Momentum is still on our side

The past year has been remarkable for what has been achieved on clean energy issues, but also daunting as the seismic shifts in global governance threaten to derail progress.

Surprise outcomes on Brexit in June and the U.S. presidential election in November caused many to be concerned about what this means for global climate action. But it would be a mistake to allow these events to overshadow the defining moments on Canada’s climate progress in 2016.

Much was accomplished on crucial clean energy issues over the past year and, as Pembina Institute’s executive director Ed Whittingham said in November, momentum is still on our side. This sentiment was hammered home in December, with the unprecedented release of the Pan-Canadian Framework on Clean Growth and Climate Change. The Pembina Institute was front and centre in its development, and the final result was about as good as we could have hoped for: many of our policy recommendations were included in the framework.

While the Pan-Canadian Framework can be seen as the crowning achievement for the past year, it was preceded by a long list of wins across all regions as well as federally. Climate progress started in earnest in March 2016, with the Vancouver Declaration on Clean Growth and Climate Change. Flanked by Prime Minister Justin Trudeau, the first ministers issued a joint communiqué that truly set in motion a national process that was promised during the federal election and the UN climate meetings in Paris. The declaration notably included plans to accelerate clean electricity trade among provinces, reduce reliance on diesel fuel in Indigenous communities, and invest in public transit infrastructure.

Also in March, we celebrated the announcement that Canada will reduce methane emissions in its oil and gas sector by 40 to 45% below 2012 levels by 2025. The Pembina Institute is one of the only Canadian environmental NGOs to have a long track record of researching and advocating for reducing methane emissions, and this win was a real source of pride for our staff.
After working hard with the Government of Alberta to help develop its Climate Leadership Plan, in May 2016 we started to see policy talk turn into action with the introduction of Bill 20, the Alberta carbon levy. The Pembina Institute was instrumental in accomplishing this remarkable achievement and we were invited to speak at its unveiling.

Over the summer, there was movement on a number of key issues including the launch of Ontario’s ambitious Climate Change Action Plan, Alberta’s decision to protect 1.8 million hectares of woodland caribou habitat that had been fragmented by oil and gas activities, and Vancouver’s adoption of the ultra energy-efficient Zero Emissions Building Plan.

In September, the Pembina Institute played a major role in bringing about the Government of Alberta’s announcement that 50% of electricity used in Alberta will come from renewable sources such as wind, hydro and solar by 2030. The Pembina Institute proposed this target and we were invited to stand with the Minister for the announcement. This major win was followed shortly thereafter by the announcement of two small-scale renewable energy pilot programs specifically for First Nations and Métis communities in Northern Alberta.

Climate progress hit a bit of a roadblock in November with the election of President Trump in the U.S., and the approval of two pipelines by the Canadian government. However, November also saw climate wins with the release of Canada’s mid-century climate strategy at the UN Climate Summit in Marrakech, the announcement of a national clean fuel standard, and the federal government commitment to eliminate coal-fired power across Canada by 2030.

As previously mentioned, the year was exuberantly capped off with the release of the Pan-Canadian Framework on Clean Growth and Climate Change, an outstanding achievement for our federal and provincial governments, the Pembina Institute and our donors. All of these 2016 accomplishments were made possible by our supporters.

Thank you for your generosity.
Priority area accomplishments

Photo: © Martin Prentice

Over 2016, the Pembina Institute worked to help implement Alberta’s ambitious Climate Leadership Plan.

**Responsible fossil fuels**

Over the past year, Pembina Institute staff met regularly with key government officials in Alberta and British Columbia to discuss the responsible use of fossil fuels.

Top of mind in Alberta was the province’s Climate Leadership Plan, which established programs and targets for joining the global movement to address climate change. The goal of the Pembina Institute’s work over the past year has been to do the research, analysis and communications necessary to support the effective implementation of the climate plan to ensure credible, meaningful, and transparent climate reduction solutions.

As part of this goal, the Pembina Institute did extensive research into the details of how to implement these programs and targets. Maintaining a positive relationship with government provided us the opportunity to inject analysis into the implementation consultations.

