CO\$TLY ENERGY

Why oil and gas prices are rising and what we can do about it

A collection of progressive analysis and policy alternatives

Edited by Seth Klein

February 2001

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Canadian Centre for Policy Alternatives Research that puts people before profits.

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Introduction

By Seth Klein, Director, Canadian Centre for Policy Alternatives BC Office

Over the past year we have witnessed dramatic increases in prices for both oil and natural gas, sending ripples throughout society. Individuals and families are feeling these increases at the pump when fuelling up their cars, and low-income people are facing great difficulty paying their home heating bills. Energy-intensive and transportation-dependent businesses are feeling the pinch, possibly resulting in layoffs. Some consumer prices are rising, and if inflation rises too much, central banks may respond with interest rate hikes, thereby slowing down the economy and potentially throwing thousands out of work.

The issue of rising oil and gas prices has profound implications for both social justice and the environment. From a social justice perspective, price increases have both winners and losers—producers and energy corporation shareholders are experiencing windfall profits, while people on low and fixed incomes (and others without energy stock portfolios) face rising costs.

On the environmental side, rising prices can offer an incentive to move individuals, corporations and institutions towards more energy-efficient practices, provided this opportunity proceeds in a manner that accommodates the social justice considerations mentioned above. However, improved environmental outcomes will not inevitably result from higher prices; as we are seeing, high natural gas prices are encouraging some large and industrial consumers to switch to dirtier fuels. We cannot expect greater energy-efficiency to result from market pressures alone—

good public policy is also needed.

In the face of escalating prices, the public has been searching for explanations and solutions. People want to know who is reaping the rewards of rising prices, and they are looking to governments to respond to rising prices in a progressive manner—ensuring low-income people and workers are not forced to carry an unfair burden, and that environmental goals are met.

This collection of essays offers answers. The first set of articles is primarily concerned with providing a progressive policy analysis of what is driving prices up, and who is profiting.

Hugh Mackenzie debunks the myth that gas taxes are driving price increases. Rather, he traces price hikes primarily to crude oil price increases, and secondarily to refining and marketing price increases. Mackenzie further notes that, while OPEC may be the source of international oil price increases, most of the price increases in Canada are not going to OPEC coffers, but rather to the profits of Canadian crude oil producers.

The second article, by Maude Barlow, makes the links between rising prices and free trade. Barlow reminds us that the Canada–US Free Trade Agreement (FTA), and the North American Free Trade Agreement (NAFTA) tied Canada into a North American energy market, in which US demand sets prices in Canada. These agreements prevent our governments from regulating exports, domestic prices and conservation of our energy resources.

The issue of rising oil and gas prices has profound implications for both social justice and the environment. People want to know who is reaping the rewards of rising prices, and they are looking to governments to respond to rising prices in a progressive manner—ensuring lowincome people and workers are not forced to carry an unfair burden, and that environmental goals are met.

The third article, by Fred Wilson, examines the case of natural gas in British Columbia, a province that produces much more gas that it consumes domestically. Yet provincial consumers have seen their natural gas bills skyrocket over the past year. Like Mackenzie, Wilson moves the spotlight from increased government royalty revenues to the natural gas producers themselves, who are reaping windfall profits from natural gas price increases. And like Barlow, Wilson examines the connection between rising prices and the move toward a deregulated continental energy market.

The final article in this section offers a primer on the global oil market. Costas Nicolaou gives us a brief lesson in how the international oil market functions, and why it produces such dramatic price volatility. According to Nicolaou's analysis, the current rise in oil prices may only be yet another price spike. There is little reason to believe that the current high price for oil of approximately \$30 per barrel represents a long-term price, and many reasons to believe that the price will return to \$15-\$20 per barrel, and perhaps less. The more important question is how we can shelter ourselves from wild price swings and the resulting economic damage and uncertainty.

The second set of articles focuses on solutions, setting out an inventory of both short and longer-term progressive policy responses. The authors find agreement on many points, although not all. For example, while there is general agreement that NAFTA significantly limits our long-term policy options, some take the NAFTA rules as a given, while others are keen to renegotiate or challenge the terms of NAFTA.

Short-term policy responses include

taxing windfall oil and gas profits, and directing the resulting revenues to rebates for low-income households, as well as to energy conservation initiatives. Virtually all the authors included in this collection flatly reject the idea of cutting either gas taxes or income taxes to off-set rising prices. As Naomi Klein points out, cutting gas taxes would merely serve to increase the profits of the oil companies. And as both David Suzuki and Ted Schrecker argue, such tax cuts would also undermine the potential environmental benefits of rising prices (namely, that higher prices encourage conservation and improved fuel efficiency).

The authors in this section propose more targeted measures for addressing both environmental and equity concerns. Andrew Jackson and Schrecker call for an increase in the GST tax credit for lowincome households struggling with their heating bills. In both the short and medium-term, a meaningful policy response also requires that we reduce our dependence on fossil fuels. To this end, Suzuki, Wilson and Schrecker urge both federal and provincial governments to direct some of their windfall revenues towards public transit, energy-conservation housing and building retrofits, and towards the development of alternative clean energy sources.

Some governments are reaping huge increases in revenues from rising oil and gas prices, provided their jurisdictions are endowed with oil and gas reserves. The most obvious example of this is Alberta, blessed as it is with tremendous reserves. But other governments are less fortunate, and are being forced to help schools, hospitals and other institutions defray the cost of rising heating and transportation bills. In this context, Marc Lee encourages a

renewed sense of national solidarity. He calls for a sharing of the wealth generated from natural resources.

In the longer-term, a number of the authors insist that we must, at a minimum, reopen the NAFTA, and change the trade rules governing energy. Nicolaou reminds us that Canada is self-sufficient in energy, and thus advises that we remove ourselves from the world oil market roller-coaster and establish a domestic price for oil. Wilson advises the same for natural gas. In both cases, this would require changing the terms of NAFTA.

The final section of this collection issues a warning. The essays in this section urge us to learn from the lessons of oil and gas deregulation, and ensure that we do not follow the same path with respect to electricity. Jim Sinclair calls for legislation to prevent the deregulation and privatization of power utilities, while Murray Dobbin warns us of efforts to lock energy deregulation into place through the World Trade Organization.

Taken as a whole, these essays demonstrate that there is nothing inevitable about price volatility and the resulting hardship. Rather, these are the consequences of policy choices to leave oil and gas production and distribution to the vagaries of market forces. There are solutions, but they require political will and a commitment to intervene and act collectively: to regulate exports, supply and prices; to tax windfall profits; to assist low-income people and displaced workers; to invest in alternative energy sources; and to fund conservation, public transit and fuel-efficiency.

PART ONE

The Problem:

What is driving up oil and gas prices?

In Picking Oil Price Targets, Money Talks

By Hugh Mackenzie

In July 1998, the average price of regular, unleaded gasoline in Canada was 53 cents per litre. In the first week of October 2000, regular gas averaged 75.4 cents per litre.

That's an increase of 22.4 cents per litre—or 42%—in just over two years.

There is an obvious explanation—the 135%-plus increase in crude oil prices over that period. But that explanation has attracted surprisingly little scrutiny.

Instead, with the enthusiastic encouragement of the oil industry, the debate over what to do about this extraordinary increase in price has focused on gasoline taxes.

A visit to the web site of any of the major oil companies reveals the now-familiar statistical core of their argument—bar charts breaking down the price of gasoline in Canada into its various components, including taxes; bar charts comparing prices, with and without taxes, in Canada and the United States; and bar charts comparing gasoline prices in Canada with those in European countries and Japan.

The charts make their points. Taxes are shown to be the largest single component in gasoline prices in Canada. The price differential between Canada and the United States is shown to be entirely attributable to differences in tax levels. And Canadian gasoline prices are demonstrated to be lower than those in Europe and Japan.

Points powerfully made—and absolutely irrelevant.

Irrelevant, because they offer no explanation at all for the increase in retail gasoline prices in the past two years.

Based on data provided by the Canadian Petroleum Institute and Shell Canada, however, the details are readily apparent.

Figure 1 (see page 6) shows how average national retail prices at the pump broke down in July 1998, compared with September 2000.

In July 1998, of the 53 cents per litre price at the pump, crude oil accounted for 12.5 cents; Federal excise taxes 10 cents; provincial gas taxes averaged 14.9 cents; and the GST/HST 3.7 cents; leaving 11.9 cents for refining and marketing.

In the first week of October, 2000, the retail price of 75.4 cents breaks down as follows: crude oil, 29 cents; Federal excise taxes, 10 cents; provincial gas taxes 14.9 cents; and the GST/HST 5.3 cents; leaving 16.3 cents for refining and marketing.

An appendix to this article shows similar price breakdowns for a major city in each of Canada's ten provinces.

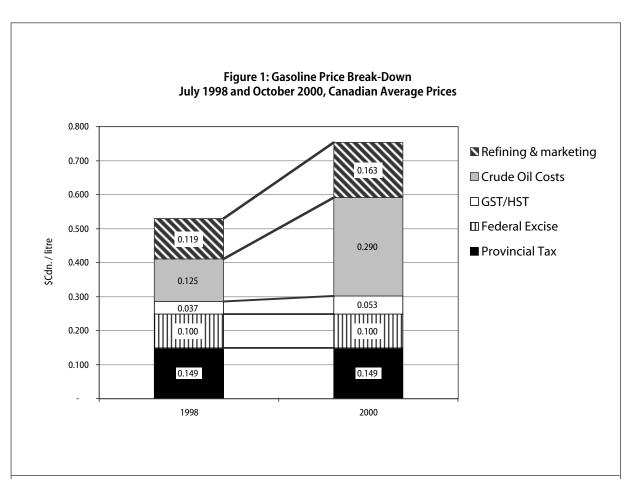
Figure 2 (see page 6) explains the price increase.

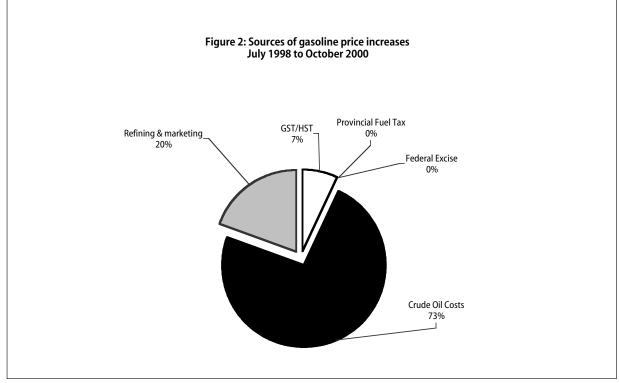
Of the 22.4 cent per litre increase, only 7% is attributable to taxes; 73.5% is attributable to crude oil price increases; and 19.5% is attributable to refining and marketing.

And where does that increase go? We are encouraged to believe that the 16.5 cents per liter increase in crude oil prices disappears into the coffers of the members of the Organization of Petroleum Export-

Of the 22.4 cent per litre price increase, only 7% is attributable to taxes; 73.5% is attributable to crude oil price increases; and 19.5% is attributable to refining and marketing.

And where does that increase go? Most of it stays right here in Canada—pure profit to Canadian crude oil producers. The 4.4 cents per litre increase for refining and marketing is right here in Canada as well.





ing Countries. In fact, most of it stays right here in Canada—pure profit to Canadian crude oil producers. The 4.4 cents per litre increase for refining and marketing is right here in Canada as well. And assuming that refining and marketing were profitable in 1998, that increase is pure profit as well.

The amount of money involved here is staggering. Based on current Canadian production levels, at current prices the increase in crude oil prices from July 1998 increases annual revenue to the oil industry by \$14 billion. When you add in the increased refining and marketing margin, the total windfall from OPEC's success in driving up prices to the Canadian oil industry is \$18 billion a year, at current prices.

Small wonder the oil industry in Canada has been forced to make the shocking revelation that it will be forced to pay corporate income taxes this year.

So in the face of these facts, what is the Canadian Right focusing on? Not the windfall crude oil profits of the Canadian oil industry. Not the jump in pure profit in refining and marketing. No, they are focused on the increase in GST revenues—derived from the GST on the price increase (a trivial 1.6 cents per litre) and the GST on total provincial and federal excise and gasoline taxes (an equally trivial 1.7 cents per litre).

Why? Because any other target would put the Tories and the Alliance in conflict with major financial supporters in the oil industry. Stockwell Day in particular has dreams of cleaning up in the political fundraising race in the oil patch.

And because blaming taxes for high oil prices is "on message" for an Alliance Party whose political future depends on its ability to sell Canadians lower taxes, while disguising their implications for public services. The real message? Don't confuse us with facts, we know what side our bread is buttered on.

[Note: see appendix on page 50 for detailed breakdown of contributing factors to gasoline price increases in major Canadian cities.]

Washington to Canada: Fill 'er up How NAFTA is Driving Up Canadian Oil and Gas Prices

By Maude Barlow

Considering the uproar over the price of oil, it's absolutely remarkable that few recall the debate that raged over our energy sovereignty a decade ago. That was just before Canada ceded total control of its oil and gas reserves in both the Canada-U.S free-trade agreement, signed in 1989 by Brian Mulroney, and its successor, the North American free-trade agreement, signed in 1994 by Jean Chrétien. Those deals left Canadians at the mercy of global prices and without the power to conserve these precious resources.

And now here we are.

The first free-trade agreement was negotiated in the mid-1980s against a backdrop of media reports that the United States was running out of energy. The American Gas Association reported in 1986 that supplies in the lower 48 states were virtually gone, and numerous U.S. government studies warned of looming oil and electricity shortages. American trade negotiators and politicians made no bones about the importance of securing access to Canada's energy supplies in the trade deal.

