

# Environmental Economics & Policy

ATS 150

The Tragedy of the Commons is one of the fundamental ideas of Environmental Economics.



Boston Common was once a public park where anyone could allow their cow to graze.





I want another cow!

I want another cow!

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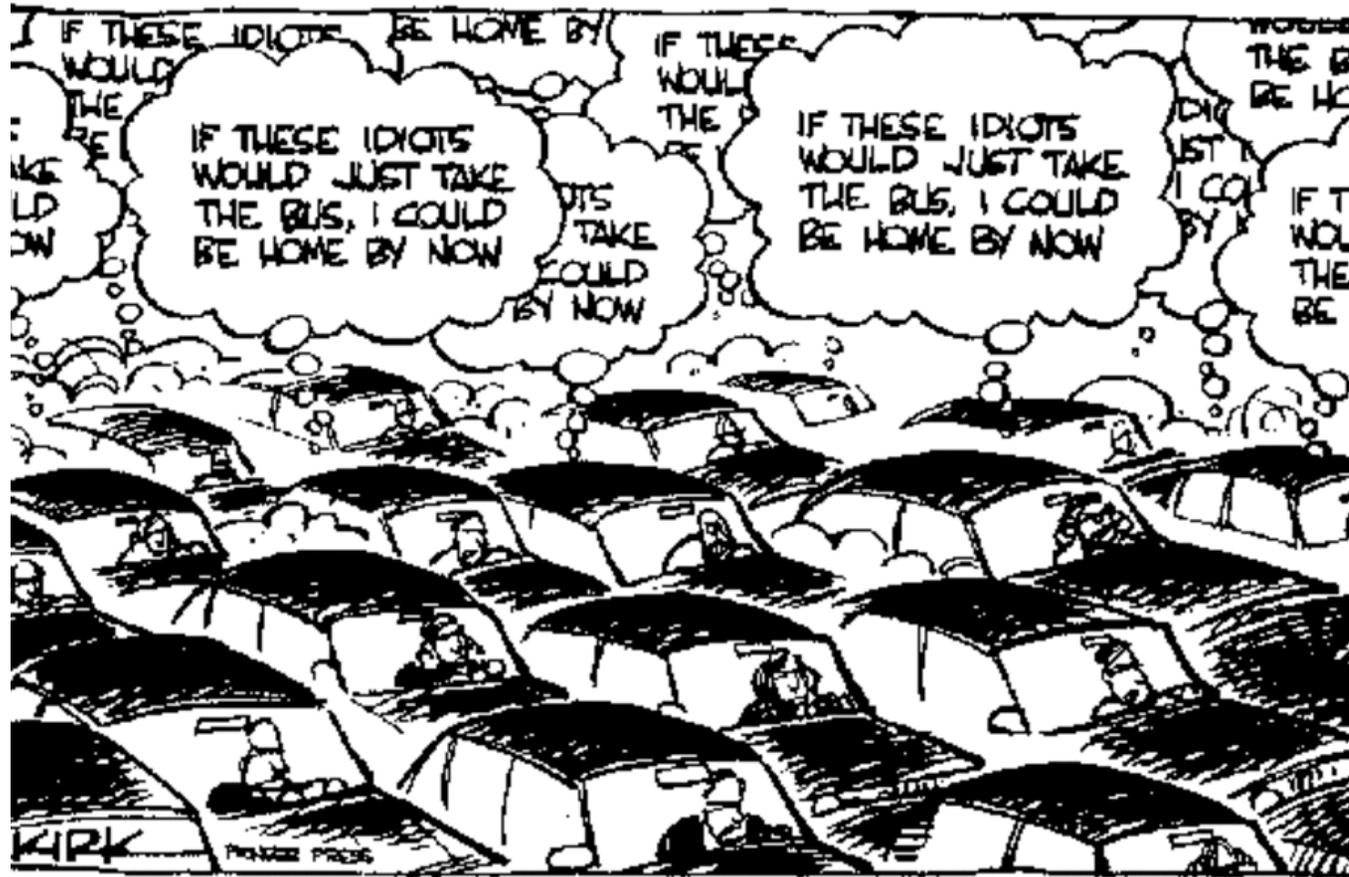
GEORGE

Grazing was limited to 70 cows in 1646.



