## Negative externality

A negative externality occurs when there is a cost imposed on a third party.

- For example, if a firm produces chemicals, the external cost is the pollution that causes damage to the river and the lost earnings for fishermen.
- If you drive into a town centre, the negative externality is the congestion and pollution that affects other people in the town.
- With a negative externality, the social marginal cost is greater than the private marginal cost.



In a free market, the equilibrium will be at Q1, P1, where Supply (S) = Demand (D).

- However, at Q1, the SMC is greater than the PMC.
- Q1 is socially inefficient because the SMC is greater than the SMB this illustrates an area of deadweight welfare loss.
- In this example, there is **overconsumption** of the good with negative externalities.
- The socially efficient level of output would be at Q2, where SMC=SMB.

## **Positive externality**

A positive externality in consumption occurs when there is a benefit to a third party from your consumption.

- For example, if you cycle to work (rather than drive), other people benefit from reduced congestion and pollution.
- If you keep bees, then a nearby apple farmer benefits because your bees help to pollinate his apple trees.

## Diagram of positive externality



In a free market, the equilibrium will be at Q1, P1, where Supply (S) = Demand (D).

- However, this is socially inefficient.
- At Q1, the SMB is greater than the SMC, leading to an area of deadweight welfare loss.
- With a positive externality, there is **under-consumption**.
- Social efficiency occurs at Q2, where SMB=SMC.