

Public Interest

Reforming Canada's Oil and Gas Industry











INSTITUTE



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About the Authors

David Thompson is an independent public policy consultant and a Parkland Institute Research Associate. He has post-graduate degrees in law and economics, and has worked in government, the private sector and the not-for-profit sector.

Keith Newman is Director of Research for the Communications, Energy and Paperworkers Union of Canada. He has an undergraduate degree in chemistry and a postgraduate degree in economics and has worked in the private sector and for unions and non-governmental organizations.

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This report is one of many issued from Parkland Institute's Energy Security Research Program. This program is a series of research papers addressing key energy challenges facing Canada in the coming decades. These papers provide both a political-economic analysis and policy recommendations for improving Canada's energy security.

The series was commenced with Parkland Institute's discussion paper, *Toward an Energy Security Strategy for Canada*, published in December 2005. That paper introduced a range of long-term energy security issues.

Fuelling Fortress America: A Report on the Athabasca Tar Sands and U.S. Demands for Canada's Energy, co-published with the Canadian Centre for Policy Alternatives and Polaris Institute in March 2006, examined the local costs of Alberta's tar sands developments, and critiqued the strategic support for exports to the United States.

Freezing in the Dark: Why Canada Needs Strategic Petroleum Reserves, published in January 2008, explored the need for Canada to develop strategic petroleum reserves — short-term stores of oil that can be released during supply shortages to meet regional needs. Eastern Canada is a net importer of oil, receiving up to 90% of its oil from overseas, much of it from OPEC countries such as Algeria, Iraq, and Saudi Arabia. Eastern Canadians are vulnerable to global oil supply shocks, and strategic petroleum reserves would reduce that vulnerability and create a mechanism to insulate Canadians from price fluctuations.

Over a Barrel: Exiting from NAFTA's Proportionality Clause, published in May 2008, examined the impact of the North American Free Trade Agreement (NAFTA) on Canada's future energy security. In a context of peak conventional oil and gas, NAFTA's "proportionality clause" guarantees future U.S. access to Canadian energy at the cost of Canada's security of supply. This paper recommends that Canada follow Mexico's lead and obtain an exemption from the proportionality clause.

The Energy Security Research Program complements a large number of other energy-related reports, all of which are available on the Parkland Institute website: www.ualberta.ca/parkland.

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Parkland Institute
University of Alberta, 11045 Saskatchewan Drive
Edmonton, Alberta T6G 2E1
Phone: (780) 492–8558 Fax: (780) 492–8738
Website: www.ualberta.ca/parkland

or The Canadian Centre for Policy Alternatives #410 — 75 Albert Street, Ottawa, ON K1P 5E7 Phone: (613) 563–1341 Fax: (613) 233–1458 Website: www.policyalternatives.ca E-mail: ccpa@policyalternatives.ca

E-mail: parkland@ualberta.ca

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SYNOPSIS

Canada's oil and gas industry creates significant environmental, social, and political problems for Canadians. This is partly due to the nature of the for-profit, private-interest business corporation, which dominates that industry. The business corporation has a mandate to maximize share value and profits, and this translates into boosting consumption and externalizing costs.

Some of the problems can be resolved by purchasing the industry and converting it to an industry aimed at serving a broader public-interest mandate. Legally and financially, the transformation would be relatively straightforward, and there are precedents.

An interesting set of design questions warrants further discussion: the type of ownership (whether public or private, or a mix), rent entitlements and federalism, stakeholder involvement, specific mandate elements, and preparations for the transformation.

Summary

This paper is aimed at promoting a discussion of the oil and gas industry in Canada, and specifically the prospect of transforming its mandate to one aimed at serving the public interest.

Industry problems, and their cause

Currently, the oil and gas industry creates a number of serious environmental, social, economic, and political problems. The environmental impacts of oil and gas extraction activities, such as Alberta's tar sands, are profound. Oil and gas corporations pay low royalties to the public resource owners and stridently resist any increases, even in times of record profitability.

Climate change, however, is the biggest problem. A catastrophe in the making, human-induced climate change is projected to cost trillions of dollars in economic harm, and mass extinctions within a generation. Yet an industry of climate change deniers exists, with funding from the energy sector, strategic assistance from public relations (PR) firms, and close ties to current governments. Their efforts in lobbying, PR, and litigation have been successful in heading off serious government action on climate change, as well as in other areas.

These issues are symptoms of a deeper underlying problem: the nature of the oil and gas industry itself. Simply put, the structure of the large, for-profit business corporation — like those that dominate the oil and gas sector — generates problems. It is programmed to maximize share value, and it causes serious social and environmental problems because of this mandate.

In the long run, maximizing share value means maximizing profits, which in turn means increasing revenues or reducing costs, or both. For the oil and gas industry, raising revenues means raising consumption. And an effective means of reducing costs is to create and maintain "externalities" — the imposition of costs on others (e.g., pollution).

While some of the harm arising from oil and gas results from the nature of the product itself, some does not. The industry works hard to increase consumption and externalize costs. If, instead, it just met market demand, the social and environmental harm would be reduced. Can oil and gas corporations do so? Can they simply decide to work toward demand reduction and cost

internalization, even if it means reducing share value and profits?

In a word, no. The share value maximization imperative is backed up by corporate law, which holds that directors of a corporation can be sued if they fail to maximize value for shareholders.

Will corporate social responsibility (CSR) provide an answer? By treating workers and communities fairly, a corporation can boost its reputation, and thus sales and profits. However, corporations can't serve environmental or community interests to the extent that it would reduce profits. Corporations often conduct costbenefit analyses (CBA) to determine whether to risk harming others or risk harming the bottom line. The Ford Pinto and Chevy Malibu cases show that corporations will choose to save money by scrimping on safety features, even when doing so could result in hundreds of deaths. While CSR takes corporate reputation into account in CBAS, it can't undo the basic rules of corporate law.

In large, for-profit corporations, the profit imperative simply outweighs considerations of social, economic, and environmental harm. As long as the oil and gas sector is dominated by for-profit corporations, these problems will continue.

Fortunately, it doesn't need to be this way.

A public-interest alternative

The oil and gas industry can be converted to an industry with a mandate aimed at serving the broader public interest, not just private interests.

Indeed, Canada's private-interest industry is distinctly out of step with the rest of the world. The great majority of oil reserves elsewhere are controlled by publicly-owned companies. The private-interest industry controls only about 10% of global proved reserves. (Ironically, there are plenty of public companies participating in Alberta's oil patch, but all of them are foreignowned.)

A public-interest industry could be set up to supply all of the oil and gas that customers want,

but without the efforts to boost consumption and externalize costs. It would no longer be engaged in lobbying, litigation, and PR campaigns to prevent and undermine effective conservation and emissions-reduction efforts. And, needless to say, it would be a Canadian industry, not a foreign-owned one.

Furthermore, a public-interest company could be mandated to help in:

- boosting job-producing, value-added, cleaner downstream industry development in Canada;
- instituting demand reduction through carbon pricing;
- making oil patch development more orderly and less inflationary;
- boosting security of energy supply for Canadians;
- enabling full capture of rents; and
- developing job-creating renewable energy.

How would the transformation be carried out?

As with any corporate acquisition, the cost of buying out the industry would be paid for out of its future profits. In other words, the net cost would be zero, or close to it.

