Last week, Senator Bob Wieckowski (D-Fremont) introduced a new bill, SB 775, that would replace California's cap-and-trade system with a new approach to regulating California's greenhouse gas emissions beginning in 2021. There is much to admire in the new bill, including an aggressive pricing approach that would ensure that California's carbon price remains high. The bill proposes returning to California residents much of the revenue raised from the carbon price in the form of a per capita dividend. And it reserves some of the proceeds for investment in climate and energy research and infrastructure spending, with a special focus on the state's most disadvantaged communities.

But SB 775 also contains a number of provisions that erode much of the stability and flexibility currently built into the state's cap-and-trade system. It undermines investments that allowance purchasers have made in the current system, and may well decimate the revenue that should be generated from cap-and-trade over the next several years as a result. And it embraces an approach to regulating carbon emissions that shuts out relationships with other states, provinces and countries at a time when global cooperation and relationships should be first and foremost.

Since California passed its first law to regulate greenhouse gases from cars in 2002, governments from around the world have looked to the state's leadership on climate change in crafting their own climate policies. Delegations from China regularly visit the state seeking the expertise of the California Air Resources Board (CARB). A number of Chinese provinces have now started cap-and-trade systems based in part on California's experience and advice. Leading lawyers and economists from Russia know the intricacies of California policies inside and out (I know this from my own experience meeting with them in Moscow). The Republic of Khazakhstan even has a greenhouse gas emissions policy that has cap-and-trade as its centerpiece. Cap-and-trade programs now cover jurisdictions representing almost half of the world's GDP. California is so important in global climate policy that when Governor Jerry Brown led a delegation of California officials to the talks that produced the Paris Agreement, he was accorded as much respect and had as much influence as all but a handful of global leaders.

One of the obvious reasons for all the attention is because California’s climate programs have so far succeeded in delivering real reductions in greenhouse gas emissions while the state’s economy has boomed. Utility prices have remained stable and increases in gasoline prices have been modest. The green technology sector has exploded, the state leads in venture capital investments in green technology, and renewable energy has flourished. California has a number of policies that have led to its success and one of the most important is its cap-and-trade system. Despite this success, SB 775 would essentially throw out the existing program and start a new one with a different, untested design. Rather than repealing and replacing cap-and-trade, we should be refining and revising what already works well to make it even better.

In setting up its cap-and-trade program, which began in 2012, the California Air Resources Board took a number of steps that have served the program well. It looked to existing cap-and-trade programs like Southern California’s RECLAIM program, the Regional Greenhouse Gas Initiative, and the European Union Emissions Trading System (EU ETS) to see what was working and what wasn’t. It sought expert advice about program design, consulted with environmental and community groups and regulated parties, and used its own considerable internal expertise to craft a program that has avoided many of the missteps that other cap-and-trade programs have faced. RECLAIM, for example, blew through its cap during the state’s energy crisis in 2000-01 in part because of insufficient compliance flexibility for utilities. The EU ETS was criticized for giving away all of its allowances for free, resulting in windfalls to utilities and other covered entities. And the Clean Development Mechanism, a Kyoto-authorized program for offsets, has experienced some well-publicized instances of fraud. None of these problems have occurred in California.

California’s cap-and-trade program has not been perfect — allowances have not always sold out and prices have remained at or just above the price floor CARB set. Ensuring that California is accounting for and regulating emissions from imported electricity has been challenging and complex. Yet CARB has worked closely with our electricity system operator, CAISO, to minimize leakage of emissions across our borders. And with respect to allowance sales and prices, both of those issues are a result not of design flaws in the program but because many of the greenhouse gas reductions the state has seen have come from other mandates, like the renewable portfolio standard, and because of legal challenges about whether the auction under the program was an unauthorized tax. The state has now won the lawsuit at the Court of Appeals level.

There are, to be sure, legitimate philosophical debates about some of the design choices

CARB has made. It has, for example, allowed regulated entities to meet a part of their obligations under the cap-and-trade program with offsets from a limited number of approved project protocols. Though I am a supporter of offsets in order to bring emissions not covered under cap-and-trade (like forestry and agriculture) into the program and in order to keep overall program costs lower, there are legitimate concerns about how to ensure that offsets are producing real, additional emissions reductions that would not have occurred in the absence of regulation. And offsets can be used more effectively to ensure that disadvantaged communities in California have access to their benefits, though the state must craft its policies carefully to avoid violating the U.S. Constitution’s Commerce Clause. Similarly, as we move forward to meet much more stringent emissions targets after 2020, perhaps we should consider strengthening our price ceiling on allowance prices in order to provide stability and ensure that we don’t have a return to the problems of RECLAIM (though there are other problems that a price ceiling creates, including allowing emitters to avoid paying the full social cost of the pollution they are creating). Most fundamentally, we should make certain that cap-and-trade is not exacerbating pollution problems anywhere in the state, but especially in our most vulnerable low-income communities. At the same time, we should also make sure that CARB is fully enforcing state and federal air pollution laws that regulate pollutants like particulate matter and ozone.

