AN INTRODUCTION TO CARBON PRICING

CENTER FOR Sustainable Climate Solutions

Mennonite Central Committee

What is Carbon Pricing?

As the United States Congress discusses legislation to address climate change, *carbon pricing* has emerged as one possible part of the solution. Some carbon pricing proposals have bipartisan support and support from the business community. As with all government policy proposals, however, it is important to not only look at how such legislation will tackle the problems it aims to solve but also how it will affect marginalized communities.

Carbon pricing works by increasing the cost of carbon emissions, like those from fossil fuels (coal, oil, gas). This can be done through a *carbon tax* or a *cap and trade* system (both are discussed below). The idea is that as the cost of energy sources such as coal and gas increases, businesses and individuals will choose to use more renewable sources of energy like wind and solar. This will reduce the use of fossil fuels and lower the carbon emissions that cause climate change. In most plans, individual households, particularly lower income households, would be compensated for the higher energy and fuel costs during this transition through *revenue* distributed from the carbon tax. Carbon pricing attempts to put a *true* price on fossil fuel emissions, acknowledging additional costs to the environment and to human health which previously have not been considered in the price of fossil fuels.

Both carbon taxes and cap-and-trade are *market-based strategies*, meaning they put a price on carbon and expect businesses and people operating within the market to change their purchasing habits as the prices of energy and products made with fossil fuels rise. Many carbon pricing proposals are advertised as *revenue-neutral* because all funds collected would be returned to communities, often through tax rebates. One study argues that a carbon tax of $50 per ton, increased by five percent each year, could reduce emissions by 63 percent by 2050. Carbon pricing would also create jobs in renewable energy fields, although it would reduce jobs in fossil fuel industries. The true *social cost* of carbon could be much higher than $50 per ton. One study argues that if all the damages caused by greenhouse gas emissions and climate change are considered, this social cost could be as much as $220 per ton.

As with any large policy proposal, there is the potential for unintended consequences—for doing harm in addition to doing good. Concerns with carbon pricing proposals include the risk of carbon leakage or “cheating” (when companies move production to other countries to avoid a carbon tax) and the rollback of environmental regulations, such as regulations for clean air and clean water, that have been proposed with some carbon pricing legislation. Additionally, increasing the cost of fossil fuels, particularly automobile fuel and heating oil, will place the greatest burden on low-income households and rural communities, essentially acting as a regressive tax. Many individuals may be left out, or not fairly compensated, in the revenue distribution that returns funds to individual households, including people of color, people with disabilities, immigrants, indigenous communities and other marginalized groups.

Carbon Tax versus Cap-and-Trade

Cap-and-trade

Cap-and-trade solutions have been a part of climate policy conversations for many years. As the name suggests, this type of solution is broken into two pieces:

- Cap: There is a cap on the amount of total carbon that a market is allowed to produce. The focus of cap-and-trade is on large emitters, such as power plants. Usually this cap is lowered over time, raising the price of carbon-intensive products and discouraging consumers from using those products.
- Trade: The government issues a certain number of permits, or credits, for companies. As a market-based strategy, this plan allows permits to be traded freely throughout the market. In the process of trading, a price is set on carbon. Companies polluting more can purchase credits from companies that have made significant reductions in emissions through activities such as reducing energy usage or investing in projects like planting trees.

Cap-and-trade has received a lot of criticism, as it can be seen as "permission to pollute" for corporations already contributing the most to carbon emissions. In California, for example, factory owners gained credits from carbon-fixing activities that were often out-of-state, and low-income communities and communities of color where factories were located were still impacted by pollution because the companies had permission (through credits) to continue to pollute. On the other hand, many credit a cap-and-trade approach as key to the success of reducing sulfur dioxide emissions from power plants, which effectively addressed problems of acid rain.

Carbon Tax

A carbon tax, sometimes called a carbon fee and dividend, works by having the government set a monetary value (e.g., $20 per ton of carbon) to be applied to the emission of carbon. Some proposals provide exemptions, such as for military use of fossil fuels or carbon produced in the agricultural industry. Most proposals return the revenue collected from carbon taxes to households.

In some proposals, the revenue is returned as a lump sum to households, regardless of income level or other conditions. In other plans, extra money is given to low-income households. Some plans include grants to states that could be used to assist rural households, provide job training, and for other activities related to transitioning to a low-carbon economy. Some plans direct funds towards adaptation and mitigation for communities in the U.S. and in other countries vulnerable to the effects of climate change. Adaptation helps communities to adapt to the reality of climate change and includes actions like building seawalls in coastal cities and drought-resistant agriculture. Mitigation strategies seek to slow climate change and include actions such as restoring wetlands, creating a more sustainable transportation infrastructure, and installing solar panels.

