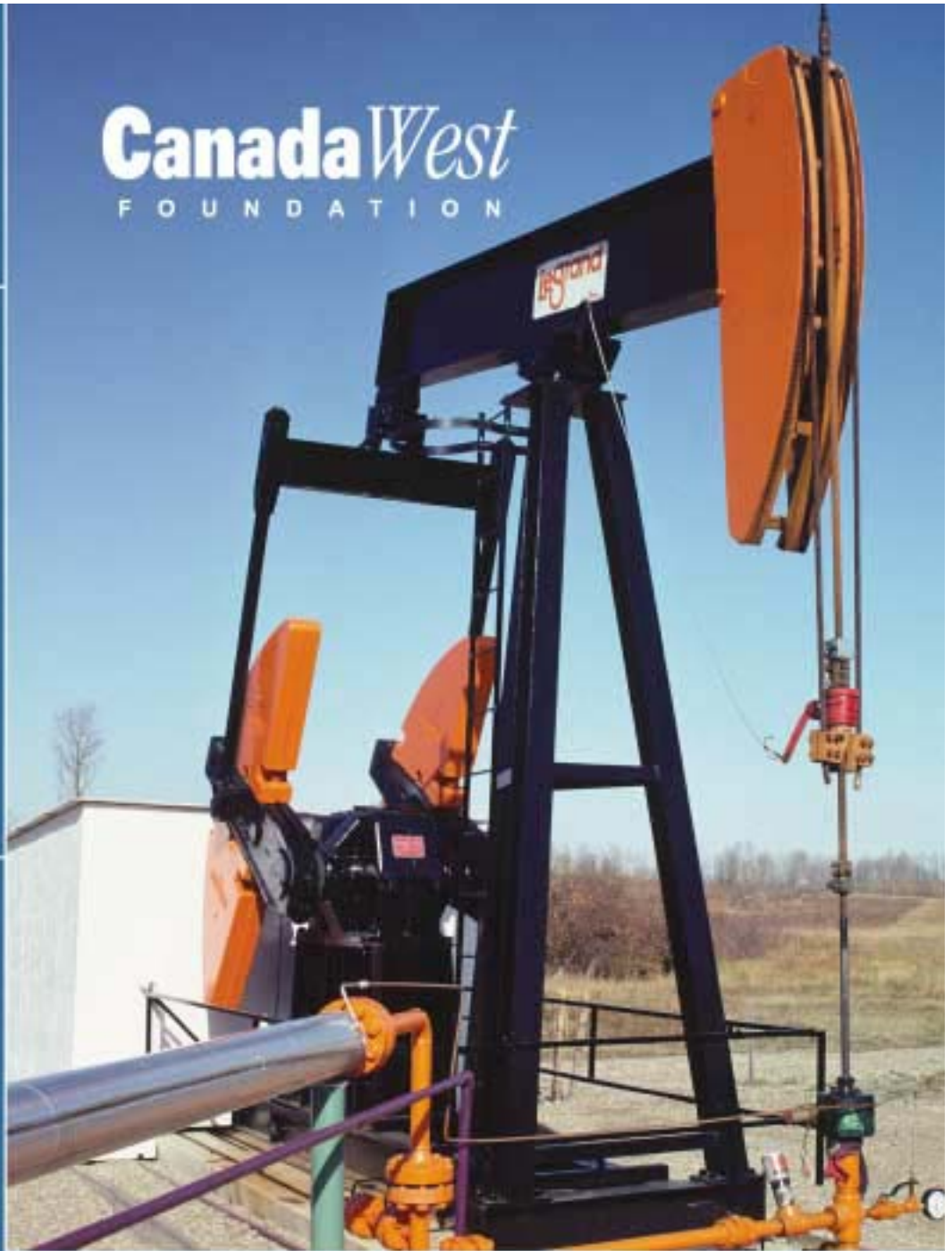


Canada *West*
FOUNDATION

Roger Gibbins
President and CEO

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Senior Policy Analyst



INVESTING Wisely

An Investment Strategy for Creative Leadership

INVESTING WISELY: An Investment Strategy for Creative Leadership

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In March 2005, the Canada West Foundation brought together 40 public policy thinkers from across Alberta for three think-tank sessions on the potential for an Alberta investment strategy. A similar session was held with the Board of the Canada West Foundation, followed in turn by two meetings with business and community leaders in Calgary and Edmonton. In total, almost 100 thoughtful individuals participated in the construction of *INVESTING WISELY: AN INVESTMENT STRATEGY FOR CREATIVE LEADERSHIP*, a report designed as a catalyst for an informed public debate on natural resource wealth, its public management, and its transformative potential.

