GETTING IT RIGHT

Design Recommendations for Ontario's Cap-and-Trade System

CLEAN
ECONOMY
ALLIANCE

Acknowledgements

This report was prepared by the CLEAN ECONOMY ALLIANCE.

ABOUT THE CLEAN ECONOMY ALLIANCE

The CLEAN ECONOMY ALLIANCE is a group of over 80 organizations representing a broad cross-section of Ontarians that have united in support of the Ontario government's recent commitment to develop a climate change strategy and put a price on carbon. The alliance includes prominent Ontario businesses, industry associations, labour unions, the Ontario Federation of Agriculture, health charities, and environmental groups.

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Executive Summary

Ontario has committed to developing a cap-and-trade program as part of a larger strategy to fight climate change. This report outlines a series of recommendations on the design of Ontario's cap-and-trade program, developed by the Clean Economy Alliance, a multi-stakeholder alliance with more than 80 members. These recommendations build upon the Alliance's founding principles on cap-and-trade program design.

The recommendations have been informed by the perspectives of experts on cap-and-trade programs and by the experiences of other jurisdictions, with particular attention paid to Quebec and California, which Ontario is expected to link with under the Western Climate Initiative.

Cap-and-trade can be an effective tool to help reduce emissions, but it's important that the system be designed well if it is to live up to its promise. With that in mind, the Alliance offers the following recommendations for consideration by the Province of Ontario, as the provincial government develops its cap-and-trade program.

RECOMMENDATIONS

COVERAGE

Following from the principle that the cap-and-trade program should apply to as large a share of Ontario's emissions as is practicably possible, coverage in Ontario should be aligned with Quebec and California at a minimum of 85 per cent coverage of the economy, including electricity, buildings, transportation and industry. Fuels should be included in the system from the outset. No exemptions should be given.

STRINGENCY

Ontario's cap-and-trade program should be implemented by 2017 and the emissions cap should decline by approximately five megatonnes (MT) per year, on a clear and transparent schedule to provide businesses certainty. The cap needs to decline commensurate with Ontario's 2020 and 2030 targets. Consistent with the recommendations on coverage above, fuels should not be subject to delayed implementation.

PRICE STABILITY

Ontario's program should include a price floor, a market stability reserve, and an allowance purchase limit. Ontario should establish an auction reserve price (acting as a price floor) that increases by five per cent per year plus inflation to align with Quebec's and California's systems. It should establish a market stability reserve (acting as a price ceiling) that holds allowances and contains clear guidelines for adding and removing allowances from the system. Lastly, it should establish an allowance purchase limit to prevent covered industries from purchasing unnecessary allowances and artificially raising the price.

OFFSETS

Ontario should limit the use of offsets to a maximum of eight per cent of an entity's total compliance obligation, consistent with California and Quebec. Offsets should be subject to high standards in terms of verification to show that they are additive and permanent.

COMPETITIVENESS IMPACTS

Any process for assessing and addressing competitiveness impacts must be rigorous, transparent and based on sound economic analysis. If any permits are allocated without cost, they should only be granted to a very small set of industries where there is compelling evidence that there will be competitiveness challenges and leakage. Furthermore, any free allocation of permits must be transitional, decreasing consistently over time and in keeping with emissions intensity targets that also decrease consistently over time.

PROGRAM OVERSIGHT AND REVENUE ALLOCATION

The proceeds from carbon pricing should be dedicated to the Greenhouse Gas Reduction Account, per the Environmental Protection Act (2009), and disbursed according to the provisions of that legislation, including but not limited to:

- Mitigation of climate impacts on low-income and otherwise marginalized communities
- Monitoring, reporting, verification, oversight and governance, similar to the allocation of $45 million for "coordination, monitoring and accountability" in Quebec's Climate Change Action Plan
- Development and deployment of low-carbon technologies, such as renewable energy, clean technology, energy efficiency and conservation, public transit, and infrastructure for active transit, such as walking and cycling, that will support economic transformation and innovation and position Ontario to build a 21st century clean economy.

The fund should be administered by a third party in a transparent manner in order to avoid the perception of political interference and to facilitate widespread popular support. The determination of which projects receive funding should include a per dollar assessment of the GHG reduction potential of the initiative, economic analysis to ensure the proceeds deliver the greatest impact possible, and consideration of when an initiative will begin delivering emissions reductions. Ontario should also consider allocating a portion of proceeds to municipal planning authorities to develop climate change action plans to help municipalities mitigate and adapt to climate change.

LINKAGE WITH QUEBEC AND CALIFORNIA

Through the WCI, Ontario should focus on similar design details as those in California and Quebec to facilitate linkage, while making minor improvements that ensure its system is just as, or more stringent, equitable and effective than the others while accommodating Ontario's unique economy and environment.

Introduction

In spring 2015, Ontario announced that it would be putting a price on carbon by implementing a cap-and-trade program. This is an important step forward for meaningful climate action in Ontario. The government is in the process of making a number of decisions on the design of the program, and is expected to release details this fall, before the United Nations Conference on Climate Change in Paris this December.

The Clean Economy Alliance, comprised of more than 80 organizations representing a broad cross-section of Ontarians, united this year to urge the province to show leadership on climate action. Leadership means cutting carbon pollution and helping to clean the air, improve Ontarians' health while creating new jobs and opportunities for businesses. To do this, as a part of the province's climate change strategy, Ontario must design an effective, predictable, stringent, fair and transparent cap-and-trade program that maintains broad support and endures through time and any changes in government.

