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IMPERIAL'S GREAT CANADIANS
GOING GREENER
COMING HOME FROM AWAY
RETURNING THE LAND
JANN ARDEN'S CANADA
150 YEARS OF FARMING FOR OIL
TAKING ON THE OIL SANDS CHALLENGE

Canada's oil sands reserves are needed now, and they can be developed responsibly

By Bruce March
Chairman, President and CEO of Imperial Oil

The oil sands of northern Alberta are undergoing rapid growth. Nearly $100 billion will be spent in the coming decades to produce this resource, which contains about 175 billion barrels—a reserve second only to Saudi Arabia's in size. This development has made the oil sands one of the most widely discussed energy stories. Recent polls suggest that Canadians are divided about this energy opportunity. Most agree that oil sands development has benefited our economy. At the same time, many are concerned about the impact of development on the environment.

Because bitumen is embedded in sand and clay, it takes more energy and water to extract the resource than conventional oil. Oil sands development contributes to greenhouse gas emissions and has a visible impact on the land for a period of time. These are legitimate concerns—and ones that industry shares. We are steadfastly committed to reducing our environmental footprint and are achieving significant progress on all fronts. Yet some are calling for a temporary halt to development while others argue that no further development should be permitted.

In a perfect world, halting or delaying development might be a valid choice, but the world we live in is far from perfect.

Consider the global energy outlook. World demand for energy continues to grow. And even with rapid increases in renewable energy, the world will depend on hydrocarbon fuels to satisfy most of its demand, at least for the foreseeable future. We will need oil—and more of it.

Canada has the good fortune of having a world-class resource. All told, about 13 percent of the world’s known oil reserves are in the oil sands. And while many of the world’s resources are in regions where political and civil stability are weak, making supply highly vulnerable, Canada has the additional advantage of possessing an enormous energy supply in a stable political environment. We are a resource-rich country in a resource-hungry world. And oil sands development is an essential piece of the puzzle.

While this energy outlook is promising for Canada, the industry faces environmental challenges. These are complex issues that will take strong commitment to resolve.

Take the issue of greenhouse gases, for example. Oil sands production currently accounts for about four percent of Canada’s total greenhouse gas emissions—or less than one-fifth of one percent of global emissions. By 2015, the oil sands are expected to produce three million barrels a day, representing three-quarters of Canada’s total oil output. By then, the oil sands will grow to eight percent of Canada’s total emissions.

Our industry is focused on finding and developing ways to reduce emissions. One such way is through energy efficiency. Imperial Oil, for example, is a founding sponsor of the Imperial Oil-Alberta Ingenuity Centre for Oil Sands Innovation at the University of Alberta. This centre brings together some of the best scientists and engineering minds to seek breakthrough technologies associated with all aspects of oil sands development, including more energy-efficient ways to extract and upgrade the resource.

Extracting oil sands consumes large amounts of water, but we are steadily improving our efficiency. For example, nearly 40 years of technical innovation at Imperial have helped to pioneer state-of-the-art water recycling techniques at our Cold Lake operations. Today, Cold Lake recycles 95 percent of the produced water that is recovered with the oil, helping to reduce requirements for fresh water. And research is ongoing to develop new solvents and processing techniques that will allow companies to further lower freshwater use.

A lot of attention has focused on operations that involve open-pit mining. This recovery method is used where deposits are found near the surface. Certainly, these projects have a visible impact on the land. But we are working hard to minimize this impact, reclaiming the land as we go. Moreover, only 20 percent of the resource can be developed using open-pit mining. Increasingly in the future, the focus will shift to the other 80 percent of the oil sands which lie deep underground. These reserves are recovered through "in situ" technologies that pump the oil to the surface from centrally located well clusters (Cold Lake is one such operation). Not only do these operations avoid the need for tailings ponds, the land they use can be reclaimed much more quickly because of smaller surface disturbance.

Because of the location of the resource, most oil sands development will occur in Canada’s boreal forest. Estimates are that current and future mining operations will disturb one-tenth of one percent of this 3.2 million square kilometre area. The industry recognizes the need to do more when it comes to protecting land and wildlife in this environmentally important region, and is developing and implementing new technologies and best practices—some of which are discussed in this issue.

There’s no question that the environmental issues associated with oil sands development are pressing. However, tough issues have a way of getting solved when we apply human ingenuity and technological innovation.

In the future, we will continue to face tough challenges as we go about developing oil sands. Our work is not done. We must constantly look for the ways to do things better, especially with regard to our environmental footprint. And here our goal is simple: In 100 years, we want no evidence that we were ever there.

In the end, the oil sands should be recognized for what they are—an enormous historic energy opportunity for all Canadians. If we do this right—as we are confident we will—the legacy we leave future generations will be one we can take pride in.
Despite its relatively small population, Canada continues to produce remarkable citizens who make major contributions not only to this country but to the rest of the world. Among these world-class Canadians are many who have worked, or are still working, for Imperial. Here, we profile five accomplished Canadians who are current and past long-serving Imperial employees from across the country. Like Canada itself, they represent a wide-ranging diversity, coming from very different backgrounds and with achievements in fields as varied as inventions, sports, politics, research and community leadership. All have overcome challenges and, models of resilience, have gone on to make significant contributions locally, nationally and internationally. With their admirable skills, courage and vision, they represent the potential both of the company and of the country.

**LOUIS MICHAUD  INVENTIONS**

For most people, a tornado is a force of destruction. For Louis Michaud, it's a source of energy. Michaud has invented a method of creating artificial, tightly controlled tornadoes, each of which could power a city of 100,000. He's drawn interest from federal and provincial governments, and now he's attracting international attention from media sources like the Discovery Channel, the Fox network and New Scientist.

Michaud, 67, who retired from Imperial in 2006 as a senior process control applications engineer in Sarnia, Ontario, says tornado power is cheap, clean and safe. It's also powerful. Even a medium-sized twister produces as much energy as a small power plant or 100 windmills.

