Sustainable Energy Solutions
Annual Report 2009

safe climate
healthy environment
secure future
As Canadians work to re-energize our economy we have a unique opportunity to reconsider how we create sustainable prosperity. After all, much has changed over the past decade, both economically and environmentally. Nowhere is this change more apparent than in how we produce and consume energy. We must now ask ourselves how best to enhance our economic competitiveness while ensuring environmental health and community wellbeing — not just for the next quarter, or the next year, but for the next generation.

The imperative of addressing climate change and the economic opportunity associated with the transition to clean, renewable energy and energy efficiency has sparked a new global race. From Europe to the US to China, governments and businesses alike are quickly moving to become leaders in clean energy.

At the Pembina Institute, our sustainable energy experts are committed to ensuring that Canada joins and succeeds in this race. Our future depends upon it.
Creating sustainable energy solutions
Some highlights of progress from 2009

Energy policy solutions
Minimizing energy development impacts
The Pembina Institute continues to inform the energy debate through such work as the publication Carbon Copy: Preventing Oil Sands Fever in Saskatchewan, which launched the beginnings of a public dialogue about Saskatchewan’s oil sands. Read more on our work on oil sands, climate change and renewable energy on pages 4 to 7.

Pembina Corporate Consulting
Sustainable energy solutions for leaders
Pembina Corporate Consulting is helping Cameco find opportunities to incorporate renewable energy solutions into its mining operations. Read more on our corporate consulting work on pages 8 and 9.

Sustainable Communities
Supporting community development in Canada and internationally
Municipalities are looking to become carbon neutral, and the Pembina Institute’s Cool Tool will help them get there. Read more on our work with communities on pages 10 and 11.

Institute news
Recognized in Canada
Tides Canada, a national leader in cutting-edge environmental and social philanthropy, named the Pembina Institute to its prestigious annual Tides Top 10 awards for 2009. Read more on what’s happening with us on pages 12 to 19.
Solutions needed more than ever

The economic downturn coloured the experiences of the whole world in 2009, and the Pembina Institute was certainly not immune to challenges produced by an uncertain economy. Thanks to the hard work and commitment of the staff, however, the team remained strong and focused on our key work areas: the challenges of oil sands development, Canada’s global responsibility for managing our greenhouse gas emissions, and the potential of renewable energy and energy efficiency solutions.

As a strictly non-partisan organization, the Pembina Institute was able to work with all decision makers and all sectors of society who have influence on energy issues — often working behind the scenes to bring new ideas and new solutions to the decisions that affect how clean, safe, reliable, affordable and ultimately sustainable our energy system is.

As the uncertainty over the future of the planet and the well-being of its inhabitants grows, the Pembina Institute’s message of sustainable energy solutions is needed more than ever.

The Board of Directors is confident that the Pembina Institute’s focus and the resolve, integrity and commitment of its staff will continue to deliver solutions that meet the energy and environmental challenges of our time.

David Armour, President, Board of Directors

Staying the course in a year of challenges

Looking back, 2009 was a challenging year in all regards. The economic downturn impacted non-profit agencies in all sectors, and the Pembina Institute was no exception — although we remained resilient, innovative and highly productive in spite of this challenge.

We saw great momentum leading up to the UN climate negotiations in Copenhagen, where world leaders had the opportunity to reach a new international agreement to fight catastrophic warming. Although positive steps were made, the resulting Copenhagen Accord failed to reflect the international demand for action, and the agreement falls well short of the level of emissions reductions that science says is required to curb dangerous climate change.

Here at home, the pace and scale of oil sands development continued, while the debate over the industry’s environmental impacts became very polarized. As a solutions-driven organization, we had to cut through the rhetoric from all sides and stay focused on pointing out the challenges we face and the solutions we need to implement.

Despite these challenges, I am extremely proud of what our team accomplished in 2009.

On the oil sands, we saw progress when the Alberta government introduced the first regulatory requirement to begin reducing toxic tailings. Looking forward, the key to real success on this issue will be ensuring that regulation is adequately enforced.

On climate change policy, we presented Canada with a groundbreaking solution to achieve our international commitments and manage our greenhouse gas emissions. Our study Climate Leadership, Economic Prosperity ignited the debate over Canada’s energy future, and has set the bar for the level of analysis required to show what it takes to solve our climate challenge.

Renewable energy offers some of the most promising and effective solutions to that challenge. In 2009, we published a thorough analysis of what is possible in Alberta, both to transform the province’s electricity system and to get the province off coal power. We have shown that greening the grid is definitely doable, and are working hard to help make this a reality.

Ontario took a huge step toward greening its grid in 2009, with the introduction of the Green Energy and Green Economy Act, which is being called the most advanced renewable energy policy in North America in decades. The Act aims to boost investment in renewable energy technology and infrastructure for the province, create thousands of new clean energy jobs and promote energy conservation and efficiency as key measures to help the province shut down all of its coal power plants.

The Pembina Institute was one of eight founding members of the Green Energy Act Alliance, which played an important role in consultations that led to this groundbreaking legislation.

With all of these successes in mind, and in light of the many challenges we faced in 2009, I am most proud of how the Pembina Institute stayed the course of producing professional and rigorous analysis that allowed us to continue bringing real solutions to the table. We worked with stakeholders from all sectors — corporate, First Nations, government, other non-governmental organizations — to help start the consensus-building process required to solve Canada’s very real environmental challenges.

Thank you for your continued support of our work. It makes a world of difference.

Marlo Raynolds, PhD,
Executive Director

Photo: David Dodge, The Pembina Institute
Outcomes and objectives

Our efforts are specifically aimed at achieving three long-term outcomes:

- implementation by Canadian federal and provincial/territorial governments of policies and programs that result in sustainable energy production and consumption
- a continual shift in the Canadian corporate sector toward sustainable energy production and consumption
- an increased shift by communities in Canada and developing countries toward sustainable energy production and consumption

To achieve these long-term outcomes, we seek to:

- minimize negative impacts from conventional energy;
- maximize low-impact renewable energy production, energy efficiency and conservation; and
- minimize greenhouse gas emissions.

Our philosophy

The Pembina Institute incorporates the principles of sustainability in our own policies and practices:

Collaboration We encourage collaboration across program areas and among staff, as well as through partnerships with other stakeholders.

Participatory decision-making We practice this by applying a consensual decision-making model and encouraging all staff to participate in major organizational decisions.

Equal opportunity We are an equal opportunity employer, encouraging applicants from all ethnicities, gender orientations and spiritual beliefs to join our team.

Diversity We invite input from a range of external perspectives and by proposing sustainability solutions that respond to diverse interests.

Transparency Our decision-making practices are transparent, enabling staff and partners to understand how and why decisions are made.

Fiscal responsibility We embrace balanced budgeting as a principle of sustainability by not taking on significant financial debt or risk. Our operational facilities are modest, allowing us to concentrate our resources on program activities.

Scientific and technical rigour We take non-ideological and non-dogmatic positions, and ensure that the recommendations we advocate for are based on solid scientific research and analysis.

Zero footprint The Pembina Institute strives to achieve the zero footprint principle by teleconferencing, purchasing green power and carbon offsets, and promoting carpooling and alternative transportation.

Forward-looking and long-term thinking We ensure that we only put forward creative and original sustainable energy solutions and we value “out of the box” thinking. Our solutions are always proposed with an eye to the long term and the impact on future generations.
Energy policy solutions

Minimizing energy development impacts

We encourage energy developers to use the best environmental practices possible, and we collaborate with policy makers in order to improve regulations and standards and to protect the environment. We also bring information to people to help them deal with the energy development issues they face — locally, regionally and globally.

