

ANNUAL REPORT | 2012–2013

IVEY ENERGY POLICY AND MANAGEMENT CENTRE



About the Ivey Energy Policy and Management Centre

The Ivey Energy Policy and Management Centre is the centre of expertise at the Ivey Business School focused on national energy business issues and public policies. It conducts and disseminates first class research on energy policy; and promotes informed debate on public policy in the sector through supporting conferences and workshops that bring together industry, government, academia and other stakeholders in a neutral forum. The Centre draws on leading edge research by Ivey faculty as well as by faculty within Western University.



Message from the Director

Guy Holburn

Director, Ivey Energy Policy and Management Centre, Suncor Chair in Energy Policy, and Associate Professor of Business, Economics and Public Policy

Energy sector issues are complex and multi-faceted, requiring expert analysis from multiple perspectives – economic, environmental, social, and political. This is what makes the research done by the Ivey Energy Policy and Management Centre both rewarding and unique.

Few would argue that Canada's history is tied to its natural resources, and more specifically, to its energy resources. Coal, oil, uranium, and natural gas – and now renewable energy such as wind and solar power – are an integral part of our national conversation. Now, however, that conversation has broadened into a global discussion. Development of the oil sands, for example, has a ripple effect that reaches across Canada and North America to the governments of nearly every nation.

What's more, energy issues are not just the challenge of politicians. Energy sector issues are complex and multi-faceted, requiring expert analysis from multiple perspectives – economic, environmental, social, and political. This is what makes the research done by the Ivey Energy Policy and Management Centre both rewarding and unique. Just like the issues themselves, our work is cross-disciplinary and takes into consideration the far-reaching concerns facing the energy sector.

As I look back on 2012 and now during 2013, I am pleased to report that we have ably tackled some of the challenges faced by the sector through our research, teaching and outreach initiatives. I encourage you to read more about our work in the pages of our annual report, but let me outline some of the many successes we have had this year.

One of our key aims at the Centre is to provide thought-provoking new knowledge that promotes effective yet balanced solutions to local, national and global energy challenges. The work done by my colleagues, Assistant Professor Adam Fremeth and Professor David Conklin from Ivey, and Professor Matt Davison from Western University, as well as in my own areas of interest, have brought new insights to energy discussions on national and global levels. On selected projects we have partnered with the University of Calgary and the University of Waterloo to extend the scope and depth of our impact. This year we also welcomed two former federal Deputy Ministers as Senior Research Fellows, Paul Boothe and Richard Dicerni. They bring a wealth of policy expertise and practitioner insight to the Centre's research.

Especially visible to the community have been the conferences and panel events organized by the Centre. Leaders from many organizations – including the Canadian Association of Petroleum Producers, the Canadian Society for

