

VEHICLE EMISSION FEES

Vehicle Emission Fees, also known as carbon taxes and cap and trade programs, generally assess fees on the use of carbon based fuels, in this case motor fuels. It is assumed funding can be spent flexibly but programs are generally aimed at uses which reduce carbon based greenhouse gas (GHG) emissions.

What is a Vehicle Emissions Fee?

- An emissions fee is a fee charged to vehicle emissions from burning fossil fuels, in this case motor fuels.
- The fee can consist of a surcharge on carbon-based motor fuels.
- The fee encourages adoption of cleaner technology and consumption by penalizing vehicle based GHG emissions, and in the process produces revenue.
- It is usually passed on to consumers in the price of motor fuels.
- The Province of British Columbia has implemented an emission fee (carbon tax) on motor fuels. Note these revenues are “deemed revenue neutral” and are used to create reductions in other taxes and fees.

What is cap-and-trade?

In a cap-and-trade system, government puts a ‘cap’ (limit) on the overall level of carbon emissions allowed to be generated and may reduce that cap over time. The limit is set by regulation, and requires wholesalers that exceed their carbon emissions quota to buy or trade for unused allowances from those that have available allowances or “credits” to sell. Generally state governments have major credits (state forests are an example¹) that may be sold in the cap and trade market and charge access fees to the cap and trade market that generate revenues for the state.

The government or a quasi-governmental entity establishes a “market” mechanism that host the “cap and trade” sales/trades for emission credits at an auction. Once they create and own credits/permits, companies and governments can buy and sell them as they could any other securities, and prices fluctuate depending on demand for them. Companies that cannot attain their assigned cap must buy permits from others. This creates an incentive for firms to reduce emissions and to sell rather than purchase pollution permits.

Cap-and-trade has been used successfully in the U.S. to reduce emissions of sulphur dioxide and nitrous oxide, two key sources of acid rain. Since the early 1980s, cap-and-trade has reduced acid rain- emissions by nearly half.

- The European Union has had a GHG cap-and-trade system in place since 2005 to reduce emissions from about 10,000 large industrial emitters.
- Tokyo has operated its own cap and trade system since 2010.
- The State of California implemented a carbon cap and trade system that began in 2013 as further discussed below.

¹ In California, private or public owned forest can be used as carbon offsets or sold as credits provided the forest are maintained to standards similar to environmental easement or purchases used for mitigation offsets/credits for transportation projects. California has not “sold credits” yet for state lands, but they are researching and developing a process for consideration in the future.

Using Cap and Trade Revenues

Vehicle emissions fees and cap and trade programs, in addition to reducing greenhouse gases, are a new source of revenue when the government, through the entity that runs the cap and trade program, “sells carbon allowances or credits” in the market. Transportation programs will have to compete with many other uses when legislation is written to put these programs in place. In most cases, including the new program in California, there is expected to be a “rational nexus” or logical connection between the way the money is spent and the ultimate purpose of the program, which is reducing GHGs. Highway investments are seen by some as creating rather than reducing GHGs and have usually not been funded by these programs. Transit and intercity rail investments have been viewed more favorably as applications for program revenues. In California, the Cap and Trade program began in 2013 for producers of electricity and was expanded to include distributors of motor fuels in 2015.

In California, the Legislature and Governor determine annual appropriations from the Greenhouse Gas Reduction Fund (GGRF) to state agencies. The GGRF programs are required to reduce GHG emissions and 25% of the revenues must benefit disadvantaged citizens, with at least 10% spent within geographic boundaries of those communities. The California Legislature decided in 2014 that 60% of the Cap-and-Trade revenues will be continuously appropriated to four major programs beginning with the 2015-16 fiscal year:

- 25% California High Speed Rail Program
- 20% to Affordable Housing in Sustainable Communities
- 10% to Public Transit and Intercity Rail
- 5% to Low Carbon Public Transit Improvements

Is there a difference?

There is much discussion about whether an emissions fee or a cap-and-trade system is the best way to put a price on carbon emissions. The answer depends on how the system is designed. The specifics will determine the environmental and economic effectiveness. Key questions are:

- How strong is the economic incentive (i.e., the carbon price) to reduce emissions and switch to cleaner energy?
- To which emission sectors does the system apply? Is transportation included?
- How are the revenues used? Are they invested in green infrastructure or corresponding tax breaks? Will they be available to fund transportation programs?

Policy Considerations for Discussion by the Task Force

- Should cap and trade programs or carbon emission fees be incorporated into a regional transportation strategy?
- Should revenues from such strategies, if adopted, be used for elements of the transportation program which promote greenhouse gas reduction?
- Should the region move ahead with emission fees or wait for the state discussion to unfold?