



Practice our laser talks

Learn to speak about climate change like an expert.

SUGGESTIONS ON HOW TO PRACTICE LASER TALKS

- **MIRROR WORK:** Rehearse them in front of a mirror.
- **PAIR AND SHARE:** Practice the laser talks with a partner over coffee.
- **PERSONALIZE:** Take these laser talks and make them your own using your own choice of words.
- **PICK AND CHOOSE:** Practice the laser talks that interest you the most – you don't have to learn all of them. If you are new to Citizens' Climate Lobby – keep it simple – **you only need to absorb the first three laser talks**. The **highlighted laser talks** are most important and grey highlighted laser talks are pretty important too - but don't stress out – lots of volunteers know this stuff and they can help. You are not lobbying alone. The last few laser talks are very wonky – so don't stress about them either. They are for our super wonks and for reference if things get detailed when lobbying – which for the most part does not happen.
- **HAVE THEM ON HAND:** You can bring these notes in with you when you lobby and discretely use them if stumped. We have had MPs ask for our laser talk booklet after watching us refer to them – so perhaps have extra copies on hand to leave behind with MPs.
- **FACILITATE DISCUSSION:** Note that the laser talks are not meant for people to present as monologues and by all means please do not read directly from them. The real purpose of the laser talks is to facilitate a discussion on climate change with our political representatives, the media and the general public.
- **HAVE FUN:** First and foremost, have fun lobbying. Don't expect perfection of yourself. Let us be your role models - yes there will be typos in here. The content is factual and sourced.
- **YOU ARE POWERFUL:** Constituent lobbyists are powerful. You just being there is so powerful.
- A complete list of fully referenced laser talks are found on our website including some French translations: <http://canada.citizensclimatelobby.org/laser-talks/>
- **PS:** We will not be making copies of these for the conference. It is up to print them yourself.

LASER TALK: Carbon Fee and Dividend

Carbon Fee and Dividend is a revenue-neutral price on carbon that functions as follows:

- A fee is placed on carbon-based fuels at the source (well, mine or port of entry).
- All of the money collected is returned to Canadians on an equitable basis.
- Under this plan most Canadian households would break even or receive more in their dividend check than they would pay for the increased cost of energy, thereby protecting the poor and middle class.
- A predictably increasing carbon price will send a clear market signal which will unleash entrepreneurs and investors in the new clean-energy economy.
- It includes border tax adjustments on imports from jurisdictions without equivalent carbon pricing to prevent leakage and spur our trading partners to price carbon.

For more details please explore our [webpage](#).

LASER TALK: A Brief Overview of Canada's Greenhouse Gas Pollution Act

In June 2018, the [Greenhouse Gas Pollution Pricing Act](#) achieved Royal Assent and became law of the land in Canada. All provinces and territories must have a carbon pricing policy of at least \$20 tonne by January 1, 2019 raising \$10 per tonne each year until 2022, with flexibility for provinces to have carbon taxes or an equally stringent cap and trade system. How equivalency will be determined is unclear. In jurisdictions that do not have carbon pricing policies the Federal Backstop Carbon Pricing Policy will apply. There are two elements of the federal carbon pricing policy:

1. A charge on fossil fuels that is generally payable by fuel producers or distributors, with rates for each fuel that are equivalent to **\$10 per tonne of carbon dioxide equivalent (CO₂e) in 2018**, rising by \$10 per year to \$50 per tonne CO₂e in 2022. The carbon fee for the federal backstop policy is revenue-neutral. PM Trudeau says the money will [go directly](#) back to the people in jurisdictions without carbon pricing. How exactly the revenue will be recycled back to the citizens (tax-shifting or cheque) has not been determined. We recommend a cheque to help build political will. CCL also recommends the price be economy-wide and rise past 2022.
2. For businesses and industries that qualify, they will enrol in an **Output-based Carbon Pricing System**. They will pay a carbon price based on their emissions intensity relative to a best in their class standard in their industry and surplus credits will be traded. This system will send a market signal because good actions are rewarded. This component of the act protects emissions-intensive trade-exposed industries from trade pressures and carbon leakage. However, it is not stringent enough. CCL recommends that the carbon price should be economy wide and thus the Output-Based Pricing System should be temporary, and ultimately replaced with Border Carbon Adjustments.

LASER TALK: Trudeau's Carbon Pricing Plan Will Put More Money in Our Pockets

For provinces without carbon pricing, they will get the federal carbon pricing policy— and the PM said the money will go back to the people. Clean Prosperity have recently published a study which found that the federal carbon price will save the vast majority of Canadians money. If this scenario plays out, in five years the net benefit per household (\$60,000-\$80,000 bracket) would be \$328 in Ontario, \$1,231 in Alberta and \$1,711 in Saskatchewan. (see image on next page)

- <https://nationalpost.com/opinion/john-ivison-game-changing-study-suggests-liberal-carbon-tax-plan-would-put-more-money-in-canadians-pockets>
- <https://www.carbon-dividends.ca/>

LASER TALK: Most Economists Support Carbon Pricing

Carbon pricing is not the stand-in for climate action but it is important and effective. Almost all economists ([75% in one survey](#)) believe that putting a price a price on carbon pollution is the most economically efficient way to reduce greenhouse gas emissions without harming the economy.

LASER TALK: THE BC CARBON TAX WORKED

From the time the BC carbon tax was introduced in 2008 and steadily increased until 2011, GHG per capita from sources subject to the carbon tax dropped by 10% but only 1% in the rest of the country. BC's GDP also performed better than the rest of Canada during that time frame.

Read [Sustainable Prosperity's report on the BC carbon tax here](#).

