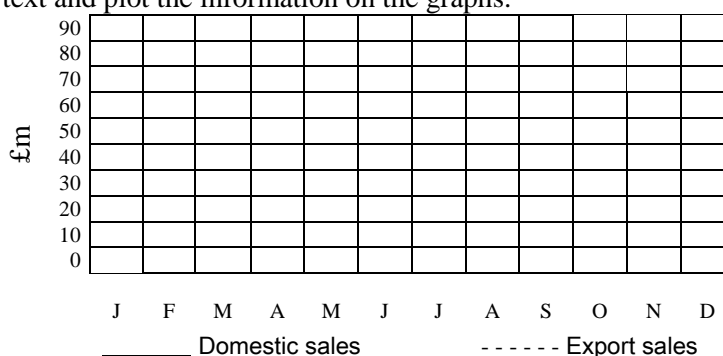


Figure 8: Domestic and export sales

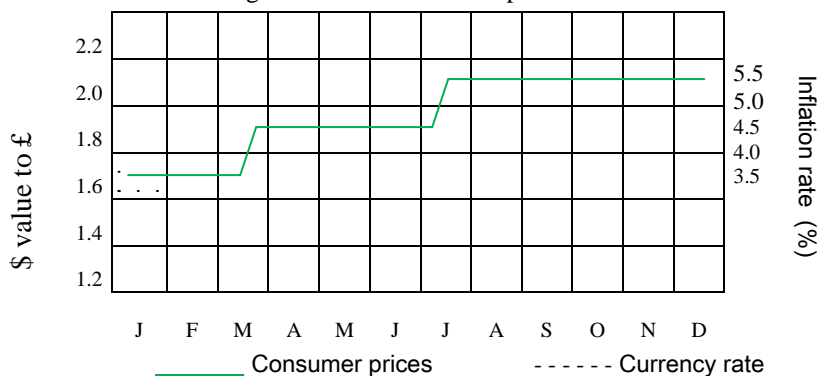


Figure 9: Currency rates and inflation

3. Listen to the text again to decide whether the following statements are true or false. Justify with words or expressions that you hear in the text.

- | | |
|--------------------------|--|
| <input type="checkbox"/> | 1. Domestic sales have not changed much over the year. |
| <input type="checkbox"/> | 2. The dips in April and August were significant. |
| <input type="checkbox"/> | 3. Export sales have been steady. |
| <input type="checkbox"/> | 4. In the first quarter export sales went up. |
| <input type="checkbox"/> | 5. Then they became steady. |
| <input type="checkbox"/> | 6. Export sales then began to rise. |
| <input type="checkbox"/> | 7. In the last quarter export sales improved slightly. |
| <input type="checkbox"/> | 8. At the end of last year the dollar rose to 1.5. |
| <input type="checkbox"/> | 9. The dollar had never been lower than in January. |
| <input type="checkbox"/> | 10. The dollar remained low for 3 months. |
| <input type="checkbox"/> | 11. Consumer prices declined before March. |
| <input type="checkbox"/> | 12. Consumer prices unexpectedly rose dramatically. |

E. DATA DESCRIPTION (CHANGE OVER TIME)

1. What is the difference between nominal prices and inflation adjusted prices?
2. Describe the graph to your partner so that he/she can fill in the missing information.

Listen to your partner to complete the missing information on your graph.

