

**Natural Resources and Government
Revenue:**

Recent Trends in Saskatchewan

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by John W. Warnock

Introduction

For most of its history, Saskatchewan has been a “Have not” province with per capita income and gross domestic product below the Canadian average. This has commonly been attributed to the fact that Saskatchewan does not have a major manufacturing sector, is less urban than other provinces, and has an economy which is heavily dependent on agriculture and resource extraction. Until the province began to develop the resource sector, there were limited government revenues available for expanding social programs.

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Natural resources are a free gift from nature. In Canada, they are the property of the people as a whole, under provincial jurisdiction, and managed by their elected governments. Since the expansion of democracy, and the election of the CCF Government in 1944, the people of Saskatchewan have consistently felt that natural resources should be developed for the benefit of all. This means that the economic surplus, or economic rent created by the extraction of non-renewable resources, should primarily benefit the general public.

Beginning with the election of the NDP Government of Allan Blakeney in 1971, there was a concerted effort to expand the share of resource rents going to the government. This additional revenue helped finance economic development and enabled a significant expansion of social programs. However, after 1982, successive governments have steadily reduced the share of economic rent going to the general public and increased the share going to private corporations and their owners. In the present era, with rising natural resource prices across the world, the provincial government has been transferring billions of dollars of resource rents to private investors by reducing royalties, fees and taxes. In turn, the provincial government has been receiving relatively fewer revenues and has been forced to cut funding to many important programs including health, education, social services, and support for local governments.

Saskatchewan as a hinterland province

Saskatchewan is a hinterland area within North America. In Canada, it is an economy that has been based on the export of primary products. From a political economy perspective, and one of economic geography, Saskatchewan has been a hinterland area dominated by the metropolitan political and economic links through Winnipeg to Montreal and London, and then to Toronto and New York. The implementation of the Canada-U.S. Free Trade Agreement (1989) and the North American Free Trade Agreement (1994) accelerated the degree to which Saskatchewan has become a hinterland area of the U.S. economy. Even in the Canadian Prairies, Saskatchewan is more of a hinterland economy. Manitoba has Winnipeg as a major distribution and manufacturing area, and Alberta is building an urban economy in both Calgary and Edmonton, on top of its very large oil and gas industry.

Despite calls from the Saskatchewan business community to create a political and economic structure that is “More attractive to investment,” and lamenting over the fact that the population continues to hover around one million people, it is extremely unlikely that Saskatchewan will ever be anything but a hinterland economy. First of all, we are a part of the world capitalist economy, which has always been characterized as a polarization between town and country – urban industrial centres and less developed more rural areas. Beginning with the spread of mercantilism between 1500 and 1750, the world capitalist economy produced a dramatic polarization between the industrialized countries in Europe and the colonized areas in the South. In addition, one of the basic features of capitalism is the concentration of capital and capital markets in large urban centres – normally one in every country.

There is another aspect of the metropolitan-hinterland relationship. As ecologists have stressed in recent years, urban areas *require* hinterland areas. This was true of all urban areas long before the development of capitalism. Hinterland areas provide urban areas with clean air, water, food, raw materials and labour, and they recycle urban wastes (Rees, 1992; 1994).

Within the capitalist world system, the polarization between urban and rural areas is a fact of life. This generates a growing inequality in both income and wealth between urban and rural areas. As many United Nations (UN) organizations have recorded in their annual reports, inequality between the industrialized capitalist countries of the North and the less developed capitalist countries of the South has accelerated in the era of free trade and free market economies. Furthermore, they record that this is also happening *in* all countries, regardless of whether they are in the North or the South (Milanovic, 2002; United Nations Development Programme, 2001).

The only countries where the general trend toward polarization was either diminished or reversed was in the centrally planned Soviet economies. In Bulgaria, for example, the development of the Agro-Industrial Complex system began to decentralize production, employment and population. This was halted by the collapse of the Soviet system in 1989. However, few in Canada would wish to see this alternative introduced (See Warnock, 1987).

The reality is that Saskatchewan has more in common with the United States' (U. S.) North American Prairie states than it has with other Canadian provinces. Today, Minneapolis-St. Paul is the metropolitan centre which dominates the hinterland areas of the Central Northwest and the Ninth Federal Reserve Bank area that includes North and South Dakota, Montana, Minnesota, and part of Michigan and Wisconsin. The Twin Cities became a trading centre in the

fur trade era, then, the centre for the milling and food processing industry, next, the centre of the wood processing industry, and finally, the centre for finance, banking and regional capital, drawing on its prairie hinterland area. North Dakota, like Saskatchewan, remains a hinterland area in this system of political economy (Warnock, 2004).

Natural resources and capital accumulation

What can a government achieve working in a capitalist system and based in a hinterland area like Saskatchewan? In 1944, the newly-elected CCF Government, headed by Tommy Douglas, found it had very little freedom for action. The average income of families was low. There was neither a class of wealthy nor high income people to tax. There was no base for capital in the province. They were forced to rely on the credit unions and co-operatives for new locally controlled enterprises. For larger developments, they introduced a system of guaranteeing capital investments.

For many years Saskatchewan's economy was heavily dependent on agriculture. However, as Vernon Fowke and other political economists have stressed, the National Policy and the Wheat Economy was a commercial empire, a system of capital accumulation. It was designed to promote the development of industry and manufacturing in central Canada, not on the prairies. The economic surplus of farmers and farm labourers was to be extracted by financial institutions, the farm supply industry, and the agribusiness industry downstream. These corporations "Farmed the farmers" (Fowke, 1957), as they say. Thus, the economic surplus created by farm labour applied to land was skimmed off by the capitalist sector, owned and controlled in the eastern urban centres. This left farmers with relatively little net income, and they could not be a major source of government taxes and revenues. For farmers, little has changed over the years (Fowke, 1957; National Farmers Union, 2003).

From the beginning, Tommy Douglas' CCF Government believed that the best hope for expanding the economy and gaining revenues for government services and social programs was to develop natural resources. In 1944 and 1947, the new Mineral Taxation Act allowed the Provincial Government to change resource royalty rates that were set by previous governments and establish the principle that natural resources belong to the people as a whole. As well, they also ensured that natural resource development and use would be controlled by the provincial government. Although party members wanted a major government role in resource development, the Douglas cabinet chose a more conservative and pragmatic policy of support for private industry (Murray, 1978; Warnock, 2004).

There are two basic approaches to the development of natural resources under a capitalist economy. The liberal system developed during the early period of capitalism, when governments were run by well-to-do men who owned property. The theory which justified the early approach was developed by political economists who were staunch defenders of the new economic system. John Locke (1637-1704) was the first to present a detailed defence of the new capitalist view of natural resources within the context of the colonial and imperial conquest of North America. Locke and the capitalists emphatically rejected the traditional approach to natural resources. Around the world, pre-capitalist societies believed that natural resources – such as air, water and

land – belonged to all of the people. In these societies, resources were social property. Individual communities and nations may grant use rights (usufruct) to families, but no one with use rights could either buy or sell a natural resource like land. Very few pre-capitalist societies had a system of private ownership of land. Those that did had major urban structures and well developed class systems which separated the peasants and workers from the landlords.

Locke went to great lengths to set forth the new view of natural resources. Capitalism could not work unless the majority of the working population was forced off the land to become the proletariat with nothing to sell but their labour. However, capitalism also required that all natural resources, starting with land, were privately owned. The imperial and colonial project of the 19th Century, including North America, involved the removal of land and resources as common property, which was transformed into private property for individuals and business enterprises. State ownership was the intermediary stage in the privatization of resources. Today, we see this approach in Canada where the state still owns most of the forests. However, forests are not developed as either public or social goods, but are granted to private corporations through long-term leases (Arneil, 1996; Warnock, 2004; 2005).

Adam Smith (1723-1790) produced the classic description of capitalism and the accumulation process. Profits were the economic surplus extracted from workers labouring in the manufacturing process. Economic rent was the economic surplus extracted from labour applied to land and other resources. Profits and economic rent were accumulated by the capitalist class, which then invested to accumulate more profits and economic rent. Competition between capitalists was the heart of the new system of economic development, where capitalists must constantly strive to accumulate more profits. If they fail to expand and grow, they will be driven out of the market and collapse. This process has become known as Adam Smith's *Law of Accumulation*. Locke had argued, and Smith agreed, that when either an individual or a business takes a part of the common land or resources, he – as only men were to own property – did not owe compensation to the general public. Land and resources were there for the use of capitalists.

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The liberal capitalist theory of economic rent from resources was set by David Ricardo (1772-1823). Since then, it has formed the basis of mainstream economic rent theory. Economic rent is defined by Ricardo as a payment *over and above* what is necessary to keep labour and capital on the land and producing products – including a normal profit. Where an economic rent is present, there is a monopoly market that returns to either the farmer or capitalist a return *over and above* the normal rate of return. Thus, Ricardo's theory of economic rent neither included the payment of compensation nor royalty to the general public for the privatization and use of natural resources, which had previously been considered public property. In the context of this paper, I shall call this the liberal theory of economic rent. (Buchholz, 1989; Gunton and Richards, 1987; Heilbroner, 1961)

Governments seek to capture economic rent

This early view of resource rent did not go unchallenged. The working class struggled and achieved the right to vote and the right to form political parties. Eventually, women earned the right to vote. The new, more left wing political parties and governments, seeking greater equality in society, rejected the early liberal capitalist view of natural resources. The popular democratic majority began to insist that natural resources were a free gift from nature and there for everyone to use. This was a return to the historic pre-capitalist view of natural resources, which became the common view of radical democrats and socialists. In countries with socialist governments most natural resources were nationalized to, once again, make them public property. In some state socialist countries – e.g., Poland, Yugoslavia and Cuba – there was a mixture, with a high percentage of agricultural land remaining the private property of individual family farmers. However, resources – such as forests and mineral resources – were re-classified as public property.

In capitalist countries, new democratic governments demanded that natural resources be used for the common good. Within some capitalist

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states, some natural resources are held as state property. Historically in Europe, oil and natural gas were developed by state-owned enterprises. Today, in the Middle East capitalist countries, oil and gas resources are public property and developed by state-owned enterprises. In Mexico and Venezuela, as well as other Latin American countries, there is state ownership of oil and gas resources, which are

primarily developed by state-owned corporations. Under this system, some economic rent from resource extraction and use is retained by those who work in the industry as wages and salaries, but the rest of the rent goes to the government as revenue. In most capitalist countries, there is a political struggle over what share of the economic rent from resource extraction should go to the general public in the form of royalties and fees and what share should go to the private corporations who extract the resources.

In Canada today, and in many other countries, economic rent from resource extraction and use is considered to be the difference between the basic international price of a commodity less all the costs of production – including exploration, development of the extraction process, operating the system, the capital invested and the transportation costs. Mainstream economists always add a “Normal rate of return” to the capital invested; without this return, there would be no investment by private interests. Economic rent under this definition would include the excess profits captured by the corporations, as well as the special taxes, fees and royalties, which are used by governments to try to appropriate a share of the rent for the general public – the legal owners of the natural resources. Economists also include the federal and provincial corporate and income taxes as part of the economic rent (Macnab et al, 1999; Taylor et al, 2005).

Social democrats like the CCF-NDP in Canada have traditionally supported a “mixed economy.” They have sought a policy direction that includes both co-operatives and some state-owned enterprises. Private natural resource extraction companies are expected to pay royalties for the use of natural resources. Various approaches have tried to determine a royalty system that would return revenues to the general population through the government, while, at the same

time, encouraging investment by private capital. It is difficult to set the level of royalties because private corporations strongly resist revealing their operations to government officials. This is particularly difficult when the government is dealing with large transnational corporations whose “sales” are really intra-corporate transfers. For example, Weyerhaeuser Corporation, which accounts for about 85 percent of wood product sales in Saskatchewan, sells most of their product to their head office in the United States. Intra-corporate transfers, which use prices as a management tool, are widely used around the world to hide profits and avoid taxes.

A wide variety of royalty systems have been used in Canada and Saskatchewan. One early approach was to place a flat rate on the resource extracted. For example, a standard rate is to be paid to the government for a tonne of coal. Other similar royalties include a property tax – usually a percentage of the value of the land for either mineral or oil extraction – a lease fee on land leased for mineral purposes, or the sale of mineral rights to a piece of land. The theory is that the private company responsible for the extraction owes royalties to the owners of the resource, the general public, and this should be considered a basic cost of production. This is a common practice in the United States where there is widespread private ownership of land and resources.

A second royalty widely used is an *ad valorem* tax on annual company sales. This is easy to calculate if sales are at arms length, not intra-company transfer payments. The royalty preferred by corporations is an *ad valorem* rate applied to net profits. This royalty has been widely used in Saskatchewan in recent years. Where resources are privately owned, as in the U. S., there is strong opposition to this system by owners. The private owners of resources argue that companies are able to use “creative accounting” to show that they do not make a profit to avoid paying royalties. In Saskatchewan, resource extraction corporations demand that all royalties be calculated as a percentage of profits, not as a share of sales.

Marketing boards have been used in Alberta and British Columbia to gain a share of resource sales for the general public. In this case, all resources – such as oil and natural gas – are sold to the marketing board, which sells the resources to the market. This gives the general public, through their elected governments, some control over pricing and the economic surplus. One advantage is that the marketing board can capture the monopoly rent which comes from higher international prices caused by either cartels or supply and demand factors. For example, in 2004-5 there was a major increase in the price of oil and natural gas unrelated to the cost of extraction, and the monopoly rent was captured by the private corporations and their owners.

Finally, many countries have used joint ventures and state-owned enterprises. For example, in Mexico, the government of Lazaro Cardenas nationalized all of the oil industry in 1938 and created Petroleos Mexicanos (Pemex), with monopoly state ownership over the extraction, production and sale of all petroleum products. With joint ventures and state-owned enterprises, governments can capture a much higher share of the economic rent for the general public. (Cartwright, 1999; Warnock, 2004)

The petroleum industry

Saskatchewan has the second largest petroleum industry in Canada. There were small early developments in the province, and in the 1930s, the co-operative movement built the Co-operative Refinery in Regina. T. C. Douglas' CCF Government headed by T. C. Douglas invited private companies for the development of oil, provided assistance and set relatively low royalties. The Canadian Petroleum Association, representing the large foreign owned oil corporations and led by Imperial Oil (ESSO), threatened to withdraw from the province if there was movement toward state ownership of the industry. In 1954, the association protested when the Douglas Government leased two small areas of land to the Consumers' Co-op, and it threatened to lead a campaign to refuse to buy Saskatchewan Government Bonds. Drilling in the province dropped off after the major discovery in the Leduc field in Alberta. Oil production did not expand until the late 1940s, but became a significant industry in the 1950s. Provincial revenues from oil extraction rose in the 1960s. By 1968, provincial royalties and fees were up to 14 percent of sales (Crane, 1982).

In 1971, the Allan Blakeney NDP Government took office. The NDP election platform and campaign promised to acquire a greater percentage of the economic rent from resource extraction for the general public. The royalties paid by oil corporations had been averaging only 10 to 12 percent of sales. Royalties and fees paid to the provincial government increased significantly, rising to 50 percent of sales by 1975. The oil was there, the prices were high, and profits kept flowing. There was no move by the oil corporations to pack their bags and leave the province. The number of wells drilled and the oil extracted and sold continued to increase until the world recession of 1981-2. (See Table I)

Then, in early 1973, the Blakeney Government created the Saskatchewan Oil and Gas Corporation (Sask Oil), a Crown corporation charged with the exploration, extraction, refining and selling of oil and oil products. Public opinion polls across Canada showed strong majority support for government/state ownership and control of the oil industry (Laxer and Martin, 1976).

Political change was underway in the Middle East. The Organization of Petroleum Exporting Countries (OPEC) was founded in 1960 by many of the oil producing governments in the Third World. The Arab countries were angry over the crushing defeat by Israel in the 1967 war. In October 1973, Egypt invaded Israel and the Yom Kipper War began. Once again, Israel won a decisive military victory. When the U.S. Government gave full political and economic support to Israel, Saudi Arabia – by far the largest OPEC producer – announced an embargo on the export of oil to the United States. The Saudi Government also increased the price of oil from \$3 to \$5 per barrel. Then, the international price of oil was set by OPEC at about \$11 per barrel. This became known as “The first oil crisis” (Engdahl, 2004; Philip, 1994; Yergin, 1992).

The federal government responded to the oil crisis by imposing an export tax on oil. Both Peter Lougheed's Tory Government in Alberta and Allan Blakeney's NDP Government in Saskatchewan announced new excess profit taxes to capture the windfall from the higher oil prices set by OPEC. The Lougheed government announced that the 16.7 percent maximum royalty on oil would be repealed, and, in the future, a rise in the international price of oil would result in a corresponding rise in provincial royalties. In December 1973, the Blakeney Government introduced new legislation to establish a “royalty surcharge,” the equivalent of the windfall profits from OPEC monopoly pricing (Crane, 1982; Richards and Pratt, 1979).

Oil corporations were quite successful in western Canada before the price increase. In September 1973, the average price of a barrel of oil was \$3.80, but operating costs were only \$0.67, federal taxes \$0.27, and provincial royalties and taxes \$0.92, leaving the corporations with an economic rent of \$1.94. The oil industry, supported by the Federal Liberal Government, took the Saskatchewan Government to court, arguing that the Provincial Government did not have the right to impose the new taxes. The Blakeney Government, supported by the Alberta Government, did not back down and introduced different tax legislation. The Tory Government in Alberta responded by creating the Petroleum Marketing Commission to guarantee control over resource royalties (Richards and Pratt, 1979).

At this point, it would be useful to recall the political economy of the oil industry, its monopolized structure, and its close ties to imperialism and colonialism. In the mid-19th century, oil was first used commercially, primarily as kerosene for lighting, but the development of the internal combustion engine and the automobile made it the most important fuel source. The U. S., viewed as having the largest supply, was the first country to fully develop the industry. John D. Rockefeller built the Standard Oil Corporation into a dominant monopoly power. Great Britain, France and other European countries relied on oil extracted in colonies and dependencies in the Middle East, North Africa and the East Indies. Although Standard Oil was split by U.S. government anti-trust action in 1911, it continued to dominate the informal oil cartel. In 1928 the three largest oil corporations – Standard Oil of New Jersey, Royal Dutch/Shell and British Petroleum – met in Scotland, set the world price for oil based on the high-cost Texas Gulf resource and divided up the world market. Later, the cartel expanded to include Gulf, Texaco, Mobil and Standard Oil of California, the infamous “Seven Sisters,” who dominated the world industry (Engdahl, 2004; Tanzer, 1980; Yergin, 1992).