The trick is in harnessing that power to make it completely controllable, predictable and stationary. "This is not a wild tornado, and there's no way it could 'jump out,'" Michaud says.
Natural tornadoes form when warm, humid air rises near the earth's surface, displacing cooler air above. Outside air then rushes in to replace the rising air, causing the entire mass to spin. Repeating this process, Michael has designed a small prototype in his garage. It looks like a cylindrical tank, about a metre high and a metre across, made of plywood and sheet metal. It's insulated with aluminum deflectors and has a plywood lid with a hole in the centre, like a doughnut. When he heats the air from below with a propane heater, he creates a mini tornado that shoots two metres high, with a vortex three or four centimetres in diameter. When he removes the heat source, the tornado dies.

Michael, who patented the process, which he calls the Atmospheric Vortex Engine, says a full-size operation would be 100 metres in diameter and create a tornado that spins at more than 300 kilometres per hour and reaches several kilometres into the sky. It would create a slight increase in local rainfall, but Michael says that too many locations, such as the American Southwest, could benefit from more rain. The heat source could be the sun or warm seawater, or, even better, the waste heat from an existing power plant, thus reducing emissions. At an estimated cost of $120 million including turbines and generators, Michael says it's far cheaper than a conventional power plant. "I don't see any reason why this process couldn't be developed within five years," he says.

Michael grew up in Campbellton, N.B., and earned a degree in electrical engineering when he was in the navy. While sailing around the world, he developed a fascination with meteorology. He worked variously in the aluminum and paper industries in Quebec, then in the nuclear industry in Ontario, before joining Imperial in 1980. In his spare time, he was always inventing. For instance, for Imperial he invented a level transmitter to measure the height of product in a drum for very low-temperature processes. "Working on my inventions forced me to do much more self-study, which enabled me to perform better at my Imperial job," he says.

Michael takes his vision of inventing from Albert Einstein, who once said that a solution should be "as simple as possible, but no simpler." At his retirement party, Michael's fellow engineers said this clarity of vision has informed his entire career, and called him consistently groundbreaking and an outside-the-box thinker. As one colleague said, "Louis has solved a huge number of important control problems using the simplest possible solutions." Michael, a grandfather of four, has high hopes that his father's tornadoes will prove to be the simple solution to the energy needs of future generations.

**PETER SZMIDT**

*CHAMPIONSHIP SPORTS*

When Canada joined a multi-country boycott of the 1980 Moscow Olympics to protest against the Soviet invasion of Afghanistan, Canadian champion swimmer Peter Szmidt decided he had had enough. He could seek out bitterness, or he could change his focus from competing in the Olympics and winning an Olympic gold medal to attaining his goal of setting a world record. He chose the latter. That summer, at the honorary Olympic trials held by most of the boycotting countries, the 18-year-old Szmidt swam the 400-metre freestyle in 3:50.49, a new world record that would stand internationally for 18 months and in Canada for almost two decades.

Szmidt's time was also good enough to have won Olympic gold if Canada had competed, but he has never harboured any resentment. "I didn't want to spend my life carrying the burden of not being able to have been a contender," he says. "I wanted to move on." Adele Szmidt, whose father was a member of the Polish underground resistance movement in World War II and a survivor of Auschwitz, "I guess maybe it's for intemorial fortitude rubbed off on me."

Szmidt, 47, a special projects manager and teleskoper with Imperial, was born in Montreal but learned to swim at the age of six when his family lived briefly in Greece. Returning to Quebec, Szmidt joined a swim club in Pointe Claire and by the age of 11 was swimming competitively. At 15, he won all five freestyle events at the Canada Games, the largest model event for any individual. At 17, he won silver and two bronze in the Pan-American Games.

On a swimming scholarship at the University of California, Berkeley, Szmidt majored in computer science and took weekly lessons with swim team athletes in team swimming, visualization and positive thinking. He credits visualization in particular for helping him on his record-breaking swim. "On a daily basis I would lie down, close my eyes and imagine every detail of the race, right down to touching the wall and looking up to see the clock," he says.

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Visualization is a tool he still uses. "Your chances of reaching your goal are so much more if you can actually see it."

After his triumphant, headline-making race, Simski returned to Canada to finish his degree at the University of Alberta in Edmonton. He won two silver at the 1992 Commonwealth Games and also won the 1994 Olympics in Los Angeles, but didn't make the podium. Still, he remained Canadian champion for eight years until he retired from swimming in 1994.

In 1985, hunting for a full-time job, Simski targeted Imperial because its Esso credit card holder and customer. He was impressed with the way Esso treated its customers. Also, Esso Petroleum Canada, an Olympic sponsor, had presented all the swimmers with Olympic rings. Simski applied for a position as a systems engineer, and although he got lost in Toronto and was an hour late for the interview, he got the job. "I think my work ethic came through," he says.

Simski is proud of Imperial for giving employees the chance to excel in a variety of jobs. "Once they gave me a job normally staffed by a chemical engineer, and I had no such training," he says, adding with a chuckle, "I managed not to burn the plant down." Modern aside, Simski recently won an award from ExxonMobil's industrial and wholesale department's Global Recognition Program.

Although earlier this year there were hints that some countries might boycott the Beijing Olympics over human rights abuses in China, Simski is pleased that the boycott didn't materialize. "I think clearer heads prevailed this time," he says.

JANE STEWART

Politics was the second career for Jane Stewart, who served as a cabinet minister in Jean Chrétien's government from 1993 to 2001. Her first career was with Imperial.

Stewart became fascinated with the study of psychology in the workplace when she took a bachelor of science degree at Trent University in Peterborough, Ont. After graduation, she was thrilled to get a job at Imperial's head office in Toronto as an employee relations analyst. "Imperial was one of the few companies hiring professionals specifically for employee relations with an understanding of the 'bottom line' importance of investing in employees' development," says Stewart, 53. "It was a dream job. I thought I'd died and gone to heaven." She worked particularly on job classification and salary administration, whose data in those pre-personal computer days all had to be keypunched onto thousands of cards.