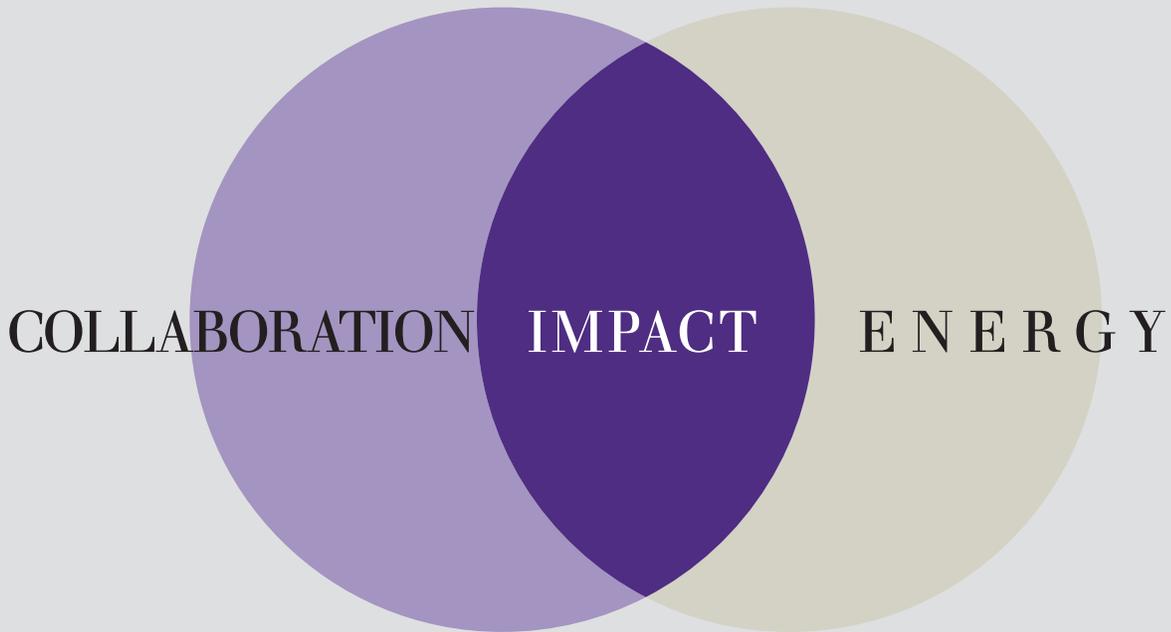
Unconventional Resources, Environment Canada, First Nations, the In Situ Oil Sands Alliance, StormFisher Biogas, Suncor, and TransCanada Corporation – have engaged in conversations around private and public sector policy issues in Canada's energy sector. Hundreds of Ivey HBA, MBA and MSc students have enhanced their education by attending and participating in these events. The Centre also organized the first annual Energy Leaders Roundtable, an invitation-only event for 40 senior executives across Canada and the United States, in partnership with the Council for Clean and Reliable Electricity.

I am very pleased to highlight the multiple formal partnerships that we have established with industry stakeholders since 2012, which makes the Centre unique in Canada. The Suncor Energy Foundation has established the Suncor Chair in Energy Policy and also the Suncor Energy Emerging Leaders Awards for HBA students. In addition, the Ontario Municipal Employees Retirement System (OMERS), the Power Workers' Union, and TransCanada Corporation have each provided significant financial commitments to the Centre for the next five years.

We are indebted to all our partners for their foresight in providing this support, which will enable the Centre to grow and expand its reach. Together we are able to promote greater engagement between industry, government, and academia on national and global energy issues.

2012-2013 Highlights

- *Suncor Energy Foundation committed \$1.125-million to establish and support the Suncor Chair in Energy Policy at Ivey*
- *The first HBA students received the inaugural Suncor Energy Emerging Leaders Awards*
- *The Ivey Energy Consortium established with TransCanada Corporation, Ontario Municipal Employees Retirement System (OMERS), and the Power Workers' Union is providing \$750,000 in funding to support Centre initiatives*
- *The Ivey Energy Policy and Management Centre connected students with a wide range of leaders from all areas of the energy sector during 2012–2013*



research

Energy development is progressing on every front. New technologies are helping drive the expansion of new sources world-wide. These new technologies are creating challenges on many levels – social, environmental, business and policy. The Ivey Energy Policy and Management Centre is making a significant impact on our understanding of these challenges through its broad-reaching research efforts.

Surveying the policy environment to improve wind energy development

Provincial governments in Canada have encouraged substantial private investment in renewable energy resources, notably in wind power, through targeted energy policies and programs.



These policies and programs are a central element in several provincial governments' broader energy agendas. But have they been successful?

"There is little empirical research on wind energy policy in Canada. To this point, we didn't understand which specific policies were having an impact," said Ivey Energy Policy and Management Centre Director Guy Holburn. "Our goal was to provide new insights into which policies were influential

in encouraging the development of wind power in Canada, and to give policymakers better information when making policy decisions."

The Centre, along with the School of Public Policy at the University of Calgary, surveyed every wind power company active in Canada. That's 146 senior executives at 89 companies involved in the development, operation or ownership of wind projects in Canada.