A study commissioned by **Canadians for Clean Prosperity** shows that the vast majority of households, regardless of income level, would receive more money in the form of carbon dividend cheques than they would pay in carbon taxes, should the federal government introduce carbon dividends in those provinces in which it brings in its carbon tax "backstop" starting in 2019.

Alberta 2020

Household income	What you pay/yr Average household	What you get/yr Average household	What you save/yr Average household
\$20K or less	\$310	\$1,268	+\$958
\$20K - \$40K	\$379	\$1,268	+\$889
\$40K - \$60K	\$435	\$1,268	+\$833
\$60K - \$80K	\$451	\$1,268	+\$817
\$80K - \$100K	\$495	\$1,268	+\$773
\$100K - \$150K	\$542	\$1,268	+\$726
\$150K or more	\$602	\$1,268	+\$666

Higher income households tend to emit more carbon than lower income households.

What you pay may differ from the average household depending on your consumption choices.

All households receive an equal Carbon Dividend.

Saskatchewan 2020

Household income	What you pay/yr Average household	What you get/yr Average household	What you save/yr Average household
\$20K or less	\$351	\$1,567	+\$1216
\$20K - \$40K	\$356	\$1,567	+\$1211
\$40K - \$60K	\$422	\$1,567	+\$1145
\$60K - \$80K	\$468	\$1,567	+\$1099
\$80K - \$100K	\$514	\$1,567	+\$1053
\$100K - \$150K	\$561	\$1,567	+\$1006
\$150K or more	\$648	\$1,567	+\$919

Higher income households tend to emit more carbon than lower income households.

What you pay may differ from the average household depending on your consumption choices.

All households receive an equal Carbon Dividend.

Ontario 2020

Household income	What you pay/yr Average household	What you get/yr Average household	What you save/yr Average household
\$20K or less	\$222	\$517	+\$295
\$20K - \$40K	\$258	\$517	+\$259
\$40K - \$60K	\$317	\$517	+\$200
\$60K - \$80K	\$340	\$517	+\$177
\$80K - \$100K	\$391	\$517	+\$127
\$100K - \$150K	\$446	\$517	+\$71
\$150K or more	\$501	\$517	+\$16

Higher income households tend to emit more carbon than lower income households.

What you pay may differ from the average household depending on your consumption choices.

All households receive an equal Carbon Dividend.

LASER TALK: Carbon Pricing Around the world:

Around the world, carbon pricing initiatives have been implemented or scheduled for implementation in 51 jurisdictions. In total, there are 45 national initiatives (including China) and 25 subnational initiatives (including 11 US States). In 2018, these initiatives cover 11 GtCO₂e, representing 20% of global GHG emissions with a total value \$88.68 Bn (USD) of carbon pricing initiatives in 2018. More here: [World Bank's Carbon Pricing Dashboard](#).

LASER TALK: The New Climate Economy Report

In September 2018, [the Global Commission on the Economy and Climate](#), released a [report](#) that determined that acting on the climate crisis will deliver a \$26-trillion boost to the world's economy by 2030 and avoid 700,000 premature deaths. The Commission [recommends](#) prices on carbon dioxide emissions of \$40-\$80 a tonne by 2020 in major economies.

The Global Commission on the Economy and Climate includes former heads of government, business leaders and economists. Former Mexican president Felipe Calderon, honorary chair of the commission, says it is "a manifesto for how we can turn better growth and a better climate into reality". Co-chairs include Unilever CEO Paul Pohlman and London School of Economics professor Nicholas Stern.

Laser Talk: Fossil Fuel Subsidies and the Carbon Bubble in Canada

In August 2018 Canada committed to peer review of fossil fuel subsidies under the [G20 process](#). Despite some reforms in recent years, Canada is still the largest provider of fossil fuel subsidies to oil and gas production in the G7 per unit of GDP 2018 according to the September 2018 report: [Public Cash for Oil and Gas: Mapping federal fiscal support for fossil fuels](#).

A January 2018 study by the [Parkland Institute](#) estimates that the [Big Five](#) (Canadian Natural Resources Limited (CNRL), Suncor Energy, Cenovus Energy, Imperial Oil and Husky Energy) in Alberta are sitting on an almost two trillion liability. "Alberta's oil sands industry is a carbon bubble—a petroleum-oriented economy that has a high risk of instability, crisis, and even collapse," the report states.

There is an urgent need to reconsider the fossil fuel industry's economic value chain in light of climate change. Negative taxes are artificially incentivizing companies to sink costs into infrastructure with [dubious](#) prospects. The costs of [orphaned wells](#), tailing ponds, [climate disruptions](#), and other externalities will be borne by future taxpayers long after fossil fuels have ceased to generate wealth. Climate change is a game changer.

Laser Talk: the stories the Alberta government and oil industry don't want to tell

A time of reckoning is at hand for the province's regulatory regime that oversees old wells and the protection of the environment. The impending costs of orphaned wells and tailing ponds are astronomical and may eventually be the burden of the taxpayer in Alberta and the rest of Canada. Here are some recent reports:

- [CD Howe Report \(2017\)](#): In a stress test, they estimated the potential social cost of well liabilities to be as high as \$8 billion.
- [Western Producer](#): A March 2018 report indicates that the cost for orphan wells may be \$48 billion
- [Dr. Kevin Taft, former leader of the Liberal Party of Alberta](#) (May 2018) The Alberta Energy Regulator has internal estimates that the total cost of cleaning up all Alberta's oil industry (conventional and oil sands) will run to \$260 billion, which could crush the finances of Alberta's government.
- [Alberta Views Article on The Redwater decision](#) – An oil company went bankrupt. Who is to pay for the clean-up? Is the environment going to be the last "person" to get paid when a company goes bankrupt? Will the taxpayers be on the hook? This Supreme Court decision will pave the way.