In 2016, the Pembina Institute also continued to be actively involved in finding solutions to the extensive and toxic oilsands tailings ponds that cover more than 220 square kilometres of northern Alberta and contain almost 1.2 trillion litres of contaminated water. Working with a group of Alberta-based environmental organizations, we conducted an analysis of the latest industry plans to start addressing the ponds and found serious areas of concerns. These concerns include volumes that would increase to more than 1.5 trillion litres of toxic waste over the next 20 years, inconsistencies with stated government policy, and clean-up plans that extended 70 years beyond when operations would cease to generate revenue. As a result of our findings, we submitted official statements of concern with the Alberta Energy Regulator about every plan. In March 2017, the Alberta Energy Regulator rejected Suncor’s tailings pond plan, citing many of the same concerns we found in our assessment and statement of concern.

At the North American Leaders’ Summit in June 2016, the Pembina Institute’s work on methane saw a big win, with Mexico, the U.S. and Canada all agreeing to significantly reduce methane emissions from the oil and gas industry. The Pembina Institute worked closely with partners in the U.S. and Mexico to create support within each country’s government to sign off on the final agreement.
In B.C., the carbon emission impacts of fracking and liquefied natural gas (LNG) development gained much political traction over the past year. We were invited to collaborate with First Nations, local governments and community groups on opportunities to intervene or provide input on shale gas development. We also provided fact sheets and other communications materials as well as presentations on water impacts — freshwater required and wastewater produced.

The Pembina Institute’s B.C. Shale Scenario Tool quantifies the carbon and water impacts of upstream LNG development. We used this innovative modelling tool to highlight the impacts of various LNG development scenarios — both for specific LNG proposals and for northeastern B.C. more generally.

We answered more than 100 new requests for analysis, information, and communications materials (including from media). The tool has been used by Environment and Climate Change Canada, in the environmental assessment process for specific projects, as input to the B.C. Climate Leadership Team recommendations, and by many groups concerned about LNG developments in their territories or regions. We ran scenarios for various communities, First Nations and grassroots groups, and also provided training and how-to videos so that First Nations and government agencies could run their own modelling scenarios.

Our work provided input into key policy windows, including the B.C. Climate Leadership Plan, the Pan-Canadian Framework on Clean Growth and Climate Change, the Pacific NorthWest LNG project development agreement at the provincial level, and the assessment and approval processes at the federal level, but has also helped support the submissions of many other groups into these processes. This project has resulted in extensive media coverage that highlighted the impacts and risks of LNG/shale gas development at a crucial time, as B.C. headed into an election.

This work has already resulted in important policy changes — from the incorporation of upstream carbon emissions into environmental project assessments, to advocating successfully for reform of the National Energy Board and Canadian Environmental Assessment Agency processes.
Climate leadership

Prime Minister Trudeau’s national carbon pricing plan will level the playing field from coast to coast to coast. It ensures that provinces and territories that have been slow to price carbon will catch up, while requiring early-moving provinces to strengthen existing systems. The Pembina Institute participated in the federal process by submitting recommendations on carbon pricing systems to the Pan-Canadian Framework discussions, by engaging in the NGO-think tank working group on carbon pricing as part of the framework consultation process, and by providing analysis and maintaining consistent media presence on this topic.

The federal carbon pricing system closely resembles what we proposed in our submission, and will not only end decades of federal inaction, but also push provincial and territorial governments (particularly those where the Institute has been active) forward. Revenue from carbon pricing will remain with the provinces and discussions are ongoing on allocation of these revenues.

Over the past two years, the project team has engaged in discussions with emission-intensive trade-exposed (EITE) industries in B.C. in collaboration with other environmental and academic allies. We have provided research and analysis to advance conversations to move forward from a stronger shared understanding. While this work was initiated by the Pembina Institute, and stakeholders have been limited to private sector companies, ENGOs and academics, both the provincial and federal governments have been keenly interested in learning and outcomes, and are playing an increasingly active role. Competitiveness of EITE industries has been a barrier to steps forward on carbon pricing in B.C., where substantive carbon pricing has the longest history. Addressing this barrier will be important to brokering progress in all Canadian jurisdictions.