In sum, a carbon tax is designed to encourage people and corporations to shift away from using fossil fuels by making these fuels more expensive. Households and businesses would then move to more renewable sources of energy. There would also be a financial incentive to improve the fuel efficiency of vehicles, increase the efficiency of appliances, and weatherize buildings. While some revenue is collected from the tax, the primary goal is to encourage people to shift away from emitting carbon, not to collect funds for climate change response or other projects. In fact, if the tax accomplishes its goal, the use of carbon would plummet and the tax would eventually collect

Considerations in carbon pricing

Equity - Due to the way in which a carbon pricing system is usually structured, a carbon tax can act like a regressive tax. Because wealthier households can afford more energy-efficient appliances and homes and other carbon-reducing strategies and because they have more disposable income, they will feel less burden from the tax. The rebates that low-income households receive may not balance out what they had to pay in terms of increased utility and fuel costs. Some proposals try to address this by investing extra funds in low-income communities. Other individuals, including undocumented immigrants and those who are unable to work but do not receive disability benefits, might be explicitly excluded from a carbon pricing proposal, though they would still pay higher prices for gas and electricity. Rural households who use more fossil fuels, in the form of heating oil and automobile fuel, may also be disproportionately affected.

Rollback of environmental regulations - Some proposals suggest a rollback of bedrock environmental regulations, like the Clean Water Act and the Clean Air Act, in exchange for the establishment of a carbon tax. Other proposals provide more moderate limitations on the Environmental Protection Agency's regulatory powers. Proposals should be analyzed for whether any rollback of environmental regulations diminishes efforts to reduce carbon emissions or adversely impacts human health or wildlife. Carbon pricing strategies should complement environmental regulations, rather than replace them.

Indigenous communities - The Indigenous Environmental Network (IEN) opposes all carbon pricing strategies, arguing that they fail to hold corporations accountable and that the funds offered to vulnerable communities through the various carbon pricing schemes will not adequately compensate for prior damages done by global fossil fuel usage. Concerns from frontline communities, which include indigenous people and other marginalized communities, should be taken into account in the evaluation of any carbon pricing proposal.

Just transition - Currently in the United States, many people are living in communities largely dependent on the fossil fuel industry. Some plans provide transition assistance for those communities as they seek jobs in other sectors. Legislation in the style of the RECLAIM Act could be part of a carbon pricing proposal.

Insufficient pricing - The United Nations (UN) recommends a carbon fee of $100/metric ton of carbon, which equals about $110/U.S. ton. This suggests that most proposals coming out of the United States are pricing carbon much lower than necessary to reduce carbon usage to a level that would avoid the worst impacts of climate change. For many large corporations, a lower price may not make any significant impact on their overall yearly budgets, failing to change their carbon emissions levels. However, because most plans include a rate of increase in the price placed on carbon, some of the proposals would eventually reach a value as high as that proposed by the UN.

Border adjustment fees - Most carbon pricing plans include what is called a border adjustment fee. This is a tariff that is applied to carbon-emitting products and fuels coming from other countries. If the country from which the product is coming already has an equivalent carbon fee in place, this tariff does not apply. This fee is intended to prevent companies from moving

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Carbon pricing bills have been introduced in both the House and the Senate. It is unlikely that any of these bills will pass in the current Congress, but they contribute to a broader conversation about the role of carbon pricing to slow fossil fuel consumption in the U.S. While several proposals are awaiting reintroduction in Congress, the following are the current bills introduced as of July, 2019.

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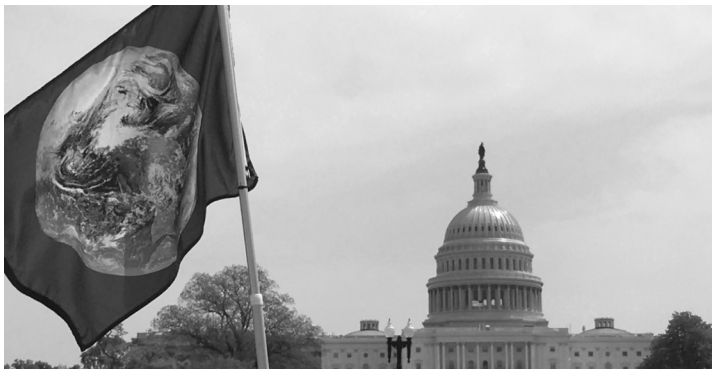
Current national carbon pricing proposals

