

BUILDING ON THE BEST KEEPING CANADA'S CLIMATE PROMISE

REPLICATING CANADA'S BEST MADE-IN-CANADA SOLUTIONS IS KEY TO PROGRESS

In 2009, Canada made an international promise to reduce carbon pollution by 17 per cent by 2020. As the auditor general's office stated, Canada is not on track to deliver on that promise. Contrast that to the United States, where policy decisions have put the country within reach of meeting its carbon pollution reduction targets — and possibly exceeding them, thanks to a recent climate agreement with China.

With a unifying climate change strategy, Canada could make serious headway in reducing greenhouse gas emissions. Moreover, this report confirms that if Canada had adopted a national approach five or six years ago, we would be within reach of meeting our 2020 emissions target and upholding our climate change commitment to the world.

Meeting our climate change promises and historical targets isn't as difficult as perceived, but it does require the federal government to build on the successes we've had at the provincial level by adopting the best, already existing "made-in-Canada" solutions, such as putting a price or limit on carbon pollution, prioritizing clean energy, using energy and resources more wisely and, ultimately, shrinking emissions.

This report shows we have a tremendous opportunity to leverage the best of Canada's ingenuity, skills, workforce and abundant renewable energy resources. Doing so would put us in reach of living up to our climate change commitment to the world.

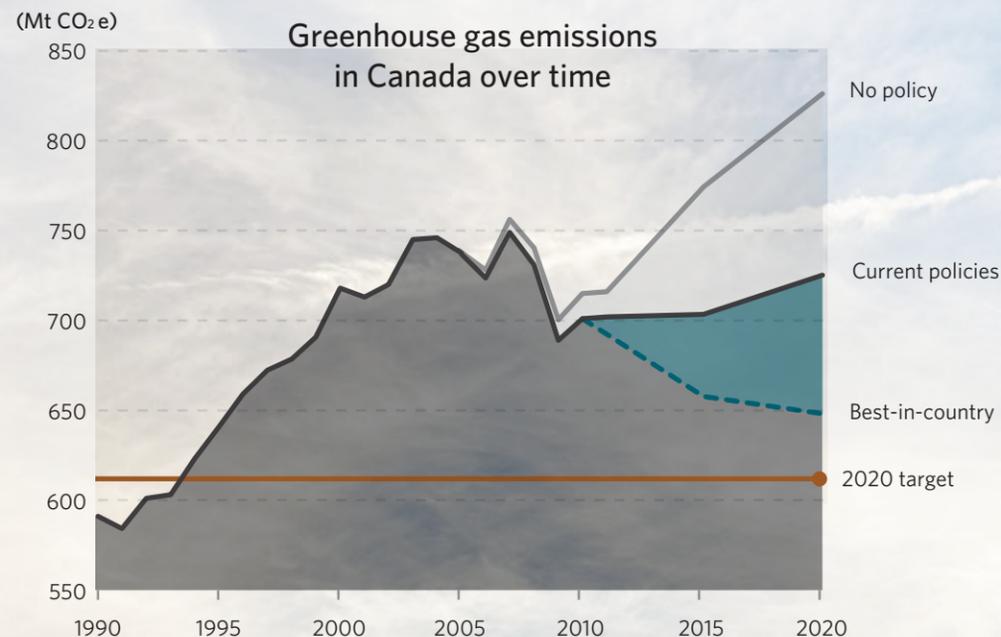
SPECIAL REPORT: An analysis of Canada's top climate change policy solutions and the path to progress

THESE ARE NOT RADICAL, NEW IDEAS.

They are solutions that are already working to reduce emissions in Canada.

The findings of this report are based on analysis and energy and emissions calculations conducted by [Navius Research](#). The research on Canada's most effective climate change policies reveals that:

- Despite Canada's poor reputation on climate change policy internationally, several significant and effective policies to reduce emissions have been implemented at provincial and municipal levels.
- If Canada had adopted key, best-in-country policies in 2008, emissions would be 77 million tonnes lower in 2020 (roughly equal to excising Quebec's emissions), and within 5.6 per cent (or 36 million tonnes) of reaching Canada's international emissions target for 2020.
- Canada would then have been able to declare at international negotiations that, like the U.S., we were on track to meet our 2020 target.
- Canada has a significant opportunity for knowledge sharing and implementation of climate policy. For example, adopting best-in-Canada policies on renewable energy, staged phase-out of coal power and pricing carbon pollution in Saskatchewan and Alberta would be three times more effective in reducing carbon pollution than current policies (from 21 MT to 61 MT in emission reductions annually by 2020).
- Opportunities to rapidly transition to cleaner energy have been demonstrated by Ontario's phasing out of coal and scaling up of renewable energy.