The authors would like to thank the participants for their generous donation of time and ideas. Any shortcomings in the analysis are the authors' alone. We would also like to thank Robert Roach, Canada West Foundation Director of Research for his insights, and Lori Zaremba, Canada West Foundation Director of Finance, for organizing the think-tank sessions and community meetings.

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EXECUTIVE SUMMARY



Alberta is celebrating its 2005 Centennial with the elimination of the provincial debt and a substantial surplus. This capstone sets up the challenge for the years to come: *how can Albertans capture the transformative potential of natural resource wealth, and do so in a way that exercises leadership within the national community?* In large part, the answer to this question can be found in an investment strategy for non-renewable natural resource revenues.



To date, most of Alberta's provincial revenues from non-renewable natural resources have gone to current consumption. Of the \$122.9 billion in resource revenues generated from 1977/78 to 2004/05, 91.4% went into general revenues. This pattern raises serious concerns about fiscal sustainability and intergenerational equity – current generations are running down the natural resource endowment of future generations. The Canada West Foundation therefore recommends that a fixed portion of non-renewable natural resource revenues be dedicated to investment rather than to current consumption, with the income earned thereon being used to create sustainable transformations. The Foundation suggests 50/50 as the appropriate ratio between current consumption and investment.



The Foundation also recommends that decisions relating to the expenditure of investment income should be made within a principled framework that protects investments from the political exigencies of the day, meets the need for intergenerational equity, has a strategic focus, and minimizes negative externalities for Alberta's neighbours and the national economy.



The investment strategy should go beyond providing a revenue stream for "rainy days," or for when the "oil runs out." Alberta needs a proactive strategy that builds on existing strengths, invests today to ensure that prosperity and quality of life are not endangered as conventional energy reserves decline, and ensures Alberta remains an attractive place to live, work, and invest. Above all else, Alberta needs an investment strategy designed to make Alberta the national leader in creativity and innovation. Today's focus must be on tomorrow's opportunities.



These recommendations do not rest on the assumption that Alberta's natural resource wealth is transitory, or that the good times of the past few years are here to stay. The need to balance current consumption with investment is compelling in either case. However, if Albertans are to stay the course through uncertain times to come, then the dedication to an investment strategy must be legislatively entrenched, subject to modification only through direct voter approval. Although Albertans can afford a great deal, we cannot afford to lose our nerve.





imagine the future...

It is 2105, and Albertans are commemorating their Bicentennial. Although the past 100 years have witnessed fundamental and sweeping transformations of the global economy, Alberta has remained at the cutting edge no matter where that economy has gone. Alberta enjoys a global reputation for its quality of life, natural beauty, and prosperity. Although patterns of energy use and production have changed dramatically since the province's Centennial, Alberta remains at the forefront of the energy industry – the laboratory of innovation and creativity across the energy spectrum. Investments made early in Alberta's second century have paid off as the province continues to be a magnet for the best and the brightest. In short, Albertans have kept pace with a rapidly changing and evermore competitive global economy while at the same time retaining an unsurpassed quality of life. The Bicentennial, therefore, is an occasion for celebration, and for optimism about the century to come.

But there is also a second, very different possibility...

Although Alberta remains a source of natural resources for North American and international markets, the province is now on the margins of a transformed global economy. The action has gone elsewhere. Natural resource wealth has not disappeared, but prices have fallen substantially and resource industries are no longer associated with employment growth and innovation. Alternative drivers of vitality have not been put into place. Those who remain in Alberta continue to enjoy a high standard of living and quality of life, but the province is not the magnet for the best and the brightest from around the world. The Bicentennial spirit, therefore, reflects a sense of paradise found and lost, of "might-have-beens" that never were. Alberta is a former boomtown whose day in the sun has come and gone.