>>>Oil sands<<<

Minimizing energy development impacts

Canada’s oil sands hold claim to the world’s largest investment in unconventional oil, but 2009 marked a change in the tide of investor confidence. While huge investments continue to be made in the oil sands, investors have begun to question the risks associated with oil sands development, mounting shareholder challenges and adding fuel to the fire in the ever-increasing debate about the growth of this resource.

Indeed, the oil sands debate continues to grow on an international level, as does the Pembina Institute’s reputation for being a credible source on the subject. National Geographic ran a comprehensive piece in March 2009 entitled “The Canadian Oil Boom,” for which they spoke to government officials, regulators, First Nations, oil executives, world-renowned scientists and the Pembina Institute’s oil sands director, Simon Dyer. With the Pembina Institute referred to as “a moderate and widely respected Canadian environmental group,” it’s clear our oil sands team is informing this important discussion.

Preventing oil sands fever in Saskatchewan

Having played a crucial role in increasing public awareness about the rapid pace of oil sands development in Alberta, the Pembina Institute’s oil sands team focused a significant amount of their time in 2009 working to bring increased awareness to the rapidly intensifying development of oil sands in Saskatchewan. With lands being leased without debate or dialogue, Saskatchewan has been following the same path taken by the Government of Alberta — a path that has led to growing public concern about the environmental, social and economic impacts of oil sands development. In August 2009, the Pembina Institute, with the Saskatchewan Environmental Society and the Canadian Parks and Wilderness Society, published Carbon Copy: Preventing Oil Sands Fever in Saskatchewan, that province’s first reference piece for oil sands development. The report garnered 12,558 downloads, 10 media stories and five speaking engagements at government and post-secondary institutions, launching the beginnings of a public dialogue about Saskatchewan’s oil sands.

Debunking oil sands myths

Clearing the Air on Oil Sands Myths was produced to credibly assess the claims being made by oil sands industry about its own performance. It provided concise, referenced information on oil sands environmental impacts and management. The work, presented in both a report and a slideshow on our website, gained lots of exposure, feedback, controversy and downloads. It continues to serve as a valuable quick reference for many topics related to oil sands development.
Toxic tailings regulatory victory

The adoption of Directive 074 by Alberta’s Energy Resources Conservation Board was a great environmental success from 2009, and the Pembina Institute’s work played a pivotal role. The directive sets out new tailings requirements for oil sands producers. Stricter regulation of tailings is essential as this liquid waste byproduct from the oil sands extraction process now occupies 170 square kilometres, an area bigger than Vancouver. The Pembina Institute not only helped get the directive enacted, but also assessed oil sands company submissions for compliance with the new regulations. Ensuring compliance and enforcement is critical for real success on this issue.

Impacts across provincial borders

Oil sands development may have started in Alberta, but its environmental impacts are growing across other provinces. One aspect of this is in water use: such developments use large quantities of freshwater and produce large amounts of toxic waste, posing a risk not just to local ecosystems but to those downstream as well. In February 2009 the Pembina Institute released The Waters That Bind Us: Transboundary Implications of Oil Sands Development, which explores both the impact that oil sands development has on water resources and current water management practices in Alberta and the Northwest Territories.

>>>Climate change<<<

Climate action creates economic opportunities, demands increasingly urgent action

In 2009, the Pembina Institute’s climate change work followed a path of peaks and valleys. There were the highs: finding unanimous support among opposition parties for the Climate Change Accountability Act in the House of Commons; releasing a groundbreaking economic study on the national and regional consequences of climate action in Canada; and the great optimism leading up to the UN climate talks in Copenhagen.

And then there were the lows: the federal government’s ongoing failure to take strong and science-based action on climate change; the deep disappointment as global leaders came up short of reaching a fair, ambitious, and binding deal in Copenhagen; and a flare-up of attention to skepticism about climate science despite growing evidence that the impacts are becoming increasingly serious and require urgent action.

Amidst the challenges, our work in 2009 uncovered several examples of positive climate action in Canada, and highlighted some areas for improvement.

Building a prosperous and sustainable future

Released in October in partnership with the David Suzuki Foundation, our economic modelling analysis found that tackling climate change by adopting science-based policy solutions is both affordable and feasible for all regions of Canada. The modelling showed Canada could continue to grow the economy substantially — and create over a million net new jobs — while meeting a much more ambitious emission target than the federal government has proposed.

As the first comprehensive national and regional analysis of the economic effect of climate policy action in Canada, Climate Leadership, Economic Prosperity received widespread media attention and drew strong responses from senior-level politicians, commentators and think tanks — sparking a dialogue that continues even today.
UN climate negotiations

In recent years, Canada has gained international notoriety as a laggard on climate change, a reputation it lived up to at the December UN negotiations in Copenhagen. The talks fell short of expectations, producing the non-binding Copenhagen Accord instead of the ambitious new climate treaty we hoped to see. Despite its shortcomings, the Accord does set the goal of avoiding dangerous climate change by limiting warming to below two degrees Celsius, and includes objectives for mobilizing the financial support that developing countries need to tackle climate change. The Pembina Institute’s climate team was in Copenhagen for the duration of the talks, tracking Canada’s negotiating positions and providing commentary in the media.

Canada’s “fair share” of global climate solutions

Canada is among the world’s top 10 emitters of greenhouse gas pollution and has the world’s 13th largest economy. This means we have both the responsibility and the capacity to support emission reductions and adaptation to the impacts of climate change in developing countries. In 2009, the Pembina Institute published an assessment of Canada’s “fair share” of climate financing, based on international estimates of national responsibility and on Canada’s track record of contributions to other global initiatives. Climate financing was a hot-button issue at the 2009 G8 meeting in L’Aquila, Italy, and a central part of the UN climate talks in Copenhagen. (Editor’s note: Just before the G20 summit in Toronto in June 2010, Canada announced a commitment to provide an initial contribution of climate financing in the range recommended by the Pembina Institute.)

Northern leaders meet on climate

In August, 60 young Canadians met in Inuvik, Northwest Territories, for the 2009 Northern Leaders’ Summit, which aimed to build the capacity of young people to speak on climate change at home, nationally and internationally. The Pembina Institute was one of the co-hosts of the summit, along with the Arctic Athabaskan Council, Climate Action Network Canada, Ecology North, and Gwich’in Council International.

The young leaders produced a declaration highlighting the realities of climate change, particularly from a northern perspective. The declaration states that: climate change is a human issue; the North is highly vulnerable to climate change; climate change is happening now; and strong action by Canada and the international community is needed immediately.

Carbon pricing in action

Most climate change experts agree that putting a price on greenhouse gas emissions is a vital strategy in a portfolio of solutions to fight dangerous climate change. Under an effective carbon pricing system, every tonne of pollution comes at a cost, rather than being free. The dirtier the energy source, the more expensive it becomes.

With one of the most comprehensive carbon taxes in the world, British Columbia provides a solid example. Applying to almost three quarters of provincial emissions, the tax will ramp up to $30 per tonne by 2012. Revenues are used to reduce other taxes and provide some tax relief to low-income families. The Pembina Institute called for continued protection to these families while the tax rate rises; economic modelling done by the Pembina Institute found that the tax needs to increase to $200 per tonne in the next ten years as part of Canada’s fair share of an international effort to avoid dangerous climate change.
Despite federal setbacks, renewable energy is on the rise

Around the world, countries are ramping up renewable energy investments to stimulate their economies, ward off climate change, and increase energy security.

