### 4 Diagrams you need for Externalities

**ED 2: externalities**

Best Uses:

* sustainability / unsustainability welfare gain (maket increases in size)
* welfare gain (underproduction/consumption)
* welfare loss (overproduction/consumption)
* supports arguments for regulation of markets to
* cope with over and under production +
* consumption

**(4 uses of the MsB/MsC diagram) How to draw the diagram correctly? See the ‘blue box’ in webnote 141.**

**Welfare loss**

= a non optimal allocation of resources.

**MsB** is not

equal to

**MsC**

### addressing market failure 2.4[[1]](#footnote-1): diagrams 1-4

* **‘overproduction’ in Perfect Competition 2.2 (HL) – diagram 1**
* **Macroeconomic statistics do not measure externalities 3.1**
* **This diagram could also be used in conjunction with welfare economics / producer and consumer surplus. See webnote ED 2.**
* **Seee webnote 252 for an explanation of welfare loss**
* **To illustrate Poor resource allocation/ economic or resource efficiency**

**Production externalities**



**Negative Externality of Production**

**COMMENT: DIAGRAM 1**

* **Q1 is the socially efficient level of output**
* **Market supplies q2**
* **Overproduction = area abc**
* **Abc = welfare loss**
* **This is a welfare loss or cost to society of the market failure. ABC can also be referred to as ‘ dead weight loss’**
* **Examples are environmental pollution caused by industry that damage the environment and increase costs to society**

**Positive Externality of Production**

**COMMENT: DIAGRAM 2**

* **Q1 is the socially efficient level of output**
* **Market supplies q**
* **Underproduction = area abc**
* **Abc=welfare loss**
* **This is a welfare loss to society of the market failure.**
* **Example would be a chemical plant installing a water purification system that benefits other local firms e.g. a local fish farm is not paying for cost of clean water**



**B**

**ED 2**

### 4 Diagrams you need for Externalities

**Consumption externalities**



COMMENT: DIAGRAM 3

* **Q2 is the socially efficient level of output**
* **Market only supplies q1**
* **Underconsumption = area of jkl**
* **Jkl = welfare loss**
* **This is a welfare loss to society**
* **Could apply to education ( society benefits from educated individuals) and health care (avoiding an epidemic) in an LDC or to the construction of beautiful buildings that enhance the local environment**



COMMENT: DIAGRAM 4

* **Q1 is the socially efficient level of output**
* **community supplies q2**
* **Overconsumption = area of jkl**
* **Jkl = welfare loss**
* **This is a welfare loss to society**
* **Example would be an individual listening to loud music that affects local neighbours**
* **Demerit goods e.g tobacco, drugs**

1. **For further reading** **see the article on page 6 of the Economic Review, April 2003 issue, Volume 20, number 4. Title is Externalities** [↑](#footnote-ref-1)