Canada's 2020 climate target is lower than our previous Kyoto Protocol commitment. While the 2020 target isn't ambitious enough, it's an important benchmark. Canada's inability to meet this target with current policies further highlights the need to adopt proven, effective carbon pollution reduction strategies.

KEY BEST-IN-COUNTRY POLICIES THAT COULD HAVE BEEN APPLIED ACROSS THE COUNTRY SINCE 2008

Eliminating emissions from coal power

Provinces have the option of closing or retrofitting their existing coal plants with carbon capture and storage. This results in the closure of 2.4 per cent of coal capacity on an annual basis — the same rate that Ontario achieved.

Generating more electricity from renewable sources

Provinces increase the share of their electricity generated from renewable energy by up to 23 per cent by 2020.

Carbon Pricing

Provinces adopt a carbon tax at the same pricing schedule as B.C.'s (\$5 per tonne increase per year; equivalent to a 1.1 cent increase in gasoline and a subsequent 1.1 cent decrease in personal and/or business income taxes every year). This would reduce competitiveness concerns and enable the pricing schedule to reach \$70 per tonne by 2020. Alberta's regulation (SGER) is maintained but strengthened to reflect the more ambitious pricing schedule.

THE GOOD NEWS: These policy options are still on the table. As nations work to negotiate a new global agreement, the world will continue to look to Canada for signs of leadership. With the U.S. on track to meet its target and China committing to significantly decarbonize its economy, it's time for Canada to move forward with more of the following battle-tested, "made in Canada" climate solutions.

CANADA'S TOP CLIMATE CHANGE SOLUTIONS: Pricing carbon pollution



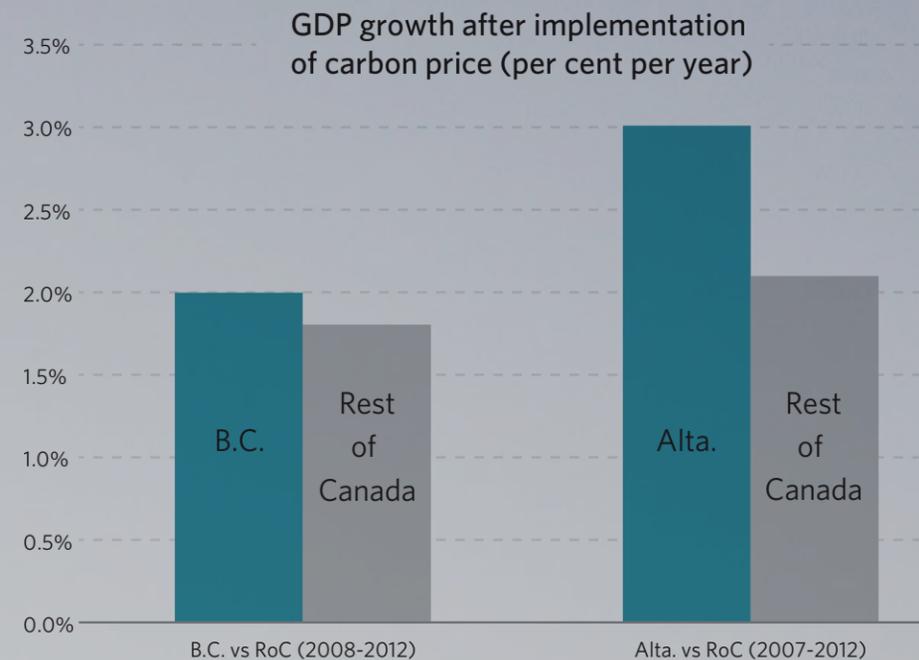
CARBON POLLUTION
REDUCED BY 2020
(CURRENT POLICIES)

14-15
MILLION
TONNES

Putting a price on carbon pollution is one of the most powerful incentives governments can use to encourage companies and communities to pollute less and prioritize cleaner alternatives.

IT'S ALSO ONE OF THE MOST SMEARED CLIMATE POLICIES IN CANADA.

Fortunately, sufficient real-world experience with carbon pricing, even in Canada, proves this negative rhetoric false. British Columbia, Quebec and Alberta were early North American carbon pricing adopters, and Ontario recently announced it will follow suit. Although each province has chosen a different approach and level of ambition, they all demonstrate the policy's benefits.