The up-front payment would be on the order of \$330 billion(Cdn) to purchase the firms producing a majority of Canada's oil and natural gas output, based on market capitalization in mid-November 2009. Changes in circumstances could alter the up-front price in the future.

This figure is not so daunting when compared to the \$490 billion of Canadian military spending announced in June 2008 or Norway's Pension Fund (built with oil revenues) of about \$450 billion, or even the size of federal surpluses and deficits (tens of billions per year) and recent federal corporate tax cuts (\$15 billion per year). If the current industry is made to play by

the same rules that the public-interest industry would play by when it is established, the price would be lower.

Governments in Canada have the legal authority to acquire corporations and create new businesses with pubic interest mandates programmed into their governing documents. Both senior levels of government have owned energy corporations in the past: for example, the Alberta Energy Company and Petro-Canada. Neither the Constitution nor trade agreements impose barriers to converting the industry to a public-interest mandate.

Of course, this wouldn't stop corporations from litigating; strategic litigation doesn't require a winnable case in order to be pursued. However, providing fair value compensation — as proposed in this paper — would take the wind out of the sails of any litigation. And amending or withdrawing from NAFTA, if that were necessary, could be accomplished in a matter of months.

Several interesting design issues would arise in the transformation.

Public, private or mixed ownership?

Public ownership is one way to enable a publicinterest mandate. Although nationalizing oil companies is supported by at least half of Canadians, public ownership in general has become an ideological bogeyman for political leaders across the mainstream spectrum. However, with the recent degree of public involvement in the financial and automotive sector bailouts, this ideology no longer determines practice.

In any event, public ownership is not the only way to enable a public-interest mandate. Other models are available, such as social enterprises run by charities and non-profits. Social enterprises have organizational structures that are similar to those of corporations, and control large diversified industries in Canada and globally. Another model, the co-operative, is common throughout the world, the Canadian co-operative sector alone employing 160,000 people

and controlling \$167 billion in assets. Canada's Federated Co-operatives Limited even runs an oil and gas business.

Yet another model, the Community Interest Company, has recently been developed in the United Kingdom. The existence and success of such business models demonstrate that a public-interest energy corporation can be created with public, private, or mixed ownership. The ownership decision would turn on a number of factors, including democratic control, stability, service of Aboriginal interests, public acceptability, and federal/provincial relations.

Would the new replacement industry be comprised of one entity, or many? If many, would they be competitive, subsidiaries, or joint ventures? Would some be for-profit? These are all questions open for discussion, and would need to be considered in light of the larger goals of the transformation.

Rent entitlement, and producing and consuming regions

The public owns the vast majority of oil and gas in Canada, and is entitled to the rents (excess profits) from their development. However, the private-interest oil and gas corporations capture an enormous share of those rents — a remarkable transfer of wealth from the public to corporate shareholders. Royalties and taxation are one way to capture those rents. Another way is through public-interest ownership, which enables both an accurate determination of the size of those rents, and their full capture.

Which regions of Canada would be entitled to those rents? Currently, both producing and consuming regions benefit from rent capture via royalties and taxation. With a public-interest industry, both could benefit even more. In practice, however, the level(s) of government that captured the rent could depend largely on which government(s) established the new public-interest industry. It is possible that, if a producing province like Alberta or Newfoundland and

Labrador acted first, it could retain the additional rents and not need to share them. In any event, the rents shouldn't be seen as a bonanza for current generations. They result from extraction of natural capital, and instead of being liquidated to finance regular spending, they should be gradually converted to investments in infrastructure or education that will provide benefits in future years when natural capital is depleted.

Stakeholder involvement

The vast majority of workers currently employed by the industry would still be doing their jobs after it was converted to a public-interest mandate. Only those few engaged in undermining public policy would be redirected or dismissed. The directors would consist of people knowledgeable about the business and the full range of issues within the public-interest mandate of the industry. The members/shareholders would represent the equity owners and the broader public, being chosen from across occupations, regions, and cultural and other groups.

A new mandate

The new mandate of the public-interest industry would include working for improvements in job-rich, value-added processing, energy conservation, energy security, renewable energy development, improved employment conditions, and environmental protection. Performance indicators would enable directors and managers to be

evaluated and compensated on the basis of the outcomes produced in each of these areas.

Preparing for the transformation

The transformation would require significant preparation, including stakeholder negotiations, advanced implementation of the policy framework (the rules that the public-interest industry would play by), and public education and outreach to inform the public about the change and counteract any disinformation circulated by the current industry.

Conclusions

The private-interest, for-profit oil and gas industry creates significant social, environmental and political harm, much of which is a result of its profit-maximization mandate. However, the industry can be transformed to have a public-interest mandate. Doing so would result in business as usual for the vast majority of the sector's workers. But vital changes would take place: an end to consumption boosting, cost externalizing, and lobbying, litigating, and waging of PR wars against public-interest regulation. And with those changes would come reductions in fossil fuel consumption, increases in employment, development of renewable energy, a cleaner environment, and healthier people.

With oil prices at around one-half their previous levels, as Stephen Harper famously said, this could be a "buying opportunity."

Introduction

"[I]t is entirely reasonable that national governments should have legitimate policies different from those of oil majors when it comes to exploiting the natural resources of their countries..."

-Lord Ron Oxburgh,

Former Chairman, Royal Dutch Shell¹

Oil and gas extraction provides immediate economic and fiscal benefits, but the longer-term costs of local environmental and health impacts, social and economic dislocation, and contributions to human-induced climate change are extremely high. Furthermore, the public economic and fiscal benefits obtained from the extraction could be improved upon, significantly. Indeed, oil and gas extraction under the current system amounts to mortgaging the interests of future generations for what is largely short-term financial gain.

However, the oil and gas industry could be converted to an industry that focuses foremost on serving the public interest. This paper is aimed at promoting discussion of the ownership structure and mandate of the Canadian upstream oil and natural gas sector. It is part of a larger,

Alberta-led initiative that will seek input from Canadians from both energy-producing and energy-consuming regions.

Three key facts prompted this initiative:

- 1. Currently, the structure of the Canadian oil and gas industry is overwhelmingly private-interest, for-profit, and majority foreign-owned.
- 2. The structure of that industry, like any, influences its behaviour.
- 3. The current structure of the Canadian industry is not inevitable; indeed, globally it is the exception rather than the rule.

A number of recent publications² have briefly addressed the possibility of a public-interest oil and gas sector. Converting the private-interest, for-profit oil and gas industry to a public-interest industry provides a tremendous opportunity to create more jobs, address climate change and local environmental impacts, and capture wealth that can be saved for the future when resource revenues dwindle.

This paper is intended to broaden and deepen this discussion, and advance the project of mapping out the steps to converting the industry. Its aim is not to provide firm answers for every question, but rather to provide a foundation for discussion, and to help identify relevant issues.

The first section of the paper points out a few of the major social, environmental and political problems caused by the oil and gas industry. These include losses of wealth for the public owners of the resource; environmental impacts, including the impending climate disaster; economic disruption for other exporting industries; and an undermining of democracy.

The second section analyzes a significant cause of these problems — the for-profit, private-interest nature of the industry, which drives corporations

to boost consumption and exports, externalize costs, and fight against public-interest regulation.

The third section discusses how the industry's mandate could be transformed to one of serving the broader public interest, and the abovenoted problems thereby mitigated or eliminated. It discusses the legal and financial means of transformation, and a series of design issues that would need to be resolved in carrying out the transformation.