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The imperial powers competed to see who would dominate the major oil areas in the Middle East and North Africa. The U.S. government constructed a special relationship with the royal family of Saudi Arabia. British interests were dominant in Iran, Iraq and the Persian Gulf area. This changed in 1953 when the U.S. government overthrew the elected government in Iran and

compelled the new puppet regime to provide U.S. oil companies with a controlling role in the country. In 1957, President Dwight Eisenhower declared that the Middle East and its oil were essential to U.S. national interests. By the 1970s, the U. S. was becoming more dependent on imported oil, particularly from the Middle East. Following the popular revolution in 1978, which overthrew the Shah of Iran, the new government announced an embargo on the shipment of oil to the United States. This triggered “the second oil crisis.” In January 1980, President Jimmy Carter issued the famous “Carter Doctrine” that Middle East oil was a “Vital interest” of the U.S. government and declared they would use military force to prevent any obstruction to the free flow of oil to western countries. Both of the subsequent U.S. wars in Iraq have been widely seen as part of this overall U.S. government strategy (Engdahl, 2004; Klare, 2001; Philip, 1994; Tanzer, 1980).

The U. S., with only five percent of the world's population, consumes 25 percent of the world's petroleum resources. Thus, the U.S. Government set a goal to control oil resources in Venezuela, Mexico and Canada. In 1951, during the Korean War, the Truman Administration appointed the Paley Commission to examine the country's natural resource needs. The Commission proposed Canada as the United States' natural resource reserve and advocated a continental energy pact. For many years U.S. governments pushed for such an agreement, but Canadian public opinion restrained Canadian governments. However, when the draft of the Canada-U.S. Free Trade Agreement was released in the October 1987, Canadians were stunned to find that it included a continental energy pact. Furthermore, under the terms of the Agreement, Canada could not reduce its exports of either oil and gas or other natural resources below the average exported over the most recent three years. The National Energy Board was radically changed by the Brian Mulroney Government, and the corporate oil and gas industries began exporting to the United States as fast as they could. There was no longer any concern about future Canadian needs (Cameron, 1988; Crane, 1982).

In Saskatchewan, Grant Devine's Progressive Conservatives were elected in 1982 with a strong commitment to the privatization of state-owned assets, particularly those in the resource sector. Sask Oil was a growing enterprise. In 1981 it had assets of \$191 million, gross revenues of \$60 million, and paid the province \$26 million in royalties. The Tories changed the management of Sask Oil and began the privatization process. Between 1984 and 1989 they sold bonds, common shares and preferred shares on the Toronto Stock Exchange, raised \$487 million, and paid the government \$75 million – apparently for 40 percent of the value of Sask Oil. By the end of the stock sales, over 75 percent of the new owners lived outside Saskatchewan, most of them in the United States.

In June 1988, the Sask Power Corporation, now under the control of Tory George Hill, sold 510 billion cubic feet of its natural gas reserves to the privatized Sask Oil for \$325 million, all but \$124 million was financed by Sask Power. These gas fields represented 15 years of supply being held for the people of Saskatchewan. Given the price of gas at the time (\$1.93 per 1000 cubic feet), the true value of this resource was at least \$1 billion. This is a good example of what privatization is all about, the piracy of public assets and the upward redistribution of wealth (Pitsula and Rasumssen, 1990; Warnock, 1990b).

Cyrus Bina, an economist who has specialized in the petroleum industry, has examined the trends in political approaches to the issue of economic rent and royalties. His analysis of trends in the industry provides a background for understanding developments in Saskatchewan.

Focusing on the relationship between the Seven Sisters oil cartel and the OPEC member states, Bina divides this history into three main periods. First, during the period from 1901-1950, there were early concessions obtained by the private corporations. The royalty paid by the western oil corporations averaged around 12.5 percent of the sales price. In reality it was a fixed payment per tonne of oil extracted, not a share of the market price. The contracts between the colonies and semi-colonial governments and the oil giants often included a share of profits, but this pledge was never honoured. (Bina, 1985)

The second period (1950-1970) was a transition period. Many of these colonies were now becoming independent countries. They wanted a greater share of their resource rents. Mexico had nationalized all the foreign owned oil companies in 1938. In 1948, the new Venezuelan Government passed new petroleum laws that required foreign oil corporations to give 50 percent of oil profits to the state. Throughout the Middle East and North Africa, the new governments tore up the old concessionary agreements and introduced 50-50 profit sharing. During this period, market prices were established on the costs in the least productive region and either differential or monopoly rents were the norm. Costs of extraction were very low in Saudi Arabia and other countries in the Middle East and economic rents were very high.

The third period is characterized by the growth of the international market for oil, the strengthening of OPEC as an international political and economic cartel, and the general move towards national ownership and control of the oil industry. By 1974, all of the OPEC countries were moving towards state ownership of the oil industry. Venezuela moved to full nationalization in 1976. There was an enormous transfer of oil revenues from the transnational corporations to the OPEC countries. Oil revenues in OPEC countries rose from \$7.9 billion in 1970 to \$115.8 billion in 1975. The net income of the 30 largest oil corporations went from \$6.5 billion in 1970 to \$11.5 billion in 1975. When it comes to capturing economic rents from resource extraction and use, ownership is the key factor (Bina, 1985; Philip, 1994).

During the period from 1975 to 1983, the Saskatchewan Government moved to secure a larger share of resource rents from petroleum extraction. Provincial revenues rose to 40 and 65 percent of sales.

Saskatchewan's trends can be assessed against this background information. In the early period from the 1960s to 1974, provincial revenues from petroleum royalties, special taxes, bonus bids and leases were between 10 and 14 percent of sales. This roughly corresponded to returns that characterized the period in the Middle East when the Seven Sisters oil cartel,

backed by the European imperial powers, dominated the local political regimes. It was the era of colonialism and political dependency.

During the period from 1975 to 1983, the Saskatchewan Government moved to secure a larger share of the resource rents from petroleum extraction. Provincial revenues rose to 40 and 65 percent of sales. This trend corresponded to the era of transition in the Middle East (1950-1970) when the countries received full independence from their colonial masters and began to use their political power to negotiate 50-50 rent sharing agreements with the Seven Sisters oil cartel. During this period, the royalties charged in Saskatchewan were consistently higher than those in Alberta, but this did not lead to a flight of capital.

After 1973, the OPEC countries moved to take full control of their petroleum resources and industries through the nationalization of the interests of the private cartel. There was no corresponding development in Saskatchewan. After the election of Grant Devine's Tories in 1982, Saskatchewan Governments moved in the other direction, surrendering the option of state ownership and steadily reducing the share of economic rent going to the province. Royalties fell considerably, but were offset in recent years by the increased sale of land leases for exploration and development. Oil royalties increased after 2000, a result of the increase in the volume extracted and the international price. However, as a share of sales, oil royalties and fees have continued to decline (See Table I).

Although Grant Devine's Tory Government was known for its free market rhetoric, their economic development was characterized by state capitalism policies. For example, the creation of the \$1.6 billion heavy oil upgrader at Lloydminster in 1988 was an agreement between three Tory Governments and Husky Oil to share the capital costs: Ottawa, 31.7 percent; Alberta, 24.1 percent, Saskatchewan 17.5 percent and Husky Oil, which was to be the operator, 26.7 percent. Husky Oil, owned by Li Ka-shing, Hong Kong billionaire, was to get 50 percent of the profits plus a 10 percent return until it had recovered all of its investment. Despite cost overruns and delays, the Lloydminster Heavy Oil Upgrader opened in November 1992. However, oil prices were low and it lost money for several years.

In the meantime, the NDP was elected in 1991. In August 1994 the four parties reached a new agreement. Alberta accepted \$32 million for its \$425 million investment, Ottawa accepted \$42 million for its \$558 million investment, and the Saskatchewan NDP Government put up an additional \$57 million to get 50 percent ownership in the project with Husky Oil. The NDP decision was widely criticized in the press.

In 1994-5, the NDP Government granted Husky Oil tax breaks, and in 1995 the Lloydminster operation began to earn money. By this time Saskatchewan taxpayers had invested \$333 million in the project, and the NDP Government had written off \$90 million. However, Li Ka-shing believed that oil prices would rise as conventional oil was depleted and the project would make money selling lower grade heavy oil. In February 1998, he convinced the NDP Government to sell its investment to him for \$310 million. Husky Oil kept its tax breaks.

It is no surprise that the oil and gas corporations are among the largest and most powerful corporations in the world. Their profits are high, and the royalties and taxes they pay are relatively low.

Li Ka-shing received a \$1.6 billion heavy oil upgrader for an investment of about \$340 million. In June 1998, Li Ka-shing announced an expansion and proclaimed that the Husky Upgrader could make a good return when the international

oil price for Texas light crude rose to \$18 per barrel. In April 2005, he announced another expansion program when the price for Texas light crude had risen to \$50 per barrel and heavy oil was up to \$22 per barrel. The NDP Government had retrieved the province's investment, for which it was widely praised, but their new policy of rejecting state involvement in the resource extraction industry cost the people of Saskatchewan a great deal of revenue. In the first quarter of 2005, the Husky Oil Upgrader reported a profit of \$107 million (*Leader Post*, April 20, 2005).

It is no surprise that the oil and gas corporations are among the largest and most powerful corporations in the world. Their profits are high, and the royalties and taxes they pay are relatively low. The royalties and taxes in Canada are among the lowest in the world. Annual data from the U.S. Energy Information Administration on the 28 largest oil and gas corporations that do business in the U. S. provides a general picture of the industry. The companies include the ones that dominate the Canadian industry – Exxon Mobil, BP, Shell, Sunoco, ChevronTexaco, ConocoPhillips, CITGO, Anadarko, Apache, etc. They report the costs of production and the royalties and taxes paid in different parts of the world. Lifting costs are highest in Canada at \$5.34 per barrel, but royalties and taxes are lowest at only \$0.23 per barrel:

Production Costs by Region for U.S. Based Corporations, 2002-3
US\$ Per Barrel of Oil Equivalent

Region	Direct Lifting Costs	Royalties and Taxes
Middle East	3.99	0.15
Canada	5.34	0.23
Eastern Europe/FSU	4.43	0.75
OECD Europe	4.39	0.84
Other Eastern Hemisphere	2.97	1.09
Total USA	3.77	1.13
Africa	3.89	1.32
Other Western Hemisphere	2.14	1.45

SOURCE: U.S. Energy Information Administration, *Performance Profiles of Major Energy Producers 2003*. Washington, D.C.: U.S. Department of Energy. Accessed at www.eia.doe.gov

NOTE: Figures for royalties and taxes for the Middle East are skewed because almost all oil and gas is extracted by state-owned national oil corporations.

The Pembina Institute in Calgary recently completed a study of government subsidies to the oil and gas industry in Canada. They are substantial, but one of the results is that the rate of profit of the oil and gas industry is much higher than the average of all industries. Between 2000 and 2003, oil and gas profits were 2.92 times higher than the all-industry average (Taylor et al, 2005).

There are a few recent studies which address the issue of the declining rate of resource rents captured by prairie governments. In 1999, the Parkland Institute at the University of Alberta published a study which compared the royalty regimes of Alberta to those in Alaska and Norway. Using the calculation of barrel of oil equivalent, the study compared oil, natural gas and other by-products that are produced. It concluded that the royalties received by Ralph Klein's Tory Government (1992-97) were quite low, the equivalent of \$2.41 per barrel in 1996 prices. Over that same period, the government of Alaska received royalties which were 1.6 times as great as those in Alberta, and Norway received royalties 2.8 times as great. Alaska accumulated \$40 billion in the Alaska Permanent Fund, while Norway accumulated \$29.4 billion in the Norway Petroleum Fund. Alberta's Heritage Fund held only \$12 billion in 1997, nearly the same as in 1986. Drilling and development in non-conventional frontier areas, such as in Alaska and Norway, is generally considered to be a higher cost operation than drilling wells in Alberta.

One reason for the better returns for Norway is the existence of Statoil, their state-owned oil corporation. It maintains a direct equity interest in most offshore developments. The tax regime for oil extraction includes a rent tax, the Direct Financial Interest of the state in the petroleum area, royalties, corporate income taxes, a carbon tax, and an “area fee” similar to a land use tax. Norway, with a long history of social democratic governments, has a 28 percent tax on profits plus an additional tax of 50 percent where there are “Situations of extraordinary profitability” (Macnab et al, 1999).

The Parkland Institute study also compared the royalties received during the period of Klein’s Government with that of Peter Lougheed’s Tory Government (1972-85). Comparing barrels of oil equivalent in 1996 dollars, the study concludes that the royalties collected by the Klein government were only 45 percent of the royalties collected by the Lougheed Government. Over the period 1992 to 1997, royalties remained fixed while oil prices rose substantially. The conclusion that the authors reached was that the Klein government was forgoing about \$4 billion per year in lost revenues. Most of the economic rent from oil extraction went to private investors (Macnab et al, 1991).

One reason for the better returns for Norway is the existence of Statoil, their state-owned oil corporation. It maintains a direct equity interest in most offshore developments.

A second study of the oil and gas industry was conducted by Erin Weir and published by the Saskatchewan Institute of Public Policy. Using public data he demonstrated that between 1975 and 1982, Blakeney’s Saskatchewan NDP Government captured on average 50 percent of the province’s oil and gas sales in royalties. Under Grant Devine’s Progressive Conservative Government, between 1983 and 1991, royalties fell to 27 percent of oil and gas sales. The return of the NDP Government in 1991 did not reverse the Tory policy. In fact, between 1992 and 2000 the Roy Romanow’s Government only captured 17 percent of oil and gas sales. As Weir recounts, the NDP government introduced new royalty systems for both oil and gas drilling and extraction which favoured the industry. (Weir, 2002)

The problem is trying to determine what is a fair royalty in an industry that is 100 percent privately owned, mainly by large transnational corporations. Weir accepts the liberal definition of economic rent advocated by mainstream economists, the Ricardian rent, which constitutes windfall earnings over and above all production costs and a standard rate of profit. However, this is almost impossible to determine when corporations carefully hide their financial operations and manage business on a world scale. In Canada, they are given extensive subsidies and special low taxation regimes that are not available to other industries. Where returns to oil corporations are higher than the general rate, there is a tendency to “Gold plate” operations by hiring more people than necessary, paying higher than necessary wages and salaries, drilling more wells than would be the case in competitive situations, and buying out other companies and their reserves. Net income is hidden by overexpanding capital investments. When a corporation buys inputs from a parent corporation in another country, what is the market price? Nevertheless, under Ricardo’s rules, if there was perfect competition and a uniform rate of profit, there would be no economic rent and no royalties would be paid to the government for the extraction and use of a natural resource. Most Canadians would consider this an unacceptable situation.

Resource economists have usually argued that in the capitalist “market economy” there is a trade off between capturing economic rent for the general public and encouraging private corporations to invest. It is argued that if royalties are too high, there will be no private investment. Weir argues that a reasonable royalty guideline for Saskatchewan is one-third of the sales of oil and gas in the post-1982 period. Using this standard he concludes that the Devine Government lost royalties totaling \$1.7 billion, while the Romanow Government lost \$4.7 billion (Weir, 2002).

In contrast to most studies, Weir considers other important issues. First, he recognizes that oil and gas are finite resources, and given world trends in production and prices, they will most likely increase in value if left in the ground for the next generation. Secondly, he notes that there are serious environmental costs associated with oil and gas extraction and use, especially greenhouse gas emissions and climate change. He also recognizes that the oil and gas industries are very capital intensive, have very weak backward and forward linkages to the provincial economy, and employ very few people. Thus, a shift to a policy which stresses higher government royalties and less oil and gas production will lead to significantly higher job creation, wealth and income distribution and general public well-being. Weir mentions the option of the use of marketing boards – as in Alberta and British Columbia – as a tool for capturing rent. However, he believes that a state-owned oil corporation – like Sask Oil – would be a better approach (Weir, 2002).

The Pembina Institute in Alberta carried out the most recent study on the oil and gas industry. It compared the approaches of the governments of Alaska, Norway, Alberta, British Columbia, Saskatchewan, the Northwest Territories and the Yukon over the period of 1995 and 2002. It reviewed the levels of economic rent captured, how much was put in permanent funds for future generations, and the environmental impact (Taylor et al, 2004).

Saskatchewan does not come off very well in this report. First, the province no longer has the Heritage Fund to help future generations when the non-renewable resources are depleted. Saskatchewan fared very poorly in the environmental assessment with a 58 percent increase in greenhouse gas emissions over the eight year period and a 63 percent increase in the number of oil and gas wells drilled. Employment in the oil and gas industry was fairly stable, constituting only around 0.5 percent of total provincial employment. As a percentage of the provincial gross domestic product, the industry fell from 7.6 percent to 6.0 percent of the total.

The price of oil and gas increased over the period as world supplies declined in many areas and demand increased. More wells were drilled, production of both oil and natural gas increased, and resource royalties and taxes increased. Although the value of oil and gas resources increased by 27 percent over this period, the Canadian Association of Petroleum Producers insist that the cost of production increased by 68 percent. Using these industry figures, the Pembina Institute study calculates a relatively low level of economic rent (the liberal definition of the surplus above “normal profit”) and concludes that the Saskatchewan Government captured between 23 percent

and 100 percent of this figure. Of the seven governments surveyed, the study concludes that Saskatchewan captured the lowest average percent of the economic rent. Over the eight year period, the average rent per barrel of oil equivalent captured by Saskatchewan was \$4.70 compared to \$11.60 in Alaska and \$14.10 in Norway. This was higher than Alberta (\$4.30) and lower than British Columbia (\$5.40). Norway received the highest returns, and the existence of Statoil was clearly a determining factor. (Taylor et al, 2004)

Oil production in the Western Canadian Sedimentary Basin (WCSB) has always been closely linked to the oil industry and markets in the United States. In 1956 Dr. M. King Hubbert, a well known U.S. geophysicist who had worked for Shell Oil and the U.S. Geological Survey, predicted that U.S. oil production would peak between 1966 and 1972. He was ridiculed by oil companies, governments, and the economics profession. The peak in the discovery of new oil in the U. S. was around 1930 and the peak in production was in 1970. Despite the steadily increasing number of wells drilled, U.S. oil production has maintained a plateau roughly since

A study by the Complex Research Centre at the University of New Hampshire has predicted that by 2005 it will take more energy to explore, drill and extract oil in the U.S. than the wells will produce.

