

Pembina Institute Report to Donors 2016



Contents

Contents
What a difference a year can make2
Priority area accomplishments 4
Responsible Fossil Fuels4
Climate Leadership 5
Clean Economy5
Transportation and Urban Solutions6
Buildings and Urban Solutions6
Federal Policy Program7
Looking ahead: Making the most
of a federal opportunity 8
\$1 Million Campaign for Canada's Climate 10
Recent Pembina Institute events 11
Upcoming events13
Recent Pembina Institute highlights14



Ed Whittingham speaking at the Pembina Institute's popular unGALA in Toronto, January 2016.

What a difference a year can make

The political and fiscal landscape shifted dramatically over the past year and, thanks to your generous support, we are moving forward on high-impact climate and energy solutions together. After years of frustration, we finally reached a tipping point in terms of political momentum last year. We are now seeing meaningful change at the provincial, federal and international levels — and, as a donor, you have been a crucial part of that change.

In Alberta, Rachel Notley's NDP party swept into power with an appetite for ambitious progress on climate. Pembina Institute staff worked with her new government, industry, utilities and ENGOs to build consensus around key issues. In November, the province unveiled its Climate Leadership Plan which aligned very closely with our recommendations on implementing a carbon tax, capping oilsands emissions, phasing out coal-fired electricity, reducing methane emissions, promoting renewable energy and introducing energy efficiency programs.

Meanwhile, British Columbia is in the process of developing its Climate Leadership Plan. The Pembina Institute's Matt Horne was appointed as a member of the multi-disciplinary team tasked with producing

recommendations. The Institute's analysis and recommendations on buildings, transportation, industry and carbon pricing feature prominently in the Climate Leadership Team's recommendations. To pave the way for progress, we paired this with engagement and convening of government, industry, media and other environmental groups. The Pembina Institute continues to leverage public pressure as the B.C. government makes its decisions on the plan.

In Ontario, the Pembina Institute provided much-needed analysis and recommendations to address emissions reductions from the transportation sector, one of Ontario's most significant emitters and the biggest remaining gap in its climate plan. Over the past year, the Institute has published a number of reports on



The Pembina Institute was in Paris for the announcement and we will be there every step of the way as our country shapes new policies and takes action.

developing compact livable communities with transit to support Premier Kathleen Wynne's policy aspirations in that sector. Policy and program recommendations have had strong traction with the province and in the media.

Our federal work awoke from a semi-dormant state in 2015, when the Liberals formed a majority government. Justin Trudeau has taken on a vastly different approach to climate change than what we have seen in Canada over the past decade.

This new approach to climate change federally saw Canada re-emerge as a constructive member of the international community in December, when 195 countries came together at the UN climate talks and committed to the Paris Agreement. The agreement acknowledges the gravity and urgency of climate change, and commits signatory countries to take action. The Pembina Institute was there alongside Canada's federal and provincial delegation for the announcement and we will be there every step of the way as our country shapes new policies and takes action.

Of course, we're delighted to say that these incredible milestones only mark the beginning of an ambitious

journey for us and our donors. Within the next two years, we aim to have an integrated federal-provincial economic approach to climate and energy in place to make progress on mitigation, carbon pricing and cleantech investment to spur jobs in low-carbon industries.

But we must move quickly to push through as many positive actions as we can before the federal government moves to safer, more voter-friendly policy developments for the last half of its mandate. With this in mind, the Pembina Institute has crafted a federal strategy that is one of acceleration, creating depth and ensuring resilient policy backed by solid implementation and regulations.

Monumental change does not come easily. The Pembina Institute has been working diligently on all of its priority areas to ensure our transition to a clean energy future is as responsible and timely as possible. We've seen remarkable progress on responsible fossil fuels, climate leadership, transportation and urban solutions, buildings and urban solutions, clean economy and a growing range of federal priorities. Read on to find out how you've helped us reach our goals.

Priority area accomplishments



The ubiquitous pumpjack in Drayton Valley, Alberta.