Finally, the paper finds that, not only is this transformation possible, but, given oil prices, it may be opportune.

SECTION ONE

Problems created by the oil and gas industry

The oil and gas industry creates a number of serious environmental, social, economic, and political problems.³

The environmental impacts of oil and gas extraction are serious and widespread. The toxic lakes created by Alberta's tar sands are just one example. Gas wells can degrade local air quality, coal-bed methane development can put groundwater at risk, and pipelines fragment habitat, in some areas causing as much forest loss as industrial logging.

Oil and gas corporations also strenuously resist paying adequate royalties to the public owners of the resource, resulting in a loss of revenues to support public services, infrastructure, and long-term savings.⁴ After a year of record profits, one corporate CEO told Alberta's Royalty Review Panel: "It's a myth out there that this is a hugely profitable business." What he confided to his investors was a bit different: that his company's tar sands project will produce a "wall of cash flow" that will be "sustainable for decades." ⁵

On October 1, 2007, Alberta's Auditor General concluded that the Alberta government itself had identified roughly \$1 billion per year in royalties that were owed by energy companies,

but were never paid. The government knew at least three years earlier that it was losing royalties from energy projects such as the tar sands, and the energy minister knew but "chose not to act." Much of the rents that are not collected by the public end up leaving Canada and going to foreign shareholders and parent corporations.

The industry also tends to drive a boom-bust development style. When the boom is on, spending is fast, inflation is driven up, and temporary foreign workers are imported. When the bust comes, unemployment goes up and provincial revenues drop.⁷ Former Alberta Premier Peter Lougheed has repeatedly called for more orderly development of the tar sands, which he refers to as a "mess" and a "mad rush." It seems that a market-induced moratorium on new tar sands development is now upon us. However, when energy prices recover, the mad rush is ready to resume.

However serious these problems are, climate change is foremost among the problems created by the fossil fuel industry. This paper will not go into any depth to describe this problem or evaluate its impacts, as the science and economics are discussed in many other sources. ¹⁰ Suffice it to say that economists are calculating trillions

Ramping it up: Litigation

When lobbying and PR don't work to sway public policy decisions, litigation is deployed. NAFTA's⁸⁷ investor-state provisions enable corporations to sue governments if their "investments" are adversely affected by regulatory changes. Ethyl Corporation's \$250 million suit against Canada's ban on the gasoline additive MMT, a suspected neurotoxin, was settled for just \$13 million, but more importantly prompted a withdrawal of the measure.⁸⁸ More recently, ExxonMobil and Murphy Oil Corp. have sued for \$50 million⁸⁹ over Newfoundland's policy requiring oil corporations to conduct research and development work in Newfoundland and Labrador.

of dollars in economic harm if we don't adequately address climate change, 11 and scientists are predicting catastrophic changes, including mass extinction within a generation. 12 Of course, the consensus scientific position is that climate change is being induced by human activity. 13

Yet there is an entire industry established to deny the problem and use lobbying and PR to forestall policy progress. A glimpse into the climate change denial industry is provided by Professor Donald Gutstein, who describes some of the players in both the United States and Canada. He also outlines some of the funding of the denial industry, generously provided by Exxon-Mobil and its Canadian subsidiary, Imperial Oil, among other energy corporations. ¹⁵

Gutstein further describes the PR expertise provided to the climate denial industry by APCO Worldwide, the firm that organized the Big To-

bacco-funded "Advancement of Sound Science Coalition" to attack the science on second-hand smoke. Canada's own "Friends of Science" fronts a "coalition of oil-patch geologists, Tory insiders, anonymous donors, and oil-industry PR professionals" aimed at getting climate change deniers more profile across the country.¹⁶

In August 2008, the Public Campaign Action Fund estimated that the U.S. oil and coal industry had spent \$427 million—in 2008 alone—on "political contributions, lobbying expenditures, paid advertising and political spending by outside organizations." Canada's "Friends of Science" has also received funding from oil companies, filtered through a foundation to keep the amounts and names confidenial. 18

Politically, the impact of the fossil fuel industry and its lobbying, PR, and litigation is to undermine democracy. Not surprisingly, international academic studies have found that oil and democracy have a significant inverse correlation. Gutstein points out the unparalleled access the climate denial industry has to political leaders. He names some of the industry lobbyists who have become Stephen Harper's closest advisors, and reminds us of the prime minister's extremist assertion that the Kyoto Protocol is a "socialist scheme to suck money out of wealth-producing nations."²⁰

Friends of Science founder Albert Jacobs notes the success of the climate change denial strategy in affecting federal government policy: "Our success is very recent, and our success is tied to the Conservative government."²¹

A deeper systemic problem: The private-interest corporation

The issues discussed above are not isolated examples, and they are not coincidences. They are linked to a deeper, systemic problem. Indeed they are the symptoms of that problem.

Simply put, the mandate of the large, for-profit business corporation²² generates problems. It is programmed to maximize share value and profits. And it can and will cause serious social, environmental, and political problems if doing so will maximize share value and profits.

It is often pointed out that small corporations don't necessarily have to behave this way. Sometimes, for example, they can put the environment ahead of profits. This is because they often are structurally different from large corporations. Small corporations are often managed directly by their shareholder(s). In this case, the conscience of a shareholder can direct the corporation, and it can avoid making decisions that would impose harm on others.

Most²³ large corporations, however, are managed by a board of directors on behalf of the shareholder(s). It is large corporations such as these that dominate the oil and gas sector, and are the subject of this paper.²⁴ The "agency problem" arises in such large corporations. The board

is the agent of the shareholders in managing their property (the corporation). The agency problem refers to the fact that the board, by virtue of its position as agent, could conceivably do something that reduces the value of shares. Corporate law has addressed the agency problem by instituting a rule requiring that directors manage the corporation in such a way that it maximizes share value.²⁵

What maximizes share value? Share value is often considered a reflection of the net present value of the stream of future profits. So, in the long run, maximizing share value comes down to maximizing profits.²⁶

Maximizing profits means doing one or both of two things: maximizing revenues and minimizing costs. In the case of the oil and gas industry, maximizing revenues means striving to sell more oil and gas. Selling more oil and gas means increasing consumption of oil and gas, and thus more greenhouse gas emissions. Hence the for-profit nature of the industry, in and of itself, drives the industry to encourage more oil and gas consumption than would otherwise be the case. And if potential regulatory changes are aimed at reducing consumption, then the corpo-

Corporate social responsibility — not the answer

Corporate social responsibility (CSR) is often touted as a solution to the problem of profit maximization. CSR advocates point out that, by treating workers and communities fairly, a corporation can boost its reputation, and thus sales and profits.

This can be true. However, the legal obligation to maximize profits and share value puts a hard and fast limit on the ability to serve such other interests.

Corporations cannot act so as to benefit the community, the environment, or anyone or anything else if doing so would fail to *maximize* (not just increase) profits. So, if a corporation faced two competing investments — investment A, which protected the environment but boosted share value by \$10 and investment B, which harmed the environment and boosted share value by \$11 — it would have to choose B.