LASER TALK: Canadian Medical Association Promotes Carbon Pricing

The [World Health Organization](#) and [Médecins sans Frontières](#) have identified climate change as the greatest threat to global health in this century. The Canadian Medical Association (CMA) policy paper [on Climate Change and Human Health](#) concludes that the global community needs to act together to address the health and environmental impacts of climate change. In August 2015 the CMA passed motion [DM 5-21](#) to promote a strong, predictable price on carbon emissions. In light of the health risk of climate change we at CCL support physicians that ask that all Canadian political parties commit to reducing greenhouse gas emissions by putting an effective price on carbon.

LASER TALK: Nuclear Energy

CCL does not advocate for or against nuclear power generation. We understand the science that shows the low-carbon generating capacity of nuclear power, and we understand the objections that many people raise.

LASER TALK: Pipelines

CCL does not advocate for or against pipelines. We are for carbon pricing, which includes phasing out fossil fuel subsidies and this includes not using our taxpayer dollars to build or refurbish pipelines. We truly appreciate the work of the land defenders as their work allows us to focus on carbon pricing and thus we have more time to savour the planet. As the adage says, “*He who runs after two hares will catch neither.*” Also, consider that it is likely that a clear and incrementally rising carbon price will disincentive the building of fossil fuel infrastructure and perhaps that is why there is so much resistance to effective carbon pricing among some institutions aligned with the fossil fuel industry.

LASER TALKS: Carbon Capture and Sequestration

CCL does not oppose or support any specific technologies. As long as *all* of the climate costs are adequately priced into the energy we use, as our plan stipulates, the best long-term engineering solutions will win out. Carbon Capture and Storage (CCS) is a general term for a range of different industrial processes that can separate carbon dioxide (CO₂) emissions from smokestacks and store it underground indefinitely as toxic waste. The science is clear, we will need to deploy CCS in order to avoid the 2C limit. When combined with biofuels, CCS can permanently reduce CO₂ levels in the atmosphere. Canada is a world leader in CCS. Without carbon pricing, CCS deployed at scales required to meet climate targets is unlikely.

More details:

<https://www.nature.com/articles/nenergy2017141>

<https://canada.citizensclimatelobby.org/laser-talks-four-detailed-talks-on-canada-ccs-and-carbon-pricing/>

LASER TALK: THE MANY WAYS TO PRICE CARBON POLLUTION

There are many ways to price carbon. They are listed here from least transparent to most transparent:

1. **The Status Quo:** external costs of climate change are not internalized and the taxpayer is forced to pay for climate and health-related damages through their taxes and insurance premiums.
2. **Green Subsidies:** Government subsidies of green technologies with taxpayer dollars is a populist idea. It is a distortionary system that muddies the market signal and is thus inefficient. (1) It benefits the rich because they are larger consumers of energy (2).
3. **Regulation:** sector by sector regulation of all the sectors in the economy that produce carbon pollution. Some regulations are complementary to carbon pricing and should be implemented such as coal phase out. (3)
4. **Cap and Trade:** put a mandatory limit (or “cap”) on a portion of national emissions, and allow firms to buy and sell rights to emit within the cap as well. This can be with or without offsets. A carbon offset is a reduction in emissions of carbon dioxide or other greenhouse gases made in order to compensate for an emission made elsewhere. (3) In the Western Climate Initiative, all cap and trade allowances collected by law are put into programs that reduce carbon emissions.
5. **Carbon Tax:** a tax based on greenhouse gas emissions generated from burning fuels. The tax may or may not be revenue neutral. A revenue neutral tax is one that does not have a net increase in overall federal tax revenues. (4)
6. **Cap and Dividend:** Same as cap and trade with one exception: 100% of the money collected by the government from the sale of allowances is returned to households and is not put into programs.
7. **Carbon Fee and Dividend:** An incrementally increasing fee is placed on carbon pollution and 100% of the money is returned to households. The term fee is used deliberately to indicate clearly that it is a revenue neutral pricing system. Carbon Fee and Dividend, as proposed by Citizens Climate Lobby, is an upstream fee and is levied at point of production of fossil fuels. A downstream tax, on the other hand, would be levied at the point of consumption of fossil fuels and/or products dependent on fossil fuels.

(1) <http://documents.worldbank.org/curated/en/209041530236682559/Where-is-the-carbon-tax-after-thirty-years-of-research>

(2) <https://www.imf.org/external/np/fad/subsidies/#mes>

(3) <https://canada.citizensclimatelobby.org/laser-talk-complementary-policies-to-carbon-pricing/>

Quebec, California and the European Union are jurisdictions that have implemented cap and trade with offsets to mitigate their greenhouse gas emissions. (3) Ontario is in the process of exiting the cap and trade program with Quebec and California.

(4) British Columbia, Alberta, Norway and Sweden have carbon taxes. On Monday, October 3, 2016, Prime Minister Justin Trudeau announced that Canada will establish a floor price on carbon pollution of \$10 a tonne in 2019, rising to \$50 a tonne by 2022. It was passed into law in June 2018.

LASER TALK: A US Study: Carbon fees are superior to regulation

In 2017, the Climate Leadership Council released [the Carbon Dividends Plan](#) authored by James A. Baker, III, and George P. Shultz. Both are distinguished statesmen under Republican presidents. Their carbon dividends plan is a carbon fee and dividend policy. Note this plan has a well-funded PAC (Political Action Committee) that includes former Republicans, big oil and big business: [Americans for Carbon Dividends](#).