At a federal level, 2009 was a disappointing year for renewable energy advocates in Canada, particularly with the announcement that the federal government would not renew the successful ecoENERGY for Renewable Power program, which has provided support for low-impact renewable energy development in Canada since 2006.

On a provincial level, however, renewable energy supporters had cause for celebration as both Ontario and Nova Scotia moved forward with ambitious renewable energy targets and programs. Ontario implemented the Green Energy Act, which has been widely recognized as North America’s most comprehensive and aggressive policy to support renewable energy. The act will help Ontario meet its goal of phasing out coal power in the province by 2014. Nova Scotia, which currently depends mostly on coal power, set a legally binding target to achieve 25 per cent of its electricity from renewable sources by 2015, and a target of 40 per cent from renewable sources by 2020.

Tapping into Alberta’s renewable energy potential

Alberta’s electricity demand could be entirely met by tapping into the province’s vast clean and renewable energy resources — even if electricity consumption doubles over the next 20 years. This was the exciting finding of Greening the Grid: Powering Alberta’s Future with Renewable Energy, a comprehensive analysis by the Pembina Institute of Alberta’s power production and energy efficiency opportunities. Today Alberta has the most polluting electricity system in Canada, with coal-fired power plants accounting for 23 per cent of the province’s greenhouse gas pollution. Greening the Grid outlines two scenarios for meeting the province’s electricity demand. The more aggressive “Green” scenario demonstrates how Alberta could transition from 70 per cent coal to 70 per cent clean energy in 20 years using proven technologies — a move that would cut pollution while creating new jobs in clean energy industries.

Canada lags behind U.S. in support for renewable energy

Canada is falling behind the U.S. in its support for renewable energy, despite having the potential to generate more than 20 per cent of its national electricity from wind alone. In 2009, the Pembina Institute published a comparative analysis of Canadian versus U.S. federal support for renewable energy and energy efficiency. The analysis revealed that the U.S. outsold Canada on renewable energy by 14:1 on a per capita basis, based on the countries’ respective stimulus packages. Most notably, while the U.S. economic recovery bill included an investment of over U.S. $76 billion in renewable energy and energy efficiency technology, Canada decided not to renew the ecoENERGY for Renewable Power program, the major federal support mechanism for renewable energy.

Clearing up confusion about wind power

Wind is one of the fastest growing sources of global electricity generation, but only one per cent of energy generated in Canada currently comes from wind. Wind Power Realities, a 2009 Pembina Institute fact sheet and accompanying slide show, sets the record straight about the benefits and potential impacts of wind power production. The benefits of wind power include reduced air pollution and waste, stabilization of energy costs, and the creation of new jobs. Compared to coal, oil, natural gas, nuclear and hydro power, wind power generation has the least impact on wildlife. However, like all development, wind power production has impacts which should be recognized and minimized to the extent possible. Wind Power Realities serves as a starting point for a discussion about both the benefits and the relative impacts of wind power development.
Pembina Corporate Consulting

Sustainable energy solutions for leaders

We provide solutions for business leaders in Canada seeking to make their businesses more sustainable and climate-friendly.

Suncor Energy: Reducing greenhouse gas emissions from the transportation sector

Low-carbon fuel standards are aimed at reducing the greenhouse gas emissions created from the transportation sector and the fuels supplying it. Such standards address the carbon intensity of transportation fuels, favouring cleaner sources of transportation fuels.

In April 2009, the California Air Resources Board adopted a low-carbon fuel standard, designed to reduce carbon emissions from California’s transportation fuels by 10 per cent by 2020 by diversifying the variety of fuels used to power vehicles. California became the first jurisdiction in the world to adopt such a standard, with others such as British Columbia, the United Kingdom and the European Union following suit. Still others are hashing out the details, soon to jump aboard with similar regulations.

Suncor Energy, with significant holdings in the oil sands, asked Pembina Corporate Consulting to evaluate various greenhouse gas emissions reduction policies for the transportation sector. We identified design criteria and evaluated a full suite of policy options. We prepared a public report, published on our website, and delivered a presentation on our findings. Our research will also influence the work we do in relation to the province of Ontario’s transportation policies.

Business Development Bank of Canada: Developing a strategy for climate change

We worked with the Business Development Bank of Canada (BDC) to develop strategies to address climate change within various strategic focus areas including operations, risk management, products and services, corporate governance, and monitoring and measurement. We developed a strategic framework involving approaches, targets and tactics for these different areas in the organization, and are now helping BDC develop its greenhouse gas inventory — a fundamental component of executing this strategy.

Alberta Innovates: Determining environmental research priorities

Alberta Innovates — Energy and Environmental Solutions is an Alberta government agency, designed to be a catalyst of innovation and describing itself as “creating an environment of innovation that will excite everyone, from scientists involved in basic research to businesses and entrepreneurs who want to invest in ideas and transform them into products and services to be marketed globally.”

Pembina Corporate Consulting worked with Alberta Innovates to determine opportunities for environmental research and innovation in the province. We collected insights and perspectives from a cross-section of experts and thought leaders from across Alberta and beyond, identifying barriers and criteria for determining research priorities. Our findings were compiled into what became a seed document, providing a foundation for Alberta Innovates to determine its new environmental research priorities not related to energy.
Manitoba Hydro: Looking at the impact of electricity generation

We assisted Manitoba Hydro by analyzing the life cycle greenhouse gas emissions for three proposed hydroelectric facilities. We calculated the greenhouse gas emissions associated with the construction, operation and decommissioning of the three facilities including concrete, steel, wood and diesel production, as well as greenhouse gas emissions associated with land-use change caused by the projects. We also compared the life cycle emissions of the three proposed facilities with alternative electricity-generating technologies including coal, coal with carbon capture and storage, natural gas combined cycle, nuclear and large wind.

Manitoba Hydro used this information as part of their environmental impact statement. Our work helped to demonstrate that hydro facilities are among the lower-impact electricity generating options, as measured by production of greenhouse gases, nitrous oxides and sulphur dioxides.

Cameco: Reducing energy consumption

Cameco set a goal of reducing fossil fuel consumption across the company. Pembina Corporate Consulting assessed various renewable energy opportunities at different sites including geoexchange for space heating, solar hot water heating and solar hot air for space heating. Cameco is actively looking at advancing some of the options recommended and has already implemented a variety of energy reduction strategies for a number of its operations.

Pembina Corporate Consulting worked with these clients in 2009:

- Alberta Recycling Management Authority
- Alberta Innovates – Environment and Energy Solutions (formerly Alberta Energy Research Institute)
- Alexander Holburn Beaudin & Lang LLP
- BC Hydro
- BC Transmission Corporation
- BC Utilities Commission
- Business Development Bank of Canada
- Cameco
- Climate Smart
- ConocoPhillips Canada
- First Calgary Savings
- Hostelling International
- Lowe-Martin Group
- Manitoba Hydro
- Mountain Equipment Co-op
- National Energy Board
- Natural Resources Canada
- Oxford Properties
- Southern Alberta Institute of Technology
- Spectra Energy
- Suncor Energy
- Sustainable Development Technology Canada
- TD Bank Financial Group
- Terasen
- Vancity (Vancouver City Savings Credit Union)

Conoco Phillips: Engaging employees in sustainability

In order to fully embrace sustainability as an organization, employees need to be engaged in the process. Conoco Phillips worked with us to develop an employee sustainability awareness and engagement strategy. The energy company wanted a comprehensive approach and so we worked with them to develop a strategy that would consider principles, goals and metrics, roles and responsibilities, risks and mitigation options, key messages, as well as short- and long-term tactics.
Sustainable Communities

Supporting community development in Canada and internationally

We support ongoing community development efforts in Canada and around the world through the introduction of sustainable energy policies and practices.