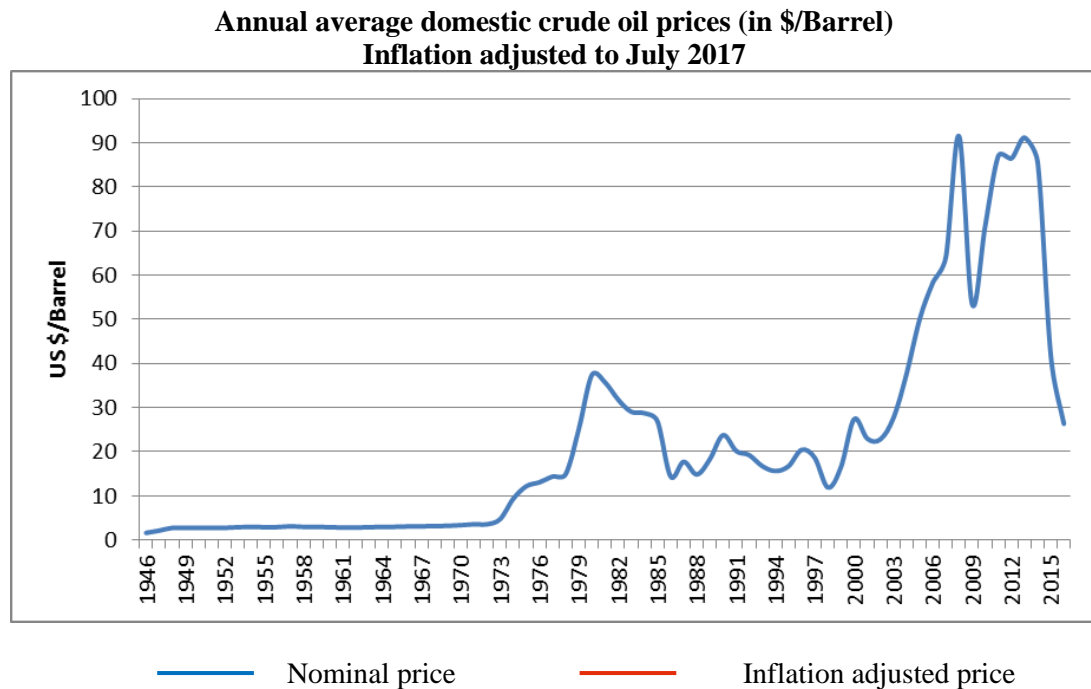
Student A: Nominal crude prices.

Figure 10: Annual average domestic crude oil prices (in \$/Barrel)
Inflation adjusted to July 2017

2. The following events, listed **chronologically**, are correlated with changes in the cost of oil following the post war reconstruction period. In pairs place the reconstruction period and the events on the graph. Be prepared to justify your decisions.

Post World War II reconstruction

Arab Israeli war – Yom Kippur & OPEC oil embargo*

Iranian revolution followed by Iraq-Iranian war

Asian economic crisis & high OPEC output

OPEC output cuts

9/11 attacks in the US

Iraq war

Mortgage crisis stocks crash

Arab Spring (a series of anti-government protests, uprisings, and armed rebellions that began in Tunisia and spread across much of the Islamic world. It began in response to oppressive regimes and a low standard of living)

* embargo = an official ban on trade or other commercial activity with a particular country or countries, or an order of a state forbidding foreign ships to enter, or any ships to leave, its ports.

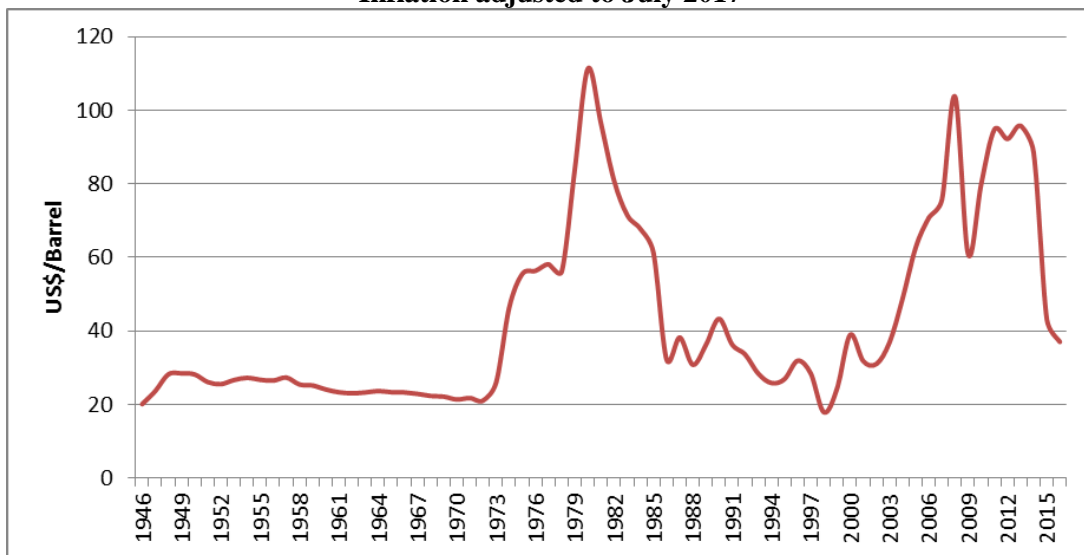
3. In pairs write 3 conclusions that you can draw from the information in the graph.