A June 2018 study showed that their carbon fee and dividend-like plan [would achieve more than triple emissions reductions of all Obama-era climate regulations](#), and could exceed the high end of the U.S. Paris Commitment.

LASER TALK: Canada's Current Climate Targets are Woefully Inadequate

On Friday, November 4, 2016, the Paris Accord went into effect. Almost two years later and the world is [still dangerously on track to blow the 2C](#) limit. We will grieve over the avoidable human tragedy if we don't take more concrete actions now. Please don't be complacent Canada. Our climate targets are [woefully inadequate](#). If all governments adopted an inadequate position, warming would likely exceed 3C. Canada's pledges must align with science and we must contribute our fair share to reduce emissions, otherwise we lose moral authority internationally.

LASER TALK: Canada's Current Climate Targets Put Into Perspective

In March 2018, in the historic report, [Perspectives on Climate Change Action in Canada—A Collaborative Report from Auditors General](#), all of Canada's auditor generals concluded that Canada as a whole is not on track to meet our greenhouse gas emission targets. It must be borne in mind that there was a paucity of climate action at the federal level between 2008 and 2015 and the provinces did most of the [heavy-lifting](#) according to Julie Gelfand, Canada's Environment Commissioner. Gelfand, said in October 2017 regarding Canada's current climate plans that it [will take time to bend the curve](#).

LASER TALK: Carbon Pricing is the Way Forward:

Canada's Ecofiscal Commission released a report in April 2015 titled "[The way forward](#)". The Ecofiscal study used an economic model that analyzed where Canada would be in 2020 if regulation or carbon pricing were used to manage carbon pollution. The carbon pricing model they used was revenue-neutral.

In this model, Canada's gross domestic product (GDP) in 2020 is **3.7%** better under carbon pricing than it is under a regulatory approach. The "gain" breaks down as follows: **0.4%** from provinces linking their carbon pricing systems; **0.9%** from recycling revenue into income tax deductions; and **2.4%** from carbon pricing alone. The study was agnostic towards which carbon pricing mechanism was used. However it did stipulate that the carbon tax or cap and trade had to be "well-designed".

LASER TALK: The REMI Study (USA):

A 2014 US [study by Regional Economic Models, Inc.](#) (REMI) examined the impact of a steadily-rising fee on carbon with revenue returned to households. Among other findings, the study shows that, after 20 years, a fee on carbon dioxide rising \$10 per ton each year would reduce greenhouse gas emissions 52 percent while adding 2.8 million jobs to the economy.

LASER TALK: How 100% Renewable Energy by 2050 will cost Canadians less*

According to Stanford civil and environmental engineering Professor Mark Jacobson's, fossil fuel energy costs 8.5 cents a kilowatt-hour and renewable energy costs 9.9 cents. We will, however, save money in two ways:

1. Efficiencies will decrease our overall need for energy. For example, electric vehicles [convert 59 to 62 per cent](#) of the electrical energy from the grid to power at the wheels, while gas vehicles convert 17 to 21 per cent.
2. Canadians will avoid \$107.6 billion a year in health costs out of our taxes.

Overall, Canadians on average can expect a savings of \$164 a year in energy costs and \$8,888 a year in climate and health costs.

<http://thesolutionsproject.org/why-clean-energy/#/map/countries/location/CAN>

LASER TALK: Canada can have 100% Renewable Energy by 2050

The world, including Canada, can convert to 100 per cent renewable energy – from wind, water and solar resources by 2050 without nuclear energy, according to Dr. Mark Jacobson of Stanford University. This includes energy for transport, heating fuel and electricity.

He presented his recent data at the Paris Climate talks in December 2015. Here is the energy mix for Canada's 100 per cent renewable scenario for 2050: Solar, 21.2%; onshore wind, 37.5%; offshore wind, 21%; wave energy, 2%; geothermal, 1.9%; hydroelectric, 16.2%; tidal turbine, 0.2%. The economic impact includes the creation of 293,000 construction and 463,000 full-time operation jobs. In addition, the result will include avoided annual health costs of \$107.6 billion and avoided annual pollution deaths of 9,598.

In an interview January 3, 2016, Jacobson was asked if 2050 is still a practical date to achieve that goal? He replied that it is technically and economically practical, but politically is another question. It is up the grassroots and our newspapers to make sure that politicians know that a 100 per cent renewable future by 2050 is possible and we are going to hold them accountable for it.

One thing needed is a predictable and increasing price on carbon pollution so investors will know when renewable energy will become more competitive with fossil fuels. By returning the money collected back to the citizens, this will shield ordinary families from price shocks as we transition away from fossil fuels and will also allow the carbon price to go high enough to help spark the necessary changes the next generation expects from us by 2050.

<http://thesolutionsproject.org/why-clean-energy/#/map/countries/location/CAN>

LASER TALK: Natural gas and climate policy

Natural gas produces fossil-based CO₂, but significantly less than coal or oil for the same amount of energy produced. [1] When burned for electricity, that advantage widens because modern natural gas power plants are much more efficient than coal plants. [2]

Unlike coal, though, natural gas can leak into the air. When that happens, its main component – methane – is a greenhouse gas with a potency 28 to 36 times that of CO₂ over a 100-year period. [3] Life-cycle leakage estimates vary widely, from 1.2 to 3.3 percent [4,5] but an in-depth 2017 analysis of available literature concluded that replacing coal-generated power with state-of-the-art natural gas power reduces GHG emissions by about 45 percent. [6]

Methane leakage can be greatly reduced by methods spelled out under Environment Canada regulations. [7] In fact, Canada is the first country in the world to tackle methane leakage with a federal policy [8], CCL's policy seeks to cover *all* greenhouse gas emissions. We, of course, are open to existing regulations or other approaches that ensure industrial methane emissions are adequately addressed.