1973 while, consumption and imports have risen steadily (Deffeyes, 2001; Heinberg, 2003; 2004; U.S. Energy Information Administration, 2004).

The cost of discovering and extracting oil in the U. S. has steadily increased. Wells are now much deeper. Pumping oil is expensive and costs more in energy terms. In the U. S., as well as in

Saskatchewan, oil extraction is increasingly dependent on secondary recovery forcing water into a nearby well to force out more oil. Even more costly is enhanced oil recovery (EOR) which includes the injection of steam, gases or chemicals into older wells to flush out additional oil. In 1916, the U.S. ratio of energy recovered to energy expended was 28 to 1; by 1985 this had dropped to 2 to 1. A study by the Complex Research Center at the University of New Hampshire has predicted that by 2005 it will take more energy to explore, drill and extract oil in the U. S. than the wells will produce. Offshore oil production is costly and has not produced major finds. Shale oil has been too costly to develop, is environmentally destructive, and has a very low, if any, net energy return. Thus, the U. S. is becoming more dependent on the importation of oil and, in recent years, Canada has emerged as the most important source (Fisker, 2005; Heinberg, 2003).

What about the tar sands in Alberta? Won't this source solve the oil needs of the United States? In 2002, the *Oil and Gas Journal* listed this potential source of oil as an "Established reserve," recoverable given present technology and economic conditions. The Alberta Energy Utilities Board identified the established reserve at 174.5 billion barrels, which boosted Canada to second in the world behind only Saudi Arabia. In contrast, the International Energy Agency believes that there are only around 30 billion barrels that can be extracted. In 2003 oil sands production exceeded 1.0 million barrels per day, most of which is exported to the United States. The Canadian Energy Research Institute has projected that production could reach 3.8 million barrels per day if world prices stay above the benchmark of US\$25 per barrel of West Texas Intermediate at Cushing, Oklahoma (CERI, 2004; Dunbar, 2004).

The tar sands are not oil. The bitumen is in a mud-like mixture of clay and sand. Some can be extracted through open pit mines with huge shovels and bulldozers. It takes two tonnes of oil sands to produce one barrel of oil using this method of extraction. This is the dominant mining system today. However, 90 percent is in a solid state deep in the ground and must be extracted by pumping steam underground, what is called the “in situ” process, which is far more expensive. The material is heated for about two weeks before it is pumped out of the ground. Once it is extracted, it is separated with naphtha and either diluted or upgraded into a synthetic crude oil and piped to refineries.

There are several major problems with the extraction process. The capital costs for a mine and processing plant are very high, currently over \$6 billion for each new project. Enormous amounts of energy are required to liquefy and extract the bitumen, which currently comes from dwindling and expensive natural gas. Each barrel mined through open pits consumes between 500 and 700 cubic feet of natural gas. Extracting the bitumen using the in situ steam process consumes twice as much. It is a strange case of using a high grade energy source to extract a low grade energy source. Crude bitumen has a relatively low grade because of high sulphur content and low API gravity (a heavy oil).

Secondly, the extraction of bitumen from the tar sands has a serious negative environmental impact. The Syncrude open pit mine in northern Alberta covers 80 square kilometres. Extracting each barrel of bitumen requires 2.5 barrels of water which, as a pollutant, is pumped into large holding ponds. Syncrude’s waste “pond” is 22 kilometres in circumference, has six metres of waste water on top, and 40 metres of sand, clay, silt and unrecovered oil on the bottom. As well, for every tonne of oil extracted through this process, one tonne of carbon dioxide is released, greatly contributing to the greenhouse gas problem (Dunbar, 2004; Heinberg, 2003, 2004).

One of the most serious problems the tar sands industry presently faces is a lack of skilled workers. It is hard to keep good workers. Many employees do not like the constant exposure to toxic fumes, the very high cost of housing when it can be found, and the limited social life in Fort McMurray. The city itself faces serious housing and infrastructure problems as the number of projects increases. Like all boom and bust northern resource communities, there are the problems of alcohol and drug abuse and the development of the prostitution industry (Collier, 2005).

Currently, the tar sands is the source of about 35 percent of Canada’s oil. It could potentially be developed to serve the Canadian market in the future. However, given its enormous capital requirements, as well as energy and environmental costs, it is hard to see how it could replace conventional oil exported to the United States. It is projected that the planned projects could absorb all the natural gas that is likely to be pumped from the Mackenzie River Delta basin. It is a very costly process, and the industry has received subsidies from the federal and provincial governments, including accelerated depreciation allowances on capital investment and provincial royalties that were set at one percent of all production (Heinberg, 2004; Macnab et al, 1999; Taylor et al, 2005).

On a world wide basis, oil production is being strained. Oil discoveries peaked in the 1960s. Those large oil fields discovered in the past have reached their peak production and are now in decline. Many of the major producing countries have reached their peak production in recent years: Indonesia (1977), Gabon (1997), United Kingdom (1999), Australia (2000), and

Norway (2001). OPEC's "Spare capacity" shrunk from eight percent in 1990 to two percent in 2001. It is believed that the OPEC countries have all overestimated their reserves in order to try to get a larger production quota. There are even questions about the reserves in Saudi Arabia because they are pumping seven million barrels of seawater into wells each day to push out oil. Only the former Soviet Union has been increasing supply. Between July 2002 and July 2004 non-OPEC supply fell. Many who have looked closely at this situation have concluded that the world peak in oil production will occur between 2005 and 2010 (Bentley, 2005; Heinberg, 2004; Horsnell, 2004; Simmons, 2005).

Conventional oil is disappearing on the Canadian Prairies. The size of pools of oil found through drilling peaked around 1976 and rapidly declined beginning in 1980. Production peaked in 1971 and has steadily declined ever since. The productivity of the existing wells is also declining; in 1994 producing wells delivered around 30 barrels per day (bbls/d), but fell to 18 bbls/d by 2003. In Saskatchewan, the number of new oil wells being drilled has fallen from 3,059 in 1997 to 1623 in 2003. The average operating cost per barrel of oil has risen from \$1.75 in 1980 to \$5.25 in 2002 (Canadian Association of Petroleum Producers, February 2005; CERI, 2005).

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Growing international shortages, the U.S. war in Iraq, and the rise in world demand, particularly by China, has led to increases in world oil prices in recent years. In mid 2004 they rose above \$40 per barrel, exceeded \$50 in October 2004, dropped off slightly, and in February 2005 rose to over \$50 per barrel. The price for Saskatchewan's lower grade heavy oil almost doubled in 2004 to \$26 per barrel. In their annual reports for 2004, all of the Big 10 oil corporations in Canada announced record profits in the billions of dollars. These reported profits do not include income in the form of accelerated capital cost allowances and capital expenditures to purchase either other companies or reserves. For the year 2003, the *Globe and Mail Report on Business Magazine* shows that the average one year return on capital for investors in the Big 10 oil corporations ranged between 18 and 34 percent. The relatively smaller Canadian-owned oil and gas corporations are now facing takeover actions by the large foreign-owned corporations who are looking to replenish their falling reserves and keep their stock prices up (*Globe and Mail Report on Business Magazine*, July/August 2004).

Despite shrinking reserves, higher prices and higher profits, Lorne Calvert's NDP Government announced a new "Fourth tier" royalty rate in October 2002. The new rate includes large volume incentives (no royalties paid) and a base rate of only 2.5 percent. There was a further reduction in the corporate capital tax on oil and gas production. In 2003, the province reported that sales for oil were up two percent over 2002, but royalties and taxes dropped by 24 percent (Saskatchewan Industry and Resources, PR-IC03, March 2004; Saskatchewan Industry and Resources, *Annual Report*, 2003-4).

On March 19, 2005, the *Globe and Mail's* business section ran a major front page article on "How to Profit from the Commodities Boom." Since January 2002, the price of oil had risen 175 percent, uranium 129 percent, and coal 107 percent. Natural gas prices increased by 65 percent, and lumber prices went up by 66 percent. Investors were throwing their money at the commodities markets because sales and profits were so high (*Globe and Mail*, March 19, 2005).

Yet, on that same day the Regina *Leader-Post* carried a different story from the Saskatchewan Government. Premier Lorne Calvert and Minister of Industry and Resources Eric Cline announced another round of cuts in royalties and taxes, this time to benefit those corporations using enhanced oil recovery (EOR). Apache Canada Ltd., one of the large U.S. corporations operating in Saskatchewan, announced that it plans to invest \$95 million in its Midale Unit oil field, so carbon dioxide can be pumped into the ground to extract more oil. They welcomed the new tax breaks (*Leader-Post*, March 19, 2005).

Business columnist, Bruce Johnstone, quoted Lorne Calvert as saying that without royalty and tax incentives “The resources would remain in the ground” (Bruce Johnson, *Leader-Post*, March 19, 2005). If they stayed in the ground, “The resources would not be able to generate wealth to fund social programs and provide jobs for our young people” (Bruce Johnson, *Leader-Post*, March 19, 2005). Calvert went on to claim that pumping more oil out of the ground, while sequestering carbon dioxide from other fossil fuels was one way for the province to meet its commitments under the Kyoto Agreement to reduce greenhouse gas emissions (Bruce Johnson, *Leader-Post*, March 19, 2005).

The oil industry developed into the most important resource extraction industry in Saskatchewan. However, it is a non-renewable resource that is being rapidly depleted and shipped to the United States.

EnCana (the new name of Pan Canadian Oil, historically a subsidiary of Canadian Pacific) operates an EOR project at its Weyburn oil field, which uses carbon dioxide piped from the Dakota Gasification Company coal operation at Beulah, North Dakota. This is a \$1.1 billion project, also

supported by “incentives” from the Provincial and Federal Governments. The corporation obviously has lots of funds, as it spent \$100 million drilling one natural gas well off the coast of Nova Scotia that turned out to be dry. EnCana has advantages over other oil companies as it owns land on the prairies granted to them from the days when the railways were constructed. Under the royalty regimes established by the Romanow-Calvert Governments, royalties are lower on privately owned land than on Crown land, and under the new “Fourth tier” royalty regime they will pay no royalties. Bruce Johnstone headlined an article on this project “Carbon Dioxide Boosts Oil Firms’ Profits.” Certainly, but it is hard to rationalize how producing more fossil fuels for burning can be seen as a “green” strategy to improve the world’s health (Bruce Johnstone, *Leader-Post*, September 7, 2004).

As Erin Weir pointed out in his study of the oil and gas industry in Saskatchewan, when you leave a highly sought after non-renewable resource like oil in the ground it increases in value. Some may be left for future generations, and as demand for the resource increases with general depletion, so does its price. Economists argue that under this changed situation additional marginal sources of oil become economically available for extraction. On this basis, the Calvert Government insists that there are billions of oil reserves still in Saskatchewan. However, there is a point reached where the extraction of these marginal resources would require the use of more energy than is being recovered.

Most economists would also insist that there has to be a consideration of “Opportunity costs.” EnCanada, with government support, is going to spend over \$1 billion of its share of the economic rent from extracting oil and gas on its EOR at Weyburn. Instead, what if that \$1 billion captured from economic rent was spent on renovating and retrofitting all the older residences in Saskatchewan? Far more jobs would be created, almost all of that investment would stay in the

province, natural gas consumption by homeowners would drop, and greenhouse gas emissions would decline. As Weir argues, there is a trade off here. Lowering royalties and taxes benefits the large transnational corporations and their owners. However, the \$1 billion of economic rent could be captured by the province through higher royalties and taxes and spent on socially constructive programs. No doubt there would be somewhat less oil extracted in the short run, but the benefits to the people of Saskatchewan would be much greater (Weir, 2002).

The oil industry has developed into the most important resource extraction industry in Saskatchewan. However, it is a non-renewable resource that is being rapidly depleted and shipped to the United States. Around the world governments are moving to capture more of the economic rent from resource extraction. Right now, about two-thirds of the reserves of oil and gas are under the control of state-owned enterprises and virtually closed to private foreign corporations (*Globe and Mail*, May 21, 2005).

Between 1971 and 1983, Saskatchewan Governments moved to capture more of the economic rent from oil extraction. However, successive governments have significantly reduced the share of economic rent going to the government to benefit the people as a whole. The people of Saskatchewan had no voice in this policy change.

The natural gas treadmill

Natural gas is a fossil fuel that is composed almost entirely of methane gas. When extracted from underground reservoirs, it often contains other hydrocarbons including propane, butane, ethane and pentane. It is also known to contain sulfur, in the form of hydrogen sulfide, which is very toxic. Most of the Saskatchewan natural gas extracted by drilling wells is relatively “Dry,” meaning it has a low content of the liquid hydrocarbons, and “Sweet,” meaning that it is relatively low in sulfur. Most of the conventional wells are relatively shallow (e.g., 900 to 2,500 feet). Thus, Saskatchewan’s natural gas requires less processing and is more profitable for the extraction corporations.

The first well was drilled in 1943, but production was rather slow to develop. It was not until 1987 that production equaled Saskatchewan’s annual consumption, about 3.1 billion cubic metres, or 109.5 billion cubic feet. The expansion of the industry required the general shift from coal to natural gas to heat homes and buildings.

Today, a number of large industries in the province are major users of natural gas, including the Co-op Upgrader, the Millar Western pulp mill, the Weyerhaeuser paper mill, the Saskferco fertilizer plant and the Husky Lloydminster Upgrader. Most of the gas wells are located in the west side of the province, close to Alberta’s major fields.

As natural gas discovery and extraction has declined in the U. S. and Alberta, drilling has increased in Saskatchewan, particularly in recent years. In 2000 there were 1209 gas wells drilled, and this rose to 2314 in 2003. The volume of gas extracted and sold has also risen rapidly since the mid-1980s and exceeded 9 billion cubic metres in 2003.

Historically, SaskPower, a provincial Crown Corporation, controlled natural gas within the province. It had the responsibility of providing gas to all customers. In 1987, Devine’s Tory Government deregulated the industry. They also split off the natural gas operation from SaskPower, creating SaskEnergy, expecting that it could be privatized. This has not happened

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yet, but subsequent NDP Governments did not rejoin SaskEnergy with SaskPower. Instead, further deregulation took place under the NDP Governments. Today, producers do not have to sell their products to SaskEnergy. In 2002, about 8.3 billion cubic feet of natural gas was extracted and sold, with only 27.3 percent going to SaskEnergy. The remainder went to marketers and brokers (47.7 percent), direct sales to industrial and commercial users in the province (19.1 percent), and direct sales to consumers out of province (5.9 percent). TransGas Ltd., a subsidiary of SaskEnergy, transports almost all of the province's natural gas because it created the infrastructure (Pitsula and Rasmussen, 1990; Saskatchewan Industry and Resources, January 2005).

The natural gas industry in Canada is closely tied to the markets in the United States. Extraction in the United States took off after World War II and peaked in 1973. Since then, the U.S. gas industry has been on a "Production treadmill." This term – coined by Matt Simmons, a well known energy investment banker in Texas – describes a situation where more wells have to be drilled every year to try to maintain a flat production rate. In addition, the amount of gas coming from new wells is steadily declining. The major production areas in the U. S., Oklahoma, Texas, and the Louisiana drilling in the Gulf of Mexico, have all peaked, and new wells are providing less and less gas. Between 1995 and 2000, the U.S. added 34,000 wells, but production did not increase. A new well now has a first year decline of around 56 percent, which is a dramatic change from the past. Tight sand gas wells, where the flow of gas is much slower and more drilling is required, deplete by 50 percent in the first six months (Darley, 2004; Duffin, 2004; Powers, 2003; Udall, 2000).

The proven reserves in the U. S. are only sufficient for about eight years' supply at the current rate of consumption, which is over 22 trillion cubic feet (tcf) per year. The U.S. Department of Energy projects that U.S. demand will increase by 50 percent over the next 20 years. Total natural gas production in the U. S., Canada and Mexico declined by three percent in 2003 and three percent in 2004. The future hope for natural gas is Alaska, which has only 10 tcf of proven reserves (Duffin, 2004; Gaul, 2004).

The United States has been forced to look for other sources of supply. They are shifting to coalbed methane gas (CBM), which is being developed in Wyoming, Colorado and New Mexico. This source now provides around 10 percent of U.S. demand. However, it is an expensive process that requires more wells to extract the gas and produces an enormous amount of toxic wastewater, which is causing serious environmental problems. U.S. reserves of CBM are estimated at 18 tcf, less than one year of annual consumption (Darley, 2004; Udall, 2000).

The other major source of future gas for the U.S. market is expected to come from the importation of liquefied natural gas (LNG). The U.S. Energy Information Agency expects that by 2010 the U.S. will be importing 2.2 tcf of LNG every year. There are serious obstacles to a major expansion in this "Energy train." There is a shortage of the ships used to transport liquefied natural gas and a limited capacity for building them. At the overseas natural gas sources, the liquefaction terminals and pipelines must be built. The United States, using Mexico and Canada, is planning to build a string of regasification terminals. Each of these "trains" can cost as much as \$10 billion. The capital costs for a LNG terminal are \$4.9 billion, and the gas-to-liquid (GTL) terminal that is being considered for possible natural gas extraction on Melville Island in the Canadian Arctic is projected at \$6.3 billion (Chan, 2005).

Furthermore, the LNG "train" is very dangerous and accidents will happen. In 1973, an

LNG facility exploded in Staten Island, N.Y. In January 2004, there was an explosion in Skikda, Algeria which destroyed three of the six operations. Many people are killed and injured in these explosions, and the resulting fires create enormous damage. Thus, in the United States, local popular coalitions have fought and defeated proposals to build terminals in California and Alabama, so more are planned for Mexico, and three are planned for Canada: Port Tupper, N.S., St. John, N.B. and the St. Lawrence River, Quebec (Darley, 2004; Duffin, 2004; Eynon, 2005; Gaul, 2004).

The lack of supply in the U. S. has stimulated the natural gas industry in Canada. In 2004, over 50 percent of Canadian natural gas production was exported to the U. S., which supplied 15 percent of U.S. consumption and accounted for 87 percent of U.S. natural gas imports. The number of natural gas wells drilled in Canada is rising rapidly, from less than 2,000 in 1992 to about 15,100 in 2003. Gas production also increased in Western Canada with the development of the large Ladyfern field in British Columbia. In 1999, its first year of production, the field produced 665 million cubic feet per day (mmcf), but by 2003 this had dropped to 120 mmcf. Canada's extraction of natural gas peaked in 2001 and declined by 5.3 percent in 2003.

