



City of
Peterborough

To: Members of the Committee of the Whole

From: Ken Doherty, Director of Community Services

Meeting Date: May 11, 2015

Subject: Report CSD15-005
Carbon Emission Reductions

Purpose

A report to update Council on the direction for carbon emission reductions.

Recommendations

That Council approve the recommendations outlined in Report CSD15-005 dated May 11, 2015 of the Director of Community Services, as follows:

- a) That Council receive this report and that Staff report back to Council on the potential impacts to the City of Peterborough on the Provincial Cap and Trade system, once established; and
- b) That the Climate Change Action Plan include the implementation of the Provincial Cap and Trade System, as directed by the Province.

Budget and Financial Implications

There are no direct financial implications associated with adopting the Carbon Emission Reductions Report.

Background

On February 12, 2015, the Ministry of the Environment and Climate Change released a climate change discussion paper that invited citizens, businesses and communities to share their ideas about how to successfully fight climate change while fostering economic growth and keeping businesses competitive. The discussion paper presented considerations for Ontario's approach to addressing climate change over the short and the long term, including carbon pricing and climate policy. The document was posted to the Environmental Bill of Rights for a 45-day comment period, closing on Sunday, March 29, 2015.

As a delegation before Council on April 7, 2015, For Our Grandchildren requested that Council take action on the problem of climate change at the local level, most notably through the reduction of greenhouse gas emissions and by supporting a price on carbon. Council directed this matter back to Staff, requesting a follow up report on climate change, carbon pricing, and the potential impact on the City of Peterborough.

Sustainable Peterborough

The Greater Peterborough Area Community Sustainability Plan, known as Sustainable Peterborough, was adopted by City Council on April 2, 2012. One of the recommendations in the Plan is that every municipality in the Greater Peterborough Area join Partners for Climate Protection and develop a Climate Change Action Plan.

The Climate Change Action Plan will set a baseline inventory of greenhouse gas for each municipality, set individual reduction targets, and establish local action plans, prior to implementation. The Climate Change Action Plan started in October 2014 and will be completed by August 2017.

Any Provincial direction on carbon emission reductions will be incorporated into the Climate Change Action Plan for implementation, as directed by the Province.

Discussion Paper

In response to the Ministry's Climate Change discussion paper, Sustainable Peterborough Coordinating Committee and Sustainable Peterborough Climate Change Working Group both formally submitted response documents within the designated comment period. Copies of the submissions are attached as Appendix A and B respectively.

To provide a broader context of submissions, a copy of the Association of Municipalities of Ontario's submission is attached as Appendix C.

Carbon cap and trade

Since For Our Grandchildren met with Council, the Provincial Government has signed a letter of intent to join the Western Climate Initiative, being North America's largest carbon cap and trade market already being operated by Québec and California.

A carbon cap and trade system sets a maximum limit or “cap” on the amount of greenhouse gas pollution industry can produce. Over time, the cap is lowered, reducing greenhouse gas pollution. The “trade” creates a market for pollution credits where industries that do not use all their credits can sell or trade with those that are over the limit. Cap and trade can reward industries that innovate; the less they pollute, the less they pay.

The government will reinvest the money raised through cap and trade back into projects that reduce greenhouse gas pollution and help businesses remain competitive.

The Provincial government has not yet released any details on how the Ontario cap and trade system will be structured. To ensure its success, it will be important that the desired outcomes are clearly defined, that mechanisms are put in place to measure the outcome, and that ambitious reduction targets are set. The system must be transparent and feasible and the implementation and oversight of the market is cost effective, so that the majority of the revenues generated can be invested in sustainable initiatives, such as public transportation, renewable energy projects, energy efficiency and conservation.

As a general overview, please find attached “A Brief look at Québec cap and trade system for emission allowances”, located in Appendix D. Staff will report back with further details on the proposed system and its local impacts once the Province has established the program.

Summary

With the approval of the Greater Peterborough Area Community Sustainability Plan and now the launch of the Greater Peterborough Area Climate Change Action Plan, the City of Peterborough is well positioned to start to address climate change at the local level.