The Cool Tool

Since 2008, nearly 200 local governments have signed British Columbia’s Climate Action Charter. Governments that sign the charter commit to becoming carbon neutral by 2012, and are eligible for a carbon tax rebate once they complete a greenhouse gas inventory and action plan. In 2009, the Pembina Institute created the Cool Tool to help municipalities become carbon neutral and claim their annual carbon tax rebates — without hiring costly consultants. The Cool Tool enables communities to create greenhouse gas (GHG) inventories on their own using a simple spreadsheet. A series of workshops accompany the Cool Tool, helping communities understand their emissions and create action plans to reduce them. The City of Surrey, British Columbia, was the first community to use the Cool Tool. Over the course of two workshops, key municipal staff learned how to use the Cool Tool and how to create GHG inventories, and explored ways to reduce emissions. In between workshops, the Pembina Institute provided technical assistance to help Surrey staff locate, collect, and input the relevant data. Several more British Columbia municipalities have signed up for Cool Tool workshops in 2010.

North Vancouver develops a green building strategy

In 2009, the District of North Vancouver, British Columbia, partnered with the Pembina Institute and the Lighthouse Sustainable Building Centre to develop a Green Building Strategy. The goals of the strategy include reducing the impact of building construction and operation on the environment; reducing the impact of buildings on financial resources; creating and maintaining healthy and effective work places; and reducing the amount of construction and demolition waste sent to landfills. The district also adopted a number of specific energy efficiency targets, including outperforming the Model National Energy Code for Buildings by at least 25 per cent by 2010. To meet the district’s ambitious goals, the project partners created two Green Building Checklists: one for large industrial, commercial, institutional, multi-family and municipal projects and one for single family buildings. The checklists, which will be implemented in the fall of 2010, are required for certain building projects and voluntary but encouraged for others. The Green Building Strategy is part of the District of North Vancouver’s long-term commitment to sustainability, which includes a goal to “be recognized among the most sustainable communities in the world” by 2020.

Walking the talk with West Moberly First Nations

The West Moberly First Nations — a community whose backyard is criss-crossed by conventional energy development — is leading the way on green energy solutions. The Pembina Institute worked with West Moberly to develop a Community Energy Plan outlining how the community could reduce its energy use through conservation, energy efficiency, and renewable energy opportunities, including solar hot water and wind. Since completing its Community Energy Plan, West Moberly has conducted ecoEnergy audits on most of its homes and on its five main community buildings; installed solar hot water systems on a home and a commercial lodge; and provided solar hot water installation training for five members of the community. West Moberly was the first First Nations community to be awarded the honour of “Solar Community” by SolarBC. In 2009, the Pembina Institute worked with West Moberly to develop a fact sheet, West Moberly First Nations: Walking the Talk. The fact sheet provides an overview of West Moberly’s accomplishments on the path to becoming a green energy community.

Low-impact construction techniques and efficiency features in new buildings are hallmarks of the Green Building Strategy.
Leading the way on greener buildings

In 2009, the Pembina Institute launched the Green Building Leaders project, a collaborative effort to design and implement new green building policies in British Columbia. Buildings account for approximately 12 per cent of British Columbia’s total greenhouse gas emissions. The Green Building Leaders project is an opportunity for leading local governments to adopt progressive green building regulations that will reduce emissions in their communities while setting the stage for broader change in the province.

Local governments participating in the project so far include Campbell River, Cowichan Valley Regional District, Dawson Creek, Delta, Regional District of Nanaimo, City of North Vancouver, Prince George, Smithers, Terrace, West Vancouver, and Whistler. These governments are working to design and implement energy performance standards for homes and buildings that are for sale or undergoing major renovations; renewable energy requirements for new homes and buildings; and higher energy performance standards for new homes and buildings.

Green Buildings Leaders is an ongoing project; check the website, www.greenbuildingleaders.ca for research completed to date and updates as the project continues to evolve.

Climate change and international development

The Pembina Institute continues to engage with the international development community through the Canadian Coalition on Climate Change and Development (C4D). Climate change is increasingly exacerbating the challenges faced by people seeking to emerge from poverty. In response, Canadian development organizations and their partners in the global south are adapting their programs to ensure resiliency and continued sustainability.

In 2009, the Pembina Institute worked with six leading Canadian development and humanitarian organizations to develop a series of case studies that showcase successful approaches to integrating climate change into international development work.

For example, in the Nkayi District of western Zimbabwe, chronic food insecurity is the result of recurring and persistent droughts stretching back nearly a decade. A three-year project of the Canadian Foodgrains Bank and Christian Care, a local partner, demonstrated that promoting conservation agriculture can increase yields, decrease chemical inputs and lower capital investment required from farmers. The project resulted in increased food security and greater resilience to climate change in a drought-prone area.

Through C4D, environment, development and humanitarian organizations continue to share their first-hand knowledge of climate impacts and solutions. Integrating that knowledge into new and existing programs can help address both climate impacts and the underlying drivers of vulnerability.

The Sustainable Communities group worked with these communities in 2009:

- Calgary, Alta.
- Campbell River, B.C.
- City of North Vancouver, B.C.
- Cowichan Valley Regional District, B.C.
- Dawson Creek, B.C.
- Dease River First Nation, B.C.
- Delta, B.C.
- District of North Vancouver, B.C.
- Prince George, B.C.
- Regional District of Nanaimo, B.C.
- Sechelt, B.C.
- Smithers, B.C.
- Stellat’en First Nation, B.C.
- Surrey, B.C.
- Terrace, B.C.
- West Moberly First Nations, B.C.
- West Vancouver, B.C.
- Whistler, B.C.
- Wuikinuxv First Nation, B.C.
Institute news

The Pembina Institute is about more than just reports. As a highly-respected think tank, our work is recognized externally in a number of ways — and our commitment to the environment is visible within our organization as well.

>>>Accolades<<<

Tides Top 10
Tides Canada, a national leader in cutting-edge environmental and social philanthropy, named the Pembina Institute to its prestigious annual Tides Top 10 awards for 2009. The Tides Top 10 celebrates Canada’s most innovative and forward-thinking non-profit organizations — groups that have demonstrated outstanding leadership, vision and real-world impact in addressing environmental and social problems. The Pembina Institute is honoured to be included in this list.

Top 40 Under 40
In 2009, Executive Director Dr. Marlo Raynolds was named as a recipient of Canada’s Top 40 Under 40 award, a prestigious national award program which each year honours 40 Canadians in the private, public and not-for-profit sectors under the age of 40.

>>>Reducing our ecological footprint<<<

Sustainability is a way of life for our staff, with all of them taking individual steps to reduce their environmental footprint. Here are a few examples:

Cherise Burda, director of Ontario Energy Solutions, enjoys her 80-minute walk (that’s the average commute time for Ontarians) to and from the Toronto office every day. She joins the large majority of staff who commute sustainably to work: on foot, by bike or on public transit.