A 1985 U.S. congressional report called Canada's regulatory control over its natural gas a "direct restriction of American rights to Canadian gas" and called for the American government to make guaranteed access to Canadian supplies a point of national security. Ann Hughes, the ranking U.S. Commerce Department negotiator, was forthright about her country's wasteful energy habits, and admitted that Canada's energy, secured by the

free-trade deal, would forestall conservation practices in the United States. Edward Ney, then U.S. ambassador to Canada, said later that Canada's energy reserves were the prime motivation for the United States in the negotiations.

Newly minted prime minister Brian Mulroney didn't waste any time delivering; only weeks after his 1984 election, he told a blue-chip corporate audience in New York that Canada was "open for business." He called the practice of maintaining emergency reserves "odious" and, declaring that Canada had not been built by expropriating "other people's property," promised American business full access to Canada's energy supplies.

The Mulroney government deregulated oil and gas exports and dismantled most restrictions on American foreign investment in the energy industry, once again opening up Canada's resources to domination by an ever-smaller, ever-more powerful group of transnational corporations with no interest in Canada.

The trade agreements exempted Canadian government subsidies for oil and gas exploration from trade challenge, ensuring that Canadian public funds would continue to pay for uncontrolled and environmentally destructive fossil-fuel exploration—a process that has already destroyed habitats in the North and that threatens the sensitive spawning grounds off Cape Breton and Newfoundland, all to the benefit of transnational corporations.

The National Energy Board was stripped of its powers and the "vital-supply safe-

The FTA and NAFTA deals left
Canadians at the mercy of
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precious resources.

guard" that had required Canada to maintain a 25-year surplus of natural gas was dismantled. No government agency or law now exists to ensure that Canadians have adequate supplies of energy in the future.

Export applicants, Canadian or American, were no longer required to file an export impact assessment and the all-Canadian gas distribution system was abandoned, setting off a frantic round of North-South pipeline construction. Export taxes on our energy supplies were banned. Thus our governments lost a source of tax revenue, and American customers, who don't have to pay the GST, gained a price advantage over Canadian consumers.

Most important, the trade agreements imposed a system of "proportional sharing," whereby Canadian energy supplies to the United States are guaranteed in perpetuity. In an astonishing surrender of sovereignty, the government of Canada agreed that it no longer has the right to "refuse to issue a licence or revoke or change a licence for the exportation to the United States of energy goods," even for environmental or conservation practices.

This led to a spectacular increase in the sale of natural gas to U.S. markets, where U.S. distribution companies, supplying a much larger population, were able to sign long-term contracts at rock-bottom prices. Canadian consumers were left to compete for their own energy resources against an economy 10 times bigger with rapidly dwindling reserves and accelerating demand.

The free-trade agreements committed Canada to an energy policy driven by massive, guaranteed exports to the United States, corporate control of supplies and an economic policy more dependent than ever on the exploitation of primary resources. When prices inevitably rose, the United States, which never gave up its right to store vast supplies of energy for emergencies, was able to dip into its reserves and bring down the price of gas for Americans.

When asked why he would use up reserves supposedly earmarked for such emergencies as war or disaster, President Bill Clinton said that the reserves would be restocked immediately.

This is because the United States has a security blanket. Under NAFTA's proportional-sharing provision, Canada must replenish even the U.S. reserve supply—by law and in perpetuity. The short-term gain for American consumers in lower energy prices may come at great expense to Canadians this winter.

The Canadian government, on the other hand, is left with the limited choices of lowering fuel taxes, thereby forfeiting important tax revenue, or giving direct financial assistance to low-income families, using public funds to do so. In either case, the transnational energy companies get to deflect attention from their outrageous profits, and the demand for their environmentally harmful products continues to grow.

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Who's making money on natural gas prices? What should government do?

by Fred Wilson

Baby its' cold outside, and natural gas is expensive.

But don't blame me, says the gas company. We only pass along our costs.

Don't blame us, says the pipeline company. We just move the stuff from the producer to you.

Don't blame us, say the producers. It's those Californians who have increased the demand and sent the price up.

Don't blame government, say the politicians. It's the free market at work.

If you are a BC Gas customer, by now you are familiar with the price increases—a 33 percent increase in rates last summer, and another 27 percent increase in January 2001. In 2001, the new regulated consumer price for natural gas is over \$13.00 per thousand cubic feet (mcf). According to BC Gas this amounts to almost \$1,500 per year for an average lower mainland home. Centra Gas home consumers on Vancouver Island have already being paying about that rate since July of 2000.

The bills are plain enough. The questions that many want answered are: Where is all that money going? And who, if anyone, can or should do something about high natural gas prices?

Following the Money Trail

BC's three gas distribution companies—BC Gas (lower mainland/interior), Centra Gas (Vancouver Island and Sunshine Coast) and Pacific Northern (northwest)

—are not racking up huge profits from the current price spike. The rates they charge consumers are regulated by the BC Utilities Commission on the basis of providing the companies with a predicted rate of return on common assets. In the case of BC Gas, the rates are designed to reward them with a 9.5% return on assets. BC Gas, the largest of the three, is nonetheless improving its profits, earning \$57 million in the first 3 quarters of 2000, of which \$24 million came from natural gas delivery.2 BC Gas also opened a new pipeline last year, connecting the Alberta border with Oliver in the Southern Okanagan. This kind of capital expansion, of course, builds assets that will be reflected in future rates to be approved by the Utility Commission.

The gas companies get delivery of natural gas from pipeline companies. In BC, there is only one pipeline company of significance—Westcoast Energy. Westcoast is a large, integrated company that owns gas distribution companies like Centra, processing facilities and pipelines. Like the gas companies, Westcoast's pipeline rates are regulated, although in their case by the federal National Energy Board. The rates (tolls) are a mixed bag of fixed and variable rates. Tolls for short-term contracts are higher when the price of gas goes up. The pipelines also benefit from supply and demand situations that maximize volumes of gas.

Westcoast also owns some of the major processing plants in BC. Natural gas must be processed before it can be shipped

The current prices mean huge profits for natural gas producers. With current spot market (short-term) gas sales of \$7-\$8, producers are still netting \$5 or better on spot markets, and \$3-\$4 on average prices for every thousand cubic feet of gas sold.

down a pipeline. Processing costs can also vary according to supply and demand factors. When the plants are running flat out, their costs can go up, and they will raise charges to the producers. However, regulated companies like Westcoast that can't raise all of its prices without regulatory approval also have an incentive to cut costs and increase profits.

One of the crueler ironies of the current natural gas market is that Westcoast is cutting about 35 jobs at its McMahon-Taylor, BC gas processing plant.

Westcoast's profits, predictably, are going up. In the first nine months of 2000 their *pipeline and gas processing profits* increased by 12% to \$140 million.³

Our search thus far, however, has yet to uncover the bags of money that consumers are shelling out. Until, that is, we reach the oil and gas producing companies that pump natural gas from wells and sell to the marketers.

There are over 250 oil and gas companies operating in BC. The top 10 producers are Canadian Natural Resources, Petro Canada, Talisman Energy, Mobil, Canadian Hunter, Anderson Exploration, Burlington Resources, Domcan Boundary, Husky Oil, and Penn West. Not one of them has a head office with a BC address. To speak to anyone in authority at any of these companies you will have to

call an Alberta office.

The current prices mean huge profits for natural gas producers. According to a BC government study in 1999, the cost of exploring for gas, drilling a well, producing gas, gathering raw gas in local pipelines, processing it so that it can be moved through a pipeline and sending it down a pipeline was \$1.30 per mcf. In addition to these costs there are taxes and royalties, which were \$0.40.5 These costs are now somewhat outdated. Producer costs have increased and royalties have increased. But with current spot market gas sales of \$7-\$8, producers are netting \$5 or better for each thousand cubic feet of gas sold in these short term markets.

In fairness, not all gas sales are fetching those \$7-plus mcf prices. Many gas sales are locked into long term contracts at lower prices. Gas futures have become a major market that entices producers to hedge against market swings. Another variation in the market has been the introduction of broker/agents who have been re-selling as a speculative venture against the market. Many agent/brokers who sold gas directly to consumers months ago, by-passing the gas distribution companies, are now being massacred by the market they bet against.

We can get a better sense of the average return from Petro-Canada, one of the two The top ten gas producers in BC pump about a third of the province's total production.

These companies alone stand to generate over \$1 billion in profits from natural gas at the prices predicted for the next year, and possibly much more.

Table 1: Natural Gas Price Forecasts—	-January 1, 2001	(constant \$Cdr	n/million BTUs)
Sproule: Alberta gas		611 . DCDI .	6.11

Year	Sproule: Alberta gas reference price plant gate	(illbert: Alberta	Sproule: BC Average Wellhead	Gilbert: BC Plant Gate	Gilbert: SaskEnergy Plant Gate
2000	3.76	4.50	4.00	4.00	4.85
2001	7.72	6.70	7.50	5.55	6.85
2002	5.31	4.85	5.22	4.10	5.00
2003	3.91	4.35	3.71	4.00	4.50

Source: Sproule Associates, Ltd., Gilbert Laustsen Jung Associates

It is another irony that the larger the pipelines we build to export gas to the US, the higher the price in our local market because of more direct competition with US purchasers.

leading natural gas producers in BC. Petro-Canada cites "price realization" (an average price) of \$4.67 in the third quarter of 2000, almost double the \$2.71 price in the same quarter of 1999.⁶ Financial statements from Canadian Natural Resources, the other leading producer, report a similar average price for the third quarter 2000 (\$4.30), and further adds that its operating costs and royalties amounted to \$1.50, providing a "netback" (profit) of \$2.80.⁷

Prices increased further in the final quarter of 2000, and gas analysts now predict continuing high prices throughout 2001/02. As Table 1 shows, price estimates range from a high of \$7.50 at the BC wellhead for 2001, according to oil and gas consultants Sproule Associates, 8 to a lower \$5.55 at the BC plant gate, according to Gilbert Laustsen Jung Associates. 9 Both analysts agree that prices are not expected to return to last year's levels until 2003.

Here is where the money trail leads. The top ten producers in BC pumped 8.2 million thousand cubic meters of gas in 2000 —about a third of BC's total production. (Total 1999 production of BC natural gas was 25.9 million thousand cubic meters.) These top 10 BC producer companies alone stand to generate over \$1 billion in profits from natural gas at the prices predicted for the next year, and possibly much more. This will represent an increase of more than 25% over the past year. (This profit margin is before tax, and not including head office administrative costs. It also does not reflect exploration costs.) As the table below shows, natural gas profits from BC operations are contributing significantly to huge profit gains by the oil and gas giants at the corporate level.

There is another player in the money game. A chunk of the money that producers are earning ends up in royalties to the provincial government. These

Table 2: Top 10 BC gas producers: production and estimated profits					
Company	Global corporate net earnings for first 9 months of 2000 (\$ millions) ¹	Raw gas produced in BC 2000 (1000M³)²	Estimated 2001 profit from BC natural gas production at \$5.55 per mcf (\$ millions) ³		
Canadian Natural Resources	\$558	1,492,938	\$187.2		
Petro Canada	\$507	1,460,463	\$183.1		
Talisman Energy	\$621	992,055	\$124.4		
Mobil	\$12,500 4	788,920	\$98.9		
Canadian Hunter	\$94.5	679,572	\$85.2		
Anderson Exploration	\$3145	675,386	\$84.7		
Burlington Resources	\$371 ⁶	626,238	\$78.5		
Domcan Boundary	n/a	574,010	\$72.0		
Husky Oil	\$232	509,183	\$63.8		
Penn West	\$134.9	445,950	\$55.9		
Top ten		8,244,715	\$1,033.7		

Notes

- 1. Company third quarter reports, 2000.
- 2. BC Ministry of Energy and Mines, December 2000.
- 3. Estimate by author based on 2000 production, and Gilbert and Associates BC price forecast of \$5.55 for 2001, less \$2 producer costs and royalties = netback of \$3.55 mcf.
- 4. US Dollars. Exxon-Mobil consolidated 3Q 2000 net earnings; financial results for Mobil Canada not available.
- 5. 12 month earnings, Anderson Exploration 4 Quarter and fiscal year earnings to Sept. 30, 2000.
- 6. US Dollars. Burlington Resources consolidated 3 Quarter net earnings; financial results for Burlington Resources Canada not available.

royalties, of course, are the dividends that are owing to all British Columbians, who remain the collective owners of the natural gas in this province. Provincial royalties are "price sensitive," meaning that the higher the price, the higher the percentage royalty. Currently royalties are about 25% of prices. The BC government reports that in the fiscal year 2000/01 it is expecting to realize about \$1 billion in royalties from BC natural gas production, three times the \$335 million that was expected in last year's provincial budget.

There is pressure on government to return some of this money to consumers to offset higher prices, and the response of the BC government has been snail-paced. As one ministry insider said to me, "winter will be over before BC does anything." Government is also the industry's favorite target. As the CEO of BC Gas said in December, "the provincial government is making a fortune out of these gas prices. Hundreds of millions of un-budgeted dollars..."10 While this is undoubtedly so, it should be pointed out that the province is also a big consumer of gas and faces its own cost increases throughout the public sector. Already we are hearing reports is schools and universities deciding to cut services and programs in order to pay rising heating bills.

The province's gain has certainly put it in a position to spend dollars that it would not have except for natural gas revenues. However, the province's royalty gains are not the cause of high consumer prices. Unlike consumer taxes at gasoline pumps, lowering these natural gas royalties would not reduce consumer prices. The royalty charged by the province is a percentage of the producer price which, in the BC case, is set at the wellhead. The wellhead price is the market price net of process-

ing and transportation costs. If the royalty was reduced, or eliminated, the producer price would be unchanged.