Submitted by,

Ken Doherty,
Director of Community Services

Contact Name:

Melanie Kawalec,
Sustainability Manager
Phone: 705-742-7777, Extension 1441
Toll Free: 1-855-738-3755
Fax: 705-748-8824
Email: MKawalec@peterborough.ca

Attachments:

Appendix A – Sustainable Peterborough Coordinating Committee Submission
Appendix B – Sustainable Peterborough Climate Change Working Group Submission
Appendix C – AMO Submission
Appendix D – A Brief look at Québec Cap and Trade System for Emission Allowances

Appendix A

Sustainable Peterborough Coordinating Committee Submission

Sustainable Peterborough

210 Wolfe St., Peterborough ON K9J 2K9
705-743-0777
info@sustainablepeterborough.ca
sustainablepeterborough.ca



March 29, 2015

Kathy Hering, Senior Policy Analyst
Ministry of the Environment and Climate Change
Climate Change and Environmental Policy Division
Air Policy and Climate Change Branch
77 Wellesley Street West, Floor 10
Toronto, ON M7A 2T5

To Ms. Hering,

Re: Sustainable Peterborough's position on Ontario's Climate Change discussion paper 2015

The Greater Peterborough Area has undertaken an exciting journey towards sustainability through the development of an Integrated Community Sustainability Plan, known as **Sustainable Peterborough**. Sustainable Peterborough is a non-regional collective of local municipalities and First Nations, working collaboratively to lead the way towards our common sustainable future.

Working through Peterborough Economic Development, Sustainable Peterborough recently secured \$400,000 funding from the Ontario Trillium Foundation and the Green Municipal Fund to develop a Climate Change Action Plan (CCAP) for the City of Peterborough, the County of Peterborough, Selwyn Township, Municipality of Trent Lakes, Township of North Kawartha, Township of Douro-Dummer, Asphodel-Norwood Township, Havelock-Belmont-Methuen Township, Township of Otonabee South Monaghan, Cavan Monaghan Township, as well as Curve Lake First Nation and Hiawatha First Nation. The goal of the CCAP is to reduce greenhouse gas emissions and prepare our community for present and future changes.

As members of the Federation of Canadian Municipalities' (FCM) Partners of Climate Protection (PCP) Program, we will follow the well-established 5-milestone framework to create a baseline GHG inventory for each of the twelve partners. Following analysis, we will set individual Corporate and Community based GHG reduction targets, create local action plans, and implement these actions. Our overarching goal is to reduce our GHG emissions, reduce the use of fossil fuels, lower our energy consumption, and adapt to our changing climate.

Having launched CCAP in October 2014, we have only just begun. We plan to complete the 4 of 5 milestones by August 2017 for all 12 Corporate and Community Partners. Implementation of a collaborative regional approach for a non-regional group of municipalities and First Nation communities has been unheard of, to date. We recognize the need for a united, but distinctly individual, triple bottom line approach to addressing climate change at the local level. That is why the Sustainable Peterborough

Coordinating Committee was pleased with the launch and timing of *Ontario's Climate Change discussion paper*, as well to recognize climate change as the critical issue of our time.

Traditional Knowledge

The Greater Peterborough Area Community Sustainability Plan, adopted in April 2012, and our CCAP which was initiated October 2014, have both included all local levels of government, including Curve Lake and Hiawatha First Nations. Inclusiveness and recognition of traditional knowledge creates a solid foundation and a local partnership, working towards common issues and concerns. This partnership is fundamental in addressing our regional approach to climate change, by respecting and recognizing culture, history, and our common future. The CCAP is adapting the PCP framework to recognize storytelling and community planning as a recognized baseline inventory for the First Nation communities. Sustainable Peterborough will be sending a formal request to FCM to include First Nation communities in the PCP program framework.

Actions in Key Sectors

Land use planning plays a key role in addressing climate change at the local level. Municipalities must ensure that adaption, mitigation, greenhouse gas reduction measures, water and energy conservation targets are incorporated into local Official Plans and all future planning and development policies. This includes aligning and embedding sustainability and climate change action within all municipal plans.

Communities & Built Form

Through the development of a baseline GHG inventory for each of our partner municipalities, it is evident that transportation and buildings are the largest generators of GHG emissions. Working with our consulting team, LURA and ICLEI Canada, we aim to establish local GHG reduction targets and action plans based on ICLEI Canada's database of local action and best practices from across Canada. Creating a tailor made, local approach should garnish the best fit and gain the most traction for local success on reducing GHG. This approach, in partnership with strong provincial direction on build form, building densities, complete streets, energy efficiency, supported through a progress building code would be a great starting point.

We would like to conclude by acknowledging that a 45 day comment period is simply too short a review period to address the depth of this discussion within a municipal government setting. In this regard, we would encourage the Ministry of the Environment and Climate Change to host a regional town hall meeting in the City of Peterborough in the next step of local stakeholder engagement.