Responsible Fossil Fuels

Pembina Institute staff met with a range of government officials over the past year to address environmental impacts of the fossil fuel sector. Meetings were held with the federal Minister of Environment and Minister of Natural Resources and with Alberta's Minister of Environment, as well as with political and bureaucratic staff in the Alberta departments of Environment, Energy and Finance, and the Executive Council. At these meetings we gathered information and shared our findings and options on several areas.

On methane, the Pembina Institute worked with the Environmental Defense Fund and the Clean Air Task Force (both based in the U.S.) to advocate for significant commitments on reductions of methane emissions from oil and gas development. The Pembina Institute was the only Canadian environmental organization working on this file this past year. We were delighted when Alberta, B.C., Canada and the U.S. all committed to reduce these emissions by 40 to 45 per cent below 2012 emissions by 2025.

The commitment in the Alberta Climate Leadership Plan to phase out coal-fired electricity by 2030 represents a dramatic victory for the Institute after several years of working on this issue.

Over the past year, the Institute has undertaken significant analysis and outreach around liquid natural gas (LNG). For example, the first publicly available tool to quantify the impacts of upstream shale gas production (water required, wastewater produced and GHG emissions) was developed by the Institute and has been used by impacted communities, the B.C. Oil & Gas Commission and, most recently, by the Canadian Environmental Assessment Agency.

In 2015, the Pembina Institute conducted analysis of policy options under consideration on oilsands tailings management and participated as the lead ENGO member in discussions organized by the regulatory agency. These included initial discussions with key stakeholders on options in addressing the terrestrial impact of oilsands activity — in particular, the sector's impact on endangered species. We also undertook analysis of climate policy options related to the oilsands sector, including options on pricing carbon pollution, sectorwide performance benchmarking, and approaches to oilsands emissions peak. This information was used to engage in a conversation with other ENGOs, the private sector, and government officials.



The Pembina Institute's Matt Horne, and member of British Columbia's Climate Leadership Team, provides remarks at the launch of the public consultation period for the province's new Climate Action Plan in July, 2015.



As of June 2016, British Columbia continues to develop its Climate Leadership Plan. The Institute's Matt Horne was a member of the multi-sector team tasked with producing recommendations. Our recommendations on buildings, transportation, industry and carbon pricing feature prominently in the Climate Leadership Team recommendations. The Institute has undertaken a great deal of government relations and coordination work to help pave the way for progress on the plan.

In Alberta in 2015, the Pembina Institute increased efforts to foster a conversation on carbon pricing. This included a closed-door workshop and discussions, presentations at events, analysis of different carbon pricing options, communicating our analysis with key government officials, and bilateral engagement of stakeholders to explore alignment. In November, the Alberta government announced its Climate Leadership Plan, which focuses on introducing a carbon tax, limiting oilsands emissions, phasing out coal, promoting renewable energy and introducing energy efficiency programs.

Pembina Institute staff members also participated in the UNFCCC COP21 negotiations in Paris. Staff met with government officials to discuss the Paris Agreement, which ultimately resulted from the meeting.



Medicine Hat, Alberta has three two-megawatt wind turbines at the Box Springs Wind Farm right in the city.

Clean Economy

The Pembina Institute engaged with the Government of Alberta in its Climate Leadership Panel process to make the case for a phase-out deadline for coal and provide justification for a renewable energy target and investment in energy efficiency, backing up our analysis and recommendations with key influencers, audiences and the media. The Institute was very supportive of the government's announcement on clean economy and Executive Director Ed Whittingham was invited to speak to the plan on stage with Premier Notley when the government made its full package public on November 22, 2015.

Our expertise on policy design is increasingly being recognized through invitations to participate in panels, as well as through direct consultation on the principles for successful policy design.

Also of significance to the clean economy was the Pembina Institute's co-hosting of the Alberta Community Energy Workshop in February 2016. More than 80 diverse stakeholders participated in the event, including five MLAs and public service staff, rural and municipal governments, First Nations, project developers, utilities and economic development organizations. In addition, in April 2016, the Institute participated in the Ecofiscal panel on carbon revenue recycling in Alberta.