The lack of supply in the U.S. has stimulated the natural gas industry in Canada. In 2004, over 50 percent of Canadian natural gas production was exported to the U.S., which supplied 15 percent of U.S. consumption and accounted for 87 percent of U.S. natural gas imports.

Furthermore, as the National Energy Board reports, the general trend in Western Canada is for lower initial productivity from new wells. The average initial production from gas wells has fallen from 1.0 mmcf in the early 1990s to 350 thousand feet per day (mcf) in 2004. We are also on the treadmill. By 2003, over 3.5 billion cubic feet per day (bcfd) of new production capacity was developed to offset the growing decline in well production (Eynon, 2005; Flint and Dixon, 2004; National Energy Board, 2003; Stringham, 2004).

The demand for natural gas continues to rise. In the United States many new gas-fired power plants are coming online. Meanwhile, the Canadian Association of Petroleum Producers presents the optimistic view of future natural gas sources. The Mackenzie Delta will provide 64 trillion cubic feet (tcf); the Arctic Islands have a potential for 94 tcf; the NWT and the Yukon could produce 17 tcf; drilling offshore in British Columbia could produce 35 tcf; the offshore gas drilling in the Atlantic area is very expensive and disappointing, but it is believed to have future potential; and coalbed methane gas in the Canadian Rockies could produce up to 80 tcf. The industry argues that if these potential sources are not developed, natural gas production in Canada will seriously decline around 2010 (Stringham, 2004).

The U.S. Federal Energy Information Agency notes that a "Natural gas crisis" started around June 2000. Between this date and November 2003, natural gas prices in the U. S. rose by 83 percent. In June 2000, the average price was about US\$3 for a thousand cubic feet (mcf) and rose to over US\$6 mcf in 2004. By January 2005, it was over US\$7 mcf and expected to average over US\$8 mcf for the year. The Canadian Energy Research Institute estimates that natural gas prices in Canada will triple over the next 13 years due to the demands of the Alberta tar sands extraction process and increases in U.S. demand. The National Energy Board argues that the bright spot is that while there is the "Escalating costs" of drilling, operations, land and materials,

“Thus far, increases in gas prices have more than offset these higher costs” (National Energy Board, 2003; Yedlin, 2005). Industry figures are often put in terms of British thermal units, where one million British thermal units [1MMBtu] is equal to about 975 cubic feet of natural gas (Gaul, 2004; Yedlin, 2005).

To date, almost all of the natural gas extracted and consumed in either Canada or exported to the U. S. is from the Western Canada Sedimentary Basin (WCSB). The National Energy Board estimated the amount of discovered natural gas and what may be discovered:

Western Canadian Sedimentary Basin	Discovered	Undiscovered	Ultimate Potential
Alberta	145	61	207
British Columbia	23	27	51
Saskatchewan	8	1	9
Southern Territories	1	6	7
Total	178	96	274

SOURCE: National Energy Board, April 2004. Figures in trillion cubic feet (tcf).

The total potential for the rest of Canada includes the East Coast (offshore) 91 tcf, West Coast 17 tcf, and Northern Canada 116 tcf for an overall potential total of 501 tcf. In this picture of actual discovered resources and those estimated, Saskatchewan represents a very small part. However, it is extremely important because the province depends almost entirely on natural gas for heating and industrial energy (National Energy Board, 2004).

Proven (1P), or proved reserves, is another matter. These are reserves that by geological data and technology are commercially recoverable under current economic conditions and regulations. In 2003, the Canadian Association of Petroleum Producers noted that these reserves for the WCSB peaked in 1984 and have declined ever since. Gas reserves were estimated at 56.6 tcf, down 2.5 tcf from 2002. In Saskatchewan, the government estimated the province’s natural gas reserves at 83 billion cubic metres (2.9 tcf) in 1995, which declined to 76.8 billion cubic metres (2.7 tcf) in 2002 (Department of Industry and Resources, *Annual Report, 2003; Leader-Post*, November 26, 2004).

Despite the overall trends, there were some positive developments in Saskatchewan in recent years. The Shackleton area discovery north of Swift Current was the biggest find in 10 years. Hundreds of wells are now being drilled in this area. By 2003, it was estimated that this field accounted for about 20 percent of the province’s reserves. TransGas claims that this discovery has reversed the treadmill and new drilling is producing reserves that exceed the extraction rate. Royalties are also increasing to the province as the volume of extraction increases and the price for natural gas, and oil, is steadily rising (*TransGas Link*, Issue 49, July 2004).

The relatively low cost of extracting conventional natural gas in the WCSB allows the industry to capture a very high level of economic rent ranging from 27 percent to 53 percent of the market price:

Costs of Conventional Natural Gas in the Western Canadian Sedimentary Basin
One thousand cubic feet (\$US - mcf)

Production costs:	
Finding and development	\$0.80 - \$1.50
Operations, General and Administration	\$1.30
Royalties and taxes	\$0.45
Range:	\$2.55 - \$3.25
Transportation:	\$0.35 - \$1.30
Delivered to Market:	\$2.90 - \$4.55
Market price (winter 2004)	\$6.20
Economic rent	
Range:	\$3.30 - \$1.65 27% - 53%

SOURCE: U.S. Department of Energy, Energy Information Agency, December 2004. Accessed at www.eia.doe.gov

Historically, royalties from natural gas extraction in Saskatchewan have been quite low. As a percentage of sales, royalties were well under 10 percent until 1986. During the second term of the Devine government (1987-91), the average return to the province was 13.1 percent. This fell to 12.6 percent during the first two terms of the current NDP government (1992-1999). The returns increased to 14.6 percent during the third term of the NDP government (2000-3). Data from the U.S. Department of Energy reveals that the bulk of economic rent from natural gas extraction is going to the owners of oil and gas corporations (See Table II).

On a world wide basis this is a low rate of return. To put this in perspective, let's take a quick look at how the issue of royalties for natural gas extraction is developing in Bolivia. In 2003, a mass movement of Indigenous people, backed by the trade union movement, rose up and forced the President to resign. They strongly objected to a deal the government made with large foreign oil and gas corporations to extract and ship their natural gas to the U. S. via LNG tankers. They rejected the "Low royalty rate" of 18 percent and demanded 50 percent of the value of the sales of the gas. The Bolivian legislature, controlled by parties of the right, subsequently passed new legislation, which included the re-establishment of the partially

privatized state-owned oil and gas corporation (YPBF), required an independent financial audit of all oil and gas corporations operating in the country, proclaimed that natural gas was a national treasure for the benefit of all Bolivians, and required that royalties increase to 50 percent of sales. At this point, the U.S. Government and the 46 foreign oil and gas corporations intervened to put pressure on the new president, Carlos Mesa, and he refused to sign the legislation. In mid-March 2005, the broad opposition coalition took to the streets again and shut down all transportation. Mesa resigned, but the legislature refused to accept his resignation and demanded that he sign the legislation. What is happening in Bolivia is consistent with similar popular movements across Latin America, who demand more national control over resource extraction (Ballve, 2005; Scott, 2005).

The people of Saskatchewan have never received 18 percent of sales for their natural gas. Many countries get either 50 percent or more of the sales (Table II; Powers, 2003.)

Given the declining supply of natural gas, the steady increase in prices, and the very big profits that the oil and gas corporations are making, it is surprising that the NDP government *lowered* the natural gas royalties in October 2002. A new “Fourth tier” Crown royalty now applies to all new wells drilled, with a royalty rate of only 2.5 percent. However, the royalty rate is not applied until a well produces 25 million cubic metres, the “Royalty/tax incentive volume.” Wells drilled on freehold (private) land are exempt from paying royalties. The

Saskatchewan should be concerned about the developments in natural gas. Our reserves are limited, and the corporations extracting the natural gas are not loyal to the people in the province.

official royalty rate for the average well is lower than British Columbia and Alberta’s rates, largely because of the volume incentive. Although land sales are increasing, the return to the province is lower. In 2004, the averages were B.C., \$423 per ha; Alberta, \$343 per ha, and Saskatchewan, \$171 per ha. The Provincial Government identifies this as “The REAL Saskatchewan Advantage!” on their website (Saskatchewan Industry and Resources, PR-IC04, March 2004; Saskatchewan Industry and Resources, *Land Price Comparisons*, January 2005).

Saskatchewan should be concerned about the developments in natural gas. Our reserves are limited, and the corporations extracting the natural gas are not loyal to the people in the province. Instead, they are exporting to Eastern Canada and the U. S. as fast as they can. Prices are going up substantially every year. SaskEnergy appears to have no plan for the future. What will we do as natural gas starts to run out, production plateaus and prices rise more rapidly? This situation is not far off in the future. Natural gas will be rationed according to the ability to pay. Currently, the only program offered by SaskEnergy is a loan to homeowners to buy a more efficient natural gas furnace. The royalties that the people of Saskatchewan receive for the extraction of this valuable natural resource are among the lowest in the world. The provincial government and the opposition parties are silent on these issues. It is astonishing that all of our political leaders are simply accepting the “business as usual” approach, without making plans for the future and selling this non-renewable natural resource for a minimal return.

The potash industry

The most important mining industry in Saskatchewan is the extraction and sale of potassium chloride – potash. It is one of the three basic fertilizers used by farmers around the world. The largest deposits in the world are found in Saskatchewan at a depth of over 3,000 metres. However, given its high, uniform grade, the costs of extraction are among the lowest. Although potash was discovered in 1943, the first mine was established in 1954 by the Potash Company of America, at Patience Lake, east of Saskatoon. There were technical problems with sinking the mine shaft, and full production did not begin until 1962.

The CCF government was keen on developing this resource. Their first mistake was inviting U.S. corporations that developed mines in New Mexico to develop Saskatchewan's industry. The U.S. mines in New Mexico were shallow, and the development experience could not carry over to Saskatchewan. The Germans had over 100 years experience of deep mining potash, but the German industry, like that of the French, was state owned. The CCF government preferred development by private U.S. corporations.

Overall, potash mines in Saskatchewan were an attractive investment because owners paid neither taxes nor royalties until they recovered all of their capital investment. By world standards for mining and energy industries, the royalty rates were very low.

Private corporate investment in the industry was “encouraged” by an extensive range of subsidies from the Federal and Provincial Governments. Ottawa exempted all new mines from taxes for the first three years and granted accelerated depreciation allowances and amortization. In addition, there was a special tax exemption created for potash mines.

The CCF Government exempted potash mines from royalties for the first three years of operation. Then, it promised a long term guarantee of low royalty rates, about 3.5 percent of sales. In 1967, the agreement was extended until 1981 by Ross Thatcher's Liberal Government. The potash corporations received the same general subsidies provided to other large industries – lower power and energy rates, paved highways to the mine and technical assistance. Water was required from the lake behind the Diefenbaker Dam on the South Saskatchewan River, so taxpayers built a canal system, pipelines and reservoirs for the mines. Overall, potash mines in Saskatchewan were an attractive investment because owners paid neither taxes nor royalties until they recovered all of their capital investment. By world standards for the mining and energy industries, the royalty rates were very low.

With the subsidies, capital rushed into the potash industry. By 1970, there were 10 mines with a capacity for production that was twice the North American market. As the price of potash fell, less productive mines in New Mexico lost money, and a local lobby protested against the U.S. Government for “dumping” Canadian potash below the production cost. Sixty-five percent of Saskatchewan's exports went to the United States and the result was the Potash Conservation Board, a classic cartel set up by the Saskatchewan and New Mexico Governments. Saskatchewan's mines were provided with a quota of the estimated market – about 50 percent of production capacity – and a “floor price” was set at \$33.75 per ton, a 50 percent increase over the average 1969 market price. This did not solve the problem of overcapacity because the high cartel price encouraged the development of potash mines in other countries. (Richards and Pratt, 1979; Warnock, 1974)

When Allan Blakeney's NDP Government was elected in 1971, the party's platform and campaign promised voters they would increase the government's share of economic rent from resource extraction. At the time, all of the potash mines were controlled by large transnational corporations – eight by foreign interests. There is not enough time to revisit the conflict between the NDP government and the corporations, backed by the Federal Liberal Government and the Provincial Liberal Party. However, the Government's attempt to increase resource royalties resulted in strong resistance from the corporations, who retaliated with several court actions. In the end, the Government "nationalized" five mines representing 40 percent of the capacity of the industry, which became the Potash Corporation of Saskatchewan (PCS), a Provincial Crown Corporation.

The NDP Government provided compensation to the owners of the mines, but they rejected a proposal to pay the investors the depreciated book value of their actual investment. Instead, the government paid a higher amount,

deemed to be "fair market value," which equaled 93 percent of replacement value. For example, Pennzoil Corporation, which owned the Duval mine, received \$128.5 million for a mine which cost \$80 million, or \$140 million in 1976 dollars. The owners received this "fair market value" although they had recovered their initial investment and earned profits from their ventures. This may have appeared to be a political necessity, but the payment was much higher than if it had been a sale to a private corporation. This political compromise left the newly formed PCS with a large debt. (Richards and Pratt, 1979; Richards, 1987; Warnock and Checkley, 1990)

When Allan Blakeney's NDP Government was elected in 1971, the party's platform and campaign promised voters they would increase the government's share of economic rent from resource extraction.

It is difficult to determine a precise analysis of the economic rent from a resource because the corporations involved, like the potash industry in 1975, refuse to open their books to the government. However, a general view can be created by looking at the overall sales of the industry and comparing them to the royalties and fees paid to the province.

The royalties collected by Tommy Douglas (1960-1964) and Ross Thatcher's (1964-1971) Governments averaged about 3 percent of gross industry sales. Compared to resource royalties paid around the world, these were extremely low. The rate of royalties could not increase until the government broke the original CCF-Liberal commitment to low royalties, which was set to stay in effect until 1981. When potash prices rose dramatically in 1972 – with all the windfall rents going to the transnational corporations – the Blakeney Government attempted to break the old agreement by introducing a "reserve tax." This provoked major conflict with the industry. (Anderson, 1984; Richards, 1987)

With the formation of PCS and the introduction of a new Potash Resource Payments Agreement with the remaining private corporations, the government revenues from potash extraction rose significantly. Between 1975 and 1981, potash royalties ranged between 20.7 percent and 27.6 percent of gross sales. Professor Nancy Olewiler, a resource economist at Queen's University, concluded that between 1978 and 1981 the provincial investment in PCS

“Yielded an after-tax return to the residents of Saskatchewan of 21, 34 and 26 percent.” She concluded that PCS “Added large sums to the provincial revenues well beyond what the mines PCS purchased would have generated through provincial taxes if they had remained in the private sector.” Thus, the Blakeney Government demonstrated the advantages of state-owned resource extraction enterprises. (Quoted in Warnock and Checkley, 1990)

In 1982 the NDP was defeated, and Grant Devine’s Progressive Conservatives were elected. They were the party of private enterprise, who disliked Crown corporations, particularly in the resource area. The Tories forced PCS to join Canpotex, the marketing organization for the private firms where each company had one vote. Canpotex, dominated by the foreign-owned corporations, undermined the sales policy of PCS, which was based on long-term contracts. The Crown Corporation began to suffer and lost historic markets. It was forced to operate at only 50 percent capacity, while private firms operated at 80 percent capacity. The share of Canpotex sales held by PCS also fell from 60 to 45 percent. Although PCS was losing money, Devine’s Government stripped \$162 million in dividends from the Crown Corporation to bolster general provincial revenues.

Nevertheless, PCS survived under the Tories. Between 1976 and 1988 it recorded a net income of \$334 million and paid \$372 million in taxes and \$228 million in dividends to the Provincial Government. In 1989, the Tory government – in control of management at PCS – began to privatize the corporation. Share prices offered to investors were set at \$18 because the Tories determined the value of PCS at only \$630 million. Other analysts insisted that the corporation’s assets were worth at least \$2 billion. In 1994, Roy Romanow’s NDP Government sold the final shares held by the government, removed the provisions limiting the percentage of stock that could be held by one investor, and removed the provision that non-Canadian residents could not own more than 45 percent of the stock. (Charlton et al, 1996; Pitsula and Rasmussen, 1990; Warnock and Checkley, 1990).

PotashCorp, the new name of the privatized PCS, is quite successful for its new owners. Retained earnings were used to purchase other potash mines – Texasgulf and the phosphate business of Occidental Chemicals – and the corporation expanded into nitrogen by purchasing the Arcadian Corporation. The general public in Saskatchewan has not fared as well. In the first term of the Devine Government, the potash royalty rate was reduced and the public’s share of the potash extraction fell to 5.4 percent of sales – only one-fourth of the level under the Blakeney Government. Royalties rose slightly to 6.6 percent during the second term of the Tory Government.

Many people expected a major direction change after the election of the NDP under Roy Romanow in 1991. During the campaign, NDP candidates pledged to raise royalties back to the levels under the Blakeney government. However, they did not fulfill their promises. During the first term of the NDP government (1991-1995), royalties rose to 7 percent of sales. In the second term (1996-1999) they rose to 10.1 percent, but they fell in the third term (2000-2003) to 9.5 percent. (See table III)

Lorne Calvert became the new NDP Premier in 2002, following the retirement of Roy Romanow. Many believed that Calvert represented a move to the left by the party, but this has not been the case. In August 2003, right before the provincial election, the Calvert Government further reduced the royalties paid by the potash industry.

Since 1990, potash royalties have taken two forms. First, there was a base rate of 35 percent of resource profits, which were subject to a minimum per tonne of \$11.00 and a maximum of \$12.33. The effective rate ranged between 2.1 percent and 4.5 percent, and was reduced further by the Saskatchewan Resource Credit by 1 percent of sales value. This was supplemented by a tax on profit per tonne of potash sold. In 2003, this profit tax was further reduced by the Calvert Government, which also introduced a 100 percent depreciation for any new capital expenditures. Furthermore, other concessions were granted. This is reflected in the drop in 2003's royalties to only 7.4 percent of sales (Saskatchewan Industry and Resources, August 14, 2003).