Recently, the Clean Economy Alliance brought together prominent Ontario businesses, industry associations, labour unions, agricultural groups, health charities and environmental organizations to find consensus on cap-and-trade design. The Alliance convened a series of workshops that brought in experts on cap-and-trade design and implementation in California, Quebec and the European Union. **At the workshops, participants shared perspectives, learned from one another, and agreed on a set of six principles to guide Ontario's cap-and-trade program.**

PRINCIPLES TO GUIDE ONTARIO'S CAP-AND-TRADE PROGRAM

Ontario's cap-and-trade program must be designed so it is effective and contributes meaningfully to reaching Ontario's 2020, 2030 and 2050 emissions reduction targets

The cap-and-trade program should apply to as large a share of Ontario's emissions as is practicably possible

The program should be designed in a way that is fair to those who may be disproportionately impacted, such as low-income families and workers

The program should be fair to companies that have taken early action, and address impacts to energy-intensive and trade-exposed industries

The cap-and-trade program should be predictable, and be geared toward continuous improvement and increasing stringency over time

Proceeds from the cap-and-trade program should be dedicated to supporting complementary policies to reduce carbon emissions and adapt to the impacts of climate change

This paper outlines a series of recommendations on key design elements – coverage, stringency, price stability, offsets, addressing competitiveness impacts, program oversight, proceeds allocation, and linkages. These have been developed by the Clean Economy Alliance, following from the principles listed above and drawing from the cap-and-trade programs operating in other jurisdictions.

The cap-and-trade program will be a critical part of Ontario's climate strategy. But the design matters, a lot. A robust system will help reduce emissions cost effectively and put Ontario on track to meet its climate targets. A poorly designed system, however, could erode confidence in government programs, in Ontario and elsewhere, to address climate change or, conversely, give Ontarians the impression that action is being taken when, in fact, the system does little to contribute to meeting Ontario's climate challenge. The recommendations laid out in this paper are intended to help ensure that Ontario's cap-and-trade program delivers on its potential.

Coverage

In a cap-and-trade program, coverage refers to the greenhouse gases, sectors and entities included as part of the carbon market. Broader coverage enables a more ambitious reduction goal in a cap-and-trade system and typically delivers a more cost-effective program because it allows an economy to share the costs of emissions reductions more broadly.

Both Quebec's and California's programs cover approximately 85 per cent of emissions in their jurisdictions. If Ontario is to join California and Quebec in a cap-and-trade system, it will be expected to have a similar level of coverage. **The Clean Economy Alliance supports and recommends this alignment of coverage to facilitate linking Ontario's cap-and-trade program with those jurisdictions.**

Quebec and California's programs cover emissions from electricity generation and industrial facilities and, as of January 2015, the programs expanded their coverage to include fuels, including gasoline, diesel, and natural gas. **Because Ontario's cap-and-trade system will be linking with Quebec and California, it is widely accepted that fuels will be covered from the outset.**[1] Moreover, delayed coverage of and compliance for fuels will make it very difficult for Ontario to meet its 2020 climate targets.

Lessons learned from other jurisdictions, such as British Columbia, Quebec, California and the European Union, also underscore the need to avoid giving exemptions to various sectors, due to the fact that once one exception is given, a precedent can be set that makes it challenging to deny others.[2]

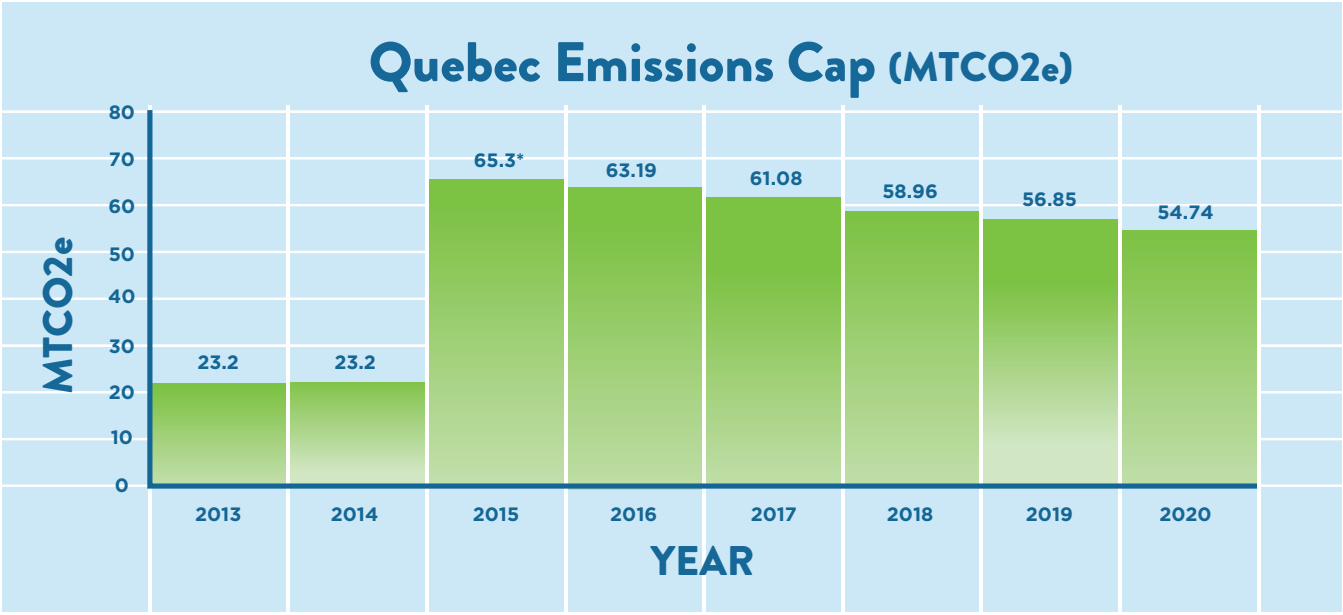
Following from the principle that the cap-and-trade program should apply to as large a share of Ontario's emissions as is practicably possible: The Alliance recommends that coverage in Ontario should be aligned with Quebec and California at a minimum of 85 per cent coverage of the economy, including electricity, buildings, transportation and industry. Fuels should be included in the system from the outset. No exemptions should be given.

