

INSIDE NORTH AMERICA'S LARGEST CARBON MARKET

Ten Lessons from the Front Lines of
Quebec's Fight Against Carbon Pollution

Sources

We conducted all of our interviews confidentially, and we assured interviewees that their specific comments would not be attributed to them by name. However, some participants opted to put some or all of their comments “on the record.” All ten interviews were conducted by telephone.

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Introduction

In 2012, Quebec became the first Canadian province — and only the second jurisdiction in North America — to enact a cap and trade system for greenhouse gas (GHG) emissions under the Western Climate Initiative. When the province formally linked with California's system on January 1, 2014, the partnership became the most comprehensive carbon trading system in North America.¹ While the market has only just completed its second joint auction, we wanted to explore the lessons the province learned in developing and implementing what is now the continent's largest carbon market.

During the fall of 2014 and earlier this year, Clean Energy Canada conducted a series of confidential, candid interviews with the policy's architects and with expert observers who have watched its development and implementation. We spoke with elected representatives and officials working in Quebec's government at the time, and experts from the business, academic, and environmental communities within the province. We also sought commentary from California — Quebec's carbon market partner — to provide an inclusive look at the players intimately involved in shaping and responding to this ground-breaking policy.

These interviews focused on a few key questions that dug into the politics and process of adopting a cap and trade system:

- What motivated the development and introduction of a cap and trade system in Quebec?
- What are the key policy-design decisions that governments considering such an initiative would need to make? What are the pros and cons of these choices?
- What kind of response might governments expect if they introduce this kind of policy, and how can governments ensure that the response is as favourable as possible?

We've distilled our findings from these interviews down to ten key takeaways focusing on the development of Quebec's cap and trade system under the Western Climate Initiative. Together with our assessment² of British Columbia's Carbon Tax, we have provided a comprehensive look at how existing carbon pricing systems operate and how they can serve as useful lessons for jurisdictions considering adopting such a system.

The key findings from our interviews are summarized on the next page and described in more detail in the pages that follow. Questions posed to interviewees are included in Appendix A.

¹ Klinsky, Sonjia (2013). Bottom-up policy lessons emerging from the Western Climate Initiative's Development Challenges. *Climate Policy*, Vol 13. No2. 143-169.

² *How To Adopt a Winning Carbon Price: Top 10 Takeaways From the Architects of British Columbia's Carbon Tax*, Clare Demerse, Clean Energy Canada, February 2015. Available at cleanenergycanada.org.

Top 10 Takeaways

Considering a cap and trade system? Here's what you really need to know.

1. You'll need strong political leadership and a citizenry primed for climate action.

2. Partner with other jurisdictions to create new opportunities and lower the "cost" of participation.

3. Invest in education. Develop in-house expertise, and learn from others.

4. Take the mistakes of others, fix them, and turn them into benefits.

5. Invest auction revenues in tangible climate solutions.



6. Commit to openness, fairness, and transparency.

7. Address competitiveness concerns with a home-grown approach.

8. Design your system to support economic success.

9. Don't expect your cap and trade system to do everything; consider it one component of a full suite of climate policies.

10. Get ready for the global spotlight.

A Cap and Trade Primer

The mechanics and impacts of Quebec's cap and trade system

On January 1, 2013, Quebec took a bold step toward fighting climate change by launching a cap and trade system under the Western Climate Initiative's (WCI) carbon market. A year later, when Quebec linked its system with California's, it created North America's largest carbon market.

While it is too early to draw conclusions on Quebec's long term economic performance under the cap and trade system, a great deal remains to be learned from how the system came together. Quebec is the first subnational jurisdiction in Canada to develop a cap and trade system, and the first in Canada to do so under the Western Climate Initiative. Thus far, the system has also survived two changes in government.³

What is cap and trade?

Cap and trade is a form of market regulation applied to greenhouse gas (GHG) emissions.

The "cap" puts a limit on the maximum amount of GHGs that can be emitted, which is then translated into a number of allowances. Allowances can be distributed free to some or all covered entities or auctioned to highest bidders within a competitive bidding process; each emission unit usually represents one tonne of GHG.⁴ Companies must match their emissions to their allowances. Over time, the overall cap is lowered, leading to reductions in GHGs.

The "trade" creates a market for emission or carbon allowances. A company that is part of a capped sector must report its total emissions. If its emissions are equal to its allowances, then the emitter is compliant. At the end of the compliance period (in Quebec, three years), the emitter must return its allowances to the regulator.

If total emissions come in below the allocated allowances, the company has unused allowances — a surplus — which it can then choose to bank, surrender (for compliance during the current compliance period) or trade with other

companies/entities that are part of the market. If the emissions are greater than the allowances allocated, then the company must purchase allowances from those who have them for sale, at auction, or acquire offsets (see below). If the company does not have enough allowances or offsets to cover their emissions, the regulator will impose penalties.

Surplus allowances are traded and priced according to supply and demand. As the regulator gradually lowers the cap on emissions, fewer allowances are available. This creates a demand for allowances, which increases their value or price. Over time, industries that use carbon-intensive technology will find it more economical to upgrade to lower-carbon technology to reduce their need for allowances.

What is an offset?

Offsets are initiatives undertaken by non-regulated industries that reduce or remove greenhouse gas emissions, and which can be sold to emitters to help meet their compliance obligations. To be eligible as an offset, the regulatory authority must validate projects. In Quebec and California, offsets are limited to eight percent of the compliance obligation.