How does it work in the real world? In 1973, Ford Motor Co. projected its likely costs from death and injury lawsuits caused by explosions of its Ford Pinto gasoline tanks. The cost of fixing the gas tanks was higher by \$11 per car. The cheaper tanks were thus chosen, and hundreds of people died in fuel-fed fires.⁹⁰ Corporations are the ultimate "rational economic actor," and such a cost-benefit analysis (CBA) is the norm for a large corporation. General Motors conducted a similar CBA on its Chevrolet Malibu, concluding that the cost to pay liability claims for 500 deaths per year was cheaper than the \$8.59 per car required to make the Malibu gas tanks safer.⁹¹

A sophisticated CBA will include potential damage to corporate reputation, and its impacts on profits and share value. On the other hand, "issue management" PR can sometimes reduce those impacts more cheaply than making products safer. Ultimately, the rules of corporate law cannot be repealed by CSR; the corporation still has to maximize profits.

ration will resist such changes, by lobbying, PR campaigns, litigation, or other means.

Minimizing costs can mean making operations more efficient, but it also includes "externalizing" costs so that somebody else pays them. Pollution is the classic externality, with the costs of pollution being borne by everyone, not just by the corporation creating it. Again, if potential regulation (e.g., under the Kyoto Accord) stands in the way of externalizing costs, then the corporation will fight it, using a variety of means. The corporation is often called "a machine for externalizing costs."²⁷

Another externality imposed by the oil and gas industry is the transformation of the Canadian dollar into a "petro-currency." As a result of the expansion of oil production, Canada has become a major oil exporter, and, when the price of oil increases, so does the value of the Canadian dollar. This phenomenon has made many

Canadian manufacturers uncompetitive. Many plants have closed and thousands of good manufacturing jobs have been lost as a result.

Thus the corporate law requirement of share value and profit maximization leads oil and gas corporations to encourage more oil and gas consumption and exports, and to externalize their costs. Both create social and environmental harm.

Of course, not all the harm arising from oil and gas is the result of the for-profit nature of the industry producing it. The normal use of fossil fuels (combustion) produces emissions, for instance. However, the added consumption and the cost externalization create more harm than would be the case if the industry simply met the market demand for fossil fuels.

Can the large corporation circumvent, or simply ignore, the requirement to maximize share value and profits? Could its directors simply decide that enough is enough, and they are going to reduce CO₂ emissions from the added consumption, even if it means sacrificing profits and share value?

The short answer is "no."

When corporations fail to maximize profits, their directors can be sued. For example, when Henry Ford attempted to reduce the price of his cars so that working people could afford to buy more of them, he was sued by two minority shareholders, John and Horace Dodge. The court found that Ford had reduced share value, and ruled against him. The Dodge brothers founded a new car company with their winnngs.²⁸

One could object that corporations are collections of people, and people have consciences, and thus the corporation is guided by human morality.

The bottom line, however, is that a corporation is not a person, nor is it the aggregate of the people involved in it. A corporation is a separate and distinct legal entity, a "legal fiction," a "nexus of contracts." It is a machine legally programmed to do one thing: maximize the value of shares. Although endowed with legal personhood (the ability to make contracts, own property, etc.), the rest of the human package is not included. For centuries it has been realized that corporations have no conscience, no sense of right or wrong, no soul.²⁹

It is true that individuals in an oil corporation have a conscience, and some may wish to see oil consumption and attendant emissions re-

Corporations are not people

"'Yes, but the bank is only made of men.'

'No, you're wrong there—quite wrong there. The bank is something else than men. It happens that every man in a bank hates what the bank does, and yet the bank does it. The bank is something more than men, I tell you.'"

—John Steinbeck, The Grapes of Wrath⁹²

duced. They may wish that they were not fighting against regulatory initiatives designed to protect the environment. They may wish that the public received more of the massive profits now taken by shareholders. They may wish exports were kept at levels that did not disrupt other industries.

However, the corporations themselves cannot and do not operate that way. And indeed, if employees and directors don't do their jobs and serve the corporate mandate — share value maximization — they can be fired and potentially sued.

Thus the social and environmental harms caused by higher oil and gas consumption and by cost externalization are simply trumped by the profit imperative. The types of behaviours noted in the previous section are not the result of a few "bad apples." They are a systemic problem.

As long as the oil and gas sector is dominated by for-profit corporations, these problems are bound to continue.

Fortunately, it doesn't need to be this way.

SECTION THREE

A public-interest industry

The oil and gas industry can be converted to an industry with a mandate aimed at serving the broader public interest, and not just private interests.

A public-interest industry is one that would supply the oil and gas that customers wanted, but would not have a profit-maximization mandate. So it would not need to boost sales and consumption or exports, nor would it be compelled to externalize costs. It would no longer be engaged in lobbying and litigation and PR campaigns to prevent or undermine meaningful conservation or emissions-reduction initiatives. Needless to say, it would also be a Canadian industry, not a foreign-controlled one.

Indeed, a public-interest industry could be programmed to assist in the enterprise of reducing consumption and emissions. Of course, such reductions would not be achieved through restricting supply, since doing so would result in dramatic shortages and line-ups at fuelling stations, which would be politically impossible. Moreover, supply restrictions would result in home heating fuel shortages, which would be

dangerous and morally reprehensible. Rather, the consumption reductions would come from demand management.

The reform of the industry would enable it to work with other non-industry players on a variety of other initiatives, such as:

- instituting demand management through carbon pricing;
- investing in value-added, cleaner, downstream development in order to keep more jobs in Canada;
- making oil patch development more orderly and thus easing inflationary and development pressures in producing areas;
- ensuring security of energy supply for Canadians;
- obtaining accurate information on industry costs, so as to enable full rent capture; and
- investing in renewable energy, which generates many times more jobs than investments in the fossil fuel sector.³²

4.1 How would the transformation be carried out?

Converting the oil and gas industry to a publicinterest industry would be straightforward in some respects, and complex in others.

The straightforward part is the technical side — financial and legal. The industry would need to be acquired, so financing would need to be arranged. As with all corporate acquisitions, the purchase cost would be paid out of future profits.

However, an up-front payment would need to be financed. The up-front purchase price would be on the order of \$330 billion, based on market capitalization in mid-November 2009. Changes in circumstances could alter the price in the future. (See the Appendix for more information on corporate valuation.)

The scale of this investment can be better understood when compared to other figures. For example, the federal government recently announced \$490 billion in military spending.³³ Note that this is spending, as distinct from investment in a revenue-producing asset. As another comparator, Norway's Pension Fund (built from oil revenues) is worth more than \$450 billion.³⁴ Other comparisons (note these are annual amounts, not one-time investments) include:

- The federal annual surplus prior to recent tax cuts and stimulus spending — was about \$10 billion per year.
- Federal deficits were on the order of \$40 billion per year in the Mulroney era.
 Current projected deficits are on the order of \$40-60 billion per year.
- The federal corporate tax cuts announced earlier in 2008 will cost nearly \$15 billion per year.³⁵
- Federal transfers to other levels of government are approximately \$45 billion per year.

Canada's private-interest oil and gas industry — out of step

Elsewhere in the world, countries have been asserting greater control over their resources. National oil companies (NOCs) are the major players in global oil reserves. Private interest international oil companies (IOCs) "control less than 10% of the world's proved oil and gas resource base. Indeed, the super-majors themselves [the largest IOCs] account for only 3% of oil reserves and 2% of gas reserves... When ranked on the basis of proved oil and gas reserves, 17 of the top 20 oil and gas companies in the world are NOCS."³⁰

This changing dynamic is evident in Alberta's tar sands. Publicly owned oil companies from countries such as Norway, China, Korea, and Abu Dhabi have made purchases in the tar sands. It is ironic that public sector ownership in Alberta's oil patch is increasingly common, but only for foreignowned public firms.³¹

It is important to bear in mind that, although the initial investment would be substantial, the cost would be paid out of the future profits of the industry. As with any business purchase, it would pay for itself. Thus the money would not come from taxes, and the net cost would be zero, or close to it.