B.C.'S CARBON TAX: REDUCING EMISSIONS, GROWING AND DIVERSIFYING THE ECONOMY

When the B.C. government introduced North America's first significant carbon tax in 2008, it laid out a path to fight climate change while continuing to stimulate a prosperous economy. Since the carbon tax's introduction, B.C.'s consumption of fossil fuels covered by the tax has decreased by 19 per cent per capita compared to the rest of the country.¹ Meanwhile, B.C.'s economy outperformed most of Canada.² The carbon tax is expected to cut about three-million tonnes of carbon pollution annually by 2020.³

Strengths of B.C.'s carbon tax:

- It applies broadly throughout the economy (with the exception of one notable loophole for non-combustion industrial processes and the shale gas and liquefied natural gas sector), covering approximately three-quarters of provincial emissions.
- It's the strongest carbon price on the continent at \$30 per tonne of carbon dioxide.
- It is "revenue-neutral" — all carbon tax revenues are used to cut existing business and personal income taxes and provide transfers to lower-income households that would be otherwise disadvantaged by the tax.

QUEBEC'S CAP ON EMISSIONS

In 2013, Quebec joined California in prioritizing clean energy and environmental innovation with a firm cap on industrial carbon pollution that will ratchet down over time. In 2015, Quebec plans to expand the system to cover emissions from the transportation sector. Estimates say the policy will reduce Quebec's emissions by about 1 million tonnes by 2020.

Strengths of Quebec's cap-and-trade system:

- It allows the province's emissions target to be strengthened over time.
- The system can be linked with other carbon markets in Asia and the European Union.
- The system has a proven track record — cap-and-trade was used to reduce acid rain emissions in North America in the 1980s and 1990s.

ALBERTA'S SPECIFIED GAS EMITTERS REGULATION

While Alberta's carbon price is weaker and less transparent than B.C.'s carbon tax, it does apply to a portion of a very large and growing source of emissions from the oil sands sector. Alberta's Specified Gas Emitters Regulation calls for large industrial facilities including the oil sands and natural gas plants to reduce their emissions intensity per unit of output. Industry is required to pay \$15 for every tonne of carbon pollution that exceeds targets. The Pembina Institute has estimated the average cost per tonne for oil companies and other industries to meet the emission target at \$1.80.⁴ A portion of the carbon price revenue is used to invest in low- and zero-emissions technologies. This policy is expected to slow the growth of carbon pollution in Alberta by 10-million tonnes annually by 2020.⁵



CARBON POLLUTION
REDUCED BY 2020
(CURRENT POLICIES)

25
MILLION
TONNES

AIR POLLUTION COSTS ONTARIO \$4 BILLION

A study by the Canadian Medical Association found air pollution is responsible for lost worker productivity, increased health-care costs, reduced quality of life and loss of life — costing \$4 billion per year in Ontario alone.¹⁶



Getting [Ontario] off coal is **the single largest** climate change initiative undertaken in North America and is equivalent to taking up to **seven million cars off the road.**¹³

Bob Chiarelli, Ontario Minister of Energy

ONTARIO HAS BECOME THE FIRST INDUSTRIAL REGION IN NORTH AMERICA TO ELIMINATE COAL-FIRED POWER⁸

Coal-fired power is by far the dirtiest electricity generator, currently responsible for about one tenth of Canada's carbon footprint.⁹ Facing the need to modernize its energy system and address the societal challenges of lung-crippling smog and climate change, Ontario decided in 2007 to phase out coal-fired power in favour of clean energy and energy conservation.¹⁰ The province set an ambitious target of phasing out all coal-fired electricity by 2015.

In April 2014, Ontario achieved this goal by closing its last coal-fired power plant in Thunder Bay.¹¹ Over seven years, from 2008 to 2014, the province managed to close 15 coal plants (6,300 megawatts of coal power capacity)¹² — equivalent to 20 per cent of its 2007 installed electricity capacity — resulting in the

single-largest elimination of carbon pollution in North America. Ontario's success shows that the electricity system can be transformed rapidly.

Ontario is not alone. While Nova Scotia's electricity system is smaller, its coal-reduction policy is no less significant. Using a declining cap on the emissions from its electricity sector, the province hopes to reduce emissions by 2.5-million tonnes by 2020.¹⁴

The federal government has also enacted policy to reduce coal emissions,¹⁵ establishing deadlines for coal plants to be either closed or retrofitted so their emissions are closer to cleaner natural gas power plants. Unfortunately, this policy will achieve only modest reductions in the short term and will allow many plants to continue burning coal for several more decades — far too late to meet Canada's climate change commitment.