E. DATA DESCRIPTION (CHANGE OVER TIME)

1. What is the difference between nominal prices and inflation adjusted prices?
2. Describe the graph to your partner so that he/she can fill in the missing information.
Listen to your partner to complete the missing information on your graph.

Student B: Inflation adjusted prices

**Annual average domestic crude oil prices (in \$/Barrel)
Inflation adjusted to July 2017**



— Nominal price — Inflation adjusted price

Figure 10: Annual average domestic crude oil prices (in \$/Barrel)
Inflation adjusted to July 2017

2. The following events, listed **chronologically**, are correlated with changes in the cost of oil following the post war reconstruction period. In pairs place the reconstruction period and the events on the graph. Be prepared to justify your decisions.

Post World War II reconstruction

Arab Israeli war – Yom Kippur & OPEC oil embargo*

Iranian revolution followed by Iraq-Iranian war

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* embargo = an official ban on trade or other commercial activity with a particular country or countries, or an order of a state forbidding foreign ships to enter, or any ships to leave, its ports.

3. In pairs write 3 conclusions that you can draw from the information in the graph.

F. DATA COMMENTARY: EXPLANATION (CHANGE OVER TIME)

Look at the information in the graph below.

1. Which events affect the supply for crude oil and which affect the demand for crude oil?
2. Which events would normally cause the price of crude oil to rise? Why?
3. Which events would normally cause the price of crude oil to fall? Why?
4. Which events seem to be anomalies?
5. **WRITTEN ASSIGNMENT 3** Analyse the graph. Write the data commentary to describe and explain the major trends in the price of crude oil. (Max. length 1 page; Times New Roman 11 or 12; Line spacing 1½.)