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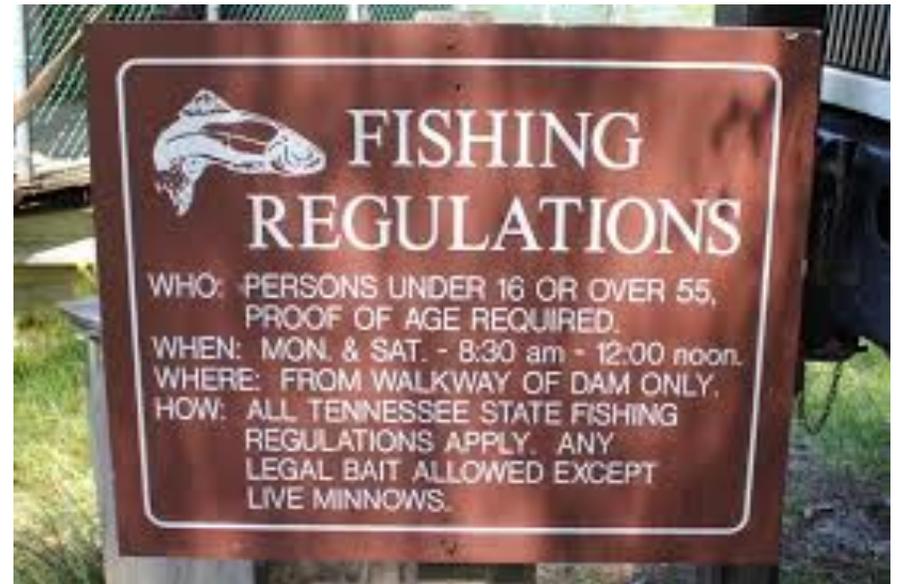


In our overfishing example, what are the costs of resource depletion?



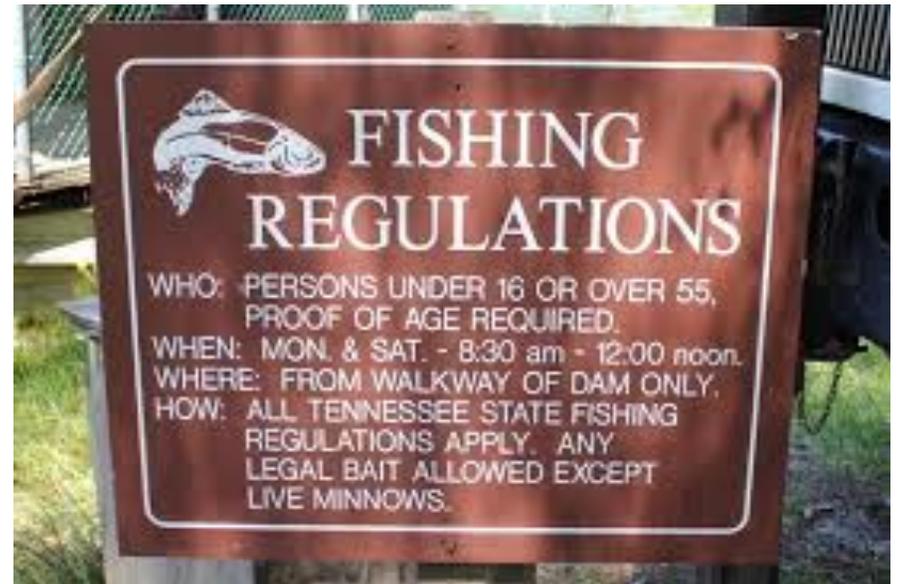
# How could we solve this problem?