**CARBON POLLUTION
REDUCED BY 2020
(CURRENT POLICIES)**

**21
MILLION
TONNES**

**OUR BEST-KEPT SECRET:
\$11.3 BILLION
ANNUAL CLEAN TECH SALES**

One of Canada's best-kept secrets is that the clean technology industry — including renewable energy and energy-efficiency technologies — is the country's fastest-growing sector.¹⁷

Not surprisingly, most of Canada's \$11.3 billion in annual clean technology sales are exports. Canadian companies are seizing opportunities as large economies around the world seek technologies to address climate change and achieve cleaner air and water.

Canada could support its clean technology sector growth by taking strong action to prioritize clean energy and capitalize on our abundance of renewable energy resources.



Canada has an abundance of renewable energy potential. Several provinces, including B.C., Manitoba and Quebec, already have low-carbon, hydro-powered electricity. Prioritizing further renewable energy development, in addition to energy conservation, to meet future energy demands will help shrink the 13 per cent of Canada's emissions attributed to electricity generation.

KEY POLICY: ONTARIO'S GREEN ENERGY AND ECONOMY ACT

Eliminating coal-fired electricity and prioritizing clean energy has been a powerful combination for Ontario.

In 2007, the province launched the Green Energy and Economy Act to modernize its industrial economy and create new jobs by developing renewable energy. The policy set a guaranteed fixed price for solar and wind power projects. Although some people have criticized this policy for lack of public consultation (and false health concerns), few policies have been as effective at quickly developing clean, renewable energy.

By 2020, Ontario will be able to generate 25 per cent of its electricity from sun and wind, up from two per cent in 2007.¹⁸ These efforts have already created more than 20,000 jobs.¹⁹

Ontario has supported renewable energy in a region not as richly endowed with renewable resources as other provinces. If Ontario can do it, other provinces with greater clean energy resources have few excuses not to.

If other provinces had undertaken similar efforts, Canada's electricity system would have achieved an additional 38-million tonnes of reductions by 2020.

CANADA'S TOP CLIMATE CHANGE SOLUTIONS: Transportation policy



**CARBON POLLUTION
REDUCED BY 2020
(CURRENT POLICIES)**

**16
MILLION
TONNES**

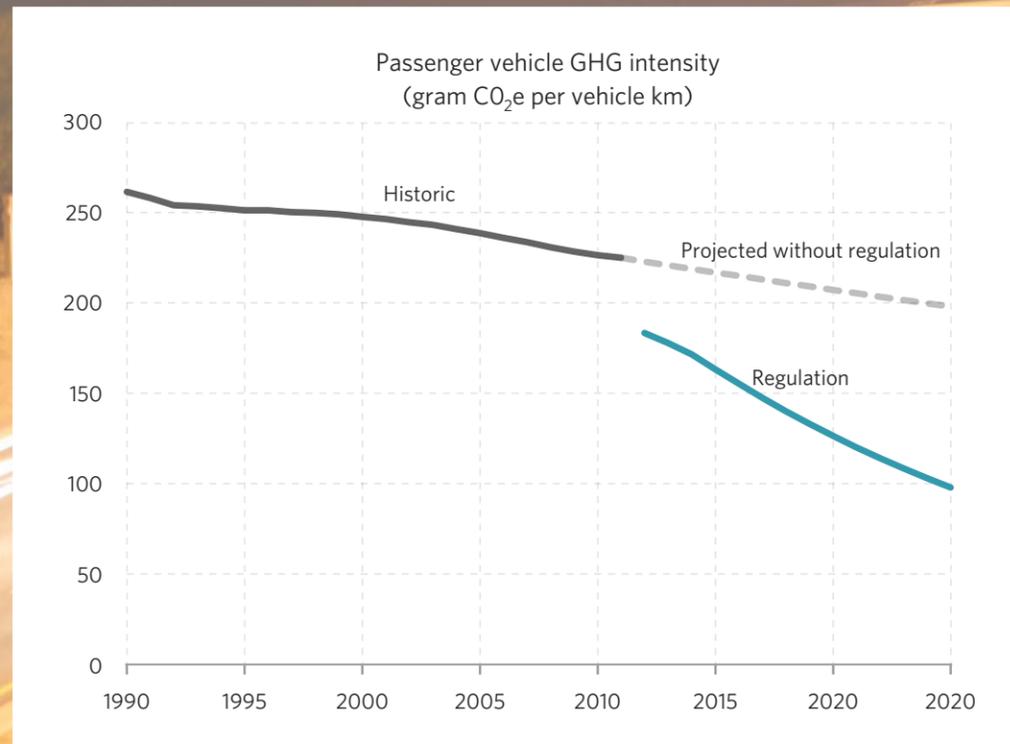
BETTER TRUCKS: GIVE ME THE GOODS

The U.S. and Canadian federal governments have also brought in regulations to improve fuel efficiency for tractor trailers, delivery trucks and buses. By 2020, this policy is expected to reduce carbon pollution by three-million tonnes.²⁵

LET'S GET MOVING: BETTER TRANSIT AND PLANNING

Land-use planning promoting more pedestrian-, cycling- and transit-friendly communities is also key to reducing transportation emissions. Improving transit infrastructure, through programs such as Ontario's The Big Move or Metro Vancouver's proposed plan set for a spring referendum, enables passenger transportation with fewer emissions and less traffic congestion.