Decarbonizing the transportation sector is a critical pathway to help Canada meet its mid-century targets.

Transportation and Urban Solutions

The Pembina Institute's Ontario team continues to address the systemic problems relating to transportation and urban planning. Through the lens of our "Live Where You Go" strategy that was developed in 2014, our efforts in the Greater Toronto Area have primarily been focused on promoting location-efficient development and the benefits of creating communities where people can live, work and play. Major reports that have been released within the last year include:

- Close to Home A recent report looking at the benefits of density and intensification in the Greater Golden Horseshoe
- Cycle Cities A report card comparing cycling expansion and infrastructure in major Canadian cities
- Make Way for Laneway A report identifying barriers and opportunities to expand residential laneway development in the City of Toronto
- Subways in the Suburbs An analysis of density around subway stations on the Yonge-University-Spadina line

While this remains a priority area for the Ontario team, the region is also well positioned to broaden its scope to respond to unprecedented global and national changes that have occurred in the last six months. The change in Canada's federal government leadership, the adoption of the Paris Agreement and the subsequent First Minister's Vancouver Declaration, the release of

Ontario's Climate Change Strategy and Metrolinx's Big Move reviews offer a new opportunity to influence decision-makers, build a strong legacy and increase low-carbon prosperity.

The Pembina Institute is proposing to develop a broader comprehensive strategy with clear objectives and outcomes to reduce GHG emissions from the transportation sector while ensuring effective land use decisions are made that support location-efficient development. This proposed strategy will build on our past work and capitalize on the new priorities and commitments made by Canadian governments nationally, provincially and locally.



Near net-zero home that requires very little energy for heating or cooling and gets half its heating from passive solar energy streaming through the windows. Photo: Green Energy Futures.

Buildings and Urban Solutions

Buildings account for up to 45 per cent of GHG emissions in our cities and 12 per cent of our total national emissions. It's crucial then to significantly increase building energy efficiency if we are to achieve our climate targets.

Last June, the Pembina Institute brought together senior staff from the B.C. government, developers, architects, engineers, suppliers, builders, contractors, utilities and local government for two days to commit to a target to have all new multi-unit residential and commercial buildings in B.C. be net-zero ready (super energy efficient) by 2030.

The target garnered consensus, and two policy pathways to achieve that target were tested. Following the forum, an energy efficiency working group was established within the provincial government to provide a home for the collective efforts, and Pembina Institute staff have been asked to convene a second two-day multidisciplinary forum in 2016 to create detailed policy and programs to achieve the target.

The Pembina Institute is sharing this progress at the federal level with Natural Resources Canada, Environment and Climate Change Canada and the Canadian Code Centre, as well as with the provincial governments in Alberta and Ontario.

We are also involved in multi-stakeholder work to develop retrofit policy and programs to transform existing building stock, and continue to work with Metro Vancouver to pilot a home energy labelling program. Global markets for green building technologies and expertise are growing rapidly and if Canada emerges as a leader in this sector, the country will be able to compete more strongly in these markets.



The Pembina Institute's Erin Flanagan discussing the environmental assessment process for pipeline projects on Power and Politics in January 2016.

Federal Policy Program

In 2015, the Pembina Institute undertook significant work to rebuild its presence with the federal government.

In advance of the federal election, we recognized that there could be significant changes in federal environmental policies depending on the election outcome — and that those policies could directly affect our priorities in every region. For the Institute to influence changes at

the federal level, the people making the changes need to see us as an active and influential stakeholder: when the "demand" appears for new policy ideas, we need to be top-of-mind as a "supply" source. We can use this position to enter into limited conversations — providing briefings, responding to requests, etc. — that maintain or build our relationships with these federal influencers.

With the support of New Venture Fund and Environmental Defence Canada, the Institute sought support from Summa Strategies, a top government relations firm in Ottawa. This partnership was used to re-establish relationships with political staff in all major parties, and to discuss the UN climate summit with Canada's climate change negotiators. We also provided commentary on party platforms in advance of the election.

