



The Western Climate Initiative:

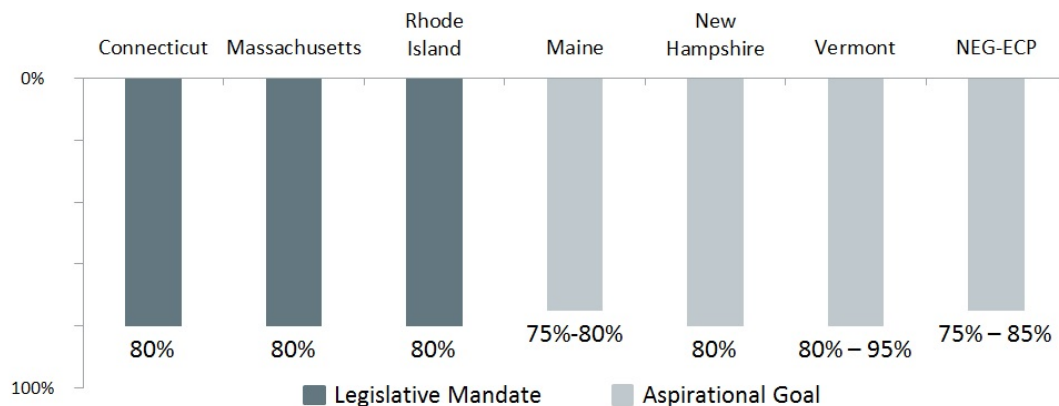
Québec's Cap-and-Trade System

Michael Pizziferri
Public Affairs Attaché
Québec Government Office in Boston

From a carbon levy to a carbon market: Québec's carbon pricing history

States Have Set Goals for Reductions in Greenhouse Gas Emissions: *Some Mandated, Some Aspirational*

Percent Reduction in Greenhouse Gas (GHG) Emissions Economy Wide by 2050*



The New England states are promoting GHG reductions on a state-by-state basis, and at the regional level, through a combination of legislative mandates (e.g., CT, MA, RI) and aspirational, non-binding goals (e.g., ME, NH, VT and the New England Governors and Eastern Canadian Premiers).

* MA, RI, NH, and VT use a 1990 baseline year for emissions reductions. CT and the NEG-ECP use a 2001 baseline. ME specifies reductions below 2003 levels that may be required "in the long term." For more information, see the following ISO NewsWire article: <http://isonewswire.com/newenglandstateghgreductiongoals.html>.

Québec GHG Reduction Targets:

6% below 1990 levels by 2012 --- this target was exceeded (8 % below 1990 in 2012)

