

18. Statistics

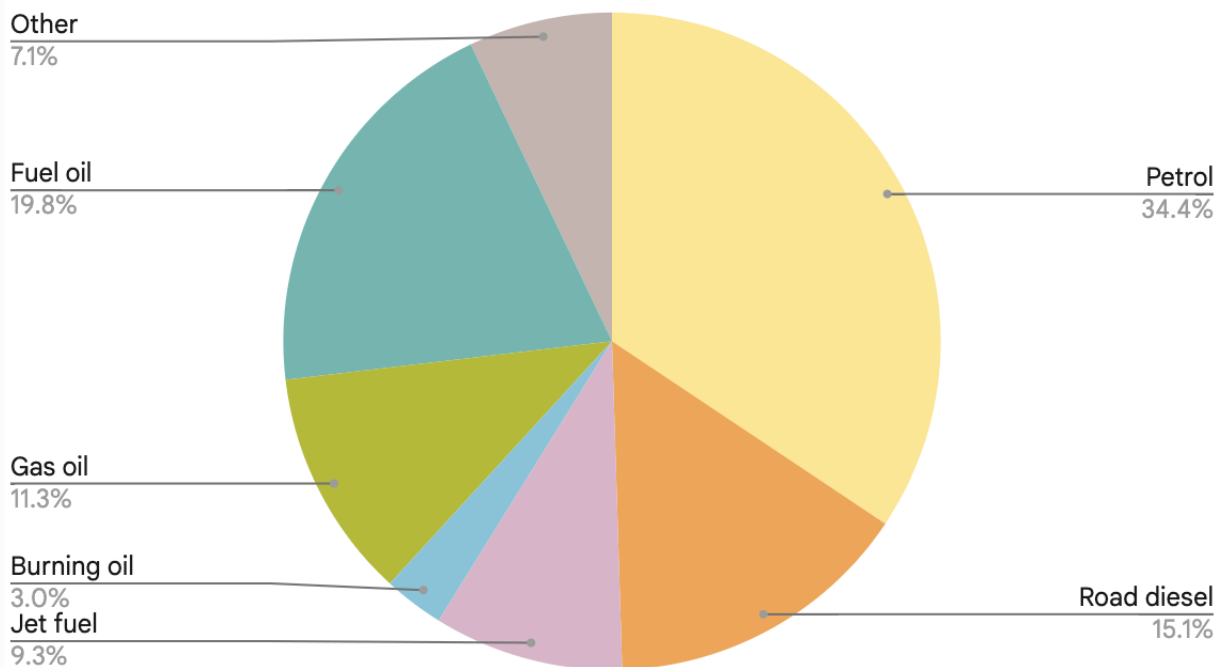
You are undertaking a group geography project to prepare a report on the changing UK demand for petroleum products over the past several decades. You are responsible for using the data to draw insights and produce visualisations.

- The tables below show the demand for petroleum products in 1990 and 2021. Note that the unit used for comparing volumes of oil and gas is “tonnes of oil equivalent”. Produce two accurate pie charts for your project that display this information.

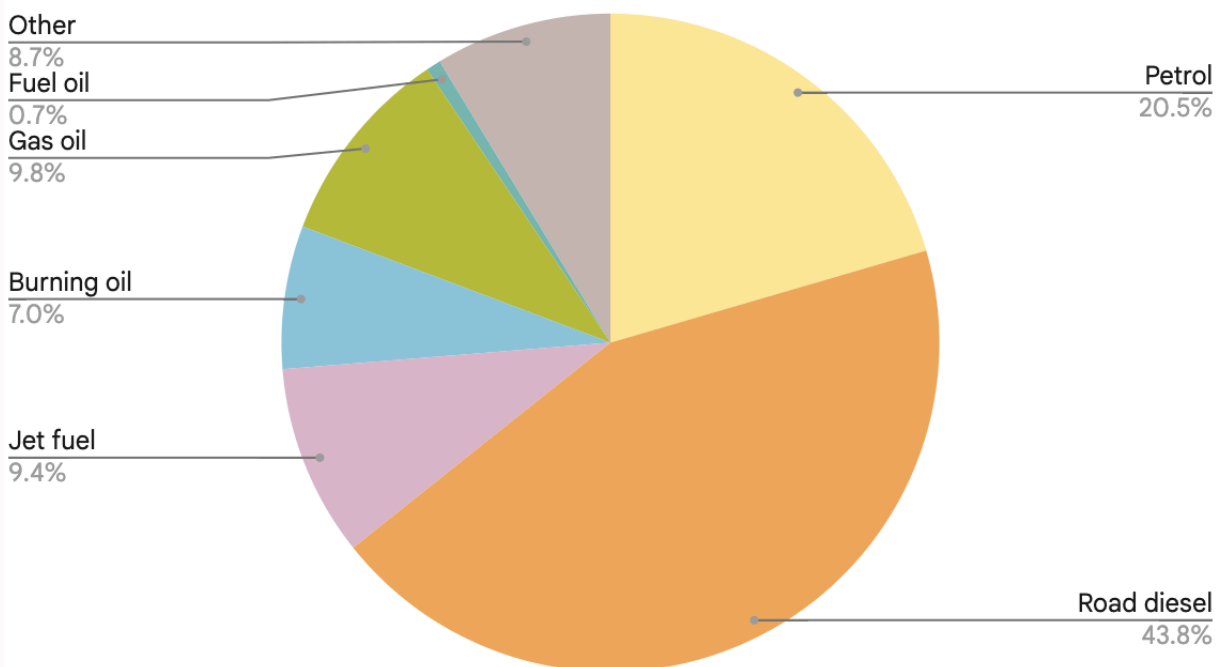
Demand for petroleum products, 1990	
Petroleum type	Million tonnes of oil equivalent
Petrol	24.3
Road diesel	10.7
Jet fuel	6.6
Burning oil	2.1
Gas oil	8.0
Fuel oil	14.0
Other	5.0