CCL holds that a 90 percent cut in greenhouse gas emissions by 2050 is necessary to achieve a livable future. How long can natural gas remain in the mix and still meet this target? Should it serve as backup for intermittent renewables like wind and solar? Should it be used in transportation?

Those decisions are not up to CCL. As long as *all* of the climate costs are adequately priced into the energy we use, as our plan stipulates, the best long-term engineering solutions will win out.

1. "Emissions Factors for Greenhouse Gas Inventories." U.S. EPA (4 Apr 2014).
2. "What is the efficiency of different types of power plants?" U.S. Energy Information Administration (10 May 2017).
3. "Understanding Global Warming Potentials." U.S. EPA (accessed 24 Apr 2018).
4. "Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016: Executive Summary." U.S. EPA (12 Apr 2018).
5. Howarth, R.W. "A bridge to nowhere: methane emissions and the greenhouse gas footprint of natural gas." Editorial in *Energy Science & Engineering* 2:47-60 (22 Apr 2014).
6. Scull, B. D., *et al.* "Upstream Emissions of Coal and Gas." New York, NY: Columbia University, School of International and Public Affairs, p. 3 (24 May 2017).
7. "Canada's methane regulations for the upstream oil and gas sector Environment Canada" (26 April 2018)
8. "New federal methane regulations a vital step in implementing Canada's climate plan." (26 April 2018) Pembina Institute.

Laser Talk: Lord Stern, The New Climate Economy, Carbon Pricing and the G7

On September 20, 2018, at the 2018 G7 Environmental Ministerial in Halifax, Lord Nicholas Stern noted the findings of the 2018 report of the Global Commission on the Economy and Climate that climate action represents an opportunity to create **\$26 trillion in economic growth and 65 million jobs by 2030** (1). To seize this opportunity it was recognized that businesses require certainty including clear policies, rules **and consistency around carbon pricing**.

The New Climate Economy Report recommends high prices on carbon dioxide emissions of \$40-\$80 a tonne by 2020 in major economies (2). Subsidy reforms in the energy sector, coupled with higher carbon prices, could raise \$2.8-trillion a year in government revenues in 2030, it says. (3)

Former Mexican president Felipe Calderon, honorary chair of the commission, says it is "a manifesto for how we can turn better growth and a better climate into reality". Co-chairs include Unilever CEO Paul Pohlman and London School of Economics professor Nicholas Stern. Trump, who doubts manmade emissions of greenhouse gases are the prime cause of climate change and wants to promote the coal industry, has said the 2015 Paris Agreement could cost 2.7-million US jobs by 2025.(3)

The report also singled out Ontario in their report for backsliding, as a threat that could lock the planet into a high-polluting, unequal future. (4)

With such high level support for carbon pricing and warnings of failure to act – it leaves on to wonder – what do the Conservative's plan for lowering emissions?

1. <https://g7.gc.ca/en/g7-presidency/themes/working-together-climate-change-oceans-clean-energy/g7-ministerial-meeting/g7-environment-ministers-meeting-chairs-summary/>
2. <https://newclimateeconomy.report/2018/>
3. <https://www.businesslive.co.za/bd/world/2018-09-05-going-green-could-deliver-a-26-trillion-boost-to-the-worlds-economy-a-new-study-shows/>
4. <https://www.nationalobserver.com/2018/09/05/news/ontarios-ford-government-singled-out-backsliding-planet-faces-use-it-or-lose-it>

LASER TALK: Less than five percent of the Canadian economy is trade exposed

It is important to note that a [November 2015](#) study by the Ecofiscal Commission found that less than 5% of the overall Canadian economy would be exposed to competitive pressures if carbon was priced at \$30 a tonne – that's because like most western democracies, Canada has a huge service sector that is neither emissions-intensive nor trade exposed. The good news is, governments can address the challenges of the trade exposed industries with targeted, transparent, and temporary support measures for genuinely vulnerable industries. Ultimately though, Canada will need a national carbon price with border tax adjustments to protect domestic industries.

***LASER TALK: Border Carbon Adjustments**

Our Carbon Fee and Dividend policy has a provision built in to protect trade competitiveness: a "Border Carbon Adjustment" (BCA) imposed on carbon-intensive trade-exposed goods [1,2] that cross our border in either direction. Products imported from a country that does not bear a carbon price equivalent to ours will have to pay a surcharge to make up the difference. Conversely, a Canadian-made product exported to such a country will get a refund for the carbon fee associated with its carbon footprint.

This BCA prevents Canadian manufacturers from being put at a competitive disadvantage in global markets because of the fee. It will also remove the incentive for them to relocate overseas to avoid the carbon fee. In addition, it will encourage foreign countries to adopt their own carbon fee so they would get the money instead of us. Carbon Fee and Dividend's BCA is designed to comply with international trade law. [3,4]

Note that exported fossil fuels don't get any special border treatment. Our proposal does not include a refund for Canadian-produced fossil fuels that are exported, and imported foreign oil has the same carbon fee placed on it as domestically produced oil. The BCA applies only to carbon-intensive products, not fuels.

REFERENCES:

- 1) Provincial Carbon Pricing and Competitiveness Pressures. Canada's Ecofiscal Commission (November 2015)
- 2) Nicholson, M.W. "Disaggregated Analysis of Competitiveness and Employment Issues in Energy-Intensive Trade-Exposed Industries." International Trade Administration (Jun 2010).
- 3) Pauwelyn, J. "Carbon Leakage Measures and Border Tax Adjustments under WTO Law." In Research Handbook on Environment, Health and the WTO (21 Mar 2012).
- 4) "Climate and carbon: aligning prices and policies." OECD Environment Policy Paper No. 1 (Oct 2013).