Sincerely,

Ken Doherty, Chair
Sustainable Peterborough Coordinating Committee

Appendix B

Sustainable Peterborough Climate Change Working Group Submission



March 29, 2015

Kathy Hering
Senior Policy Analyst
Ministry of the Environment and Climate Change
Climate Change and Environmental Policy Division
Air Policy and Climate Change Branch
77 Wellesley Street West, Floor 10
Toronto Ontario M7A2T5
Phone: (416) 326-8092

Re: Comments Regarding Ontario Climate Change Discussion Paper, Submitted by the Sustainable Peterborough Climate Change Working Group

In the spring of 2012, the City of Peterborough, the County of Peterborough, the eight member townships, and two First Nation communities adopted the Greater Peterborough Area Community Sustainability Plan, known as ***Sustainable Peterborough*** (<http://sustainablepeterborough.ca>). The Plan committed all 12 community partners to building a healthy environment, a strong and vibrant social and cultural network, and a prospering economy to be celebrated by all, including future generations. Representatives from the partnering communities, municipalities, and First Nations formed the Sustainable Peterborough Coordinating Committee to oversee the Plan and to lead the way towards our sustainable future. The Climate Change Working Group is one of the theme-based Working Groups that have formed to activate the strategic directions and recommendations outlined in the Sustainable Plan. These comments are the collective submission from our Working Group.

The Climate Change Strategy Discussion Paper was released by the province on February 12, 2015 and is accepting comments until March 29, 2015. The province is likely to develop new climate change strategies and policies based on the discussion document and feedback from the public.

The discussion paper lays out a four-part vision for Ontario climate change actions (pg. 8):

- Establish Ontario as a leader in climate change mitigation and science;
- Redesign and build strong carbon-neutral economies, communities, infrastructure and energy;
- Leave a legacy of a healthy world for our children and future generations; and
- Protect ecosystems, including air, land and water.

The long-term goal is the transformation of our economy and communities (pg. 12). The paper states that global greenhouse gas emissions need to stabilize in 5-10 years, be reduced dramatically by 2050 and approach zero by the second half of the century in order to avoid dangerous climate change. The province has set targets that align with these goals: 6% below 1990 by 2014 (achieved), 15% below 1990 by 2020, and 80% below 1990 by 2050.

Four “climate critical” policy areas are described to get to the 2020 target: pricing carbon, focusing on key sectors (e.g., transportation, buildings, electricity, agriculture), supporting research and technology, and promoting climate resilience and risk management (i.e., adaptation planning).

The Climate Change Working Group of Sustainable Peterborough is very supportive of the general direction of the Climate Change Strategy Discussion Paper. We know that detailed policy design is crucial to the success of the strategy in the short and long term. We welcome continued opportunities to be involved in this work, noting that the 45-day window for public comment is too short to allow meaningful involvement from municipal councils. Nonetheless, as a cross-sectoral committee working toward sustainable development in the greater Peterborough area, we would like to provide input regarding three of these policy areas: traditional knowledge (discussion question area #1), climate resilience (discussion question area #3) and carbon pricing (discussion question area #4).

First, the following statement on traditional knowledge was provided by Tom Cowie, from Hiawatha First Nation and a member of the Sustainable Peterborough Coordinating Committee. "Traditional knowledge and values about the environment, and its use and management, are based on direct observation and experience, shared information within the community and over generations. Examples include cultural practices and social activities, land use patterns, archaeological sites, harvesting practices, and harvesting levels, both past and present. Traditional knowledge includes moral and ethical statements about the environment and about the relationships between humans, animals, and the environment. This kind of knowledge can be melded with science as First Nations consider themselves as part of the ecosystem and try to protect it." It is crucial, in the opinion of the Working Group, that traditional knowledge be meaningfully integrated into our climate change strategies and policies.

Second, there is great need for further work in improving the resiliency of our communities to a changing climate. We have begun some of this work through Sustainable Peterborough and highlight the real and significant roadblocks facing municipalities wishing to move on climate adaptation planning including funding, competing priorities, information and expertise, and governance (Langford, 2013). We feel that the province should work closely with municipal governments, Public Health units, Local Distribution Companies, and Conservation Authorities in designing policies for adaptation planning.