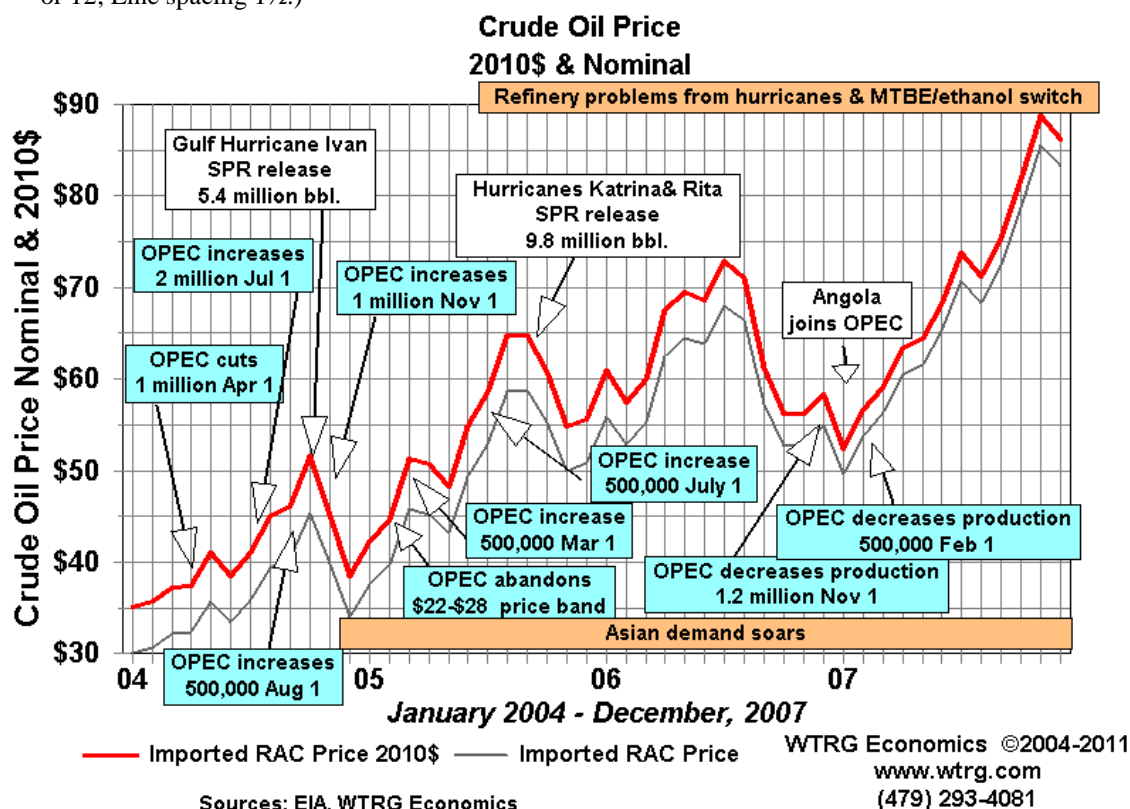


Figure 11: Crude oil price 2004-2007

RAC price = Refiners' Acquisition Cost price, i.e. the cost of crude oil, including transportation and other fees paid by the refiner

SPR = The Strategic Petroleum Reserve (SPR) is an emergency fuel storage of petroleum maintained underground in Louisiana and Texas by the United States Department of Energy (DOE). It is the largest emergency supply in the world, with the capacity to hold up to 727 million barrels (115,600,000 m³).

MTBE = a gasoline additive, used as an oxygenate to raise the octane number

See *Grammar file* for the language of cause and effect.

G. ANALYTICAL EXPOSITION

1. Skim read the following text. Write a one-sentence summary beginning: The writer ...
2. Mark the paragraph breaks in the text.
3. What is the social purpose of the text? Identify the generic stages and moves. (See grammar file for the generic moves of an analytical exposition.)
4. REFERENCE, SUBSTITUTION & ELLIPSIS What do the highlighted expressions in the text refer to?

Electric cars pose little threat to oil demand

Majority of vehicles will remain powered by petrol for at least the next 2 decades

