Carbon Pricing in North America

Despite the resistance to putting a price on carbon at the U.S. federal level, carbon pricing is gaining momentum in Canada, Mexico and within states and regions of the U.S.. Canada is requiring carbon pricing in all provinces by 2018, and Mexico has both a carbon tax and is beginning implementation of cap and trade, with trading hoped to be across North America (California, Quebec, Ontario, possibly Mexico and Washington). In addition to the California, Washington, and RGGI cap and trade programs, which are in force in the U.S., other states are pushing for some form of carbon pricing.

United States

Three cap and trade systems are in place in the U.S. covering eleven states, and six other states have proposed legislation in the 2017 sessions for some form of carbon pricing. For more detail on the status in the U.S. states, go to PriceonCarbon.org and search State Actions.

Existing Systems

All of the existing systems in the U.S. are some form of cap and trade.

California began its cap and trade system in 2011, but has been hampered by litigation since 2013. California upped their emissions reduction target to 40% below 1990 levels by 2030 with the passage of SB 32 in 2016. But use of a pricing mechanism beyond 2020 is arguable. To solve both issues, bill AB 398 was passed in July of this year. It extends cap and trade to 2030, and since it passed by 2/3 the litigation becomes moot. The auction following passage of AB 398 saw prices at their highest to date. Near-term emissions sold for $14.75, while future allowances went for $14.55 as companies buy permits before prices rise in the time until 2030.

Washington state's Clean Air Rule was instituted by executive action in September 2016, establishing what is essentially cap and trade on large stationary emission sources. In the 2017 legislative session there are two proposals with coordinated bills in the house and senate, and a third in the senate. All propose a carbon tax with varied revenue use; none includes a dividend.

RGGI: The Regional Greenhouse Gas Initiative (RGGI) is a cooperative effort among the nine states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont to cap and reduce CO_2 emissions from the electric power sector. It has been in operation since 2009. Each state determines how to use the revenues raised; most have invested in energy efficiencies with good success.

RGGI recently announced they are nearing the end of a program review where they are proposing reducing the cap by an additional 30% from 2020 to 2030. The 2030 cap proposed would be more than 65% lower than RGGI's 2009 starting cap.

Progress in Other States

Efforts to put a price on carbon through legislation are gaining momentum in Connecticut, Massachusetts, New Hampshire, New York, Oregon, Rhode Island, Utah, and Vermont, as well as additional legislation to add to or modify pricing systems in California and Washington.

- **Connecticut** formed the Governor's Council on Climate Change in 2015 to evaluate ways to reach the state's ambitious greenhouse gas emissions reduction target of 80% below 2001 levels by 2050. There is a 2017 proposal in the House to establish a carbon fee, with both revenue positive and negative portions.
- **Massachusetts** has two revenue neutral carbon fee proposals and one which returns 80% of revenues to consumers on the legislative docket for 2017.
- **New Hampshire** is beginning to consider carbon pricing and are proposing a study commission to look at possibilities.
- **New York** legislators have introduced two coordinated bills in 2017. One set proposes a carbon tax with 60% of revenue as a dividend and the remaining to be invested in clean energy and transportation infrastructure. The second proposes a study on implementing a greenhouse gas or carbon emissions fee or tax.
- **Oregon** legislators have proposed but failed with both carbon tax and cap and trade in the 2015 and 2016 sessions. In the 2017 session, one set of coordinated bills seeks to establish cap and trade, a senate bill sets up "cap and penalty", and a house bill sets up cap and trade. All rely on the Oregon Environmental Quality Commission to establish revenue use.
- **Rhode Island** is pushing for a carbon tax. In the 2017 session a set of coordinated bills propose a carbon fee with 40% of revenue returned as a dividend. These bills are also

coordinated with similar bills proposed in Massachusetts and Connecticut, and will only go into effect if those bills also pass.

- **Utah** is entering the discussion. A house bill proposed in 2017 calls for an escalating tax on fossil fuels with revenues to be spent on transportation infrastructure as well as providing a tax credit (dividend).
- **Vermont** has a growing push for a carbon price, with a host of bills introduced in 2017. Three establish a carbon fee but with different revenue use, a fourth proposes a cap and trade system, and a fifth proposes a study to compare the fiscal effects of cap and trade and carbon tax.

Canada

Canada recently announced a national framework to put a price on carbon emissions with flexibility for each province. Prime Minister Justin Trudeau announced the policy in October 2016. The proposal is for an initial price of $10 (Canadian) per metric tonne of CO_2e, to increase annually by $10/tonne to reach $50 in 2022. Provinces will have until 2018 to adopt a carbon pricing scheme, or the federal government will impose a pricing system for them.

Currently there is a carbon tax in British Columbia, instituted in 2008, and Alberta has just implemented a carbon levy (tax) of $20 (Canadian)/tonne in 2017 and $30/tonne in 2018. In both provinces, the tax is on gasoline, diesel fuel, natural gas and propane. Cap and trade is the pricing mechanism in Quebec and Ontario. Quebec began its program in 2014 and Ontario implemented in January, 2017. Both are, or will be, trading in a joint market with California as part of the Western Climate Initiative.

Mexico

Mexico instituted a federal carbon tax as part of a broad fiscal reform approved by its Congress in 2014. The tax is on liquid transportation fuels, and on coal when used for transportation. Jet fuel is excluded. The average tax started at $3.7US/ tonne CO_2e and increases with inflation. Mexico also launched a pilot cap and trade program in November 2016, with full implementation expected in 2018. Mexico announced that as part of cap and trade, they hope to join the growing North American market for carbon allowances with Quebec, Ontario, and California in the Western Climate Initiative (WCI). Other possible partners in the WCI – although how to reconcile the systems needs to be determined – include Washington state, Colombia and Chile.