1. Apportion ownership of the resource
2. Limit consumption voluntarily
3. Institute government regulations

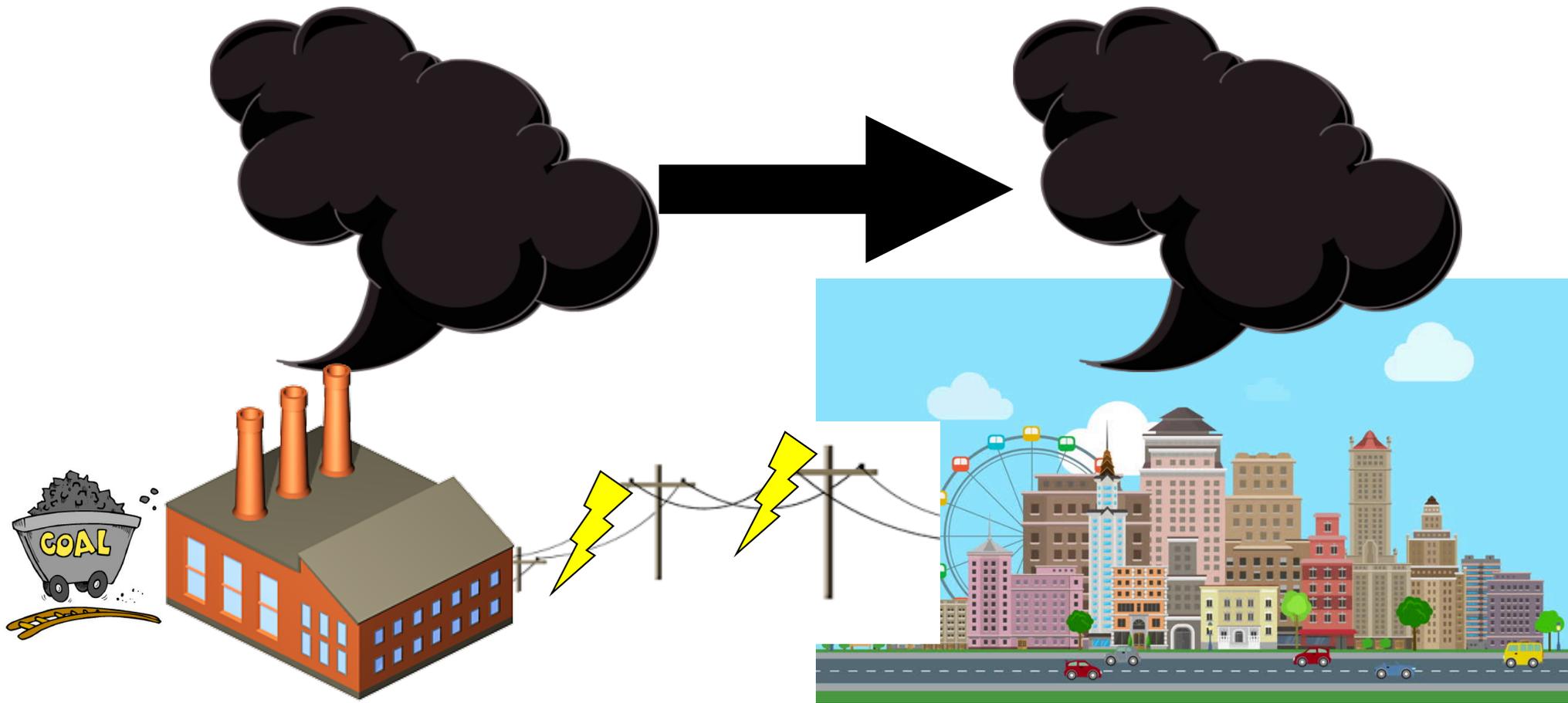


In the real world, all these solutions work, but not all the time.

