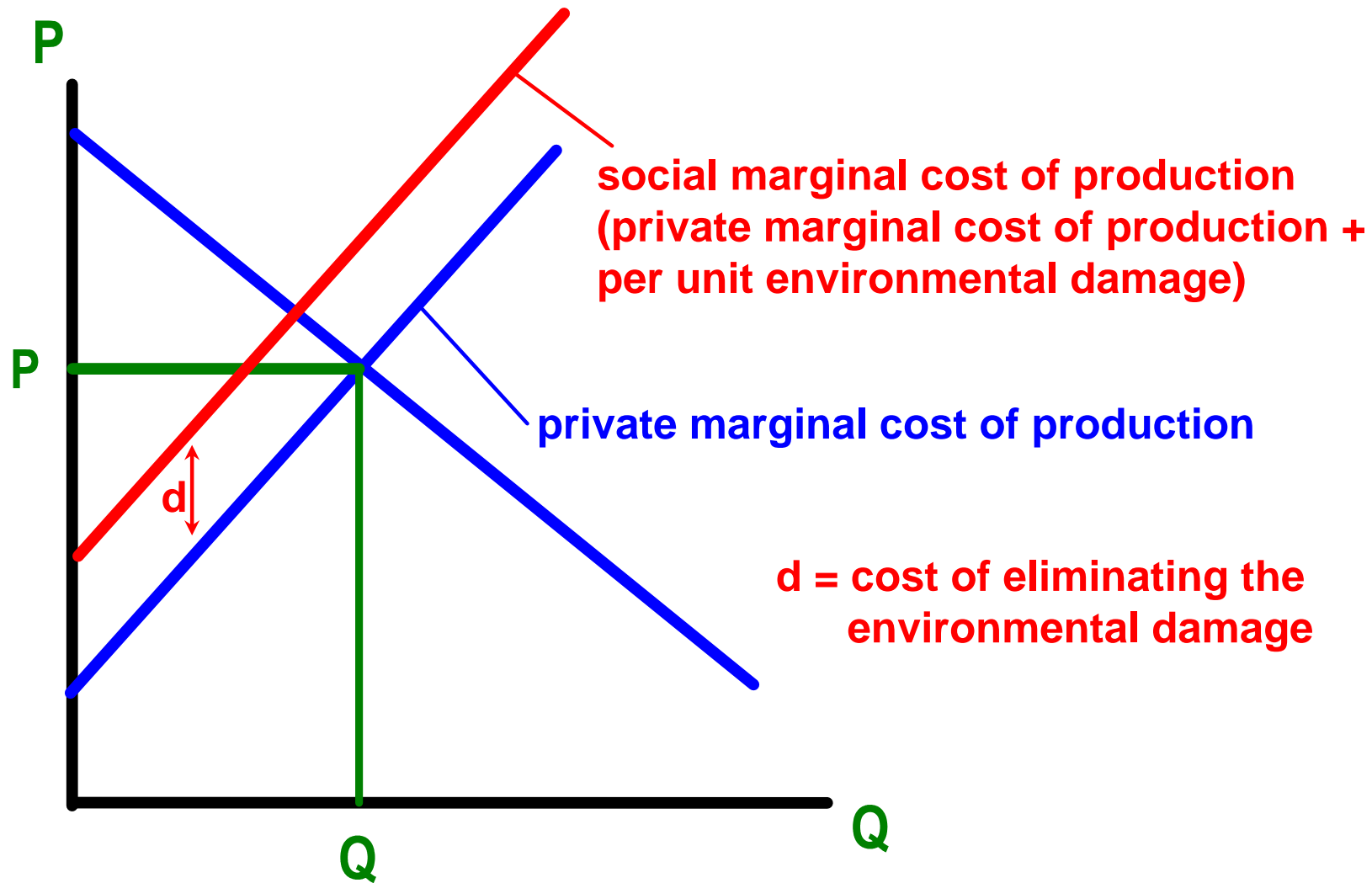


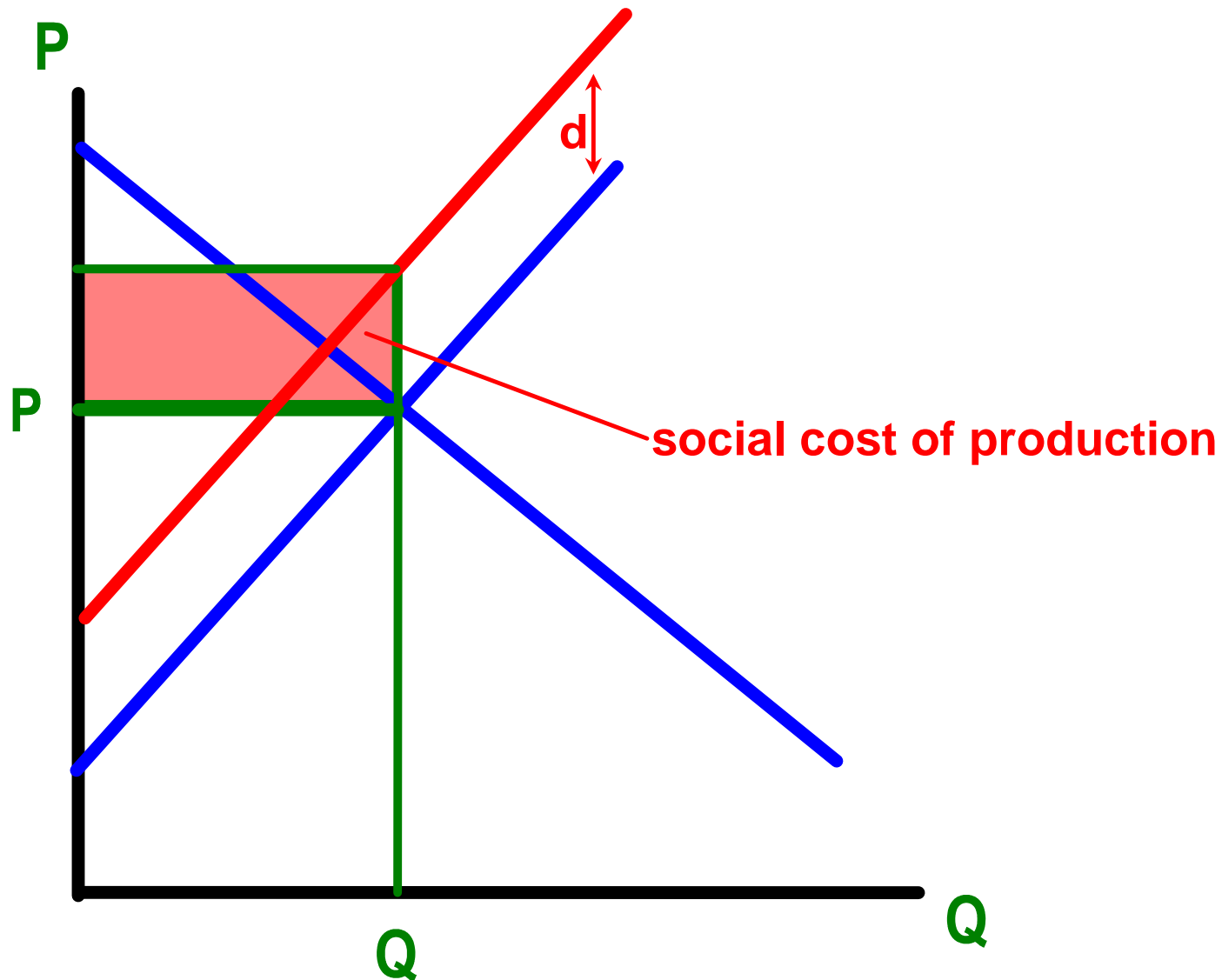
# **Trade, trade policies, environmental policies and the environment**

- **environmental policies and market equilibria**
- **trade policies, market equilibria and the environment**