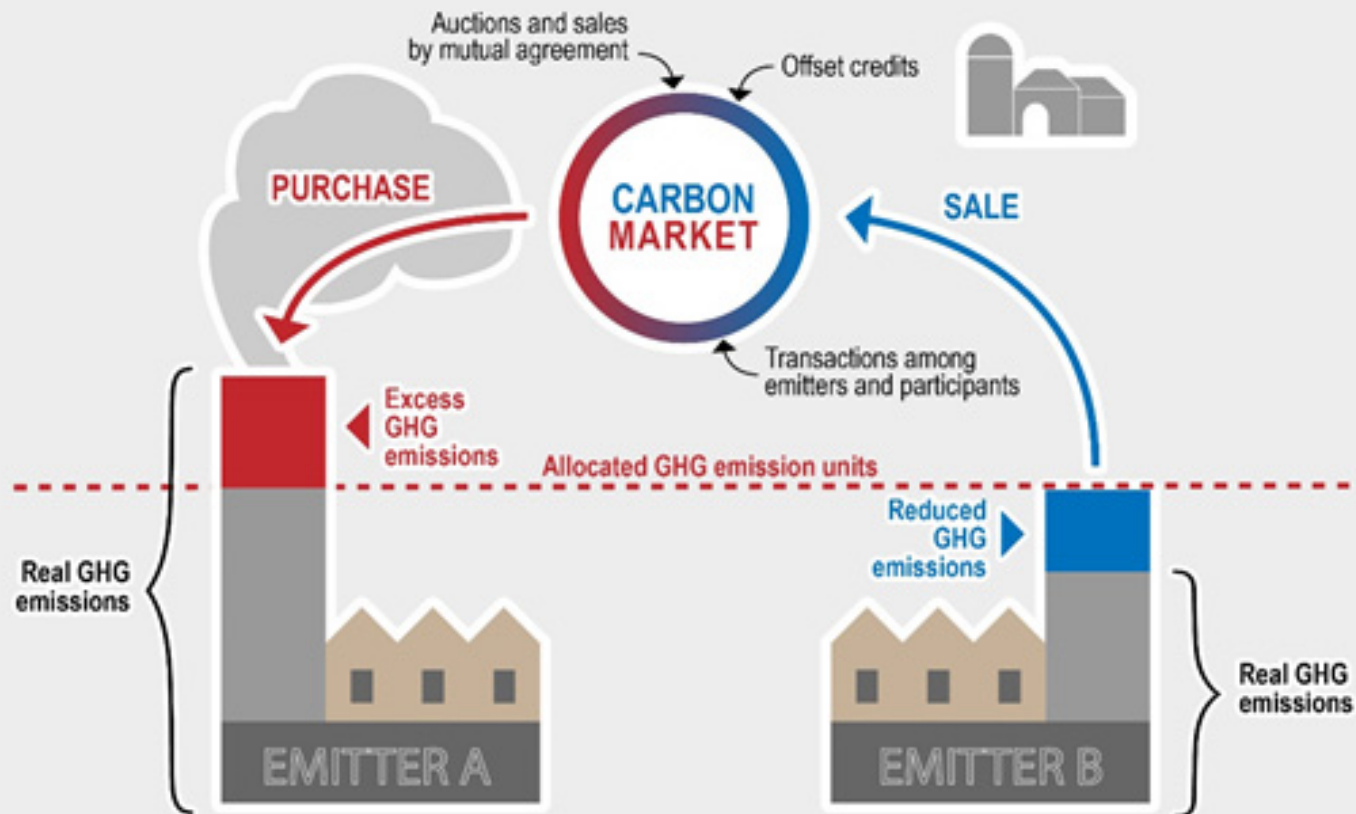
20% below 1990 by 2020

37.5% below 1990 by 2030

80% below 1990 by 2050

How does cap-and-trade work?

Ministry of Environment Link: http://www.environnement.gouv.qc.ca/changementsclimatiques/marche-carbone_en.asp



Québec's Green Fund

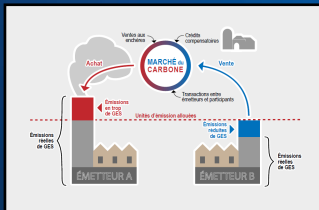
Between 2013 and 2020, \$3.3 billion in investments will have been made in:

- Sustainable mobility
- Transportation electrification
- Energy efficiency
- Energy conversion
- Green building
- Climate change adaptation

Cap-and-trade system
Royalties payable for waste disposal
Royalties payable for water use



Fondsvert



- Mitigation
- Adaptation
- Public awareness

Decarbonizing the Transportation Sector

- Over 2,300 EV charging stations province-wide
- 50% of Canada's EVs with less than 25% of its population
 - 21,454 electric vehicles registered in Québec (December 2017)
- Spurring growth in new industries:
 - Lion Bus electric school bus manufacturer
 - Novabus electric transit bus manufacturer



Results:

1990 – 2015

- 8.8% emissions reduction
- 18% growth in population
- 60% growth in the economy
- 22.7% decline in carbon emissions per capita
- 43% reduction in the economy's carbon intensity

TENDANCES À LONG TERME : ÉVOLUTION DEPUIS 1990

- De 1990 à 2015, les émissions de GES au Québec ont diminué de 8,8 % (voir le tableau 2). Au cours de cette période, la population a augmenté de 18,0 %, et le PIB, de 60,0 %.
- En 1990, les émissions québécoises de GES se chiffraient à 89,5 Mt éq. CO₂. Un ralentissement économique a entraîné une baisse de celles-ci pour les deux années suivantes. Par la suite, une tendance générale à la hausse a été observée pour atteindre le plus haut niveau en 2003, soit 92,1 Mt éq. CO₂ de GES.
- Depuis 2003, les émissions sont en baisse de 11,4 %. Le total des émissions pour 2015 était de 81,7 Mt éq. CO₂ (voir la figure 4).