Finally, as noted, the \$330(Cdn) billion orderof-magnitude figure is based on market capitalization in mid-November 2009. The up-front price would be lower if the policy framework that the public-interest industry would work within (see sections on Rent Entitlement and A New Mandate, below) were applied to today's industry.

Power to acquire

Governments in Canada have the legal capacity to effect a public-interest transformation of the oil and gas industry. They can acquire corporations through voluntary or compulsory purchases, and they can establish public or private sector businesses. Furthermore, a government can determine the mandate of a corporation by programming a public-interest mandate into its governing documents.

Governments have always had the legal power to acquire property, either through voluntary or involuntary transfer. The latter is termed expropriation in Canada (condemnation or eminent domain in the U.S., and compulsory purchase in the U.K.). Expropriation is used frequently, for instance to obtain land for roads or utilities. Expropriation is normally carried out with compensation at fair market value.

In Canada, all three levels of government can expropriate. All provincial and territorial legislatures and Parliament have passed statutes guiding the exercise of that power, which is granted in hundreds of other statutes.³⁶ And they have the constitutional authority to pass further statutes enabling expropriation, if and as needed. In some instances, legislation even enables private parties to expropriate.³⁷

Power to establish businesses

Provincial and territorial legislatures and the federal Parliament have the power to establish corporations. Both orders of government have incorporation statutes, which enable corporations and non-profits to be created by a simple act of registration. Governments can also establish corporations by special statute.

The governing documents of corporations are their charters (also termed constitutions), bylaws, and relevant legislation. In establishing a public-interest organization, a mandate can be placed directly into its governing document, thus determining what the organization can and cannot do.

Canada's Constitution

The doctrine of legislative supremacy holds that Parliament and the legislatures can do anything they desire, subject to the limits set out in the Constitution. Canada's Constitution divides legislative authority between the federal and provincial levels of government.³⁸ Although the

provinces have legislative authority over natural resource management,³⁹ clearly both levels of government have the capacity to own corporations in the oil and gas sector, as evidenced by previous provincial public ownership in Alberta Energy Company⁴⁰ and federal public ownership in Petro-Canada.⁴¹

The Canadian Charter of Rights and Freedoms likely would not restrict the ability of governments to convert the oil and gas sector to a public-interest sector. The Charter's section 7 protection of the right to life does not apply to corporations.⁴² And the section 2(d) protection of freedom of association only applies to association,⁴³ not the ability to undertake the business of an association.⁴⁴

Trade Agreements

Trade agreements, such as NAFTA and the WTO agreements, are established for the purpose of restricting the capacity of citizens, acting through democratically elected governments, to institute desirable public policy measures if those measures could also affect trade. Thus they are sometimes described as a second layer of constitutional limitation on democratic decision-making. Some such agreements (e.g., NAFTA) also include restrictions on the ability of citizens, via their governments, to institute policy measures if they could adversely affect investments.

Nevertheless, trade agreements don't restrict the conversion of the oil and gas industry to a public-interest industry. They specifically allow for expropriation of the property of foreign owners (with compensation)⁴⁵ and the operation of monopolies and publicly owned enterprises.⁴⁶ They furthermore contain exceptions to trade rules for domestic policies addressing health and natural resources.⁴⁷

Of course, the for-profit oil and gas industry could well litigate under a trade agreement in order to preserve its very favourable current arrangements. Such a challenge could be launched either directly under the chapter 11 investor provisions of NAFTA, or indirectly by inducing a government to launch a challenge on the industry's behalf. A challenge could be launched regardless of the lack of merit of such a case. However, if fair value compensation is provided in an industry transformation, as proposed in this paper, the government(s) involved could comfortably discount the threat of any such litigation.

In the end, if an industry transformation were desired, but actually threatened by NAFTA, then Canada could seek to amend NAFTA, or simply withdraw from it on six months' notice.

Both the financial and the legal side of an industry conversion are relatively straightforward. The precedents exist; these types of things have been done — here and elsewhere — and they can be done again.

In other ways, the establishment of a publicinterest industry would entail some more complex and interesting issues, worthy of discussion, such as:

- whether ownership would be public or private;
- entitlement to rents, vis-à-vis producing and consuming regions;
- stakeholder involvement;
- the mandate of the public-interest industry;
- performance measures; and
- preparing for the transformation.

Each of these topics is briefly discussed below.

4.2 Public, private or mixed ownership?

When considering businesses run in the public interest, people often think of publicly owned businesses, like Crown corporations. Crown corporations are often established to serve various public-interest goals, like strengthening or diversifying local economic development.

Not all public-interest businesses, however, are publicly owned. Other types of business operations are established to serve community and public interests. Two models — social enterprises and co-operatives — show how the public interest could be injected into the core mandate of a privately-owned business organization.

Many charities and non-profit organizations run businesses, often called social enterprises.⁵² The social enterprise has a similar operational structure to a business corporation, for instance member/shareholder(s) electing a board of directors, which supervises a CEO, who engages other employees.

Social enterprises are active in diverse sectors. For instance, Makivik, an Inuit-owned nonprofit, has business interests in transportation, food, financial services, and more. Social enterprises span the range from small businesses like museum gift shops to large international concerns like Goodwill Industries, which has over 2,000 retail stores and revenues of over \$3 billion per year.⁵³

The Community Interest Company is a new form of social enterprise, recently established by legislation in the United Kingdom. It was created for people "who want to conduct a business or other activity for community benefit, and not purely for private advantage." Over 3,000 Community Interest companies have been registered since the model was created in 2005.⁵⁴

Co-operatives are another model of business ownership, and a familiar one to Canadians, 10 million of whom are members of at least one co-operative. Mountain Equipment Co-op, Servus, and VanCity Credit Unions, and Desjardins Group are just a few of over 10,000 co-operatives across Canada. Mountain Equipment Co-op Servus, and VanCity Credit Unions, and Desjardins Group are just a few of over 10,000 co-operatives across Canada. Mountain Equipment Co-operatives across Canada. Co-operatives explicitly include the broader community in their mandates. This doesn't exclude them from being big players in the economy. Indeed, Canadian co-operatives employ 160,000 people and control \$167 billion in assets. Spain's Mondragon co-operative alone

Industry Profile: Statoil48

Statoil is a Norway-based energy company with operations in 40 countries. It has a market capitalization of about US\$80 billion, produces nearly 2 million barrels per day of oil, and employs over 30,000 workers worldwide.

Statoil is majority-owned by the people of Norway, through the Norwegian government. The percentage of public ownership has varied over time between 62.5% and 100%. The Norwegian Storting (Parliament) directed that the public should own at least two-thirds of Statoil, and thus the government has recently increased its ownership share to 67%.