How does it work?

- In Quebec's system, sectors perceived as trade-vulnerable receive emission allowances free of charge. These sectors include: aluminum, lime, cement, chemical and petrochemical industry, metallurgy, mining and pelletizing, pulp and paper, and petroleum refining, among others.⁵
- Emission units not allocated free of charge are auctioned off, at most up to four times a year. Since January 2014, Quebec and California have held these auctions jointly.⁶
- The floor price for the joint auction is set by selecting the higher of Quebec or California's minimum price at the predominant exchange rate.⁷

- The final sale price of each emission unit auctioned is the lowest price bid for which the last emissions unit is awarded.⁸
- In Quebec's cap and trade system, trading period is referred to as the "compliance period". Allowances are allocated and auctioned within this period.⁹
- The price per unit from the last joint auction held in February 2015 was \$12.21/tonne.
- Compliance periods last three calendar years each as of January 2015 (2015-2017, 2018-2020, and so on). Rules pertaining to the free allocation of allowances are only set by regulation until 2020. All allowances have to be surrendered by the first of November following the end of the compliance period.¹⁰

What does the system cover?

- Persons or municipalities operating a facility with annual GHG emissions greater than or equal to 25,000 tonnes of equivalent carbon dioxide a year.¹¹
- The system covers close to 85 percent of Quebec's GHG emissions. At its outset in 2013, this included the industrial, manufacturing, and electricity-generating sectors. In 2015, coverage expanded to include GHG emissions related to the use and combustion of fossil fuels that are sold or distributed.¹²
- In addition, the cap and trade system is open to individuals or entities that would like to participate in the carbon market, even when there is no regulatory obligation for them to do so.¹³

Distribution of Emission Units

- For 2013/2014, industrial emitters exposed to foreign competition received most of the emission units they needed free of charge so as to prevent "carbon leakage" — that is, the movement of companies to jurisdictions without a cap and trade system.

- Beginning in 2015, in order to encourage GHG reductions, the number of free units decreases at a rate of one to two percent per year.
- Electricity and fossil fuel distributors don't receive free allocations.

All proceeds of the auction of units go into Quebec's "Green Fund" to finance various initiatives outlined in the province's 2013 - 2020 *Climate Change Action Plan*. These include public transit, research and innovation, green energy, and dealing with residual municipal solid waste.¹⁴

³ The Liberal Party formed government from 2009 - 2012, the Parti Québécois from 2012 - 2014, and the Liberal Party from 2014 - present

⁴ http://www.ieta.org/index.php?option=com_content&view=article&id=26&catid=3&D54:3-minute-briefing%26id%3D205:cap-%26-trade-basics

⁵ <http://www.mddelcc.gouv.qc.ca/changements/carbone/documents-spede/technical-overview.pdf>

⁶ <http://www.mddelcc.gouv.qc.ca/changements/carbone/documents-spede/in-brief.pdf>

⁷ Ibid.

⁸ Ibid.

⁹ https://icapcarbonaction.com/index.php?option=com_etsmap&task=export&format=pdf&layout=list&systems%5B%5D=73

¹⁰ Ibid.

¹¹ Excluding CO2 related to the combustion of biomass.

¹² <http://www.mddelcc.gouv.qc.ca/changements/carbone/documents-spede/in-brief.pdf>

¹³ Ibid.

¹⁴ <http://www.mddelcc.gouv.qc.ca/changementsclimatiques/programmes.htm>

1. You'll need strong political leadership and a citizenry primed for climate action.

It takes a strong leader to make change happen, and so when we asked each of our interviewees, “what motivated the government to introduce a cap and trade system?” the answer was often the same: Quebec deeply believed in climate change, and it was firmly within then-premier Jean Charest’s priorities.

Quebec had an advantage with respect to total energy use, as it sources its electricity almost entirely from water resources (hydroelectric).¹⁵ Even so, in 2006, then-premier Jean Charest, leader of Quebec’s centre-right Liberal party, felt more could be done. With the introduction of its *Climate Change Action Plan*, Quebec brought in a carbon levy on the carbon content of fossil fuels, making the province the first jurisdiction in Canada to send a carbon price signal to its economy. Seven years later, Charest would announce that Quebec’s carbon market under a cap and trade system was in full operation, reflecting his commitment to using economic instruments to further a social good.

Cross-government collaboration proved one of the more challenging elements of the cap and trade system’s introduction. Political and government interviewees all cited Charest’s leadership as essential.

It took more than a strong commitment to the environment to introduce a price on carbon; it also required commitment from the Finance Ministry to deal with pricing and exchange, and from the Industry Ministry to consider stakeholder support and trade — though neither department held any part of the climate change file. It took a policy champion — in this case the former federal Environment Minister and now Premier — to make it happen.

Charest had no shortage of leadership in his cabinet. Behind the cabinet’s collective support for climate action, throughout the process he relied heavily on three environment ministers:

- Claude Béchar, who formulated the government’s overall climate policy in 2006;
- Line Beauchamp, whom interviewees say did much of the heavy lifting on the actual policy design and delivery; and
- Pierre Arcand, who handled some of the more complicated issues of the implementation, especially with the business community.

Interviewees reminded us that in Quebec, a general consensus exists on the need for climate action. This consensus created the necessary environment to enable action. Quebecers know and understand that human activity causes global warming; therefore, caring about climate disruption is a political winner in the province.

