**Watch the Carbon Trading YouTube clip – answer the following questions:**

What is a ‘**tradable permit**’?

What is a carbon unit/tradable permit, how much is it equivalent to?

If a country is struggling to stay below their quota of carbon units, what two options do they have?

How is the price of a carbon unit/tradable permit determined?

**Answer the following questions relating to Carbon Trading/Tradable Permits**

1. Using the axes below, draw an **externality diagram** to demonstrate the effect of CO2 emissions upon society – make sure that you highlight the welfare loss and optimum level for society (Q\*).
2. Now consider the effects of the **tradable permit** scheme, make additions to your externality diagram (above) to demonstrate the impact upon the market.

**Mr Wilson’s Further Thinking Challenge…**

Consider the perceived optimum level of output (Q\*) for society, what evaluative points could you make about this level of output and the subsequent externality?





**Concerns over EU carbon trading**

**The European Commission has questioned the effectiveness of the EU's emissions trading scheme, the cornerstone of its climate change policy.**

Under the scheme, governments set quotas for the carbon dioxide emissions produced by 9,400 large factories and power stations in 21 member states.

Carbon permits are issued to give firms a financial incentive to invest in clean technology and cut emissions.

But the commission's report showed that states have issued too many permits and that without stricter regulation, the prospect of corruption could become a realistic proposition.

Many commentators have further questioned the credibility of similar schemes without the two largest contributors.

A fundamental flaw of similar schemes is that the two largest polluters, China and the United States, who account for some 43% of the all carbon emissions, have not agreed to be a part of any such scheme.

The permits effectively make the right to pollute a tradable commodity - giving companies the ability to buy and sell permission to emit extra carbon dioxide.

Emissions of carbon dioxide - a greenhouse gas - are widely thought to be a key factor in global warming, increasing atmospheric temperatures around the world. But experts claim this method of intervention does not actually compensate those parties which are negatively affected, rather it simply shifts the problem and becomes the responsibility of firms who, rather than actually address the issue, are juggling ‘carbon credits’ so that they can continue to pollute.

The Commission's reports showed a 2.5% surplus for 2005, with the 21 states granting 44.2 million metric tons more carbon dioxide permits than needed.

**Quota questions**

Unlike many other states, the UK kept a tight rein on the number of pollution permits it issued. But as a result, it exceeded its quota of permits for 2005.

However, the UK has been in conflict with the EU over its level of permits, with Britain now arguing that it set itself too tight a target when the scheme was originally launched.

The EU has threatened to take legal action against the UK for exceeding its national quota, set in April 2004. But the UK government is claiming that it should be measured against the revised quota it set in October 2004, which gave business more generous targets.

**Slumping prices**: When it emerged that the number of permits exceeded demand, prices slumped.

The price of carbon credits traded in Europe has already fallen by around 60% over the past two weeks because some of the data from the report was released early.

"It's clear that most countries were too generous when handing out allowances," said David Foster, head of emissions and weather derivatives at Calyon, part of Credit Agricole. "The dissemination of the information has been a farce."

The idea of the carbon-trading scheme was to raise the cost to firms of continuing to pollute while creating a market to give an incentive to become more environmentally efficient.

1. Why are there concerns over the implementation and regulation of the scheme?
2. Explain how the absence of the United States and China are detrimental to this intervention?

1. The number of pollution permits issued depends very much upon the EU’s interpretation of the socially optimum level, what are the problems involved with this?

1. Using a demand and supply diagram (on the axes below) to demonstrate the effect on the market price for tradable permits, after it emerged that the number of permits exceeded demand.
2. How might this low price of a carbon unit fail to deter firms from polluting?

 **Mr Wilson’s Thinking Further Challenge…**

Assess two other methods of government intervention which could be used to combat CO2 emissions.