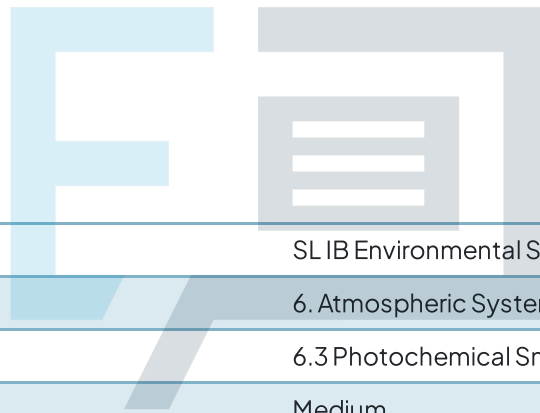




# 6.3 Photochemical Smog

## Question Paper



Course	SL IB Environmental Systems & Societies (ESS)
Section	6. Atmospheric Systems & Societies
Topic	6.3 Photochemical Smog
Difficulty	Medium

# Exam Papers Practice

To be used by all students preparing for  
SL IB Environmental Systems & Societies (ESS)  
Students of other boards may also find this useful

### Question 1

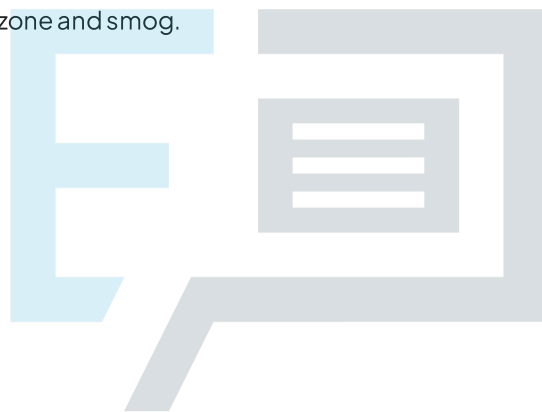
Explain the processes through which the combustion of fossil fuels contributes to the formation of photochemical smog.

[3 marks]

### Question 2

Outline **four** effects of tropospheric ozone and smog.

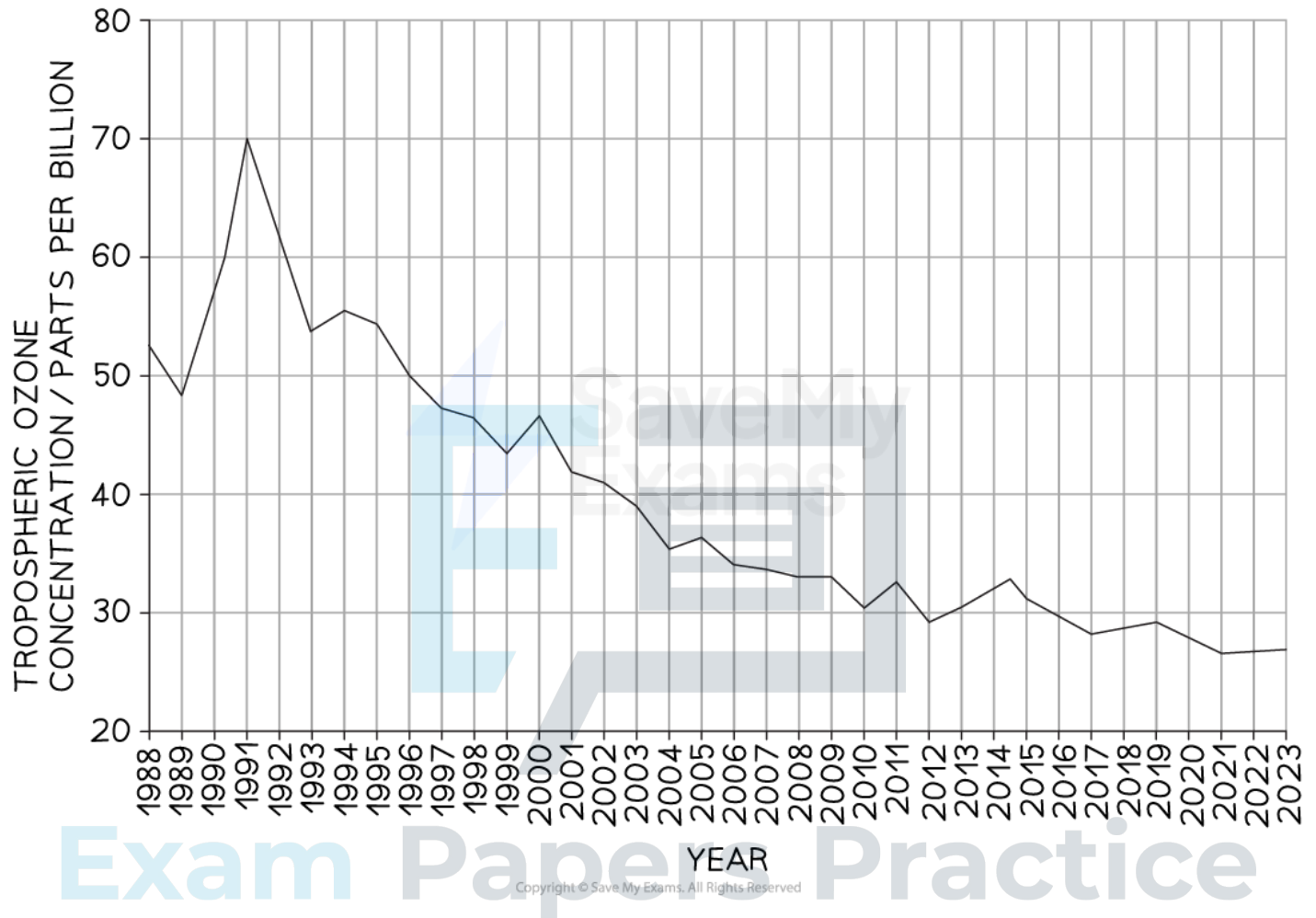
[4 marks]



# Exam Papers Practice

**Question 3a**

The graph below shows global tropospheric ozone levels between 1988 and 2023.



Suggest possible reasons for the overall trends in global tropospheric ozone levels shown by the graph.

[4 marks]

### Question 3b

Use the figure in part (a) to calculate the average annual decrease in tropospheric ozone concentration (in parts per billion) between 1991 and 2010. Show your working.

[2 marks]

### Question 4

List **four** possible air pollution management strategies that can be used to reduce tropospheric ozone and photochemical smog.

[4 marks]



# Exam Papers Practice