Charest saw cap and trade as a real opportunity to showcase all of the province’s investments in hydro, hydro exports, manufacturing, and aluminum — all of which had been working effectively to reduce emissions since the 1990s. For Charest and his majority Liberal government, a cap and trade system would position Quebec as a clear winner in a global economy already heading in the direction of decarbonization. Interviewees also credited public support for climate action as the reason why carbon-pricing policies have survived changes in government: the public saw it as Quebec’s opportunity to lead.¹⁶

These factors, in combination, helped Quebec develop and implement a leading climate change policy — and be the first of Canada’s jurisdictions to do so under the Western Climate Initiative. But the driving force was the carefully calculated direction of one politician’s personal convictions and his deep desire to build a strong economy for his province.

¹⁵ <http://www.hydroquebec.com/about-hydro-quebec/who-are-we/hydro-quebec-glance/html>

¹⁶ A Parti Quebecois government held power in the province from 2012-2014

In their own words

“There was strong political leadership from Charest. He was convinced that this was the right thing to do, and he did it right at the peak of climate concerns in Quebec.” – Karel Mayrand, David Suzuki Foundation

“We had a Premier who was profoundly convinced and engaged in tackling climate change. Yes, you need strong Ministers — but honestly, I don’t think we would have got there without a Premier who believed very strongly in this initiative.” – Interviewee

“This choice of policy reflects an ethic of enlightened self-interest in Quebec. They saw where the world was going in terms of carbon markets, knew they could reduce GHGs by becoming more efficient, and they wanted to get credit for it. Charest also perceived himself as a leader on the environment; he was a policy entrepreneur. Looking at Governor Schwarzenegger, Premier Campbell — you need that kind of leadership at the very top, because there will be some bumps in the road.”

– Erick Lachapelle, Université de Montréal

“If you have a leader that’s going to go to the wall on doing something on climate change, you can get things done. It became a legacy issue for him.”

– Katie Sullivan, IETA

2. Partner with other jurisdictions to create new opportunities and lower the “cost” of participation.

Though Quebec’s cap and trade system, like California’s, is very much the result of provincial and state legislation, both operate under the guidelines of the Western Climate Initiative. The Initiative is a voluntary subnational intergovernmental organization initiated in 2007.¹⁷

When Quebec linked its cap and trade system with that of California in January 2014, it established North America’s largest carbon market. Our Quebec-based interviewees cited two tangible benefits of the relationship: The spill over effect of California’s positive reputation in terms of policy leadership, and the creation of a market large enough to generate sufficient credit to ensure robust trading.

Having more players creates a more fluid and dynamic market. This fact was undisputed among our interviewees, who also saw the need for a large market to support the function and credibility of a cap and trade system.

Politically, California was described as a “leading state,” where fuel efficiency standards “set the pace for both the US and Canadian national governments.” Interviewees felt strongly that the California link gave Quebec a degree of political cachet that another jurisdiction would not. This cachet afforded the partnership a sense of confidence. The personal relationship between then-Premier Jean Charest and then-Governor Arnold Schwarzenegger helped, too.

When asked to cite downsides of interlinked systems, our interview subjects flagged the cost of emission units, and the debatable benefits of having them available at a lower cost. In the linked system, California has a surplus of units, thereby reducing the price of units at auction. Many of our interviewees pointed to the fact that this results in Quebec companies purchasing units at a cheaper rate in California to meet their emissions targets, leading to a “flight of capital” from Quebec to California.

Others said the California linkage is easier on Quebec businesses, citing the attractiveness of lower private-sector compliance costs. They argued that the flight of capital would “net out” over the longer term as other jurisdictions join and Quebec establishes emissions reductions targets beyond 2020.¹⁸

Finally, several of our interviewees cited a non-market-based benefit: the opportunity to demonstrate how a program of this magnitude can have broad appeal even in a jurisdiction that differs in language and currency. Interviewees from both the state and the province cited the collaboration as intensely positive in terms of both learning and outcomes. They believe this sends a message to other WCI partners (which have yet to introduce carbon regulations) that collaboration is possible and beneficial.

“We gave a lot of thought to how to make the trading program work well, to ensure that there were separate and different benefits for each jurisdiction. The fact is both Quebec and California have similar ambitions that are compatible over the long term – and this is what made it net out in a fair and balanced partnership.” – **Mary Nichols, California Air Resources Board**

“Quebec joining with California gave credibility. Quebec was the only Canadian province to do it, so it put some of its industries at a competitive disadvantage (or so they argued) – especially when compared with Ontario. So acting with other jurisdictions makes it more credible, especially with California. It gives value to the system.” – **Karel Mayrand, David Suzuki Foundation**

“Partnership is why the linkage matters so much. That’s why California did it too – it doesn’t look good on anyone to be alone. Would Quebec be their ideal partner? Probably not, but they were the only ones left standing.” – **Interviewee**

“Honestly, if we didn’t have California, I’m not sure we would have been able to move alone. There was a strong consensus, but would we have been able to keep that consensus without California? We needed to show we weren’t alone in North America.” – **Interviewee**

¹⁷ Purdon, M., Houle, D. & Lachapelle, E. (2014). *The Political Economy of California and Quebec’s Cap-and-Trade Systems*. Sustainable Prosperity Research Report, page 5

¹⁸ California has committed to 80% below 1990 levels by 2050

3. Invest in education. Develop in-house expertise, and learn from others.



Courtesy of the Centre for Sustainable Development

As mentioned earlier, it was important to Quebec — and personally to Charest — to use market-based tools to price carbon emissions, but all of our interviewees noted that creating a credible cap and trade system is an extremely complex process. On this front, Quebec had the opportunity to look to other jurisdictions for lessons learned.

