

EMISSIONS TRADING SCHEME

Emissions trading or **cap-and-trade** is a market-based approach used to control pollution by providing economic incentives for achieving reductions in the emissions of pollutants.

A central authority (usually a governmental body) sets a limit or *cap* on the amount of a pollutant that may be emitted. The limit or cap is allocated or sold to firms in the form of emissions permits which represent the right to emit or discharge a specific volume of the specified pollutant. Firms are required to hold a number of permits (or allowances or *carbon credits*) equivalent to their emissions. The total number of permits cannot exceed the cap, limiting total emissions to that level. Firms that need to increase their volume of emissions must buy permits from those who require fewer permits.

The transfer of permits is referred to as a trade. In effect, the buyer is paying a charge for polluting, while the seller is being rewarded for having reduced emissions. Thus, those who can reduce emissions most cheaply will do so, achieving the pollution reduction at the lowest cost to society.

Command-and-control regulations take a variety of forms and are much less flexible while emissions trading scheme or cap-and-trade are incentive based regulations. An example of this is a performance standard which sets an emissions goal for each polluter that is fixed and, therefore, the burden of reducing pollution cannot be shifted to the firms that can achieve it more cheaply which can easily be done in emissions trading. As a result, performance standards are cost effective in cap-and-trade emissions trading.

There are active trading programs in several air pollutants. For greenhouse gases the largest is the European Union Emission Trading Scheme, whose purpose is to avoid dangerous climate change. In the United States there is a national market to reduce acid rain and several regional markets in nitrogen oxides. Markets for other pollutants tend to be smaller and more localized.

An Emission Trading Scheme for Particulate Matter from Stationery Sources has been proposed for India and a Pilot Project has been started by Ministry of Environment and Forests, Government of India, New Delhi. Gujarat is one of three participating States and Gujarat Pollution Control Board is the implementing agency for the project.