Following the October election, the Pembina Institute formally launched a new federal program designed to amplify and support our regional policy proposals. The overarching goal for the federal program is to influence elected officials who are engaged on national climate and energy issues to enact policies that ensure Canada does its fair share to combat climate change. Canada's "fair share" can be defined, at a minimum, as 80 per cent below 1990 levels by 2050. This will require Canada to transition away from polluting sources of energy like oil, coal and gas, and towards low-carbon solutions for electricity, transportation, buildings and other important sectors of the economy in the next 35 years.

Aligning Canada's emissions trajectory with this vision requires immediate action in domestic policy areas that support Canada meeting its existing 2020 and 2030 greenhouse gas reduction targets. Further, this will require Canada and its sub-national governments to increase their ambition on policy stringency and on reduction targets gradually over time to align with the Paris Agreement's goal of limiting the global temperature increase to "well below 2 degrees Celsius above pre-industrial levels" and the best-available climate science.

To that end, the Pembina Institute developed targeted policy asks for federal issues like coal, methane, transportation, renewables in remote communities and buildings, to ensure we are amplifying the work of our existing priorities and increasing the likelihood of successful and ambitious policy change in our regions. In this way our federal work acts to strategically amplify and assist our regional priorities.

Looking ahead: Making the most of a federal opportunity

The Pembina Institute is collaborating with other ENGOs in Canada, the United States and Mexico, to establish resilient policy backed by solid implementation and regulations.

Federal challenges the ENGO community can support

Working with Catherine McKenna, the federal minister of the environment and climate change, and her staff, the Pembina Institute and partnering ENGOS discussed five challenges that need to be overcome to ensure the ministry's ambition and progress is not constrained:

1. Communications

- a. The federal government needs a strong communications plan
- b. The federal government needs support on specific issues; for example, ENGOs could push back if provinces criticize the federal government for implementing a federal carbon price backstop.
- c. The offices of the prime minister, Minister McKenna and Minister Carr need an opportunity before October to introduce a plan that will work and be implemented.

2. Public engagement

a. The public needs to be engaged so they are part of the transition and don't feel they are being forced into action they don't understand. This is an important step in the process, and all levels of government need to be involved.

3. Capacity

- a. Considering its ambitious agenda, the Canadian government has significant capacity challenges around policy expertise, implementation, and coordination (internally, and with other provinces and municipal governments).
- b. Over the last 10 years, federal departments have produced little research, and capable influencers have either left or have had little opportunity to speak.

4. Sectoral support

a. Coalitions of colleagues, such as those within the ENGO community, will need to be brought onside for specific policy changes. This will help to bring less supportive provinces along.

5. Conflicts during transition

a. There will be a period when existing projects will continue to go ahead in conflict with the intended path to reduce emissions. The Government of Canada will be making decisions — on pipelines, for example — that will appear out of step with the ambition of the Vancouver declaration. The government needs to ensure those decisions don't erode its ambitious climate policy nor its base of support within the ENGO community.





Ed Whittingham joins Prime Minister Justin Trudeau on stage during the launch of the green economy initiative, Smart Prosperity, in Vancouver, B.C., on March 1.

ENGO collaboration on a federal action plan

The Pembina Institute and the ENGO community plan to address the aforementioned challenges identified with Minister McKenna with five specific actions:

- 1. Maintain good relations and continue ongoing strategizing with the offices of the prime minister, Minister McKenna and Minister Carr. To do this, we will continue to convene regular dialogue opportunities for ministers and with members of the ENGO community. This is especially important given how rigid federal-provincial consultation is going to be.
- 2. Support these offices and ministries in advancing the most impactful opportunities.
- Build support within the Liberal and NDP caucuses, the B.C., Ontario and Alberta governments, the media, and key industry groups (oil and gas, electricity and green buildings), by leveraging our research, reputation and convening power. We will do this in conjunction with partnerships we have developed with Environmental Defence Canada and Équiterre, and our partnerships with U.S. groups (Natural Resources Defense Council, Environmental Defense Fund and the Center for American Progress).
- 4. Publicly reward positive behaviour and successes, such as our congratulatory op-ed that followed the methane reduction target announcement.
- 5. Confront opponents openly and at every opportunity with factual information and solid arguments.