In addition to negotiating with California, the province witnessed the development of the Western Climate Initiative as a corporation providing administrative and technical services to support the implementation of greenhouse gas emissions trading programs.¹⁹ They also looked to the European Union and the Regional Greenhouse Gas Initiative (RGGI) experiences. From this they learned two major lessons. First, as one interviewee put it, “we really, really needed a price floor.” Second, there was a need to cover more sectors than the RGGI. It also helped to govern Quebec’s treatment of offsets in their system.²⁰

Several interviewees who worked in government at the time of the project’s development wanted to acknowledge a “small but effective” group of dedicated staff, 10 to 15 individuals who “ate, slept, and breathed” the cap and trade policies and knew them so intimately that everyone was able to stay on the same page and on message in a variety of negotiations and meetings.

Hugo Séguin directly credited Environment Minister Line Beauchamp with becoming an expert on cap and trade policies. “Like Hermione in *Harry Potter*,” Beauchamp learned the ins and outs of the carbon market so intimately that she was credited as “knowing more than some of the companies did.”

¹⁹ <http://www.wci-inc.org/index.php>

²⁰ For treatment of offsets, please see number 4

“One of the things they did learn from the EU program was having that price floor, which is very important. The safety valve at the top end also gave comfort to industry that prices wouldn’t go skyrocketing in the near-term.” – **Katie Sullivan, IETA**

“The Quebec government benefitted from the evolution in thinking from the European Union, from academics and from the experience with RGGI. They also benefited from having the WCI as a central coordinating agency to ensure their system would eventually comply.”

– **Erick Lachapelle, Université de Montréal**

“Quebec developed very significant expertise in carbon markets, so that they did not have to be a rule-taker in negotiations. They carefully studied the EU experience.” – **Hugo Séguin, Université de Montréal**

“We really studied the existing systems carefully. We looked at RGGI, and really learned a lot there, and we looked at the European Union’s (EU) Emissions Trading System (ETS). We saw that you really needed a minimum price to avoid the problems the EU had with the ETS.”

– **Interviewee**

4. Take the mistakes of others, fix them, and turn them into benefits.

When we asked interviewees what made the biggest change in policy effectiveness for Quebec's cap and trade system, the answer was consistent: cost containment. The policy's floor price and the Minister's allowance reserve, which acts as a price ceiling, were widely cited as critical to its long-term success.

Quebec developed its cap and trade system with great care. Its architects made deliberate decisions rooted in lessons learned from other jurisdictions. Interviewees pointed to the process surrounding free allocations to qualifying entities as a unique feature of the Quebec system. Officials added this, they said, to address a perceived shortfall in the European Union's system.

As one interviewee explained, "when emitters qualify for free allocation, we give two-thirds of the allowances at the start, and one-third afterwards, or the following year. So if a company has increased its production, we give more, and if less, we cut their allocations." The approach prevents the inadvertent "over-awarding" of free allowances, a pitfall of the European system which does them out in one fell swoop.

Our sources also cited offsets as a distinctive feature of Quebec and California's system — in particular the fact that compliance obligations are limited to eight percent. Offsets are highly controversial in the cap and trade world, and Quebec's use of the instruments is no exception. While some of our interviewees believe that the cap on offsets can undermine both environmental integrity and the integrity of the cap itself, others vehemently disagreed. They believe that offsets support cost containment,²¹ and allow legitimate emissions reductions to occur in the non-covered sectors outside of the cap, driving cooperation and creating a true market "link."

When asked about improvements that could be made, several sources agreed that the province should establish more long-term emissions targets, because businesses require longer planning cycles. This would afford businesses greater assurance, more incentive to act, and strengthened stability over a longer time period.

"The allocation approach with industry was good. [Government] worked quite closely with affected industries well in advance so that they understood they needed a step-by-step approach with gratis allocation at the front end." – Katie Sullivan, IETA

"The system was designed not to hurt those sectors, thanks to free allocation of allowances. The free allowances are almost a form of support to those sectors, but the system is set up to ensure it won't have a damaging impact on trade-exposed sectors."

– Interviewee

"We didn't try to crunch all of the issues at once. We thought it was legitimate to make decisions gradually. We wanted to establish the principle, get the system going, get the quotas decided, and that's what we did."

– Jean Charest, Former Premier of Quebec

"Design is tricky. Quebec had observed what had happened in Europe, where faulty design had led to the collapse of the price in the system." – Interviewee

²¹ This is because offsets offer lower cost reductions than allowances

5. Invest auction revenues in climate solutions.

Any government considering a carbon-pricing system must confront the most hotly debated question: Where do the revenues go? Various Canadian jurisdictions have taken different approaches to the conundrum. In fact, even Quebec and California chose different paths; California returns some revenues to citizens in the form of energy credits.²²

For its part, Quebec places all cap and trade revenue into the Green Fund, which some interviewees expect will grow to between \$2.7 and \$3.3 billion²³ in the next eight years. This decision helps ensure the system's credibility, they said, and helps make it politically palatable to climate-savvy voters. Take transit, for example. The Green Fund dedicates two-thirds of its funding to transit — a policy not supported by all interviewees. The impact on ridership, however, is undeniable: "In 2010 or 2011 we broke a record for transit use that dated from 1947 — transit use had been declining ever since [that post-war period]," one of our sources said.

