

Cap and trade

Cap and trade is one of the main forms of emissions trading (the other is offsetting). Under cap and trade schemes, governments or intergovernmental bodies set an overall legal limit on greenhouse gas emissions in a certain time period (“a cap”) and then grant industries a certain number of licenses to pollute (“carbon permits” or “emissions allowances”). Companies that do not meet their cap can buy permits from others that have a surplus (“a trade”). In theory, this provides a cheap and efficient means to limit greenhouse gas reductions within an ever-tightening cap. In practice, it has rewarded major polluters with windfall profits, while undermining efforts to reduce pollution and achieve a more equitable and sustainable economy.

Some of the key problems with cap and trade are:

The “cap” has too many holes and sometimes caps nothing. The cap is only as tight as the least stringent part of the system. This is because permits are sold by those with a surplus, and the cheapest way to produce a surplus is to be given too many permits in the first place.

The “trade” component does not require any emissions reductions. It simply allows companies to buy cheaper “emissions allowances” or “carbon offsets” which are supposed to represent emissions reductions elsewhere.

Offsets burst the cap. While cap and trade in theory limits the availability of pollution permits to trading between polluters, offset projects are a license to print new, even cheaper and less regulated ones. Virtually all current and proposed cap and trade schemes allow offset credits to be traded inside them through “linking mechanisms” – including the European Union Emissions Trading System (EU ETS) and a proposed cap and trade scheme in California, USA.

Locking in pollution. In chasing after the cheapest short-term cuts, cap and trade tends to encourage quick fixes to patch up outmoded power stations and factories – delaying more fundamental changes. What is cheap in the short-term does not translate to an environmentally effective or socially just outcome over the long-term.

The price will never be right. Carbon markets claim to set a “price signal” that encourages polluters to switch to cleaner technologies. But carbon prices are incredibly volatile and prone to major crashes – in large part because “carbon” is a commodity that does not exist as a single entity outside of the numbers displayed on trading screens. The result is that these markets emit, at best, a very weak signal. The practice of “hedging” carbon permit prices against shifts in energy prices and currency exchanges then cancels out this signal altogether.

The EU ETS is by far the largest cap and trade scheme to date, covering over 11,000 power stations and factories in 30 countries, and accounting for almost half of the EU's CO₂ emissions. It has failed to cut emissions, however. In the first phase, which ran from 2005 to 2007, around four per cent more permits were handed out than the actual level of pollution. In other words, the “cap” did not cap anything and the price collapsed. A similar problem is being repeated in the second phase of the scheme (2008-2012), which is expected to result in a surplus of around 970 million in unused permits. These can be held over to the third phase, meaning that EU polluters need take no action domestically until 2017.

The EU ETS has also acted as a subsidy scheme for polluters, with the allocation of permits to pollute more closely reflecting competition policy than environmental concerns. Power companies gained windfall profits estimated at €19 billion in phase I, and look set to rake in up to €71 billion in phase II. Subsidies to energy-intensive industry through the two phases could amount to a further €20 billion. The third phase of the ETS will continue to see significant subsidies paid to industry, despite the auctioning of permits in the power sector. Industry lobbying has resulted in over three quarters of manufacturing receiving free permits, which could yield at least €7 billion in windfall revenues annually. Energy companies successfully lobbied for an estimated €4.8 billion in subsidies, mostly for carbon capture and storage (CCS, a cover for new coal plants). In addition, the European Commission is reviewing "state aid" rules with a view to granting direct financial subsidies to companies claiming that the ETS damages their competitiveness.

These obvious failings, combined with a series of corruption scandals, have damaged the credibility of cap and trade. For example, the Chicago Climate Exchange, which pioneered cap and trade, ended its failed cap and trade experiment in 2010. New schemes continue to crop up, however. These included a New Zealand ETS in 2010, and look set to be followed by cap and trade in California (although this is subject to a legal challenge from environmental justice groups). Politicians in South Korea, Australia and Japan are also discussing the possibility of new cap and trade markets, while China intends to pilot cap and trade schemes in various regions.

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