The potash royalties collected by the government are very low mineral taxes compared to international standards. Lorne Calvert proclaimed that these concessions, as well as other royalty reductions under consideration, were designed to help create employment. However, mining is known as a capital-intensive industry, and the labour force in the potash industry has been quite stable, ranging between 2900 people in 1994 and 3088 in 2003. The day after the NDP Government announced the reduced royalties the Potash Corporation announced that it would spend \$80 million to upgrade its mine at Rocanville. They also announced that the engineering and construction firm, as well as all of the employed labour, would be from out of province (Saskatchewan Industry and Resource, 2005; *Leader Post*, August 15 and 16, 2003).

The potash royalties collected by the government are very low mineral taxes compared to international standards.

The potash industry in Saskatchewan is dominated by two large transnational corporations. Agrium Inc. of Calgary, formerly Cominco, operates the mine at Vanscoy. The PotashCorp is the largest fertilizer company in the world, the most profitable fertilizer company, and the largest potash producer with one-quarter of the world's capacity. They also have 72 percent of the world's excess capacity, an inheritance from the over expansion of the mining industry in Saskatchewan during the years of extensive government subsidies. Their 2004 annual report states that "Our long-term investors have enjoyed a cumulative return of 629% in the 14 full years since we became publicly traded, compared to the [fertilizer] industry average of 89% over the same period" (qtd. from www.potashcorp.com, accessed February 15, 2005). Between 1995 and 2003, their shareholder returns have been *five times* that of the industry average (www.potashcorp.com, accessed February 15, 2005).

PotashCorp is based in Saskatoon, its stock is traded on the New York Stock Exchange, and industry analysts believe that the majority of its stockholders live in the United States. They are certainly happy with the performance of the company and the support it receives from the Saskatchewan Government. In 2003, the company reported an annual return to shareholders of 38 percent. The average for the fertilizer sector was "only" 26 percent. Between 2002 and 2003, potash sales rose 21 percent and 33 percent in 2004. The company expects demand for and price of potash and other fertilizers to continue to increase in the coming years due to increased imports by China, Brazil, India and other Asian countries. The company is confident that it will continue to dominate the expanding market, shrinking some of its extensive unused capacity at its six mines in Saskatchewan. No new competition is expected because it costs about \$1 billion to sink a new mine shaft and build a mine. (PotashCorp, *Annual Report*, 2004 at www.potashcorp.com)

The second largest potash corporation in Saskatchewan is Mosaic, based in Minnetonka, Minnesota. In 2004, IMC Global of Chicago and Cargill Crop Nutrition of Minneapolis merged, but Cargill is considered to be the dominant partner. Mosaic owns and operates four mines in Saskatchewan and the mine at Esterhazy with PotashCorp. It is also in the business of producing nitrogen and phosphate fertilizer. IMC Global was the second largest fertilizer company in the world and the second largest potash corporation. The merger with Cargill increases its power. The new corporation's second quarter sales in 2004 equaled \$1.1 billion. The corporation reported that "Our potash business demonstrated outstanding performance with good volumes, high prices and effective execution during the second quarter" (qtd. in Mosaic Corporation at www.mosaicco.com). Furthermore, Mosaic is now the 50 percent owner of the Saskferco Products nitrogen operation at Belle Plaine (Mosaic Corporation at www.mosaicco.com).

Given the political climate in Saskatchewan today, these corporations, like all other large businesses, continue to push for even lower royalties and taxes. In February 2005, PotashCorp was "threatening" to build a new mine in New Brunswick unless the NDP Government provided further tax concessions. Eric Cline, the NDP Minister of Industry and Resources, stated that his government was willing to consider other "tax changes" to help the Saskatchewan industry (*Leader Post*, February 24, 2005).

It did not take long before the new changes were implemented. In early April 2005, the Calvert Government announced further reductions in potash royalties and taxes. There is now a new ten-year royalty holiday on "new potash production." New machinery that is purchased for the purpose of expansion is granted a 120 percent accelerated capital depreciation. At the same time, all three potash companies announced that they are expanding production in their Saskatchewan mines. PotashCorp announced that it will bring back 1.9 million tonnes of capacity that had been kept idle. Mosaic announced \$28 million in funds to expand its capacity at the Esterhazy mine, while Agrium planned to spend \$65 million to expand its operations at Vanscoy. Agrium estimated that the new changes in taxation would save the potash companies \$6.25 per tonne. Michael Wilson of Agrium noted that prices were steadily rising due to increased demand, excess capacity would be used up, and profits would rise (*Globe and Mail*, May 10, 2005; *Leader Post*, April 12, 2005).

In his study of Saskatchewan's potash industry, economist John Richards assessed the "poor planning" and "foregone economic rent" that is characteristic of the potash industry's development. He argued that Governments should not depend on private interests when planning for what is best for the general public. Richards stressed the "Necessity of maintaining public ownership as the ultimate weapon in the government arsenal for rent collection" (Richards, 1987). Without this policy tool, the government has "limited ability" when negotiating with cartels and large transnational corporations. Furthermore, fewer problems would have occurred if the Blakeney Government had nationalized all of the industry instead of 40 percent (Richards, 1987).

When Roy Romanow and Lorne Calvert's NDP Governments ruled out ownership and participation in the mining industry, they weakened their political bargaining position with the large transnational corporations. Since the NDP took office 1991, a close partnership has developed between the government and the large transnational corporations that dominate the resource sector. Negotiations over taxes and royalties take place behind closed doors. The general public is completely excluded, and there is no debate on resource policy. The end results are always the same – the government announces further reductions in royalties and taxes, with more economic rent for private investors and less for the general public.

Uranium -- the unforgiving industry

Saskatchewan has mined uranium and helped build nuclear weapons since the Second World War. The Canadian Government was directly involved with the U.S. and U.K. Governments in the Manhattan Project, as well as the development and production of the first atomic bombs and their use against Japan. Uranium mined at Port Radium in the Northwest Territories, Lake Athabaska and Uranium City in Saskatchewan, and Elliott Lake in Ontario, was used exclusively to produce nuclear weapons for the U.S. and U.K. Governments up to the 1960s. Even after the construction of nuclear power plants, Saskatchewan uranium was regularly used to produce nuclear weapons for the U.S. and French Governments. Starting in 1945, Canada's first nuclear reactors – ZEEP and NRX – at Chalk River, Ontario were used to produce plutonium for the U.S. nuclear weapons program (Edwards, 1983).

Uranium 234 and 235 is separated from natural uranium and is enriched for use in nuclear weapons and as fuel for nuclear reactors. Uranium 238 – known as depleted uranium or DU – is the byproduct from natural uranium. It is used to provide 50 percent of the explosive power in hydrogen bombs. DU is also used in military reactors – such as those in Hanford, Washington – to breed plutonium for nuclear weapons. Most recently DU, a very dense and hard substance, is used in a variety of weapons – from machine gun bullets to guided missiles to “bunker bombs” – to increase their penetrating capacity. In 1996, the UN General Assembly declared DU weapons as “Illegal weapons of mass destruction” (qtd. in Campaign Against Depleted Uranium at <http://cadu.members.gn.apc.org/whatisdu.htm>; Denver 2003; Edwards, 1983).

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Uranium is not another mineral for extraction. It is a very special mineral that is used in the world's most destructive weapons. It is a hazardous radioactive mineral to miners and anyone else involved in either its military or civilian use. The waste from the uranium nuclear fuel and weapons production cycle is extremely hazardous for very long periods of time. To date, there is no safe method of waste disposal that has both widespread scientific and political support. Although the U. S., Sweden and Finland are working on disposal programs, none of the programs have been implemented. Radiation fallout from nuclear weapons is extremely hazardous. Accidents at nuclear power plants have caused widespread damage and loss of life. In Saskatchewan, miners and mill workers exposed to radiation suffer many illnesses, have a high incidence of cancer and their lives are shortened. Uranium is “the unforgiving technology” (Macfarlane, 2003).

Since the formation of the peace movement in the early 1960s, uranium mining has been a controversial political issue in Saskatchewan. All CCF-NDP Governments, from Tommy Douglas to Lorne Calvert, have strongly supported the industry. Why is this the case? It should be remembered that the Canadian government not only helped create nuclear weapons, but it has always held a very close relationship with the U.S. and U.K. governments on both political and military matters. Social democratic parties in the industrialized world strongly supported the Cold War against communism, military alliances – such as NATO – and the development and deployment of nuclear weapons. The CCF in Canada and Saskatchewan were no different. The opposition to nuclear weapons and nuclear power developed in the peace movement, the women’s movement, the youth movement, and the environmental movement – all movements outside the social democratic parties. The opposition formed the basis of the Green movement in the early 1970s, which has always denounced nuclear weapons and nuclear power. This was also true in Saskatchewan, where opponents of nuclear weapons and nuclear power included members of the provincial NDP and individuals who joined the NDP to change government policy on uranium mining (Gruending, 1990; Harding, 1995).

Blakeney’s NDP Government was committed to developing the uranium industry. Its 1974 policy goals were to “Maximize provincial revenues received from royalties and taxes associated with the development of uranium” (qtd. in Gullickson, 1990), train and employ more workers in the North, develop a regional economy of the North, protect health and the environment, and “Ensure that the Province retains the right to manage and control the development of uranium resources” (qtd. in Gullickson, 1990).

Saskatchewan also has the highest average grades of uranium ore in the world – reaching 25 percent at the McArthur River mine and 19 percent at the Cigar Lake mine.

Saskatchewan has one of the largest deposits of uranium in the world that accounted for 34 percent of the world’s production in 2001. Saskatchewan also has the highest average grades of uranium ore in the world – reaching 25 percent at the McArthur River mine and 19 percent at the Cigar Lake mine. The uranium industry in Saskatchewan is widely recognized as high grade, low cost mining. Cameco Corporation and COGEMA Resources Inc. are the two largest uranium mining corporations in the world. Together they account for 93 percent of Saskatchewan’s total uranium production. They do not compete with each other, but share production at the McArthur River and Key Lake mines. The other two production corporations in Northern Saskatchewan – OURD (Canada) Co. Ltd and Tenwest Uranium Ltd. – represent Japanese interests, who have minority participation under COGEMA in the McClean Lake mine. The industry is highly monopolized and dominated by large transnational corporations. As well, several other transnational corporations hold mining claims and properties for potential future mines (Vance, 2004).

Canadian uranium extraction increased rapidly throughout the 1950s when all of the resource went towards nuclear weapons production. Canadian mines produced over 15,900 short tonnes of uranium oxide in 1959, with the majority from Ontario. Nevertheless, production

expanded in the Saskatchewan mines at Lake Athabasca and Uranium City. Fifty Saskatchewan mines were created under contract with Eldorado Nuclear and Uranium Canada, a Federal Crown Corporation. In 1959, the U.S. and U.K. Governments stopped purchasing uranium for weapons, and the industry virtually collapsed. The final original mine at Beaverlodge was closed in 1982, and Uranium City became a ghost town.

The uranium industry believed that it would not only survive, but expand with the introduction of nuclear power plants. Exploration continued in Saskatchewan, and in 1968, Gulf Minerals announced a major discovery at Rabbit Lake and Amok Ltd. announced a high grade ore deposit at Cluff Lake. A third major discovery was made in the Key Lake area by Bell Oil. The development of the industry accelerated until the disaster at Three Mile Island in March 1979. The final U.S. nuclear reactor was ordered in 1978. The 1986 Chernobyl disaster convinced several governments that nuclear power was unsafe and deadly. In addition, as taxpayers learned only too well in Ontario, nuclear power is an expensive industry that exists only through a major government subsidy. Nevertheless, mines opened at Rabbit Lake in 1975, Cluff Lake in 1980, Key Lake in 1983 and Collins Bay in 1985 (Anderson, 1987; Gruending, 1990; Harding, 1995).

In 1972 the price of uranium fell to \$5 per pound, and the Canadian Government agreed to help creation an international cartel of uranium producers outside of the Soviet bloc. The “Uranium Club” (qtd. in Harding, 1995) was established with representatives from Australia, France and South Africa, as well as Gulf Minerals and Rio Tinto Zinc. The club was chaired by a Denison Mines representative, the main operator at Elliott Lake. The cartel remained secret until 1976 when Westinghouse, a major operator of nuclear power plants in the U.S.A., found out and filed a damage suit in court. Under the cartel agreement, Canada was to receive 33.5 percent of the world market. Between 1972 and 1975, the price of uranium rose from \$5 to \$40 per pound (Harding, 1995).

Saskatchewan has not released data regarding royalties that were paid to the province before 1976. John S. Burton reports that producers paid 12.5 percent of profits, but the existing mines were unprofitable so, “Revenues to the province were minimal” (qtd. in Burton, 1997). Jim Harding estimates that \$15,000 was paid in 1970-1, \$9,000 in 1972-3, and \$907,000 in 1974-5. In 1964, the province enacted the Saskatchewan Metallic Royalty system, which provided a three-year tax-free holiday on net income for new mine operations. After this, a mine was expected to pay a progressive rate of five, seven and nine percent of net income. This system produced little economic rent for the province (Anderson, 1987; Burton, 1997).

A new royalty regime was established by the Blakeney NDP Government in 1976. The basic royalty was a three percent levy on gross sales. On top of this was a graduated royalty on operating profits above 10 percent. The rate of profit was reduced substantially because the mine operators were able to claim a double write off of their original capital investment. The NDP Government insisted that a 20 percent return on capital after all taxes and royalties were paid was a “fair rate of return” (Anderson, 1987) for private investors. They concluded that “economic rent” was only funds that exceeded a 20 percent net annual rate of return on investment (Gullickson, 1990). As David Anderson points out, “Even after full capital cost recovery, the investor is able to earn a tax-free rate of return (ignoring inflation) of 15 per cent before the graduated royalty takes effect” (Anderson, 1987).

The second part of the Blakeney Government's uranium royalty regime was the creation of the Saskatchewan Mining and Development Corporation (SMDC), which was established by Cabinet order-in-council in 1974 and legislation in 1977. As well, the Crown Equity Participation Program was enacted in 1975, where corporations with new exploration projects were required to offer 50 percent equity to SMDC. Under this system of joint ventures, SMDC became a major participant in the Key Lake mine, the Cigar Lake mine and the Cluff Lake mine (Anderson, 1987).

Contrary to the potash industry, there was no objection to government participation in the uranium industry. The large corporations were worried about the Federal Liberal Government that promised limits on foreign ownership, particularly in the uranium industry. Participation with the Saskatchewan Government was a likely guarantee that the Federal Government would not restrict foreign ownership. Furthermore, as David Anderson points out, "Saskatchewan became perhaps the only jurisdiction with high grade, large-scale reserves and an explicitly pro-development stance, [while] Conservative Governments in British Columbia, Nova Scotia and Newfoundland enunciated various anti-mining positions" (Anderson, 1987). As Saskatchewan captured a reasonable share of the economic rent, public support for the industry in the province was expected to increase (Anderson, 1987; Gullickson, 1990).

The Blakeney NDP Government planned to use the majority of the province's resource revenues to further investment in the resource industry. In 1974, they created the Energy and Resource Development Fund – through oil and gas royalties – as a reserve of capital for investment. It provided \$344 million to facilitate purchases of potash companies during the nationalization process. In 1978, the government created the Saskatchewan Heritage Fund, with \$429 million from the Energy Fund and \$36 million from the Consolidated Fund. The new fund was used to develop infrastructure, create a new research park in Saskatoon, build new highways to Northern mines, develop northern airports, build bridges and causeways, and provide grants to support exploration. It also provided most of the capital for the equity investment of SMDC in the three new northern uranium mines. The Blakeney Government informed the Cluff Lake Board of Inquiry that if the uranium mines were developed, the province would reap between \$1.5 and \$3 billion in royalties and taxes between 1977 and 1990 (Gruending, 1990; Harding, 1995).

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The election of Grant Devine's Tory Government in 1982 led to significant changes in the uranium industry. In Ottawa, Tory Prime Minister Brian Mulroney was anxious to privatize Eldorado Nuclear. The two Tories decided to merge SMDC and Eldorado to form a new corporation, the Canadian Mining and Energy Corporation (Cameco) that would eventually be privatized. In 1987, SMDC's assets were valued at \$914 million, with reported sales of \$194 million that produced a return of 21 percent. It had an excellent ratio of debt to equity of 1.4:1. Meanwhile, Eldorado had little productive assets. Cameco reported assets of \$1.6 billion, of which the Saskatchewan Government owned 61.5 percent and the Federal Government owned 38.5 percent (Pitsula and Rasmussen, 1990).

Cameco was created in 1988 and Saskatchewan remained the largest single investor. In 1991, Cameco sold 10.4 million shares of common stock on the Toronto Stock Exchange for \$12.50 a share to raise \$130 million. In 1996, the Crown Investments Corporation of Saskatchewan (CIC) held 15.5 million shares – equal to 29.5 percent of the total shares. In March 1996, the corporation and the Saskatchewan Government sold 9.5 million shares for \$75.50 per share – raising \$793 million and reducing the province’s share in Cameco to about 10 percent. In 2002, the final five million shares held by the CIC were sold for \$181.3 million (Cameco Annual Reports at www.cameco.com).

The returns to the people of Saskatchewan from the development of uranium mining have been quite low. Paul Hanley, environmental reporter for the Saskatoon *Star Phoenix*, did an in-depth investigation of the industry in 1992 and concluded that the investment by taxpayers was three times as large as the taxes and royalty revenues received, and this excluded many of the indirect costs. Royalties as a percentage of sales peaked at 11.3 per cent in 1982 and 1983. They rose slightly under Roy Romanow’s government, but have significantly dropped under Lorne Calvert’s government (*Star Phoenix*, February 10 and 24, 1992; Table IV).

Saskatchewan’s total share of uranium sales fell to three percent in 2003, a level not seen since the 1970s.

A new royalty rate for uranium mining – that consisted of a basic rate of five percent of gross sales – was set by Grant Devine’s government in 1986. Secondly, there was a tiered royalty that was paid only after the mining corporation recovered all of its original capital investment. The tiered rate of royalties were paid when the international price of uranium exceeded \$15 per pound. Between 1988 and 2002 there was only one year, 1996, when the price was above \$15 at \$16.50. After \$15, the royalty rate was 4.3 percent, over \$20 it was 5.7 percent, and above \$25 it was 8.5 percent. The maximum rate – 10 percent – was applied when the price exceeded \$30.