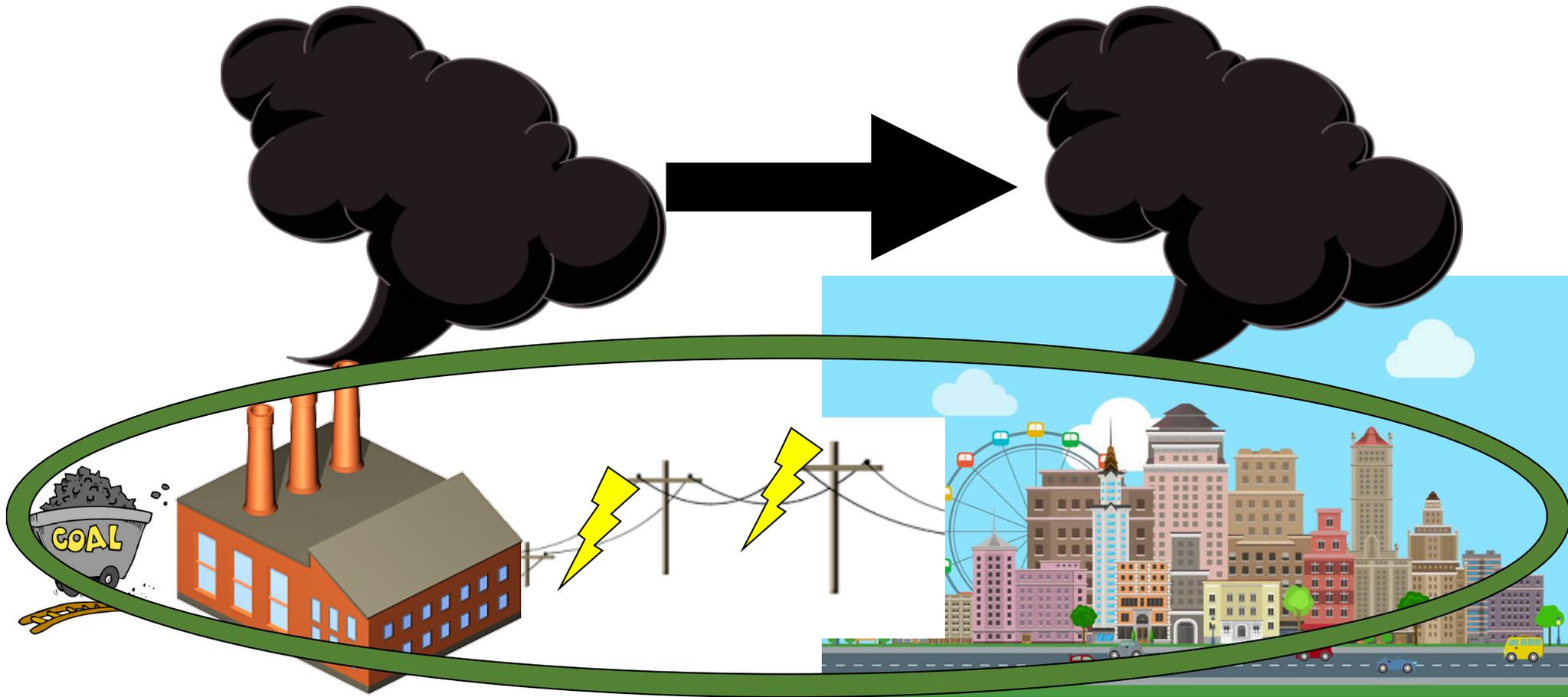
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