Challenges to Integration of State and Regional Greenhouse Gas Programs

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A comprehensive greenhouse gas (GHG) legislation in the US and Canada has failed to pass at the federal level, many states provinces and regions have begun to initiate their own carbon markets. Each of these markets—and the states/provinces within these markets—has begun to design their own rules regarding how GHG are to be regulated. The differences between these emerging markets will make the goal of linkage and eventual harmonization with federal legislation challenging. It may lead to price arbitrage, as market participants and observers take advantage of varying degrees of stringency under distinct regulations. There are also likely to be environmental repercussions of this type of trading across markets. This is because the stringency of the combined markets may fall to the level of the least strict system included. Despite these concerns, linkage is often considered advantageous because it allows a market to be deeper and more liquid. Thus, allowing GHG emissions reductions to be made where they are most cost effective. Expanding the borders of a market increases the possibilities for reductions and often makes reductions per tonne of carbon dioxide (CO2) less costly. Given this reality, one could question why individual states and regions have evolved their own forms of GHG regulation.

The emission sources from individual states and provinces vary widely as the industries in these locations are distinct. States with a strong service-based economies, such as California, have fewer industrial and process emissions on a per capita basis than a province like Alberta where many thriving extractive mineral industries exist.

Therefore, the GHG reduction goals set by the distinct locations and the types of reduction technologies that are allowed for use within markets differ. Some individual states or provinces may have designed their own GHG systems, because they hope to either earn primacy over regulation of this sector when federal legislation passes. Alternatively, they may strive to help set the federal legislation that will be passed. California has often set more stringent environmental regulations than other states. It will likely fight to have its aggressive climate legislation initiated by the “Global Warming Solutions Act” (AB 32)—enforced even after weaker federal legislation passes. Alberta created its own GHG legislation in order to ensure that its extractive industries would not be crippled by federal legislation.

Carbon markets have begun or are being designed at the state/provincial level in New Mexico, California, Quebec, British Columbia, Ontario and Alberta. Regional markets that have formed or are forming include the Regional Greenhouse Gas Initiative (RGGI), the Western Climate Initiative (WCI) and the Midwestern Greenhouse Gas Accord.

The design of each of these markets differs in several ways including, but not limited to:

1. the amount of pollution permits or allowances that will be auctioned versus the amount that will be freely allocated;
2. the unit of trade (RGGI uses tons of CO2, while all other markets use tonnes of CO2);
3. the sectors of the economy covered;
4. what type and whether action taken by emitters in advance of regulations should receive credit in the market; and
5. the types and amount of offsets and early offsets allowed in the market.

These differences will likely lead to different allowance prices; already RGGI’s price hovers at about $1.90 a tonne of CO2, while California’s market has had a forward trade in the range of $11–$13.50/ton. As California and RGGI have announced their intention to link their markets, and later join with the EU emissions trading scheme (ETS), it is apparent that there could be major consequences to linking. For example, the price of an allowance in a regional market stabilizes between the two current prices.

Even within regional markets that have formed, key differences between state-level legislation will challenge harmonisation. The WCI has created design recommendations for its members and calls for an overall reduction of 15 percent below 2005 levels by 2020. One of the underlying principles of WCI is that the region will form a cap-and-trade market in order to reduce the cost of compliance to each individual member. However, WCI member states have set distinct reduction targets and other design guidelines, complicating trade across state and provincial boundaries. AB 32 calls for a different reduction goal of stabilization of 1990 emission levels by 2020. New Mexico’s proposed cap-and-trade market calls for the GHG reduction goals set by the distinct locations and the types of reduction technologies that are allowed for use within markets differ.

A 1.5 per cent reduction of 2012 emissions and a 2 per cent reduction a year for the following seven years.

In addition to differing targets, states have taken unique approaches to the number of allowances that will be auctioned. Even though the WCI calls for auctioning of at least 10 per cent of allowances, New Mexico’s market will not include auctions because the state does not have the authority to conduct them. Auctioning a portion of the total allowances in other WCI states, such as California, may lead to comparatively higher priced allowances.

Emerging provincial-level markets may also be trending towards the creation of their own specific targets. Under such a situation, if trading across state boundaries occurs, a “race to the bottom” could occur as the price of allowances and offsets in the least stringent market will be used first. The environmental integrity of legislation in states/provinces with more stringent targets will be compromised. If a WCI member fails to meet its target reductions, the system has no enforcement mechanism. Therefore, a state that does not adequately enforce regulations could further compromise the integrity of the entire regional market.

In addition to varying reduction targets and auction procedures, the types and number of offsets allowed in each state/province are not consistent with the WCI design.