Stewart was promoted to human resources adviser with Esso Chemical, then human resources manager at Esso Petroleum Canada, where she continued to learn about the new, leading-edge style of participatory management. "How much more vibrant and active and exciting the workplace is when you have a participative approach to management," she says. "That experience really resonated with me and guided me in my world view."

At 38, Stewart was ready for a new challenge. "I really wanted to help people reconnect with the government, so they wouldn't see it as an us-and-them situation," she says. Stewart had grown up with politics — her father was former Ontario Liberal leader Robert Nixon, and her grandfather, Harry Nixon, was Ontario premier in 1943 — so campaigning came naturally to her. She won her seat in the federal Brant riding and was soon appointed to senior positions, each time leaving her mark. As minister of National Revenue, she simplified tax accounting for businesses and had a "Thank you for filing your income tax return" added to every notice of assessment. As minister of Indian Affairs and Northern Development, she oversaw the peaceful creation of Nunavut and made a public statement of reconciliation to acknowledge decades of mistreatment of Aboriginal people, beginning the process that would ultimately lead to the formal apology earlier this year. As minister of Human Resources Development, she doubled the parental benefit period to one year.

Stewart's biggest political challenge was the so-called "billion-dollar boondoggle" of 2000, which involved ineffective financial and administrative practices regarding the funding of job creation projects. Ultimately, more careful audits found that all but $45,000 was accounted for, but Stewart says, "I learned that we had to do a better job of being accountable to the taxpayer. You can never have enough communications around this."

Charest stood by her and Stewart stayed in cabinet until 2003, but then chose to leave politics. She took a job as an acting executive director of the International Labour Organization in Geneva, which brought her back to her HR roots. Back in Canada, she served...
brieﬁng as chief of staff to Liberal Opposition leader Bill Graham, leaving when her mother suffered an aortic aneurysm. Her mother recovered, and Stewart spent a year as the province of Ontario's chief economic minister in the Caledonia land dispute, helping to deﬁne a volatile situation.

Today, Stewart feels she's come full circle. She's living in the house she grew up in, a 155-year-old limestone farmhouse in St. George, near Brantford, Ont. Her parents live in the brick cottage next door. The 120-hectare property, now with crops of corn and beans, has hosted parties and picnics with such esteemed guests as Chrétien, Pierre Trudeau and Lester Pearson. Stewart married since 2005 to her second husband, Henry Stolp, chairs the local United Way and serves on many boards, including the Centre for Addiction and Mental Health. Stewart says, "I still do so much volunteer work in the community that my dad says, ‘You running for politics or something?’"

Clem Bowman

RESEARCH

At 78, Clem Bowman won on the verge of winding down his research work and gearing up for the golf course when he learned that he had won one of the world’s most prestigious scientiﬁc honours — the Global Energy International Prize. Sometimes called the Nobel Prize of the energy world, the award comes with a cash payment of $1.3 million. Bowman and two Russian scientists would share the award, designed to foster international co-operation in solving challenges in the ﬁeld of power generation. Bowman was recognized for his groundbreaking work in developing technologies for extracting oil from the oil sands.

"This award has changed my life," says Bowman — and is keeping him too busy to see much of the golf course.

Bowman, a retired vice-president of ExxonMobil Canada living in Sarnia, Ont., is now spearheading efforts to aggressively pursue new energy technologies. Bowman agrees that Canada has the potential to become an energy superpower, as Prime Minister Stephen Harper famously said on the eve of the 2006 G8 Summit. "But not just any energy superpower," Bowman adds. "A sustainable and environmentally friendly superpower."

That means walking away from fossil fuels or closing coal plants, Bowman insists, but developing new technologies that maximize energy and minimize environmental impact. He recommends three approaches worth pursuing: First, gasifying coal (very different from burning coal) to create electricity and hydrogen. The hydrogen can then be used to upgrade the bitumen in the oil sands. Second, capturing carbon dioxide and storing it safely as a liquid underground instead of releasing it as a harmful greenhouse gas. Third, building a national electrical "highway" across Canada, which could be as signiﬁcant as the building of the national railway in the 19th century. Beneﬁts could include unparalleled economic and social wealth in Canada, Bowman says. "This should be our moon-shot. All that’s needed, he adds, is the political will to champion it.

Wing family roots in England, Ont., Bowman grew up in north Toronto and earned a degree in chemical engineering. He worked for a few years for DuPont in Kingston but realized he couldn’t get ahead without a graduate degree. He went back to school for a master’s and PhD, doing his doctoral thesis on the mass transfer from gases to liquids. He’d intended to return to DuPont, but Imperial lured him to work as a research chemist at its Sarnia operations. Imperial then leaped him for six years to Syncrude Canada, Imperial’s partner in the oil sands project. "That was hugely exciting," Bowman says. "It was clear that the oil sands were a growing resource for Canada. I felt I was following in the footsteps of many explorers and geologists over the previous half-century."

After returning to Sarnia as research manager, Bowman was personally lured back to Alberta by former premier Peter Lougheed to head up the Alberta Oil Sands Technology and Research Authority. A Crown corporation established to develop technologies to recover oil from deeply buried oil sands deposits. "It went reluctantly, because I was very happy with Imperial," Bowman says. After nine years, he returned to ExxonMobil to become research manager and then vice-president (research) from Imperial in 1986. As one colleague joked at the time, "This is the second Clem Bowman retirement party I’ve attended, and I’m not going to another!"

Bowman was on the open market for only a week before being approached once again by the Alberta government, this time to head the Alberta Research Council, a government-
owned corporation to develop and commercialize technology. Bowmans, still fascinated by the oil sands, took the job and stayed four years. In 1994 he was awarded the Order of Canada.

After receiving the Global Energy prize in St. Petersburg, Russia, in June, the married grandfather of four says that he's almost back to working full-time now that people see him as the bearer of a crucial message about Canada's role in sustainable energy: "It's hard to walk away."

MEL BENSON

Even before he got to Africa, Mel Benson knew about land negotiations, and he knew what didn't work. As the senior operations adviser in Houston for Exxon International, he knew that local governments, even village chiefs, sometimes pocket the money meant for the people. So when he set out on the first of 34 trips to Africa as part of the project to build a massive $4 billion pipeline in Chad and Cameroon, he was determined to try something different. "We firmly believed that the old method of land grants was unfair, and we wanted to do something right," Benson says.