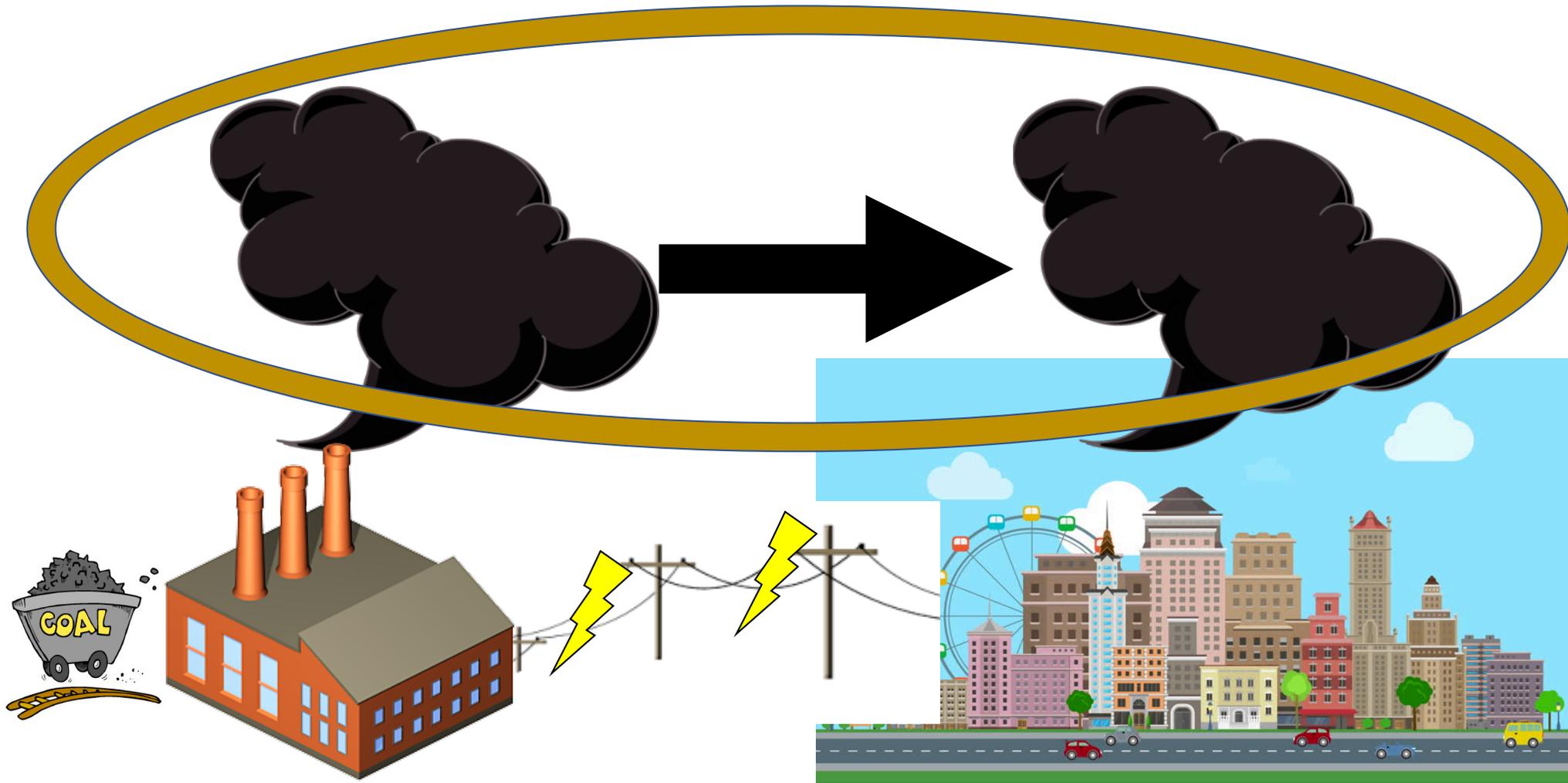
New example: a coal-fired power plant upwind of a town.