Matthew Bramley, director of climate change, at the Ottawa airport on his way to the Copenhagen climate talks. Unavoidably, staff do have to travel — whether by train, bus, car, small plane or jet — so we purchase gold-standard planetair carbon offsets to mitigate the greenhouse-gas producing effects.

Dan Woynillowicz, director of strategy and external relations, telecommutes from his home office in the B.C. Interior. He’s one of several staff who telecommute regularly.

Staff in our Drayton Valley office are passionate about composting and use the compost to feed their flower garden. All of our offices reduce waste wherever possible.

Our Edmonton, Alberta office is powered by Bullfrog Power. In fact, all other eligible offices — Calgary, Vancouver, Drayton Valley, Toronto and Ottawa — are powered by Bullfrog. The Pembina Institute has supported green power initiatives in Canada since 2003. Most recently, we have partnered with Bullfrog Power to promote green electricity — electricity generated exclusively from wind and hydro facilities that have been certified as low impact by Environment Canada under its EcoLogo program.
Collaborations

Canadian NGOs and industry talk cap-and-trade

The Pembina Institute played a leading role in pulling together major Canada-based companies and environmental non-government organizations (NGOs) to prepare recommendations for the design of a Canadian cap-and-trade system.

Participating NGOs (David Suzuki Foundation, Environmental Defence, ForestEthics, Pembina Institute, Sierra Club Canada, Sustainable Prosperity, and WWF–Canada) and industry participants (Catalyst Paper Corporation, Direct Energy, Dow Canada, DuPont Canada, ENMAX, Royal Bank of Canada, Rio Tinto and The Toronto–Dominion Bank) outlined key policy areas where they felt agreement was possible, then looked for common ground. After much back-and-forth, the groups agreed to a set of recommendations in a joint statement released October 2009.

Although the Canadian government has not adopted the recommendations — opting instead in late 2009 to follow the lead of the U.S. in setting climate policy — the process was still valuable in getting industry, government and the non-governmental sector to put aside their differences and work together, participants agreed.

Ingenuity across the border

Leaders from the major U.S. and Canadian environmental and conservation organizations met outside Washington, D.C. in June 2009 to discuss common climate, energy and natural areas conservation issues. The 12 Canadian and 20 American groups particularly focused on recognizing the integration of U.S. and Canadian economies and the mutual need for clean energy job creation.

The groups, which included the Pembina Institute, Pollution Probe, Sierra Club, Greenpeace and Environmental Defense, issued a joint statement noting, “North American ingenuity can protect our deteriorating atmosphere, grow manufacturing jobs in harnessing wind and solar energy, improve our security by reducing our dependence on oil, minimize climate change’s drastic impact on human and natural communities, and protect our fragile natural areas such as the Arctic and the Boreal Forest.”

Alberta Acts on Climate Change

The University of Calgary and the Pembina Institute partnered in 2009 in the Alberta Acts on Climate Change project to increase environmental citizenship in southern Alberta communities. The project uses multi-stakeholder steering committees from each community to organize forums with local residents.

In Airdrie, forum participants decided to create a citizens’ group, Sustainable Airdrie, to further engage on environmental issues. In Black Diamond, the sustainability committee expanded its volunteer base and made significant strides toward implementing its Municipal Sustainability Plan.

Two video conferences, one with over 200 participants and one with 40 participants, connected Albertans from communities far and wide on local energy and community action.

Alberta Acts also partnered with several youth organizations to host workshops and plant the seeds (literally) for community gardens in Calgary.
Engaging with media

The spotlight was on Alberta oil sands in 2009, and the Pembina Institute’s work appeared in a number of very high-profile media investigations, including, “Ölsand: Kanadas schwarzes Gold” (“Oil sands: Canada’s black gold”), a documentary by the major German television broadcaster ZDF, and National Geographic’s March 2009 feature article, “The Canadian Oil Boom.”

Pembina Institute experts appeared at a variety of public speaking events at conferences, workshops and townhalls across the country. They also took part in countless interviews with journalists and reporters and were regularly called upon to comment on a variety of environmental and energy issues. We have been working hard to get our in-depth analyses out using a variety of tools.

Several longer op-ed pieces have been published in mainstream Canadian media outlets, including work on the energy mix in Ontario and Alberta, federal action on climate change, and the environmental footprint of the oil sands. Our blogs have allowed us to create new analysis and accessible content that can be passed along almost immediately when we need to get a message out. The exponential nature of social media such as Facebook means that our news can spread that much further and faster.

TRANSFORMING GREENLEARNING IN 2010

GreenLearning is at a unique point in its history: in 2010, it will become an independent not-for-profit organization, The GreenLearning Canada Foundation. GreenLearning will be dedicated solely to providing quality, balanced youth education on energy and sustainability.

GreenLearning will have its own Board of Directors, with a range of experience and expertise in youth environmental education. In 2010 the Foundation will be conducting a more aggressive national campaign of outreach, marketing and delivery so that more teachers have the opportunity to use GreenLearning programs in their classes. GreenLearning will also focus on supporting the Redfish School of Change and its growing spinoffs. With the ongoing challenges to fund this important work, the GreenLearning team is exploring new ways to engage individuals and corporations to bring their expertise and support to the program.

A few GreenLearning snapshots from 2009 demonstrate youth education that is making a difference:

- The first Redfish School of Change (www.schoolofchange.ca) ran in May and June 2009. This intensive six-week program is for young people who want to lead the way in achieving greater ecological sustainability and social equity in their own lives and communities.

- Two new eCards modules were released: one on climate change and the second linking health and active living to air quality.

- 1,041 new teachers registered to join the GreenLearning team.

- GreenLearning and UNICEF supported four youth delegates to participate in the Children’s Climate Forum in Copenhagen in December 2009. These delegates took eCards messages from over 400 students from across Canada to the Forum, using these to prepare their formal statement to the UN conference.

“[Redfish] not only opened my eyes to the social and environmental concerns in my own community, but how I can be a part of changing them… I must say the most intriguing part of the program was the change that occurred in me.”

– 2009 participant
Board and staff

>>>Board of Directors<<<

Experience and diverse perspectives characterize the Pembina Institute’s Board of Directors in 2009.

The Pembina Institute’s Board of Directors provides governance, support and operational strategic direction for the organization. Our board includes experienced and insightful professionals who bring to the table diverse perspectives on environmental priorities, business administration and societal responsibility. The board meets regularly throughout the year, and board members volunteer their time. To learn more about our board members, visit www.pembina.org/about/board.

DAVID ARMOUR — Pembina Institute Board President
Executive Director of the Canadian Olympic Foundation

FRANCES BOWEN — Pembina Institute Board Treasurer
Associate Professor of Strategy and Global Management, University of Calgary, and Director, International Institute for Resource Industries and Sustainability Studies

JOHN ROBINSON — Pembina Institute Board Secretary
Professor, Institute for Resources, Environment and Sustainability and the Department of Geography, University of British Columbia

WANDA HELLEVANG — Pembina Institute Board Director
President, Hellevang Consulting and Ventures

ERIC LLOYD — Pembina Institute Board Director
President, Lloyd Energy Inc.

ROB MACINTOSH — Pembina Institute Board Director
President, Dejanira Enterprises, and Senior Partner, Green Planet Communications

KEN OGILVIE — Pembina Institute Board Director
Executive Director Emeritus, Pollution Probe

>>>Staff and consultants<<<

Passionate and innovative staff are the Pembina Institute’s greatest asset.

