Carbon Price - UPSC Notes

Carbon price is a term often heard in the news in the context of climate change and other environmental issues. In this article, you can learn all about carbon price or carbon pricing, the difference between carbon price and carbon tax, and other important details for the IAS exam.

What is Carbon Pricing?

A carbon price is a cost put on carbon pollution to nudge polluters to lower the amount of greenhouse gas they release into the atmosphere.

- According to economists, carbon pricing is an effective way to encourage countries to reduce their greenhouse gas emissions.
- The costs of carbon pollution are heavily skewed against future generations as they are the ones who would suffer most because of the effects of pollution.
- The idea behind carbon pricing is to **distribute this cost more evenly across generations**, rather than the costs being borne disproportionately by the future generations.
- Economists also believe that **climate change is a market failure** since the costs and risks associated with climate change are not adequate reflected in market prices. Carbon pricing is a method to internalise the costs of future environmental damage by putting a price on the thing that causes it – namely carbon emissions.
- Carbon pricing, apart from encouraging people and businesses to reduce GHG emissions, also generates finances for activities that can contribute to cleaning up the atmosphere/environment.
  - For instance, the carbon cost collected by the government can be spent on research into fuel cells, etc.
- Carbon pricing is generally the external costs of carbon pollution, that is, the price borne by the public, for example, damage to crops, health problems, droughts, flooding, etc.
- Rather than imposing and dictating who should reduce emissions and how arbitrarily, a carbon price allows polluters to transform their activities into more sustainable and green activities so that their carbon costs are reduced.
- Carbon price can help transform an economy into a decarbonised economy.

Need for Carbon Pricing

Carbon pricing helps express carbon emissions in monetary terms which makes it relatively simpler for businesses to incorporate this figure into their financial planning and strategies. Carbon price helps shift the burden for the damage back to those who are responsible for it, and who can reduce it.

Carbon price as a planning tool helps identify revenue opportunities and risks to reduce costs, emissions and guide capital investment decisions. For businesses, it can mean gradually transforming into a greener and sustainable model, which in all likelihood, is the way for the future.

For a list of environment conventions and protocols, click on the linked article.

Major Types of Carbon Pricing

There are two broad ways to establish a carbon price. They are discussed below.

1. **Carbon Tax:** This is levied by the regulator or the government on activities and products which entail a carbon cost. For example, the government could levy a carbon tax on the distribution, sale or

use of fossil fuels. This will drive the costs of these fuels and the associated activities up and encourage businesses to switch to greener options. **Read more on carbon tax in the linked article.**

2. **Emissions trading/cap and trade approach:** Under this approach, the total permissible emissions of a country or region are set in advance or 'capped'. Within a region also, companies' total emissions can be capped. Countries or companies as the case may be, can trade emissions permits with one another. This will introduce a market for pollution that should see to it that the carbon savings are made as cheaply as possible.
    1. There is another emissions trading system, apart from the cap and trade model. This is called the 'baseline and credit systems'. Here, baseline emissions levels are defined for regulated entities and credits are given to entities that have decreased their emissions below the baseline. These credits can be sold to other entities that have exceeded their baseline emission levels.

Indirect methods of incorporating a carbon price includes removing subsidies on fossil fuels, fuel taxes and having laws or regulations that include a social cost of carbon.

Problems with Carbon Pricing

Although many economists opine that carbon pricing is the way forward to address climate change issues, some argue against this approach. Some of the arguments against carbon pricing are discussed below.

- One issue put forward is that this approach views climate change as a market failure rather than as a system problem. Climate change is framed as the consequence of a market failure that can be rectified by placing a price on carbon so that actors also pay for the social cost of their carbon-intensive activities and reduce their demand for such goods and services. This fails to see the climate change problem in its entire depth and expanse. They argue that fundamental changes to the system are needed to address this issue.
- This approach places more emphasis on efficiency than effectiveness. To address climate change, for example, to limit global warming to less than 1.5 °C, there is hardly any time to reach carbon neutrality. Carbon pricing, by allowing polluters to choose abatement options that are the most cost-effective for them, basically allows polluters to go for the low-hanging fruit. This is not enough to address the issue of climate change which is urgent and widespread.
- It is unclear how carbon pricing is pushing the research and development of low-carbon technologies or innovations.
- Carbon pricing strategies are predicated on the idea that eventually, all nations will be covered under uniform pricing, since only then, it can be ensured that no country will free-ride on the efforts of others. But, this universalist approach ignores the realities of the fragmented international climate policy landscape. This ignores the fact that all countries do not have the same level of institutional structures, regulatory environment and compliance. It also overlooks the fact that policies need to be tailor-made to suit the local environment.
- Carbon pricing also ignores the political realities, that is, how politicians and policymaking is linked to the influences that big corporations and businesses wield on them. These 'polluting' actors can influence policymaking in such a manner as to reduce the cost associated with carbon emissions or weaken the stringency of carbon pricing for themselves.