Since our federal and provincial governments jointly deregulated natural gas in 1986, the wholesale price for natural gas has been determined by supply and demand in the market (which today is effectively a continental market). Market prices are established at pipeline "hubs" where gas can be diverted in separate directions. There are three main hubs in Canada. One is in Dawn, Ontario; a second is the interconnect between the Nova and AECL pipelines in Alberta; the third is the Sumas exchange where Westcoast's pipeline diverts gas either into the BC market or south towards California.

Proponents of deregulation have argued that for most of the years since 1986, Canadian consumers have benefited from low natural gas prices. While that is true, other factors need to be taken into account to understand the low gas prices of the past decade. Limited pipeline capacity from Canada to the US meant that there was usually a surplus of gas to serve the Canadian market. As a National Energy Board report on natural gas explains, "Canadian pipelines were operating at near capacity and excess gas supply conditions existed in Western Canada, creating intense gas-on-gas competition. Consequently, prices were determined by local market conditions."11 Pipeline expansions, and new pipelines like the Alliance pipeline from northeast BC to the US midwest have altered this equation. It is another irony that the larger the pipelines we build to export gas to the US, the higher the price in our local market because of more direct competition with US purchasers.

Proponents of deregulation have argued that for most of the years since 1986, Canadian consumers have benefited from low natural gas prices. While that is true, other factors need to be taken into account to understand the low gas prices of the past decade. Limited pipeline capacity from Canada to the US meant that there was usually a surplus of gas to serve the Canadian market. Pipeline expansions, and new pipelines like the Alliance pipeline from northeast BC to the US midwest have altered this equation.

Progressive Policy Alternatives

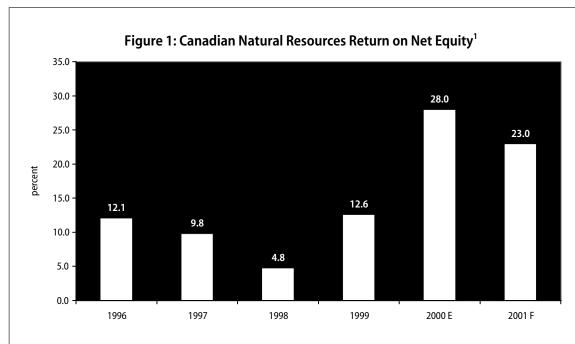
After fifteen years of deregulation, what can be done now to soften the blow of price increases for natural gas? After all, we live in a cold climate and heating our homes is hardly a luxury.

In truth, governments have several policy alternatives left to them, even though they have already deregulated on a continental basis, and creating a new regulatory framework that would make sense would be a complicated matter indeed.

In the longer term, the federal government is likely the government best suited to take effective action on the gas market. For example, the federal government has the ability to put a lid on any new pipeline capacity to the United States, thereby creating a more favorable supply and demand market for Canadian consumers. All new capacity makes Canadian prices more dependent on American market prices.

The federal government should also impose an excess profits tax on oil and gas companies that are realizing windfall profits because of market conditions in the United States. A federal tax, applied across Canada, would address the problem of inter-provincial competitiveness. These funds could be redirected to a consumer relief program in conjunction with the provinces.

At the provincial level, hard decisions have to be made about how much of the royalties should be used to offset consumer prices. In the BC case, if \$200 million was allocated for consumer relief, and applied equally to the province's 845,000 regulated gas consumers, it



Note:

1. Canadian Natural Resources Ltd., Presentation to Investors, November 2000. Estimated returns for 2001 are based on a commodity price for natural gas of \$5.50 mcf. CNR ranks itself among the top earners in the industry with the 2nd highest return on equity in Canada, and in North America. Industry analysts argue that returns for regulated sectors like distribution companies and pipelines are based on "no risk" and returns for oil and gas companies should be higher.

would offer only about \$236 per house-hold—or a little less than half of the average annual increase resulting from the latest 27% increase. The rebate would be larger, of course, if targeted to low income households.

Governments' windfall revenues, and a share of excess profits, should also be directed into a fund for conservation and energy retro-fits.

The fundamental question is whether the natural gas production and marketing system could or should be regulated again to stop market swings that batter consumers and energy-dependent industries.

There are credible arguments that gas and oil prices are not too high, given full cost accounting of environmental impacts. Many environmentalists have argued that prices were too low for the past decade, thereby encouraging excessive use of fossil fuels. This may well be so, but it is hardly an argument for market based energy prices, because the low prices of the past were also the result of deregulation. Moreover, the current high prices of natural gas are now resulting in large and industrial consumers switching to dirtier fuels. If we are looking for a way to reduce greenhouse gasses, the current oil and gas market formula seems to be a very unstable and ineffective mechanism.

Another common argument is that the industry's profits at this time are extraordinary and must be averaged over a longer period. High profits at the top end of market cycles are necessary to fund new investment, which is crucial to maintaining gas reserves. The argument has not been made, however, that oil and gas company profits were too low in the past. Taking Canadian Natural Resources as an example, (see figure 1, facing page) the

company's return on equity over the period 1996—1999, before the current market swing, averaged 9.8%. By comparison, the BC Utility Commission grants BC Gas a return of 9.5%, and the National Energy Board provides a return of 9.6% to pipeline companies.

Regardless of producer returns, it remains a matter of public policy whether an essential service – energy, hot water and home heating – should be subject to dramatic market swings when the result is hardship for consumers and economic catastrophe in energy dependent industries.

The most fundamental question of regulation is whether Canada should, or must, remain in a single continental market. If one considers it appropriate that the price of natural gas in BC should be significantly determined by the political and economic decisions of Californians, it makes sense to continue Canadian support and involvement in a single, continental oil and gas market. The alternative is to reintroduce a regulatory framework that would have the effect of regulating market prices in Canada, which under NAFTA rules would extend that market price to Americans as well. NAFTA rules out a two-price system for domestic use and exports, requires equal treatment of domestic and foreign companies, and also prohibits a deliberate reduction in exports of gas or oil to the US (unless proportionate reductions are made in Canadian supply). However, within this context Canadian governments retain the ability to intervene in the market. Needless to say, one province acting alone would likely result in capital flight affecting future supply. Ultimately, if Canada wants to return to a regulated, stable domestic price, the terms of NAFTA must be reconsidered.

The federal government should impose an excess profits tax on oil and gas companies that are realizing windfall profits because of market conditions in the United States. These funds could be redirected to a consumer relief program in conjunction with the provinces. Governments' windfall revenues, and a share of excess profits, should also be directed into a fund for conservation and energy retro-fits.

Notes:

- 1. The current rate per thousand cubic feet (mcf) can also be described in Gigajoules (GJ) or Millions of BTU (MMBTU) at \$12.42. Natural gas units can also expressed in thousand cubic metres (M3), which is approximately 35 times larger than per unit of mcf. Unless otherwise specified, all units expressed in this paper are in thousand cubic feet (mcf).
- 2. BC Gas, Third Quarter Report, Sept. 30, 2000. The balance of BC Gas' earnings were from petroleum transportation fees and non recurring items related to income taxes.
- 3. Westcoast Energy, Q3 interim report, Sept. 30, 2000.
- 4. BC Ministry of Mines, Energy and Resources.
- 5. BC Ministry of Mines, Energy and Resources, Natural Gas Industry Competitiveness Study, September 1999. This study is based on average costs in the Ft. St. John region and may differ in other regions of Northeast BC. In addition, data is based partly on information dating to 1995. A revised cost estimate will be

- completed in 2001, but Ministry officials indicate that some costs such as drilling may have increased as much as 25% in the past year as a result of competition for rigs.
- 6. Petro-Canada, Price Realizations (Natural Gas Prices Received by Petro Canada), Quarterly Report, Oct. 24, 2000.
- 7. Canadian Natural Resources, Third Quarter Report, Sept. 30, 2000. Netback does not include administrative costs or exploration costs.
- 8. Sproule Associates Limited, Natural Gas Price Forecasts Various Shippers as of Jan. 1, 2001.
- 9. Crowfoot, Carol, Senior Energy Economist, Product Price and Market Forecasts for the Canadian Oil and Gas Industry, Gilbert Laustsen Jung Associates Ltd., Quarterly Update, January 1, 2001.
- 10. John Reid, President BC Gas, Speech to news conference, December 6, 2000.
- 11. National Energy Board of Canada, Canadian Natural Gas Market: Dynamics and Pricing, November 2000.

Understanding the Volatility of World Oil Prices

By Costas A. Nicolaou

World crude oil market prices. Competitive or not?

Perfectly competitive prices, despite many caveats, are widely considered to be a relatively healthy—if very rare—free market outcome. Leaving aside an explanation of why such prices are so desirable, let us first examine whether the world crude oil market exhibits any or all of the standard hallmarks of competition. The usefulness of this exercise is that, if it turns out that the answer is negative, the road will naturally be more open to policy suggestions directed at disengaging, correcting, or otherwise managing the Canadian component of this market in some manner. This strategy would then achieve better domestic market performance for Canada, which, being more than self-sufficient in crude oil, does not have to depend on the world market.

So, one task of this paper is to direct our attention to the international crude oil market, in order to establish whether the market exhibits competitive features such as: many participants with small individual market shares (therefore little influence on the market price); free entry and exit of participants; perfectly informed buyers; uniform price; and price volatility. Such features would be expected to result in market prices faithfully reflective of costs and reasonable profits, as well as of the eventual scarcity of this non-renewable resource. On the other hand, lack of these features would betray undesirable distortions, hence the need for policy.

Let us, then, look for each characteristic of competition in turn.

Deceptive hallmarks of competition in world crude oil markets

As it turns out, the world crude oil market does exhibit some competitive features, and therefore might easily deceive the casual observer. First, there are apparently no economic restrictions of entry in the crude oil market, short of the obvious necessity to have discovered oil. Any country with oil within its territory would be free to produce and consume/ export, or to halt production at will. Current United Nations sanctions on Iraq are obviously a non-economic restriction, imposed on that country after its invasion of Kuwait and the ensuing Gulf War. These sanctions are therefore irrelevant for our current purpose, although they will be discussed later when we come to mention non-economic factors in the world market.

Price volatility is another feature that market participants and observers expect of competition. And volatility is the rule, rather than the exception, in the world crude oil market. A good example is the New York wholesale market price for West Texas Intermediate (WTI), the US benchmark crude grade, which literally never stays still, fluctuating from one minute to the next. Between the second half of 1986 and the end of 1999, WTI fluctuated between \$10.80 and \$41 per barrel.

Finally, the world oil market exhibits fairly *uniform prices* for the same grade¹

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in different locations, properly adjusted for transportation costs. For example, Canadian benchmark crude oil at Edmonton has been tracking WTI Chicago prices very faithfully since the mid-eighties, with the differential fairly well explained by transportation costs and exchange rates. The same type of observation holds for crude oil prices in markets on both sides of the Atlantic, for example, between New York and Rotterdam.

Undesirable concentration in world crude oil production and trade

While most other characteristics that promote competition seem to be present in the world oil market, the situation in production and trade unfortunately spoils the chance for competitive pricing in crude oil. This section will explain why.

Current production outside the Organization of Petroleum Exporting Countries (OPEC) is mainly concentrated in seven countries: Canada, the UK, Mexico, Norway, China, the USA, and Russia, each of which produced between 1.9 million and 6.1 million barrels per day (mb/d) of crude oil in 1999.³ With the total world production standing at 67.7 mb/d, the individual shares of these countries in world production ranged from 2.8% to 9% in 1999.

The remaining sources of non-OPEC oil are highly diversified and include 14 countries producing between .34 and 1.1 mb/d. The individual shares of these countries in world production range from .5% to 1.6%.

Finally, there are another ten much smaller producers⁴ that produced an aggregate total of over 1.1 mb/d in 1999, a combined share of 1.6% in world production.

In summary, outside OPEC we have a

total of 31 countries with individual production shares ranging from much less than .5% to 9% in 1999.

Beyond these, there are the eleven OPEC members: Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, The United Arab Emirates, and Venezuela. Together, the OPEC countries produced 27.6 mb/d in 1999, which translates into almost 41% of world crude oil production.

In terms of the pure number of producers, then, we have a total of 42 countries. However, since production decisions in OPEC are fairly centralized, the operative total is only thirty-one individual producers and OPEC, with the latter controlling almost 41% of world production. This degree of concentration does not conform very well to the perfectly competitive standard.

Moreover, when other, equally important, production and supply considerations are taken into account, the situation in the world oil market is in fact much less conducive to worldwide competition than is indicated by the producing countries' shares in world production.

Take, for example, the share of producers in crude oil exports worldwide. Here we have the situation that major non-OPEC producers—mainly the USA—are oil importers, therefore they belong on the demand side of the world trade equation. In contrast, OPEC's production is mainly destined for exports, thus dominating 56% of the world export total. In terms of control of supply available for world trade, then, the appropriate degree of one-country concentration to use is 56%, not the 41% that comes out of the world production data.

Next, if we examine capacity utilization rates in the production of crude oil, the current situation is that OPEC (and, specifically, Saudi Arabia alone) is the only supplier with substantial excess capacity.

Moreover, OPEC is the only producer with the right economics for increasing that capacity at low cost, even at oil prices well below \$15/bbl. This is because OPEC's production costs (particularly in the Persian Gulf) are under \$2/bbl, and the capital expenditure to increase capacity by 1 barrel per day ranged between \$2,500 and \$5,000 in 1995. In contrast, non-OPEC production is much more costly in terms of both extraction and increase in capacity.

Finally we must look at the distribution of world oil reserves. Here, once more, OPEC dominates, controlling a proportion just shy of 80% of the world total.

The result of all the above factors is that price determination in the world oil market is in fact in the hands of OPEC, with many undesirable consequences, as we now come to discuss in more detail.

OPEC's 'management' of world oil prices: Chaos instead of order

OPEC's cartel managers are acutely aware of their price-setting power, and profess to manage crude oil prices with price stability and long-term world supply considerations as main goals.