They were asked two central questions:

- How important are specific policy and market factors in shaping the attractiveness of a jurisdiction for potential investors?
- How do the provinces in which the respondents have had experience compare on a relative basis for each factor?

"The results showed very clearly that it's not just about rates. It was just as critical for wind companies to have policy stability and consistency over time."

The survey and its results are just one example of the type of collaborative research work done by the Centre both within Ivey and with outside partners.

Ivey Energy Policy and Management Centre

Meet the people of the Ivey Energy Policy and Management Centre who are breaking new ground in the areas of energy, business and policy.

Guy Holburn
Director

Paul Boothe
Senior Research Fellow

David Conklin
Senior Research Fellow

Matt Davison
Senior Research Fellow

Richard Dicherni
Senior Research Fellow

Adam Fremeth
Senior Research Fellow

Horia Hangan
Senior Research Fellow

Rajiv Varma
Senior Research Fellow

Featured faculty research publications

Do campaign contributions affect utility mergers? How responsive are companies to regulations outside of their home district? Research done by the Ivey Energy Policy and Management Centre examined several key issues in the energy sector, with some surprising results.

“Integrated Market and Non-Market Strategies: Political Campaign Contributions around Merger and Acquisition Events in the Energy Sector.”

Guy L.F. Holburn and Richard G. Vanden Bergh, Forthcoming. Strategic Management Journal

- Are election campaign contributions to politicians influencing regulatory merger approvals? Holburn and Vanden Bergh discover that many electric utilities in the United States increase their contributions in the year before they announce a merger.

“Strategic Rationale for Responding to Extra-Jurisdictional Regulation: Evidence from Firm Adoption of Renewable Power in the US.”

Adam R. Fremeth and J. Myles Shaver, Forthcoming. Strategic Management Journal

- Firms tend to respond to regulations in their home jurisdictions, but what about outside them? Fremeth and Shaver examine renewable-power provision in the U.S. electricity sector between 2001-2006.

“Factors Affecting the Value of Environmental Predictions to the Energy Sector.”

Matt Davison, Ozgur Gurtuna, Claude Masse and Brian Mills, 2012. Environmental Systems Research, 1 (1).

- Energy extraction, production, and transmission are highly sensitive to temperature, wind speed, and even ice cover. How much value can environmental predictions provide to the operator of a given energy system? The authors present three Canadian case studies.

“Making Good Regulations.”

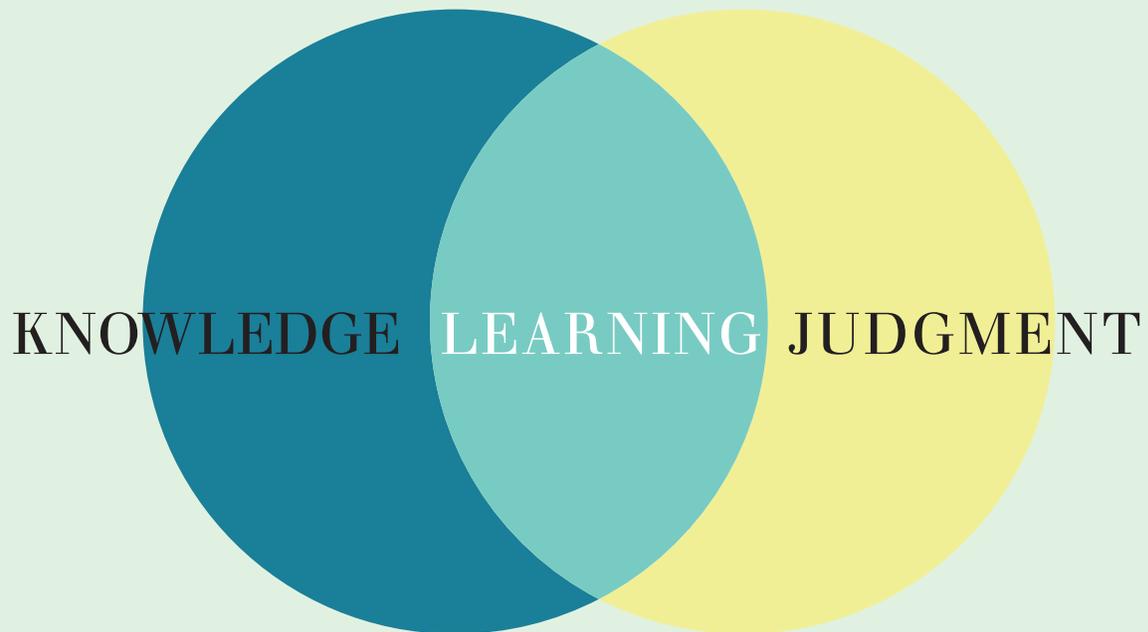
Paul Boothe, 2013. Canadian Public Policy