# The environmental issue: the autarchy case

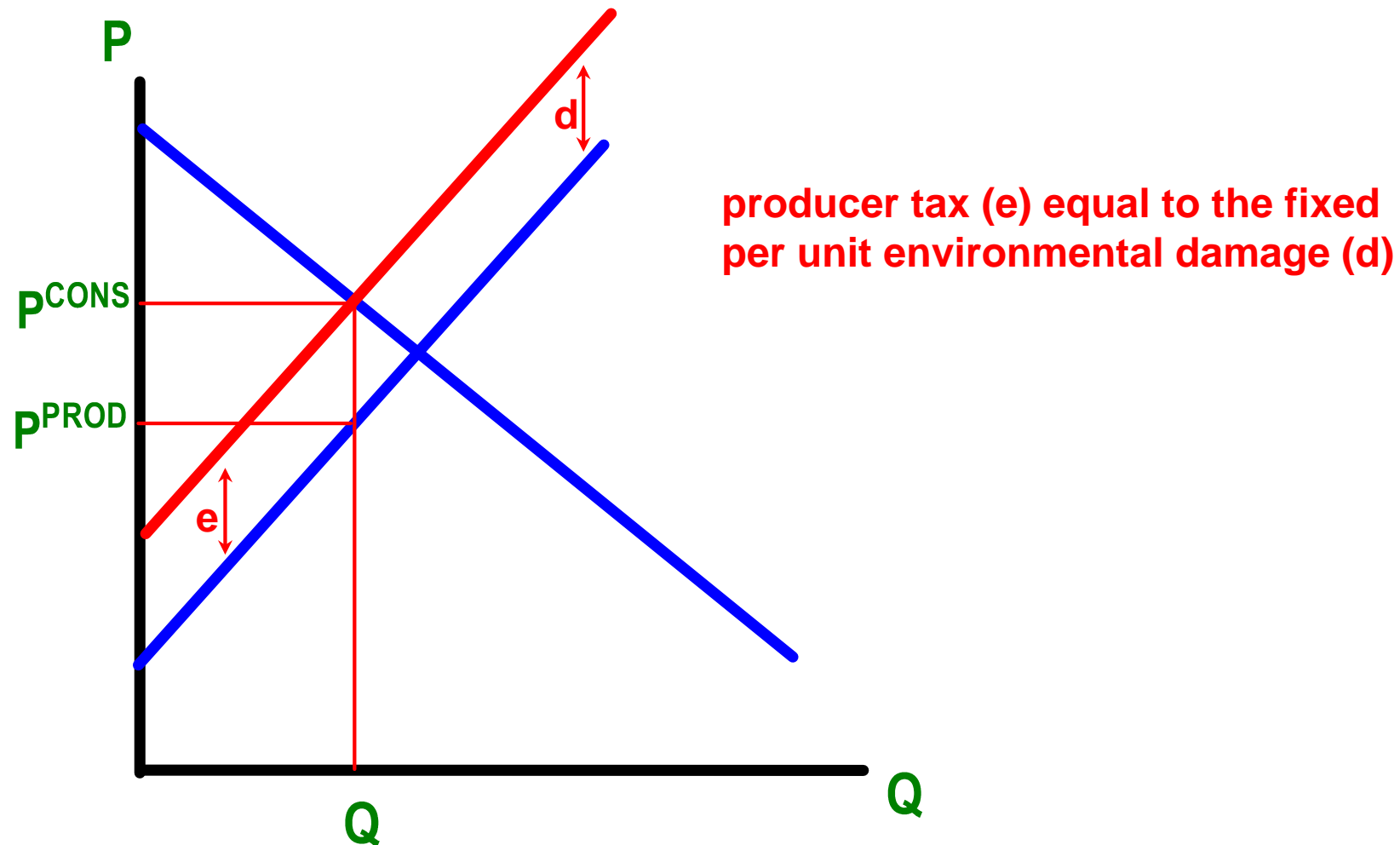


# The environmental issue: the autarchy case



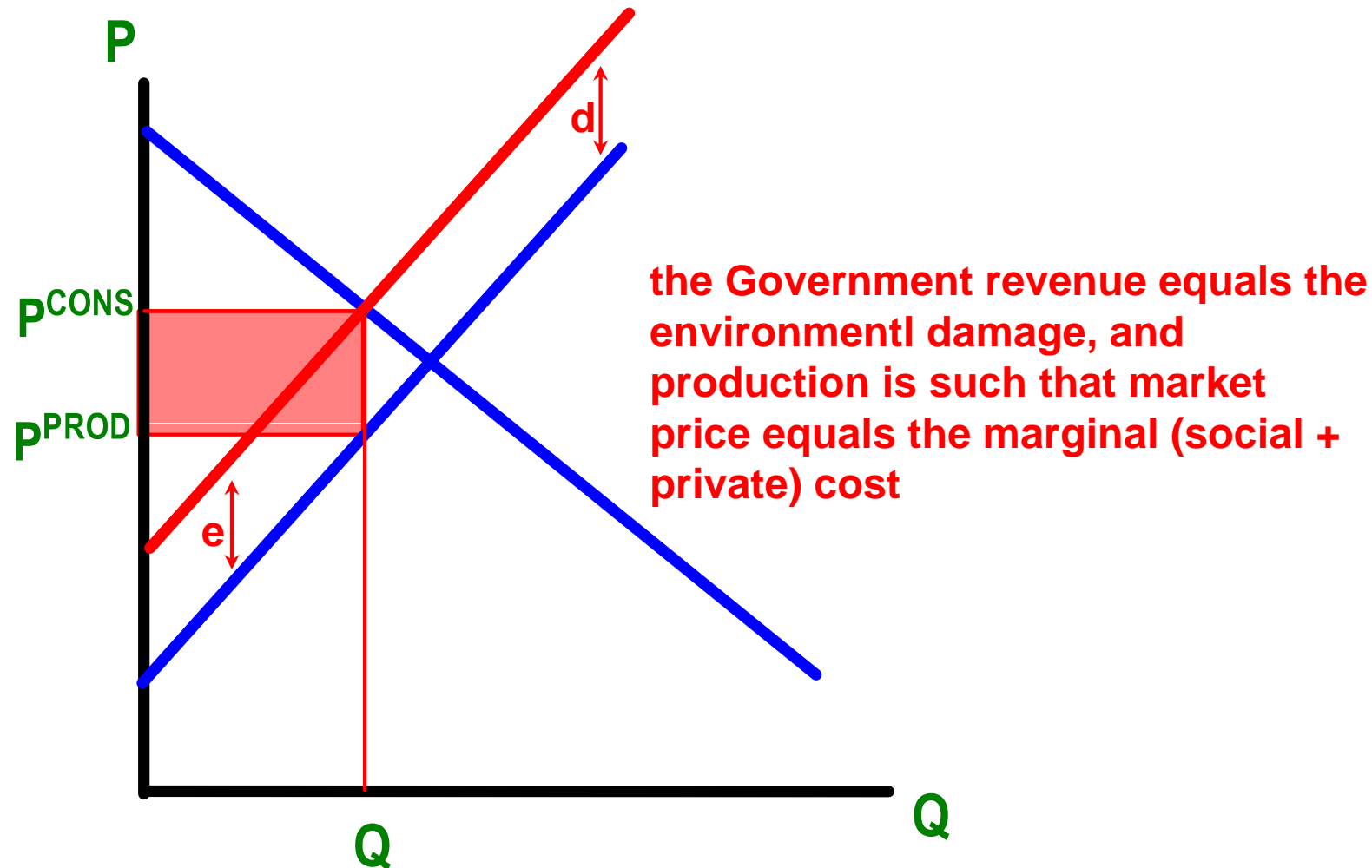
# The environmental issue: the solution in the autarchy case