Vancouver has been bucking the North American trend, quickly growing in population, economic development and jobs while cutting carbon pollution and car traffic in its downtown core. Over the past decade, Vancouver's population has increased by 18 per cent and jobs by 16 per cent. At the same time, the number of vehicles entering the city is down five per cent while those entering downtown have decreased 20 per cent. Over that period, carbon pollution has decreased nine per cent.



THE RIPPLE EFFECT: FULL THROTTLE ON CLEANER CARS AND TRUCKS

Transportation accounts for approximately 28 per cent of Canada's carbon pollution,²⁰ so cleaner cars and trucks, better public transit networks and more efficient movement of goods are all critical in an effective climate change plan.

In 2011, the federal government, to its credit, followed lockstep with the U.S. federal government to enact stricter Canadian fuel efficiency standards for cars and light trucks. By 2020, these regulations will require new passenger vehicles to emit on average 44 per cent fewer emissions than those sold in 2011.²¹ In Canada, these regulations will reduce carbon pollution by 13 million tonnes per year by 2020.²²

In addition to reducing carbon pollution, these regulations are expected to deliver many other benefits,

including saving citizens \$27 billion on fuel purchases and cutting the incidence of respiratory illness, which would reduce associated health costs by over \$1 billion by 2020.²³

These achievements were not the result of top-down leadership from either the Canadian or U.S. federal governments, but came from below and rippled up.

California, the eighth-largest economy in the world, has greatly influenced the car industry since it started regulating vehicle emissions five decades ago. When the state's strict fuel efficiency standards attracted the attention of other jurisdictions and were subsequently adopted or tabled by 16 states²⁴ and several provinces, including Quebec and British Columbia, both federal governments were forced to strike an auto industry deal to set national regulations.

CANADA'S TOP CLIMATE CHANGE SOLUTIONS: Other measures that are reducing emissions



**CARBON POLLUTION
REDUCED BY 2020
(CURRENT POLICIES)**

**21
MILLION
TONNES**

ENERGY EFFICIENCY

One of the simplest ways to reduce carbon emissions is to use less energy. Investment in energy efficiency is cheaper and less harmful to the environment than building new power projects. The federal government's discontinued ecoENERGY program raised efficiency standards for a range of consumer products, including major appliances. There are currently more than 200 provincial and territorial efficiency programs and policies.²⁶

For example, Nova Scotia has shown significant leadership in achieving more energy efficiency in the province. Programmes and incentives help to save Nova Scotians more than \$78 million per year in electricity costs and have reduced total electricity demand by 5.5 per cent.²⁷ These initiatives have also created jobs employing 1,200 Nova Scotians.²⁸

**15
MILLION
TONNES**



CARBON CAPTURE AND STORAGE (CCS)

CCS allows fossil fuel power plants and other industrial sites to capture carbon otherwise released into the atmosphere and store it underground. Federal and provincial governments have invested \$2 billion in oil sands and coal-power projects in Alberta and Saskatchewan.²⁹ Saskatchewan's Boundary Dam coal plant facility is the first CCS project in operation. While CCS can play a key role in low-carbon transition as the Intergovernmental Panel on Climate Change has reported, it has yet to overcome barriers that would make it feasible in the short-term on a large enough scale; therefore, other policies will also be needed to decrease emissions from producing and burning fossil fuels.

**3.8
MILLION
TONNES**



LANDFILL AND BIOGAS

Gas collected from decomposing organic matter in landfills can be captured, upgraded and used in place of conventional natural gas. Canadian facilities have increased landfill gas capture by 40 per cent since 1990 and are now capturing 25 per cent of total emissions from this source.³⁰ Similarly, biogas can be derived from livestock manure and food waste. Ontario is providing financial assistance to facilities to capture emissions from these sources, enabling production of enough electricity capacity to power 10,000 homes.³¹

**2.2
MILLION
TONNES***



*Data limited to Ontario and Manitoba

WHICH PROVINCES HAVE THE MOST POTENTIAL



TO ACHIEVE REAL PROGRESS USING HOMEGROWN CANADIAN SOLUTIONS?