In 2009, the Pembina Institute’s staff team included more than 50 scientists, researchers, engineers, policy analysts, teachers, accountants, lawyers, business administrators, writers, editors and communication strategists, rounded out with a team of exceptional consultants.

Aarti Rana, BA
Alex Doukas, BA
Alison Bailie, MRM
Alison Cretney, P.Eng.
Amanda Pitre-Hayes, MBA
Amy Taylor, MRM
Anya Knechtel, MAP
Bev Broks, B.Sc.
Cherise Burda, MA
Chris Severson-Baker, B.Sc.
Christy Goerz
Claire Beckstead, MES
Clare Demerse, MJ

Dan Woynillowicz, MA
Dana Silver, B.Comm.
Darlene Zimmer, B.Sc.
Dave kalbfleisch, B.Math.
Dave Lovekin, M.Eng.
David Dodge, B.Sc.
Devika Shah, MBA
Ed Whittingham, MBA
Gordon Harrison, BA
Graham Haines, B.A.Sc.
Greg Brown, B.Sc.
Greg Powell, B.A.Sc.
Jennifer Grant, M.Sc.

Jeremy Moorhouse, B.Eng.
Jesse Row, P.Eng.
Johan Stroman, MA
Joshua MacNab, MRM
Julia Kilpatrick, MJ
Karen Campbell, LLM
Kathy Worobec, B.Ed.
Katie Laufenberg, B.Sc.
Laura Fauth, BA
Marc Huot, M.Sc.
Marlo Raynolds, PhD
Matt Home, MRM
Matt McCulloch, P.Eng.
Matthew Bramley, PhD
Mike Kennedy, M.Sc.

Nadine Raynolds, MA
Nathan Lemphers, MCP
Ngaio Hotte, B.Sc.
Oliver Hendrickson, LLM
Pam Taks
Paul Cobb, B.Eng.
Peggy Holroyd, M.E.Des.
PB Partington, B.Sc.
Ria Forster
Roberta Franchuk, B.Sc.
Roland Lines, B.Sc.
Simon Dyer, M.Sc.
Terra Simieritsch, B.Sc.
Tim Weis, P.Eng.
Our supporters

The Pembina Institute is extremely grateful for the support of these donors who generously contributed to the advancement of sustainable energy solutions in 2009.

$100,000+
- Alberta Agriculture and Rural Development
- VanCity Credit Union

$50,000-$99,999
- Government of the Northwest Territories
- International Institute for Sustainable Development
- Natural Resources Canada

$20,000-$49,999
- Alberta Law Foundation
- Aurora Research Institute
- Ecology North
- Indian and Northern Affairs Canada
- International Development Research Centre

$10,000-$19,999
- Alberta Energy Research Institute
- British High Commission
- Climate Action Network Canada
- Environment Canada
- The Real Estate Foundation of BC

$5,000-$9,999
- bhpbilliton
- Canadian Wind Energy Association
- Dowland Contracting
- Economic Development Alliance of Southeast Alberta
- Environmental Defence
- Gereingsite Power Corporation
- Heritage Wind Farm Development Inc.
- Hydro One Inc.
- Joss Wind Power Inc.
- NatureEner Energy Canada Inc.
- Oak Foundation
- Ontario Power Generation
- Saskatchewan Energy and Resources

$1,000-$4,999
- Jeffrey and Hanna Guduls
- Millwoods Bottle Depot
- Mistaya Engineering Inc. (Miss Eva M. Powell)
- Tracy and Maria Raynolds

$500-$999
- Linda Bily and John Baldwin
- Ken Lertzman
- David and Olga Rigby
- Egbert Stomp
- Anonymous (1)

$100-$499
- Neil Richards
- Judith Anderson
- Tim Roberts
- Stuart and Anne-Marie Anderson
- Avery and Paul Chapman
- Elizabeth Asselstine
- Ms. Marie Auger-Methe
- Cameron Baughen
- Richard Beier
- Heather Bessey
- Georgina Brunette
- Alain Caisse and Corrine Sneider
- David and Florence Carr
- Douglas and Isobel Cornick
- Wes and Mary Crigg
- Brian Deheer
- Dorothy Dickson
- Dylan Dowd
- Kitty D. Dunn
- Stewart Eigle
- Alan Ernst
- Gilles Fectueau
- Susan Fisher
- Anne Fitzpatrick
- Stuart Fix
- Catherine Garvey
- John S. Gaul
- David Gehr
- Allison Gentry
- Jack Gingrich
- Isidor Gliner
- Christopher Gusselin
- Richard Gynoich
- Patrick Gun
- Stephen Hall
- Jim Harris
- Wanda Helleveang
- Philip Herman and Heather MacLean
- Richard and Elaine Hibbard
- Christopher Higgins
- Robert Hornung and Ellen Burack
- William Johnston
- Jane Kitehi
- Michael Kneef
- Valerie A. Loewen
- Robert and Diana MacDonald
- Barb Macintosh
- Ann Macintosh
- Penny and Tony Marshall
- Barry McCashin
- Gord McGee
- Diane McFarland and Eduard Wozynzczuk
- Paul McKendrick
- Jan McMillan
- James McMillan
- Catherine McKell
- Peter Miller and Carolyn Garlich
- Helen Molloy
- George and Mary Morrison
- Nancy Mucklow
- Barbara and Terry Myers
- K.H. Newman & Associates Ltd
- Nobuko Okawa
- Brice Peresini
- Sheila Pratt
- Shirley Farlinger
- Evelyn and Sol Feldstein
- Ms. E. A. Finley
- Ms. Jean C. Finley
- Douglas Fish
- Patrick Forseh
- Gerald Friebe
- Cyril and Marion Fry
- Jean Fulton
- Jim Galloway
- Gail Gates
- Maryelle C. Gaudreau
- Loma Graham
- Richard Gutteson
- Joel Hogan and Nadine Fletcher
- Donald Hall
- Elizabeth Hanley
- Helen B. Hanna
- Elaine Harasymiw
- Manfred Harpe
- St. Kathleen Harrigan
- Pauline Heinonen
- Kathryn Heller-McRoberts
- Barbara Heron
- Nina Hillier
- Jean Hoag
- Marshall Hoke and Barbara Prescott
- Andrew Hurst
- International Factors Corporation
- Sharon Irwin
- Janette Johnston
- Rosi and David Jory
- Morry Joy
- Myles Keelman
- Anthony Ketchum
- Bevley Kline
- James and Lois Kinne
- Johannes and Dorothy Klein
- Patricia Kotow and Mike Jones
- Jean Lafframe
- Lucene and Wayne Laffrance
- Paul Lawson
- Sandra Lee
- Betty and Richard MacArthur
- Yvon Mahé
- Pegasis McAulay
- Ms. Lynn McIntyre
- Lesley McKenzie
- Beatrice McLaren
- George and Janice Mclean
- Jean McNeil
- Gordon McNulty
- Ms. Virginia Medleylane
- Douglas Meggison and Marie Cholley
- Hazel Menzies
- Glenn Miles and Janet Russell
- Karen Mills
- Peter Mix
- Agnes Morgan
- Dan A. Morrison
- Marilyn Morton and Brian Zimmerman
- Nestor and Phyllis Muddy
- Jennifer Niece
- Jim Nielson
- Patricia and Edward Oakes
- Ken Ogilvie
- Grace B. Olds
- Beverley A. Page
- Derek Paul
- Ev Pearson
- Dr. Edwin M. Pennington
- Dr. Richard and Mrs. Vivian Pahas
- Roy and Beatrice Piepenburg
- Richard N. Piper
- Hannelore Plonka
- Franklin and Doreen Pope
- Laura Porcher
- Jane Power
- Prof. Richard Price
- David Pritchard
- Aaron Quein
- Peter and Georgia Ramos
- Geoffrey D. Richards
- James and Nancy Riesberry
- Francis J. Rigby
- John Ross
- Catherine Russell
- Arlene and James Sagan
- St. Paul Veterinary Clinic
- Gary Sarkissian
- Wayne and Kate Schlepp
- George Shane
- David and Jean Sheppard
- Patricia and E. Sieber
- Sisters of Instruction of the Child Jesus
- Harry Smaller
- Donald and Margaret Smith
- Ms. Diia Soman
- Thomas and Alvina Sperring
- Ms. M. Judith Stockdale
- Dann Stockwell
- Robert Taddie
- Brenda Tempest
- Blanché Thoms
- Karen Tippet
- Yatti Tipto
- Carol and Peter Tracey
- Gordon F. Vlkruck
- Matthew Wallace
- Dr. Joel Weinstein
- Mr. Gordon Wiegle
- Gwen Williams
- George A. Wood
- Agnes and Albert Wurfel
- Anonymous (15)