... force producers to “*internalize*” into their production decision the cost to “*repair*” the environmental damage (*polluters pay principle*)

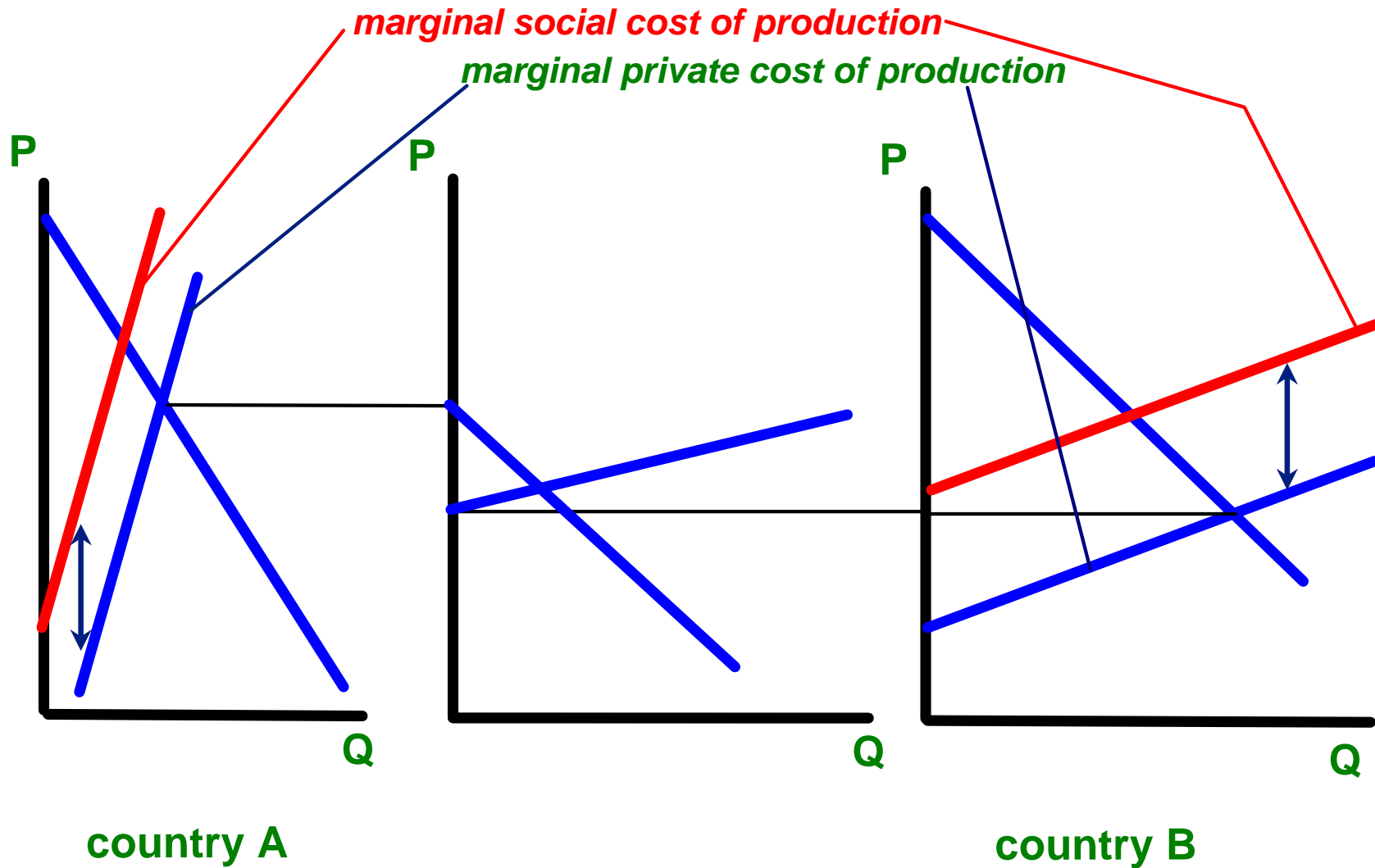


## The environmental issue: the solution in the autarchy case

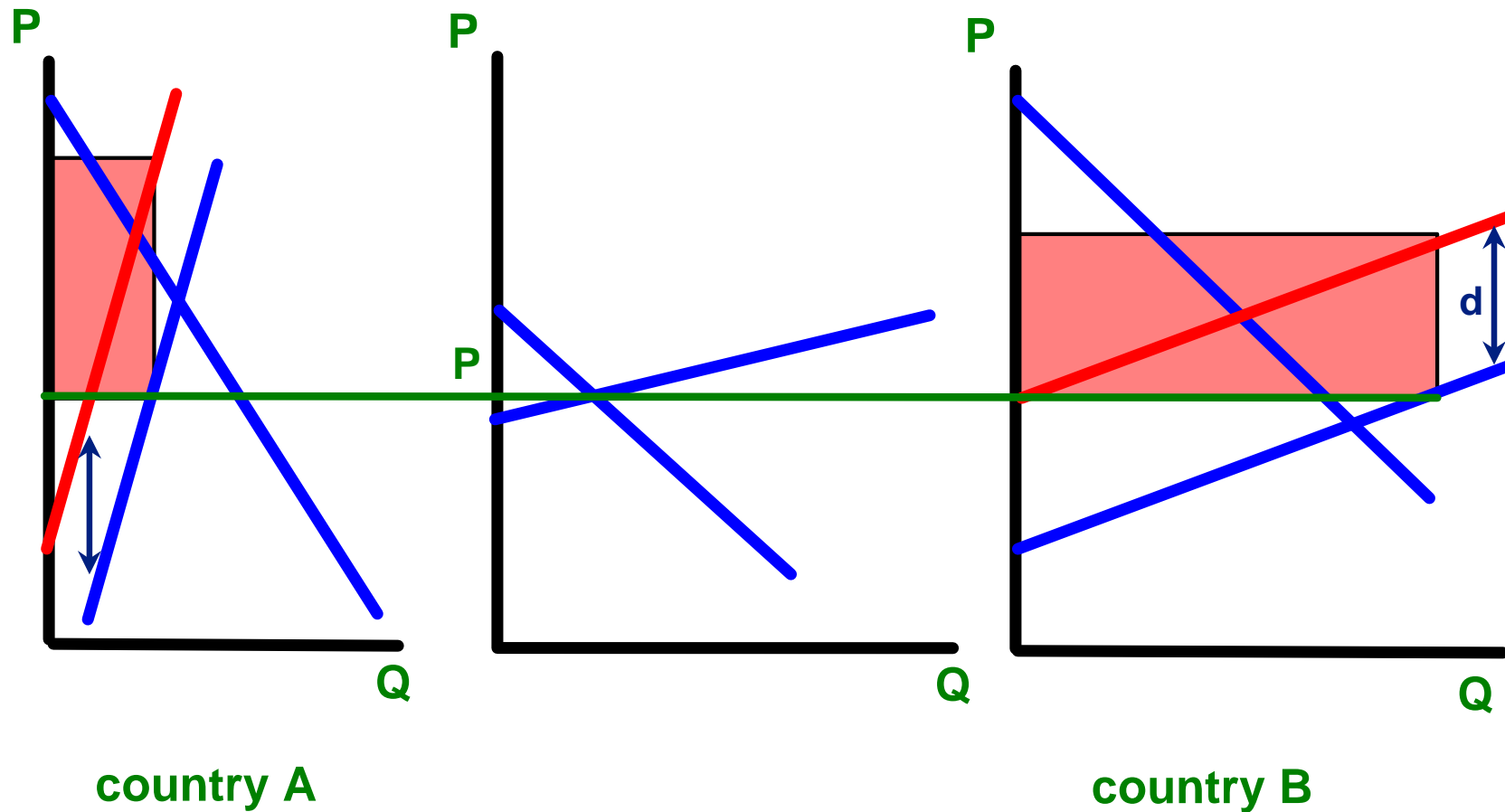
The government tax revenue will make it possible to restore initial environmental conditions, eliminating the damage; the quantity produced will be such that marginal cost (private + social) equals market price (i.e. marginal revenue for the firms)