We were hopeful the B.C. government might release a strong Climate Leadership Plan based on the package of recommendations developed by the cross-sector Climate Leadership Team, which the Pembina Institute was a part of. However, on a Friday afternoon in August, after many delays, a weak plan was released to little fanfare. Within the plan, however, are two bright spots where the Pembina Institute has been focused: commitments to reduce methane emissions from oil and gas production by 40–45% by 2025 (in line with Alberta, federally and in the U.S.) and a commitment to have all new buildings be net-zero ready (highly energy efficient) by 2032.
Boosting the green economy: Alberta has committed to producing 30% of electricity from renewable energy by 2030.

Clean economy

The Pembina Institute enjoyed some remarkable wins over the past year, including commitments to phase out the use of coal-fired electricity, the introduction of carbon pricing in Alberta, Alberta legislation committing to 30% of electricity from renewables by 2050, and the creation of Energy Efficiency Alberta.

After our long and unwavering campaign on the negative health and environmental impacts of coal-fired power, the Alberta and federal phase-out announcements in November were cause for celebration. From our 2013 publication A Costly Diagnosis: Subsidizing coal power with Albertans’ health to the 2016 Out with the Coal, In with the New, and all the smaller initiatives and campaigning that came between, coal has been a priority issue for the Institute. We’re thrilled to have seen so much concrete action on the issue over the past year.

Going from a climate laggard to a climate leader, Alberta received international recognition for the introduction of an economy-wide price on carbon. By responding to numerous media requests, participating in speaking engagements and publishing educational literature, the Pembina Institute played a crucial role in helping the public to understand what a carbon price is, why it is being implemented and how the system will work.

Also rewarding was a win for our long-standing renewables campaign in Alberta. In September 2016, the Government of Alberta legislated our recommended 30% renewable energy generation target by 2030. It is a big win for renewables to have legislated certainty around this target.

In 2016, the Pembina Institute also held seats on an expert panel advising Alberta’s Minister of Economic Development and Trade on funding clean technologies, as well as on the board of Emissions Reduction Alberta where we continue to work to ensure the clean tech innovation delivers significant emissions reductions. Importantly, our alliances with clean tech entrepreneurs and thought leaders allowed us to mobilize industry voices in support of climate and environment policy leadership.

In B.C., while the province’s climate plan missed the mark overall, a bright spot was the commitment to net-zero buildings by 2052. The net-zero buildings commitment was based on recommendations resulting from our convening work in B.C. with industry, researchers, builders, and all three level of government. This was a shining example of the Pembina Institute’s ability to provide smart policy recommendations that enjoy cross-sectoral support.

And finally, after many years of advocating for a provincial agency to help Albertans save energy, the government announced the creation of Energy Efficiency Alberta. After extensive work partnering with local thought leaders to explain the value of energy efficiency to the public, and conducting research on best practices in energy efficiency, this win felt particularly rewarding.
A new Toronto streetcar carries passengers along the Cherry route. The new streetcars can hold up to 251 passengers — almost double the capacity of the older streetcars.

**Freight and transit**

In 2016, the Pembina Institute developed a comprehensive strategy to reduce emissions from the transportation sector, with two primary focus areas: reducing greenhouse gas emissions from the freight sector, and promoting the expansion of transit in Ontario.

Emissions from freight are expected to be the fastest growing emissions within the transportation sector in the coming years. By undertaking initiatives such as highlighting the need for more resources allocated to freight planning in the Greater Toronto and Hamilton area, we succeeded in getting freight on key influencers’ radar. In addition, we were awarded a large three-year grant from The Atmospheric Fund to pilot a Neighbourhood Freight Forum in partnership with a local business improvement area in Toronto’s northwest — a project with immense potential for scaling up across Canadian cities.

