1. The behavioral underpinning economics matter for environmental policies

Fossil Fuels

Burning coal, oil & gas

⇓

high emissions

Coal ⇒ "Cheap." → prices as incentives to ↑ burning coals for productions

⇒ "costs of emissions" not reflected in firm's interests → firm max profit (no environmental costs reflected)

→ Decide to choose coal as benefits > costs.

⇒ Policies to put a price on carbon

Carbon pricing ⇒ Coal more expensive

⇒ promote the use of RE (RE more cost-competitive)

⇒ Policies to promote alternatives (RE)

e.g. Subsidies / Feed-in-tariff program

↳ guarantee a fix amount of revenue over a fixed period of time

EV promotion

2. Market failure : No market values & prices

i) Discourage economic agents from polluting

"Externalities" ⇒ prices not imposed on emissions of fossil fuels

ii) Encourage to produce environmental benefits

" Forest values " ⇒ increasing the opportunity cost of deforestation

⇒ promote the use of forest in providing eco-system services.

3. Market system can be used as tool to allocate environmental resources,

" Carbon market "

" Emission trading " → cap and trade,
program (ETS)

RE certificates ⇒ ↑ benefits of RE over fossil fuels.
Carbon credit

4. Government intervention could make things worse

intensive farming
subsidies

coal subsidies
oil subsidies

use of chemical substances.
Over exploitation of resources
over consuming

5. Economic growth contribute to environmental problems

Economic growth ↑ ⇒ " Use environmental bad resource "
" scarcity of resoures "

⇒ " generate more emissions " from productions of goods & services

6. Role of institutional arrangements to reduce 'free-ride' problem

Paris Agreement : UN COP 26 (Climate change conference of Parties)

- international pressure
- funding access

EU CBAM : Carbon border adjustment mechanism (levy on imported products with emissions)