The OPEC Council of Ministers, its governing body on matters of energy pricing, meets regularly to decide upon the target price range of OPEC crude, and the associated quotas for each member so that this range may be achieved. The relevant calculations obviously have to take into account all other factors and players in the international crude oil market, besides

OPEC itself. In effect, OPEC as a whole attempts to act as the 'swing producer' in world oil, adjusting its total output in order to achieve a balance of supply and demand at a price it desires.

To correct for possible prediction errors, as well as non-economic factors that can interfere with supply and demand balance and therefore price determination, OPEC uses an adjustment mechanism to correct the price for its 'basket' of crude oil grades. This mechanism goes into effect if the price is either too high or too low for ten or more days, with the adjustment taking place at the end of the month.

Besides errors, unpredictable extremes in weather and a host of other factors, there is the issue of cartel discipline. As is typical with cartels, members have an incentive to exceed their officially set production quota, particularly when the crude oil price is set well above their cost, as it always is.

It is difficult to track over-production by OPEC members above their respective quotas, but many international agencies attempt to monitor it, a fact that suggests that 'cheating' by cartel members does take place, and therefore must be counted as one of the factors depressing world crude oil prices at times. In fact, Saudi Arabia, with its sizable production and capacity, has at times acted to neutralize overproduction by other cartel members so as to maintain the agreed upon target prices.

Another interesting factor—in crude oil demand, this time—is the policies of the bulk of refiners, particularly those in the USA. Refiners have in recent years gradually shifted their crude oil and oil product inventory policies to Just-In-Time inventory, with the result that

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international relations,
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also between them as a group
and the rest of the world,
especially the United States.

inventory levels have been lowered and kept to an absolute minimum, in order to save inventory-carrying costs. This inventory practice, however, denies the industry the ability to buffer prices from even small increases in demand, resulting in sharp spikes in both crude oil and product prices. It appears that the only winners in this situation are the profit levels of refineries. None of these fluctuations in prices has meaning for long-term costs and product availability; the fluctuations only serve to correct temporary market imbalances that cannot be worked out through an appropriate buffer of inventories.

Matters are further complicated by the fact that the worldwide crude oil market is shrouded by a great degree of secrecy. Consequently, it is very difficult for anyone to find the true balance of supply and demand, and, in the absence of reliable information, prices are driven as much by the animal spirits of traders as by real factors. The traders are often off-base in their collective expectation of future prices, adding another instability wrinkle in the crude oil price puzzle.

World crude oil prices could perhaps be kept stable if OPEC was to intervene in the market on a continuous basis, with Saudi Arabia (the producer with excess capacity) functioning as the ultimate 'swing producer'; that is, as the final balancer of supply and demand at the target price. This, however, would mean that the instability of the market price would be more or less transferred to the revenue of that country. This is obviously not a plan that Saudi Arabia might be interested in officially putting in place, although, as already mentioned, it has often, if reluctantly, acted in this manner.

Thus, on the economic front, OPEC is

faced with the monumentally difficult task of balancing a global market where both supply and demand are governed by widely divergent cost and demand conditions and national interests among the various players. To make matters worse, this market is also affected by unpredictable and uncontrollable developments in weather, production failures, and other similar factors.

Finally, a much more important factor than conditions of world supply and demand is the complications coming from political considerations. Crude oil prices, at least since the re-activation of OPEC in the early seventies, have often been dominated by political developments, particularly those occurring in the Middle East. In fact, causality in price determination also runs in reverse; that is, crude oil is one of the dominant factors affecting political developments and international relations, particularly among the Persian Gulf countries themselves, but also between them as a group and the rest of the world, especially the United States.

Figure 1 charts crude oil prices in nominal US dollars, marking events related to this strategic product and thus illustrating the connection between political events and oil prices. While crude oil prices were both stable and at very low levels before1973, when OPEC was not active, price gyrations have been the order of the day since its re-activation. These gyrations were often a consequence of OPEC's output and price decisions, but equally often they were caused by political events and traders' expectations about security of supply, particularly from the Persian Gulf.

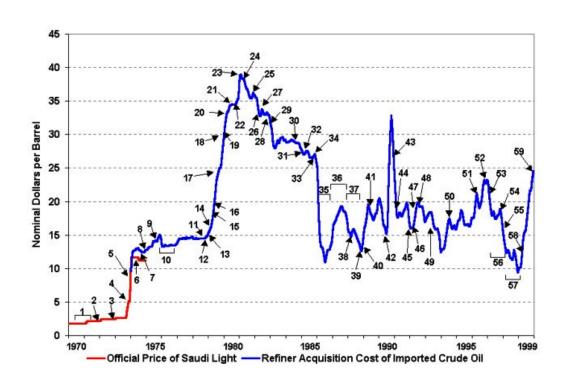
Here is a summary list of the main political events that have shaped crude oil pricing over the years, along with a few unpredictable situations such as severe weather and other facts (refer to Figure 1 using the numbers attached to these events below):⁶

- Oil embargo begins (October 19-20, 1973) (4)
- Oil embargo ends (March 18, 1974)(6)
- Iranian revolution; Shah deposed (13)
- Iran takes hostages; President Carter halts imports from Iran; Iran cancels US contracts; Non-OPEC output hits 17.0 million b/d (17)
- Kuwait, Iran, and Libya production cuts drop OPEC oil production to 27 million b/d (20)
- First major fighting in Iran-Iraq War (23)
- President Reagan abolishes remaining price and allocation controls (24)
- Spot prices dominate official OPEC

prices (25)

- OPEC output falls to 13.7 million b/d (32)
- Saudis link to spot price and begin to raise output (33)
- OPEC output reaches 18 million b/d (34)
- Iraq invades Kuwait (42)
- Operation Desert Storm begins; 17.3 million barrels of SPR crude oil sales is awarded (43)
- Persian Gulf war ends (44)
- OPEC production reaches 25.3 million b/d, the highest in over a decade (48)
- Kuwait boosts production by 560,000 b/d in defiance of OPEC quota (49)
- Extremely cold weather in the US and Europe (51)
- U.S. launches cruise missile attacks into southern Iraq following an Iraqi-

It seems that the oil market will rarely disappoint those who enjoy the excitement of a roller-coaster.



The inescapable conclusion is that the world crude oil market is plagued by so much diversity of conditions in both its supply and demand side, and suffers from so many political influences, that prices determined in that market rarely come even close to reflecting, as they should, either costs or long-term scarcity of the non-renewable resource that is crude oil. In other words, the market fails to deliver prices that could serve as guides to producers, investors, and consumers. To make things worse, crude oil instability is damaging to the rest of the economy. supported invasion of Kurdish safe haven areas in northern Iraq. (52)

- Iraq begins exporting oil under United Nations Security Council Resolution 986. (53)
- Prices rise as Iraq's refusal to allow United Nations weapons inspectors into "sensitive" sites raises tensions in the oilrich Middle East. (54)
- World oil supply increases by 2.25 million barrels per day in 1997, the largest annual increase since 1988. (56)
- Oil prices continue to plummet as increased production from Iraq coincides with no growth in Asian oil demand due to the Asian economic crisis and increases in world oil inventories following two unusually warm winters. (57)
- OPEC pledges additional production cuts for the third time since March 1998. Total pledged cuts amount to about 4.3 million barrels per day. (58)

The data in Figure 1 goes to the end of 1999, when crude oil prices stood at \$25/bbl. Since then, crude oil spot and futures prices first rose to almost \$35/bbl, and then backed off close to \$27/bbl (January 2001), amid concerns that another spiral, this time downward—below \$20/bbl—might result from overproduction of crude oil as the Spring season approaches and demand is expected to ease. The talk is now about reduction in oil supply, by a sizable 1.5 million b/day. It seems that the oil market will rarely disappoint those who enjoy the excitement of a roller-coaster!

To summarize, wild price gyrations are quite typical of the world oil market, and they are due to at least three reasons.

First, there are the innumerable compli-

cations related to the difficulties of predicting demand and supply worldwide, coupled with the secrecy surrounding market developments. For example, one explanation for the slide of crude oil prices in 1998, besides OPEC member discipline, was the inability to predict the crisis in the Asian economies during 1997 and beyond, and the unusually warm winter of that period.

Second, there is OPEC member discipline. The cartel's most frequent historical pattern has been to meet regularly and set up their production quotas so that the world market ends up with the price they themselves determine in advance. As time passes, though, their incentive to sell over quota 'under the carpet' gradually ends up spoiling their own market plan, and crude oil prices start to fall. History then repeats itself: Back to the meeting table, and back into re-arranged production quotas, to revive the sagging price.

Third, and very important, are political developments. In fact, most of the 'spikes' in oil prices in Figure 1 were associated with political crises.

The inescapable conclusion is that the world crude oil market is plagued by so much diversity of conditions in both its supply and demand side, and suffers from so many political influences, that prices determined in that market rarely come even close to reflecting, as they should, either costs or long-term scarcity of the non-renewable resource that is crude oil. In other words, the market fails to deliver prices that could serve as guides to producers, investors, and consumers. To make things worse, crude oil instability is damaging to the rest of the economy, a concern to which we turn in the next section.

Volatile crude oil prices, the economy, and consumer and producer planning

It cannot be overemphasized that crude oil is a strategically important commodity, and that developments in its production and pricing are crucial to the economy as a whole. This is because, beyond its great importance for the transportation sector, crude oil also serves as both energy input and raw material in the production of a host of other commodities. Crude oil availability and its price therefore impact on the general economy in multiple ways, affecting the economy's performance to a much greater degree than many other commodities put together.

The most important channel of influence is that rising crude oil prices feed price inflation in consumer and other intermediate goods, which in turn impacts on other final commodity prices. This inflation then fuels demands for wage and salary increases to maintain consumer purchasing power, and the inflation spiral gets on its way.

Monetary authorities, in their attempt to keep inflation at bay, end up having to raise interest rates, thus sending economies into recession. The detrimental effect of such developments on growth rates is both substantial and unmistakable. One of the worst post-war recessions, also accompanied by double-digit inflation, happened in the early seventies when the price of crude oil skyrocketed as OPEC was re-activated.

Besides the inflationary effects, the virtually unpredictable price volatility of the world crude oil market plays havoc with planning, and causes a host of mistakes on both sides of the market. For

example, Alberta's oil producers had to languish under crude oil prices as low as US \$10/bbl at the end of 1998, while three short months later they came to enjoy more than double and eventually 3.5 times these prices.

This was not the first time that this kind of fluctuation has occurred. In 1995 prices peaked at about \$40/bbl and then tumbled close to \$10/bbl in less than two years.

These sorts of price whirls do not come even close to reflecting production costs in any consistent manner. Nor do they help orderly planning. To make matters worse, the instability is in turn reflected in both the level of exploration and in oil rig counts, and it sends confusing and contradictory signals to planners and investors about the actual scarcity of the resource. Yet, it is the scarcity conditions that ought to govern long-term exploration and production in a healthy market.

Crude oil volatility hurts many other parts of the economy, because the plans of industrial users of crude oil and its products are constantly put in jeopardy. Business firms, both in energy and in other parts of the economy, make investment decisions based on expectations about prices. If the decision is made in the expectation of low (or high) energy prices, and the oil market varies sharply, firms end up with inappropriate investment and general business decisions. Even those firms that correctly anticipate the volatility may be adversely affected by simply putting off a decision until the market stabilizes.

Finally, consumers and small businesses are not immune from volatile crude oil prices either. Consumer purchases of housing and consumer durables, such as Rising crude oil prices feed price inflation in consumer and other intermediate goods, which in turn impacts on other final commodity prices.

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autos and appliances, are also adversely affected by instability in energy markets.

For example, the latest climb in prices from a 'bottom of the barrel' \$10/bbl in 1998 to almost \$35/bbl in 1999 and 2000 caught motorists driving SUV's with gasoline-guzzling engines, and pushed small truck owner-operators to the brink of bankruptcy, when their costs shot up but their transportation charges to customers had to stay unchanged. Many other small businesses faced similar predicaments, while larger corporations, such as land transport companies and airlines, raised prices to cover increased costs, causing inflation instead.

In summary, OPEC's price control, along with all the other factors affecting world oil prices, make planning very difficult. OPEC-determined prices appear to have no relationship whatsoever to real scarcity, and everything to do with the cartel's success or failure in controlling prices, as well as political events. Is there a way to insulate Canada from these price gyrations and achieve a more stable price environment that would enhance planning and provide correct incentives to fuel users? As we shall see in the next article, there is.

Notes:

1. On the other hand, crude oil is not a *homogeneous product*. Rather, it exhibits substantial variation in quality. 'Heavy' versus 'light' and 'sweet' versus

'sour' crude oil are examples of two major classifications (among others) encompassing a number of different grades of oil. Nevertheless, world crude oil market buyers and sellers are specialized, and therefore very well informed as to crude oil varieties and their differing yields of oil products. Consequently, market price differentials usually reflect quality and yield differences rather faithfully, at least most of the time, while any unjustified differentials are expunged fairly quickly by shifts in demand among different grades. The situation then is almost perfectly equivalent to the theoretical case of product homogeneity expected to be a feature of competitive markets.

- 2. Final Report of the Commission of Inquiry Into Gasoline Pricing in Manitoba, 1987, Figure 34.
- 3. Most of the raw data in the following paragraphs are from the US Department of Energy (DOE).
- 4. Denmark, Congo, Vietnam, Azerbaijan, Brunei, Trinidad and Tobago, Cameroon, Romania, Turkmenistan, and Peru. Beyond these, there is Italy, Uzbekistan and Guatemala, all with production less than 100,000 b/d in 1999.
- 5. DOE, USA, *International Energy Outlook*, 1995; and DRI/McGraw-Hill, *Oil Market Outlook* (Lexington, MA, July 1995), Table 1, p. 10.
- 6. Listing of events by USA/DOE.