Third, we feel that pricing carbon is the most economically efficient way to reduce greenhouse gases: they provide a broad price signal to the market. In Canada, we have been discussing the why's and how's of carbon pricing for twenty years. The most successful model to date is the British Columbia carbon tax (Sustainable Prosperity, 2013), which started small in 2008 at \$10/tonne CO₂e and grew each year to \$30/tonne by 2012. Revenue is returned to the public through cuts to existing taxes or a grant to low-income individuals who would not benefit from a tax reduction (a cash dividend for everyone could also be considered but would add a layer of administration). In contrast, cap-and-trade systems are complex, slow to be implemented, and more easily applied to larger industrial emitters (meaning that they are limited in where the price can be applied within the production and commodity chain). They are also more open to manipulation by policy actors because of the series of negotiations required to determine various elements of the system (e.g., burden, allocations, intensity, etc). In Ontario, industrial greenhouse gas emissions have declined by 21% since 1990 while emissions from transportation, particularly personal vehicles, have grown by 24% (Environmental Commissioner of Ontario, 2014). We agree that targeted action in each sector is useful but note that a carbon tax is well placed to connect pricing with the emissions from private automobiles. We recognize that further work in the design of the carbon tax (e.g., production or consumption, tax cut or dividend) is essential to ensuring it will be both environmentally and economically beneficial.

Finally, for the next round of consultations we request that a town hall meeting be organized in Peterborough. We would welcome the opportunity to assist the province in organizing this consultation.

Sincerely,
Stephen Hill, stephenhill@trentu.ca
Al Slavin, aslavin@trentu.ca

On behalf of the Climate Change Working Group of Sustainable Peterborough.

Works cited:

Environmental Commissioner of Ontario. (2014). Looking for Leadership: The Cost of Climate Inaction.

Sustainable Prosperity. (2013). BC's Carbon Tax Shift After Five years: And Environmental (and Economic) Success Story. *Sustainable Prosperity*.

Langford, L. (2013). Greater Peterborough Area Climate Change Scoping Document.
<http://sustainablepeterborough.ca/wp-content/uploads/2015/01/Climate-Change-Scoping-07-2013.pdf>

Appendix C AMO Submission



Office of the President

Sent via e-mail: gmurray.mpp@liberal.ola.org

EBR Registry number 012-3452

March 17, 2015

The Honourable Glen Murray
Minister of Environment and Climate Change
Ferguson Block - 11th Floor
77 Wellesley Street West
Toronto ON M7A 2T5

Dear Minister Murray:

In keeping with our effective working relationship, AMO would like to update you on the climate change work we are doing. As we have agreed, municipal governments are leaders in climate change action, pursuing sustainability in our communities and working to reduce greenhouse gas emissions and prepare communities for adverse extreme weather impacts.

AMO's Task Force has been renewed and will start its work by first looking at the issues raised in MOECC's discussion paper and will respond in greater detail over the course of the next few months. However, in the interim, the AMO Executive has adopted a principled framework that the Task Force will be using. We hope it will be taken into account as the government builds its policy coming out of its current consultation process.

The framework the Executive Committee has approved includes the following elements:

- **Climate change action and policy should not result in unfunded municipal mandates** – as you will know from your time as Mayor of Winnipeg, municipalities in Canada have limited financial resources with many competing demands on the nine cents we receive of every household tax dollar. To be successful, any new activities must include new funding means or they will inevitably dilute our resources affecting service levels. As well, municipal governments in Ontario continue to struggle with the challenge of managing over a \$60 billion infrastructure gap. New responsibilities cannot make this situation worse.
- **A carbon pricing mechanism should recognize municipal actions, with monetary values if a credit system is introduced, including those taken in the recent past** – as mentioned, municipal governments have been amongst the leaders in climate change mitigation and adaptation efforts. Over the years, local governments have invested in local renewable energy, energy conservation, sustainable buildings, transit and active transportation to lower greenhouse gas emissions often in partnership with the Province. These actions should be recognized in any pricing regime that monetizes reductions so that municipalities and the Province can reinvest in efforts that increase sustainability and reduce carbon emissions.

