

GOING GREENER

The Imperial Oil Foundation is increasing its support of projects that encourage consumers, students and businesses to be more environmentally aware and energy efficient *By Margo Pfeiff*

“YOU hear so much about energy in the news these days, about the price of oil, carbon issues, global warming, energy security, sustainability.”

Pierre-Olivier Pineau sits on the edge of his seat and leans across the table, speaking with urgency. “It’s all very confusing.” And it’s not just consumers who don’t understand exactly how it all works and what the best choices are for the future; company managers have questions too. “It wasn’t necessary to know about these issues before,” says Pineau. “Energy was cheap and everyone took it for granted. But now, with rapidly rising fuel costs, all that is changing.”

Pineau is an energy expert and associate professor in the Department of Management Sciences at Montreal’s École des Hautes Études Commerciales (HEC Montréal), one of the country’s most highly rated business schools. With funding from the Imperial Oil Foundation, he is creating a unique energy outlook and management case study called “Bringing the Big Picture to the Office” that will help business students and company managers alike learn about



complex global energy issues and allow them to make smart energy decisions that are not only good for business, but good for the environment as well.

HEC's case study is one of many environmentally oriented projects being funded by the Imperial Oil Foundation. Since the 1920s, four decades before the subject entered our everyday lives as a major issue, Imperial has been involved in dozens of environmental projects including the establishment of the Canadian Wildlife Federation.

In 2007, with environmental and energy issue stories featured

announced it will also begin funding a national "scrappage" program in January 2009.

As part of its efforts to address water quality concerns, the foundation is funding projects on both coasts. Vancouver Aquarium's science-based program "AquaVan" helps students discover the connections between animals, people and the environment by taking a large cube van stocked with live marine and freshwater animals to inland schools in British Columbia and Alberta.

And at the opposite end of the country, a similar program is taking place at the Quidi Vidi / Rennie's River Development Foundation

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on the front pages of newspapers, the foundation made a decision to significantly increase its support of initiatives involving these two areas. "We know that after health, the environment is the next most important concern on the minds of Canadians," says Imperial Oil Foundation president Monica Samper, "and that there are ever-growing business and societal expectations on environmental issues." In 2006, roughly five percent of the foundation's funding budget was devoted to environmental projects. The goal now is to increase that to about 22 percent with an annual average expenditure of \$1.4 million.

The foundation looked at many potential partners and identified specific areas where Imperial Oil has a footprint. As a result, funding is being directed into initiatives concerned with air and water quality, land use, energy conservation and environmental education. The grants range from \$1,000 to \$1 million and the initiatives are as diverse as our vast country. For example, Imperial continues its long-term support of the Arctic Science and Technology Information System (ASTIS), Canada's national northern database at the University of Calgary's Arctic Institute of North America. It is by far the best online resource for environmental information about Northern Canada, with 65,000 publications and northern research projects. At the same time, in the south, the foundation is helping save Alberta's boreal forest through a Nature Conservancy of Canada program called "Advancing Boreal Land Conservation through Private Rights Securement."

One venture that is currently surging in popularity is the Toronto-based Clean Air Foundation's national "Car Heaven" program, which Imperial has funded, giving more than \$1 million since it launched in 2000. Car Heaven makes it easier for Canadians to retire their older gas guzzlers. In most cases, the clunker is towed away free of charge to an accredited automobile recycling yard and a charitable tax receipt is issued from a charity of choice. On top of that, a gift certificate toward a new, more fuel-efficient vehicle has helped convince a total of 79,000 Canadians to take part in Car Heaven. The federal government recently

in Newfoundland. The group has a long-established educational program on Long Pond in the heart of St. John's, but with the foundation's help, its members are taking the learning experience "Water Quality Analysis" on the road. An instructor visits classes of grade 9 students across the province, spending a day with each class to teach proper water quality testing of streams and lakes. "They also 'sweep' a local stream for invertebrates – an indicator of water quality," says executive director Sharon Jeans. "And most importantly, they gain awareness of water issues."

Education is a key theme in the current lineup of Imperial's funding recipients. One of Samper's personal favourites is an innovative new school program called "Habitat in the Balance." "I like it because it offers the tools to help young people make intelligent and informed decisions," she says.

Habitat in the Balance is the brainchild of the Calgary-based SEEDS (Society, Environment and Energy Development Studies) Foundation, a non-profit organization that has been bringing environmental and energy education into the classroom curriculum of thousands of Canadian schools from kindergarten to grade 12 since 1976. Its programs include educating about climate change, the environment and energy. Imperial Oil Foundation has funded SEEDS since its inception.