Stringency

In a cap-and-trade program, the rate at which the cap comes down is the main determinant of stringency by setting forth how quickly the system reduces greenhouse gas (GHG) emissions. **Ontario's 2020 emissions reduction target is 15 per cent below 1990 levels, or 150 MT.** And because Ontario's cap-and-trade program is expected to cover the vast majority of emissions in the province, **the cap must come down at a rate that is consistent with this target.** In addition, to reach this target, the cap will need to start coming down as soon as possible and decline predictably year over year. Creating a clear reduction schedule provides businesses with the certainty needed to plan investment over time.

In Quebec, the cap decreases by nearly four per cent per year between 2015 and 2020 where it is set at 54.74 MT (See Figure 1).[3] Note that the cap rose in 2015 due to the expanded coverage of the system to include fuels.

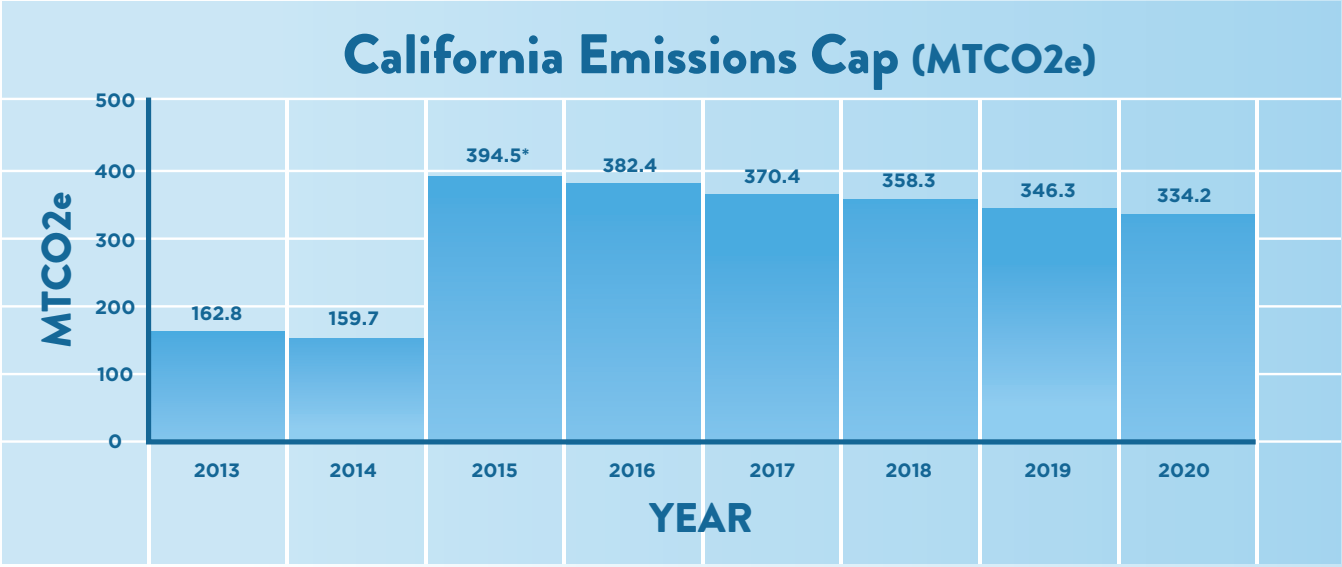
FIGURE 1: PLANNED EMISSIONS REDUCTIONS UNDER QUEBEC'S CAP-AND-TRADE PROGRAM



*The cap rose for the second compliance period due to the expansion of coverage to fuels.

In California, the cap decreased by about two annually in 2013 and 2014. Between 2015 and 2020 it will decrease by 12 MT per year, which is approximately three per cent of covered emissions in 2015 (See Figure 2).[4]

FIGURE 2: PLANNED EMISSIONS REDUCTIONS UNDER CALIFORNIA'S CAP-AND-TRADE PROGRAM



*The cap rose for the second compliance period due to the expansion of coverage to transportation fuels.