- This paper looks at the changing nature of regulation with a special emphasis on the role that economists should play.

Grants & Donations

- Professor Matt Davison received a five-year renewal of his Canada Research Chair (Tier II)
- Professor Adam Fremeth was awarded a major grant from *Carbon Management Canada* for a project titled “Achieving a Low-carbon, Globally Competitive Energy Economy: Removing Barriers and Cultivating Enablers to Innovation in Canada’s Oil Sands & Heavy Oil Industry.” He will work with a team of researchers across Canada to systematically investigate the barriers and enablers to breakthrough innovations in reducing greenhouse gas emissions.
- Professors Guy Holburn and Adam Fremeth were awarded a three-year grant from the *Social Sciences and Humanities Research Council of Canada* for a project titled “Regulatory Externalities and Corporate Environmental Performance”. The project addresses the managerial challenge created by the proliferation of environmental regulatory policies that vary by province, state, and country.
- Professor Guy Holburn was awarded a five-year Chair position funded by the Suncor Energy Foundation. As the Suncor Chair in Energy Policy, Holburn promotes greater engagement between academia, industry and government on national and global energy issues. In addition to enhancing energy policy research, he leads the development of new teaching materials and outreach events.
- The Ivey Energy Consortium was established in 2013. The Consortium supports and expands the energy policy research and outreach work of the Ivey Energy Policy and Management Centre. Members of the Consortium include TransCanada Corporation, Ontario Municipal Employees Retirement System (OMERS), and the Power Workers’ Union.





teaching

Through its teaching, case studies, and research, the Ivey Energy Policy and Management Centre is helping the next generation of business leaders grasp the society-wide implications of energy sector development in Canada, North America and around the world.

Developing the next generation of energy sector leaders

The Ivey Energy Policy and Management Centre connected students with a wide range of leaders from all areas of the energy sector during 2012–2013. The speakers, panelists and experts helped broaden the students' perspectives and gave them first-hand insights into the future of energy in Canada and worldwide.



TransCanada Corporation President and CEO **Russ Girling** talks about the oil and gas business with students.

Representing the facts in a hot political debate

Russ Girling, President & CEO of TransCanada Corporation, speaks at Leaders Forum and Ivey Energy Centre event, November 2012

TransCanada Corporation President and CEO Russ Girling engaged HBA and MBA students in the challenges facing the Keystone pipeline.

Speaking to a packed classroom, Girling talked about the lessons learned in the

development of the Keystone pipeline through Canada to the U.S. – a distance of approximately 3,500 km. Girling spoke of how the company learned and made adjustments to its strategies and moved forward. He emphasized the importance of consistently representing the facts in the pipeline project, a difficult challenge in an often partisan political debate.

Risk and return in the renewable energy sector

StormFisher Biogas executives reflect on entrepreneurship in renewable energy, November 2012

Brandon Moffat, StormFisher Biogas plant manager; Dan Berry, HBA '12, author of the StormFisher Biogas case; and Chris Guillon, MBA '06, StormFisher Biogas co-founder all participated in an exclusive event for Ivey students.