Wherever possible, instead of giving cash, Benson and his team of French Canadians (French is an official language in both countries) negotiated payment in kind to benefit the whole community. They built schools, roads, parks and pharmacies and provided useful equipment like plows and sewing machines. They were sensitive to the community's needs when they built a well, they located it outside the village, not in the center, so other collecting water is a social outing for women. The attributes of the project are now considered a model for the world, and several World Bank projects have since adopted a similar approach.

Benson, 59, has spent his entire career building connections between indigenous people and industry. Born in a cabin in the tiny community of Philomena, on the Northern Alberta Railway line near Lac La Biche, Benson was the second of 13 children. "We were a poor family, but we didn't know it because the whole community was the same," he says. When he started school, he and his older sister used to hitch a ride on a classmate's horse-drawn wagon to get to the one-room schoolhouse. Benson's father, of Swedish-Dene background, was a road builder with little formal schooling, and his mother, a member of the Beaver Lake Cree Nation, didn't learn to read or write until her 40s. But Benson, who used to study the classroom globe, had more worldly ambitions.

Growing up in a family that believed in the importance of giving back to your community, even if you didn't have much to give, Benson started helping out at his local Aboriginal friendship centre in Edmonton, working on the weekly paper, putting out radio programs, and acting as a community liaison on native issues. He quickly developed a reputation for being a straight-shooter and for getting things done. Although he never completed a post-secondary degree, "I got my PhD in the streets," he jokes — he helped design and served as an instructor for the native studies program at Edmonton's Grant MacEwan College, which gave him an opportunity to work with elders. "That brought me really close to my cultural ties," he says.

After a stint with the department of the Secretary of State for Canada, Benson joined Imperial as an Aboriginal affairs adviser. He then became an operations manager for Saskatchewan, which quickly took him from the theoretical to the hands-on. "I'd never hugged a pipeline until then!" he says. He went on to head up operations in several different locations, including the Drayton Valley oilfield in Alberta and the Norman Wells expansion project in the Northwest Territories. He's proudest of helping to create environment that encourage Aboriginal employment. In 2003, he won a National Aboriginal Achievement Award for Business, which he calls "the proudest and most humbling experience of my life."

Since retiring from Imperial in 2001, Benson, who lives in Calgary and owns an 800-hectare brown ranch, continues to work. He is involved in pro bono work for First Nations communities in the Northwest Territories, and is a principal in four small public oil and gas start-ups. Benson also serves on the boards of the Northern Alberta Institute of Technology and Suncor Energy, and is a supporter of the University of Calgary Native Centre. "As a society we need to be committed to helping all Canadians, including the Aboriginal community, to get to an even starting line, so everyone can participate in the lifestyle we take for granted in Canada."

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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 Pleiff

"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..."
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?

on the front pages of newspapers, the foundation made a decision to significantly boost, giving its support of initiatives involving these two areas. "We know that after health, the environment is the next most important concern of the minds of Canadians," says Imperial Oil Foundation president Monica Samper, "and that there are enormous 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 85,000 pages of data on climate 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 Forest Land Conservation through Private Rights Realizations."

One venture that is currently gaining 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 2003. 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 national 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 announced it will also be funding a national "scrappage" program in January 2009.

As part of its efforts to address water quality concerns, the foundation is funding projects in both areas. Vancouver Aquarium's science-based program "AquaaVum" helps students understand water issues, while the "Eco-Habitat" program between animals and people and the environment by taking a large cube trucked 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 Quadi Vidi/Rennie's River Development Foundation 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 "sleep" a local stream for inventories - an exercise for students to learn about quality, says executive director Sharon Jones. "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 Sapem's personal favours is an innovative "new school program called "Habitat in the Balance." "It is like 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 something to do with habitat and we were thrilled when they also wanted to tackle decision making," says Mario Helpers, 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 forests, 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.

Students access the module online and, 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 constraints, rationale and options. They are given all background information and a host of perspectives from historical and scientific to recreational and philosophical. Along the way, discussions with the other "stakeholders" are held in the class as students evaluate their choices and the consequences.

In 2008, many of the project at HEC Montreal 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 Pienas. "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 know, and I think everybody wants more than the image," explains Pienas. "They want proof of real actions and efforts being made."

Undergraduate, MBA and other managerial programs regularly use case studies to 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 quintessential (English, French and Spanish and Portuguese program) is to help students of all 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 Pienas. "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 behavioral... and this is where good manage-
COMING HOME FROM AWAY
On a trip from rowdy St. John’s to historic Bonavista, travel writer Colleen Seto learns why Newfoundlanders are always happy to come home

Newfoundland isn’t for the faint of heart. With its often harsh weather and rugged terrain, “the Rock” can seem downright inhospitable. And yet, Newfoundland is home to the most welcoming, spirited and generous people one is ever likely to meet.

The island itself holds such an appeal that both those who “come from away” – CFAs – and native islanders living elsewhere yearn to return to this enigmatic place. Never have I fallen so truly, madly and deeply in love with a land so hard and so vast.

Much of the draw of Newfoundland lies in discovering its infinite offerings, whether they are the local characters, the landscapes, the music, the art or the wildlife. This is why Ken Sooley, an IT account executive turned tour operator, started CapeRace Cultural Adventures. As a way of getting back to his Newfoundland roots, Ken has devised unusual eco-cultural tours for visitors to explore Canada’s youngest province in authentic “choose-your-own-adventure” format. Tours are unscripted and rely on participants to drive the action. So be forewarned. Adventure is the name of the game here. If you want scheduled activities or five-star hotels, this is not the trip for you. But if you have a natural curiosity, a caretaker attitude and a propensity for fun, then pick-up!

As soon as I set foot on the Rock, I was warmly greeted and introduced to a local dish – deep-fried cod tongues and scrunchoons, which are small pieces of fried salt pork. Right there, even in my jet-lagged state, I knew I was in for a trip unlike any other. I breathed in the salty sea air and set off for my first stop, Admiral’s Adventure B & B in the Battery neighborhood of St. John’s.