POTENTIAL REDUCTIONS
18%

SASKATCHEWAN

Given Ontario's experience, Saskatchewan should feel confident that clean, renewable power could allow a more rapid phase-out of coal-fired electricity in the short term, should carbon capture and storage prove to be more costly or slower to deploy. Saskatchewan has a competitive advantage over Ontario on renewable energy generation as its peak electricity demand aligns with peak supply from wind power generation and it has greater solar power potential. But the province must seize these opportunities. Saskatchewan should establish regulations that shrink industrial carbon pollution and establish a multi-stakeholder team to re-energize citizens on a provincial climate action plan.

ACHIEVED REDUCTIONS
4%

POTENTIAL REDUCTIONS
9%

ALBERTA

Alberta could show the world it cares about climate change by introducing a stronger price signal on carbon pollution and applying it to growing emissions from the oil sands and other provincial emissions. Alberta could prioritize the health of Albertans by phasing out pollution from coal-fired power in the short term and accelerating renewable energy, as in Ontario and Nova Scotia.

ACHIEVED REDUCTIONS
6%

POTENTIAL REDUCTIONS
8%

ATLANTIC PROVINCES

Atlantic provinces could increase renewable energy generation by strengthening incentives or standards for clean energy and creating a market to value flexibility of the electricity grid by increasing transmission connection, energy storage, and dispatchable electricity generation. These efforts could be reinforced if the Atlantic provinces were to set a regional energy efficiency target.

ACHIEVED REDUCTIONS
16%

POTENTIAL REDUCTIONS
6%

QUEBEC

Quebec should invest a significant portion of revenues from the carbon market in transit and electric vehicles and charging stations and explore biofuels. Progress can be achieved by powering more of Quebec's transportation system with the province's clean electricity while strengthening the fuel-efficiency standards for cars. Quebec can also identify more opportunities by conducting an analysis to estimate the effectiveness of current carbon pollution reduction policies.

ACHIEVED REDUCTIONS
7%

POTENTIAL REDUCTIONS
4%

BRITISH COLUMBIA

With populations booming in Metro Vancouver and other major centres, B.C. should ramp up transit investment to slash traffic congestion and pollution while setting standards for electric cars and lower-carbon fuels. B.C. could drive more innovation and cleaner technologies by strengthening the carbon tax price and applying this incentive to include industrial emissions from shale gas and the proposed LNG sector.

ACHIEVED REDUCTIONS
14%

POTENTIAL REDUCTIONS
4%

MANITOBA

Manitoba should collaborate with Ontario and Quebec on prioritizing low-impact renewable energy by pricing carbon pollution.