The commodities Note

The Financial Times, 21 March 2017

By Cuneyt Kazokoglu

1. The popular claim that a surge in electric cars will hasten the arrival of peak oil demand is undermined by the data. The majority of the world's cars will remain powered by petrol, also commonly known as gasoline, for at least the next two decades and **this** will drive oil demand, according to data from Facts Global Energy. With the number of passenger vehicles
5. expected to grow to 1.8bn by 2040, the energy consultancy estimates only **10 per cent** will be accounted for by electric cars and a further 20 per cent by hybrids. **This** might sound contentious given the hype around Teslas, the flag-bearer of electric vehicle producers, and many analysts forecasting a structural decline in oil consumption. But most research simplifies **the matter**, suggesting that falling battery prices are tightly correlated with electric
10. car sales. The reality is more complex. The shift towards electric has to be supported by significant government incentives. Norway, for example, owes **its** success to the hundreds of millions of dollars in tax revenues diverted towards subsidies making it almost free to drive an electric car. Today it is normal for a Norwegian to buy an electric car in addition to a petrol vehicle for daily use to save money. Without such a subsidy, sales would fall, as demonstrated
15. in Denmark last year. When the incentive was dropped in January 2016, electric car sales plunged 80 per cent from the previous year. Battery technology is improving but not as fast as necessary. Even at the \$150/kWh – considered widely as **the level** to trigger mass production – a battery pack for an electric car with a comparable range to that of a petrol-powered car would cost tens of thousands of dollars. Cost aside, the improvement in battery
20. effectiveness as measured by energy density is also slow. It is not possible to quickly increase the amount of distance travelled unless you add more batteries to a car, which means more weight and, in turn, a reduction in how far you can go. The affair with the sport utility vehicles, partly driven by low oil prices, remains a problem. Last year, Ford sold six F-series light trucks in the US for every plug-in vehicle, providing solid petrol demand for the years to
25. come. Even in China, one in every three cars sold is an SUV. With relatively low oil prices for at least the next decade, in FGE's view, **this trend** will continue. Production capacity is another obstacle. Despite impressive annual growth rates, total electric car production was less than 500,000 in 2016, compared with global light vehicle production capacity of more than 70m. Tesla put just 80,000 cars on the road in 2016. Mass electrification of global road
30. transport will not be possible without large-scale involvement from the main car manufacturers. A case in point is the Nissan Leaf, now one of the world's bestselling and affordable electric cars. Since **its** launch six years ago, cumulative sales of the Leaf amounted to just 250,000. While its parent group sold almost 10m vehicles last year, less than 1 per cent were electric. Global car production grew approximately 2 m units a year over the past
35. decade. Even if battery electric vehicle production were to grow at **this rate** for the next two decades, their share in the total fleet would remain limited. The fate of petrol demand – and oil for that matter – will not be set in the west but in Asia, which is only at the start of mass motorisation. Asia accounts for approximately one-third of the global light vehicle fleet of 1.1bn. FGE expects growth in **the region** over the next 25 years of more than 500m units,
40. more than the growth in the rest of the world combined. By 2040, almost every other car in the world will be driven in Asia. Even with the most generous electrification assumptions, it is hard to see a "peak" in petrol demand followed by a subsequent drop. A more likely scenario is **it** continues to grow for decades to come.

H. ANALYTICAL EXPOSITION: WRITTEN ASSIGNMENT 4:

Choose one cartoon. Write an analytical exposition in response to the following questions.

What issue does the cartoon raise? What point does it make? To what extent is it valid?

Make sure you include a clear thesis statement.

(Length $\frac{3}{4}$ - 1 page; Times New Roman 11 or 12; Line spacing 1½.)



Figure 12

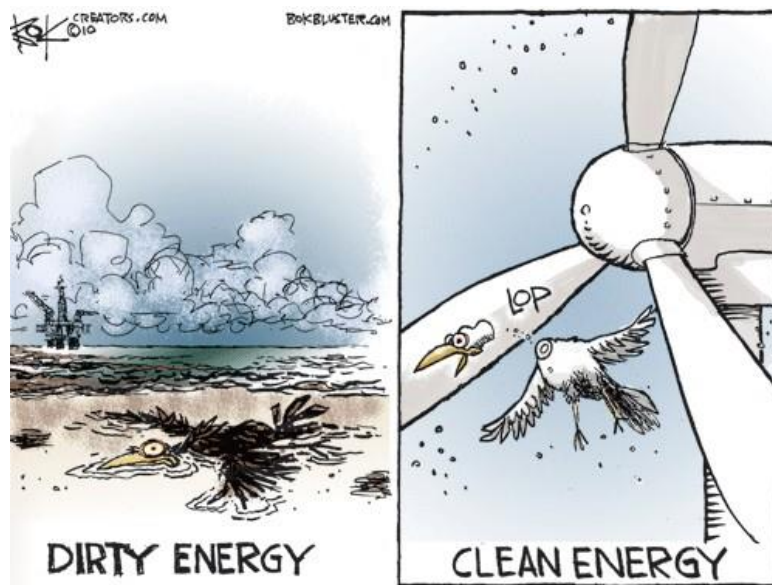


Figure 13