After winding down 40odd stairs and plunks to sea level (leave the reluctant at home, ladies!), I entered the front door and met Bruce Peters, innkeeper, sea captain and adventurer extraordinaire. Bruce is the epitome of Newfoundland hospitality, having converted the former fishermen’s twine loft – basically a house on stilts, where fishermen store and mend nets, to an eccentric B & B akin to a homestay. Bruce has shyly built the guestrooms around the existing rock cliff, so directions like “Go past the softi and the rock” actually make sense here. Rooms are all full bar you need a bed? No worries, he’ll build you one. Seriously. In the few days I spent at Admiral’s, I witnessed Bruce build both a guest bed and a boat house floor to host a party. This is the type of do-it-attitude I was amazed to find throughout Newfoundland.

Up and at ’em the next morning, my fellow travelers Liz, Chris and Jamie and I piled in the car with a map, a list of “leads” outlining potential people and places of interest, and palpable excitement for what the day might hold. The CapeRace is like organized “swimming it” – the trick is you must be willing to go with the flow or, if necro-
“Even in my jet-lagged state, I knew I was in for a trip like no other. I breathed in the salty air and set off for my first stop, Admiral’s Adventure B&B in the Battery neighbourhood of St. John’s.”

sary, create the flow. We expected to take a few wrong turns, which we did, but we often wound up finding something we might not have otherwise. You can be both lost and found in Newfoundland so long as you’re open to new possibilities.

As a bunch of extroverts, we had no qualms about the freedom the tour offered and motor full-speed ahead, going west along the Conception Bay coast towards the Harbour Grace area, about 100 kilometres from St. John’s. There, preparations were underway to welcome home local hockey hero Dan Cleary of the Detroit Red Wings with the Stanley Cup. Remarkable as that was, we had other treasures in mind. For me, it was all about finding an iceburg.

It was a prolific year for icebergs by early May, the International Ice Patrol (ICP) had already counted 90 through iceberg Alley, which runs from the northern tip of Labrador down to the eastern coast of Newfoundland. The alley is also where the Titanic sank in April 1912. As a direct result of that disaster, the ICP was formed to track icebergs, which can threaten international shipping lanes in Iceberg Alley. An average year sees about 500 icebergs with the peak in spring. The trouble was that it was already late June, so most, if not all, of the icebergs had already moved through the alley. Along the Baccalieu Trail, a route derived from the Spanish word basica, meaning “saltfish,” we found a stretch of beautiful coastal scenery and fishing villages on the Bay de Verde peninsula. We asked the locals if there were any icebergs. Once we deciphered the thick accents of the region, we learned that icebergs had indeed been spotted in the last couple of days. That served to make me even more determined to find one.

After trying to locate a few MIA bergs, I began to think that perhaps the locals were simply too kind to tell us we had missed our chance. In our quest, we did we other notable sites such as the old cable station in Heart’s Content, where the first successful transatlantic telegraph cable came ashore in 1866. Unfortunately, my heart would not be content until I found an iceberg.

It wasn’t long before the island answered my call. Despite having earlier identified a group of houses as icebergs, Chris redeemed himself and caught sight of an icy jugged top as we rallied toward Heart’s Delight-Ishlington, a coastal town on Trinity Bay’s south shore where we’d be staying, about 140 kilometres from St. John’s. We veered onto a dirt path, and sure enough, we found not one, but three glorious icebergs in the cove of Western Bay. I ran so fast I nearly fell off the cliff in exhilaration. Another tick off my list of things to see before I die. Thank you, Newfoundland.

High from our successful iceberg mission, we arrived at one of Ken’s beautifully restored family homes in Heart’s Delight, the place that helped spur his passion for CapeRace Cultural Adventures. “My whole life in Toronto was work,” he recalls. “It wasn’t until I came out to Heart’s Delight and spent some time with my family that I realized how much fun they were having.” And so, CapeRace was born. It hasn’t just meant discoveries for visitors, but has also become a personal journey for Ken. “I’m finding out a lot about my family and why they are the way they are,” he says. In fact, many of his family members are involved in the business, including his cousins Elizabeth and Donna, who along with Elizabeth’s husband, Jerry, renovated and maintain the historic homes in which CapeRace stay.

We bravished into the William B. Skeyes house, planning to settle in for the night. That turned out to be wishful thinking. No sooner had we set down our luggage than Ken whisked us off to nearby Bay Roberts to attend a community event. It was the launch of the Pigeon Inlet Festival, a celebration of the works of Ted Russell, one of Newfoundland and Labrador’s most renowned storytellers, made famous by the Fishermen’s Broadcast on CBC Radio in the 1950s. It was an evening of music, humour, family and celebration—typical for any Newfoundland gathering. To wrap up the crowd stood and sang “Ode to Newfoundland,” the provincial anthem. Now, I’m not sure if my home province of Alberta has such a song, but I guarantee if we do, every person knows all the words. Here, everyone knew every word and sang it with such heartfelt enthusiasm that I choked up a bit. As I looked around the gymnasium, I saw several people overcome with emotion as they sang. Talk about loving your province. As Edmund Diossy, a Pigeon Inlet Steering Committee member, told me, “That’s the way we feel here. I’ve been across Canada, and I’m always happy to come home.”

That same sentiment was echoed by 34-year-old Stephen Clear, a Newfoundlander born and bred who just recently returned to St. John’s from Fort McMurray. As a native Altherian, I’ve met many Newfoundlanders who have ventured west for job opportunities. Some have become great friends and have settled in Alberta. When I heard Stephen had been working in Fort Mac, I asked him to share his story. He too, had traveled west to see what time and fortune might await him. He spent 16 months in Fort McMurray working every job including construction worker, counter, steam cleaner of heavy haulers (dump trucks used to transport bitumen), fuel and lube technician, parts runner and even ticket seller for a charity magic show. While the going was tough, he learned valuable lessons in Fort Mac: “It was stressful and hard, but worthwhile. That experience is worth something - I really learned to get things done. And I met a lot of great people.”