Bureaucratic delays, shifting political priorities, and changing markets were just some of the challenges faced by Chris Guillon, Bas van Berkel and Ryan Little, all MBA '06, when they started StormFisher Biogas, in 2007.

But as HBA students in Energy Centre Director Guy Holburn's Corporations and Society class learned, managing risk is not for the faint-hearted. Guillon and Moffat spoke to them about the early days of planning the company, their success in raising \$350 million, and the obstacles they faced.



Brandon Moffat, Dan Berry and Chris Guillon.

Talk about energy

The first HBA recipients of the inaugural Suncor Energy Emerging Leaders Awards excel in their studies, *and* find the time and energy for their own personal pursuits – from badminton to triathlons.

Pat McJannett is doing a dual degree in engineering and business. He is one of the leaders of a solar car project and plays badminton competitively.

Michelle Bashaw is also doing a dual degree in engineering and business. She has a passion for sustainability that finds expression in her commitment to Engineers Without Borders. Somehow she finds time to train for triathlons.

Daniel Otamendi is a LEADER Project participant and intern with the Lawrence National Centre for Policy and Management.

André Wilkie mentors younger students as a residence advisor and has interned with an environmental company.

Deborah Gullaher, Vice-President Marketing with Suncor Energy, explains that building skills and knowledge is an important pillar of the company's community investment strategy. While Suncor has partnered with a number of universities across Canada, Ivey is the first relationship the energy company has built with a Canadian business school.

"As we considered the key schools in Ontario, we looked at a number of factors, including the quality of the programs, faculty and students," she says. "Ivey really rose to the top."

Energizing the future: Suncor Energy Emerging Leaders Awards

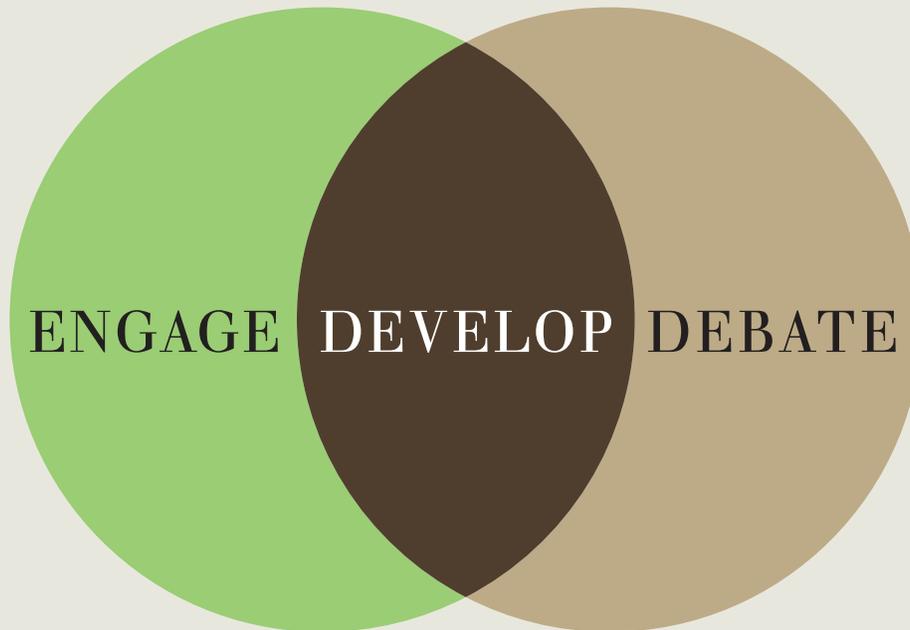


Suncor executives, Ivey faculty and staff, and Ivey students at the inaugural Suncor Energy Emerging Leaders Awards (SEELA).

Suncor Energy Foundation committed \$1.125-million to establish and support the Suncor Chair in Energy Policy at Ivey. The gift also supports undergraduate student awards, program outreach, case-writing and research.