Carbon pricing bills introduced in the 116th Congress (2019-2020)

The Energy Innovation and Carbon Dividend Act (H.R.763)

Emissions reduction: 33% below 2015 levels by 2030 and 90% by 2050.
Carbon fee (tax): $15/ton, increased by $10 each year.
Revenue: Establishes a “trust fund” for the revenue, which is allocated to U.S. citizens based on Social Security information. Half-shares are assigned to children.
Regulatory rollbacks: The EPA would not be allowed to regulate CO2 emissions for global warming potential. However, the EPA could still regulate automobile emissions and could regulate CO2 and other greenhouse gas emissions as they pertain to adverse health effects or other impacts on the environment not related to global warming. If the tax is not successful in the first 10 years, the EPA’s regulating power would be returned. Some organizations, including the American Lung Association, have expressed concerns that this bill could weaken the EPA’s powers considerably and impact public health because the EPA would not be able to regulate pollution from power plants.



The American Opportunity Carbon Fee Act (S. 1128)

Emissions reduction: 51% below 2005 levels by 2029.
Carbon fee (tax): $52/ton, with a 6% increase every year.
Revenue: A $900 tax credit is returned to working adults, as well as those receiving Social Security and disability payments. This proposal also directs some money to states in the form of block grants. While block grants can allow states to choose different ways to respond to climate change, they also run the risk of funds not equitably going back to the most marginalized within a community.

The Healthy Climate and Family Security Act (H.R. 1960 and S. 940)

Emissions reduction: 50% below 2005 levels by 2030 and 80% by 2040.
Carbon fee: This is not a carbon tax, but is instead a cap and dividend strategy, in which large emitters purchase permits and carbon emissions are capped increasingly over time.
Revenue: The funds obtained from these purchases would be divided among U.S. citizens at a flat rate.

The Baker-Shultz Carbon Dividends Plan

This plan has not yet been introduced as a bill in the U.S. Congress. It was written by The Climate Leadership Council, which is primarily made up of oil and gas companies. It has received significant criticism because the plan provides protection to oil and gas companies from climate change-related lawsuits. It would also include a comprehensive rollback of environmental regulations.
Emissions reduction: This proposal does not provide an estimate of how much carbon emissions would be reduced.
Carbon fee (tax): $40/ton, increasing gradually every year.
Revenue: The revenue from this tax would be returned in the form of a dividend check to U.S. citizens. The current proposal estimates an average check of approximately $2000 per household.

States and countries currently using carbon pricing

California: California's cap-and-trade program is perhaps the most well-known in the United States. The program has been called a failure by some, particularly because of the ways that the policy unfairly impacted low-income communities and communities of color. Using common cap-and-trade practices, factory owners gained credits from carbon-fixing activities that were often out-of-state (e.g., planting trees in a rainforest or installing solar panels). Conversely, low-income communities and communities of color where factories were located were still impacted by pollution because the companies had permission (through credits) to pollute.

Regional Greenhouse Gas Initiative: Ten Mid-Atlantic and New England states participate in a cap-and-trade partnership strategy. The starting fee is very low, at $5/ton. The permits for polluting are traded at an auction and the process is evaluated by an independent economic monitoring firm.

European Union: In addition to a traditional cap-and-trade method of carbon pricing, the European Union also relies on regulations to significantly reduce emissions.

Canada: The government of Canada implemented a carbon pricing plan in 2016, called the Greenhouse Gas Pollution Pricing Act. The plan is comprised of two components: The requirement that all provinces and territories have a carbon tax implemented by 2019 and further regulations placed on heavy carbon-emitting industries. Under this bill, rural communities will receive a 10% additional rebate to cover their expenses associated with rising fuel costs. Additionally, some supports for indigenous communities are provided in this plan.

For additional information about carbon pricing schemes in U.S. states and other countries, see: These countries have prices on carbon. Are they working? In The New York Times, April,

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Created by Clara Weybright, 2019 Climate Advocacy Intern of CSCS at the MCC U.S. Washington Office, July 2019.

The **Center for Sustainable Climate Solutions** is a collaborative effort of Eastern Mennonite University, Goshen College, and Mennonite Central Committee. CSCS advances thinking and action in Anabaptist and other faith communities to mitigate climate change.You can learn more about the Center at SustainableClimateSolutions.org.

The **Mennonite Central Committee U.S. Washington Office** is a Mennonite and Brethren in Christ presence on Capital Hill. Working closely with MCC starff around the world, the Washington Office advocates for U.S. Government policies that make for a more peaceful and just world.