Given that Ontario's 2020 targets are fast approaching, it is advisable that the Province get the cap-and-trade system up and running as soon as possible. As such, the Clean Economy Alliance recommends that Ontario launch the program and hold its first auction in 2017. Ontario should then link with Quebec and California at the earliest possible date, which is 2018, when those jurisdictions' third compliance period begins.[5]

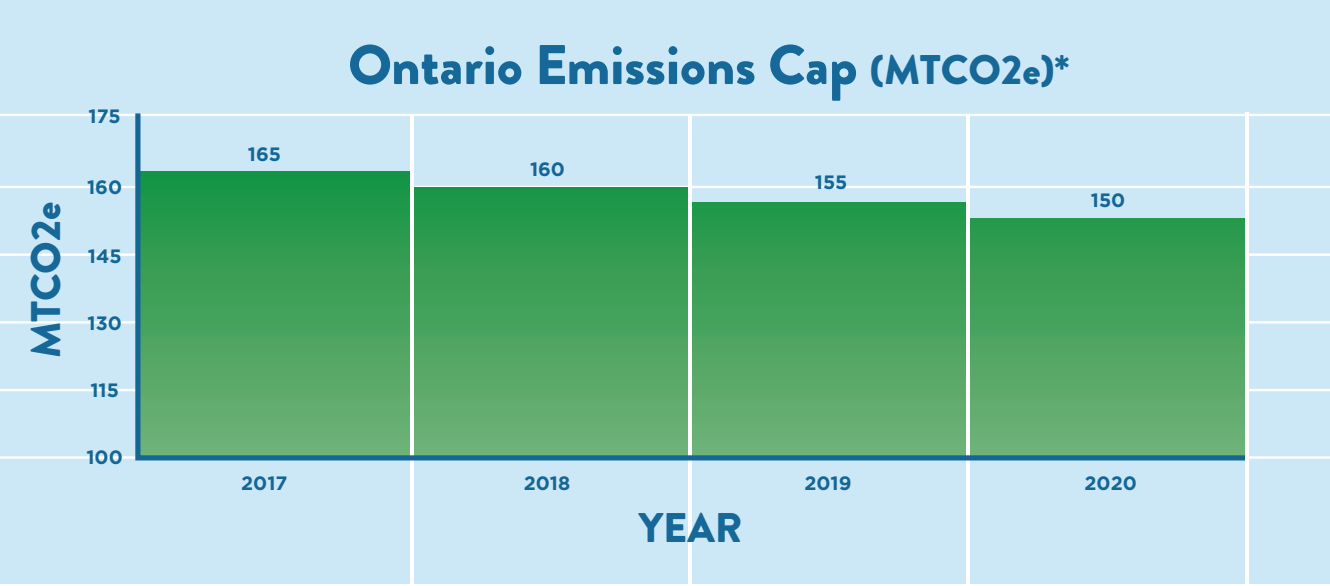
Assuming provincial emissions have been reduced to 165 MT in 2017, following the completion of the coal phase-out, progress on energy efficiency and other complementary policies, an emissions reduction of 5 MT per year will be required to reach the province's 2020 target of 150 MT. If emissions in 2017 are greater than 165 MT, then the cap will need to decline at a greater rate in order for Ontario to meet its target.

While most of the emissions reductions will come from sectors and fuels covered by the cap, it's important to note that the cap-and-trade program alone will only incent a portion of the required reductions; complementary policies, particularly in the buildings and transportation sectors, will be essential.[6] As a high level principle, members of the Clean Economy Alliance agree that **Ontario's cap-and-trade system must be designed so it is effective and contributes meaningfully to reaching Ontario's 2020, 2030 and 2050 emissions reduction targets.**

There is also need for predictability so that entities covered under the program can plan for and make investments needed to meet their compliance obligations. These features align with another Clean Economy Alliance principle: **The cap-and-trade system should be predictable, and be geared toward continuous improvement and increasing stringency over time.**

Below (in Figure 3), we've plotted emissions reductions at 5 MT per year, beginning in 2017, which will put Ontario on track to meet its 2020 targets.

FIGURE 3: RECOMMENDED EMISSIONS REDUCTIONS UNDER ONTARIO'S CAP-AND-TRADE PROGRAM



*Assuming 165 MT in 2017 and a declining cap of 5 MT per year.

One further matter to consider is that Ontario recently announced 2030 carbon reduction targets.[7] Consistent with the principle of predictability, Ontario's cap-and-trade system should also establish caps out to 2030.

The Alliance recommends that Ontario's cap-and-trade program should be implemented by 2017 and the emissions cap should decline by approximately five megatonnes (MT) per year, on a clear and transparent schedule to provide businesses certainty. The cap needs to decline commensurate with Ontario's 2020 and 2030 targets. Consistent with the recommendations on coverage above, fuels should not be subject to delayed implementation.

Price Stability

Best practices from Europe, California and Quebec indicate that a cap-and-trade program should include mechanisms to manage price volatility and ensure a predictable increase in the price of allowances in order to encourage innovation and ensure long-term emissions reductions.[8] Both Quebec and California, like any jurisdiction that has joined the Western Climate Initiative (WCI), have design features that act as a price floor and price ceiling and ensure allowances predictably increase in price. (For more information on the WCI, see text box.)

THE WESTERN CLIMATE INITIATIVE (WCI)

The Western Climate Initiative (WCI) is a non-profit corporation formed to provide administrative and technical services to support the implementation of state and provincial greenhouse gas emissions programs, including cap-and-trade programs.

Formed in 2007 by the governors of five western states, WCI has grown to include seven American states and four Canadian provinces – British Columbia, Manitoba, Ontario and Quebec. An additional 14 sub-national jurisdictions in Canada, the United States and Mexico participate as observers.