In February 2008, Steve returned to St. John’s with his girlfriend and can’t imagine being anywhere else. “When I wake up, I’m euphoric.”

20 FALL 2020

The Revero 21
"We veered off a dirt path, and sure enough, we found not one, but three glorious icebergs in the cove of Western Bay. I ran so fast I nearly fell off the cliff in exhilaration."

Atlantic fish, and beluga, which is called baloney by Newfoundlanders, and swallowing a shot of seaweed. We also had to kiss a cod — of the dead and frozen variety — and after that we were challenged with tongue twisters as the locals got a good laugh. Once we each shouted, "Long may your big job drain!" cheers rang out, and we were declared sons and daughters of Newfoundland. I will proudly cherish my screeched-in certificate forever.

The following day we trekked around the Bonavista Peninsula. The town of Bonavista is one of the oldest settlements on the northeast coast about 300 kilometers from St. John's. In Elliston, a few minutes drive from Bonavista, we came upon the puffin colony, where we found hundreds of the little seabirds that look like a mix between penguins and penguins. It was a sight to behold to see them whirling about on a windy, rainy and cold June morning.

It was also in Bonavista where I met amateur poet Wayne Taylor. As he recited his poems, "The Ocean at Our Door," it summed up for me what being a Newfoundland is all about.

Be we gone near or far
We craie to come home
From wherether we roam
To be by the sea
To be by the sea

Newfoundland is a place and a people shaped by the sea. It's not an easy life, but it's a storied one. The people are all spirited because their lives here demand they be. If you don't have a sense of humour, you're not going to make it through the winter.

Now, having experienced the province and its people first hand, I understand what the Newfoundlanders are all about. It's a hard place to live and to work, but the people are tough. They know that they have to work hard to make a living, and they don't mind the hard work because they see it as a future [and a] way to come home.

"Coming home" — a phrase I heard over and over during my time in Newfoundland. It seems that every Newfoundlander, whether living in the province or not, will always be a Newfoundlander and eventually return here. It's a title worn with such pride that it's hard not to feel a bit jealous of their strong sense of place.

But that's not to say we Newfoundlanders couldn't try our hand at becoming Newfoundlanders. The next night after a delicious lobster boil, we found ourselves at an honest-to-goodness kitchen party. The house was packed with musicians and partiers of all ages from 17 to 82, and we all sang "Oh, how they sing" a song that would make us eat our icebergs.

And this was serious business. Well, as serious as public humiliation can be. Former Heart's Delight-Ingonish mayor Stan Reid, who happened to be the lead musician/singer for the band, performed the honours, which involved each victim — I mean CFA — trying all sorts of Newfoundland delights. This included eating ausked caplin, a small

Everything is tranquil — it's kind of magical. You need to get away to really appreciate it all. And the longer you're away, the more you appreciate it.

After sharing a drink and a dance following the Pigeon Inlet event, Al Stacey, a neighbor from Carbonear, told me that he too understands the draw of Fort McMurray. He has two sons working in the oilands, both heavy equipment operators. "When you're young, free and footloose, it just makes sense to go," he said. "I would have done the same thing."

Al also pointed out that going away to work isn't new for Newfoundlanders: "I worked in mining in Sudbury when I was young. Many of us had to go work away. This is my sons' time and Fort McMurray is the place. In six or seven years, they'll be back. They don't mind the hard work because they see it as a future [and a] way to come home."

Since Newfoundland has developed its offshore oil and gas industry, there is renewed optimism for a stronger economy and more job prospects. In fact, next year could mark the first time the province comes off the federal equalization program since it was established in 1997, officially taking Newfoundland off the list of have-not provinces. Its budget surplus for 2008-09 is forecast to be $544 million, and Statistics Canada reported that the province's economic growth last year was 9.1 percent, more than triple the national rate. This gives Newfoundland oilands workers the potential promise for careers at home as they gain experience in the field in Fort McMurray. "If the oil comes online, everyone will come home," Al asserted.

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RETURNING THE LAND

From old refinery sites to oil sands operations, Imperial is committed to reclaiming the lands it has disturbed

By Brian Bergman

Industrial development disturbs land – there is no way around that. But how permanent or complete must such disturbance be? That, in essence, is the reclamation challenge facing any major energy producer. Societal expectations for how disturbed lands should be reclaimed – and how fast – are constantly evolving. Meeting those changing expectations requires a commitment to research and innovation to find the best ways possible of putting back together what has been torn asunder. A bit of humility doesn’t hurt, either.

Stuart Nadeau has spent the last five years overseeing environmental management for Imperial Oil’s proposed Kearl oil sands project. While reclamation plans for the megaproject are thorough and exacting, Nadeau is circumspect about the scale of the challenge ahead.

“This is an incredibly complex undertaking,” says Nadeau, environmental and regulatory manager for the mining project, which will tap into an estimated 4.6 billion barrels of recoverable bitumen. “We think we’ve got a comprehensive reclamation plan based on what we know today, but we will have to adapt and change as new practices and technologies emerge.”

For a large, integrated energy company like Imperial, the challenge of dealing with disturbed lands has been an ongoing process. In any given year, the company’s surplus property management division oversees the closure or renovation of dozens of retail service stations across Canada and rehabilitates those properties so they can be used or sold for other purposes. The same division handles the recovery of abandoned gas plants, terminals and well sites and is currently coordinating the remediation of lands associated with seven former refineries in or near Vancouver, Calgary, Regina, Winnipeg, Toronto and Montreal.

It’s a major undertaking. Imperial spends more than $150 million annually to rehabilitate surplus properties, including significant investments in new remediation technologies. For example, Calgary-based researchers are currently working on a promising new technology to turn subsoil into high-quality topsoil, a requirement in so many reclamation projects. Left to nature, this process can take thousands of years; research supported by Imperial is looking to reduce that timeframe to a decade or less.

