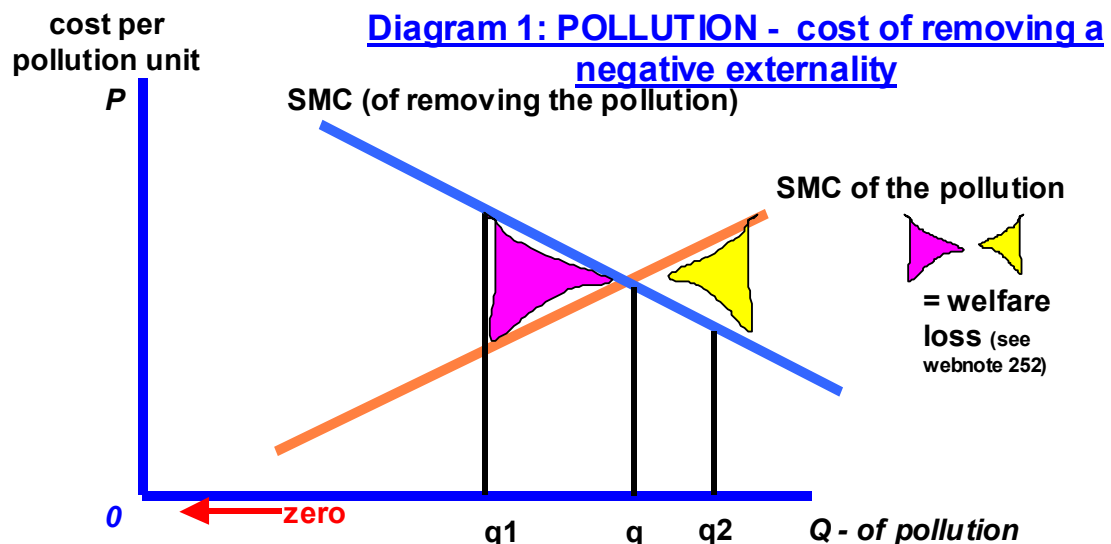


SYLLABUS REFERENCE 1.4¹: Zero pollution + Solutions for Market Failure

Resource Allocation applying the concept of welfare economics: A solution to Market Failure using Social Costs + Benefits²



COMMENT: DIAGRAM 1

- **What is the optimum level of pollution ?**

Answer :

- **Zero ?**
- **Opportunity cost of removing the pollution e.g. litter would be too high**
- **Reducing pollution to q1 would involve a welfare loss because the marginal social cost of reducing the pollution would exceed the benefit people would receive**
- **The opportunity cost of transferring resources to bring about a q1 solution would be too high in terms of society's use of the factors of production**

¹ **TKB/NOTES/IB S+H/ source:grant + young**

² for more on diagram 1 and welfare economics see sebnote 252 + Stanlake ,Introductory Economics' page 219

CONCLUSIONS:

What then is the role of government ?

- **Legislation establishing regulations and penalties**
- **Measurement of negative externalities can be very difficult**
- **International agreements: Kyoto, the Hague ? ? Kyoto valid until 2012.**
- **Taxation : direct taxes on the profits of firms The power of the firm is crucial here. If some degree of monopoly power exists then the firm may simply pass on the costs to the consumer in the form of higher prices**
- **Indirect taxes can be used to discourage demerit goods**
- **Subsidies can be used to encourage firms to produce goods and services that result in external benefits e.g. labour training subsidies**

Some Solutions:

1. legislation
2. penalties
3. international agreement
4. taxation
5. ban
6. extend property rights
7. advertising
8. subsidy
9. tradeable permits
10. government provision of public and merit goods

What government can do to reduce negative externalities?

- Government provides public and merit goods
- Tax/ban/advertize demerit goods
- Subsidize merit goods
- Tax/penalize polluters e.g european car industry

- Negative and positive advertising
- Extend property rights
- Legislation (Kyoto 2001). Regulate domestic market e.g tradeable permits to control co2 emissions (global warming)/Carbon credit schemes

Exam focus
MAY 2002 HL 2

2. Explain how the use of expenditure / indirect taxation might be an appropriate response to the problem of negative externalities.

May 2003 HL 1

3 (b) Evaluate the options available to governments to overcome the failure of markets arising from the production and consumption of demerit goods. Illustrate your answer with

- **concept /theme focus:**
 1. MsB +MsC
 2. welfare loss
 3. markets require regulation /intervention
 4. market bases solutions are still possible e.g. tradeable permits
- Welfare loss is a socially inefficient allocation of resources
- Social optimum is where MsC=MsB

Exam focus Nov 2000 HL 1

3 (a) Why are environmental problems considered to be an example of market failure?

(b) To what extent can government intervention correct this failure?

Reading:
See Stanlake and Grant Chapter 26 Government Responses to Market Failure
Copies on reserve in library