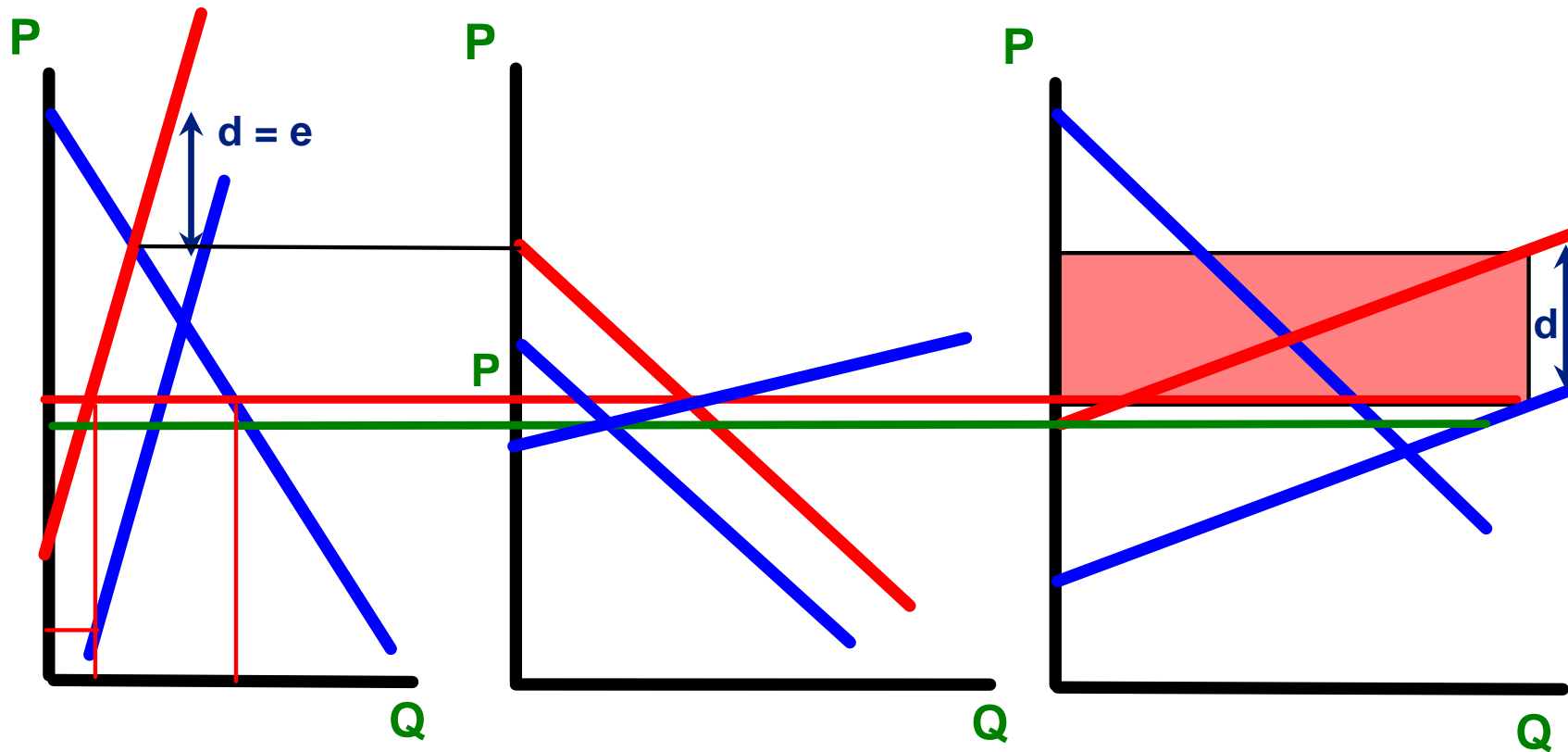
# The environmental issue in an open economy setting (zero transportation costs)



# The environmental issue in an open economy setting: no policy intervention



# The environmental issue in an open economy setting: the importing country intervening

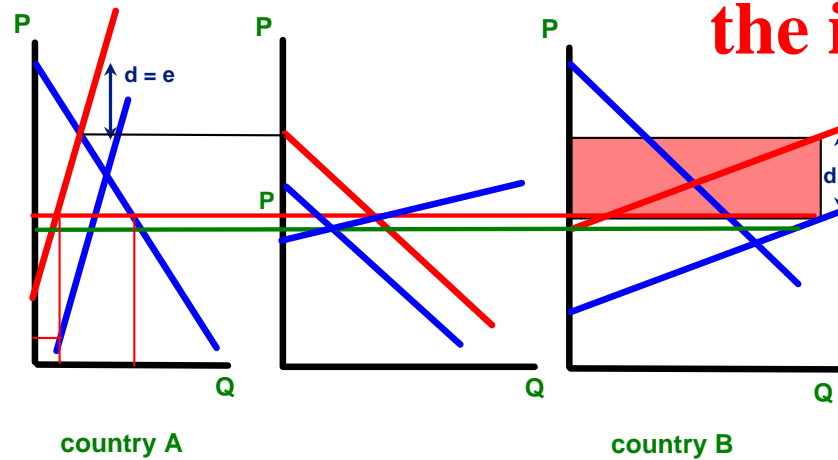


country A

country B

a production tax (e) equal to the per unit environmental damage (d)