Then there is the challenge of reclaiming land, wetlands and well sites at far-flung operations like those near Cold Lake, Alberta, where the company has planted more than 700,000 trees and shrub seedlings since 1998. And with its Kearl oil sands project near Fort McMurray, Alberta, Imperial will become even more immersed in the complex business of oil extraction and then reclaiming land in the sensitive boreal forests.

Imperial is one of several oil sands operators funding leading-edge reclamation research conducted by the Canadian Oil Sands Network for Research and Development (CONRAD). This includes studies into every aspect of improving oil sands reclamation, including revegetation, water management and the development of better reclamation materials. “Indeed, the oil sands operators are spending several million dollars a year on basic reclamation research,” says Ron Myers, manager of Imperial’s facilities and environment research group. “The vision is, how can we get to the desired end point faster, more effectively, and still fulfill all stakeholder expectations?”

What follows are snapshots of efforts to meet the reclamation challenge – past, present and future. They demonstrate that both the science and practice of reclamation are very much a work-in-progress. What was deemed acceptable yesterday often falls short of today’s standards, and that dynamic is bound to continue. So while significant strides have been made in recent years, more will always remain to be done.

The unexpected challenges that are part of reclaiming the site of a decommissioned oil refinery

When a petroleum company, like Imperial, sets out to rehabilitate a former industrial site, it’s prepared to deal with a wide range of issues, including potential contamination of soil and groundwater due to waste spills or disposals. But sometimes an entirely unexpected challenge arises.

Such was the case with the historic IIOCO (Imperial Oil Company) refinery lands, part of which form the Barrand Lakes, a critical waterway running from the Port of Vancouver inland to Port Moody. The IIOCO refinery, established in 1915, was originally built to supply fuel to the West Coast. Security concerns (including the possibility of the First World War reaching North America’s shores) contributed to the decision to amass some 260 hectares of land that helped create a buffer around the refinery.

The refinery ceased operation in 1995 and has since been largely demolished. A portion of the original 75-hectare refinery site continues to be used as a distribution terminal.

The refinery lands straddle two jurisdictions – the Village of Anmore and the city of Port Moody. While urban development was sparse when the refinery opened, that has all changed. Imperial has identified more than 80 hectares that could be sold and redeveloped for residential purposes, including a 60-hectare parcel of land within Anmore.

“You try to catch the animals in what are called pit traps, what are essentially ice cream pails buried in the creek bank that contain food the water shrews like to eat. They come along and fall into these pails. But you can’t allow any of them to perish, so we had to monitor these traps constantly – in an area where bears and the occasional cougar prowled.”

Peter Nicholson
"This type of well pad is a kind of island on the wetland," says Janzen. "We want to see if we can remove that island in a way that maintains the proper drainage across the site and allows natural vegetation and wildlife habitat to return." - Hanna Janzen

"At one time, the idea was backfill the mine, plant the trees, and you're done," says Thompson. "Today, it's to create self-sustaining watersheds and a diversity of habitat so it's not just a monoculture of spruce trees." - Don Thompson

Pilot project will help reclaim in situ well pads at Cold Lake

The reclamation of the Cold Lake wetlands is only the beginning. The amount of land affected in the province is vast, and the challenge is daunting. The reclamation effort is focused on the Cold Lake area, but it is just one of many that are underway across the province.

Oil sands projects, like Syncrude, are expected to eventually reclaim all disturbed land

Syncrude's Don Thompson knows all about the sensitive nature of resource development in the boreal forest. Thompson joined the oil sands consortium in 1979 and now serves as Syncrude's general manager of regulatory and external affairs. Over the years, he has seen many changes in reclamation objectives and techniques.

At one time, the idea was backfill the mine, plant the trees, and you're done," says Thompson. "Today, it's to create self-sustaining watersheds and a diversity of habitat so it's not just a monoculture of spruce trees."
There are two key words about this reclamation proposal, says Nadeau. First, it's progressive—we want to get in and begin the environmental work earlier. Second, it's adaptive, which means this plan will change as new technologies and learnings emerge, and as societal expectations about the desired end point of reclamation continue to shift. Stuart Nadeau

As society's expectations evolve, reclamation at Imperial's Kearl oil sands project will adapt

In his downtown Calgary office, Stuart Nadeau looks through inches-thick binders containing data and maps on Imperial's proposed Kearl oil sands project. "There's five years of my life in these books," says Nadeau with a smile.

Even so, he stresses that everything is about to describe is at the conceptual stage. At the time we are speaking, the project is still pending final approval by Imperial's board of directors. But it's quite an impressive concept—a multi-phased, 50-year mining operation running in tandem with an even longer reclamation program.

Nadeau also stresses that the initial Kearl plan builds on lessons learned by Syncrude and Suncor Energy Inc. during four decades of oil sands mining. It has similarly benefited from research by industry-supported, multi-stakeholder groups like the Cumulative Environmental Management Association (CEMA) and the aforementioned CONRAD. For example, CEMA, which monitors the cumulative effects of oil sands development, has helped facilitate the sharing of information about new reclamation practices and techniques, while CONRAD has been a leader in advancing tailings management technologies.

And the Kearl plan will continue to evolve. "There are two key words about this reclamation proposal," says Nadeau. "First, it's progressive—we want to get in and begin the environmental work earlier. Second, it's adaptive, which means this plan will change as new technologies and learnings emerge, and as societal expectations about the desired end point of reclamation continue to shift."

Those expectations have already changed considerably since the 1960s. Consider just one aspect—protection of fish habitat. Kearl will require the removal of 15 streams on the Imperial lease. As part of its reclamation plan, Imperial documented exactly how many fish, and what species, now exist in the affected streams. The regulatory expectation is that every bit of that lost habitat must be replaced on a site-to-site basis.

Since replacing the streams isn't feasible, Imperial has proposed a "compensation lake." As streams are removed, extension lakes will be added to the existing Kearl Lake. The fish will be relocated from the streams and taken to their new homes. These new lakes will be deeper, enabling more fish to survive winter freeze-up.