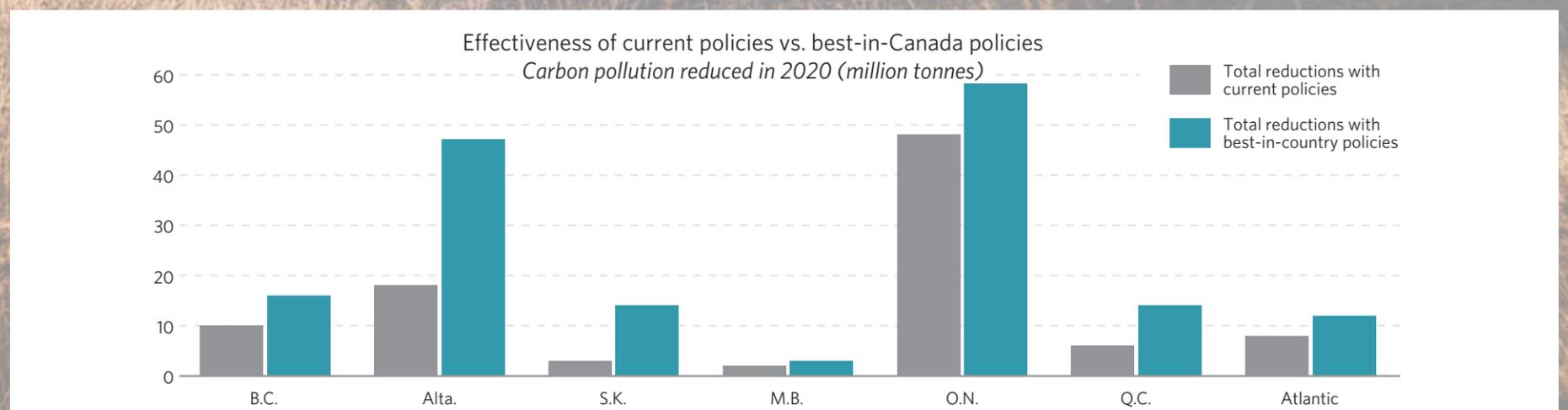
ACHIEVED REDUCTIONS
10%

POTENTIAL REDUCTIONS
4%

ONTARIO

Ontario should move forward with its commitment to increase transit and active transportation infrastructure investment and encourage cleaner air and energy-efficient technologies by putting a price on the province's carbon pollution. Ontario's forthcoming Climate Action Strategy should include policies and programs that can help reduce the vulnerability of communities to extreme weather.

ACHIEVED REDUCTIONS
23%





**CANADA CAN
KEEP ITS PROMISES
TO THE REST OF THE WORLD
BY WORKING TOGETHER
AS A NATION**

WHAT'S NOT WORKING

Canada doesn't have a unifying strategy to advance the strongest policies that now exist at provincial or municipal levels. In an October 2014 report, the auditor general's office reinforced this point, noting that the federal government is not coordinating with provinces and territories and that Canada's plan to shrink carbon pollution "has been ineffective and the action it has taken has been slow and not well co-ordinated."³²

WHAT WE NEED

The federal government must build on successes at the provincial level and play a unifying role. The federal government could encourage adoption of the best provincial clean energy practices, solutions and ideas at a national scale.

This report shows we have a tremendous opportunity to leverage the best of Canada's ingenuity, skills, workforce and abundant renewable energy resources. Doing so would put us in reach of living up to our climate change commitment to the world.

PUBLICATION INFORMATION

Co-authored by Ian Bruce and Ryan Kadowaki

We would like to acknowledge Jotham Peters and Michael Wolinetz of Navius Research; Catherine Abreu of Ecology Action Centre; Louise Comeau of Climate Action Network Canada; and Ian Hanington, Gail Mainster, Karianne Blank, Theresa Beer, Faisal Moola and Karel Mayrand of the David Suzuki Foundation for their input and advice.

Canadian Cataloguing in Publication Data for this book is available through the National Library of Canada

ISBN 978-1-897375-81-5

David Suzuki Foundation, December 2014



9-2211 West 4th Avenue
Vancouver, BC V6K 4S2
Phone 604-732-4228
www.davidsuzuki.org

PHOTO CREDITS

Page 1: Paul van Soest via Flickr.

Page 2: Patrick Emerson via Flickr.

Page 3: Alberta Tarsands, Kris Krüg via Flickr.

Page 4: Bottom left - childhood asthma, Jakob Montrasio via Flickr; background - Toronto skyline, Chung Ho Leung via Flickr.

Page 5: Centre - wind farm construction, Valard LP via Flickr; background - solar panel, Mike Baker via Flickr.

Page 6: Top left - trucks on highway, Liquid Oh via Flickr; centre left - family biking, Señor Hans via Flickr; bottom left - Vancouver skyline, Sebastien Panouille via Flickr; background - traffic at night, Michael Ruiz via Flickr;

Page 7: Top - energy efficient home heating system, Green Energy Futures via Flickr; centre - Stator installation, Sask Power CCS; bottom - Ontario dairy farm with biogas plant, Green Energy Futures via Flickr; background - snowy rooftops. Gerry via Flickr.

Page 8: Sunrise over a field. Tommy Clark via Flickr.

Page 9: Skating on Rideau canal, Ottawa. Terri Oda via Flickr.