PART TWO

Solutions:

Progressive Policy Alternatives

Escaping Volatile World Oil Prices: A Domestic Oil Price for Canada

By Costas A. Nicolaou

A dual price plan for Canada

Stable prices are a desirable goal of economic policy. However, the world crude oil market is not able to produce price stability. It seems, then, that the only solution is to escape from its wild rides. Such an escape, however, might be possible only for those countries that are at least self-sufficient in oil.

Fortunately, Canada is, in fact, a net exporter of crude oil. While we do import some quantities for Eastern Canadian refineries, we also export at least an equal amount from Alberta to the USA. In effect, we do not need to purchase net imports from the outside world. Hence, we do not need to depend on world oil prices.

We can, therefore—at least in principle—insulate ourselves from the wild rides of world crude prices, and the associated economic inefficiency of the world market. Under a scheme of this sort, the Canadian price would be determined independently from the world crude oil market.

But why would a Canadian price be easier to determine, and without fluctuations, in comparison to the world price? The simple reason is that the Canadian market is far less complicated and much smaller than the world market for crude oil. The latter market is plagued by too many players, too many unpredictable factors, cheating by cartel members, and unforeseen political developments.

In contrast, a separate Canadian market would be much smaller and more

manageable. Moreover, it would not be subject to so many political developments, and would not be plagued by cartel cheating. Consequently, supply and demand balance would be far easier and achievable, free of wild fluctuations. A made-in-Canada price would suffer from much less volatility and unpredictability. Needless to add, good planning by all participants would also be made much easier in such an environment.

Some details of a made-in-Canada price

Leaving aside for the moment the actual mode of determining a made-in-Canada price, let us first deal with measures that the domestic price plan needs to put in place with respect to exports and imports.

The plan would require some insulation of the domestic market from the world price, in order to avert the routing of domestic production to exports (when the world oil price is higher than the Canadian price) or the flooding of the domestic market by imports (when the world price happens to be lower).

This insulation would require a tax and an equivalent subsidy, one on each side of crude oil export and import activities. Which measure (tax or subsidy) is to be applied to which leg of trade (exports or imports) would depend upon the relationship of the world price to the domestically determined one.

When, for example, the world crude oil price happened to be higher than the Canadian price, a tax equal to the difference would be applied to the Canadian

Fortunately, Canada is, in fact, a net exporter of crude oil. While we do import some quantities for Eastern Canadian refineries, we also export at least an equal amount from Alberta to the USA. In effect, we do not need to purchase net imports from the outside world. Hence, we do not need to depend on world oil prices. We can, therefore—at least in principle—insulate ourselves from the wild rides of world crude prices, and the associated economic inefficiency of the world market.

export leg² and the equivalent subsidy would be paid to the importers. This procedure would make the effective export prices equal to those of production for domestic use, and the import costs equal to domestic purchase prices.

If, on the other hand, world crude oil happened to be priced lower than the made-in-Canada price, the equivalent subsidy would be to the exports—up to the quantity matching the necessary imports—while the tax would be imposed on the imports.³

The level of the made-in-Canada price should be determined by joint consultations between the Federal Government, the Provinces and the oil industry. That price should take into account Canadian exploration and production costs as well as a reasonable level of profit for the oil industry. That profit level should not be too far from the industry's historical experience over the complete cycles of past world crude oil prices.

There will, of course, be those prepared to argue that current profit levels in the industry are much higher than justified by competitive standards. This might be true, but the value of the made-in-Canada price plan proposed here is primarily to avoid the gyrations of crude oil prices, the associated costs for the whole economy, and the damage to effective planning. The expectation is that the benefits of a stable crude oil price for consumers, investors, long-term industrial development, export prices, and for the economy as a whole far outweigh the possible gains to the economy from reducing the profits of the oil industry from current levels.

Moreover, allowing the industry's profits under the plan to approximate past

levels would probably make the industry less resistant to what they would be prone to see as heavy-handed government interference. The Canadian-based oil industry has achieved full integration from the crude oil wellhead to the gasoline pump, and this integration enables them to have infinitely better control of their product markets than agricultural producers, for example. Hence we observe the contrast of the oil industry abhorring government involvement, while the agricultural industry regularly appeals for help to mitigate the effects of instability in their product prices and incomes.

The oil industry may have managed to shield itself enough from the vagaries of unstable crude oil prices, rarely losing overall, whether crude oil prices are high or low. Nevertheless, it is not a matter of debate that the general economy still suffers bouts of inflation and recession from oil price volatility. Planning, both by the industry and consumers, also suffers, as explained above.

It is therefore not difficult to support the position that the oil industry ought to consider interests beyond its narrow profit concerns. When a plan is proposed that does not affect the industry's ability to maintain its profit levels, but the plan helps other components of the overall economy, it is a matter of social responsibility for the oil companies to give the plan fair consideration.⁴

Time to challenge the FTA, NAFTA and WTO

But how feasible would a dual price plan be in the current institutional environment that Canada has—I would say, unwisely—embraced in the last fifteen years? To wit, how would a made-inUnfortunately, the entry of resource-rich and self-sufficient
Canada into the FTA and
NAFTA has placed our national government in a much less
powerful position to administer and manage the country's valuable resources.

Canada oil price square with the Canada-USA Free Trade Agreement (FTA), the North American Free Trade Agreement (NAFTA), and the World Trade Organization's (WTO) rules and policies?

Unfortunately, the entry of resource-rich and self-sufficient Canada into these agreements—coupled with its unquestioning acceptance of the WTO's new more stringent rules compared to those of its predecessor, the General Agreement on Tariffs and Trade (GATT)—has placed our national government in a much less powerful position to administer and manage the country's valuable resources.

In fact, article 605 of the NAFTA would probably preclude us from establishing price and quantity controls on resources, even in emergencies. The article says that Canada can reduce exports to the United States only if domestic supplies are cut by a proportional amount.

The same article almost says that there can be no made-in Canada price for oil. More specifically, "the Party does not impose a higher price for exports of an energy or basic petrochemical good to such other Party than the price charged for such energy good when consumed domestically, by means of any measure such as licenses, fees, taxation and minimum price requirements."

It is articles such as the above that allow US Energy Secretary Bill Richardson to assure Americans⁵ that the potential for disruptions along the eastern seaboard is minimal—thanks to Canada's existence as a "secure supplier".

It is unfortunate, then, that the current institutional setting that our government has subscribed to makes dual pricing very difficult to put into practice, to say nothing of East-West regional difficulties.

Yet, it appears high time for the Federal government to consider getting out of the restrictions that previous governments have boxed Canada into. One only has to take a cursory look at other energy sources, such as natural gas and electricity, to see how detrimental conditions can rapidly become for the country when no residual national control over market supply exists.

For example, natural gas prices have, since the FTA and the deregulation of the industry, been determined by continental demand and supply. The recent hair-raising jump in these prices, from a ball-park average of Can. \$1.60/GJ to over \$10/GJ is mainly a result of weather and demand from the USA, coupled with the shortterm inability of the Canadian producers to provide extra quantities in short order. We are now reaching the unthinkable and ridiculous position of having to switch away from clean-burning natural gas and toward oil in Canada, while the USA demand for natural gas soars due to substitution of coal and other dirty fuels in electricity and other goods production. To add insult to injury, prices paid by Canadians for natural gas are now determined in the United States New York Mercantile Exchange, which means that our price for a commodity produced in this country is also affected by exchange rate movements of our dollar vis-à-vis the US dollar.

Similar developments have occurred in electricity, where Alberta's deregulation is causing second thoughts by its *laisserfaire* conservative government. As a consequence of this deregulation, Albertans are faced with paying exorbitant prices for electrical energy, due to shortage problems in the Western USA.

Only a re-examination and re-negotiation

of these limiting agreements could free Canada to pursue policies beneficial to its citizens. It is high time that the process be started before we lose all control, including most of the resources that this country is blessed to be endowed with. The costs of proceeding under current agreement regimes are unacceptable, and our politicians ought to take the lead in restoring some sanity in trade matters.

Notes:

- 1. Something similar was tried by Canada's federal government in the second half of the seventies. Because of a distinction between 'old' and 'new' oil, however, the quantities of exports and imports on which the taxes/subsidies were applied were not equal, and this resulted in the government running into substantial deficits in the oil account. This danger is avoided in the plan proposed here, because all exports are treated in the same manner.
- 2. Perhaps only up to a quantity equal to imports. Allowing exports to be higher than that might subject Canadian reserves to a quicker rate of exhaustion. Nevertheless, a higher world price would also encourage opening up of hitherto unprofitable sources of oil, and more exploration. This issue, then, would have to be decided upon in joint consultation with the industry, and with in-depth examination of the reserve situation and exploration activity.
- 3. Any excess of exports over imports

could be allowed to be sold at the world price, but exporting that excess could be left to the discretion of exporters. See previous footnote.

4. There is also the argument that dual pricing of a commodity results in the sort of economic losses depicted by the traditional 'welfare' triangles. Perhaps a few words are in order here.

First, these arguments usually apply to competitive prices. When the price determination process is subject to monopoly elements and to so much instability, the burden of proof—that welfare losses are of importance in managing crude oil prices—is with those who want to argue their point. Their argument, I would suggest, ought to be couched in dynamic terms, rather than abstracting from the costs of volatility associated with the current regime in crude oil pricing.

Second, it must be pointed out that the Canadian-based oil industry is foreign-owned to a large extent. Nevertheless, these economic 'loss' arguments are usually couched in a form that does not single out Canadian costs and benefits from global effects. But, from the point of view of national policy, gains and losses ought to have a 'national' and 'foreign' identity. Even the most altruistic national governments, after all, must be more concerned with national welfare, rather than weighing gains and losses equally for citizens and foreigners.

5. October 2000.

Only a re-examination and renegotiation of these limiting agreements could free Canada to pursue policies beneficial to its citizens.

Helping Low-Income Households Cope with Soaring Energy Prices

By Andrew Jackson

As crude oil prices continue to surge, cries for cuts to gas taxes by truckers and motorists alike understandably become more insistent. There may be a case for changes here, but increases to the GST credit make most sense from the point of view of protecting low-income households from soaring heating costs this winter.

Arguably, higher energy prices are here to stay, and are needed to bring about the shift to conservation and higher efficiency, which is needed to deal with global warming. However, the sharp 11.9% increase in energy prices we have seen over the past year creates very serious immediate difficulties, not just for businesses with high energy costs such as trucking, but also for low-income households.

While the spotlight has recently been on gas prices at the pump, home heating costs are more significant for most Canadians, and are less easily avoided. People can take the bus or drive less in response to higher gas prices. But the thermostat can only be turned down so far when winter comes.

Statistics Canada data for 1998 show that the average household spent 4.2% of its budget, or \$1,521, on fuel, electricity and water used in the home. The lowest income 20% of households, however, spent 5.6% of their budget on these items, an average of \$880.

It is interesting to note that household spending on private transportation tends to rise as a percentage of total spending as income increases, while spending on household energy costs tends to fall. Most seniors spend much more heating their homes than they do on gas, and low-income households tend to rely more on public transit.

No one knows exactly what will happen to home heating costs this winter. But fuel oil and natural gas prices have soared—and we are only now starting to notice it on our bills yet—and we will soon see a pass through into electricity prices in provinces that rely heavily on oil and gas for power generation. And let's not forget that higher energy prices have already pushed the inflation rate to close to 3%.

To cushion low income households, the CCSD calls on the federal government to increase the GST tax credit by \$70 per adult and by \$30 per child, over and above the anticipated inflation adjustment, at an estimated cost of \$920 million. The credit, which is paid out in cash, was introduced to protect low and modest income households from price increases caused by the introduction of the GST, and is phased out from a family income level of about \$26,000. Single households receive a modest supplement in recognition of the higher costs of living alone.

Increasing the GST credit would give some real protection to low and modest income families with children and to seniors, helping them to adequately heat their homes this winter without squeezing already very limited budgets. It would be a targeted, cost-effective measure, consistent with the long-term goal of making Canada more energy efficient without inflicting unnecessary hardships.

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Canadians Need More Options, Not Cheap Gas

By David Suzuki

When the price of gasoline rose dramatically this past summer, many Canadians were outraged and demanded the federal government cut gas taxes to reduce the burden to consumers. That hasn't happened, but with prices still high is it time to cut taxes? Will Canadians be better off with cheaper gasoline?

Far from it. The truth of the matter is that the price we pay for gasoline still does not reflect its true cost to society and the environment. In fact, when you look at the cost of other products and compare their impact on the planet to that of fossil fuels like gasoline and coal, it's clear how artificially cheap these fuels really are.

Consider the cost of two products sold by the litre—gasoline and bottled water. Many Canadians will gladly pay \$2 for a bottle of water that was simply collected at a natural spring, filtered (sometimes), bottled and delivered to the store. But we are beside ourselves at the thought of paying 80 cents for a litre of gasoline, which started as crude oil, requiring extensive exploration and test drilling to find and a pumping infrastructure to extract (processes that emit pollution and greenhouse gases). Then it has to be transported to a refinery for processing (more pollution), and finally delivered to market as gasoline. Only then do we buy and burn it, usually in inefficient engines, creating pollution yet again.

Fossil fuels such as gasoline are integral to our current economy. They are used to transport people and goods, generate electricity, heat our homes and cook our food. But fossil fuels are also non-renewable;

when we burn them, there's that much less for future generations. And burning them causes climate change, air and water pollution, and contributes to other problems like urban sprawl, gridlock traffic and car accidents. These impacts are very costly. For example, according to federal government statistics, up to 16,000 Canadians die prematurely each year from air pollution.

