Two recent Legal Planet contributors have shared concerns about SB 775 over the last several days (Ann Carlson's piece is here and Dallas Burtraw's is here). We write here to provide context—economic, legal, and political—to help readers, and perhaps even these respected authors, better understand why the bill proposes to extend and evolve California's approach to cap-and-trade. For a primer on SB 775 itself, we recommend excellent articles from James Temple at MIT Technology Review and David Roberts at Vox.

A strong carbon pricing policy is essential for achieving California's ambitious climate target for 2030. In order to achieve a 2/3 vote to extend cap-and-trade, however, several changes to the current market design will be necessary. SB 775 is the first serious attempt to address the challenge of extending carbon pricing after 2020 and continues to be the only proposal that offers a solution to the real-world constraints facing legislators today.

California's 2030 greenhouse gas reduction goal is incredibly ambitious

The most important thing to recognize about the challenge of extending cap-and-trade after 2020 is that it will take much more effort to meet the state's 2030 climate target, which is 40% lower than the 2020 target.

Achieving the 2020 target has turned out to be much easier than anticipated, thanks to the Great Recession, low natural gas prices, and California's effective clean energy policies. Indeed, ARB projects that California's emissions will fall below the 2020 target by a substantial margin. But the cap-and-trade program has suffered from low demand at quarterly auctions because there are now more permits to emit than there are emissions (and therefore demand for permits).

Were it not for the smart design choices that ARB made to avoid problems that plagued the European carbon market, the carbon price would be at or near zero. Instead, the system today operates like a moderate carbon tax with modest annual increases. California's cap-and-trade has worked well in this context, and it should continue to do so until 2020.

The next ten years will present new challenges. Some numbers may help readers develop an intuition for the changes that are coming. In order to achieve the 2020 target, emissions in California need to fall about 1.8 $MMtCO_2e$ per year over the next few years. But in order to get from the 2020 to the 2030 target, emissions will have to fall almost ten times faster—17 $MMtCO_2e$ per year on a statewide basis.

Over the last decade, California has pursued most of the inexpensive options to reduce emissions (along with some expensive ones, too). Most notably, utilities in California have

moved away from coal-fired electric power and towards a mix of renewables and natural gas in their electricity imports; those cheap reductions are now gone. After 2020, the 17 MMtCO2e a year in new reductions will have to come from improvements in the power sector that will be harder to achieve, as well as significant reductions in the transportation and industrial sectors.

Estimating the carbon price implications of the 2030 target requires confronting fundamental uncertainty in economic growth, technological progress, and future policy developments. What is clear is that prices in the carbon market will be higher. Most likely much higher. Prices as high as $100 per ton are not at all out of the question, particularly because of policy interactions with California's other energy and climate policies.

With higher prices, managing the economic impacts to households and firms becomes much more important. Under the current system, households get modest utility rebates and trade-exposed firms get free allowances. SB 775 would extend and expand the protections for households by delivering substantial cash rebates to account for their total fuel cost increases, not just utility bill impacts. Firms would be protected by a border carbon adjustment. Despite its legal risks and administrative complexity, a border adjustment is the only functional approach to maintaining economic competitiveness at the high carbon prices necessary to achieve our 2030 targets—and one we believe ARB is uniquely capable of administering.

One of the biggest challenges facing state policymakers is how to transition into an environment with higher carbon prices. We believe the best option is to facilitate a gradual transition from low to high prices, which is what SB 775 does with its price collar. A gradual transition is particularly important to avoid the risk that the Governor will need to intervene to suspend the market—as is his or her right by statute. But markets in general don't tend to gradually transition when expectations change. And rules that allow firms to bank allowances purchased today for use in later compliance periods mean that as soon as the legal uncertainty that clouds the current program is resolved by passage of legislation reauthorizing cap-and-trade, prices in the market will rise, possibly to very high levels.

Careful attention therefore needs to be paid not just to the magnitude of carbon price increases, but also to the timing of the changes.

Cap-and-trade needs new legislation

All of the concerns about the post-2020 market could conceivably be addressed by ARB in its current rulemaking—although they haven't been—were it not for the fact that the

legislature must reauthorize cap-and-trade by a supermajority vote. Anything less will cast the post-2020 program into deep legal uncertainty that deters firms from making the investment decisions needed to put the state on track for 2030.

New authority is needed because AB 32 authorized cap-and-trade with a unique time limitation not included for other measures. Cal. Health and Safety Code Section 38562(c) provides that ARB "may" adopt a market based compliance mechanism "applicable from January 1, 2012 to December 31, 2020." This language strongly suggests that extending cap-and-trade beyond 2020 will require new legislation.

Since that time the voters adopted Proposition 26, which generally requires a supermajority vote for programs that raise revenue—such as a cap-and-trade program with allowance auctions. Any changes made to AB 32 that clarify ARB's authority to use cap-and-trade after 2020 would be subject to Proposition 26, which is one reason the Governor has repeatedly called for reauthorization of cap-and-trade via a 2/3 majority vote.