In 2014, Quebec's Sustainable Development Commissioner tabled a report specifically addressing the Green Fund. The assessment criticised the fund, and said it was lacking in terms of project criteria, calls for proposals, clearly defined objectives, and program information.²⁴ One interviewee agreed, suggesting "highly political objectives" undermined the Fund, and said that its development favoured projects in certain sectors, "like public transit, because they're popular."

So while interviewees unanimously believed strongly that auction revenues should be reinvested in climate solutions, many attached caveats. As one source suggested, "if we did other kinds of projects, we could be more oriented to results. We could set up formal requests for proposals (RFPs) to see what industry could come up with to help address climate change." If given the opportunity to plan the system all over again, one participant said he would bring industry into the loop on Green Fund allocations.

²² Purdon, M., Houle, D. & Lachapelle, E. (2014). *The Political Economy of California and Quebec's Cap-and-Trade Systems*. Sustainable Prosperity Research Report, page 22

²³ http://www.mddelcc.gouv.qc.ca/changements/plan_action/pacc2020-en.pdf

²⁴ http://www.vgq.qc.ca/en/en_publications/en_rapport-annuel/en_fichiers/en_rapport2014-2015-cdd.pdf

"Quebec was increasing fees on all sorts of government services just to generate revenues, but the Green Fund was additional investment in things to combat the sources of climate change that Quebec would not be doing otherwise." – Karel Mayrand, David Suzuki Foundation

"It's a question of credibility. If we tell people that this matters, and there's a system in place that will give a price signal to reduce emissions, it's essential the money actually goes to reducing emissions. It will fail without that — the system would lose credibility." – Vincent Pouliot, Gaz Métro

"For the public, it makes sense to spend revenues generated from cap and trade on the deployment of alternative sources of energy. In Quebec, the second most popular use of revenues is to decrease the province's dependence on oil. While consistent, we don't hear nearly as much this outside of Quebec." – Erick Lachapelle, Université de Montréal

"If we take auction revenues and use them to reduce dependence on imported fossil fuels, we'll be building Quebec's economy." – Hugo Séguin, Université de Montréal

6. Commit to openness, fairness, and transparency.

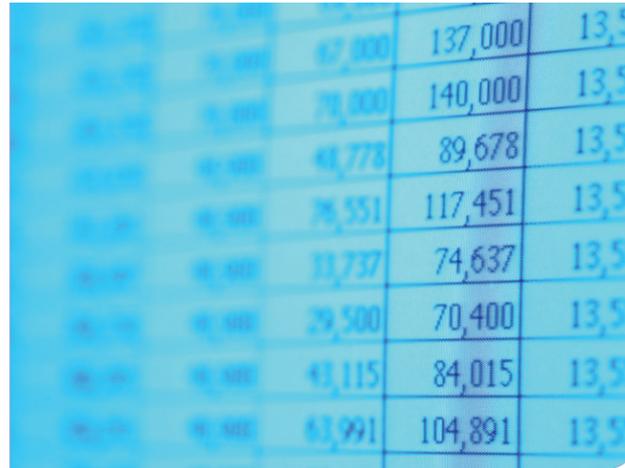
Cap and trade advocates take a lot of flack for the inherent complexity of their chosen approach. That's why many of our interviewees stressed the importance of fairness, openness, and transparency in system design.

Accountability boils down to three characteristics, our interviewees said: Public education and awareness, a transparent system design — especially with respect to industry negotiations — and an independent body to keep an eye on things. Without these elements in place, a cap and trade system's long-term credibility is at risk. With them, it is far more likely to stand the test of time.

Unhappy about their January 2015 inclusion in the program, late last year oil companies leveraged low public awareness of cap and trade to launch a negative public-relations campaign. The companies floated the spectre of high gasoline prices in an effort to build public opposition to carbon pricing. Some of our interviewees felt this could have been avoided with a more informed public, but as one interviewee stated, "it wasn't such a big deal once gas prices started falling. Nobody noticed anymore, and the opposition was silenced. [The government] got lucky."

When designing and implementing its cap and trade system, Quebec's government engaged with industry early and often. Many of our contacts characterized this decision as one of the more politically contentious aspects of the process. On the one hand, the move allowed the government to earn the private sector's support prior to the system's launch. On the other, interviewees felt that truly broad industry support didn't in the end materialize, and that closed-door meetings with individual sectors created both real and perceived inequity in the system.

The best example of this, according to our non-government sources, is the way the province handled free allocations. While several industries, including aluminum, pulp and paper, cement, and others, receive free allocations in Quebec's cap and trade system, it is not clear how they are distributed. While the total number of allowances — and a list of the entities that receive them — is published in the *Gazette officielle du Quebec*,²⁵ only the government knows the exact number received by each.