Over 2016, the Pembina Institute will actively participate in the federalprovincial consultation working groups that were announced in March and will focus intensely on the six-month window of opportunity to get recommendations into federal and provincial budgets for spring 2017.



The premiers of Manitoba, Ontario, and Quebec, and Alberta and B.C.'s environment ministers with the Pembina Institute's Executive Director Ed Whittingham at Canada Night during UNFCCC COP 21.

The \$1 Million Campaign for Canada's Climate

With renewed climate leadership provincially and federally, the time is right to advance climate policy and set Canada on course for a low-carbon economy.

The Pembina Institute has already been invited to play a strong role in climate plan implementation because of our credible evidence-based work, our expertise and our relationships. The Campaign for Canada's Climate will ensure we can continue to work effectively on both the federal and the provincial stage. This work includes supporting a Pan-Canadian climate framework, informing provincial climate strategies and implementation plans, and convening with key stakeholders such as industry, government, academia, First Nations, local government, labour and non-profits. The \$1,000,000 Campaign for Canada's Climate is bold and ambitious, but so are the Paris Agreement and Vancouver Declaration. The funds raised through this campaign will empower the Pembina Institute to seize policy opportunities as they arise throughout this landmark year— a year that could truly mark a turning point in Canada's energy transition. With \$650,000 raised so far, the effort to put Canada on the right track for a low-carbon future is underway.

If you have already made a gift for 2016, thank you. If you haven't supported the Pembina Institute yet this year, we hope you will consider doing so.

A review of recent Pembina Institute events



Ed Whittingham facilitating a session on net-zero buildings.



June 4-5, 2015

The Pembina Institute hosted a thought leader forum on June 4 and 5, 2015 to test key elements of a roadmap to net-zero buildings. The "Pathways to Net-Zero Buildings in B.C." forum focused on policies and regulations to drive energy efficiency for new, multi-unit residential or commercial buildings, with a target for new buildings to be net-zero ready by 2030. Two policy pathways were tested and an unexpected outcome was that an energy efficiency working group was established within the provincial government to provide a home for the collective efforts.



Last summer the Pembina Institute convened thought leaders on climate and industry to discuss priorities for a new Alberta climate plan.

Energy and Environment in Alberta Cross-Sector Roundtable July 28, 2015

The Pembina Institute, in partnership with the Pembina Foundation, the Max Bell Foundation and the Ivey Foundation, hosted a roundtable discussion in July to gather practitioners and strategic thinkers for a candid discussion on energy and environment policy opportunities in Alberta.

The roundtable focused specifically on the policy considerations for capitalizing on the greenhouse gas reduction opportunities through action in the electricity sector, energy efficiency, and carbon pricing. The 75 participants included executives from the electricity and oil and gas industry, environmental groups, First Nations, as well as government officials.



Bruce Nilles (Sierra Club US) and Dawn Farrell (CEO of TransAlta) share their story of shutting down a coal-fired power plant in Washington State.

Alberta Climate Summit September 9, 2015

In September 2015, the Pembina Institute convened its first Alberta Climate Summit in Edmonton, to showcase the latest thinking on climate policy from a variety of stakeholders.

The summit focused on exploring viable options for progress on climate change. More than 300 people attended, representing the oil and gas industry, the electricity sector, First Nations, unions, environmental groups, municipalities and the provincial government.

The summit explored policy solutions in several areas, including carbon pricing, renewable electricity, and energy efficiency.



The Pembina Institute co-hosted Canada Night — along with Équiterre and Environmental Defence — to recognize Canadian climate action.

Canada Night in Paris December 8, 2015

It was an exciting night, with over 300 attendees representing Canada from coast to coast to coast.

Quebec Premier Phillippe Couillard, Ontario Premier Kathleen Wynne, and Manitoba Premier Greg Selinger spoke about their provinces' cap-and-trade approach to pricing carbon.