On our transit file, we emerged as a leading thinker on transit corridors in Toronto, producing accessible research and hosting a sold-out panel to support a pilot project for improved transit movement along King Street. We continued our work to promote sustainable, dedicated transit revenue, including by defending a highway tolling proposal at the City of Toronto — an idea that had been suggested in a 2015 Pembina Institute publication. Looking to the exciting transit expansion underway outside of Toronto, we have also developed research highlighting lessons learned from four new rapid transit projects.

At the federal level, we submitted recommendations relating to freight and transit to the ministerial working groups on the development of the Pan-Canadian Framework on Clean Growth and Climate Change. Following on this success, we are actively participating in the development of the federal clean fuel standard, a policy that has enormous potential for emissions reductions.
**HOW DID THE PAN-CANADIAN CLIMATE PLAN SHAKE OUT?**

<table>
<thead>
<tr>
<th>Our recommendations</th>
<th>What is in the climate plan</th>
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<tbody>
<tr>
<td><strong>Carbon Pricing</strong></td>
<td>Economy-wide, flexible national carbon price with broad coverage and scheduled increases until 2022</td>
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<tr>
<td>Economy-wide, national carbon price with broad coverage and a known schedule for increases – ideally at least 10 years.</td>
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<tr>
<td><strong>Buildings</strong></td>
<td>Develop net-zero building codes starting in 2020, adopted by 2030; retrofit code for existing buildings developed by 2022; mandatory labelling of building energy use as early as 2019; improved energy efficiency standards for appliances and heating equipment</td>
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<tr>
<td>New buildings are net-zero ready and 30% of existing buildings undergo retrofits by 2030; energy labelling and disclosure for homes and buildings; and innovative financing to accelerate energy efficiency</td>
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<tr>
<td><strong>Transportation</strong></td>
<td>Intention to develop a zero emissions vehicle strategy and a Clean Fuel Standard; investments in public transit; intention to support low carbon transportation corridors</td>
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<td>Infrastructure money dedicated to active transportation and low-carbon corridors; a Low Carbon Fuel Standard and zero emissions vehicle legislation; and develop a land freight strategy</td>
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<td><strong>Methane reduction</strong></td>
<td>Reduce oil and gas methane emissions by 40-45% by 2025, backed by federal regulations</td>
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<tr>
<td>Reduce oil and gas methane emissions by 45%, backed by regulations</td>
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<tr>
<td><strong>Coal phase-out</strong></td>
<td>National accelerated coal phase-out by 2030 with limited natural gas replacement; coal-to-gas conversion grace period until 2045</td>
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<tr>
<td>National accelerated coal phase-out to 2030 (40 year end-of-life), while promoting renewable replacement generation and limiting role of natural gas</td>
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<td><strong>Renewables</strong></td>
<td>Intention to support a phase-out of diesel generation in remote communities; requirement for 90% clean energy by 2030 supported by creation of the Canada Infrastructure Bank and support for integration of renewables</td>
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<tr>
<td>Support for renewables in remote communities; develop innovative power purchase policies and other financial mechanisms for community owned renewable energy projects</td>
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2017 Race to the Front Campaign:
It’s time for Canada to be a global leader on clean energy and climate

As a country with a progressive leader, an ambitious climate plan, and the ability to be at the front edge of decarbonization, Canada is becoming increasingly prominent on the global stage. The Race to the Front Campaign is about investing in Canada — because it’s more important than ever to lead by example and support Canadian climate action.

Given Prime Minister Trudeau’s profile on the international stage, the role Canada played at the last two UN summits in Paris and Marrakech, Canada is uniquely positioned to lead in international climate diplomacy. This would shore up international support, continue to inspire international collaboration, and force more ambitious implementation of domestic commitments.

By supporting the Pembina Institute’s $1 million Race to the Front Campaign you will help build a future for Canada that is economically responsible and technologically advanced. The time is ripe for Canada to position itself as a global leader on clean energy and climate.

If you have already made a gift for 2017, thank you. If you have not yet supported the Pembina Institute this year, we hope you will consider doing so.