The WCI developed a roadmap for member jurisdictions to design and administer a cap-and-trade program. It facilitates the linkage of cap-and-trade programs across borders, as happened between California and Quebec in 2015. WCI will allow Ontario's cap-and-trade program to link to California and Quebec in 2018 for the third compliance period.

In Quebec, the Minister of Sustainable Development, Environment and the Fight against Climate Change keeps an allowance reserve account to ensure compliance costs remain stable and predictable for covered emitters. Emitters covered by the cap-and-trade program need to have a reasonable expectation of the increasing cost of emitting a tonne of carbon (an allowance). If the price rises unexpectedly quickly, the cost may be a shock to emitters that have budgeted a certain amount for their carbon emissions.

The allowance reserve acts as a soft price ceiling that ensures emitters aren't disproportionately caught off guard by an unexpected increase in the cost of carbon allowances. If the cost of a carbon

allowance rises too quickly, the Minister can make reserve allowances available to give emitters more flexibility for compliance. The Minister may choose to use reserve allowances to adjust the amount of free allowances allocated to emitters. Or the Minister can sell the reserve allowances at a price that is much higher than the floor price for auction allowances, as is the case in Quebec, where the minimum prices of the allowances increase by 5 per cent plus inflation each year. Only a small proportion of allowances are held in the reserve account: one per cent of allowances under the cap for 2013 and 2014; four per cent of allowances under the cap set for 2015 to 2017; seven per cent of allowances under the cap set for 2018 to 2020; and four per cent of allowances under the cap set for 2021 and beyond.[9] The allowance reserve therefore helps ensure the price of a tonne of carbon rises predictably, without flooding the carbon market with too many allowances that would undermine emissions goals. [10]

The rules for California's system are similar, but only Quebec emitters can access Quebec reserve allowances and only California emitters can access California reserve allowances. These WCI program features provide businesses with compliance flexibility while ensuring that emissions goals are achieved. It should be noted, however, that the price of allowances in joint Quebec and California auctions has consistently been near the price floor,[11] suggesting an abundance of free allowances has driven down prices.

While in WCI jurisdictions, price ceilings have been incorporated into the program to safeguard against prices rising too high too quickly, legislators can also intervene when prices are too low. For example, the European Union recently modified the European emissions trading market to reflect backloading, which allows the European Commission's Union Registry to remove permits from the system to ensure market stability and increasing stringency over time.[12]

In Ontario, price stability design features are needed to ensure the durability and long-term stability of the cap-and-trade program, and satisfy several of the Clean Economy Alliance's design principles.

The Alliance recommends that Ontario's program should include a price floor, a market stability reserve, and an allowance purchase limit. Ontario should establish an auction reserve price (acting as a price floor) that increases by five per cent per year plus inflation to align with Quebec's and California's systems. It should establish a market stability reserve (acting as a price ceiling) that holds allowances and contains clear guidelines for adding and removing allowances from the system. Lastly, it should establish an allowance purchase limit to prevent covered industries from purchasing unnecessary allowances and artificially raising the price.

Offsets

Offsets are emission reduction credits from project-based activities that can be used to meet compliance as a supplement to reducing one's own emissions or purchasing available permits on the carbon market. Offsets can lead to emissions reductions in areas not covered by the cap-and-trade program. In order for the cap-and-trade program to be effective, it's critical that Ontario ensure offsets are credible and held to a high degree of scrutiny.

As a general rule, in order to be credible offsets need to be real, verifiable, additive and permanent. It's important to ensure, however, that verification costs do not impair the ability of businesses and farmers to produce offsets. Offsets come from practices or other initiatives that would not have happened otherwise and result in permanent greenhouse gas reductions. In light of recent findings from the Stockholm Environment Institute about country-to-country trading of offset permits, the Alliance would add that offsets should be limited to projects that take place in North America.[13]

In Quebec, covered entities can use offsets to fulfil up to eight per cent of their compliance obligation. Quebec's program does not include international offset protocols.[14] In California, like Quebec, no more than eight per cent of a company's total compliance obligation for each compliance period can be satisfied by offsets. Offset types include early action offsets, international sector-based offsets and offset credits validated by the arms-length California Air Resources Board (CARB). CARB has currently accepted five offset protocols, based primarily on Climate Action Reserve protocols that ensure offsets are verifiable, additive and permanent.[15]

Ontario should allow early action offsets similar to those allowed in California.[16] Some businesses have made necessary investment in the immediate past and may not have opportunities to further reduce emissions in the near term. Rewarding early action can build further trust and foster greater innovation by business.

Clear and stringent offset protocols are another way of aligning the Clean Economy Alliance's principles with cap-and-trade design. The use of offsets helps address competitiveness impacts for businesses that must make changes and investments to reduce their emissions and gives businesses flexibility and predictability in meeting their compliance obligation, helping to satisfy the Alliance's fourth and fifth principles for cap-and-trade design.

The Alliance recommends that Ontario should limit the use of offsets to a maximum of eight per cent of an entity's total compliance obligation, consistent with California and Quebec. Offsets should be subject to high standards in terms of verification to show that they are additive and permanent.

Competitiveness Impacts

Certain economic sectors may be disproportionately affected by a carbon price, particularly energy-intensive and trade-exposed (EITE) industries. EITE industries might include iron and steel, chemicals, cement, lime and other manufacturing sectors.

The concerns around EITE industries are two-fold. First, if a domestic firm loses market share due to the cost implications of a carbon price, there is an economic cost to the policy. Second, if the goods are instead produced by a firm in a jurisdiction lacking GHG regulations, then the policy fails at its objective of reducing emissions (a phenomenon known as leakage).