Another key feature is the use of "end pit lakes" to progressively cleanse the water on reclaimed lands. It is the idea to channel water that has some hydrocarbon contamination through a series of constructed wetlands and lakes to allow biodegradation to occur before the water is discharged back into the natural watershed.

Yet another challenge is that Imperial's reclamation plan must be closely integrated with the plans of neighbouring operators to maintain viable drainage patterns and wildlife corridors across the region. Imperial has already done in conjunction with Syncrude and Shell's Jackpine oil sands mine. "This requires a large industry-wide effort, including sharing information and reclamation materials," says Nadeau. "This was unheard of before. But people now realize that, to put things back together, we have to work together."

Nadeau is confident that over the life of the mine there will be further advances in every aspect of reclamation, including the critical issue of tailings technologies. "Every year, we advance things from a research standpoint. I know every reason to believe that will continue."

by the Alberta government (certified land becomes property of the Crown). Many environmental critics were underwhelmed, pointing out that the reclaimed area represented only a tiny fraction of all lands disturbed by oil sands companies over the past four decades.

Thompson finds that criticism misleading. Along with other oil sands producers, Syncrude is required to reclaim all the land it disturbs, which includes the remediation of tailings basins and mine pits. In fact, by 2012, Syncrude will have filled a decommissioned mine pit with CT produced from free tailings extracted from the Mildwater Lake Basin, the largest of its settling ponds. Syncrude has so far permanently reclaimed 22 percent of its original mining area lease, the largest share in the oil sands industry. "We have another 4,500 hectares that are out there growing and will eventually be certified," says Thompson. "Some of them are quite far along, but it takes time."

Those lands, he adds, are now being put to productive use. Gateway Hills is home to a 4.5-kilometre hiking trail, while other reclaimed areas support a thriving herd of 300 wood bison. "The point is we are reclaiming as fast as we can," says Thompson, "and every aspect of reclamation has been improved by research Syncrude helped fund."
You don’t say!

You do, I wish, even without a beer called “Waddie” right here in Albemarle. You have drunk, drank, drunk it! Yes, you know what I mean. It’s lovely stuff... but I disagree. My parents are good neighbors, think the goddamn stuff is toxic. If you have an old neighbor living 75 feet from you in this day and age, you could very well end up as a guest on The Jerry Springer Show. I am sure I can, see into my parents’ house. I can imagine them turning their TV off right at that eerie blackness, suddenly just disappears when they finally find their remote and click “off.” At 11 o’clock, like clockwork, the clownish seagulls build the most ridiculous nest... and then to bed. I can see every light being turned off as they make their way through the house. First the TV goes off, then the hallway lights and then the living room lights, then the backyard light, and then the kitchen light, and finally the hallway light. It always makes me smile. It’s comforting knowing that they are there and that they are fine and, still moving ever forward.

I am lucky to be able to do this. I am lucky to be able to have them here with me.

We, my parents and I, had always talked about buying land further out of the city and building two homes on it so that we could look out for each other. I have traveled 250 days a year for nearly 16 years now. Of course, with my parents getting older, we thought it would be great to live as close together as possible without somehow turning into a group of a weird kids. I am quite sure we’ve done all this years sooner than we thought we would have to, but the city was sleeping at our souls and it was just time to leave our old life and move into something new. I think I will have mine paid off in just under 27 years... if I double up a few payments, but who’s counting? The day I moved in was overwhelming in so many ways. I felt like all the work I had put into this had actually created something that I was proud of. I was excited. My new house seemed like a dream. It is a beautiful house in the middle of a quiet neighborhood. We have a large yard, and the neighborhood is great. I could never imagine living here before.

It matters where I go in this world, the respect that is paid toward me simply because I live in this country astounds me. People here are so kind and considerate of each other. I have no idea why I am so lucky to live in such a beautiful place and I always say, “Yes, I am the luckiest girl in the world.”

And yet, through generations of hard times, some families stubbornly held the faith that this hard work and sacrifice would have its day. The longest-standing are the Fairbanks, an oil-producing family who supplied fuel to Imperial even before the company was incorporated.

“We are the oldest supplier to Imperial at the Imperial Oil Company and become a refinery, he was determined to be an “oilman.” And, in the early days, his logic made sense. In 1950, when Canada’s oil production was about 400,000 barrels per year, Fairbank’s company was the largest oil producer in the country. He was also the inventor of the jetter line system of pumping oil, which involves running multiple wells from a central steam engine rather than pumping the wells individually. It was a simple but efficient invention that caught on and spread around the world.

Despite the eventual loss in standing for Fairbank Oil the company always kept good relations with Imperial Oil. Fairbank II recalls a time when his father dropped in at Imperial’s former head office on Church Street in Toronto to discuss prices with the then-vice-president Alex McQueen: "When the prices were too low for local production Imperial would help out. It wasn’t an accommodation you’d expect for the little guy.”

Now Fairbank is determined to keep the family business alive. In the 1990s, he bought adjacent properties with wells that had been abandoned some 50 years before. With a metal detector in hand, he went out and found several wells, cleaned them out, both, and they have been in production ever since.

Fairbank’s land is much different than it was in 1949. Today, it is covered with green grass and trees, jetter-line wells and sheep that operate better than any lawnmower, and a killer jet line that keeps the grass short. He describes his 363-hectare property as a “small scale farm that’s in harmony with nature.”

Using the same technology his great-grandfather invented, Fairbank produces about 24,000 barrels of oil per year from his 350 wells. In fact, his field is the largest in the country.

He describes himself as a “historic oil producer” who is proud to live in his childhood home, but his pride is more about the history of the wells. "That place means a lot to me, more than anything else. It’s his home, his property, his history. He uses the word "home" here."

In Review

The first oil boom began in 1856 when James Miller Williams dug a shallow well in his property in Black Creek, Ontario, later to be renamed Oil Springs. When oil bubbled to the surface, he made history by turning his discovery into the first commercially successful oil well in the world.

Dices after him followed, led to punch holes in the ground in hopes of finding their fortune. Unfortunately, peak production for Oil Springs hit in 1862 and has been in decline ever since. The peak production for Oil Springs hit in 1862 and has been in decline ever since.

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