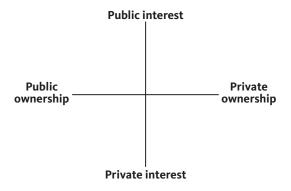
Statoil is a major player in the oil extraction industry and, like other such players, has investments worldwide, including in Canada's tar sands. However, its behaviour does differ from private interest oil corporations like Exxon in significant ways, e.g., in the area of global warming policy. While Exxon has been criticized (for example, by the U.K.'s Royal Society) for funding junk science aimed at denying anthropogenic (human-caused) global warming, Statoil has taken a different path. It recognizes anthropogenic global warming, and calls for carbon pricing. In the context of the lead-up to the 2009 Copenhagen Climate Change Conference, Statoil called for a "quick and very clear agreement" to stabilize the rising concentration of atmospheric greenhouse gasses.

has assets of 32 billion euros and employs over 100,000 workers.⁵⁹

Interestingly, there are many co-operatives in the oil and gas business — in Canada and elsewhere. For example, Western Canada's Federated Co-operatives Limited, among other industries, operates an oil and gas business that includes refining, distribution, and retail.⁶⁰

Illustrating the public-interest/ private-interest distinction

The normal left-right divide of public ownership versus private ownership can be contrasted with the distinction of the public-interest mandate versus private-interest mandate. An illustration helps:



The public-interest/private-interest distinction enables a focus on the issue of organizational mandate. Instead of being sidetracked by the often-ideological issue of ownership, the conversation can turn to the more pragmatic question of the public good and what interests are served by the organization.

It is possible to map existing groups of institutions, including types of business organization, onto this illustration. ⁶²

Public i	nterest
Schools Hospitals Crown corporations Public ownership	Charities Churches Social enterprise Co-operatives Private ownership
Private	Business corporations

This simple illustration shows that organizations with a mandate focusing on the public interest can be either publicly or privately owned. Likewise, privately owned organizations can have either a public-interest or private-interest mandate.

Industry Profile: Federated Co-operatives Limited⁶¹

The CO-OP brand is one of the most familiar in Western Canada—and for good reason: retail co-ops are among the largest providers of retail goods and agricultural inputs in Western Canada. Approximately 300 co-op retailers serve 1,000,000 individual co-op members across the West.

Federated Co-operatives Limited (FCL) is a manufacturer and wholesaler that serves about 265 retail co-operative outlets. Its 2008 sales were \$8.4 billion, putting it in the *Financial Post* business magazine's top 50 corporations. In 10 years, FCL has returned more than \$2.4 billion in profits to its member-owners.

The FCL network includes a number of businesses in the oil and gas sector. They include retail fuel and lubricant sales, cardlock and bulk petroleum, and the Consumers' Co-operative Refinery in Regina. The refinery's original output of 500 barrels per day (bpd) has grown to 100,000 bpd and is expected to be 130,000 bpd by 2012.

In addition, FCL is a major provider of good jobs. FCL employs over 2,800 people at its various locations in Western Canada, in addition to the 15,000 retail co-op employees.

In the bottom right quadrant, ordinary business corporations are privately owned, and focus on serving private interests. In the top left quadrant, publicly owned institutions such as schools, hospitals, and Crown corporations are established in order to serve public interests. In the top right quadrant are privately owned institutions designed to serve public interests, including churches, charities, social enterprises, and co-operatives.⁶³ Note that business organizations are represented in all three quadrants.⁶⁴

This discussion paper proposes a public-interest oil and gas industry. However, it does not make a recommendation about whether ownership should be public or private, or some mix of the two. Some factors for consideration in this discussion include:

• Democratic control: Would a Crown corporation or other government-controlled business, because it is owned by the entire public and not a subset, be more democratic than private or mixed sector ownership? Have existing and previous publicly owned enterprises met the ideal of full democratic control? Could a new one be tailored more carefully to do so?

- **Stability:** What type of model would be harder to dismantle in the future by a government hostile to the public-interest mandate? Could this risk be reduced by including federal, provincial, and territorial governments, along with some private partners, and requiring unanimous agreement⁶⁵ to dismantle it?
- Aboriginal interests: What type of model would welcome the involvement of Aboriginal peoples, or be suited to serve their interests and rights in relation to natural resources?
- Public acceptability: What type of model would be more palatable to the range of political views in Canada?
- Federal-provincial/territorial relations: Would a public, private, or mixed model be more capable of satisfying federalism concerns?

Would the new public-interest industry be a single entity, or many entities? If the latter, would there be several competing to deliver on the overall public-interest goals? Or would a single holding firm run the industry, placing or-

Public ownership: socialist threat or capitalism's saviour?

Public ownership is one option to secure a public-interest mandate for the industry. And it is an option that many Canadians support; 51% of decided Canadians supported nationalizing Canadian oil companies — and this was in 2005, before gasoline prices spiked.⁶⁶

Despite public opinion, in the last two decades public ownership had become an ideological bogeyman of conservatives in the Anglo-American countries. In recent years, the public ownership no-go zone had spread as far as the parties in the centre and even the left of Canadian political spectrum. In 2004, under Prime Minister Paul Martin, the Liberal federal government sold its final 19% share of Petro-Canada, which it had created just 19 years earlier. During the French-language federal election debate on October 2, 2008, Jack Layton, leader of the New Democratic Party, was asked about nationalizing the petroleum industry, and quickly rejected the idea.

However, times have changed. The ideological, knee-jerk opposition to nationalization clearly has taken a back seat to pragmatic politics and economics. The scale of the recent global financial sector nationalization has been enormous, and unprecedented in its speed. Even conservatives acknowledged publicly that nationalization of financial institutions is required in order to save capitalism.⁶⁷

In 2008, the United States — that global defender of "small" government and unbridled capitalism — announced a quarter-trillion-dollar equity injection into its major banks, after the previous three-quarter-trillion-dollar infusion of cash failed to stabilize markets. By summer of 2009, "the amount that has been expended on bank rescue efforts and that is currently outstanding" was estimated at \$3 trillion. The total potential liability, in the unlikely event that programs faced maximum requests for assistance, was estimated at \$23.7 trillion.⁶⁸

The U.K.'s financial nationalization is the biggest nationalization of a sector in British history. Only the wave of postwar nationalizations of several industries — the "commanding heights" of transportation, coal, gas and electricity — was larger. That earlier nationalization took place over six years, ⁶⁹ not a few weeks.

Despite its free market rhetoric, the Canadian government in late 2008 engineered a three-way asset swap to support Canadian banks. In a complicated exchange between the Canadian Mortgage and Housing Corporation, the Bank of Canada, and the Government of Canada, the chartered banks were given approximately \$100 billion of Government of Canada bonds, mostly in exchange for mortgages they had been holding previously. As a result, the supposedly debt-phobic Conservative government added \$100 billion to the federal government debt.⁷⁰

Governments around the world have provided trillions more in bank support.⁷¹ Given the speed of these developments, and the possibility of a W-shaped or L-shaped recession, it is quite possible that more nationalization is on its way — in the U.S., the U.K., and elsewhere.

It appears that the ideological bogeyman has been slain, and nationalization is now well-trodden territory, globally. It remains to be seen whether Canadian centrist and progressive politicians will continue to so quickly reject public ownership.

ders with subsidiaries or independent suppliers to deliver on specific elements of the business. Would some, all, or none of those subsidiaries or independents be run on a for-profit basis? Would joint ventures be used?

These are all open questions, and must be considered in light of the larger goals of the transformation. It seems clear, however, that leaving in place the current large, for-profit energy corporations would jeopardize any public-interest industry; their influence over politicians and their willingness to interfere with needed public policy pose too much risk that they would work to undermine the public-interest industry.