		67,000	137,000	13,5
		78,000	140,000	13,5
		68,778	89,678	13,5
		78,551	117,451	13,5
		11,737	74,637	13,5
		79,500	70,400	13,5
		61,115	84,015	13,5
		63,991	104,891	13,5

Quebec's provincial government manages all aspects of its cap and trade system, including the offsets protocol development, registry, and issuance. Its American counterpart is the California Air Resources Board (CARB), an independent government agency charged with managing the system's rules, regulations, and participation.²⁶

In comparing the two bodies, interviewees noted that CARB leans heavily on third parties for support in areas such as offset protocol development and registries. By design, these stakeholders can bring protocols to CARB for review, which the board can in turn review and adopt as official protocols.

In Quebec, there is no equivalent process for advancing protocols, and no third-party review. One interviewee described the setup as one "done in isolation with no transparency." Another characterized the province's approach as "slow" and "not one that is business-oriented — the whole focus is on environmental integrity." This suggests that the system could be strengthened if officials ensured processes were transparent and easier to understand.

²⁵ <http://www.mddelcc.gouv.qc.ca/changements/carbone/documents-spede/technical-overview.pdf>

²⁶ <http://www.arb.ca.gov/html/mission.htm>



"It's not so much that people didn't care about the system going into effect. I would argue that many small- and medium-sized enterprises didn't know what was going on, and it showed." — Erick Lachapelle, Université de Montréal

"This was the aspect that created the most concern from industry: the idea that political distribution of allowances would give political favours to a given sector or competitor." — Interviewee

"We were surprised by the lack of awareness among the public and even within some of the regulated sectors. This is particular to Quebec — the story in other WCI jurisdictions was different." — Erick Lachapelle, Université de Montréal

7. Address competitiveness concerns with a home grown approach.



Courtesy of the Centre for Sustainable Development

When Quebec set about engaging with business and industry on its system design, it kept two anticipated concerns front and centre: Maintaining competitiveness, and overcoming expected opposition.

The Quebec government invested a great deal of time sitting down and listening to businesses, interviewees told us. Several cited “if not weekly, then at least monthly” meetings to keep an open channel with affected parties, and quickly respond to concerns. These meetings “helped to get businesses to support the market before it came into force.”

²⁷ Manufactures of glass containers, electrodes, gypsum products, and some agri-food establishments

Interviewees felt these meetings were essential in negotiating design elements — namely, the free allocation of emissions units — that were felt to be critical to secure industry support. They also helped ensure that trade-reliant sectors would not view themselves as unfairly targeted. Sectors receiving free allocation of allowances include aluminum, lime, cement, chemical and petrochemical, metallurgy, mining and pelletizing, pulp and paper, and petroleum refining, among others.²⁷ Under the system’s design, fuel distributors are not eligible to receive free allowances.²⁸ As a whole, this approach helped Quebec secure a supportive business community for its cap and trade program and subsequent California linkage.

²⁸ Some thermal power producers are eligible to receive free allowances. The allowance distribution process is described in sections 39 to 44 of the *Regulation pertaining to the cap and trade system for greenhouse gas emission allowances*

“There are appeasement measures that government can negotiate— but [we] need to ensure the balance between appeasement and system integrity.” – Karel Mayrand, David Suzuki Foundation

“The allocation approach with industry was good. The government worked quite closely with affected industries well in advance so they understood they needed a step-by-step approach with gratis allocation at the front end.” – Katie Sullivan, IETA

“Need support from progressive businesses. Business has a lot of sway in government, and if business is seen as isolated, it becomes ‘environment versus economy. If progressive businesses are on board, then government can act with broad-based support.”

– Karel Mayrand, David Suzuki Foundation

“The system was designed not to hurt those sectors thanks to free allocation of allowances. The free allowances are almost a form of support to those sectors, but the system is set up to assure it won’t have a damaging impact on trade-exposed sectors.” – Interviewee

Tax Politics

How the Government of Quebec prevented its cap and trade system from becoming a wedge issue at the ballot box

Political considerations lie at the heart of any major policy introduction — and Quebec’s cap and trade system is no exception. That said, our Quebec-based expert commentators were unanimous: Climate action and the cap and trade system were never an election issue.

Under the governing Quebec Liberal Party, the province demonstrated its commitment to action by setting a target to reduce emissions 20 percent below 1990 levels by the year 2020. In 2012, the National Assembly passed a resolution “deploring” Canada’s withdrawal from the Kyoto protocol. “Quebec for its part, intends to respect and make known its commitment to meet the greenhouse gas emissions reduction target,” the resolution stated. It was only one of two such decrees that passed in the session with unanimous consent from all parties.

When the Parti Québécois (PQ) rose to power later in 2012, one interviewee recalled a personal thought about what might happen, “for partisan reasons the PQ had critiqued the market before the election, if it came from [former Quebec Liberal Party premier] Charest it was highly suspicious.”

Instead, the PQ made an extended commitment to the cap and trade system, and an even stronger commitment to reducing emissions; a 25 percent reduction below 1990 levels by 2020.

Because of the strength of public support on climate action, *inaction* on climate became a political third rail. Dismantling the cap and trade system was never an option for government. This is one of the few jurisdictions in North America where this is the case.