In their design, most cap-and-trade programs can address competitiveness impacts faced by EITE industries. However, research suggests that the economy-wide competitiveness impacts under current carbon prices ($40 per tonne or less) are small, in part thanks to Ontario's largely decarbonized electricity sector.[17]

Broadly speaking, there are two main ways that carbon pricing systems can address competitiveness.

Border carbon adjustments (BCAs) are, in theory, an optimal instrument to address competitiveness. When designed well, they ensure that products imported into the jurisdiction are treated the same as those produced by companies under the cap and can also work to ensure that exports from the jurisdiction aren't disadvantaged in export markets without equivalent policies. In this way, BCAs can help protect trade-exposed industries, while reducing leakage and preserving a high level of program stringency. It should be noted that there are no working examples of BCAs to date, and that sub-national governments have limited legal authority to implement BCAs. California is currently designing a pilot BCA with the cement sector but it carries legal trade risk. Use of BCAs in Ontario should balance the elegance of a BCA solution with exposure to legal risks under international trade law.

Alternatively, a portion of the compliance permits can be given away freely, reducing the impact of price on the industry. As the use of free permits dampens the price signal embedded in carbon pricing, free permits are generally best limited only to "true" EITE sectors. And **the use of free permits should be regarded as a transition measure until key trade markets adopt similar policies or until such time as a BCA can be put into place. As a general principle the number of free permits available should decrease each year, incentivizing each firm to gradually reduce emissions or pay for more permits.**

In Quebec, the government annually determines the number of freely allocated allowances to each eligible emitter based on efficiency benchmarks and production output. Between 2012 and 2014, allowances were freely allocated based on an entity's average historic emissions intensity between 2007 and 2011 and adjusted for production output, with 100 per cent allocation for process emissions, 80 per cent for combustion emissions, and 100 per cent for emissions from other sources. From 2015 to 2020, free allocation decreases by one per cent to two per cent annually, determined by an emissions intensity target that also decreases annually. Different industrial sectors will see different levels of decrease.[18] **While Quebec's approach to free allowances was crucial to securing industry support for its cap-and-trade system, the allocation of free allowances was criticized for perceived inequity between sectors and lack of transparency.**[19] Ontario should strive to avoid similar criticisms.

In California, CARB freely allocates most allowances to two categories of covered entities: vulnerable industries and electricity generators, including the refinery sector. The system for free allocations is designed to reward facilities that are relatively more efficient than their competitors and to ensure that an entity cannot increase its allocation by artificially increasing or decreasing production at strategic times.

To determine the amount of free allowances distributed to industry, CARB created the industry assistance factor, a percentage based on an industry's economic leakage risk. CARB divides the industrial sector into three leakage classifications: high leakage, medium leakage, and low leakage. For the first compliance period (2013-2014), approximately 90 per cent of allowances were freely allocated to all industry sectors, regardless of leakage classification. For the second compliance period (2015-2017), 75 per cent and 50 per cent of the permits are allocated freely to entities in the medium or low leakage categories, respectively. During the third compliance period (2018-2020), free allocation drops to 50 per cent and 30 per cent for medium and low leakage entities, respectively. Free allocations to high leakage entities remain at 100 per cent throughout all compliance periods.[20]

The approach to competitiveness and leakage is particularly challenging and contentious. The Clean Economy Alliance acknowledges that concerns about competitiveness and leakage are legitimate in some instances and affirms in its fourth principle that **Ontario's cap-and-trade program should be fair to companies that have taken early action and address impacts to EITE**

industries. Ideally, carbon pricing would be applied equally across all covered entities, but in the absence of a continent-wide or global system, some measures to address competitiveness will be needed and will also help broaden support from Ontario businesses and make Ontario's program more stable and durable.

The Alliance recommends that any process for assessing and addressing competitiveness impacts must be rigorous, transparent and based on sound economic analysis. If any permits are allocated without cost, they should only be granted to a very small set of industries where there is compelling evidence that there will be competitiveness challenges and leakage. Furthermore, any free allocation of permits must be transitional, decreasing consistently over time and in keeping with emissions intensity targets that also decrease consistently over time.

Program Oversight and Revenue Allocation

Ontario's cap-and-trade program is expected to generate between $1 and $2 billion annually in proceeds.[21] The province has indicated that proceeds will be reinvested into projects that further reduce GHG pollution and help businesses remain competitive, including energy efficiency and conservation, public transit, and research and development of clean technology solutions.[22]

The province should also strongly consider dedicating a portion of the funds to low-income individuals and communities in recognition of their comparatively smaller contribution to GHG emissions and greater vulnerability to climate change impacts. California, for example, dedicates 25 per cent of the proceeds from its program to mitigate climate impacts to low-income individuals and members of visible minorities.