Everything in **this circle** is paid for with money.



The pollution is a **Negative Externality!**



Externalities are market failures wherein there are costs or benefits to an activity that are not priced.

**Positive Externalities**

**Negative Externalities**

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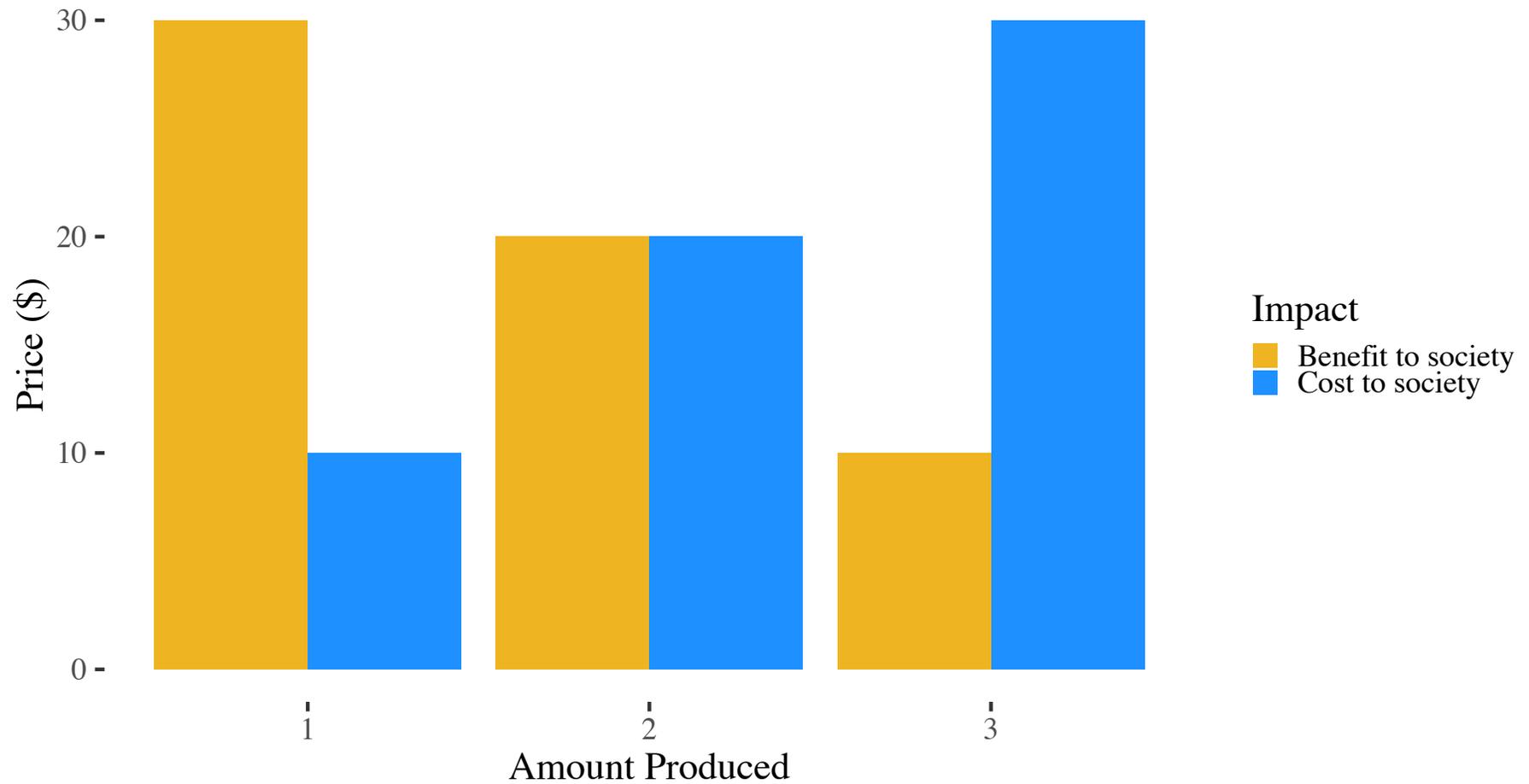
### **Positive Externalities**

- Education
- Vaccination
- Bees?!