“It was never an election issue, never a wedge politics issue, never was this policy questioned” – Erick Lachapelle, Université de Montréal

“In Quebec in general, climate change policy becomes a race to the top between the parties. No debate at all on the big question of whether we should take action to tackle climate change” – Hugo Séguin, Université de Montréal

8. Design your system to support economic success.



Courtesy of the Centre for Sustainable Development

Quebec's cap and trade system is too new to yield meaningful empirical data with respect to economic effects. Regardless, our interviewees were pointed in their comments about its role in the province's economy. Generally, they agreed that:

- 1) The cap and trade system has had a neutral effect on Quebec's economy to date;
- 2) The system will help Quebec stay on the leading edge of a new, greener economy; and
- 3) Chances for success improve if new partners join Quebec and California under the Western Climate Initiative.

Overwhelmingly, the majority of participants stressed the second point — preparing Quebec to enter into a new, green economy — as the system's primary economic benefit. One interviewee described entering into a cap and trade system as "an economic instrument, so that Quebec would be the economic winners."

Because Quebec generates relatively low emissions from its hydroelectric production, one source said that participation in a low-carbon economy will ensure that "Quebec will be a winner, because our products already have a lower carbon footprint, thanks to our electricity." Others praised the Green Fund's clean transportation investment requirement, and the jobs that it creates.

Those who felt that the cap and trade system has had a neutral impact on the economy generally believed that it was benefitting from the decline in oil prices — creating less of a price increase than otherwise might have occurred. Any negative performance in Quebec's economy can be attributed to larger macroeconomic issues, which have overshadowed the results of the cap and trade system, itself operating at capacity only since 2014.

"We know there is huge potential in the green economy. For example, in Quebec there's a huge emphasis on the electrification of transportation. We have lots of companies that benefit from the turn towards a green economy." – Interviewee

"I think the effect on the economy is neutral. Even with the slowdown in Quebec's economy now, nobody is linking that (or even part of that) to the carbon market, and I have never heard of an industry refusing to come to Quebec because of the carbon market." – Interviewee

"There was a strong belief that the world was heading to decarbonization, and that a price on carbon was an essential part of that. Those who were most prepared would be the biggest winners economically."

– Interviewee

"It's neutral on the economy for now, but it's not a bad thing to be a pioneer. It may help better position Quebec for the future." – Interviewee

9. Don't expect your cap and trade system to do everything; consider it one component of a full suite of climate policies.



In both Quebec and California, the cap and trade system is just one component of a suite of policies designed to fight climate disruption. As ably described by the University of Ottawa's Sustainable Prosperity think tank, both systems serve as a backstop measure, making other climate policies more robust.

California officials expect that complementary policies — such as the state's renewable energy portfolio and low-carbon fuel standards — will realize 85 percent of 2020 emission reductions.²⁹ Similarly, Quebec details 30 priority projects expected to result in 6.1 of the estimated 11.7 megaton reduction required for Quebec to meet its greenhouse gas emissions targets.³⁰

Quebec officials never envisioned their cap and trade system operating in isolation. Our sources pointed to the province's previous climate change policies, specifically its fossil fuels levy,³¹ as the first phase in a more comprehensive strategy. The cap and trade system became one component of that larger strategy, not insignificantly, the one that generates the revenue required to fund it.

Two-thirds of Quebec's cap and trade revenue will fund transportation-sector improvements. Coincidentally transportation fuels produce 43.5 percent of the province's carbon pollution.³² Meanwhile, voters typically support public transit and other clean transportation initiatives. One interviewee noted that, because of decreased revenue in other areas, "a dedicated funding stream allows the government to put investments where it otherwise would not have been able to."

Interviewees emphasized that the cap and trade system was just one piece of the puzzle in a broader government plan to help tackle climate disruption. In the case of Quebec, this helped to capitalize on the public's acceptance of climate change as a threat and the government's commitment to taking a leadership role in addressing it.

²⁹ Purdon, M., Houle, D. & Lachapelle, E. (2014). *The Political Economy of California and Quebec's Cap-and-Trade Systems*. Sustainable Prosperity Research Report, page 5

³⁰ http://www.mddelcc.gouv.qc.ca/changements/plan_action/pacc2020-en.pdf

³¹ Ended December 31, 2014

³² http://www.mddelcc.gouv.qc.ca/changements/plan_action/pacc2020-en.pdf, page 22



"The Quebec government, from the mid-2000s, wanted to be a leader in the fight against climate change. They did many things in that fight; cap and trade was not the first. Since 2006, we had the Green Fund, which generated \$200 million a year dedicated to tackling climate change."

– Interviewee

"In 2009, Quebec announced GHG emissions reduction targets for 2020 and integrated these targets in its climate change action plan — but the action plan wasn't enough on its own. Quebec wanted a steady money stream to ensure that programs could then help reach the targets."

– Hugo Séguin, Université de Montréal

"California had decades of investments in energy to transform its electricity sector, so the proportion generating from clean sources was increased." – Mary Nichols, California Air Resources Board

10. Get ready for the global spotlight.



While it is still too early to assess the economic performance of Quebec's cap and trade system, when it came to assessing the success of the policies, our interviewees were unanimous on one point: Carbon pricing has significantly enhanced Quebec's reputation on the world stage.

When asked about environmental benefits from the cap and trade system, generally, interviewees viewed the environmental successes as "longer-term." It is a benefit that the cap and trade system has helped raise awareness among businesses about the need for greenhouse gas emission management. However, one interviewee

expressed some hesitation with respect to Quebec's efforts to reduce carbon pollution 20 percent by 2020. That source cited the lack of alignment with California's targets, and the province's "freezing or re-evaluation of other climate programs."

