



**Centurion**  
**UNIVERSITY**

*Shaping Lives...  
Empowering Communities...*

# **MARKET INEFFICIENCY WITH EXTERNALITIES**

**Dr. Madhumita Das**



**Centurion**  
**UNIVERSITY**

*Shaping Lives...  
Empowering Communities...*

# Analysis of Inefficiency

- Why do externalities like pollution lead to economic inefficiency?
- Take a hypothetical coal-burning electric utility. Dirty Light & Power generates an externality by spewing out tons of noxious sulphur dioxide fumes.
- Some of the sulphur harms the utility, requiring more frequent repainting and raising the firm's medical bills.
- But most of the damage is “external” to the firm, harming vegetation and buildings and causing various kinds of respiratory ailments and even premature death in people.



**Centurion**  
**UNIVERSITY**  
*Shaping Lives...  
Empowering Communities...*

# Socially Efficient Pollution

- Given that private decisions on pollution control are inefficient, is there a better solution?
- In general, economists look to determine the socially efficient level of pollution by balancing social costs and benefits.
- More precisely, efficiency requires that the marginal social benefits from abatement equal the marginal social costs of abatement.



**Centurion**  
**UNIVERSITY**  
*Shaping Lives...  
Empowering Communities...*

An unregulated market economy will generate levels of pollution (or other externalities) at which the marginal private benefit of abatement equals the marginal private cost of abatement.

Efficiency requires that the marginal social benefit of abatement equals the marginal social cost of abatement.

In an unregulated economy, there will be too little abatement and too much pollution.



**Centurion**  
**UNIVERSITY**

*Shaping Lives...*  
*Empowering Communities...*





**Centurion**  
**UNIVERSITY**

*Shaping Lives...*  
*Empowering Communities...*

**THANK YOU**