Demand for petroleum products, 2021	
Petroleum type	Million tonnes of oil equivalent
Petrol	10.2
Road diesel	21.7
Jet fuel	4.7
Burning oil	3.5
Gas oil	4.9
Fuel oil	0.4
Other	4.3

Demand by petroleum products, 1990



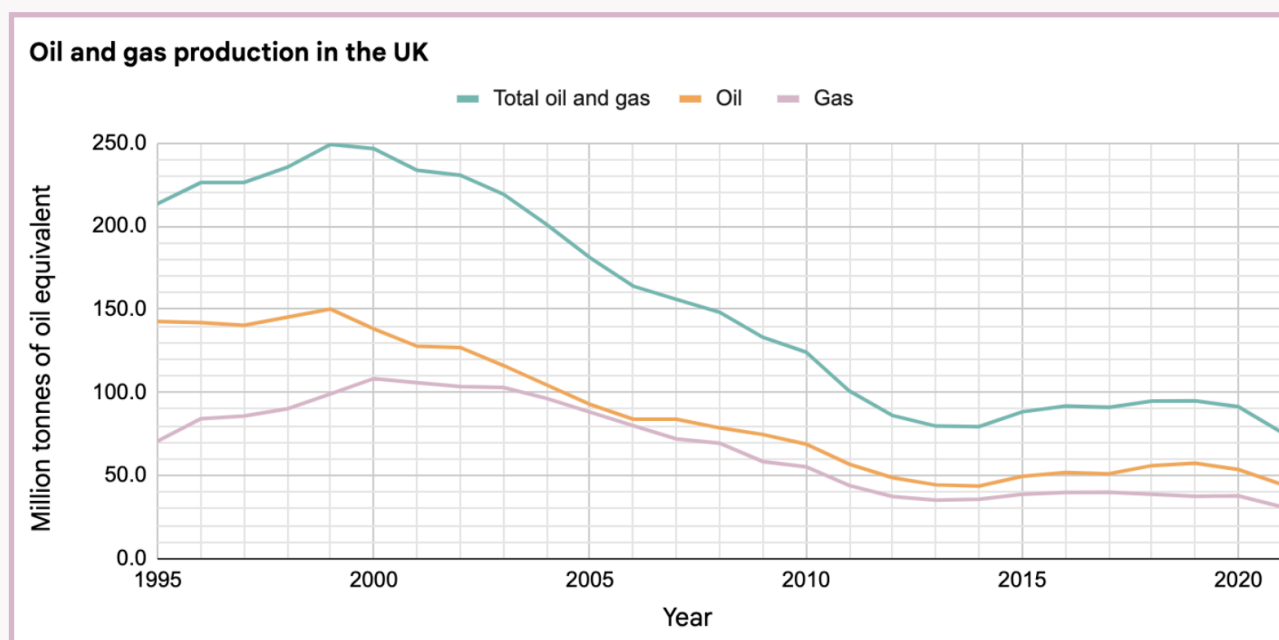
Demand by petroleum products, 2021



2. Comment on the most interesting changes that have occurred during the period from 1990 to 2021.

Overall demand for petroleum products has decreased significantly. Demand for petrol has decreased by over 58% while there has been over a 100% increase in demand for diesel. Even though demand for jet fuel has decreased, it still represents a 9% share of total demand for petroleum products.

3. Use the graph below to complete the following statements.



NB: Ranges have been provided for some of the answers below as it is difficult to take an exact reading from the graph. Any answer within these ranges is acceptable.

- Total oil and gas production was **__25__**% lower in 2021 than in 2011.
- Oil production peaked at 150 million tonnes of oil equivalent in the year **__1999__**.
- Oil production in 2021 was **__70__**% (105 million tonnes of oil equivalent) lower in 2021 compared to its peak.
- Gas production peaked at **__107-110__** million tonnes of oil equivalent in the year 2000.

- e. Gas production in 2021 was **71-73%** (**76-80** million tonnes of oil equivalent) lower than its peak.
- f. The largest annual decrease in total oil and gas production was in 2011, total production fell by **19-20%** (**23-25** million tonnes of oil equivalent). Meanwhile, oil production fell by 18% (12 million tonnes of oil equivalent) and gas production fell by **20%** (11 million tonnes of oil equivalent) compared to the previous year.
4. Taking into account your answers to the questions above, including the pie charts that you prepared for question 1, what trends regarding the UK's demand for petroleum products over the period from 1990 to 2021 have you observed that might be useful for your report?

Any reasonable observations are valid. Example commentary:

Overall demand for petroleum products has decreased significantly, this coincides with the drop in oil and gas production in the UK. In 1995, the UK produced significantly more oil than gas, this gap has narrowed over this period. The petroleum product which saw the greatest increase in demand was road diesel.

The petroleum product which saw the greatest decrease in demand was fuel oil.