- **Dedicated funding for adaptation initiatives is required to upgrade municipal infrastructure to protect Ontarians** – climate adaptation efforts require for the most part public infrastructure spending to manage the effects of extreme weather. For example, sewer separation and storm sewer development are costly endeavors. Some municipalities have instituted fees for the latter that help to create a revenue stream to manage them. Where this is possible, it is an innovative solution. However, other municipalities will need support and funding to take on initiatives that cannot be supported from local revenues alone.
- **Dedicated funding and financial incentives for sustainability, emissions reduction, alternative energy and energy conservation initiatives is needed in addition to carbon pricing to ensure Ontarians have the resources to implement changes** – related to the previous points, in some cases in order to institute sustainable local solutions, it will be necessary to create some sort of fund to help building managers, condominium corporations and others to upgrade their buildings to reduce their carbon footprints. This could take the form of loans in some situations and in others grants might be necessary to upgrade building stock and allow local communities to pursue energy conservation and green energy initiatives.
- **Where possible and appropriate, policies should place responsibility on the individual or business to take action and incentives should be provided** – this is a counterpoint to the previous point. Where possible, individuals, be it home or property owners, businesses or others should have the responsibility for initiatives that help to conserve energy and reduce emissions as well as taking responsibility for more sustainable practices. One example could be upgrades to housing stock. Another might be managing runoff through increased lot-level controls such as rain barrels, permeable pavements and other solutions. Finally, creation of the necessary conditions to allow insurers to offer homeowners insurance for overland flooding is of great interest to the sector.
- **Whatever policies or strategies are chosen to reduce greenhouse gas emissions and increase climate resilience, municipal governments should not face an increased administrative burden and ideally, would have a reduction in administrative requirements** – municipal governments have long advocated for fewer and more manageable reporting requirements to reduce administrative burden. A high administrative burden could act as disincentives for some municipal governments to take part in the initiatives and policies the Province will pursue. Particularly, smaller communities that may have innovative local solutions may find reporting requirements more arduous than participating allows. Being smart with an eye to coordinating reports and minimum requirements is important to success too and would be appreciated.

This is the principled framework that AMO's Climate Change Task Force will use to evaluate additional policy options in support of the Province's climate change strategy goals. It is a useful lens to view local government participation and our ability to help MOECC and the Province to meet its goals. The principles are consistent with those that municipal governments have been advocating for a long time and we hope you will consider and use them in your own policy development.

We and the AMO's Climate Change Task Force look forward to working with you and your Ministry officials on the provincial climate change strategy and action plan.

Sincerely,

A handwritten signature in black ink, appearing to read 'G. McNamara', with a horizontal line extending to the right.

Gary McNamara
AMO President

cc: The Honourable Ted McMeekin, Minister of Municipal Affairs and Housing

Appendix D

A Brief look at Québec Cap and Trade System for Emission Allowances



A BRIEF LOOK AT THE QUÉBEC CAP AND TRADE SYSTEM FOR EMISSION ALLOWANCES

The beginning of a new era in Québec

January 1, 2013, marked the beginning of a new era in the fight against climate change in Québec – the era of the Western Climate Initiative's (WCI) carbon market. On that day, the Québec cap-and-trade system formally started operating. Henceforth, businesses subject to the system have to take into account the cost of emitting greenhouse gases (GHG) in their decision-making process. A year later, Québec linked its system with that of California, thus creating the largest carbon market in North America, and the first one in the world to have been designed and to be operated by subnational governments of different countries.

What is a cap and trade system?

A cap and trade system is an innovative economic tool that is different from standards and regulations traditionally used to reach environmental objectives.

It is a flexible market mechanism used to induce a carbon cost in business decision-making, and to facilitate lowest GHG emission reductions, while encouraging the implementation of clean technologies.

What sectors are subject to Québec's cap and trade system?

Businesses that emit 25,000 metric tons or more of CO₂ equivalent a year are subject to the cap and trade system. For the first compliance period (2013-2014), only the industrial and electricity sectors are subject to the system. However, during the second and third compliance periods (2015-2017 and 2018-2020), fossil fuel distributors are also subject to the system.

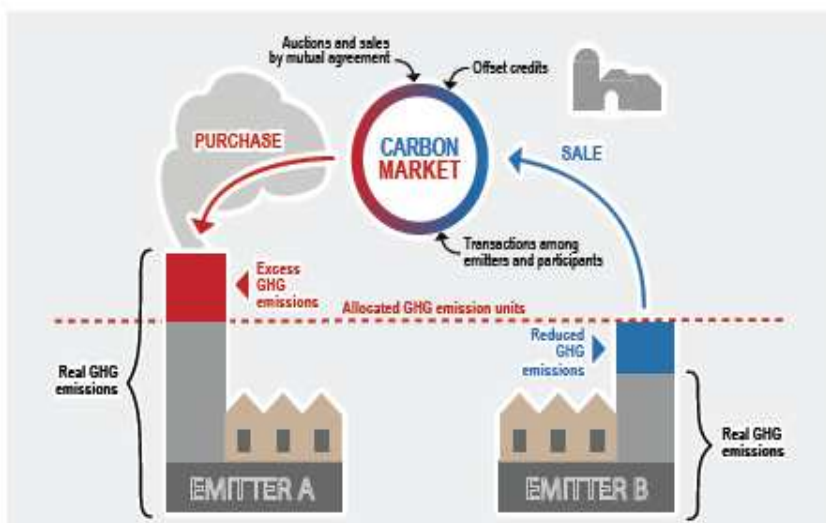
In addition, the cap and trade system is open to individuals and other entities that would like to participate in the carbon market, even if there is no regulatory obligation for them to do so.