Alberta's environment minister, Shannon Phillips, talked about the province's climate plan. B.C.'s environment minister Mary Polak spoke of her government's Climate Leadership Plan review, including the prospects of unfreezing its carbon tax in 2018.



A sea of cowboy hats washes up in Toronto each year at Pembina's unGALA, which hosted two Premiers at its most successful unGALA yet.



January 21, 2016

This year, more than 350 supporters of the Pembina Institute came together from across the country to celebrate our shared clean energy successes of the past year.

Unprecedented demand for tickets this year had the Fermenting Cellar in Toronto's Distillery District packed to capacity. Additionally, participation by both Alberta Premier Rachel Notley and Ontario Premier Kathleen Wynne confirmed the Pembina Institute's unGALA as a not-to-be missed event on Canada's clean energy calendar.



Ministers Catherine McKenna and Mary Polak speak at the Pembina Institute's Vancouver Reception.

unofficial GLOBE Cocktail Party

March 2, 2016

The Pembina Institute and the Real Estate Foundation of British Columbia hosted a cocktail reception in March 2016, in historic Gastown in Vancouver.

The reception followed the GLOBE 2016 Conference & Innovation Expo, which presented sustainability in business. Hundreds attended, including corporate executives, government officials, and civil society leaders.

The reception featured speeches by Catherine McKenna, Canada's minister of environment and climate change, and British Columbia's minister of environment, Mary Polak.

Upcoming events

Alberta Climate Summit September 20, 2016 Calgary

Pathways to Net-Zero **Buildings in B.C.** November 28-29, 2016

Vancouver

unGALA 2017 January 26, 2017 Toronto

Recent Pembina Institute highlights

October, 2015



The Pembina Institute renews its federal program, led by Erin Flanagan. The government promises to establish a "pan-Canadian framework for combatting climate change" and we have been asked to help develop solutions that will have broad support across economic sectors and citizens.

November, 2015



The Government of Alberta releases its Climate Leadership Plan. The Pembina Institute worked closely with government and industry to help put this robust, comprehensive package in place — and will continue to do so. In recognition of our efforts, the Pembina Institute's executive director Ed Whittingham is asked to speak at the Climate Leadership Plan announcement.

December, 2015



The Paris Agreement is gavelled on December 12, 2015. The agreement recognizes the urgent threat of climate change and calls for near total cuts to carbon pollution in the next 35 years. While in Paris, the Pembina Institute co-hosts "Canada Night" with Équiterre and Environmental Defence. The premiers of Quebec, Manitoba and Ontario speak at the event, along with environment ministers from B.C. and Alberta. The overwhelming feeling at the event: Canada is back.

January, 2016



At the Institute's signature unGALA event, both Ontario Premier Kathleen Wynne and Alberta Premier Rachel Notley addressed the cowboy hat-wearing crowd in downtown Toronto.

February, 2016



In a Vancouver Sun op-ed, the Pembina Institute and some of its environmental partners pre-emptively react to the March First Ministers' meeting in Vancouver. In the op-ed, the group calls for strong action by the various levels of government on five key points: addressing carbon emissions; escalating carbon prices; cooperative action between governments; ensuring provinces play an equal role; and starting all these changes as soon as possible, while establishing regular reviews of emissions reductions.



Ed Whittingham joins Prime Minister Trudeau and other leaders from industry and the NGO community on stage in Vancouver for the launch of Smart Prosperity, an achievable but ambitious roadmap for Canada's transition to a cleaner, stronger economy.

March, 2016



Also in Vancouver, the Pembina Institute hosts and moderates a roundtable for Catherine McKenna, federal minister of the environment and climate change, and her staff.



Arranged at the same time as the GLOBE 2016 Conference & Innovation Expo, the Pembina Institute hosts hundreds of people at a packed-to-capacity "un-official" cocktail reception to celebrate climate leadership and innovation.



Pembina Institute staff at the organization's annual assembly. February 2016.

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