Former Deputy Ministers of Industry and Environment, **Richard Dicerni**, right, and **Paul Boothe**, discuss regulation with Ivey students.



outreach

The challenges in the energy sector are complex, far-reaching and cross into almost every area of business and policy-making. The Ivey Energy Policy and Management Centre brings key stakeholders together in a neutral forum to discuss and debate policy options and priorities in an informed manner. In this way, we are helping advance and elevate the national dialogue on Canada's energy policies.

Hosting informed dialogues on energy

The revolution in natural gas

Shale Gas and Fracking: Energy Sector Revolution or Evolution? January 2013

The Ivey Energy Centre hosted a packed event for 80 students and faculty on shale gas, hydraulic fracturing and energy policy in Canada. **Guy Holburn**, Director, moderated a panel discussion with guest experts, including **Kevin Heffernan**, President of the Canadian Society for Unconventional Resources; **Margaret Meroni**, Executive Director of the Oil, Gas and Alternative Energy Division of Environment Canada; and **Burns Cheadle**, Associate Professor, Earth Sciences at Western University.

The discussion ranged from the technological challenges faced in extracting the shale gas to the policy challenges faced by government in balancing economic and environmental issues.



Photo: **Margaret Meroni**, Executive Director, Oil, Gas and Alternative Energy Division of Environment Canada.

“Shale gas has the potential to dramatically shape the energy sector in Canada. Government and industry need to collaborate in the development of shale gas to maximize its benefit for the whole country.”

– **Guy Holburn**, Director of the Ivey Energy Policy and Management Centre

Electricity regulation ripe for reform

Auditor General speaks at the Ivey Energy Centre Conference, April 2012

The Ivey Energy Centre and the University of Waterloo held an electricity policy conference in Toronto featuring Ontario’s Auditor General, **Jim McCarter**, as the keynote speaker. One hundred leaders from energy companies, government, universities, NGOs, and unions participated.

A roundtable for Canada’s energy leaders

Annual Energy Leaders Roundtable, April 2013

The Ivey Energy Centre partnered with the Council for Clean and Reliable Electricity and the University of Waterloo to organize the two day invitation-only Annual Energy Leaders Roundtable in Orangeville, Ontario. Keynote speakers included **Darrell Bricker**, CEO, Ipsos Public Affairs Worldwide; **Mathew Coon Come**, Grand Chief, Grand Council of the Crees; and **David McFadden**, International Chair and Partner, Gowlings.



Ontario to benefit from oil sands development

Oil Sands Roundtable Discussion, June 2012

In a forum organized by the Ivey Energy Centre, local companies and federal, provincial and city officials connected with members of the **In Situ Oil Sands Alliance (IOSA)**, a group of independent Canadian oil sands drilling companies, to discuss the opportunities for Ontario companies in the oil sands sector.

Photo: **Patricia Nelson**, Vice-Chair at IOSA and former Alberta Minister of Energy.



The future of the Canadian oil and gas sector

Ivey Energy Centre and Ivey Energy and Resources Club host panel discussion on the future of the Canadian oil and gas industry, October 2013

Panelists included Alex Pourbaix, President of Energy and Oil Pipelines at TransCanada Corporation; Greg Stringham, Vice President of Oilsands and Markets at the Canadian Association of Petroleum Producers; and Tyrone Brass, Vice President of the Northeastern Alberta Aboriginal Business Association, and Founder of Bayzik Oilsands Electric. The event was moderated by Professor Adam Fremeth. More than 120 Ivey students and faculty participated.

Photo: From left, **Guy Holburn**, **Tyrone Brass**, **Greg Stringham**, **Alex Pourbaix**, and **Adam Fremeth**.

“As a nation, we have to figure out what a national energy strategy means, given the regional and provincial differences we have in Canada. It’s a very important discussion because we have the potential to be an energy superpower.”

– **Russ Girling**, President & CEO of TransCanada Corporation

Ivey Energy Policy and Management Centre

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