But any of these potential changes to cap and trade could be made to the existing program, extended beyond 2020, rather than throwing it out entirely. Such an approach would take a program that has fundamentally worked as intended and change it around the margins. SB 775 takes a much more drastic approach. It basically allows the current cap-and-trade program to die on the vine and replaces it with a program that may well cause many more problems than those it attempts to solve. And it does so in a way that embraces a “California alone” philosophy that is fundamentally at odds with California’s approach over the last decade to be a global leader on climate change. At a time when the federal government is rejecting climate change altogether and backing out of a leadership role on the most pressing environmental challenge we face, California should be increasing its connection to the rest of the world in its climate policies, not turning inward.

At its core, SB 775 attempts to wall California off to the rest of the world in the way that it regulates greenhouse gas pollutants. Yet greenhouse gases are contributing to a *global*, not a local problem. SB 775 makes California more insular in its regulatory approach in three ways: by making linkages with other states, provinces and countries much more difficult (essentially only if they make the same regulatory choices California does); by eliminating entirely the use of offsets; and by setting up a border adjustment “tax” on goods imported into the states from jurisdictions that do not impose stringent carbon regulations. This is a fundamentally different approach to climate change regulation than the state has taken to date.

It’s important to stress that California’s contribution to climate change emissions is — relatively speaking — minuscule. To put our contribution into perspective, if we simply shut off all sources of emissions today, we’d have essentially no effect on solving the problem of global warming. Too many emissions have already accumulated in the atmosphere and too many more emissions from around the globe will continue to build atmospheric concentrations of greenhouse gases to unsustainable levels even without California’s contributions. Then, you might ask, why should California regulate greenhouse gas emissions at all? For at least two key reasons that can contribute in fundamental ways to global efforts to reduce emissions: to spur the development of green technologies that can lead to emissions reductions around the world (battery storage and electric vehicle improvements are two easy examples); and to pioneer regulatory programs that effectively reduce greenhouse gas emissions as cost effectively as possible not just to reduce our own emissions but to show other jurisdictions with less courage and with less expertise that such regulation can work and work well. Once California has worked out the kinks, other jurisdictions can follow its lead, adopting one or two or all of the state’s approaches. In my view, this pioneering role is one of the most important contributions California can make.

Linking our cap and trade program to other jurisdictions is one way we can encourage other jurisdictions to regulate. Linkage provides jurisdictions new to regulating carbon with access to California’s experience and expertise. It expands the breadth of the trading program, making overall compliance costs lower and reducing opportunities for gaming trading. And it commits jurisdictions to a collective goal to work together to tackle a global problem. These benefits may even increase the likelihood that a jurisdiction will choose to regulate ambitiously. Though we are currently linked only to Quebec, Ontario and several other jurisdictions are currently considering linking to California’s progam. SB 775 — by requiring a regulatory purity that many jurisdictions would choose not to follow — will make linkage highly unlikely. It could also discourage jurisdictions from regulating altogether.

Offsets are another way to bring areas outside of the state into the business of reducing carbon emissions. Offsets allow for emissions to occur outside of the regulated sector in an unregulated but carbon-intensive sector. Regulated parties can then buy these offsets to meet their own compliance obligations. The theory behind using offsets is based, again, on the global nature of climate change. To solve the problem of global warming, it does not matter if carbon emissions are limited in Illinois or California or Ecuador. The point is to limit how many emissions enter the global atmosphere, period. It may, moreover, be much cheaper to reduce greenhouse gas emissions from particular sectors (say, forestry) and in particular parts of the world (say, India). As a result, we may be able to reduce many more tons of carbon dioxide or other GHGs for less money by allowing offsets to be used to comply with California limits. Funding the reforestation of a blighted urban parcel of land, for example, might produce real benefits in addition to the carbon the new trees will sequester and be much cheaper than, say, retrofitting a power plant.