GreenLearning Canada supporters
- Devcon Canada
- Learning for a Sustainable Future

In 2009, The Pembina Foundation for Environmental Research and Education contracted the Pembina Institute to undertake several key projects with the generous support of the following donors:
- Alberta Culture and Community Spirit
- Alberta Ecotrust Foundation
- The Calgary Foundation
- The Daly Foundation
- Edmonton Community Foundation
- The EJLB Foundation
- Gordon and Betty Moore Foundation
- Max Bell Foundation
- Allain and Helene Shelf
- Vancouver Foundation
- Walter & Duncan Gordon Foundation
- The William and Flora Hewlett Foundation
- Morden Yolles
- Anonymous major donors (3)
Sustaining the future

The Pembina Institute is a non-profit sustainable energy think-tank. The majority of our revenue is project-specific and we do not receive any core funding (i.e. specifically for the purpose of covering administration, infrastructure and fundraising costs).

Every single policy research or advocacy activity that we have undertaken to date has been made possible by philanthropic support from concerned individuals, charitable foundations and other organizations. Our ability to play this role in the future will depend significantly on the generous financial support of new and existing donors. Individuals like Allan Shiff (featured next page) are stepping up to help us create a better Canada. We invite you to join Allan by making a donation to the Pembina Institute — every dollar counts!

Why support the Pembina Institute?

In addition to our niche focus on sustainable energy solutions, the Pembina Institute is unique among Canadian change agents in several ways.

Our people are highly intellectual, solutions-focused and committed.
Pembina Institute staff represent the “cream of the crop.” This multi-talented, diverse, extremely productive, highly educated and passionately committed group of people are the reason behind our success.

We direct 99 per cent of your individual donor contributions directly to program support.
This is because our fundraising and infrastructure costs are already covered through our alternate sources of revenue. Donations can go directly to research, analysis or advocacy in the program area of your choice.

We welcome opportunities to engage our donors in carrying out our mission.
We actively seek strategic input and advice from individuals across all sectors, including our highly-informed donors.

We are a hybrid organization.
The Pembina Institute is an organization that combines the research and technical capacity of a think tank, the environmental values and advocacy capacity of an environmental NGO, and the entrepreneurial and business capacity of a for-profit consulting firm. This gives us a multi-faceted and highly collaborative approach to change, as well as access to a diverse range of key influencers across many sectors of society.

We have significant technical and research analysis capacity.
We have advised numerous companies on a wide range of sustainable energy solutions, helping them decrease greenhouse gas emissions, deploy new technologies, and increase energy efficiency and use of renewable energy sources. With this experience, our highly competent staff can recommend policy solutions that are informed with an on-the-ground understanding of key industry issues and challenges.

Our culture is highly productive and results-oriented.
The Pembina Institute is a project-oriented organization. We use sophisticated project tracking and reporting software that help us deliver our work efficiently and on budget. Our administration, infrastructure and fundraising expenses are extremely low compared to most other not-for-profit organizations, giving our funders and supporters an above-normal return on investment.

There is now a strategic window of opportunity for visionary philanthropists working hand in hand with the Pembina Institute to truly effect change. Now is the time to ensure that politicians and opinion leaders are armed with sustainable energy expertise and policy solutions to take real and immediate action.
Donor profile
Allan Shiff

Allan Shiff isn’t your average donor. Writing a cheque to support imperative work on climate change doesn’t quite cut it for him. This semi-retired grandfather travelled across the world last December, “under Pembina’s wing” as he describes it, to observe international climate talks. Indeed, Allan Shiff could probably be called our most unorthodox donor.

An avid reader, Shiff has become increasingly concerned about climate change and explains why, for him, it stands out from other compelling issues.

“International affairs, wars and economic crises all have horrendous costs, but we, in a brutal sense, get on with things and rebuild,” Shiff says. “It’s different when the complete living system is at risk though — one gets a little concerned about the viability of the whole system.”

Shiff didn’t come to that conclusion from skimming a few news headlines. He regularly reads several newspapers, and in October 2006 he downloaded The Stern Review on the Economics of Climate Change, a 700-page report on the global economic impacts of climate change. That’s when he began his search for a Canadian organization working on the subject.

“I got in touch with some organizations and the more I looked into Pembina, the more impressive it became,” he says. “It had a different culture than others, related to the corporate and government world, and kept popping up in news articles of importance.”

Shiff has not only made generous financial contributions since then, but he also met with his member of parliament and last December, joined the Pembina Institute’s climate team in Copenhagen, Denmark to take in the international climate conference.

“I would guess most people would support an organization through financial donations, but I felt that because of seriousness of issue, it was important to get a little more involved,” Shiff says.

The seriousness of the issue is intensified for Shiff personally because of his grandchildren.

“The forces that are creating problems would have that much freer reign without Pembina. The positive effects of Pembina are far-reaching; if they weren’t there, it would be a far-reaching loss.”

“I know it’s their future that we’re talking about. I’m 73 and the [climate change] effects on me will be zero. The effects on my children will be there, but once we get into my grandchildren’s generation, the effects will be very powerful.”

Shiff feels supporting the Pembina Institute will move the climate agenda forward: “The forces that are creating problems would have that much freer reign without Pembina. The positive effects of Pembina are far-reaching; if they weren’t there, it would be a far-reaching loss.”

Concern for his grandchildren’s future spurred Allan Shiff to support the Pembina Institute and its climate change work.
The Pembina Institute needs your help!

Advancing sustainable energy solutions is no easy task. The Pembina Institute fills an important niche within a broader community of organizations and individuals working on these critical issues.

Over the past 25 years, the Pembina Institute has developed a multifaceted set of strategic capacities and is now heavily relied upon to serve as a:

- catalyst and bridge builder — facilitating cross-sectoral collaborations, finding win-win solutions and common ground;
- think tank and research institute — pursuing innovation in policy development and providing detailed policy analysis and critiques;
- professional service provider — providing corporations, governments and communities with business and technology solutions for sustainable development;
- independent, public-interest NGO — advocating for change, monitoring developments and serving as a watch dog;
- educator and communicator — informing media and individuals to better understand the complex energy issues we face today.