# The environmental issue in an open economy setting: the importing country intervening



## Country A

- no environmental damage
- production decreases
- consumption decreases
- imports increase

## Country B

- production increases
- environmental damage increases
- consumption decreases
- exports increase

*the competitiveness of country A's producers with respect to those in country B is reduced !*

# **Environmental regulations and competitiveness in open economy setting**

**stricter environmental regulations/standards reduce the competitiveness of the country's producers with respect to those of the other countries**

## **a solution:**

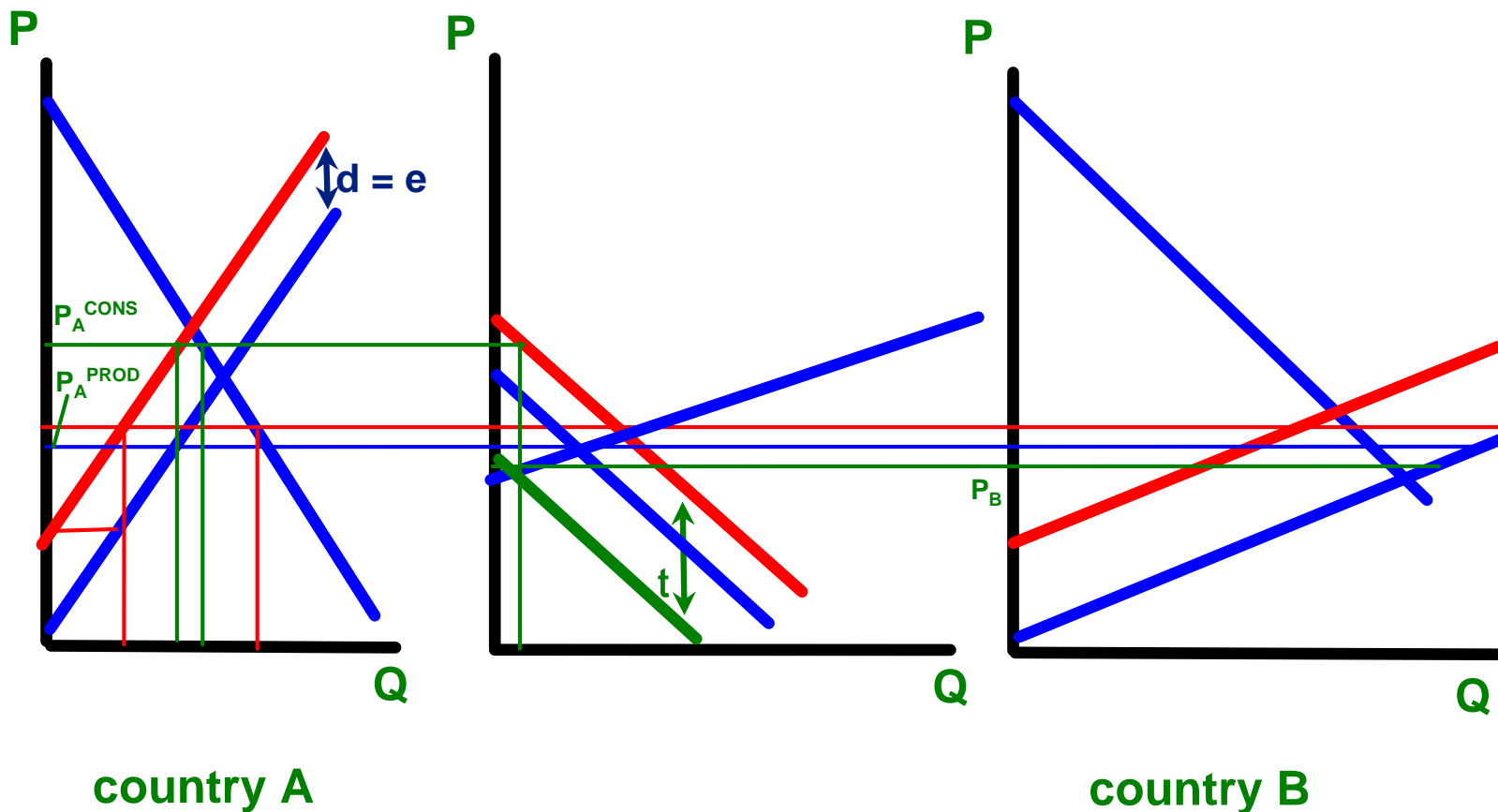
**adding to the environmental regulation/tax a trade policy intervention to restore previous market conditions (such as domestic producer profits or imports)**