There are, to be sure, issues with offsets. It is imperative that we be able to certify that emissions reductions from offsets are actually occurring, will be permanent, and wouldn't have occurred in the absence of the offset. And to the degree constitutionally permissible, if the state can encourage offset projects that target economic and environmental benefits within its own borders, we can get the benefits of global emissions reductions along with localized benefits (the state cannot, however, "facially" discrimination in favor of its own businesses and projects without raising serious constitutional concerns). CARB has struggled with these issues and limited offsets to five project types, all within the borders of the U.S. I believe CARB should continue to play this role because California's efforts are allowing us to see if a robust program of offsets can effectively reduce greenhouse gas emissions in creative ways that provide cost relief to the regulated sector. CARB-approved projects that protect forest resources on Yurok tribal land in northern California and encourage the capture of methane – one of the most potent short-lived climate pollutants — from dairy livestock in the Central Valley are precisely the kinds of projects our laws should encourage. The state is playing a vital role in developing regulatory protocols to ensure that offsets have integrity and in developing projects that can produce real emissions reductions from sectors other than traditional fossil fuel-based sectors. If part of our mission in leading on climate change regulation is to demonstrate to the rest of the world how to do so effectively and in a way that encourages economic growth, as I believe it should be, then our current approach is helping to meet that mission. Banning offsets, as SB 775 proposes, does not do so.

Finally, SB 775 creates a new program, the Economic Competitiveness Assurance Program, which effectively serves as a border tax for products with embedded carbon in them that are imported into California from other states and countries that do not have strong climate regulation. The purpose of the new program (ECAP) is to ensure that California companies that are subject to our stringent carbon regulation do not suffer a competitive disadvantage large enough to drive them out of state. This purpose is a worthy one. ECAP, however, is a cumbersome way to try to remedy any competitive disadvantage, may have constitutional problems under the Commerce Clause, will be very difficult to administer, and has the potential to create mini trade battles with states and countries that import products into

California. It may also provide far greater regulatory relief across far more economic sectors than currently exists if the program is found to be unconstitutional or otherwise unlawful. Briefly, the ECAP program, as its sponsors describe:

1. Requires ARB to identify "covered imported products" that exhibit a "material price difference" depending on whether the product is subject to the California carbon price;
2. Enables private parties, including manufacturers and importers, to petition ARB to list a product as a "covered imported product" and requires ARB to evaluate these petitions using the same process ARB develops for itself.
3. Requires importers of covered imported products to surrender allowances equal to the emissions associated with their product that would have been covered by California's carbon pricing program had they been manufactured instate.

CARB has to try to determine the "life cycle emissions" of products subject to the ECAP in order to determine the allowances the importer of the product must surrender.

It isn't hard to imagine private parties, including manufacturers and importers, inundating ARB with petitions seeking to have their competitors subject to the ECAP process. Purely hypothetically, take Tesla, for example, which manufactures its cars in Fremont, California. Assume that Tesla will be operating its facilities with electricity supplied by its local utility and using at least some components manufactured in California. Under SB 775, Tesla could file a petition with CARB asking it to list automobiles manufacturers outside of California and imported into the state (from Detroit or from Tennessee or from Mexico) as a "covered imported product." CARB would need to figure out the life cycle emissions associated with manufacturing the out-of-state automobiles and then compare those emissions with the emissions that would have been covered in California by its program. If that number creates a "material price difference," the out of state manufacturer would have to submit carbon allowances to California. The task of determining this material price difference in and of itself would be very difficult. Think also of the message this new program would send to Michigan, Tennessee, Mexico, Japan, Korea, Germany or any other state or country engaged in the production, export, or manufacture of automobiles. Suddenly, rather than leading a global effort to reduce greenhouse gas emissions by setting an example for the world, California will be in potentially nasty quasi-trade disputes with other states and countries over a host of products we import.

CARB currently attempts to deal with industries that might suffer a serious competitive disadvantage as a result of the cap-and-trade system by providing those industries with free rather than auctioned allowances. It does so carefully and sparingly. SB 775 would impose a radically expanded program that would allow in-state businesses to demand that CARB conduct complex economic and environmental evaluations of any imported product subject to a petition, creating a potentially huge number of mini-trade disputes that might infuriate other jurisdictions. There are other issues with the ECAP that include potential constitutional and WTO infirmities that could invalidate the ECAP and then provide industries that argue that they’re at a competitive disadvantage with free allowances (the bill actually says that” if at any time a judicial opinion, settlement, or other legally binding decision reduces or eliminates the state board’s authority to implement the Economic Competitiveness Assurance Program,” CARB must create a system that freely allocates allowances to affected manufacturers.) We will address those potential infirmities in future posts. For now, however, my worry is that by limiting leakage, banning offsets, and setting up a border tax, the bill signals to the outside world that California is concerned only with its own emissions, not with the larger role it has been playing and should continue to play as a global leader on climate policy.

This is part of a series, with links compiled at [The Future of California’s Greenhouse Gas Cap and Trade Program After 2020](#).