We would like to extend our warmest thanks to our 2017 Campaign Cabinet:
• Dan Balaban
• Debby Beatty
• Glen Estill
• Mark S. Rudolph
• David Runnalls
• Leonard Schein
• Annette Verschuren
Remembering Joan Baker

Joan Baker was a long-time supporter of the work of the Pembina Institute, and was especially proud of the contribution her son, Chris Severson-Baker, made over his 20-year career at the Institute. She was deeply concerned about climate change and believed that the Pembina Institute could make a real difference.

Joan Baker loved kayaking, hiking, gardening and was passionate about preserving farmland and eating local. She saw the connections between a healthy society and a healthy environment. Her career was teaching English to new immigrants.

In August 2016, Joan passed away. In her final years she articulated a strong desire to see the world become safer and more sustainable for her grandchildren. One of the things that gave her comfort was seeing real climate policy beginning to be implemented, first in Alberta and then by the federal government, and knowing that Canada was beginning to be a leader the international struggle to combat dangerous climate change.

Joan understood the importance of strong advocacy around environmental and energy policy change in Canada, and she was pleased to be able to leave a legacy donation to support the work of the Institute. She will be missed dearly by her family and by everyone at the Pembina Institute.
A review of recent Pembina Institute events

Our Future King

On June 16, 2016, the Pembina Institute co-hosted with the City of Toronto “Our Future King,” a panel event that kicked off a city-wide conversation on re-imagining traffic, transit, cyclist and pedestrian movement on King Street.

Passing through the largest concentration of jobs in the urban region, King Street connects Toronto’s financial district with revitalized industrial areas on the shoulders of the core that have become vibrant, mixed-use urban districts known for their cultural richness and creative scenes.

Our Future King brought together a variety of stakeholders and community groups who gave their perspectives on how Toronto can improve efficiency along the King corridor, in order to move the most people. The panelists included Jennifer Keesmaat, chief planner at the City of Toronto, and Andy Byford, CEO of the TTC, along with the Pembina Institute’s Nithya Vijayakumar.

Selling out in less than two days and generating insightful dialogue around the future of King Street, the panel proved to be a remarkable success.

Alberta Climate Summit

In September 2016, the Pembina Institute hosted its second annual Alberta Climate Summit. It was standing room only at the BMO Centre in Calgary thanks to over 500 registered attendees and a significant media turnout.

The event featured 34 expert presenters from across the continent, including much-lauded speeches by grade 12 students Colin Charlton and Bandile Phiri, a keynote address from Environment and Parks Minister Shannon Phillips and a multitude of panels and workshops that represented a diverse range of sectors.

The overarching message from the 2016 Climate Summit was that Alberta’s actions to transition away from fossil fuels are bold, but the province does not stand alone. Around the world, the movement toward a greener future is gaining momentum. Alberta has joined jurisdictions at the forefront of the transition, and the success of the Climate Summit speaks volumes about Albertans’ commitments to become leaders in this movement.
Passive House media tour

The Pembina Institute invited journalists to attend a media tour of a green building complex under construction in Vancouver’s Hastings–Sunrise neighbourhood. The six-storey, 85-unit apartment building on East Hastings Street aims to be Canada’s largest building certified as achieving the Passive House standard (ultra-low energy buildings that require little energy for space heating or cooling).

On November 8, 2016, the developer, architect and builder were on site to talk about the cost-effectiveness of constructing, maintaining and heating ultra energy-efficient buildings. City of Vancouver staff and experts from Passive House Canada and the Pembina Institute were also on hand to discuss how this apartment development relates to the city’s Zero Emissions Building Plan, British Columbia’s climate plan, and the Pan-Canadian Framework on Clean Growth and Climate Change.

In total, six journalists attended the Passive-House Tour, which garnered 11 news stories including two television news spots.

2016 Net-Zero Buildings – Thought Leader Forum

On November 28 and 29, the Pembina Institute hosted its second Pathways to Net-Zero Buildings Thought Leader Forum in Vancouver. Due to overwhelming demand for this invite-only event, we expanded to over 120 participants from 80 the previous year. The forum brought together a cross-section of the entire building sector: developers, builders, contractors, owners, architects, engineers, suppliers, academics, NGOs, and all three levels of government. Out-of-town participants included non-profit and government representatives from Ontario, Colorado, and Seattle.