What is an emission allowance?

An emission allowance is a legal concept introduced by the regulation respecting the cap and trade system. It is equal to one metric ton of CO₂ equivalent and is issued exclusively by the government. An emission allowance exists only in electronic form in the cap and trade tracking system, called CITSS. Emission allowances are identified by type and by year of creation. There are three types of emission allowances:

1. Emission units distributed free of charge, auctioned off or sold by mutual agreement by the government;
2. Offset credits stemming from GHG emission reductions in sectors not subject to the cap and trade system;
3. Credits for early reductions.

Emitters and participants in the cap and trade system must each have an account in the CITSS in which their emission allowances are held.

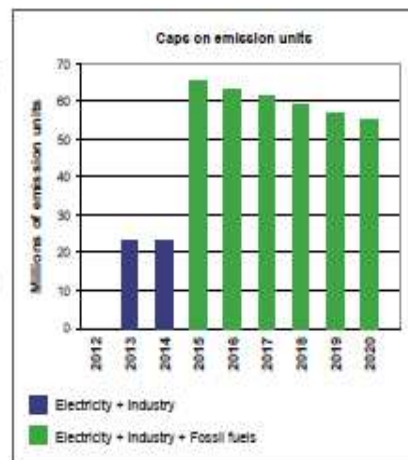


HOW DOES THE SYSTEM WORK?

Setting of annual caps

The government has set a cap on the number of emission units that it will put in circulation each year.

- Starting in 2015, the cap gradually drops each year.
- Annual caps on emission units were set in order to help reach Québec's GHG emission reduction target, notably by encouraging covered emitters to improve their energy efficiency, rely on renewable energy, and use low-carbon technologies.



Distribution of emission units

In 2013 and 2014, industrial emitters exposed to foreign competition receive most of the emission units they need free of charge in order to prevent what is called "carbon leakage", that is, the offshoring of companies to places without a cap and trade system.

Starting in 2015, however, the number of units allocated free of charge to these emitters generally drops about 1% to 2% a year, notably for combustion emissions, in order to encourage them to cut GHG emissions further.

Electricity producers as well as fossil fuel distributors do not receive free allocations.



www.mddelcc.gouv.qc.ca/changements/carbone/index-en.htm

Regulatory compliance

At the end of each compliance period, all covered emitters must have enough GHG emission allowances in their account to cover their total reported and audited GHG emissions for the period in question. These emitters, like other participants, can obtain emission allowances during government auctions, by purchasing them from other participants or by purchasing offset credits.

The system does, however, set holding limits to prevent market manipulation and provides for sanctions in case of non-compliance.

Auctions

Emission units not allocated free of charge are auctioned off by the government four times a year. A minimum price of C\$10.75 was set for 2013, which is scheduled to increase at a rate of 5% plus inflation every year until 2020. For joint auctions with California, the minimum price is set by retaining the higher of the two system's minimum prices at the exchange rate prevailing at the time of the auction. Auctions are open to all emitters and other participants registered with the CITSS. The final sale price of each emission unit is the lowest price bid for which the last available unit is awarded.

The government could also organize sales of emission units for emitters that may have difficulty acquiring enough of them to meet their compliance obligations (sales by mutual agreement).

All auction proceeds go to the Québec Green Fund and are earmarked for the financing of the different initiatives contained in the 2013-2020 Climate Change Action Plan, which aim at reducing GHG emissions and at helping Québec society adapt to the impacts of climate change.

The cap and trade system: a sustainable development tool

In essence, by setting a price on carbon and by permitting the purchase and sale of emission allowances, the cap and trade system becomes the cornerstone of an integrated environmental approach aimed at encouraging the most cost-effective GHG emission reduction projects, and at helping Québec develop a low-carbon economy that is less dependent on oil. It thus lays the foundation for an economic strategy focused on developing a green economy.