Regardless of the decisions made around what to spend the cap-and-trade revenue on, it is critical that the decision-making process, the oversight of the program, and the administration and allocation of proceeds from the program be done in a transparent and accountable manner. Proceeds from the cap-and-trade program can either be managed directly by government or internally by an external third party. **Ontario should ensure that proceeds from cap-and-trade are disbursed following a clear set of criteria that ensure the province is deriving maximum environmental and economic benefits.**

OVERSIGHT

In Quebec, the Minister of Sustainable Development, Environment, and the Fight against Climate Change has broad powers to annually determine the number of freely allocated allowances, award allowances from auctions, approve or disapprove early action credits, validate or invalidate offsets, and allocate reserve allowances.[23] Quebec's approach has been criticized for its lack of transparency and oversight.[24]

California's approach has better oversight and transparency features than Quebec's. CARB administers the cap-and-trade program, making it arms-length from the executive and legislative branches of government. It has also assembled a Market Surveillance Committee composed of academics with expertise in market development and oversight. The committee analyzes and makes recommendations on carbon market design, surveillance and oversight. CARB has also taken a rigorous approach to the environmental integrity of offsets.[25]

REVENUE ALLOCATION

Proceeds from Quebec's carbon price are transferred to the province's Green Fund, pursuant to its *Environmental Quality Act*, and are mostly used to fund Quebec's Climate Change Action Plan, which includes mitigation, adaptation and sustainable development measures. Over $1.5 billion is set aside for public transit, $200 million is allocated to help Quebec firms transition to a low-carbon economy and nearly $100 million supports municipal and community initiatives to reduce GHG emissions and adapt to climate change. Another $120 million is used to promote renewable energy and energy efficiency in residential, commercial and institutional buildings, while smaller amounts provide assistance to farmers to manage GHG emissions and help prevent and limit the health impacts of climate change.[26]

In California, proceeds from allowance auctions are deposited into the Greenhouse Gas Reduction Fund (GGRF) and reinvested to reduce climate pollution and benefit the economies, health and environment of the state's communities. This includes long-term funding streams for public transit, sustainable communities, affordable housing near transit, and high-speed rail. Legislation requires 25 per cent of this funding to be invested in programs that benefit disadvantaged communities in California and at least 10 per cent to be invested in projects directly within those communities. In 2014, this came in the form of energy retrofits and deployment of solar energy for low-income households, energy efficiency for public buildings, and water and energy conservation programs for households and agriculture.

Legislation also directs CARB to fund the development, demonstration and deployment of zero and near-zero emissions trucks, buses and off-road vehicle and equipment technologies, with a focus on disadvantaged communities. In 2014, legislation required CARB to develop a long-term funding plan to meet the goal of putting one million electric vehicles on California's streets while ensuring that low-income communities benefit from this transition. Other amendments include $30 million for electric vehicle rebates and $40 million for water efficiency projects. Last year, each household that purchased electricity from a private utility in California received a $70 credit to help alleviate the impact of increases in electricity prices from the cap-and-trade program.[27]

The cap-and-trade systems in Quebec and California, as well as other carbon pricing systems such as the Regional Greenhouse Gas Initiative (RGGI) in the northeastern United States, have demonstrated that states and provinces that price carbon can successfully reduce GHG emissions while enjoying above-average economic performance.[28] They have also shown that recycling proceeds from the carbon price into further climate action has positive outcomes for the environment, public health, and the economy while sustaining public support.[29]

The Ontario government has indicated that it intends to make the governance of the cap-and-trade program open and transparent.[30] **To ensure transparency and optimal use of proceeds, the provincial government should develop a set of criteria that ensures cap-and-trade proceeds produce environmental and economic benefits.** The criteria should include estimates of the carbon reduction per dollar value of a project, the indirect economic impacts of a project (economic multiplier) and the speed with which projects can be implemented to help meet provincial climate targets.

Ontario recently put into force regulations in the *Environmental Protection Amendment Act (Greenhouse Gas Emissions Trading)*[31] that establish a Greenhouse Gas Reduction Account and allow for the reinvestment of cap-and-trade proceeds into programs similar to those in Quebec and California. This is in line with the Clean Economy Alliance's third and fourth principles, acknowledging that Ontario's cap-and-trade program be designed in a way that is fair to those who may be disproportionately impacted, such as low-income families and workers, and that proceeds from cap-and-trade should be dedicated to supporting complementary policies to reduce carbon emissions and adapt to the impacts of climate change.

The Alliance recommends that the proceeds from carbon pricing should be dedicated to the Greenhouse Gas Reduction Account, per the Environmental Protection Act (2009), and disbursed according to the provisions of that legislation, including but not limited to

- **Mitigation of climate impacts on low-income and otherwise marginalized communities**
- **Monitoring, reporting, verification, oversight and governance, similar to the allocation of $45 million for "coordination, monitoring and accountability" in Quebec's Climate Change Action Plan**
- **Development and deployment of low-carbon technologies, such as renewable energy, clean technology, energy efficiency and conservation, public transit, and infrastructure for active transit, such as walking and cycling, that will support economic transformation and innovation and position Ontario to build a 21st century clean economy.**

The fund should be administered by a third party in a transparent manner in order to avoid the perception of political interference and to facilitate widespread popular support. The determination of which projects receive funding should include a per dollar assessment of the GHG reduction potential of the initiative, economic analysis to ensure the proceeds deliver the greatest impact possible, and consideration of when an initiative will begin delivering emissions reductions. Ontario should also consider allocating a portion of proceeds to municipal planning authorities to develop climate change action plans to help municipalities mitigate and adapt to climate change.