4.3 Rent entitlement, and producing and consuming regions

The vast majority of non-renewable resources in Canada are owned by the public, and so the public is entitled to the "rents" (see explanation below) from their development. But the oil and gas corporations now capture an enormous share of those rents — around 50% in Alberta in recent years, according to the provincial government's own Royalty Review Panel.⁷²

The corporate capture of rents is a massive giveaway by government, an enormous transfer of wealth from the public to corporate shareholders. In April 2008, economist Pedro van Meurs, who has regularly worked with the energy industry and government, was quoted as saying of Alberta's government: "They are not capturing the proper economic rent... You leave a bundle (of money) on the table. It is just unbelievable."⁷³

The Canadian oil extraction sector alone has typically declared annual profits on the order of \$20 billion annually,⁷⁴ and it is unknown how much profit is not declared because it is masked by transfer pricing or creative accounting practices. With no public-interest players in the industry, there is no access to this data. And of course it would be in the interests of the

Rents, royalties, and public-interest ownership

Rents are the financial surplus from selling a resource: the price obtained for the product, less the costs of finding, developing, extracting, and transporting it, and a "normal" level of profit (i.e., one that assumes a competitive market with other investments). In other words, rents are the profits above normal levels of profit. Thus they are often termed unearned profits, windfall profits, or supernormal profits.

To sum up:

resource selling price

- costs (of exploration, development, extraction, transportation, etc.)
- profit (normal, competitive level of profit)

= rents

Royalties are a mechanism used by governments to capture rents. They are not the only mechanism. Taxes are also used. But the most effective way to be able to determine what rents are available, and to be able to capture them, is public-interest ownership. Norway, with its \$400–500 billion Pension Fund⁹³ (formerly called the Petroleum Fund) that dwarfs both Alberta's Heritage Fund and Alaska's Permanent Fund, collected a large proportion of its rents from its ownership position.⁹⁴

corporations to underestimate profits and rents when reporting to government.⁷⁵

So there are likely significant additional rents available. With a public-interest oil and gas sector, the "rents" from resource extraction could be known, and be fully captured by the public.

The question arises, then, as to who would be entitled to the rents.

The provinces have legislative authority to tax natural resource production.⁷⁶ So, would rents be due exclusively to producing provinces? Or should Canadians from consuming provinces also benefit from them?

The reality is that both already receive a portion of the rents, and benefit from them.

Canadians in producing provinces receive rents via royalties and taxes collected by prov-

incial governments. Canadians in consuming provinces receive the benefit of rents captured by federal taxes — on the order of \$6 billion per year,⁷⁷ and from fuel excise taxes and the GST. The federal government further captures some rents through income taxes on resource corporations. With respect to northern territories and offshore deposits, the federal government collects royalties as well.

So it seems likely that Canadians from both producing and consuming regions would be able to receive additional rents. However, whether they actually did so would depend on the nature of the public-interest industry established, and which governments establish it.

If a public-interest oil and gas industry were established by agreement among the federal government and provinces and territories, they would no doubt share the additional rents according to a negotiated formula. Likely, their share would be in accordance with their investment, i.e., their financial contribution toward acquisition. However, if a producing province like Alberta or Newfoundland and Labrador acted first to establish a public-interest sector, it could potentially retain all of the additional rents captured and not need to share them.

Considering the additional rents likely available, it would be possible to increase the rents for the benefit of Canadians in both producing and consuming regions. In other words, it is not a zero sum federalism game; *all* Canadian citizens could receive higher rents from a public-interest industry than they receive now.

Of course, rents should not be regarded as a bonanza for the current generation. Fossil fuels are non-renewable resources and will decline over time. Rents from their extraction should not be used to finance ordinary government operations. Because rents are derived from natural capital stocks, they should be converted to other forms of capital that will provide benefits for future years when the party is over and the natural capital is depleted.⁷⁸ Thus rents could be

kept out of the general revenues stream, as they are in Norway. Doing so would eliminate the short-term political temptation to boost extraction rates. It would also help to reduce "Dutch Disease" — the upward pressure on the Canadian dollar and consequent damage to the rest of the economy, in particular the manufacturing sector.

4.4 Stakeholder involvement

In any business or other organization, there are several levels of involvement of participants. The members or shareholders control the business in the sense of electing a board of directors. The board supervises the business, by hiring and firing the CEO. The CEO manages the business and the hiring, direction, and firing of the rest of the employees.

Starting with the employees, the vast majority in a public-interest industry would be the same people as under the private-interest industry. The same rig workers would be operating the drill rigs, the same drivers would be driving trucks, etc. Retaining experienced employees would be a priority for the public-interest business. This said, there would be a few changes; people involved in lobbying, litigating, and waging PR campaigns against public policies would be redirected or dismissed. The CEO and other managers would, of course, be people experienced in running a large organization, and would need to be fully supportive of a public-interest mandate.

The directors would be people with experience on large boards of directors. Their task would be setting strategic direction in a public-interest organization, and holding management accountable to that direction and to efficient operations. So they would include a diverse mix of people who collectively have significant expertise on the industry, the environment, social policy, public-interest businesses, and more.

In a public-interest oil and gas business, the biggest stakeholder group and main beneficiary would be the public. Of course, since the entire public cannot be involved practically in controlling the business, some proxy representatives would need to be involved. Which representatives should be involved? As noted above, the industry could be publicly or privately owned, so the representatives may or may not include government. The individual members should be chosen to represent not only the equity owners, but also the broader public, and to be wise electors of the board. They should include Aboriginal people, experienced investors, those knowledgeable about the public-interest mandate of the business, and people from across occupations, regions, and cultural and other groups reflecting the best ideals of the Canadian mosaic.

4.5 A new mandate

The central point of the public-interest oil and gas business would be its new mandate. This mandate would be programmed into the legal structure of the business, through its governing documents. Managers and directors would be evaluated and compensated on the basis of their fulfilment of that mandate.

The mandate could include, for instance:

• Value-added processing: Currently the majority of oil and gas produced in Canada is exported; and more pipelines are being built to export raw resources, along with the value-added jobs that go with them.⁷⁹ An area with the potential to create many jobs is the Alberta tar sands. In his testimony to the National Energy Board hearings on the Keystone Pipeline project, M.C. McCracken, CEO of Informetrica, conservatively estimated that, for every 400,000 barrels per day of raw bitumen upgraded and refined in Canada, 18,000 good jobs would be created.80 Further development of a broad petrochemical and chemical industry, as well as manufacturing of plastics and components

for other industries, would likely follow, creating still more jobs.

While the potential for substantial job creation does exist, the oil giants operating in Canada have shown little interest in developing oil for the benefit of Canadians. It is estimated that, although more than half of our bitumen will undergo basic upgrading to synthetic crude oil in Canada, si ti will then be exported for refining and further processing. The remaining bitumen will be extracted and exported unprocessed directly to the United States. This can be changed. A publicinterest industry can increase the number of jobs (even while reducing extraction rates) by boosting value-added, cleaner downstream processing in Canada.