***LASER TALK: Output-Based Pricing Systems**

Only federal governments can enact border carbon adjustments (BCAs) and only if they have a fully functioning federal carbon price. BCAs also take time to set-up. As well, they are tariffs, thus, diplomatically speaking, our trading partners will need at least two years notice to prepare for BCAs. Thus, while establishing a national carbon price we have to maintain competitiveness and reduce carbon leakage without border carbon adjustments.

Industries that qualify can sign-up for output-based pricing systems for their carbon emissions. Each qualifying industry has formula for quantifying their greenhouse gas output in relation to best in their class – resulting high-performing industries paying less in carbon taxes and a price signal to stry reduce emissions.

On Wednesday, August 1, 2018, changes were made to the amount of carbon pricing revenues the federal government plans to return to Emission-Intensive and Trade-Exposed (EITE) sectors in order to protect their competitiveness and avoid carbon leakage. Previously, it had planned to return 70% of what it collected from these sectors. Now it plans to return 80%, or 90% if the sector is particularly vulnerable.

Canada's carbon pricing benchmark price must be economy-wide and must continue to rise beyond 2022 every year until 90% reduction from 2005 levels is achieved. OBPSs will not encourage the necessary radical industrial transformation. OBPS are a baby step in the right direction, but they must be nurtured into Border Carbon Adjustments in order to face the real-world challenge of global warming. CCL recommends that Output-Based Pricing Systems should be temporary and ultimately replaced with border carbon adjustments.

REFERENCES

For a deep dive into Output-Based Pricing Systems: [see the September 2018 Action Sheets](#)

LASER TALK: China is already pricing carbon

China is already pricing carbon using an emissions trading system (ETS; aka Cap-and-trade) in 7 pilots [1]. Each of these pilots is operational and is already reducing carbon emissions. The Chinese pilots alone raised the percentage of global emissions covered by a carbon market from 8% to 11% [2]. As of October 2014 those pilots had traded 13.75 million metric tons of CO2 and generated 500 million Yuan (81 million USD) for the Chinese Government.

Each of the programs has penalties for non-compliance. For example, in the province of Hubei, industrial firms busting their cap lose double the permits they failed to submit from next year's allowance, and are fined up to three times the market price for each allowance not submitted. In 2016 China plans to merge their pilots and form a national emissions trading system [2]. China has a price on carbon – and we are happy that Canada does too. Great minds think alike.

1. International Carbon Action Partnership. <https://icapcarbonaction.com/> April 15, 2015.

2. China Plans National Carbon Market by 2016 Amid Emission Pledge." Bloomberg Business. Nov 25, 2014. <http://www.bloomberg.com/news/articles/2014-11-25/china-plans-national-carbon-market-by-2016-amid-emission-pledge>

LASER TALK: Balancing the Federal Budget, Social Concerns, & the Environment

The Liberal Government is not on track to balancing our budget. As well, despite signing the Paris Accord and having a national carbon pricing policy, Canada's climate targets are still [woefully inadequate](#) of the previous government and it is unlikely that we will meet our targets. Ideally, we need a carbon price of at least \$150.00 tonne by 2030. However, forty-eight percent of Canadians are within \$200 each month of not being able to make their bills. Clearly, carbon pricing needs to be revenue-neutral and therefore, the government must use other sources of revenue to balance the budget and other social concerns.

What is needed is tax reform in Canada. The government needs to stop giving handouts to fossil fuel companies ([\\$1.6 billion](#) and a 2015 election promise), close the CEO stock option loophole ([\\$750 million](#) and a 2015 election promise), tighten tax havens laws ([\\$14.6 billion per year](#)), tax inheritance (\$?? – note Canada is the only G7 country without an inheritance tax), and start taxing in earnest the things that we don't like such as pollution with carbon fee and dividend and not tax the things we like our income by returning the dividends back to us.

[For the full Laser Talk Please Go Here](#)

Laser Talk: Complementary Policies to Carbon Pricing

Carbon pricing is widely accepted as the most cost-effective way to reduce greenhouse gas (GHG) emissions. However, where a well-designed carbon price falls short on regulating GHGs, complementary policies can be considered. For example, [Canada's Ecofiscal Commission](#) identifies three specific areas of our economy where complementary policies may be warranted:

- where emissions from small, distributed, non-point sources are challenging to measure, e.g. methane from agriculture;
- where consumers are not responsive to price increases due to lack of information (e.g. pay off for home retrofitting) or lack of alternatives (e.g. electric car availability); and
- where other benefits will be significant (e.g. health benefits of a coal phase out)

To possibly complement carbon pricing, the following policies are supported by [Pembina Institute](#) and [Deep Decarbonization Pathways](#) and incorporated in the [Pan-Canadian Framework](#):

- a coal power phase out;
- clean energy standards, including a low-carbon transportation fuel standard;
- percentage targets for vehicle manufacturers' sales of electric vehicles (EVs); and
- standards for energy efficient buildings.

Even when there appears to be a clear rationale for a complementary policy, however, it is only worth proceeding if the policy is well designed and cost-effective. For example, the [Ecofiscal analysis](#) found electric vehicle (EV) subsidies in Quebec were costly and had little effect on demand, whereas regulated quotas for EV sales were much less costly and more effective.

The bottom line is that carbon pricing must be at the heart of any climate action plan, with additional GHG regulations implemented if they meet specific criteria that demonstrate complementarity.