So when you consider these increased costs to society, gasoline is actually grossly under-priced. Indeed, in many European nations gasoline costs twice what it does here and the tax revenue generated is used to improve public transportation and encourage energy efficiency. Canada, meanwhile, is the only country in the developed world that does not provide meaningful federal funding for public transit.

There are now more than 18 million vehicles in Canada and, according to the World Bank, in the next 10 years the world's total will reach one billion. If these vehicles continue to guzzle gas, we will deplete our oil reserves much more quickly, oil prices will continue to skyrocket due to increasing demand, and our air, water and soils will suffer from greater pollution.

That's the trend in Canada, where some 300,000 more vehicles will roll onto our streets this year. According to a study by Vancouver's Translink, more families are buying second and even third vehicles, which has increased traffic volume in the city by eight per cent in the past four years, while the area's population has

risen by just four per cent.

To make matters worse, half of these vehicles are inefficient SUVs, pickup trucks and mini-vans that take up more road space, further increasing traffic congestion and air pollution. Building bigger roads helps, but not for long. In the end it simply encourages more cars, which quickly leads to more congestion.

It's a vicious cycle. We only have to look south of the border to many American cities for a glimpse of our future: vast freeways, sprawling suburbs and even greater reliance on the automobile. This will hit us right in the pocketbook because oil prices are expected to increase in the long term, and infrastructure and health care costs will continue to rise.

So there are ample reasons to reduce our reliance on fossil fuels, even without considering the looming spectre of global warming. And when we look at the recent research on what we are doing to our climate, the urgency of the matter becomes clear.

Although some newspaper editorialists still hang on to their scepticism of global warming as though it were the last bastion of freedom itself, the overwhelming majority of climate scientists agree that we are changing our climate by burning huge amounts of fossil fuels. The United Nations-sponsored Intergovernmental Panel on Climate Change (IPCC) recently adjusted their estimates for global warming in this century upwards, to between 1.5 degrees and 6.0 degrees Celsius. The panel also found there is an even firmer association between this warming and human activities than there was when they did their last estimates in 1995. In fact, as a recent editorial in the prestigious scientific journal Science points out, "Even the most sceptical climatologist in the IPCC now concedes that warming bears an anthropogenic (human) handprint."

And humanity's hand is heavy indeed. The latest research from respected organizations such as the Tyndall Centre for Climate Change Research indicate that global warming is expected to hit northern regions like Canada and droughtstricken developing nations especially hard. Meanwhile, the journal Nature recently published a paper from the Hadley Centre for Climate Prediction and Research that showed how many of the world's carbon "sinks" may actually become sources of carbon as the climate warms. Right now, carbon sinks like oceans and soils absorb half of humanity's carbon dioxide (a primary greenhouse gas) emissions. The Hadley Centre research shows that this ability will be greatly reduced as temperatures rise. These findings do not bode well for the future.

Yet this is exactly the kind of future we are heading towards if we continue to burn ever-increasing amounts of fossil fuels. Cheap fossil fuels like gasoline encourage inefficiency and waste. Instead of calling for reduced fuel taxes, which will only reduce prices by a few cents per litre, we should be fighting for improved energy efficiency legislation, better public transit and urban growth management, and more fuel-efficient vehicles. Outdated federal fuel efficiency regulations have not kept pace with new technology, and loopholes allow passenger vehicles like SUVs and mini-vans to be classified as "light trucks," which means they can burn more fuel and pollute more. The proliferation of these vehicles means that we get an average of 13 per cent less mileage from our new

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vehicle fleet than we did a decade ago.

Consumers also have to exercise their right to choose and opt for some of the better choices that are now available. My family recently bought our first brand new car in 30 years. It's a gasoline-electric hybrid vehicle that more than doubles fuel efficiency and reduces some pollutants by as much as 90 per cent. If we were to drive the average annual distance (which we will not) of 20,000 kilometers, it would cost us just \$600 for gasoline. By comparison, driving the same distance in an average SUV would cost \$2,600 and generate more than four times the pollutants.

I consider it my duty to invest in this kind of technology because consumer demand will be one of the driving forces behind making fuel-efficient technology commonplace. In other words, "green" choices will come faster and cheaper if more of us buy them and use them. They will also come more quickly if governments provide the right incentives and disincentives.

But it's not just in transportation where we have to use our fossil fuels more efficiently. Many provinces still burn huge amounts of coal to generate electricity. Yet Canada can greatly reduce our greenhouse gas emissions and reduce pollution simply by switching to cleaner-burning fuels like natural gas.

An even better solution is to start replacing fossil fuels with renewable sources of energy like wind and solar power. Wind power is now the fastest-growing energy source in the world and solar is the second-fastest. Countries like Denmark and Germany are fast expanding their use of these clean sources of energy. So is the United States, which has increased its wind power capacity by 50 per cent in the past two years. And prices have dropped too. In fact, the US Department of Energy anticipates wind power to be cheaper than natural gas by 2002. Renewable energy sources like wind power also create jobs. The wind power industry in Denmark now employs 13,000 people. In Germany, wind power investments have created 10,000 new jobs in the past decade. Across Europe, the EU expects to see some 500,000 new jobs in the clean energy and energy efficiency sectors in the next 10 years.

Canada would do well to follow the lead of these European nations by encouraging investment in cleaner energy sources. Reducing our reliance on automobiles, reducing fuel consumption and increasing energy efficiency are essential to a healthy, sustainable future. The lessons we can learn from new technologies like hybrid vehicles, wind and solar energy and soon, hydrogen fuel cells, is that these changes do not mean a reduced standard of living. Instead, they will free us from being chained to an increasingly expensive, polluted, fossil-fuel dominated future and provide us with cleaner choices that will leave Canada as a society better off.

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Coping with Costly Energy: Why Can't Our Governments Think Straight?

By Ted Schrecker

From an environmental point of view, rising energy prices—especially when they rise in a predictable fashion over time are unquestionably a good thing. They send a message about the need for farreaching improvements in energy efficiency if sustainable development rather than environmental collapse is to be the dominant theme of the next century's social history. This said, any progressive political movement must concern itself with the impact of higher energy prices on those who can least afford them. If governments do not provide assistance in response to the dramatic increase in oil and natural gas prices that began during the year 2000, then some households will be forced to choose between buying groceries and staying warm; some businesses will go under. How, if at all, can we avoid these outcomes?

During the 'energy crisis' of 1979-81, Canadian governments all along the political spectrum briefly concerned themselves with Canada's status as one of the world's most energy-hungry societies. Then, when oil prices fell on international markets, instead of continuing to rise, our political leaders went back to sleep. In the years that followed they squandered the opportunity provided by a long period of low energy prices to make the transition to a more energy-smart economy. This will probably be regarded as one of the great Canadian policy failures of the late twentieth century. Now, unless we want to bet our future on the proposition that recent price increases are just another 'blip'—and for a variety of reasons, we

should not wish for this outcome-we need to make up for lost time.

Let's start with what can't be changed, and what we shouldn't do. Oil and gas prices are set internationally, in markets where Canada—as a small producer in the global scheme of things—is a pricetaker. The political realities of Canadian federalism and the heavy reliance of a few provinces on oil and gas revenues mean that any attempt to enforce lower prices for Canadian consumers at the well head or the refinery would probably lead to the breakup of the country, and would certainly undermine the overall ability of any national government to govern. Furthermore, in the foreseeable future the oil and gas business will be carried out mainly by large corporations—many of them transnational—and smaller, entrepreneurial partner firms. There is no prospect of turning it into a public utility, even if we wished to do so.

We should avoid, at all costs, the political temptation of easing the pain of higher prices with across-the-board tax cuts, whether they involve decreased royalties or tax reductions at the point of purchase. Tax cuts are an extraordinarily blunt policy instrument; they provide help to many consumers who don't need it (Mr. and Mrs. Range Rover) as well as to those who do, and undermine the desirable effect of higher oil and gas prices on patterns of energy consumption. Working people who face income losses because their employers' energy bills are rising must be protected, but that protection is

more responsibly provided by way of support for improving the efficiency of energy use in industry and commerce.

We should also avoid the search for supply panaceas. The nuclear industry will no doubt invoke higher oil and gas prices to support a plea for yet another round of subsidies, despite the undetermined future costs of waste disposal and power plant decommissioning, as well as the \$20 billion debt nuclear power created for Ontario Hydro and its successor companies. (Only the size of that debt made deregulating electricity prices and integrating the province into the eastern North American electricity market a credible option in Ontario.) Nuclear cheerleaders should be ignored, as should the fans of large-scale hydroelectric development, which has an unenviable record of displacing or poisoning native people in Québec and Manitoba. Neither is a clean energy source, and past experience tells us that the comprehensive environmental impact assessments that should precede all such supply developments invariably fall by the wayside in an atmosphere of supply crisis.

What, then, can and should be done? Helping Canadians to improve the efficiency of energy use is the most environmentally and economically attractive solution, at every level and in every time frame. Refitting older houses, apartments and small business premises to cut heating energy use by as much 50 percent can often be accomplished in a matter of weeks; reshaping cities to use less energy through in-fill housing and reduced reliance on automobiles for passenger transport can take years, or even decades. Moving toward a less energy-intensive Canada without making life worse for households and businesses that are

already economically vulnerable should be regarded both as prudent public policy and as an ethical obligation. Fortunately, this objective does not require a Canadawide strategy. Although committing some of the national budget surplus to investments in energy efficiency would certainly help, most of the necessary steps could be taken by progressive provincial governments, and some are even within the reach of large municipalities.

Let's start with access to capital. Oil and gas producers can go to the capital markets to raise money for exploration and development; suburbanites can sell some investments or use their lines of credit to cut their heating bills with new windows. insulation and high efficiency furnaces. Most of my neighbours in Montréal's Pointe St-Charles can do neither. In this respect, they are like working people across Canada. A substantial program of zero-interest loans and even outright grants for improving energy efficiency in houses and apartments can be justified on grounds of both efficiency (correcting the market failures that result from lack of access to capital) and equity (creating local jobs and cutting household energy bills). Special measures are needed to address the situation of tenants, who may pay their own heating bills while having little right or reason to invest in upgrading the landlord's property.

Beyond these, a case can be made on equity grounds for direct tax relief, paid out monthly or quarterly rather than annually, for limited income households. The ideal would be a substantial increase in the federal GST tax credit, but individual provinces can take action that would have the same effect. Gas and electrical utilities, which operate under provincial regulatory jurisdiction, might also be required

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to provide 'lifeline' rates under which households would pay a special low rate for the first tranche of energy consumed during each billing period. Current rate structures usually work the other way, charging less per unit of consumption—in a stair-step pattern—as a customer's energy use increases.

Canada's arrangements for transporting people are overwhelmingly auto-centred. Measures to change that bias are urgently needed, since the system's social costs include not only pollution, accidents and the time lost to traffic congestion, but also the creation of an entire class of mobility-disadvantaged citizens including the old, the young, and the growing ranks of Canada's poor. Provincial governments must substantially increase capital and operating subsidies for urban public transit, once again for reasons of both efficiency and equity. Predictably, the Harris Conservatives in Ontario have done just the opposite, ending subsidies for municipal transit as part of their broader plan to force municipalities into intensified competition for tax dollars.

At least some of the necessary revenues could be raised by basing annual auto registration fees on a combination of the market value of the vehicle, the mileage driven per year, and the fuel economy rating of the vehicle. Without getting into details, we can assume that someone who owns or leases a vehicle valued at \$30,000 can afford \$450 a year, or 1.5 percent of the vehicle's value, for registration. In December 2000, British Columbia's NDP government proposed modest moves in this direction; Québec already adds a charge to support regional transit to car registration bills in some major cities. Perhaps more controversially, a special high municipal property tax rate could be applied to all commercial and institutional parking facilities.

Restoring or creating livable, high-density urban neighbourhoods as an alternative to suburbanization is imperative. People who have no recent experience of living in such a neighbourhood find it hard to understand that once you have high densities, all kinds of good things become possible—such as giving up the second car, or even the first, with remarkable after-tax savings. (On average, running a car costs around \$9,000 a year in Canada.) The task is admittedly complicated, since urban policy choices made in the cheap-energy past are quite literally cast in concrete. Efficient, affordable and safe public transportation is a necessary condition, but not a sufficient one. The next step involves substantial public investments in various forms of non-profit housing, with special emphasis on in-fill construction and on conversion of the disused industrial and commercial sites that are available in many cities. As in the case of building retrofits, local job creation would be an important additional benefit.

Finally, where a sufficient market exists, governments should invest heavily in revitalizing, and perhaps electrifying, intercity passenger rail transport. Alone among the measures I have advocated, this would probably require a direct federal financial commitment. Many justifications exist for such a commitment, starting with the prospects for avoiding the high direct costs of worsening airport and highway congestion in the Windsor-Québec City corridor.

Hardest for any progressive government to deal with are situations in which energy prices drive up the costs of doing

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business in ways that threaten jobs and livelihoods. Long haul truckers, for example, have no way of passing on increases in the price of diesel fuel to their employers or customers, which is why they have been among the most vocal supporters of energy tax breaks, on both sides of the Atlantic. In such situations, a case can be made for *targeted* tax relief (for business and farm uses only), delivered in response to tax filings that identify both current and past-year energy costs. This is a second-best solution, but one that compassion demands. Equally disturbing is the situation of workers whose employers could finance process changes or building modifications to reduce their energy costs, but will be penalized by shareholders for doing so because other, competing uses of scarce capital have more upside profit potential or are simply sexier. (In early December 2000, news reports warned that soaring natural gas prices could lead to layoffs in various sectors.)