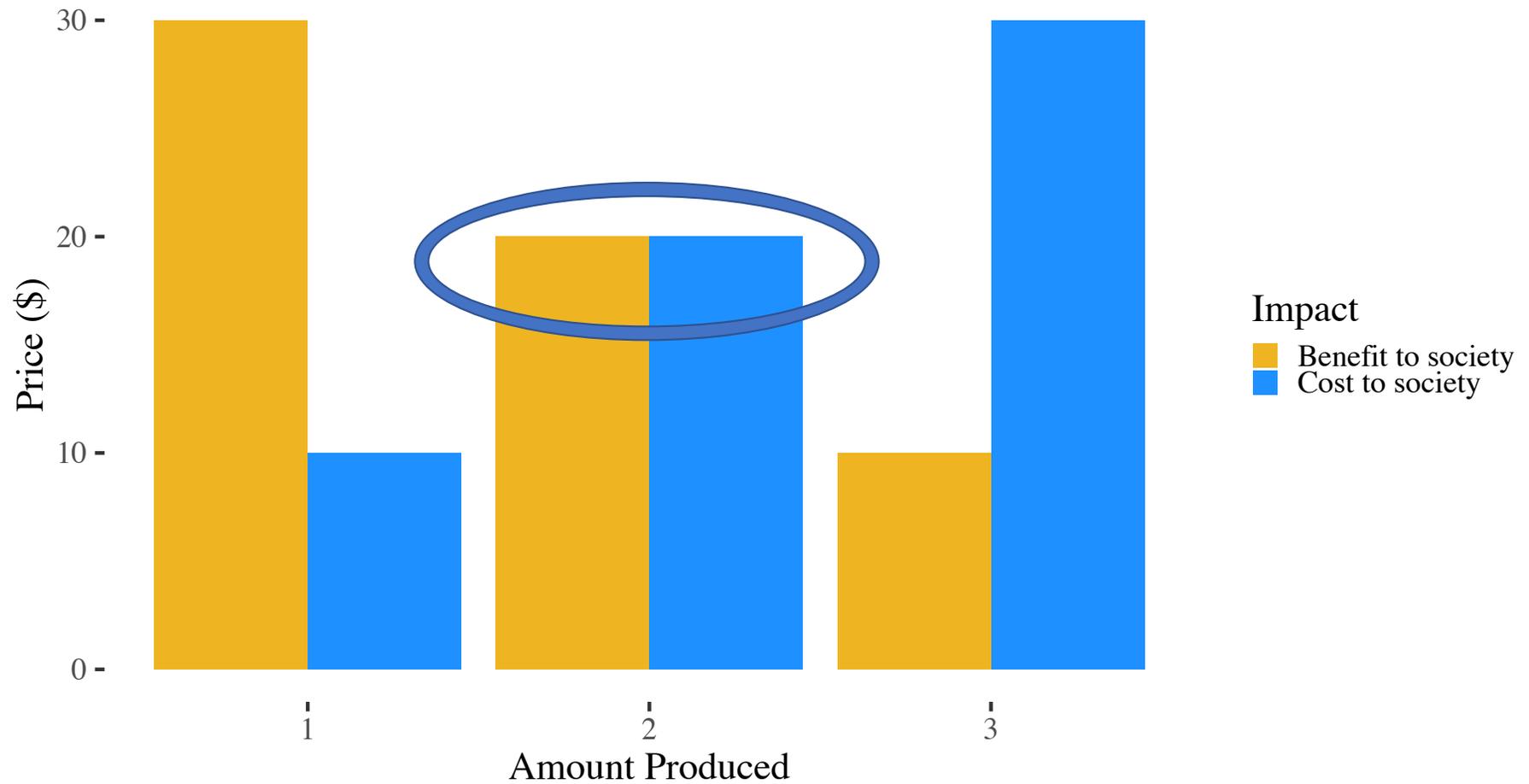
### **Negative Externalities**

- Air/Water pollution
- Climate change
- Antibiotic resistance
- Traffic
- Secondhand smoke