REFERENCES

1. Elgie, S. and McClay, J. 2013. *BC's carbon tax shift after five years: Results*. <http://www.sustainableprosperity.ca/dl1026&display>
2. Ibid
3. Ministry of Finance. 2014. *Tax reductions, funded by a revenue neutral carbon tax*. http://www.fin.gov.bc.ca/tbs/tp/climate/tax_cuts.htm
4. Partington, P.J. 2013. *How carbon pricing currently works in Alberta*. <http://www.pembina.org/blog/708>
5. Rich, K. 2014. *Role of offsets and new market mechanisms in climate policy — Alberta's experience*. <http://www.iea.org/media/workshops/2014/74RICHRoleofOffsetsandNewMarketMechanismsinClimatePolicyAlbertasExperience.pdf>
6. The World Bank. 2014. *73 countries and over 1,000 businesses speak out in support of a price on carbon*. <http://www.worldbank.org/en/news/feature/2014/09/22/governments-businesses-support-carbon-pricing>
7. Government of British Columbia. 2008. *Balanced budget 2008 speech*. <http://www.bcbudget.gov.bc.ca/2008/speech/>
8. Schneider, K. 2013. *How Ontario is putting an end to coal-burning power plants*. http://e360.yale.edu/feature/how_ontario_is_putting_an_end_to_coal-burning_power_plants/2635/
9. Environment Canada. 2014. *National Inventory Report 1990–2012: Greenhouse Gas Sources and Sinks in Canada*.
10. Government of Ontario. 2007. *Go green: Ontario's action plan on climate change*. <http://www.climateontario.ca/doc/workshop/2011LakeSimcoe/Ontarios%20Go%20Green%20Action%20Plan%20on%20Climate%20Change.pdf>
11. Government of Ontario. 2014. *Creating cleaner air in Ontario*. <http://news.ontario.ca/mei/en/2014/04/creating-cleaner-air-in-ontario-1.html>
12. Government of Ontario. 2009. *Ontario's coal phase out plan*. <http://news.ontario.ca/mei/en/2009/09/ontarios-coal-phase-out-plan.html>
13. Government of Ontario. 2014. *Creating cleaner air in Ontario*. <http://news.ontario.ca/mei/en/2014/04/creating-cleaner-air-in-ontario-1.html>
14. Nova Scotia Environment. 2013. *Amendments to greenhouse gas & air quality emissions regulations*. <https://www.novascotia.ca/nse/climate-change/docs/Greenhouse-Gas-Amendments-2013.pdf>
15. Government of Canada. 2012. *Reduction of carbon dioxide emissions from coal-fired generation of electricity regulations*. <http://www.gazette.gc.ca/rp-pr/p2/2012/2012-09-12/html/sor-dors167-eng.html>
16. Canadian Medical Association. 2008. *No breathing room: National illness costs of air pollution*. http://www.healthyenvironmentforkids.ca/sites/healthyenvironmentforkids.ca/files/No_Breathing_Room.pdf
17. Analytica Advisors. 2014. *2014 Canadian clean technology industry*. <http://www.analytica-advisors.com/sites/default/files/Stand%20alone%20ES.pdf>
18. Government of Ontario. 2014. *Long-term energy plan*. <http://www.energy.gov.on.ca/en/itep/>
19. Ontario Ministry of Energy. 2014. <http://www.energy.gov.on.ca/en/fit-and-microfit-program/2-year-fit-review/background/>
20. Environment Canada. 2014. *National Inventory Report 1990–2012: Greenhouse Gas Sources and Sinks in Canada*.
21. Natural Resources Canada. 2014. *Comprehensive energy use database; United States Environmental Protection Agency.2010. EPA and NHTSA finalize historic national program to reduce greenhouse gases and improve fuel economy for cars and trucks*; Government of Canada. 2010. *Passenger automobile and light truck greenhouse gas regulations*; Environment Canada. 2013. *Regulating greenhouse gas emissions from light-duty vehicles (2017-2025)*.
22. Office of the Auditor General of Canada. 2014. *2014 fall report of the commissioner of the environment and sustainable development*. http://www.oag-bvg.gc.ca/internet/docs/parl_cesd_201410_01_e.pdf
23. Government of Canada. 2010. *Passenger automobile and light truck greenhouse gas regulations*; Environment Canada. 2013. *Regulating greenhouse gas emissions from light-duty vehicles (2017-2025)*.
24. George, P.E. 2014. *How the California Air Resources Board (CARB) works*. <http://auto.howstuffworks.com/fuel-efficiency/fuel-economy/carb4.htm>
25. United States Environmental Protection Agency. 2011. *Paving the way toward cleaner, more efficient trucks*.
26. International Energy Agency. 2014. *Energy efficiency market report*. <http://www.iea.org/Textbase/npsum/EEMR2014SUM.pdf>
27. Efficiency Nova Scotia. 2014. *Why energy efficiency?* <http://www.energycyns.ca/who-we-are/why-energy-efficiency/>
28. Ibid
29. Government of Canada. 2013. *Carbon capture and storage*. https://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/energy/pdf/eneene/pubpub/pdf/OS_CC-storage_us-eng.pdf
30. Government of Canada. 2012. *Canada's action on climate change: Landfills*. <http://www.climatechange.gc.ca/default.asp?lang=En&n=60CB860C-1>
31. Government of Ontario. 2008. *Biogas financial assistance program*.
32. Office of the Auditor General of Canada. 2014. *2014 fall report of the commissioner of the environment and sustainable development*. http://www.oag-bvg.gc.ca/internet/docs/parl_cesd_201410_01_e.pdf