We seek to ensure our research and analysis is delivered into the hands of decision makers and opinion leaders who play a large role in implementing sustainable energy solutions. But we cannot do this alone. Our success will ultimately depend on our ability to engage and enlist others in carrying out our important mission. We invite you to join with the Pembina Institute in creating a better world. Here are just some of the many ways in which you can help:

- Advocate for the practical sustainable energy solutions put forward by the Pembina Institute and others.
- Promote Pembina Institute research and analysis to broader audiences (see sidebar).
- Provide much-needed philanthropic support to enable us to continue our role into the future.
- Help us to expand our network of key decision makers and opinion leaders in government, industry, academia and among local communities by providing valuable introductions to individuals within your own network.
- Provide us with strategic input on key issues we are working on currently.

If you would like to get involved, please contact Devika Shah, Director of Strategic Relationships, at 416-206-3863 or devikas@pembina.org.

The research and analysis that we do is only valuable if it reaches people who can make a difference. Social media tools make it easy to spread the word about the Pembina Institute’s work, and to keep up with what we are doing.

Facebook: Visit the Pembina Institute’s Facebook page. Become a friend and invite your friends to join too. Share or comment on our content.

Twitter: Follow the Pembina Institute on Twitter and re-tweet to your network.

Subscribe: We’ve made it easy for you to find out what’s going on at the Pembina Institute. Visit www.pembina.org/subscription and sign up to find out about our work as it happens. You can receive:

- Pembina eNews, our monthly newsletter
- Pembina media releases, highlighting our work plus our responses to environmental happenings in the news
- Our weekly blog round-up, featuring news and opinions from our team
- Publication alerts, reports and fact sheets hot off the (virtual) presses
Financial data

Revenue 2009
(from the audited financial statements)

The Pembina Institute advances sustainable energy solutions and advocates for change through foundation and government grants, fee-for-service contracts and support from organizations and individuals.

<table>
<thead>
<tr>
<th>Source</th>
<th>Revenue 2009</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fee for Service</td>
<td>$1,959,277</td>
<td>37.7%</td>
</tr>
<tr>
<td>Project Grants</td>
<td>2,867,048</td>
<td>55.1%</td>
</tr>
<tr>
<td>Event Sponsorships, Event Fees and Wind Power Sales</td>
<td>303,495</td>
<td>5.8%</td>
</tr>
<tr>
<td>Unrestricted Individual Donations</td>
<td>9,977</td>
<td>0.2%</td>
</tr>
<tr>
<td>Rental and Interest Income</td>
<td>63,170</td>
<td>1.2%</td>
</tr>
<tr>
<td>Total Revenue</td>
<td>$5,202,967</td>
<td>100%</td>
</tr>
</tbody>
</table>

Expenses 2009
(from the audited financial statements)

Project labour includes the expertise, skills and research required to develop, implement, communicate and evaluate the projects that help us all move towards a more sustainable energy future.

<table>
<thead>
<tr>
<th>Category</th>
<th>Expenses 2009</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program</td>
<td>$4,347,253</td>
<td>82.2%</td>
</tr>
<tr>
<td>Fundraising</td>
<td>170,031</td>
<td>3.2%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>770,404</td>
<td>14.6%</td>
</tr>
<tr>
<td>Total Expenditures</td>
<td>$5,287,688</td>
<td>100%</td>
</tr>
<tr>
<td>Total Revenue</td>
<td>$5,202,967</td>
<td></td>
</tr>
<tr>
<td>Net Revenue</td>
<td>$(84,721)</td>
<td></td>
</tr>
</tbody>
</table>
### Statement of Operations

**The Pembina Institute year ending December 31, 2009**

<table>
<thead>
<tr>
<th>Revenue</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program cost recovery under contractual agreements</td>
<td>$1,914,030</td>
<td>$2,045,386</td>
</tr>
<tr>
<td>Consulting fees</td>
<td>1,749,669</td>
<td>1,834,396</td>
</tr>
<tr>
<td>Grants</td>
<td>953,018</td>
<td>342,988</td>
</tr>
<tr>
<td>Windpower referral and event fees</td>
<td>187,964</td>
<td>161,650</td>
</tr>
<tr>
<td>Reimbursed expenses</td>
<td>158,314</td>
<td>217,353</td>
</tr>
<tr>
<td>Event sponsorship</td>
<td>115,531</td>
<td>210,202</td>
</tr>
<tr>
<td>Rental</td>
<td>52,731</td>
<td>45,300</td>
</tr>
<tr>
<td>Speaking and board honoraria</td>
<td>51,294</td>
<td>58,403</td>
</tr>
<tr>
<td>Interest</td>
<td>10,439</td>
<td>12,584</td>
</tr>
<tr>
<td>Unrestricted individual donations</td>
<td>9,977</td>
<td>73,245</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td>$5,202,967</td>
<td>$5,001,507</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenses</th>
<th>2009</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages and wage costs</td>
<td>$3,193,264</td>
<td>$2,742,201</td>
</tr>
<tr>
<td>Contractor services</td>
<td>658,191</td>
<td>657,204</td>
</tr>
<tr>
<td>Travel</td>
<td>529,480</td>
<td>455,249</td>
</tr>
<tr>
<td>Office rent</td>
<td>235,248</td>
<td>213,068</td>
</tr>
<tr>
<td>Project materials and supplies</td>
<td>229,616</td>
<td>138,991</td>
</tr>
<tr>
<td>Telephone and utilities</td>
<td>71,105</td>
<td>58,959</td>
</tr>
<tr>
<td>Amortization</td>
<td>55,625</td>
<td>47,306</td>
</tr>
<tr>
<td>Office</td>
<td>49,790</td>
<td>43,889</td>
</tr>
<tr>
<td>Advertising and promotion</td>
<td>47,022</td>
<td>27,450</td>
</tr>
<tr>
<td>Computer support</td>
<td>34,513</td>
<td>3,170</td>
</tr>
<tr>
<td>Insurance</td>
<td>32,322</td>
<td>26,383</td>
</tr>
<tr>
<td>Interest on long-term debt</td>
<td>23,282</td>
<td>37,954</td>
</tr>
<tr>
<td>Staff development</td>
<td>21,282</td>
<td>12,023</td>
</tr>
<tr>
<td>Equipment rental</td>
<td>21,262</td>
<td>20,527</td>
</tr>
<tr>
<td>Property taxes</td>
<td>17,759</td>
<td>13,382</td>
</tr>
<tr>
<td>Professional fees</td>
<td>17,534</td>
<td>17,165</td>
</tr>
<tr>
<td>Property repairs</td>
<td>12,893</td>
<td>12,332</td>
</tr>
<tr>
<td>Website hosting and development</td>
<td>11,149</td>
<td>9,993</td>
</tr>
<tr>
<td>Postage and courier</td>
<td>8,329</td>
<td>10,199</td>
</tr>
<tr>
<td>Bad debts expense (recovered)</td>
<td>7,376</td>
<td>(5,229)</td>
</tr>
<tr>
<td>Bank charges</td>
<td>4,840</td>
<td>5,007</td>
</tr>
<tr>
<td>Library purchases and subscriptions</td>
<td>2,909</td>
<td>5,700</td>
</tr>
<tr>
<td>Equipment repairs</td>
<td>2,897</td>
<td>1,780</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>$5,287,688</td>
<td>$4,554,703</td>
</tr>
</tbody>
</table>

| Excess (Deficiency) of revenue over expenses       | $(84,721) | $446,804 |