Finally, the system's designers look back on it as a highlight of their careers. One called it "the most fun subject I've ever worked on." Former Premier Jean Charest described it as "very comforting to know that this approach could make a difference." All of the interviewees who helped develop the policy reported feeling a sense of pride in what has been accomplished.

"It's excellent for Quebec's reputation. Quebec has positioned itself as a leader and that looks good on the province. Quebec will make use of this at the Paris climate talks as a significant accomplishment."

– Vincent Pouliot, *Gaz Métro*

"Really, this has put Quebec back on the map. There's a new interest in Quebec that didn't exist at this level before." – Interviewee

"We can say we're unique, we're in the avant garde, we're advising the World Bank on carbon pricing, and so on." – Hugo Séguin, *Université de Montréal*

"That is the game changer I have seen. Quebec being pointed to internationally as a sub-national that is a total climate leader." – Katie Sullivan, *IETA*

Parting Thoughts

We ended our interviews by asking, “What would be your advice to other jurisdictions considering a cap and trade policy?” Here are some of the responses.

“Be among the first — coming in last is just a losing proposition.” — Interviewee

“Take it easy on the offsets at the beginning, because it’s hard to put the toothpaste back into the tube.”

— Erick Lachapelle, Université de Montréal

“Try to forge coalitions, not just with industry but with other political parties, given the urgency of the problem, and given that this is good policy according to all the experts and economists who can back you up.”

— Erick Lachapelle, Université de Montréal

“Once you’ve taken the decision, it’s taken. There is no turning back. You’ll have critics, you’ll have opponents, but once you decide, you get it done.”

— Hugo Séguin, Université de Montréal

“Consult frequently and thoughtfully with industry and people who understand markets. It’s a market-based mechanism and designing a market is not on the CVs of a lot of environmental regulators. Don’t just think about compliance, think about secondary markets, driving liquidity, broad participation and price discovery, etc.”

— Katie Sullivan, IETA

“Raise awareness, talk about it in positive terms. Create a broad coalition in favour of action. You also need supportive businesses.”

— Karel Mayrand, David Suzuki Foundation

“Be very clear and determined when you decide to put it forward. Think it through in advance, say you’re doing it, and ask everyone to work with you on getting the design right.”

— Jean Charest, Former Premier of Quebec

“Arrange that you have civil society support all the way.” — Hugo Séguin,

Université de Montréal

“Join existing systems like the WCI rather than re-inventing the wheel. The WCI isn’t perfect, but it’s rigorous, and it’s much easier than inventing a new system from scratch.” — Vincent Pouliot, Gaz Métro

“Think about what elements are necessary to add for linking, and what can be tailored to suit an individual jurisdiction. As long as the basics are the same, there’s a lot of room for individuality.”

— Mary Nichols, Chair, California Air Resources Board

“Increase levels of transparency, and find a place for the creativity of economic actors.” — Interviewee

“Don’t sell it as a system to punish the bad guys. Environmental groups need to hear that. It’s a carbon market, and we don’t want it to be seen as punishment. The goal is to put in place a new economic tool, and you have to present it that way.” — Interviewee

Appendix A

List of Questions for Interviewees

Our team interviewed 10 experts during the fall of 2014 and the first months of this year in semi-structured conversations based on the questions below. Not all interviewees were asked all of the questions.

Developing and introducing the cap and trade system

1. In your opinion, what motivated the Government of Quebec to consider and introduce a cap and trade system?
2. Designing any cap and trade system involves making decisions about things like the use of revenues, the allocation of allowances, and the use of offsets. Which of Quebec's design choices do you think will make the biggest difference to the policy's effectiveness?
3. During the development of the cap and trade system, which aspects of its design proved the most contentious?
4. Think back to when the policy was first announced. How was it received?
5. Were you surprised by any of the responses from particular groups or individuals?
6. Were the government's communications efforts effective in responding to critiques or concerns about the system? Why or why not?
7. What approaches / strategies / tactics did Quebec use during negotiations with California—a far larger jurisdiction—to reach an agreement that worked for Quebec?

Effect of the Policy

8. Do you believe that the cap and trade system has harmed trade-exposed sectors? Why or why not?
9. Is Quebec's approach to auctioning / free allocation appropriate?
10. Do you think Quebec uses its auction revenues effectively? Could other uses of the revenue be more effective?
11. Do you think the price level and stringency of the system is about right? Why or why not?

12. In your view, how important is the linkage to California's system?
13. What are the benefits of that linkage to Quebec, if any?
14. What are the drawbacks, if any?
15. Now that we have a couple of years of experience with the cap and trade system, how would you characterize its impact on Quebec's:
 - Economy?
 - Greenhouse gas emissions?
 - Reputation?
16. What allowed Quebec's cap-and-trade system to survive an election / change in government?
17. How likely do you think it is that the cap and trade system will remain in effect over the long term? Do you anticipate significant changes to the system design in the coming years?

Cap and Trade Politics

18. What were the political advantages, if any, of the introduction of the cap and trade system? What were the disadvantages, if any?
19. From a political point of view, how could the government's rollout of the cap and trade system have been improved?

Reflective Questions

20. What would be your advice to other jurisdictions considering a cap and trade policy?
21. If it were starting all over again, what should Quebec's government do differently?
22. Looking back on it now, how do you feel about your participation in the development of the policy?

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Sarah Petreva

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