In 2006, SEEDS was interested in creating a program to enhance young people's decision-making skills when the foundation came calling. "Imperial Oil was looking at funding something to do with habitat and we were thrilled when they also wanted to tackle decision making," says Margo Helper, SEEDS national executive director. "We worked so closely together on the development of the project, it felt more like a partnership than a sponsorship."

The result, when "Habitat in the Balance" is complete, will be 12 online modules presenting complex projects related to water, land, air and their inhabitants (including flora, fauna and humans). All modules will contain only Canadian scenarios. The first module is up and running and was introduced to grades 7 to 12 science and

social studies students in the fall of 2008. The Water Systems and Habitats module, which instructs students in making informed decisions about responsible allocation of water, presents a case study based on an actual development project outside Calgary. Set in an arid region, it is a proposed entertainment centre on 1,620 hectares that includes a shopping mall, three hotels, a casino, two horse racing tracks and a nature park. The problem is that there is not enough available water in the immediate area to support the project, and to make it work would require negotiating water rights from surrounding regions.

levels understand complex and interrelated global energy issues.

The second part involves distilling this big picture and making it relevant for the office, discussing innovative management solutions in relation to energy challenges such as price, supply and environmental risks. “The richness of the case study approach comes from the group discussion and interaction,” says Pineau. “It could also be used in a competition involving teams of students from universities across Canada to raise awareness of energy management and seek innovative management solutions. The challenges will not only be technological but behavioural... and this is where good manage-



Students access the module online and assume, or are assigned, the point of view of one of 12 stakeholders, playing such roles as developer, mayor, environmental activist, rancher or farmer. They then work through water allocation issues by looking at the project’s rationale and options. They are given all manner of background information and a host of perspectives from historical and scientific to economic and societal. Along the way, group discussions with the other “stakeholders” are held in the class as students evaluate their choices and the consequences.

In the end, the students make individual decisions based on what they’ve learned as to whether they would give the project the green light or not. Their results are presented in a final statement. “This way of thinking will help not only with energy and environmental learning,” says Helper, “but in decision making in general. We’re teaching them to think.” Imperial is funding Habitat in the Balance with \$500,000 over five years.

In many ways, the project at HEC Montréal is similar to SEEDS’ since its goal is also to help students make more informed decisions. “Imperial Oil realized there is an important educational role that is not being met,” says Pineau. “Many managers don’t have a high level of awareness about the myriad global issues that are relevant to energy.” And there is a lot to be aware of, from the politics of energy-producing nations, and emerging technologies to price stability, energy security, and the growing demands by customers that corporations take the environment into consideration. “They [customers and companies] want more than the image,” explains Pineau. “They want proof of real actions and efforts being made.”

Undergraduate, MBA and other managerial programs regularly use case studies in individual courses to support learning, but few studies exist on energy and even fewer focus on energy management. With a \$100,000 grant from Imperial over three years, HEC is developing a case study in two parts called “Bringing the Big Picture to the Office.” The first part of the quadrilingual (English, French, Spanish and Portuguese) program is to help students of all

ment will come into play.”

How will all this trickle down to help companies working in a competitive environment? A firm recently approached HEC to help determine if it should switch its commercial fleet of cars from gas to propane engines at a cost of \$4,000 per vehicle. Would future energy savings justify conversion costs? “Initially yes,” says Pineau, “plus there is the bonus of environmental claims for the company.” But, he continues, what if everyone follows the same path and the increased demand drives propane prices up? “We need to set up a detailed scenario for the firm that looks at where they are driving,” he suggests, “how much they are using the vehicles and where propane is available for refuelling.” If most of the kilometres are local and there is a good supply of propane in the area, then perhaps the switch is a good idea. “But,” he says, “there are many variables that must be examined before coming to a decision.”

In their desire to hedge against future price and supply disruptions, companies will increasingly be faced with new issues. Should we switch to rail from trucks to transport our goods? Diesel? Hybrid? Or do we stay with gasoline and switch later? Do we wait five years? Ten? A company is considering converting its industrial heating needs to natural gas. But within a decade the supply of conventional natural gas will be strained and non-conventional reserves will be costlier to extract, so is that a good choice? “Often,” says Pineau, “what we are being asked is, ‘How will the world unfold?’ So we need to create scenarios to look at all the variables to assist companies in these transitions.” Hence, the case study. “The goal is to help students and businesses understand all these complex and interrelated issues,” he explains, “so they can make decisions in their management choices more wisely, more efficiently and more productively.”

Imperial Oil’s funding recipients represent a diverse palette of change instigators with a positive, optimistic vision of the future. “We strongly believe we have the strength – to inspire, guide, and above all to teach about our environment,” says Samper. “We are determined to protect tomorrow, today.” ■