This year’s key objectives were to establish consensus on the steps needed to make construction of zero-carbon new homes and buildings a requirement in B.C. and across Canada as quickly as possible, and to provide policy recommendations to curb emissions from existing buildings through provincial and national retrofit strategies.

In 2017, the Pembina Institute will build on the work started at the Thought Leader Forum by developing elements of a detailed retrofit strategy for B.C. and by advocating for the innovative proposals discussed at the Forum to be trialled through pilot projects and case studies.
Success through communications

Effectively connecting our research and ideas with our audience is a top priority for the Pembina Institute. The investment in time and effort that goes into creating top quality research and analysis is far less valuable if it is not carefully tailored and channelled to policy makers and influencers. Over 2016, 236 outputs passed through the Pembina Institute’s communications department for writing, editing, designing and stakeholder targeting expertise. This included 53 reports, 93 blog posts, 71 media releases, and 19 op-eds.

One of our most popular reports in 2016 was Race to the Front, a 45-page publication tracking climate progress across Canada and identifying key sectors that need to be addressed, along with policy recommendations. The report was complemented by a media strategy that included circulation of a media release and significant social media outputs. The media strategy saw the report covered by major media outlets, including CBC, which had a knock-on effect, resulting in almost 2,000 unique users visiting the website to download the report.

Media attention — social, print and broadcast — complements a targeted strategy and exposes a broader audience to ideas and research. In 2016, Pembina Institute experts were regular guests on popular broadcast shows — including The Current, Power and Politics, and The National — and offered commentary to print reporters on countless occasions. In fact, the Pembina Institute was featured 1,422 times in media stories over 2016; recent media mentions include the Globe and Mail, National Post, Toronto Star and the New York Times.

The Pembina Institute’s communications team stepped up its efforts to connect with a broad audience of stakeholders by hosting webinars. One such webinar brought together New York Times heavyweight Andrew Revkin, Greg Dotson from the Center for American Progress, and UBC professor Kathryn Harrison, in an effort to understand what implications a Trump presidency in the U.S. will have for climate change, energy and Canada. It had 275 virtual attendees tuning in to watch live, while hundreds more visited the YouTube recording afterwards.

Blogging has truly arrived as a communications medium for organizations working on policy issues. Our blogs are widely read by visitors to pembina.org — with almost 100,000 page views over 2016, blogs represent the most popular type of content.

Some of the most popular Pembina Institute blogs over 2016 were purposefully tailored for social media, such as “listicles” (5 things you need to know about B.C.’s new climate plan) and provocative questions on timely issues (What does a carbon levy in Alberta mean for me?). Implementing a social media strategy for blogs and other content over the year resulted in 44,975 web sessions referred from social media platforms — almost double the figure from the previous year.

The communications team is now focusing on improving its ability to target specific stakeholders and provide them with content tailored to their interests. Over 2017, this sophisticated system will bring together a group of disparate tools — newsletter emailing software, event registration websites, contact management systems — and streamline how the Pembina Institute communicates with the clean energy community.
Pembina Institute’s unGALA

On January 26, 2017, the Pembina Institute hosted over 350 guests at our fifth annual fundraising event, the unGALA. In attendance were a wide variety of representatives from the energy industry, entrepreneurs, governments and non-profits, all joining together in the spirit of finding clean energy solutions.

Keynote speaker David Heurtel, Quebec Minister of Sustainable Development, the Environment and the Fight Against Climate Change, passionately spoke about the importance of a low-carbon future and how Quebec has lead the country with its environmental policies.

Attendees were able to catch up with colleagues, network with new faces, enjoy the whiskey tasting bar, and try their hand at virtual reality target practice. The event took place at the Fermenting Cellar in Toronto’s Distillery District.
Pembina Institute staff at the organization’s annual assembly, February 2017.

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