- Conservation: Currently, Canadians are among the biggest users of energy in the world. There are many proven policy solutions to excessive consumption, and yet Canada's governments have largely failed to adopt them. The public-interest energy industry could be mandated to support governments in adopting those policy solutions (rather than opposing them), and in creating new ones.
- Energy security: Currently, the majority of Canadian oil and gas is exported to the United States, and that percentage has grown dramatically in the last 15 years, despite conventional oil and gas supplies having peaked. Meanwhile, the Atlantic region and Quebec rely on imports for 90% of their oil, and imports also account for 36% of Ontario's supply. Half comes from Europe, principally Norway and the United Kingdom, but these sources are declining because North Sea oil is running out. The remainder is mostly imported from OPEC countries. This creates a serious problem for our future energy security.⁸³

A public-interest industry could have a mandate to supply Canadian needs, but no requirement to supply foreign needs. And with no requirement that it maximize profits, it could reduce exports to buyers outside of the country.

- Employment standards and equity: A
 public-interest oil and gas industry could
 be programmed to increase employment
 of women and minorities, and to improve
 workplace equity and health and safety.
- Environmental protection: Reduced consumption (conservation) will result in lower emissions of CO₂ and other pollutants. However, the public-interest industry could be mandated to protect the environment more broadly, for instance:
 - Exploration can be reduced in scope and intensity, thus preserving habitat.
 - Wells can be drilled more selectively and operated more carefully, resulting in lower emissions and local impacts.
 - Tighter production and processing emission standards can be adopted.
 - The shift to renewable energy—a
 more employment-intensive sector
 than fossil fuel extraction—could be
 accelerated so that Canada becomes a
 world leader and exporter of technology
 and expertise. Jurisdictions around
 the world are ramping up development
 of their renewable energy resources.
 A public-interest oil and gas industry
 could boost investment and bring
 operational synergies to this sector.

 Proposed new tar sands developments can be given the go-ahead only when they are needed to meet Canadian demand.

It is always vital to measure success against goals. Traditional measures of corporate success, with their emphasis on this quarter's profits and cost minimization, would be inadequate. The industry would require a range of new targets and performance indicators. Given that some of these areas could conflict at some times, it may be necessary to establish a hierarchy.⁸⁴

4.6 Preparing for the transformation

The transformation to a public-interest oil and gas industry would require significant preparation:

- The stakeholders to be involved in the public-interest industry would need to negotiate their roles and be prepared to undertake them.
- The policy framework in which the new public-interest industry would operate effective environmental regulation, full public rent capture, improved employment standards, etc. should be established and implemented in respect of the current industry, so as to make the subsequent transition as smooth as possible.
- Public education and outreach efforts
 would be needed in order to inform
 the public about the change, and also
 counteract any disinformation circulated
 by the current industry and their allies.

SECTION FOUR

Conclusions

The private-interest, for-profit oil and gas industry causes enormous harm. That it does so is unavoidable. Its behaviour is determined by its legal mandate, and that mandate is to maximize share value or profits.

Maximizing profits means boosting sales, and thus consumption and exports, which is not good for human health, for the planet, or for jobs in other industrial sectors. It also means externalizing costs onto other people. And ultimately, if citizens, through their governments, try to reduce consumption or exports or internalize the externalities, the profit maximization imperative requires that the corporations fight to undermine those efforts. And they do.

Fortunately, it doesn't need to be this way. We can transform the oil and gas industry. The existing corporations can be acquired, and a new industry established with a mandate to

serve the public interest. Doing so would result in business as usual for the vast majority of oil and gas workers. However, vital changes would take place — an end to the lobbying, litigating, and waging of PR wars against public-interest regulation. And with those changes would come reductions in consumption, increases in employment, a vigorous renewable energy industry, a cleaner environment, and healthier people.

Canadian governments' sliding fiscal positions could make it imperative to capture resource rents and stop the public revenue giveaway. At the same time, the recession is suppressing oil and gas prices, and thus the price of the industry. Oil prices are around half of their former value, and this won't last forever.

As Stephen Harper famously said, this could be a "buying opportunity." 85

APPENDIX

Corporate Valuation

Generally speaking, the money required for a corporate acquisition is paid for by the future stream of profits of the corporation. In other words, the corporation largely pays for its own purchase, and the net cost is zero or close to zero.

Therefore the up-front price of acquiring the industry relates to how much financing must be raised. As such, it is not spending, but rather investment.

An order-of-magnitude estimate of the upfront price can be generated in a number of ways but basically, one is paying for potential future earnings. The unpredictability of such earnings, given fluctuating commodity prices, interest, and foreign exchange rates, unknown reserves and future production rates, and changing laws and regulations, makes valuation difficult. In the case of a publicly traded corporation, a simple calculation would be to multiply the market value per share by the number of shares that need to be purchased (which can be a majority of shares and need not be 100%). The value of future profits is theoretically incorporated into the market value. Sometimes a premium is paid to encourage speedier sales of shares.

Though there are additional valuation techniques, market capitalization, or share price times number of shares, provides a reasonable estimate of the value of an enterprise at any point in time. All valuation methods fluctuate according to expectations of future profits, and these are affected by the factors mentioned in the previous paragraph. Valuation would certainly be affected when a change in the regime under which an industry must operate is announced. A decision to capture the rents given away to the industry and the requirement to serve other public interest goals will clearly reduce the value of the industry to profit-maximizing investors. Consequently, the straightforward measure of current market capitalization may be seen as a maximum price for the main firms in the industry.

It is not necessary to buy all the firms in an industry in order to control it. In effect, it is the largest firms, the ones dominating the industry, that would need to be acquired and converted to function in the public interest. So the market capitalization has been calculated only for the largest firms for which information is available, the ones producing by far the largest part of Canadian oil and gas production.

Market capitalization data is available for 22 of the top 30 Canadian oil and gas firms, which produce 66% of total Canadian output of oil (all liquids) and 54% of natural gas. 86 Twenty-one of the companies are traded on the Toronto Stock Exchange and their financial statements are available. Market capitalization was calculated from data provided on Infinancials.

com. The estimate for the value of the Canadian holdings of Royal Dutch Shell was based on its market capitalization in early 2007 when its Canadian affiliate, Shell Canada, was taken over by the parent company. The estimated value of these 22 companies, based on market capitalization in mid-November 2009, is approximately CDN\$330 billion.

Notes

- 1 Foreword to UK Industry Taskforce on Peak Oil and Energy Security (ITPOES), "The Oil Crunch: Securing the UK's energy future" at p.3 http://peakoiltaskforce.net/wp-content/uploads/2008/10/oil-report-final.pdf.
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- 3 The following is just a brief, incomplete, illustrative discussion of the problems. These problems are canvassed in detail in many places, and this study is not the place to explain them in detail.
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- 23 Some larger corporations can also be controlled by one or a few shareholders, who can choose to sacrifice profits to the broader public interest. However, this is the rare exception, and not the rule.
- 24 Having the industry run by small corporations would not be a solution to the problems noted above. Logistically, they could not manage certain aspects of the oil and gas industry. Although they can be run with a public-interest mandate, and sometimes are, they often are run purely for private interest.
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Charter could still allow it. Section 1 could find the violation justified, and section 33 could be used to allow it in any event (the only potential challenges here are political, not legal).

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- **63** Note that there is scope for legitimate discussion about whether some particular organizations in the institutional categories of the public-interest spectrum actually serve the public interest, and to what degree. Such debate could lead to improved accountability for such organizations, and thus is to be encouraged. Nevertheless, the intention and result of many such organizations is clearly to serve the public interest.
- **64** The empty bottom left quadrant would consist of publicly owned institutions that serve private interests essentially those engaged in corruption and theft.
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