By mid-2001, the international spot price of uranium increased to nearly \$10 per pound. The NDP Government responded with radical changes to the tiered rate, so that tiered royalties were not paid until the price rose to \$30 per pound. By the end of 2004, the international spot price rose to \$20.70 per pound and reached \$26 per pound by May 2005. Of course, the province received no royalties from the price increase. Saskatchewan’s total share of uranium sales fell to three percent in 2003, a level not seen since the 1970s. Meanwhile, the price of Cameco’s common shares stock rose from \$15 in 2002 to \$45 by the end of 2004 and \$50 by May 2005. Nevertheless, the Saskatchewan Mining Association demanded additional reductions in royalties on uranium in May 2005. The association insisting that Saskatchewan’s royalty and taxation rates are “Among the highest in the world” (Cameco, Annual Report, 2004; *Globe and Mail*, May 27, 2005; *Leader Post*, May 31, 2005; Saskatchewan Industry and Resources, 2004; Table IV).

As we entered 2005, the outlook for the uranium industry was very good. Spot prices for uranium peaked around \$29 per pound. The nuclear industry predicts that consumption of uranium will rise from 173 million pounds in 2005 to over 200 million pounds in 2020. Thirty-four nuclear power plants are under construction in Saskatchewan, China plans to build 27 more, India plans for 17, and plants are under development in the United States. Russia has also announced that it will no longer export its stockpile of uranium. The stockpile is reserved for the 25 new nuclear power plants that Russia intends to build (Bloomberg News, January 5, 2005).

Since the mid-1980s, there has been a 70-million pound deficit between the amount of uranium extracted and consumed by the energy industry. The shortfall has been filled through existing stockpiles and recycling nuclear warheads from the former Soviet Union. However, both of these sources are running out. Within ten years, the industry predicts a serious gap in supply. Currently, Cameco is constructing a new mine at Cigar Lake that is expected to begin production in 2007. Cameco has also applied for permits to expand their production capacity at the Key Lake and McArthur River mines, and they intend to expand production at their mine in Kazakhstan. This knowledge was well known by the NDP Government when it chose to cut royalties and taxes on the industry (Cameco at www.cameco.com; “Uranium Prices Spike on Shortages,” *Vancouver Sun*, May 4, 2005).

In 1987, economist David L. Anderson concluded that Blakeney’s NDP Government “Was able to devise and implement a surprisingly successful strategy for economic development and rent appropriation” (Anderson, 1987), and the tax and royalty system “Was expected not only to capture for the state a ‘fair’ share of the rents, but also to do so in a relatively neutral fashion” (Anderson, 1987). The mandatory joint venture programs for developing mines and exploration “More than met the expectations of their creators” (Anderson, 1987). Anderson also agreed with John Richards when he argued that “Public enterprise . . . was an important vehicle for successful development/rent appropriation policies” (Anderson, 1987). However, Grant Devine’s Tory Government started to reverse this policy, and the NDP Governments of Roy Romanow and Lorne Calvert completed the job. Today, the people of Saskatchewan receive precious little from the exploitation of the uranium resource (Anderson, 1987).

The coal industry and its contradictions

Coal was the energy source of the 19th century. With the disappearance of forests and wood, coal became the fuel for heating homes, gas for street lights, the power source of the rising Industrial Revolution, and the fuel for transportation that enabled European countries to colonize the world. However, it was a dirty fuel that polluted cities, caused widespread adverse health effects, and was hazardous to mine. In the 20th century, oil replaced coal as the primary energy source, but with the development of commercial electricity, coal retained its world wide importance as the key fuel for power generation.

It was logical that SaskPower own and develop the coal mines. The coal is owned by the people of Saskatchewan, and SaskPower is a Crown Corporation that is owned exclusively by the people of the province.

There are several different classes and qualities of coal mined in Canada. Anthracite and bituminous coal – known as “hard coal” – have a higher grade due to the potential to create more energy per volume. Anthracite is the highest coal grade and is widely used in industrial and domestic consumption. Bituminous coal is used for both thermal generation of electricity and metallurgical purposes. In contrast, sub bituminous and lignite coal are low grade coals – often referred to as “brown coal” – that are used almost exclusively for the generation of electricity. Large deposits of lignite are found in southern Saskatchewan and the U.S. prairies, and it has been mined in the province since at least 1886.

Today, lignite coal is mined at Poplar River near Coronach and at the Boundary Dam and Bienfait mines near Estevan. Almost all of this production is bought under contract by the Saskatchewan Power Corporation (SaskPower) for the production of electricity. Around 60 percent of Saskatchewan's electricity stems from burning lignite coal. Since the 1950s, coal has been extracted by strip mining using enormous draglines, large steam shovels, trucks and even a railway line (Stone, 2004).

It was logical that SaskPower own and develop the coal mines. The coal is owned by the people of Saskatchewan, and SaskPower is a Crown Corporation that is owned exclusively by the people of the province. The vertical integration of coal mining and the production of electrical power made it possible for all of the economic rent from the extraction of this resource to go to the general public and users of electricity. SaskPower owned and operated the Souris Valley Mine at Estevan and later built and equipped the Poplar River mine at Coronach.

Historically, private mines – owned by well-known Tory families in Edmonton – that operated in the Estevan area sold their coal to SaskPower. Manalta Coal Ltd and Prairie Coal Ltd., owned by the Mannix family, operated the Utility and Costello mines at Estevan. Luscar Ltd. was an international mining consortium based in Bermuda. Its Canadian operations were controlled by Edmonton's Green family, who were part of the original British industrialists, close to Peter Lougheed and supporters of the Progressive Conservative party. Through Luscar, it owned the Estevan Coal Corporation.

A major change in the industry's structure came with the election of Grant Devine's Tory Government in 1982. As followers of the policies of the British Tory Prime Minister Margaret Thatcher, the Tories were a strong supporter of the sale of public assets to private investors. The first privatization was the coal industry. SaskPower – now under the control of George D. Hill, a close political associate of Grant Devine – shut down the Souris Valley mine in Estevan and sold its dragline to Manalta Coal, which was given a long-term contract to supply coal to SaskPower from their Utility mine in Estevan.

In 1982, SaskPower's Poplar River mine began to produce coal for the Poplar River generating plant. The second power unit was expected to come online in 1984. In preparation, SaskPower purchased and assembled a second dragline for its coal operation. However, in March 1984, the Devine Government sold the new dragline to Manalta Coal and the mine in November. SaskPower invested \$129 million in the mine, but it was sold for \$102 million. The Saskatchewan Government also financed \$89 million of this sale through a loan and granted Manalta a 30-year contract to provide coal to the Poplar power station. Furthermore, the coal contracts between SaskPower and the private corporation were on a *cost-plus basis*, which guaranteed a good profit for Manalta. This was the kind of capitalist resource "development" historically found in colonial situations. The bonus was that the new owners were strong Tory supporters (Warnock, 1990).

From the beginning, the coal industry paid virtually no royalties to the people of Saskatchewan. Up to 1978 royalties were less than two percent of the sales of coal and were often below one percent. In 1979, Blakeney's NDP Government demanded a larger share of the extraction of this non-renewable resource. Royalties peaked at 18 percent of sales in 1983, then,

started a downward slide to stabilize around 11 or 12 percent of sales in the latter period of the Romanow-Calvert NDP Government. Under the Coal Disposition Regulations of 1988 that are presently in effect, royalties are supposed to be set at 15 percent of the sales' value contracted at the mouth of the mine, with a one percent discount from the Saskatchewan Resource Credit (See Table V).

Strip coal mining is capital intensive and employs few workers. The three mines in Saskatchewan only employ about 350 workers. Although output has increased over the last 30 years, employment has fallen. As Jeremy Smith points out, "The taxation burden for Canadian mining industries is below . . . other Canadian industries and comparable to . . . mining industries in other countries" (Smith, 2004). Thus, the Canadian tax system should not impede innovation in the mining industry (Smith, 2004).

In 2003, the Canadian coal industry restructured its operations to create a highly monopolized industry. First, the Fording Canadian Coal Trust was formed through a merger of Fording Inc., Teck Cominco Ltd., Westshore Terminals Income Fund, Sherritt International Corporation, and the Ontario Teachers' Pension Plan. This organization controls the metallurgical mines and assets in Alberta and British Columbia, and the majority of this coal is exported.

Second, the Luscar Energy Partnership was created, with a 50-50 relationship between Sherritt International Corporation and the Ontario Teacher's Pension Plan. Sherritt is a major Canadian transnational corporation based in Toronto with major financial ties to London. Sherritt and the Ontario Teachers' Pension Plan own Luscar Coal Ltd, the largest coal producer in Canada with 10 operational mines – including those in Saskatchewan – that provide thermal coal to power plants in Alberta, Saskatchewan and Ontario. Sherritt sold its metallurgical coal mining interests to Fording and acquired Fording's thermal operations in Alberta. *Coal/Trans Magazine* announced that the mergers would ensure that Luscar is a "New dynamic force in the Canadian domestic thermal coal business [primarily because of] a wide variety of stable, long-term contracts" (January-February 2003). Most of the economic rent from coal extraction in Saskatchewan no longer goes to the people but to investors in Ontario, London and elsewhere (*Coal/Trans Magazine*, January-February 2003; Sherritt International, *Annual Report*, 2003; Stone, 2004).

The coal industry is under attack because of the pollution it generates. Traditionally, the main concern was the production of sulphur dioxide, which causes acid rain, and nitrogen oxide, which causes smog. New technologies enable power plants to reduce these emissions. Recently, the concern is the emission of mercury that bioaccumulates through the food chain, is highly concentrated in fish across North America, and is damaging the neurological development of children (*Globe and Mail*, March 15, 2003; February 10, 2005).

The use of coal for electricity is also identified as a major cause of greenhouse gas emissions. SaskPower uses coal to produce 60 percent of the province's electrical power, which accounts for about 25 percent of the province's total emissions. It is not surprising that across North America a political movement has developed to phase out all energy production from coal (Brown, 2003).

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Saskatchewan's NDP Government, the opposition Liberal Party and Saskatchewan Party, and SaskPower have all criticized the 1997 Kyoto Accord on Climate Change. The Canadian Government has agreed to reduce Canada's greenhouse gas emissions by six percent below the 1990 levels by 2012. However, since 1990, Saskatchewan's greenhouse gas emissions rose by 30 percent, the highest in Canada, and few expect that the province will meet its obligations (Bramley, 2002).

Saskatchewan's NDP Government has resisted making commitments to reducing greenhouse gas emissions. SaskPower plans to continue producing power from coal for many years. The Crown Corporation recently spent \$86 million to refurbish the Boundary Dam generating system and announced they will spend about \$130 million to upgrade the boilers at all of the coal fired stations. The Saskatchewan Government and SaskPower are also counting on a new technology to create a "clean coal" power system that would sequester carbon dioxide underground. However, coal fired plants that produce electrical power are noted for their inefficient energy conversion rates that range between 34 and 55 percent. Furthermore, sequestering carbon dioxide requires an additional drain on net energy and is an expensive project to undertake (Heinberg, 2003; SaskPower at www.saskpower.com).

Coal was the first non-renewable natural resource developed in Saskatchewan. The provincial government created SaskPower and placed it in charge of providing electricity and natural gas to all potential customers in the province. Private corporations were not interested in developing services to individuals in rural and northern locations, so the provincial governments concluded that it was both logical and just to share the costs of this infrastructure development.

Burning coal was the cheapest way to produce electricity. Saskatchewan was endowed with an abundant supply so, it was natural for SaskPower to mine the coal. As a result, all of the economic rent from coal extraction went to the people of Saskatchewan. However, this policy was reversed when the Grant Devine Tory Government was elected in 1982. The privatization of the coal industry was a classic case of the robbery of state-owned assets – the shift of public wealth to private interests.

Saskatchewan's coal industry is a good example of the commitment of governments to private accumulation of capital in the present era of neoliberalism.

Some may have believed that the NDP would return to the original provincial policy after their election in 1991. However, the Romanow and Calvert Governments have little in common with their social democratic predecessors. They faithfully continued the Tory policy of sending resource rents to private corporations and agreed with the Tory policy of eliminating public participation in resource extraction. Saskatchewan's coal industry is a good example of the commitment of governments to private accumulation of capital in the present era of neoliberalism.

Coaxing other minerals out of the ground

The spokesmen for the mining and petroleum industries argue that they are more important to Saskatchewan's economy than agriculture – accounting for 14 percent of the province's gross domestic product versus eight percent for agriculture. Oil and gas are now the most important exports in the province. The majority of the province's royalties are accounted for by the major resources covered above, but there are other minerals that contribute to the

economy. The province is basically divided into two zones – the northern region’s Precambrian Shield and the Athabasca sedimentary rocks and the southern region’s sedimentary strata. The northern part of Saskatchewan is home to the metallic-mineral industries, while the southern half contains various industrial minerals.

Base metal mining is developed almost exclusively in the northeast part of the province near Flin Flon. The rock formation straddles the border and is the source of copper, zinc, gold and silver, with some extraction of lead, cadmium and cobalt. The Flin Flon mine and smelter began production in 1930. The Hudson Bay Mining and Smelting Co. was originally owned and operated by the Whitney Group of New York City and, then, Anglo-American Ltd. In 2004, the operation was purchased by ONTZinc Corporation of Toronto and renamed HudBay Minerals. In Saskatchewan, it operates at the Konuto Lake Mine and was the only producer of base minerals in Saskatchewan in 2004. Between 1998 and 2003, the mine extracted 1.4 million tonnes of ore containing copper, zinc, gold and silver minerals (Kelley et al, 2004; Saskatchewan Geological Survey, 2003).

Placer gold mining on the North Saskatchewan River began around 1887. In 1934, discoveries on the north shore of Lake Athabaska led to the development of the Box Mine and the town of Goldfields, but the mine closed by 1942. More recently, mining operations opened at Star Lake, Jolu, Jasper and Contact Lake, but have since all played out. Today, the Seabee Mine – owned by Claude Resources Inc of Saskatoon – is the only operating gold mine in Saskatchewan.. The mine produced 50,800 ounces of gold in 2003. The Saskatchewan Ministry of Industry and Resources notes, that the more recent development in gold mining in Canada was encouraged “By a favourable investment climate created by ‘flow-through financing’” (Saskatchewan Industry and Resources), a new tax shelter. The other major source of gold is a byproduct of base-metal mining at the HudBay Minerals operation in Flin Flon. The mine is also the only source of silver produced in Saskatchewan (Kelley et al, 2004; Saskatchewan Geological Survey, 2003).

The new rush in Saskatchewan is for diamonds. Over 30 companies are exploring in the Fort á la Corne District, northeast of Prince Albert. Shore Gold of Saskatoon, with links to Newmont Mining Corporation of Canada, has begun to sink shafts at the Star Kimberlite. De Beers Canada is also undertaking a major exploration joint venture project with Kensington Resources and Cameco. The NDP Government is providing subsidies and tax breaks to encourage this development.

Sodium sulphate is one of the province’s key industrial minerals. Saskatchewan Minerals was a Crown Corporation created by the T. C. Douglas Government in 1946. It was a successful corporation that regularly earned a profit and paid taxes and royalties to the provincial government.

Over 40 years it accumulated net earnings of \$47.5 million, and it was one of the first resource area Crown Corporations sold by Devine’s Tory Government. The privatization price was a mere \$5.5 million, well below its book value, and is now a division of Goldcorp, a Toronto owned and controlled operation. Millar Western Industries, a family operation based in Edmonton, owns Saskatchewan’s other sodium sulphate plant. Recently, the potassium sulphate mine at Alsask went out of business, but Big Quill Resources is still operational in Kandahar (Pitsula and Rasmussen, 1990; Saskatchewan Industry and Resources, 2004).

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Saskatchewan's other main industrial mineral is salt. It is produced by several potash mines, including Agrium at Vanscoy, Mosaic Canada at the Belle Plaine solution plant, PotashCorp at Rocanville, and Compass Minerals [Sifto] of Kansas, at Esterhazy. Meanwhile, ERCO Worldwide, a Toronto corporation, produces chlorine dioxide for water treatment at a Saskatoon plant (Saskatchewan Industry and Minerals, 2004).

Historically, clay has been an important industrial mineral. Estevan Brick is still in operation, but its production peaked in 1989 and dropped off dramatically with the closure of the province's brick plants. It is now owned by I-XL Industries of Medicine Hat. Bentonite clay is extracted at a quarry near Truax by Buchanan Enterprises based in Alberta. Kaolinitic, or ceramic clays, are mined near Willow Bunch by I-XL Industries and Plainsman Clay of Medicine Hat. Sand and Gravel aggregates used in construction are another important source of mining activity (Saskatchewan Geological Survey, 2003).

Table VII demonstrates that the above mineral activities contribute very little resource royalties for the people of Saskatchewan. For example, between 1981 and 1992 the average royalty for the extraction of sodium sulphate was 3.9 percent of sales, for salt it was 2.9 percent of sales, and for quarriable materials – including sand, gravel, bentonite and clays – it was less than one percent. Direct and indirect subsidies to these operations by the province most likely exceed the royalties and taxes they pay. Perhaps for that reason, the NDP Government decided to stop releasing basic data to the public about their economic activities in 1997.

Saskatchewan's royalties for the extraction of precious and base metals are quite low. For precious metals like gold, silver and platinum, there are two official levels of taxation. For sales of less than one million troy ounces, the royalty is only five percent of net profits. For sales above this level, the royalty rises to 10 percent of net profits.

For base metals like copper, zinc and nickel, the royalty on extraction of ore under one million metric tonnes is five percent of net profits and over it is 10 percent of net profits. This rate applies to the Hudson Bay Mining and Smelting Co., now HudBay Minerals, which operates on both sides of the border with Manitoba. In addition, the owners of corporations mining these resources pay no royalties until they recover 150 percent of their initial costs for exploration and development. It is no wonder that Saskatchewan is widely praised for its resource taxation policies by the right-wing Fraser Institute of Vancouver and the mining executives who participate in its annual survey (Fraser Institute, 2004; Saskatchewan Industry and Resources, 2005).

It is no wonder that Saskatchewan is widely praised for its resource taxation policies by the right-wing Fraser Institute of Vancouver and the mining executives who participate in its annual survey.

Nevertheless, according to corporate executives in Saskatchewan, royalties and taxes are still too high in the minerals industry. Lorne Calvert's Government responded to the complaints with more tax cuts and subsidies in the fall of 2002. An additional Mineral Exploration Incentive Program was announced that will run for six years. This was on top of the provincial flow-through mineral exploration tax credit announced earlier in the year. The new "incentives" include direct aid for corporations and prospectors, an Enhanced Geoscience Research Program, a fuel tax rebate and a new royalty tax structure for diamond mining. The NDP Government also announced a new 10-year royalty holiday for all new base metal and precious mines which are started during the six-year period (Saskatchewan Industry and Resources, September 2002).