LASER TALK: Significant costs from climate change in Canada

Flood and fire losses are costing Canadian taxpayers \$1 billion a year, [according](#) to Canada's Minister for Public Safety and Emergency Preparedness, the Honourable Ralph Goodale. Minister Goodale said, "Canada has spent more in the last five or six years cleaning up after wildfires and floods due to climate change than was spent in the entire previous history of the program stretching back to 1970."

In British Columbia alone direct wildfire suppression costs were [estimated](#) at more than \$568 million in 2017. Canadian [insurers](#) are facing an additional \$1 billion in claims each year due to natural catastrophes – [floods](#), [forest fires](#) and other extreme weather events - [according](#) to the Insurance Bureau of Canada.

These costs will increase. In 2011 the calculated that the cost of climate change for Canada could grow to between \$21 to \$43 billion a year by 2050 with impacts felt strongly in the agriculture and forestry sectors.

Tourism and small businesses also face devastating costs. For example, visitations declined [over 50%](#) in affected areas during the 2017 BC fire season. Impacts on tourism from wildfires and smoke from BC's 2018 wildfire season [are still being assessed](#), but tourists were clearly staying away.

Individual Canadians will also feel the pinch. Governments and insurance companies will have to pass higher costs on to us in the form of higher taxes and insurance rates. As well [TVO](#) noted in 2017 that prolonged droughts and ocean acidification are causing food prices to rise.

The [Canadian Association of Physicians for the Environment](#) reminds us that we can also expect to experience negative health impacts from more wildfire smoke and extreme heat, as well as the mental stress of dealing with severe weather events, floods and fires. Weeks of heavy wildfire smoke in BC in the summer of 2018 [has taken its toll](#). Health care costs from climate change in Toronto alone could be between [\\$3 million and \\$11 million a year by the 2050s](#). Compared to these costs, a rising carbon fee is a small price to pay.

LASER TALK: Climate Change and Global Security

In 2011, in the United States, A New Strategic Narrative for the 21st Century was presented to the Joint Chiefs of Staff. It identified climate change as a key threat to economic and political stability. In 2014, in the 5th report from the UN Intergovernmental Panel on Climate Change contained an extensive chapter on the implications of climate change for human security. It detailed threats to global security and possibilities of violent conflict. In March 2016 Scientific American published a paper that outlined how climate change hastened Syria's Civil War. Global security is of concern to many Canadians, yet Canada is certainly not doing our fair share internationally to cut carbon emissions. In March 2016 the US Pentagon made climate change a long-term global security goal.

The facts are global warming is real, human caused, poses a threat to global security and the solution is to cut emissions. Canada's climate commitments are the still the Harper Government's commitments are woefully inadequate. When a country as prosperous as Canada fails to reduce its greenhouse gas emissions, we lose moral authority.

If politicians are truly serious about terrorist threats and national security, doing our fair share internationally to reduce greenhouse gas emissions should be an integral part of long term plans. A robust price on carbon pollution is critical piece of reducing gas emissions.

LASER TALK: The Effect of Pricing Carbon on Farmers

Agriculture in Canada is heavily dependent on fossil fuels for running machinery and producing fertilizers, and a price on carbon would, by design, increase the price of fossil fuels.

For farmers, however, the impact associated with a price on carbon is not nearly as great – or as volatile – as other factors, especially if the fee starts low and increases predictably over time. For example, in Canada the price of farm machinery fuel increased by 25% in 2011 from 2010. As well, during that same time period fertilizer prices rose 29%. Commodity prices, which determine the income farmers receive at any given time, are also volatile.

In addition, the impact of a price on carbon will be minuscule compared to the impact climate change will have on future farm productivity over the long-term if CO2 emissions are left unmitigated. A March 2013 report by Canada 2020 concluded that *"climate uncertainty and climate extremes are givens for the future of Canadian agriculture and while there may be some initial benefits from rising temperatures and elevated carbon dioxide levels such benefits are unlikely to last. There is a growing body of evidence pointing to temperature and CO2 thresholds, beyond which yields will level off or decline. These risks need to be addressed and policies put in place to reduce them."*

Also, bear in mind that a price on carbon will be an economic opportunity for many farmers and ranchers as demand for carbon-free energy increases. Wind developers are leasing land from farmers to erect turbines. Solar farms can also replace cropland that doesn't generate enough income from traditional farming.

Of note, British Columbia's carbon tax does not appear to have had a measurable impact on international agricultural trade, despite concerns it would greatly reduce the BC industry's competitiveness, according to new analysis commissioned by the Pacific Institute for Climate Solutions (PICS).

Bottom line: The additional cost of a price on carbon is negligible compared to the increased volatility that comes with a changing climate. In fact, a gradually and predictably increasing price on carbon creates an opportunity for farmers to balance that volatility with steady cash flow from renewables that share land with their crops.

LASER TALK: Women and Climate Change

Women currently are and will continue to be disproportionately impacted by climate change. Climate change disproportionately affects women due to a lack of power and increased social exclusion in some parts of the world. Note men and boys also have unique vulnerabilities to climate change. This can be addressed through a process of gender mainstreaming, that is, ensuring that gendered concerns are addressed and that the policy or practice does not further existing gender inequalities.

Climate change is and will lead to more competition over resources which in turn leads to conflict and violence. The Syrian Civil War is a harbinger of things to come. Conflict amplifies existing gender inequalities. Under such conditions, women will suffer the consequences of conflict such as rape, violence, anxiety, and depression. Most women can't just move. They are less mobile due to their roles as primary caregivers making it difficult for them to move as an adaptive response to a rapidly changing climate or conflict.