Tax credits or accelerated deductions are theoretically attractive, but the incremental effectiveness of such programs—that is, how much investment would not otherwise have been made—is notoriously hard to monitor. If predictions of widespread job losses are realistic, then a case exists for experimenting with 100 percent depreciation in the year of expenditure for approved capital investments to

reduce energy use, zero-interest loan programs, and even direct capital grants (so long as those loans and grants are secured against future earnings). Canada's governments should have been thinking about these possibilities, and acquiring the engineering expertise necessary to distinguish good ideas from scams, over the past two decades. Unfortunately, it is not clear how fast the appropriate programs could now be put in place without offering an invitation to fraud on a massive scale.

Creative policy responses should be facilitated by the fact that budgetary deficits are not the major problem they were ten years ago, or even five. They will, however, be made more difficult by today's pervasive view of government as nothing more than an obstacle to the solutions that could be generated by private business. This view has been carefully cultivated by corporate managers and the propertied, culminating in the tax revolt of the rich against the rest of us that now dictates the fiscal policy agenda. Since the rich will more than make up in the rising prices of their energy-related mutual funds whatever they lose at the pump and the meter, the prospects for equitable policy responses to high oil and gas prices remain bleak unless a source of decisive leadership emerges. No sightings have yet been reported.

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What are we going to do about Saudi Alberta?

By Marc Lee

Imagine a family with ten children. Some of the kids may be a little smarter or prettier due to the luck of the draw. But suppose one child of the ten is the beneficiary of a whopping inheritance that affords this fortunate son the ability to drive around in a fancy car, avoid a part-time job, and just be generally smug. It is not hard to imagine how this situation could be highly disruptive to the family unit.

A very similar problem plagues a rather complex family, the Canadian confederation. And the enfant terrible? Not Quebec, as many might guess, but a province that might better be called Saudi Alberta.

While many have proclaimed the secret of Alberta's success to be tax cuts and debt reduction, a closer look reveals that the black ink on the provincial books has everything to do with black gold beneath the surface.

Over the 1990s, resource royalties from the oil and gas sector have netted the Alberta treasury about \$3 billion per year. In 1999/00, rising oil and gas prices on world markets led to a \$4.7 billion bonanza. This amounted to 27% of total provincial government expenditures of \$17.3 billion. Put another way, if you removed resource royalties from the Budget, last year's \$2.8 billion surplus would turn into a \$2.6 billion deficit.

This year, oil prices have stayed above \$30 a barrel, and look to remain high in the short-term. The price of natural gas has almost doubled since Budget time. The resulting windfall for Alberta's treasury in 2000/01 is estimated at \$8.5 billion-or just under half of total provincial

expenditures. Alberta advantage indeed.

Albertans now contemplate the day when their wildest dreams will be funded by petro-dollars. The province is already the only one without a provincial sales tax. Talk of late is about slashing corporate income tax rates by half, and even eliminating personal income taxes altogether. While these ideas are still a pipe dream, this year's bounty has made such massive tax cuts a serious topic of conversation.

What is of concern is that Alberta is engaging in what economists call "beggarthy-neighbour" policies with regard to taxes. As they drive tax rates down, other provinces feel compelled to follow, so that businesses are not lured away to the oil patch. The OECD recently raised a red flag about such bidding wars, warning against "harmful tax competition" (in the context of national tax policies). This behavior fails to produce new investment, but rather, merely pits jurisdictions against one another, to the benefit of mobile corporations.

From the perspective of Canadian federalism, this is a big problem. If other provinces feel compelled to follow Alberta to stay "competitive", they risk seriously underfunding public services. Most provinces are not as blessed as Alberta with oil and gas; BC and Saskatchewan have some, a boost to their provincial coffers, but BC is the land of trees, and Saskatchewan of farms. Other provinces, apart from Ontario (with its massive manufacturing base), just cannot compete in this race to the bottom.

All of this means that Alberta is exporting

Over the 1990s, resource royalties from the oil and gas sector have netted the Alberta treasury about \$3 billion per year. In 1999/00, rising oil and gas prices on world markets led to a \$4.7 billion bonanza. This amounted to 27% of total provincial government expenditures

more than just oil, but its political agenda as well. This is clearly the case with Alberta's new flat income tax of 10.5%. Alberta is pushing other provinces to deliver big tax cuts for the wealthy, even if it means gutting public services. The result will be rising tuition for post-secondary students, rising user-fees for health care, and the continuing privatization of public services generally.

At one time, sentiments of national unity bound Canadians together. The federal government made moves to share the wealth across this diverse country through equalization payments and regional development programs. Here the Alberta agenda lurks again, in the form of Alberta's homegrown Alliance Party, which wants to eliminate regional development

programs and radically decentralize the country. Such a move will only reinforce all of the above trends.

So what are we going to do about Saudi Alberta? It is tempting to call for a new National Energy Program to share the booty, even if it risks escalating Western alienation. But this would likely run afoul of NAFTA. Another alternative might be to revitalize the structure of equalization payments to better ensure that provinces are not pitted against each other.

On the other hand, Alberta will get \$1.4 billion this year in transfer payments from Ottawa. If Alberta refuses to take a cooperative approach to maintaining national standards, perhaps the federal government should simply cut off Alberta's allowance.

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Why Big Oil backed the fuel protests in Europe

By Naomi Klein

So why would the oil companies tacitly co-operate with anti-oil protesters? Easy. So long as attention is focused on high oil taxes, rather than on soaring oil prices, the pressure is off the multinationals and the OPEC cartel. The focus is also on access to oil—as opposed to the more threatening issue of access to less polluting, more sustainable energy sources

than oil.

When I arrived in London last fall, the city was like a jittery heroin junkie who had just shot up. The panic that gripped Britain when a coalition of truckers and farmers blockaded the nation's oil refineries had been replaced with an unreal calm. The gas was flowing again and, at the stations, dazed customers injected their tanks with rivers of unleaded.

As is the case with any powerful addiction, the fuel crisis hasn't disappeared; it has been, momentarily, sated. Protests against oil taxes are cropping up across Europe and they may well return to Britain after the moratorium called by the truck drivers expires. Canadian truckers are even threatening to mount copycat actions.

Watched from a distance, the oil blockades in Britain look like spontaneous popular uprisings: regular working folk, frightened for their livelihoods, getting together to say, "Enough's enough." But before this David and Goliath story goes any further, it deserves a closer reading.

There's no doubt that the fuel protests began when a couple hundred farmers and truckers formed blockades outside the oil refineries. But the protests became effective only when the multinational oil companies that run those refineries decided to treat those rather small barricades as immovable obstacles, preventing them from delivering oil to gas stations.

The companies—Shell, BP, Texaco et al.—claimed they wouldn't ask their tanker drivers to drive past the blockades because they feared for their "safety." The claim is bizarre. First, no violence was

reported. Second, these oil companies have no problem drilling pipelines through contested lands in Colombia and political revolts directed against them in Nigeria. When it comes to extracting oil from the earth, there seems to be no danger, including warfare, that oil multinationals are unwilling to risk. Third, the truckers' "pickets" were illegal blockades since the protesters were not members of trade unions—unlike the cases in which union members form legal pickets and companies hire scabs to cross them anyway.

So why would the oil companies tacitly co-operate with anti-oil protesters? Easy. So long as attention is focused on high oil taxes, rather than on soaring oil prices, the pressure is off the multinationals and the OPEC cartel. The focus is also on access to oil—as opposed to the more threatening issue of access to less polluting, more sustainable energy sources than oil.

Furthermore, the oil companies know that, if the truckers get their tax cut, as they did in France, oil will be cheaper for consumers to buy, which will mean more oil will be sold. In other words, Big Oil stands to increase its profits by taking money out of the public purse—money now spent, in part, on dealing with the problems created by Big Oil.

More mysterious has been the government response to the illegal trucker protests. While Tony Blair has not caved in to demands for lower taxes (yet), he didn't clear the roads either, a fact all the more striking considering the swift police crackdowns against other direct-action protests in Britain and around the world.

The oil blockades in Britain and France were enormously costly. Final figures aren't in, but the protests likely caused more real economic damage than every Earth First!, Greenpeace and anti-free trade protest combined. And yet, on Britain's roads last week, there was none of the pepper spray, batons or rubber bullets now used when labour, human-rights and environmental activists stage roadblocks that cause only a small fraction of the fuel protest's disruption. "We need to maintain the rule of law," the police invariably say as they clear the roadways, stifling the protesters' messages while painting them as threats to our collective safety.

Not this time. William Hague, leader of Britain's Conservative Party, characterized the men who closed Britain's rural schools and partially immobilized its hospitals as "fine upstanding citizens." Perhaps the only "upstanding" way to protest these days is not out of concern for the broader good but out of pure self-interest.

What happened last week was a tax revolt on the roadway. The participants wanted a break on their taxes and happened to park big pieces of machinery in the middle of the road. That's not political activism. It's vigilante capitalism.

[This piece originally appeared in The Globe and Mail, Wednesday, September 20, 2000.]

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PART THREE

The Future:

Protecting Electricity from Deregulation

Learning the Lessons from Natural Gas—A Warning For Those Considering Electricity Deregulation

By Jim Sinclair

Here on Canada's West Coast, working families are bracing for the highest gas bills in the province's history. Businesses like greenhouses are predicting closures. Others are skirting pollution guidelines and turning to cheaper fuels like diesel and coal. Our pocket books are suffering, and now we are facing increased health risks and medical expenses as a result of record high prices and profits. BC schools are also cutting services for kids to cover skyrocketing fuel bills. How in the world did we get here, and perhaps more importantly—how in the world do we get out?

For most of this century governments have acted directly to regulate the price and flow of energy, in particular natural gas and electricity. The theory was simple enough; a fair return on equity was okay, but a product so important to all citizens could not be left to the "free" market to develop and distribute. Shortages, price speculation and lack of investment associated with "free" markets could not be tolerated.

Several decades ago, however, the natural gas industry in BC and Canada got caught up in the push to deregulate and privatize gas sales and distribution. Probusiness economists led the charge on behalf of right—wing governments, claiming the market would lower prices through competition-driven efficiencies, encourage more exploration and bring choice to consumers. Here in BC, the Social Credit government tossed the province's largest gas distribution

company to the private market in 1989. Gas prices stayed relatively low through the first years of deregulation, but in the past year gas prices have soared and there is no end in sight.

Despite the obvious failure of this policy for the majority, corporate advocates and the Fraser Institute are preparing for round two. The same forces that brought us the crisis in natural gas have now turned their sights on BC Hydro, hoping to convince us that deregulation and privatization will work for Hydro.

In December 2000, the BC Business Summit (a coalition of most of the province's business associations) reiterated the demand to sell off Crown Corporations and introduce so-called "competition" to areas such as electricity sales and the insurance industry. The push is driven by desires for huge profits. The sale of natural gas from BC alone in 2000 generated windfall profits of an estimated \$2.5 billion for the gas producing companies.

But if you're a business that buys natural gas, rather than the handful that sell it, you should be very careful. You might get what you want.

Selling off BC Hydro and deregulating the electrical industry would mean BC's electricity prices would follow those in California—leading almost immediately to 300 to 700 percent price hikes for all customers, residential and business alike. Major industries would close their doors, consumers would be gouged and the

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economy would face a long recession. This isn't just a bad dream; it's now real life for millions in Canada and the United States.

The dangers of electricity deregulation

The results of deregulation have been disastrous in California. Electricity rates have climbed dramatically—and the full impact hasn't even been felt yet because rates have been frozen for the consumer.

Consumer rates were frozen at artificially high levels to compensate the former regulated utilities, but the wholesale price (the price utilities pay to buy power) was not. The wholesale price skyrocketed and now major utilities, claiming bankruptcy, are lining up to demand the state's taxpayers pay \$11 billion to bail them out. The crisis in California has led to blackouts and is driving up electricity and gas prices for the entire West Coast.

In Washington State, where electricity for large companies is open to market speculation and price hikes, 800 workers at the Georgia Pacific paper mill are off the job as a result of an indefinite shutdown caused by soaring electricity rates. Those prices have gone from \$70 Canadian a megawatt hour to more than \$600 Canadian a megawatt hour or \$11.5 million per month. Because it's market-driven, the price is also volatile. Management fears a cold snap could raise the price to \$1,400 Canadian per megawatt hour. In contrast, large industrial customers in British Columbia, courtesy of our crown utility, pay a steady \$35 per megawatt hour and have not had an increase in seven years.

"We can't pay that so we are not running," Georgia Pacific general manager Jim Cunningham told the Bellingham Herald.

Seattle Power and Light, a long time lowcost energy supplier, has announced an 18 percent increase amid charges by Seattle Mayor Paul Schell that the problem is, "California's sadly mistaken deregulation policies, which have opened the way for price gouging and market manipulation."

Across the border in Alberta, residents and businesses are experiencing the same downsides of deregulation. Prices have doubled, and despite election year, rebate payments and a rate freeze for the next 12 months, the government is still under fire for its failed deregulation experiment.

"I think it's a major crisis," said Jason Myers, Senior Vice-President and Chief Economist for the Canadian Manufacturers and Exporters. Alberta is at a "disadvantage" compared to British Columbia, and some businesses face cutbacks, layoffs and closures. The spectacle of brown outs has already started to occur in Alberta.

What are the answers in British Columbia, and other provinces that have yet to jump on the electricity deregulation bandwagon? This situation offers a perfect opportunity for labour and business to cooperate, by demanding that the failed market policies of deregulation and privatization are not applied to BC Hydro and other crown utilities.

Low-cost power is a fundamental advantage working people and businesses enjoy. We can't afford to give that away. While you won't read about it in the papers or see it on TV, the combination of public ownership and regulation is a clear winner-economically and environmentally. In Manitoba, the NDP has introduced legislation that would require any

The same forces that brought us the crisis in natural gas have now turned their sights on BC Hydro, hoping to convince us that deregulation and privatization will work for Hydro.

government to gain the support of its citizens through a referendum before any privatization of Manitoba Hydro could take place. Provinces, like British Columbia, should follow suit.