Linkage with Quebec and California

When designing its cap-and-trade program, Ontario has the advantage of learning from other jurisdictions that have priced carbon for years, particularly the European Union (EU), California and Quebec. It is also a partner to the Western Climate Initiative (WCI), the same framework that guided the design of California and Quebec's systems and allowed them to link with one another. **Linking with other cap-and-trade systems offers several benefits, including greater cost-effectiveness of emissions reductions, a larger carbon market that allows for more flexibility for reductions, and enhanced system durability by increasing stakeholder acceptance across jurisdictions.** Furthermore, both California and Quebec must navigate legislative and regulatory processes to approve cap-and-trade linkage with Ontario. The linking process would be much simpler if Ontario's system had a similar design as the Quebec and California systems.

The Alliance recommends that through the WCI, Ontario should focus on similar design details as those in California and Quebec to facilitate linkage, while making minor improvements that ensure its system is just as, or more stringent, equitable and effective than the others while accommodating Ontario's unique economy and environment.

Conclusion and Recommendations

The cap-and-trade program is the centrepiece of Ontario's climate change strategy. And it's crucial that Ontario gets the design of the program right. Our climate and our economy depend on it.

The Clean Economy Alliance represents a broad cross-section of Ontario stakeholders that recognize the need for the province to design a cap-and-trade program that is effective, predictable, stringent, fair and transparent. Based on six principles agreed upon by Alliance members and drawing from lessons learned from the cap-and-trade programs operating in other jurisdictions, the Alliance developed recommendations on key design elements for Ontario's cap and trade program.

The Alliance encourages the Ontario government to review these recommendations and design an effective program that maintains broad support and endures through time and any future changes in government. The climate strategy requires action from all economic sectors to meet Ontario's GHG reduction targets. But without a cap-and-trade program that effectively cuts carbon pollution, Ontario will be unable to build a clean economy of the 21st century.

RECOMMENDATIONS

COVERAGE

Following from the principle that the cap-and-trade program should apply to as large a share of Ontario's emissions as is practicably possible, coverage in Ontario should be aligned with Quebec and California at a minimum of 85 per cent coverage of the economy, including electricity, buildings, transportation and industry. Fuels should be included in the system from the outset. No exemptions should be given.

STRINGENCY

Ontario's cap-and-trade program should be implemented by 2017 and the emissions cap should decline by approximately five megatonnes (MT) per year, on a clear and transparent schedule to provide businesses certainty. The cap needs to decline commensurate with Ontario's 2020 and 2030 targets. Consistent with the recommendations on coverage above, fuels should not be subject to delayed implementation.

PRICE STABILITY

Ontario's program should include a price floor, a market stability reserve, and an allowance purchase limit. Ontario should establish an auction reserve price (acting as a price floor) that increases by five per cent per year plus inflation to align with Quebec's and California's systems. It should establish a market stability reserve (acting as a price ceiling) that holds allowances and contains clear guidelines for adding and removing allowances from the system. Lastly, it should establish an allowance purchase limit to prevent covered industries from purchasing unnecessary allowances and artificially raising the price.

OFFSETS

Ontario should limit the use of offsets to a maximum of eight per cent of an entity's total compliance obligation, consistent with California and Quebec. Offsets should be subject to high standards in terms of verification to show that they are additive and permanent.

COMPETITIVENESS IMPACTS

Any process for assessing and addressing competitiveness impacts must be rigorous, transparent and based on sound economic analysis. If any permits are allocated without cost, they should only be granted to a very small set of industries where there is compelling evidence that there will be competitiveness challenges and leakage. Furthermore, any free allocation of permits must be transitional, decreasing consistently over time and in keeping with emissions intensity targets that also decrease consistently over time.

PROGRAM OVERSIGHT AND REVENUE ALLOCATION

The proceeds from carbon pricing should be dedicated to the Greenhouse Gas Reduction Account, per the Environmental Protection Act (2009), and disbursed according to the provisions of that legislation, including but not limited to:

- Mitigation of climate impacts on low-income and otherwise marginalized communities
- Monitoring, reporting, verification, oversight and governance, similar to the allocation of $45 million for "coordination, monitoring and accountability" in Quebec's Climate Change Action Plan
- Development and deployment of low-carbon technologies, such as renewable energy, clean technology, energy efficiency and conservation, public transit, and infrastructure for active transit, such as walking and cycling, that will support economic transformation and innovation and position Ontario to build a 21st century clean economy.

The fund should be administered by a third party in a transparent manner in order to avoid the perception of political interference and to facilitate widespread popular support. The determination of which projects receive funding should include a per dollar assessment of the GHG reduction potential of the initiative, economic analysis to ensure the proceeds deliver the greatest impact possible, and consideration of when an initiative will begin delivering emissions reductions. Ontario should also consider allocating a portion of proceeds to municipal planning authorities to develop climate change action plans to help municipalities mitigate and adapt to climate change.

LINKAGE WITH QUEBEC AND CALIFORNIA

Through the WCI, Ontario should focus on similar design details as those in California and Quebec to facilitate linkage, while making minor improvements that ensure its system is just as, or more stringent, equitable and effective than the others while accommodating Ontario's unique economy and environment.

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ArcTern Ventures
Asthma Society of Canada
BioFuelNet
Bioindustrial Innovation Canada
Blue Green Canada
Bullfrog Power
Canadian Association of Physicians for the Environment
Canadian Environmental Law Association
Canadian Solar Industries Association
Canadian Wind Energy Association
Carbonzero
Cement Association of Canada
Chrysalix Energy Venture Capital
Citizens Environment Alliance of Southwestern Ontario
Clean Air Partnership
Clean Energy Canada
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CRH Canada
Cycle Toronto
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