As well, water stress and food shortages brought on by climate change will lead to an increase in women's labour in many contexts as they have the primary responsibility of collecting water and working in agriculture in many parts of the world. Related increases in food prices make food more inaccessible to poor people, in particular to women and girls whose health has been found to decline more than male health in times of food shortages. Furthermore, women are often excluded from decision-making on access to and the use of land and resources critical to their livelihoods.

Lastly, gender differences in death rates attributable to natural disasters have been linked directly to women's economic and social rights. Women are more vulnerable to death in extreme weather events. For example, social prejudices in parts of the world keep women and girls from learning to swim, and as a result, they are more vulnerable to flooding disasters.

Sadly, women are under-represented at the global climate policy negotiations too.

In the 2017 book by Paul Hawken [*Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming*](#) educating and empowering women is [sixth](#) of the hundred most important things humanity can do to reverse global warming. The good news is that in 2018 the [G7](#), [IPCC](#) and the [United Nations](#) are recognizing the need for female inclusion and empowerment in tackling climate change.

LASER TALK: Canadian Companies Support a Carbon Tax

Any attempt to achieve a federal price on carbon must have the support of business executives because it is they who can make or break its effectiveness. So who has stepped up to the plate so far? The Mining Association of Canada members Suncor and Royal Dutch Shell (Shell Canada's parent company) have both said they are prepared for a carbon price.

Finally, The World Bank's [Carbon Pricing Leadership Coalition](#) (CPLC), a voluntary partnership of national and sub-national governments, businesses, and civil society organizations (including Citizens' Climate Lobby), wants to use carbon pricing as a way to control climate change. Canada, Alberta, Ontario, Quebec, British Columbia and the Northwest Territories became founding partners of the [Carbon Pricing Leadership Coalition](#) at the climate talks in Paris and committed to effective carbon pricing policies to meaningful lower emissions guided by the "[FASTER](#)" [principles](#).

On July 15, 2016, 20 Canadian companies became members, the largest number of companies joining the CPLC at one time including: Air Canada, Barrick Gold Corporation, BMO Financial Group, Canadian Tire Corporation, Carbon Engineering Ltd., Catalyst Paper Corporation, Cement Association of Canada, Cenovus Energy Inc., Desjardins Group, Enbridge Inc., Loblaws Companies Limited, Resolute Forest Products Inc., Royal Bank of Canada, Scotiabank, Shell Canada, Suncor Energy, TD Bank Group, Teck Resources Limited, TELUS, The Co-operators Group Limited, TransCanada Corporation, Unilever Canada Inc.

CCL Canada has also secured over 250 signatures to our open letter for carbon pricing in Canada.

LASER TALK: CCL Canada's Carbon Pricing Criteria

Canada now has a national carbon pricing policy. CCL Canada is committed to holding the flag for carbon fee and dividend. As we seek common ground, these following criteria will guide us. The federal carbon pricing policy must reduce carbon emissions in a timely and just manner, and:

- Include a steady, resolute and rising carbon price for predictability and effectiveness,
- Price pollution at the source and use border tax adjustments to discourage industry relocation,
- Be as simple and transparent as possible,
- Protect low to middle income Canadians, while stimulating the economy and creating jobs,
- Can work with provincial carbon pricing systems and harmonize across national borders.

LASER TALK: About Citizens' Climate Lobby Canada

Citizens' Climate Lobby (CCL) is an international, non-partisan organization that empowers citizens to lobby their representatives for a revenue-neutral price on carbon pollution. Currently, we have [494 active chapters](#) in 46 countries and over 100 000 CCL members worldwide. In Canada, we cover over 80 ridings and have approximately 1200 members.

CCL was founded in the USA in 2007 by Marshall Saunders and is modeled after the international poverty reduction organization [RESULTS](#), which is also our sister organization.

Since September 2010, Canadian Citizens' Climate Lobbyists have, through teleconference calls, monthly actions, and conferences educated us about the various aspects of climate change: from the economics and science to the sociology, communication and its myriad connections to almost everything.

Our volunteers in Canada have recorded almost 2300 letters to the editor, articles, editorials, and columns published in newspapers by or about us over the last eight years. Every June since 2011, CCL Canada has sent a delegation to Washington to lobby Congress as well as the [World Bank](#), the [International Monetary Fund](#) and the Canadian Embassy.

In 2015, we had about 500 registered volunteers at that time. Our focus was the federal election in 2015. We created the political will for carbon pricing across Canada one riding at a time and in the media using our non-partisan methodology. We had 325 print media hits and professional [public service announcements](#) on TV in the lead up to the election. Two days after the Election 2015, a Canadian Senator sent our national director the following message regarding CCL's work, *"You have done so much "groundwork" that can now start to really pay off. I feel that the prospects for climate action are exceptional."*

In 2016, we focused on educating all the new parliamentarians and met with them 199 times to discuss carbon pricing. In 2017, there was a leadership race in the New Democratic and Conservative parties federally. As well in 2017, the Progressive Conservative party in Ontario developed their platform. Thus, we focused on creating the political will for carbon pricing on the editorial pages of newspapers. We appeared on the editorial pages 701 times (17% of all print media hits in all of CCL) and had 76 editorial endorsements of carbon fee and dividend across Canada.

In 2018, we will for the first time since 2014, turn some of our attention to growing our groups locally and expanding regionally and nationally. If MPs would like to help us form groups in their ridings, that would be great.

Since November 2011, Citizens' Climate Lobby Canada volunteers have lobbied every year on Parliament Hill and many years more than once. We will gather in Ottawa October 13-16, 2018 for [our fifth annual conference and lobbying days](#) and lobby as a collective on Parliament Hill for the 13th time.