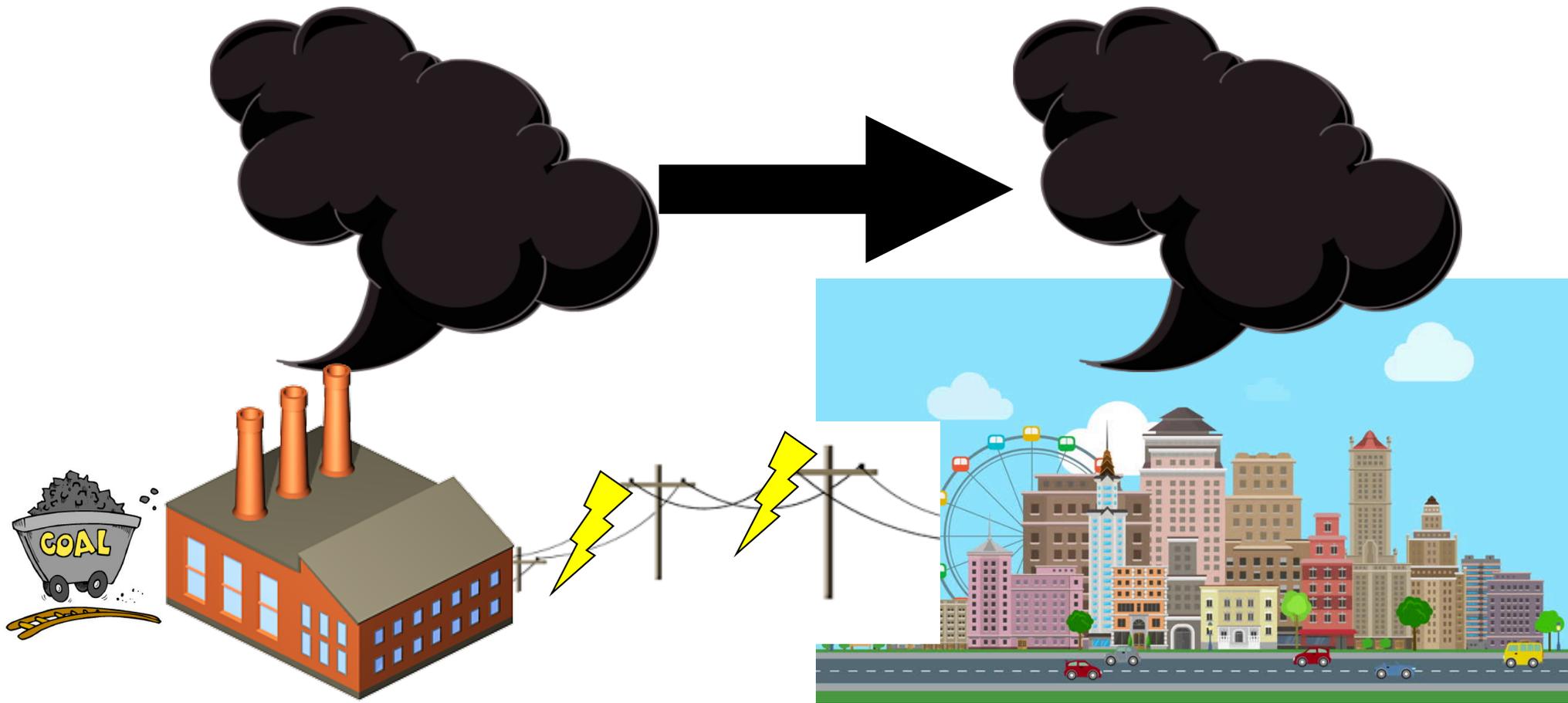
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The power plant in this example is offloading some of its costs on to the city - it isn't paying the full price.



Because the **power plant** only makes decisions based on the costs it pays, this means that **society** suffers.