The natural gas deregulation record

As for natural gas...the horse is already out of the barn. The deregulation and privatization craze has swept the entire continent and the disaster is hitting everyone. In Canada we tied our price to the "market" price and swung open the doors to unlimited exports. The results have been staggering.

Americans, more than ever, are dependent on Canada's natural gas. Canada used to supply about 5 percent of US needs but the figure has jumped to 15 percent and is continuing to climb. In 1998-99, Canada sold \$10.3 billion in gas to the United States. In 2000, with the doubling and tripling of gas prices, exports could reach upwards of \$15 billion, leading one gas analyst to comment it was going to be a "green Christmas" for the gas sellers. We're not only paying the US price, we're depleting our resources at the same time.

Besides the obvious failure of deregulation to bring lower prices, the other promise, more investment in exploration and development of supplies, has failed as well. There has been a six percent drop in natural gas production in the United States. Some suggest this may have more to do with price fixing and creating shortages than real shortfalls, however the result is the same—less gas and high prices. Another key indicator of the failure of deregulation is the all-time low level of gas in storage for the winter months. Even industry analysts are suggesting that

speculation is now driving some of the spikes in prices, with little relief in sight. Several US states are also launching court cases and investigations into price fixing by natural gas companies.

Will new supplies come to the aid of suffering consumers (both the health of their wallets and their families), or will the price continue to provide huge returns to gas and oil companies? The people who examine prices aren't predicting any sharp decline in the coming months or years. Demand is slated to grow dramatically as electrical utilities bring on natural gas fired generation to cash in on deregulated electrical markets (90 percent of new electricity plants in the US are powered by gas).

"Where is the additional gas going to come from?...Good Question," says a report by industry experts Raymond Jones and Associates. This firm predicts the high gas prices will knock out industrial usage in order to free up supply for electrical generation. Thus, working people will not only pay more; thousands of them lose their jobs.

"Natural gas sets the prices for electric power—a relationship made in heaven" brags the report. While it is heaven for gas sellers, it looks more like hell for consumers—a cold one at that. On the home front, Canada seems to have thrown our collective arms up in the air. The National Energy Board (NEB) has become captured completely by the industry it purports to regulate for Canadians, almost embarrassingly so.

Any fears by the gas industry that the NEB would deal with windfall profits and act to assure long-term supply for Canadians was dispelled in November when the NEB brought down its findings on the

In Manitoba, the NDP has introduced legislation that would require any government to gain the support of its citizens through a referendum before any privatization of Manitoba Hydro could take place. Provinces, like British Columbia, should follow suit.

How do we reclaim our natural resources such as natural gas and ensure that a regulated industry controls windfall profits and guarantees long term supply? The answer isn't complicated, it's the political will that's lacking in Canada to admit the problems and

embrace the solutions.

crisis—a report that left the energy industry celebrating.

One major US gas trade magazine described the NEB report as a great addition to industry's "defense arsenal" that "armed" them to fight critics of the huge price increases. Ironically, the magazine couldn't believe its good fortune that unlike Americans, Canadians had not made the huge price increases a federal election issue.

There are solutions

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South of the border, high prices and the supply crisis has created a growing demand for federal government action and prompted independent investigations into price fixing by gas companies.

In California, the Governor is demanding a federal inquiry into price fixing by gas and electrical companies. The state, realizing electrical deregulation is a statewide disaster, is pushing to re-regulate the industry and bring major parts of it under public control through a new publiclyowned utility. On January 16, 2000, the Governor announced the public sector would begin paying for electricity purchases because the utilities had been bankrupted by deregulation. The state of California just asked the federal government to force gas sellers to sell gas to California. Utilities are pushing for higher prices to consumers, while federally, the US government is looking seriously at some sort of price control to force profits and costs to consumers down.

Canadians should also be worried that George Bush is promising Americans a more secure supply of energy. One energy reporter wrote an entire column urging California to send in the Marines to invade BC and secure cheap energy. Although tongue-in-cheek, we in Canada know better than to dismiss the US desire for energy.

In Canada, the real solution would require the federal and provincial governments to act with courage and vision. A domestic price cap for natural gas, along with a clear ruling that Canadians must have first call on our natural gas before foreign countries, would solve the crisis and put us back into a regulated environment. As well, the NEB should re-instate its policy that exports will only be allowed if companies can guarantee that a 25 year supply of natural gas exists. The result would be an immediate drop in price, and gas company profits would be limited to 15 or 20 percent.

Such a move, however, would no doubt result in a North American Free Trade Agreement (NAFTA) challenge, because Canadians would be getting priority access to our natural gas at a domestic price that doesn't cripple our economy. The gas companies would cry foul, but the vast majority of Canadians and most businesses would support this solution, and subsequently would realize that NAFTA is bad for citizens and local business.

Where governments, such as Alberta and Ontario, try to blunt the massive price increases with grants to consumers they are only applying bandages to the problem. At the very minimum, a federal and provincial windfall profit tax should be applied and the entire amount collected

turned over to consumers.

The other part of the answer, completely ignored by the industry for years, is conservation. A deregulated environment not only leaves the health of citizens at risk it actively discourages any serious conservation strategies. Instead, it encourages cheaper, dirtier fuels. A national program to finance conservation actions, including retrofitting every government building in Canada, needs to be implemented immediately. Homeowners should not only be encouraged to conserve, but given money and support to upgrade houses and apartments. This would deal with the long-term issues and create real jobs in the short-term. Government must do this because private

energy companies, driven by the bottomline, have no interest in conservation. The bigger the demand, the higher the price.

Canada's energy resources are fundamental to the health of this country. There needs to be a national campaign to force the federal and provincial governments to reject deregulation and privatization as models for our society. The disasters of natural gas and electricity deregulation provide a blueprint for disaster, and Canadians from all walks of life are angry. The challenge is to turn this anger into progressive solutions that challenge the globalization model of the right-wing that leave consumers at the mercy of energy corporations.

A deregulated environment not only leaves the health of citizens at risk—it actively discourages any serious conservation strategies.

Instead, it encourages cheaper, dirtier fuels.

The Energy Crisis: Ideology Trumps Common Sense

By Murray Dobbin

There is a delicious free trade irony in the energy deregulation fiascoes unfolding in California and Alberta—especially in the stunned disbelief coming from business. Here we have Jason Myers, chief economist for the Canadian Manufacturers and Exporters Association (CMEA) on Alberta's sky-rocketing natural gas prices: "I think it's a major crisis. If companies have to cut costs, there will be an impact on their employment."

Earth to Mr. Myers: What did you think the FTA was about?

The Canada-US free trade agreement (FTA) handed the United States guaranteed access to Canadian oil and gas. During the 1988 election the CMEA was one of the most aggressive promoters of the agreement—a deal that virtually wrote in stone that Canadian prices for natural gas would be determined by peak American demand.

But, of course, it doesn't stop there—it's the nature of ideology that the more you swallow the hungrier you get. Having given the US guaranteed access to our oil and gas (we can't reduce exports to increase domestic supply or use differential pricing), the Canadian government and the provinces are hell bent on giving up all regulatory influence over electricity prices through massive deregulation.

In California, the North American pioneer in electricity deregulation, prices have actually tripled in many areas and doubled in most, prompting the politicians to scramble for their political lives and put a cap on prices. This desperate

effort to shut the barn door after the horses have escaped has brought once powerful corporations to the brink of bankruptcy: Pacific Gas and Electric and Edison face the prospect of eating \$8 billion in energy costs they can't pass on to consumers

Kaiser Aluminum has shut its two US smelters because they can make more money by selling their electricity, and several fertilizer companies have shut down plants. Major shortages of those products are predicted for next year.

Ralph Klein is having night sweats over his political future, too, as his deregulation experiment careens out of control. The Alberta Power Pool auction of electricity in early

December pushed generation prices from \$40 per megawatt hour to more than \$130. The Industrial Power Consumers Association is in full panic mode: "For some of my members it is catastrophic," said president Dan Macnamara. "These new price levels are downright scary."

Ontario's move to a deregulated market and the dismantling of Ontario Hydro has prompted power generators and marketers to talk openly about getting substantially higher prices in adjacent American jurisdictions. This will inevitably result in higher prices in Ontario.

It is a neo-liberal article of faith that deregulation increases "choice" and reduces prices. In practice it is doing neither, but when the medicine fails, the prescription is to give even stronger medicine.

It is a neo-liberal article of faith that deregulation increases "choice" and reduces prices. In practice it is doing neither, but when the medicine fails, the prescription is to give even stronger medicine. Canadian governments are thus pursuing even more deregulation through more trade deals. First, there is the Agreement on Internal Trade (AIT), and then there is the services negotiations at the WTO, which would make global energy deregulation literally irreversible.

Canadian governments are thus pursuing even more deregulation through more trade deals. First, there is the Agreement on Internal Trade (AIT), and then there is the services negotiations at the WTO, which would make global energy deregulation literally irreversible.

AIT negotiators will present provincial trade ministers with an energy chapter this spring. If agreed to, it will most likely lead to what is called "retail wheeling"—in effect creating electricity spot markets in every province and a virtual futures' market for electricity speculators. This is a formula for wild price volatility and would make the goal of long-term price stability virtually unachievable.

And what the AIT is hinting at, the WTO agreement on services—the GATS—will make irreversible. The US released its services negotiating position on energy on December 21, 2000. It is clear that the Americans intend to press with all their might for new WTO rules over energy. They are proposing: "Non-discriminatory third-party access to and interconnection with energy networks and grids, where they are dominated by government entities or dominant suppliers." In other words, the California model applied worldwide.

This little holiday announcement is like the Grinch who stole Christmas for hardpressed Californians threatened with the potential collapse of their entire electrical system. Yet with no appreciation of the irony involved, the US claims that this new energy regime will make energy supplies "reliable" and "...benefit residential consumers and social services, as well as employment..."

Canada is apparently supporting the US position.

Electricity and gas are not just products like toasters and light bulbs. They are critical elements in the functioning of the economy. If you list all the factors that contribute to competitiveness and economic stability, predictable energy prices rank high on the list. Actively pursuing policies that create price volatility is ideology run amok. Imagine interest rates being decided not by the Bank of Canada, but by picking the rate from a hat every two weeks.

The CMEA's Mr. Myers told me he wasn't familiar with the GATS energy negotiations. Maybe he should pick up the phone and call Canada's negotiators—before it's too late.

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Appendix: Contributing factors to Gasoline Price Increases, Major **Canadian Cities**

(detailed data from Hugh Mackenzie's article on page 5)

	Toronto				Vancouver				
	Jul-98	Oct-00	Increase	% of increase	Jul-98	Oct-00	Increase	% of increase	
GST/HST	0.034	0.048	0.014	6.5%	0.035	0.051	0.016	6.5%	
Provincial Tax	0.147	0.147	-	0.0%	0.150	0.150	-	0.0%	
Federal Excise	0.100	0.100	-	0.0%	0.100	0.100	-	0.0%	
Crude Oil Costs	0.125	0.290	0.165	79.2%	0.125	0.290	0.165	68.9%	
Refining & marketing	0.119	0.148	0.030	14.3%	0.126	0.185	0.059	24.6%	

	Calgary				Regina				
	Jul-98	Oct-00 Increase		% of increase	Jul-98	Oct-00 Increase		% of increase	
GST/HST	0.032	0.045	0.013	6.5%	0.034	0.050	0.016	6.5%	
Provincial Tax	0.090	0.090	-	0.0%	0.150	0.150	-	0.0%	
Federal Excise	0.100	0.100	-	0.0%	0.100	0.100	-	0.0%	
Crude Oil Costs	0.125	0.290	0.165	80.7%	0.125	0.290	0.165	67.5%	
Refining & marketing	0.141	0.167	0.026	12.7%	0.116	0.179	0.063	26.0%	

	Winnipeg				Montreal				
	Jul-98	Oct-00 Increase		% of increase	Jul-98	Oct-00 Increase		% of increase	
GST/HST	0.034	0.047	0.012	6.5%	0.035	0.052	0.017	6.5%	
Provincial Tax	0.115	0.115	-	0.0%	0.206	0.206	-	0.0%	
Federal Excise	0.100	0.100	-	0.0%	0.100	0.100	-	0.0%	
Crude Oil Costs	0.125	0.290	0.165	87.6%	0.125	0.290	0.165	62.9%	
Refining & marketing	0.151	0.162	0.011	5.9%	0.073	0.153	0.080	30.6%	

	Saint John				Halifax				
	Jul-98	Oct-00 li	ncrease	% of increase	Jul-98	Oct-00 Ir	ncrease	% of increase	
GST/HST	0.069	0.097	0.028	13.0%	0.074	0.104	0.030	13.0%	
Provincial Tax	0.240	0.240	-	0.0%	0.270	0.270	-	0.0%	
Federal Excise	0.100	0.100	-	0.0%	0.100	0.100	-	0.0%	
Crude Oil Costs	0.125	0.290	0.165	77.7%	0.125	0.290	0.165	72.2%	
Refining & marketing	-	0.016	0.020	9.3%	-	0.032	0.034	14.7%	

	Charlottetown				St. Johns				
	Jul-98	Oct-00 Ir	ncrease	% of increase	Jul-98	Oct-00 Ir	icrease	% of increase	
GST/HST	0.034	0.049	0.015	6.5%	0.083	0.115	0.032	13.0%	
Provincial Tax	0.120	0.120	-	0.0%	0.310	0.310	-	0.0%	
Federal Excise	0.100	0.100	-	0.0%	0.100	0.100	-	0.0%	
Crude Oil Costs	0.125	0.290	0.165	72.2%	0.125	0.290	0.165	67.8%	
Refining & marketing	0.143	0.191	0.048	21.2%	0.021	0.067	0.047	19.2%	