The Federal Government offers its own extensive subsidies to the mining industry that are summarized in a report by the Pembina Institute and Mining Watch Canada. Federal spending on the industry in 2001 totaled \$383 million, or over \$13,000, for every employee in the mining industry. Federal support comes from various tax expenditures, including the Canadian Exploration Expense, the Canada Development Expense, the Resource Allowance and the accelerated capital cost allowance rate of 25 percent. The Federal Government is also lowering the corporate tax rate for resource corporations from 28 percent to 21 percent by 2007 and removing the Capital Tax in 2008. The Green Budget Coalition points out that by 2007 the corporate marginal tax rate on mining will be only 7.6 percent.

The Organization for Economic Co-operation and Development (OECD) has recommended that the Canadian Federal and Provincial Governments eliminate the “Preferred tax treatment of conventional resource sectors, such as oil and gas and minerals and metals” (Organization for Economic Co-operation and Development). The Green Budget Coalition calls for the end to taxpayer subsidies to the industry and, in particular, an end to the new tax shelter and the flow-through shares. The coalition also calls for a new policy where resource extraction industries pay the same level of taxes as other corporations. The Federal Task Force on Business Taxation discovered that the effective corporate tax on the mining sector was only six percent in 1998, the lowest of all sectors studied (Canada, 1998; Canada, 2003; Green Budget Coalition, November 5, 2003; Pembina Institute, 2002).

We should remember that there are both environmental and social costs associated with the boom and bust mining industry. Mining creates enormous quantities of waste, and thousands of mines are simply abandoned when they play out. Clear water is also used and contaminated in the mining process. Pollution from mining and the oil and gas industry is significant. Meanwhile, workers in the industry suffer from a high rate of disabling injuries and adverse health effects (Pembina Institute, 2002).

Are the mining and oil and gas industries more important to Saskatchewan than the food and agriculture industries? We should remember that a large majority of the corporations involved in mining and oil and gas are transnational corporations whose ownership and control is outside Saskatchewan, if not outside Canada. There are a number of large Canadian owned and controlled corporations that usually keep their headquarters in either Toronto or Calgary. Only a few relatively small resource corporations are owned and operated by people in the province (See Saskatchewan Industry and Resources, *Saskatchewan Operating Mines List*, February 2005).

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Who benefits when our non-renewable resources – oil, natural gas, potash, uranium and other metals and minerals – are extracted and exported? The relatively few people employed in these industries earn fairly high wages and salaries. Some local businesses get contracts for work. However, the billions of dollars of economic rent – which takes the form of net income, accelerated depreciation rates, various allowances, the capitalization of income through the takeover of other companies, or the purchase of mining rights – remains with the owners of the corporation. In Saskatchewan, the major corporations involved in the extraction industries are owned, controlled, and have their head offices outside of the province. The economic rent they capture and retain can be invested anywhere. Dividends are paid out to the shareholders, the vast

majority of whom do not live in Saskatchewan. In contrast, the returns to farmers and ranchers from the sale of their products go to Saskatchewan's residents, and the farmers and ranchers spend their cash in the province. Ownership does matter. Who captures the economic rent matters. That is why social ownership of natural resources returns a much larger share of the economic rent to the people who own the resources than when resources are developed by large transnational corporations.

Conclusion

In May 2001, the George W. Bush Administration proposed a new continental energy pact that would accelerate exports from Canada, as well as significantly increase green house gas emissions. Saskatchewan was expected to contribute additional heavy oil, uranium and coal to meet the growing U.S. demand. The proposal was denounced by both environmental groups and other interested parties for several reasons. The U. S. already consumes 25 percent of the world's energy, has refused to endorse the Kyoto Accord, and introduced a new energy bill that will dramatically increase its greenhouse gas emissions. As the David Suzuki Foundation argued in a special report on the Bush proposal, the increased production of energy for export would increase Canada's emissions by 44 percent above the Kyoto targets. Yet, in June 2001, the western premiers met in Moose Jaw, SK and endorsed the plan. No mention was made either of future Canadian needs or greenhouse gas emissions (Suzuki, 2001).

In 2003, Lorne Calvert's Government set the goals for the Department of Industry and Resources. The overall policy was designed to complement other NDP strategic plans – including Building the Future, the Partnership for Prosperity Strategy, and the Our Future is Wide Open campaign. The top goal for the resource sector was to create “A positive environment for business” (Department of Industry and Resources, *Annual Report 2002-3*). Some may have expected a social democratic government to list either “creating social justice” or “promoting full employment” as their top priority. However, the Romanow and Calvert NDP Governments are very different from those of Tommy Douglas, Woodrow Lloyd and Allan Blakeney (Department of Industry and Resources, *Annual Report 2002-3*).

Since the NDP Government was elected in 1991, it has consistently reduced the royalties and taxes on the corporations involved in resource extraction.

Since the NDP Government was elected in 1991, it has consistently reduced royalties and taxes on the corporations involved in resource extraction. Few remember that in the 1991 election campaign, the party pledged to reverse the policies of the Devine Tory Government and promised to raise royalties and taxes on corporations in the resource extraction sector up to the levels that were under the Blakeney NDP Government. Once in office, though, the Romanow Government quickly reversed this policy in 1992. Table VI demonstrates the steady reduction of royalties and fees that led to a major loss of provincial revenue. If the government had restored the higher royalty rates that existed in the past, the provincial government may have had an additional \$2 billion in revenue in 2003 (Brown, 1999; MacKinnon, 2003; Warnock, 2004; Table VI).

Therefore, it is no surprise that the right-wing Fraser Institute in Vancouver gave the Saskatchewan NDP Government very high marks for its policies in the area of mining and mineral extraction. Each year researchers at the Fraser Institute ask senior officials from about 260 corporations in mining and mineral extraction to rate about 60 political jurisdictions that

have significant mineral and mining industries. The jurisdictions include most of the Canadian provinces, a number of U.S. states and a number of less developed countries. Saskatchewan does not rank high for mineral potential, a geological determination, but does very well when ranked by government policies – the system of mining regulations, environmental regulations, taxation levels and labour regulations. In 2004, Saskatchewan ranked fifth out of 64 jurisdictions.

Saskatchewan ranks high because of low royalties and taxes, limited environmental regulations, stability of regulations, good labour regulations – with only two strikes in the last ten years – and excellent political stability. California, Colorado, Washington, Wisconsin, Indonesia, the Philippines, Venezuela, Russia and South Africa were given low rankings for having relatively high resource taxes. Only eight percent of respondents said that the level of taxation in Saskatchewan would “Discourage exploration investment” (Fraser Institute, 2004), while over 50 percent said they would avoid California and Wisconsin (Fraser Institute, 2004).

There was a time when the NDP criticized the Fraser Institute, but that was when big business organizations supported Devine’s Tory Government. Now, Eric Cline and others in the NDP regularly point with pride to the positive rating they receive from the right-wing think tank. Cline, the Minister of Industry and Resources, was also pleased that the *Canadian Mining Journal* ranked Saskatchewan as “One of the most competitive jurisdictions in North America” (*Leader-Post*, May 29, 2004) thanks to its business policies and taxation levels. (*Leader-Post*, May 29, 2004)

If the NDP Government had restored the higher royalty rates that existed in the past, the Calvert government would have had an additional \$2 billion in revenues in 2003.

Table VI demonstrates that the steady reduction in royalties and fees in the resource sector has led to major provincial revenue losses. If the NDP Government had restored the higher royalty rates that existed in the past, the Calvert government would have had an additional \$2 billion in revenues in 2003. With these funds, programs could have been restored and the provincial debt could have been reduced.

What are the complaints we hear in Saskatchewan? Property taxes are too high – they are the highest in Canada. On a per capita basis, we spend nearly the lowest on education of any other province. Hospital waiting lists are too long. Today, there are considerably fewer nurses graduating than when Grant Devine was premier. Tuition keeps rising at post secondary institutions. There are long waiting lists for courses at the Saskatchewan Institute for Applied Science and Technology (SIAST). We have the highest rate of poverty in Canada, and social assistance rates are well below the basic needs level. We also have the poorest childcare system in Canada. There is a serious lack of good affordable housing. User’s fees are raised on several public services. There is little provincial government assistance for farmers and rural development programs. The roads are disintegrating. Rural property taxes are rising because the provincial government has cut grants to municipalities and local school boards. There is no money for pay raises for civil servants and teachers to meet the rising cost of living. The list goes on.

These shortfalls are all due to the fact that since 1982, provincial governments have failed to collect economic rents from resource industries. Devine's Tory Government tried to conceal the problem by running budget deficits and building the provincial debt. The NDP Governments have responded by balancing the budget, drastically cutting programs, off-loading costs, actively promoting gambling, and raising user fees and taxes. They have made matters worse by cutting business taxes and the rate of taxes paid by those in the highest income brackets.

Today, there is no political debate around the issue of natural resources, their extraction systems, or royalties and taxes. There is consensus among the three major parties – the NDP, the Saskatchewan Party and the Liberal Party. All three are committed to a general program of minimal state intervention in the industry and steady reductions in royalties and taxes, with the primary benefits of resource extraction going to corporations and their owners. When the Calvert Government announced its “fourth tier” royalty regime for oil, they were praised by the opposition Saskatchewan Party for being “On the right track” (*Leader-Post*, March 19, 2005). It is only the small New Green Alliance that is taking a different approach, arguing that the goal should be to gain local control over the extraction of natural resources and how they are used for development purposes. However, their argument is shut out of the mainstream press (*Leader-Post*, March 19, 2005).

It might be useful to revisit the analysis of the natural resource industry by Eric Kierans for the Manitoba government in 1973. Kierans, a professor of economics at McGill University, served as a Liberal cabinet minister and president of the Montreal Stock Exchange. As he argued, it is difficult to determine the actual economic rent from the operations of the mining industry, which is dominated by large transnational corporations. First, he noted the advantages given to resource corporations by the Federal Government: (1) deductions for the depletion of a resource; (2) tax exemptions for mines for the first three years of operation; (3) capital expenditures for investments in new resources to be deducted from current income; and (4) accelerated depreciation charges against profits for corporations. These particular concessions provided resource extraction corporations with significant advantages over other industries. They allowed them to capture the majority of the economic rent from resource extraction (Kierans, 1973). However, is this really any different from today?

Kierans' study of Manitoba's mining industry concluded that the royalty and tax system returned little to the province's people. His criticism of the Manitoba Government could easily be applied to the present Saskatchewan Government:

“To be satisfied with the new jobs created and forego the surpluses and profits inherent in the development of its own endowment is hardly the mark of a strong and mature government. It accepts the role of “hewers of wood and drawers of water” for its people when they are capable of much more. That role provides wages and salaries and little else. The profits which direct and finance the future belong to those who have been invited in. . . A developing nation, a province or a colony may be rich in its beginnings but when that wealth is depleted through the poverty of its policies, nothing remains of the original endowment but the instability, dissatisfaction and political unrest arising from poorly conceived policies.”

Kierans provided several recommendations for an alternative strategy for provincial resource development. They included the expansion of the exploration program through the government ministry, refusal to assign mineral rights to the private sector, pass legislation to promote the transfer of mining claims and leases back to the Crown, create new Crown Corporations to develop all new resource extraction projects, place a property tax on all reserves under present leases, and change the current 15 percent royalty from net income to 15 percent of the volume extraction. These resources belong to the people of Manitoba, he argued, and their exploitation should benefit the people (Kierans, 1973).

In Saskatchewan, we know that the present situation can be rectified. We have the experience of the Blakeney Government, when the province, depending on its own people, successfully built and operated a number of Crown Corporations in the natural resource area. Sask Oil succeeded during privatization. The Saskatchewan Mining and Development Corporation demonstrated that joint ventures with private capital can work. The Potash Corporation of Saskatchewan, though hindered by a huge debt, was able to capture economic rent for the people of Saskatchewan. The Crown-owned and operated utilities – SaskPower, SaskEnergy, SaskTel and the Saskatchewan Government Insurance (SGI) – are further examples of how the people in this province can build and operate very successful and enterprising public corporations. When the government ruled this option out, as the NDP Government did when it proclaimed the *Partnership for Renewal* in 1992, it surrendered the opportunity of gaining much greater economic rent for the province and removed a major tool needed when bargaining with powerful transnational corporations (See Brown, 1999; MacKinnon, 2003; Warnock, 2004).

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There is another example to illustrate the advantages of direct state involvement in the development of resource industries. Oil and gas were discovered in the North Sea in the 1960s. Under Margaret Thatcher's Tory Government and Tony Blair's Labour Government, Great Britain's share of this resource was developed according to the model of the free market, private corporations, deregulation, and low taxes and royalties. Oil and natural gas were quickly extracted and exported. Now in 2005, their North Sea oil and gas production has peaked and is in decline, and these resources must be imported. In contrast, Norway developed their share of the industry with direct state involvement through Statoil, regulated and controlled the industry, planned first for the needs of the people of Norway, and channeled economic rent into the development of renewable energy systems. The Blakeney Government started down this road, but after 1982 the Devine and NDP Governments moved away from this strategy (Darley, 2004).

The OPEC countries who nationalized the foreign-owned oil corporations, as well as Mexico, have greatly benefited from this action. Despite all of the criticisms against PEMEX, the state-owned oil company, its profits still provide 40 percent of the Federal Budget. In Mexico, students who go to state operated post-secondary institutions pay no tuition. How is this possible? The institutions receive large grants from the Federal Government, a direct benefit from having a state-owned oil corporation. Here, in Saskatchewan, the tuition for post secondary institutions has greatly increased under the Tory and NDP Governments.

Since the early 1980s, the large corporations, big capital and their political supporters have pushed for privatization and deregulation, part of the policy of free trade and free market liberalism. We are now seeing a political resistance developing against this corporate agenda.

Venezuela has had a state-owned oil industry since 1976, but under the control of the Christian Democrats (Coplei) and the Social Democrats (Accion Democratica) Governments, the majority of the industry was privatized and development was contracted out to the large transnational oil corporations. The new government of Hugo Chavez, elected with strong majorities, is now moving to take back control of this industry, determined to maximize economic rent, and use the economic rent to reduce the conditions of poverty that affect the majority of the population. His government canceled contracts with U.S. oil corporations, dramatically raised resource royalties, and is now demanding more national controls over all resource development. In April 2005, they converted all contracts with private oil firms into joint ventures, with the state-owned oil company owning 51 percent. The government also launched an official examination of the profits of the private oil corporations. When asked whether this campaign might discourage foreign investors, Chavez replied “No, we’re practically having to fight off interested investors from Russia, China, Iran, India, Japan, the European Union, Brazil, Argentina, the United States, Canada, Italy and Spain” (*Globe and Mail*, February 8, 2005; *Globe and Mail*, April 18, 2005).

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Canada and Saskatchewan look almost exclusively to the U.S. market, which now consumes 85 percent of our exports. Meanwhile, Latin America is moving in another direction. The new governments are turning their back on the U.S. plan for a Free Trade Area of the Americas (FTAA). South America is expanding Mercosur, its regional free trade agreement, promoting more trade and investment among themselves, trying to create diversity and break the economic dependence on the U. S. Hugo Chavez has now proposed a new Latin American oil conglomerate, Petroamerica, to include all of the Latin American major oil corporations, most of which are state owned, and Mexico’s Pemex. Venezuela and Argentina recently formed Petrosur, a combined state operation with private capital that takes political courage and foresight in a different direction (Rosen, 2005).

How can we describe the overall political strategy of the recent Saskatchewan Governments as they apply to the extraction of non-renewable and renewable resources? Previously, I characterized the approach to the forest industry as “neocolonial,” a weak dependent government that always submits to the demands of large transnational corporations, in this case Weyerhaeuser, which dominates Saskatchewan’s forest industry. One political economist in the resource area objected to this, arguing that the same policies would exist if all the corporations were Canadian owned. The majority of the corporations involved in extracting non-renewable resources in Saskatchewan are also transnational corporations, and most of them are owned by U.S. interests. But perhaps neocolonial is not the right model to use here because Saskatchewan is not a less developed country (Warnock, 2001).

There is no question that Saskatchewan's resource industry primarily serves the U.S. political economy goal of world domination. From the Korean War and the Paley Commission, the U.S. Government's goal was to tie Canada closely to the U. S. as the safe warehouse for strategic natural resources that are needed for their military-industrial complex. Now, Canada and Mexico are even more important as safe sources of fossil fuel energy. Since 9/11, the free trade agreements and the various proposals for "deep integration" with the U. S. are instruments for facilitating U.S. political and economic control of its two neighbours. The Canadian political elite, including Saskatchewan's politicians, appear as willing partners in this project. For example, Lorne Calvert and the other three western premiers fully endorsed George W. Bush's recent call for a new and deeper North American energy pact.

The policies of our political leaders may be to enhance economic integration with the United States. However, that is only a partial focus of the overall general policy. There is also the fact that our governments provide full support to almost any request by the large corporations that dominate the resource industry. Here, we must remember that in Canada these resources belong to all of the people – they are public property and public assets.

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There is a better concept that helps us understand why our governments pursue these consistent pro-big business policies. I first ran across this analysis when reading Christopher Manes' book on the development of radical environmentalism in the United States. He described how President Ronald Reagan, with the backing of the U.S. Congress, enacted policies to control activist environmentalists who opposed mining, oil and gas drilling, and clear cutting of timber in U.S. rangelands and forests – public domain lands held by the state presumably for the use of all. A paramilitary force was created to harass and arrest those protesting against clear cutting of old growth forests. The U.S. Forest Service closed off public land to all but those exploiting the resource. The government also sanctioned the use of armed guards by the private corporations. The Reagan Administration justified the exploitation of public wilderness areas on the grounds of national security, the Cold War against the Soviet Union. In this case, the state held large areas of the U. S. as a public reserve for private corporation exploitation. Manes described this as "The natural resource state" (Manes, 1990), where the government was not there to protect the public interest, but to foster the use of these resources by private corporations. Similar to many U.S. environmentalists, he attributed the corporate rape of public resources to "The culture of technology" (Manes, 1990).