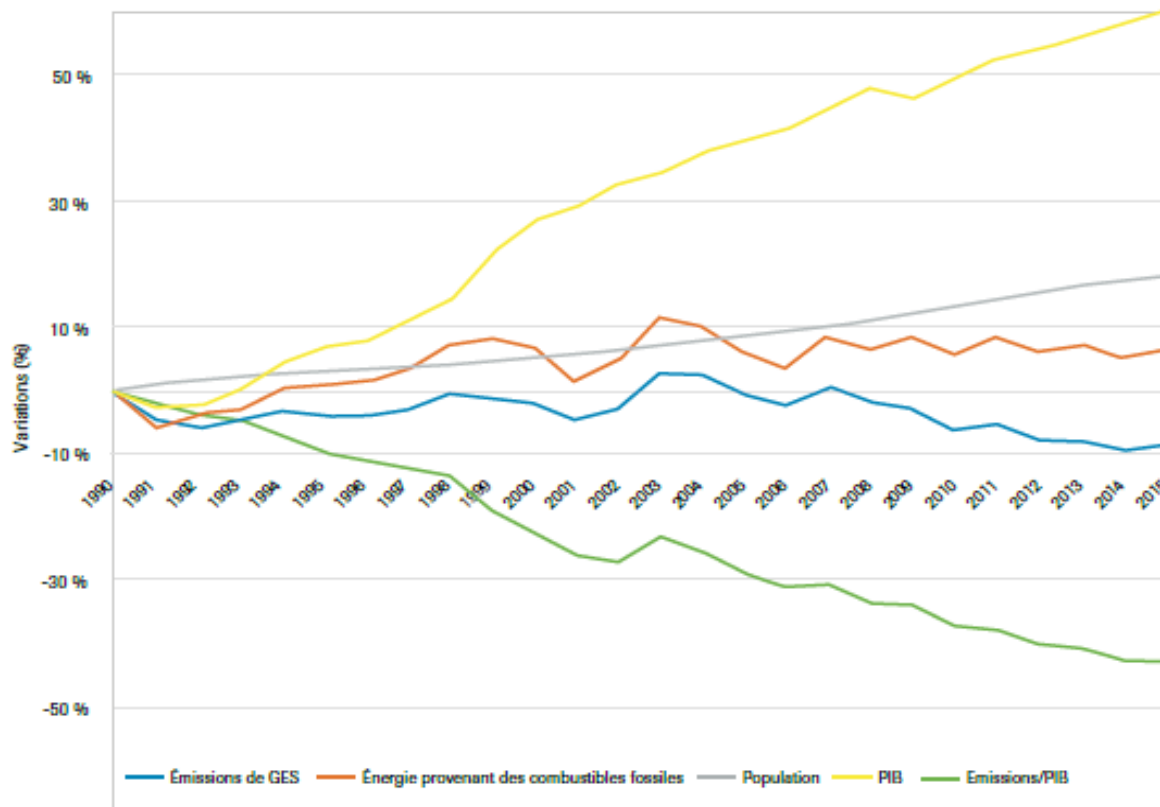


Figure 4. Variation, en pourcentage, des émissions de GES, de la consommation d'énergie provenant des combustibles fossiles^a, de la population^b et du PIB^c au Québec, depuis 1990

- De 1990 à 2015, les émissions par habitant ont fluctué légèrement, s'établissant, en 2015, à 9,9 t par habitant, ce qui correspond à une baisse de 22,7 % depuis 1990. L'intensité des émissions par rapport au PIB a diminué de 43,0 %, passant de 0,42 à 0,24 kt éq. CO₂ par million de dollars (M\$) de PIB.

Powering Québec's Economic Growth

- In 2016, Québec created more jobs than the rest of Canada combined – 85,000 full time jobs
- 5.6% unemployment rate – lowest since 1976
- Fourth consecutive balanced budget for fiscal year 2018-2019, even with \$4.3 billion in additional investments

Supporting the Green Economy:

- 43,000 direct and indirect jobs created thanks to the \$2B invested via the Green Fund

'It's raining money': Quebec's economy crawled out of the doghouse. Now, it's a powerhouse

A grim face and a briefcase full of bad news have long been job requirements for Quebec finance ministers, but these days Carlos Leitao can't help smiling



Quebec Finance Minister Carlos Leitao responds to Opposition questions over the budget speech, during question period Wednesday, March 29, 2017 at the legislature in Quebec City. Quebec Premier Philippe Couillard, right, looks down. *THE CANADIAN PRESS / Jacques Boissinot*

Québec's rural regions – benefiting from WCI