Lastly, and importantly, the recent appellate decision in the *Morningstar* doesn't obviate the need for a 2/3 vote. That decision applies to the current program and evaluates the voting standard question under a pre-Proposition 26 legal framework (see here for a longer explanation). And the *Morningstar* decision is currently being appealed to the California Supreme Court, so the case isn't yet over.

We have been discussing the need for new legislation for more than a year (see here, here, and here), but you don't have to take our word for it. In a recent Senate Environmental Quality Hearing, Senator Wieckowski asked ARB Chair Mary Nichols to describe ARB's legal authority to adopt a post-2020 cap-and-trade extension without new legislation. Chair Nichols responded that she would prefer not to do so unless absolutely necessary. Enough said. To extend cap-and trade, the legislature needs to pass a new bill.

Political constraints on legislation to extend cap-and-trade

With the need for new legislation, the question becomes: how might a bill clear the difficult hurdle of a supermajority vote in both houses? While no one can say for sure how to get to 2/3, SB 775 offers a coherent theory that responds to the politics of the moment.

First, legislation has to be acceptable to environmental justice groups. Opposition from EJ groups is an important part of the reason that prior attempts at legislative reauthorization have failed, including last year's attempts in California and in Washington State. In contrast, SB 775 has been endorsed by several prominent EJ NGOs, despite their past misgivings

about cap-and-trade. Their support turns on SB 775's prohibition on offset credits and the progressivity of its climate rebates.

Second, legislation has to confront the recent experience with SB 1, which will increase gas taxes by 12¢ a gallon in November of this year to fund transportation investments. After last month's vote on SB 1, there is no appetite among legislators for anything that will raise gas prices in the near term. Because reauthorization of cap-and-trade with banking would do just that, SB 775 creates a separation between the pre-2020 and post-2020 allowance markets, such that SB 775 would have no economic impacts until 2021.

Third, raising fuel taxes is politically unpopular, and even if the increases come later, politicians are reluctant to take actions that could be characterized as the second gas tax increase in a single year. For this reason, SB 775 includes rebates of allowance revenue directly to households. The bill's authors intend these revenues to be at least large enough to fully offset impacts to both utility bills and gasoline bills under the policy for the vast majority of California residents.

In contrast, ARB's proposal to extend the cap-and-trade market would, if authorized by a "blank check" legislative extension, fall short on all of these grounds. It retains the use of offsets and would not protect low-income Californians from gasoline price impacts. It retains unlimited banking, which would lead to an immediate increase in gasoline prices. And it does not include a mechanism for rebating the bulk of the revenue back to California residents.

We remain convinced that ARB is a global leader in terms of its administrative capacity and commitment to climate policy progress, but the market design ARB has put on the table is unlikely to win the necessary votes nor ensure that the poorest Californians benefit from the transition to a low-carbon economy.

An open door for future market links

There has been a great deal of controversy over whether SB 775 would force California to "turn inward," as some critics have put it. This view is mistaken. SB 775 creates a new cap-and-trade period that remains open to future market links with other jurisdictions, such as Quebec or Ontario.

The only new requirements for future market links are that the Governor must find (1) that the prospective linking partner has comparable minimum carbon prices, and (2) that the link would not disrupt the climate rebate to California residents. There are no additional

requirements under SB 775. In fact, these new provisions mirror the existing requirement that the prospective market links have equivalent stringency; the new additions merely clarify what equivalency means under the contours of the new program. Given that none of California's partner jurisdictions, including Quebec and Ontario, have post-2020 cap-and-trade programs, the idea that we either can or should "pre-approve" links is misplaced. If our partners adopt comparable program ambitions there is no barrier under SB 775 to replicating their links in the post-2020 period.

If anything, SB 775's border adjustment mechanism would facilitate a broader range of linkages and cross-border partnerships. This mechanism accounts for the carbon prices imposed by other jurisdictions, which means that we can cooperate with jurisdictions that are pursuing less ambitious climate targets. Others may wish to borrow California's border adjustment calculations for their own use as well. For those jurisdictions that share our ambitions, external market links remain viable and new opportunities to cooperate may emerge as well with partners who are just beginning their climate policies.

Getting to post-2020 carbon pricing

In conclusion, securing the votes to authorize a post-2020 carbon pricing program will not be easy. Any strategy must take account of the new reality of post-2020 climate ambition, be accomplished via legislative reauthorization on a 2/3 vote basis, and address the very real political constraints that currently exist in the California Legislature. SB 775 does all of these things and stands out as the only proposal that addresses the constraints facing the legislature.

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This is part of a series, with links compiled at The Future of California's Greenhouse Gas Cap and Trade Program After 2020.