**Importer: import tariff**

**Exporter: export subsidy (costly policy!)**

# Environmental regulations, trade policy and competitiveness: the importer case

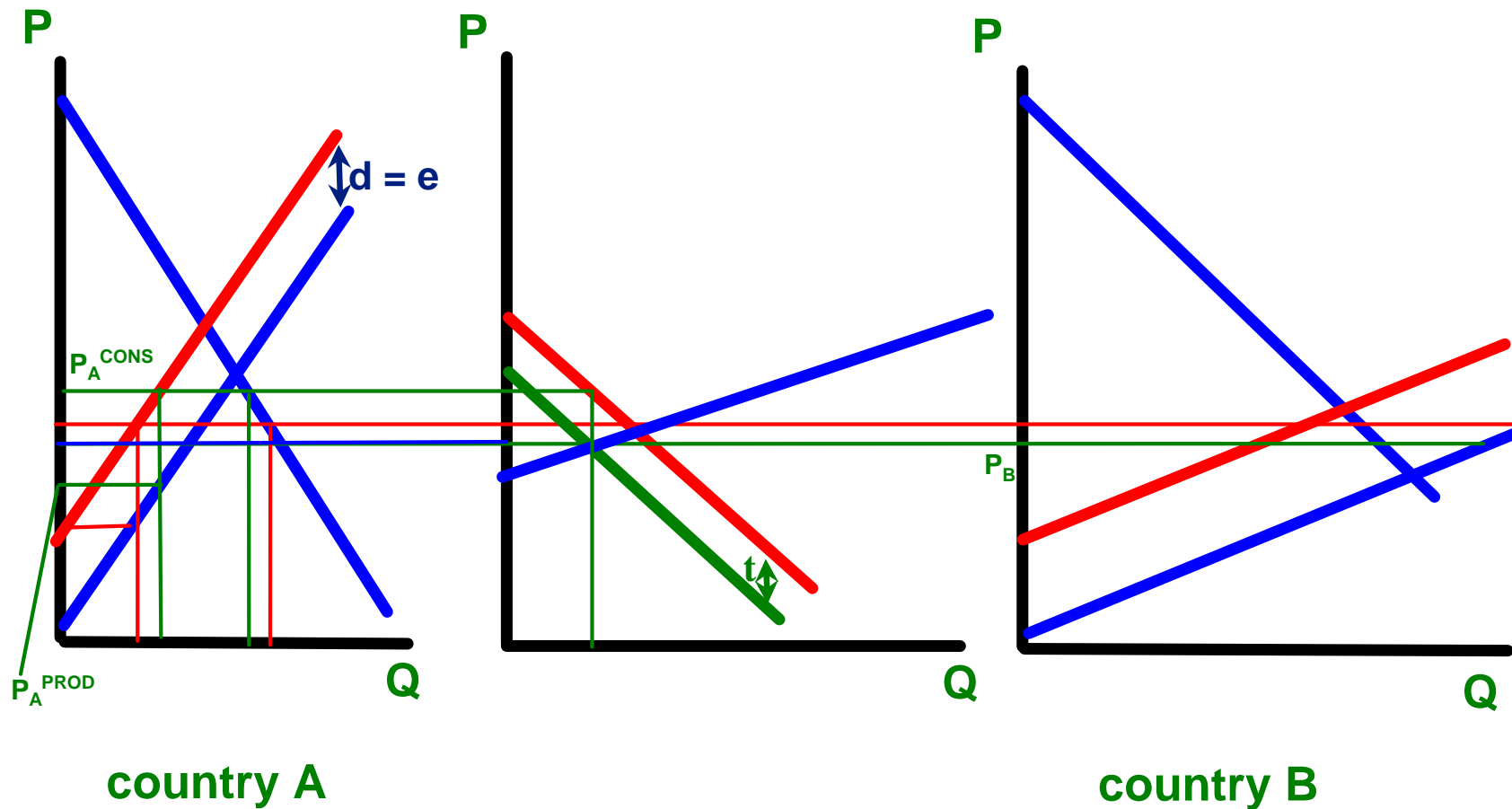
environmental production tax (e) + import tariff (t)



restoring volume of domestic production, as well as producer price and profits

# Environmental regulations, trade policy and competitiveness: the importer case

environmental production tax (e) + import tariff (t)



restoring the quantity imported