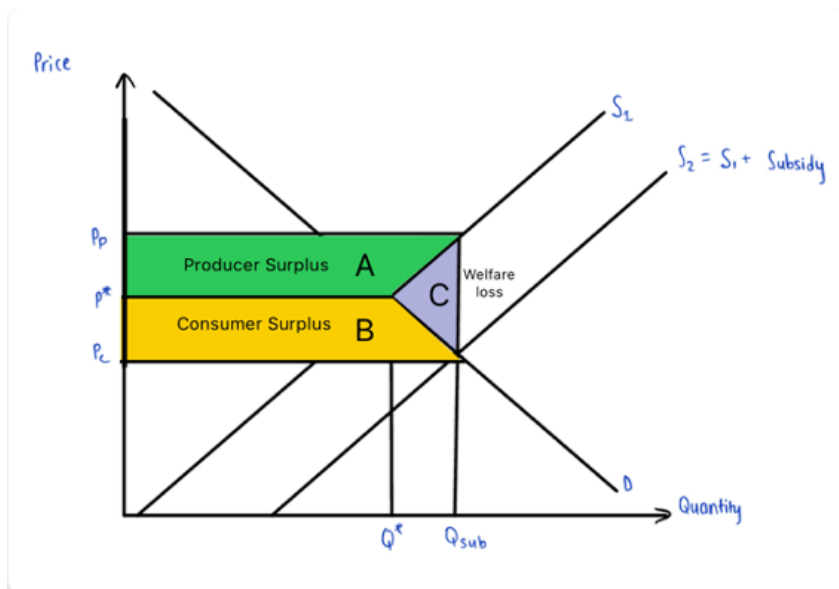


High energy usage firms in the UK may get subsidies amid soaring costs

The UK government is planning to **intervene** due to the rising energy prices leading to economic uncertainty in the UK economy. The government will **intervene** in the market by granting a subsidy which is money paid by the government to firm, per unit of output to make the energy prices more affordable for steel and glass industries.

Rising energy costs may reduce the supply of goods produced by energy-intensive industries such as steel, glass, and ceramics. They are strategic industries contributing almost 2 billion to the UK economy that play a key role in the UK's infrastructure development and economy. A fall in revenues will make it hard for energy-intensive industries to grow. Furthermore, a lack of **intervention** will threaten the industry's efficiency and ability to compete internationally, which is necessary as these manufacturers are “the lifeblood of the British economy”.



Prior to the provision of

the subsidy the economy was producing at Q^*P^* where the high cost of production was threatening the sustenance of energy-intensive firms. The **intervention** would cause a

downward shift in the supply curve, ' $S_2 = S_1 - \text{Subsidy}$ ' increasing the supply from Q^* to Q_{sub} due to the reduction of cost of production. The intersection of the demand curve and new supply curve ' S_2 ' will determine the new market price ' P_c ' payable by consumers which is lesser than P^* , passing on some subsidy benefits, in the form of reduced prices. The market quantity increases to ' Q_{sub} ' increasing revenue for the producers ($P_p * Q_{\text{sub}}$).

After the **intervention**, steel producers may be better off as they would receive the price ' P_p ' which is the price paid by the consumers (P_c) plus the subsidy ($P_p - P_c$). The **intervention** increases the revenue earned by producers. This benefit is outlined in Figure 1 where the gain in producer benefit after the intervention is highlighted by the area labelled as 'A'. Furthermore, society is worse off as Producers are likely to continue producing at the subsidy they will receive which may cause inefficient production.

However, society may be worse off due to overallocation of resources in the market. The allocative efficient quantity of production is Q^* , the intervention is going to cause an overallocation of resources in the market at Q_{sub} . The government may lose as there will be negative effects on their government budget as subsidies are paid from government taxes which may create an opportunity cost. Therefore, there is a welfare loss due to the intervention which will cause an overallocation of resources. This is represented by the purple-shaded area labelled as 'C' in Figure 1.

The consumers will be better off after **intervention** as they would receive a reduction in price from P^* to P_c while also receiving an increase in the quantity supplied from Q^* to Q_{sub} . The gain in the benefit is highlighted in Figure 1 by the yellow shaded area labelled as 'B'.

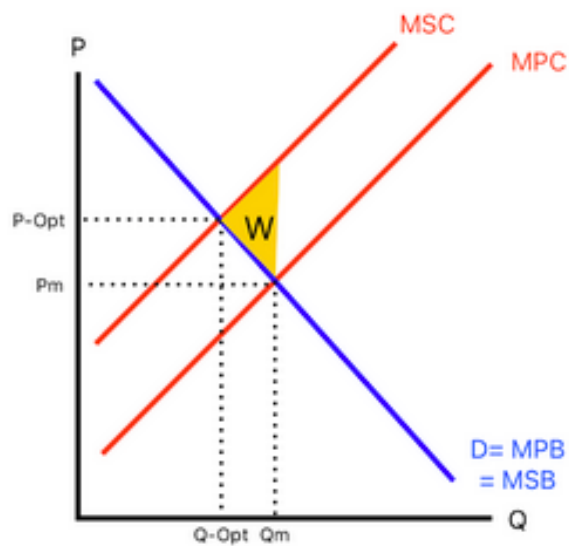


Figure 2: Negative externality caused by exemption from environmental policies

The above curve showcases the negative externality as **intervention** would “raise the exemption for businesses from certain environmental policies from 85% to 100%.” Negative externalities are external costs borne by society. The marginal private cost (MPC) reflects the firm’s cost of production and the marginal social benefit (MSB) represents the cost to society. In the diagram, the MSC is greater than the MPC. The vertical difference between the MPC and MSC curves represents the external cost to society due to the exemption of the policies. The socially optimum market points are given when the MSB and MSC curve intersect which determines Q_{pt} and P_{opt} . A consequence of not producing at the optimum amount is the rise in welfare loss which represents the loss to society. (shaded in yellow labelled W)

This move is Politically motivated as subsidies are financed by taxpayers money which has an opportunity cost. Therefore, it is likely that the intervention leads to pressure on the government.

The intervention would support 300 businesses that would provide 60,000 jobs which would help reduce unemployment because firms would mitigate the need to make employees redundant and employ more of them to match the increase in demand for steel due to a fall in price. Therefore, employees will be better off with the **intervention**.

In conclusion, the **intervention** provides many benefits and limitations to the economy, nevertheless, with the available information, the UK government is recommended to pursue the subsidy as it is important to support strategic industries amid an upcoming recession. However, the British government must acknowledge and maximise the benefits for the stakeholders that are better off, i.e, the producers and employees while minimising the drawbacks to the stakeholders that are worse off, i.e, society and the government.