John Bellamy Foster furthers Manes' argument. He focuses on the struggle in the U.S. Pacific Northwest over the issue of clear cutting the remaining old growth forests, and he tracks the similar policies between the Bill Clinton and George W. Bush Administrations. The Endangered Species Act is gutted. Raw logs are exported rather than processed in the local economies. Right to work laws in the U.S. south undermine unionized workers in the Pacific Northwest. In all of these disputes, the resource extraction corporations have the backing of both the Federal and State Governments. Thus, Foster argues that "The natural resource state" (Manes 1990) reflects the reality of the *partnership* between the large corporations and the governments. The primary role of the state is to aid the capital accumulation process. In this case, the government helps capital by enhancing the corporation's ability to capture economic rents from the extraction and use of natural resources. This is a better overall description of the post-1982 policies of the Saskatchewan government (Foster, 2002).

What could we do to begin to change resource policy in Saskatchewan? This would be difficult, given the consensus of the three major parties on resource royalties. There was a wide public and political debate in this province over resource policy during the Blakeney

The primary role of the state is to aid the capital accumulation process. In this case, the government helps capital by enhancing the corporation's ability to capture economic rents from the extraction and use of natural resources.

Government and the Devine Government terms. However, since 1991, there has been no political debate and no public discussion of the existing policy and alternatives. The mass media, with its pro-business orientation, is not at all interested in opening the debate. They continue with their one note song: "We need more corporate tax cuts and even more subsidies from the taxpayers."

There is a possibility that the NDP could change direction. If they are defeated in the next provincial election, as almost everyone expects, a new leadership could emerge that calls for a return to the social democratic policies of the Douglas-Lloyd-Blakeney years. However, given the fact that there is no left wing in the party these days, this seems unlikely. There is also the fact that social democratic parties around the world have moved away from traditional social democratic policies and have fully embraced the neoliberal free market free trade agenda of big business.

In a thorough and widely praised study of social democratic parties in Europe, Gerassimos Moschonas argues, and I agree, that there has been a "Profound transformation" (Moschonas, 2002) of these parties away from the principles and social form of classic social democracy. They have made "An unprecedented accommodation with capitalism" (Moschonas, 2002), and their new electoral form, separation from their popular groups, and the acceptance of neoliberal policy is the product of an evolution, where today these parties are "In equilibrium" (Moschonas, 2002). Social democratic and labour parties are no longer "A force in transition" (Moschonas, 2002). Thus, it would be difficult to change their policy direction. He argues that it is highly unlikely that social democratic parties will return to their roots: a popular movement – backed by the reformist trade unions – demanding the rectification of inequalities and consistently lining up on the side of the disadvantaged (Moschonas, 2002).

What could be done to put the issue of the public role in resource development back on the agenda? There have been past attempts to establish a process of public hearings by popular organizations. The Coalitions for Social Justice of the 1980s did this, but were unsuccessful in achieving their goals, due to a lack of resources. Ideally, a new government would create a broad commission of inquiry, with representatives from a range of popular groups. Serious research would also be undertaken. As in Europe, popular groups would be funded to participate and do their own research. Serious hearings could then take place all across the province. Public information sessions could be held in communities and through the media. Sweden did an excellent job of this over two years as they worked up to the national referendum on nuclear power. The Blakeney Government was able to expand the public interest in resource development because it had broad popular support and the courage to stand up to the transnational corporations and their Liberal Party. Given the move to the right fostered by the political and economic establishment, any government that wanted to change policy direction on resource policy would face strong opposition and would have to build support by raising public consciousness on the issue.

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Table I: Petroleum Production, Sales and Royalties

Year as a	Volume Produced (Cubic metres)	Value of Sales \$C	Royalties \$C	Royalties percent/sales
1972	13,767,993	213,780,984	27,953,000	13.1
1973	13,625,605	263,734,307	38,045,000	14.4
1974	11,725,945	396,675,848	50,519,400	12.6
1975	9,379,084	406,273,743	203,213,800	50.0
1976	8,888,577	443,698,639	196,178,900	44.2
1977	9,741,666	579,132,726	232,478,600	40.1
1978	9,624,550	689,316,965	293,953,000	42.6
1979	9,371,831	726,709,636	415,252,500	57.1
1980	9,330,839	862,401,640	468,973,500	54.4
1981	7,392,815	821,032,271	375,273,300	45.7
1982	8,103,947	1,189,368,427	774,840,400	65.1
1983	9,543,427	1,650,760,643	680,021,500	40.5
1984	10,812,499	1,867,839,459	730,878,800	39.1
1985	11,612,728	2,252,081,638	766,913,600	34.1
1986	11,698,239	1,173,895,539	261,471,900	22.3
1987	12,074,616	1,514,653,876	356,223,700	23.5
1988	12,269,110	1,044,243,396	207,807,800	19.9
1989	11,695,613	1,251,252,794	220,902,600	17.7
1990	12,253,452	1,627,112,509	280,353,000	17.2
1991	12,420,084	1,204,847,851	232,480,700	19.3
1992	13,369,511	1,422,593,036	232,052,800	16.3
1993	14,973,383	1,495,966,211	317,563,500	21.2
1994	17,203,619	1,900,047,745	463,873,800	24.4
1995	18,747,271	2,320,458,559	420,929,500	18.1
1996	20,935,843	3,139,575,577	598,362,100	19.1
1997	23,456,769	2,909,543,750	619,311,800	21.3
1998	23,154,231	1,980,356,363	305,725,000	15.4
1999	21,709,071	3,095,071,424	462,733,000	14.9
2000	24,245,040	5,078,410,022	826,439,800	16.3
2001	24,747,979	3,748,086,857	625,941,200	16.7
2002	24,415,468	4,715,064,265	682,555,100	14.5
2003	24,330,000	4,755,000,000	709,400,000	14.9

SOURCE: Saskatchewan Bureau of Statistics, *Mineral Statistics Yearbook 2002*. Regina, 2004.

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NOTE: Royalties includes royalties/taxes, land bonus bids, lease rentals.

Table II: Natural Gas Production, Sales and Royalties

Year	Volume Produced (Thousand Cubic Metres)	Value of Sales \$C	Royalties \$C	Royalties as a percent/sales
1972	1,657,002	7,219,640	410,170	5.7
1973	1,645,187	7,535,998	623,348	8.3
1974	1,507,692	7,730,420	805,342	10.4
1975	1,588,951	9,032,826	838,910	9.3
1976	1,530,871	10,666,729	849,751	8.0
1977	1,268,982	12,957,162	697,511	5.4
1978	1,189,035	16,882,426	693,389	4.1
1979	1,177,957	17,231,180	619,264	3.6
1980	1,196,895	19,628,096	678,359	3.5
1981	1,191,312	19,719,924	711,711	3.6
1982	1,272,434	24,257,490	714,801	2.9
1983	1,314,291	50,170,734	2,611,203	5.2
1984	1,744,178	88,589,999	7,157,163	8.1
1985	1,990,529	119,689,387	10,192,860	8.5
1986	2,367,995	170,445,630	19,264,442	11.3
1987	2,711,985	166,597,713	24,192,441	14.5
1988	3,991,768	206,956,329	26,760,206	12.9
1989	5,586,647	294,219,070	39,915,133	13.6
1990	6,318,503	359,616,942	43,264,939	12.0
1991	6,632,955	380,549,166	50,299,752	13.2
1992	6,790,428	349,548,768	32,586,899	9.3
1993	6,881,195	387,831,245	38,998,528	10.1
1994	7,891,892	528,412,324	69,331,321	13.1
1995	7,787,540	373,513,079	40,715,848	10.9
1996	8,071,000	354,000,000	53,000,000	14.9
1997	7,820,000	406,000,000	44,000,000	10.8
1998	7,696,000	435,000,000	65,900,000	15.1
1999	7,911,000	623,000,000	91,800,000	14.7
2000	8,152,000	1,128,000,000	239,300,000	21.2
2001	8,290,000	1,307,000,000	129,100,000	9.0
2002	8,278,000	942,000,000	152,700,000	16.2
2003	9,050,000	1,577,000,000	205,400,000	13.0

SOURCE: Saskatchewan Bureau of Statistics, *Mineral Statistics Yearbook 2002*. Regina, 2004.

Saskatchewan Industry and Resources, *Annual Report, 2003-4*. Regina, 2004.

Table III: Potash Production, Sales and Royalties

Royalties	Year	Volume Produced	Value of Sales	
	Royalties as a			
	(>000 tonnes K₂O)	(\$C >000)	(\$C >000)	percent/sales
1972	3,927	146,014	1,957	1.3
1973	4,249	195,025	5,023	2.6
1974	5,496	311,621	11,620	3.8
1975	5,433	348,494	72,138	20.7
1976	4,991	358,399	88,544	24.7
1977	6,090	398,055	109,785	27.6
1978	6,113	495,718	125,314	25.3
1979	6,707	733,346	152,116	20.7
1980	7,304	1,009,754	228,305	22.6
1981	7,189	995,136	264,690	26.6
1982	5,212	642,867	80,560	12.5
1983	5,928	685,902	1,203	0.1
1984	7,650	829,446	64,821	7.8
1985	6,412	621,515	45,323	7.3
1986	6,031	549,791	34,042	6.2
1987	6,449	670,739	36,483	5.4
1988	7,372	974,974	83,385	8.6
1989	6,509	879,601	68,986	7.8
1990	6,015	794,078	30,909	3.9
1991	6,299	764,754	48,539	6.3
1992	6,179	812,476	53,844	6.6
1993	5,824	799,767	55,567	6.9
1994	7,148	1,108,699	71,073	6.4
1995	7,925	1,219,000	96,888	7.9
1996	7,029	1,115,911	109,016	9.8
1997	8,718	1,504,845	128,206	8.5
1998	8,035	1,624,546	215,816	13.3
1999	7,975	1,633,157	193,330	11.8
2000	8,791	1,744,000	166,054	9.5
2001	7,799	1,622,000	165,715	10.2
2002	8,154	1,718,000	186,969	10.9
2003	8,791	1,632,000	120,000	7.4

SOURCE: Saskatchewan Bureau of Statistics, *Mineral Statistics Yearbook 2002*. Regina, 2004.

Saskatchewan Industry and Resources, *Annual Report, 2003-4*. Regina, 2004.

Table IV: Uranium Production, Sales and Royalties

Year	Volume Produced (>000 tonnes U3O8)	Value of Sales C\$	Royalties C\$	Royalties as a percent/sales
1972	605.4	9,342,000	N/A	N/A
1973	636.2	9,810,000	N/A	N/A
1974	505.1	14,477,489	N/A	N/A
1975	649.4	15,733,147	N/A	N/A
1976	2,194.4	44,768,527	1,002,112	2.2
1977	2,803.2	74,984,185	1,191,594	1.6
1978	3,006.3	261,462,153	5,410,937	2.1
1979	2,886.5	257,963,000	12,541,471	4.8
1980	2,809.3	232,205,998	14,316,251	6.2
1981	3,380.7	258,301,750	23,816,558	9.2
1982	3,491.1	250,525,503	28,472,528	11.3
1983	2,770.3	121,399,534	13,700,754	11.3
1984	6,920.4	353,722,841	22,354,741	6.3
1985	6,990.3	456,416,829	33,952,361	7.4
1986	8,136.9	457,173,138	19,312,336	4.2
1987	9,714.7	637,461,373	20,352,465	3.2
1988	9,654.8	463,341,701	19,804,760	4.3
1989	8,734.8	380,171,229	15,333,176	4.0
1990	6,804.7	343,679,518	18,177,621	5.3
1991	8,113.4	303,792,632	14,500,000	4.8
1992	9,849.5	381,056,161	26,400,000	6.9
1993	10,024.1	375,310,183	31,700,000	8.4
1994	10,618.3	407,785,181	20,200,000	4.9
1995	11,582.1	432,178,175	44,700,000	10.3
1996	13,349.8	650,722,069	57,900,000	8.9
1997	14,173.4	556,853,100	38,500,000	6.9
1998	9,984.0	554,000,000	19,950,000*	6.5
1999	10,157.0	500,000,000	32,500,000*	6.5
2000	12,200.0	419,200,000	38,700,000	9.2
2001	15,100.0	561,800,000	22,700,000	4.0
2002	13,700.0	593,100,000	29,200,000	4.9
2003	12,400.0	548,000,000	16,300,000	3.0

SOURCE: Saskatchewan Industry and Resources, *Annual Report 2003-4*. Regina, 2004.
Saskatchewan Bureau of Statistics, *Mineral Statistics Yearbook 2002*. Regina, 2004.
Natural Resources Canada, *Canadian Minerals Yearbook 2002*. Ottawa, 2004.

*Estimates for 1998 and 1999. No figures are available on royalties paid.

Table V: Coal Production, Sales and Royalties

Year	Volume Produced (Tonnes)	Value of Sales C\$	Royalties C\$	Royalties as a percent/sales
1972	2,976,868	6,569,118	113,585	1.7
1973	3,655,897	8,500,351	131,947	1.5
1974	3,484,867	8,160,805	107,566	1.3
1975	3,548,725	9,239,216	64,681	0.7
1976	4,693,938	15,201,433	88,260	0.6
1977	5,476,398	20,335,302	148,206	0.7
1978	5,029,060	17,705,483	108,575	0.6
1979	5,011,669	20,474,866	1,650,821	8.1
1980	5,979,724	29,726,008	2,768,759	9.3
1981	6,798,297	42,060,549	5,233,417	12.4
1982	7,494,259	62,060,549	8,468,676	13.6
1983	7,759,917	72,798,613	13,417,688	18.4
1984	9,884,996	97,964,742	17,901,391	18.3
1985	9,537,238	87,459,000	13,634,736	15.6
1986	8,329,130	82,902,318	13,469,509	16.2
1987	10,020,334	92,077,181	13,225,491	14.4
1988	12,109,690	110,318,973	15,715,545	14.2
1989	10,815,806	99,604,135	12,613,167	12.7
1990	9,406,973	99,543,400	12,652,314	12.8
1991	8,981,478	93,867,875	13,953,296	14.8
1992	10,058,949	99,724,493	13,795,515	13.8
1993	10,044,870	93,910,578	12,594,388	13.4
1994	10,664,689	104,151,672	15,451,010	14.8
1995	10,739,710	116,200,011	14,394,017	12.4
1996	10,854,234	116,091,756	15,544,851	13.4
1997	11,652,603	122,107,578	14,043,448	11.5
1998	12,040,000	126,430,000	13,907,300	11.0
1999	11,590,000	127,280,000	13,364,400	10.5
2000	11,190,106	131,823,000	14,500,530	11.0
2001	11,390,275	181,900,000	20,009,000	11.0
2002	11,365,000	161,117,000	19,334,040	12.0
2003	10,664,000	146,934,000	14,693,400	10.0

SOURCE: Saskatchewan Industry and Resources, *Annual Report, 2003-4*. Regina, 2004.
Saskatchewan Bureau of Statistics, *Mineral Statistics Yearbook 2002*. Regina, 2004.
Natural Resources Canada, *Canadian Minerals Yearbook 2002*. Ottawa, 2004.
Coal Association of Canada, statistics, www.coal.com
Sherrit International, *Annual Report 2004*, www.sherritt.com

NOTE: Estimates are based on Other Mineral Royalties, @ Saskatchewan Industry and Resources, *Annual Report 2003-4*. Natural Resources Canada and the coal industry continue to publish volume and sales data.

**Table VI: Lost Economic Rent from Resource
Extraction -- 2003 as an Example**

Resource Industry	2003 Sales \$millions	2003 Revenues \$millions	2003 % %	Historical High %	Higher Revenues \$millions 2003	Lost Revenues \$millions 2003
Oil	4,755	734.6	14.4	51.8	2,463.1	1,728.5
Gas	1,577	205.4	13.0	14.7	231.8	26.4
Potash	1,633	120.4	7.4	23.9	390.3	269.9
Uranium	548	16.3	3.0	11.3	61.9	45.6
Coal	147	14.7	10.0	17.1	25.1	9.6
Total	7,660	1,091.4	14.2	30.7	3,172.2	2,080.0

SOURCE: Saskatchewan Bureau of Statistics, *Mineral Statistics Yearbook 2002*. Regina: 2004.

Saskatchewan Industry and Resources, *Annual Report 2003-4*. Regina, 2004.

NOTE: Peak periods of resource royalties used above are as follows:

Oil, 1975-1982

Natural gas, 2000-2003

Potash, 1975-1981

Uranium, 1982-1983

Coal, 1983-1986

Table VII: Other Metals and Minerals: Production, Sales and Royalties

<i>Minerals and Metals</i>	2002	2003
Industrial Minerals		
(1) Salt:		
Production (>000 tonnes)	920.3	1,004.6
Sales (\$ millions)	21.4	22.7
Royalties (\$ millions)	1.0	0.9
Royalties/Sales percent	4.7	3.9
(2) Sodium Sulphate:		
Production (>000 tonnes)	185.3	171.4
Sales (\$ millions)	23.0	20.0
Royalties (\$ millions)	0.9	0.5
Royalties/Sales percent	3.9	2.5
Precious and base Metals		
(3) Gold:		
Production (kgs)	1,470.0	2,074.0
Sales (\$ millions)	25.1	33.7
(4) Silver:		
Production (tonnes)	1.0	2.0
Sales (\$ millions)	.349	.355
(5) Copper:		
Production (tonnes)	10,080.0	12,180.0
Sales (\$ millions)	24.8	29.6
(6) Zinc:		
Production (tonnes)	5,172.0	5,386.0
Sales (\$ millions)	6.3	6.2
Royalties -- Total (\$ millions)*	1.5	1.8
Royalties/Sales Percent	2.6	2.6
Quarriable Materials		
(7) Sand and Gravel:		
Production (kilotonnes)	5,172.0	12,489
Sales (\$ millions)	6.3	38.9
(8) Clays and Bentonite:		
Production	N/A	N/A
Sales (\$ millions)	3.7	1.2
Royalties -- total (\$ millions) +	1.7	0.8
Royalties/Sales Percent	N/A	N/A

SOURCE: Saskatchewan Bureau of Statistics, *Mineral Statistics Yearbook 2002*. Regina, 2004.

Saskatchewan Industry and Resources, *Annual Report, 2003-4*. Regina, 2004.

Natural Resources Canada, *Canadian Minerals Yearbook, 2002*. Ottawa: 2004.

* The Saskatchewan Government ceased publishing details on many minerals in the mid-1990s.

These are estimates based on averages for the years 1981-94.

+ Estimates based on 1992-7 years.