If we fail to act strategically, if we drift towards the future, then the likelihood of the first possibility fades and that of the second grows. Today's choices shape tomorrow's outcomes.

INVESTING WISELY PARTICIPANT:

“Governments are financial planners and wealth managers on a grand scale. They are responsible for the greatest body of assets in post-industrial society. They handle more money than any other entity. The well-being of every citizen and corporation and institution is affected by the fiscal policies of all tiers of government.”



SETTING THE STAGE

Alberta is celebrating its 2005 Centennial with the elimination of the provincial debt and a substantial surplus. Not surprisingly, this capstone has sparked a lively discussion on how best to spend the surplus. The discussion, however, too often overlooks a more important question: *how can Albertans capture the transformative potential of natural resource wealth, and do so in a way that exercises leadership within the national community?*

This question takes us well beyond the short-term disposition of the current surplus, and for that matter well beyond Alberta. All four western Canadian provinces enjoy huge natural resource endowments, and therefore the Alberta situation brings a larger regional opportunity into bold relief. It also drives home the critically important distinction between conventional tax revenues and revenues derived from non-renewable natural resources.

Alberta's good fortune in 2005, and quite likely for years to come, provides a momentous opportunity. However, with wealth also comes the responsibility to manage the province's natural resource endowment prudently, and with maximum benefit for present and future generations in Alberta, and in Canada.

In light of this opportunity and responsibility, and in light of the downside risk of falling energy prices, the Canada West Foundation has concluded that there is an urgent need for a strategic, principled, and disciplined investment approach to non-renewable natural resource revenues, one that can capture the transformative potential of natural resource endowments. If we are not careful, we may miss the chance for sustainable transformations, for intergenerational equity, for investing in ways that strengthen rather than distort the regional and national economies, and for choosing options that ameliorate rather than aggravate regional tensions within the Canadian federation. Above all else, we may squander an unsurpassed opportunity for national leadership.

The risk, it should be stressed, does not stem from a lack of strategic thinking by the Government of Alberta. To the contrary, the government has put into place a comprehensive 20-year strategic plan, and strategic planning is taking place across a broad range of specific policy files. Without question, the government is looking ahead with energy and vision. However, a critically important component is missing, and that is an investment strategy for natural resource revenues. The government has not committed to balancing spending with investment when it comes to natural resource revenues. Until this piece is put into place, the broader strategic planning exercise is not only incomplete – it is quite possibly imperiled.

There is, then, a need to move with strategic dispatch. Here we can do no better than to draw upon the advice William Shakespeare imparts through Julius Caesar:

**“There is a tide in the affairs of men,
Which taken at the flood, leads on to fortune.
Omitted, all the voyage of their life
is bound in shallows and in miseries.
On such a full sea we are now afloat.
And we must take the current when it serves,
or lose our ventures.”**

The time to act is now, when Alberta's natural resource tide is “at the flood.”





NATURAL RESOURCE REVENUES

Any strategic vision for Alberta must come to grips with the characteristics of natural resource revenues, and with their particular contribution to Alberta's current and potential prosperity. Although Alberta is not unique among governments by running a surplus – all four western provincial governments and the Government of Canada ran surpluses in 2004/05 – the size of Alberta's surplus and its debt free status set the province apart. Alberta's 2004/05 surplus was \$5 billion, \$1 billion higher than in 2003/04. The present situation also brings into focus the special character of non-renewable resource revenues and the challenges they pose:

- A significant proportion of Alberta government revenues comes from non-renewable natural resources (see *Figure 1, Charts 1 and 2*). From 2000 through 2005, 31.3% of provincial revenues did so. For 2004/05 alone, this amount was \$9.7 billion, or 33% of total provincial revenues.
- Energy markets, and therefore provincial resource revenues, are highly volatile (see *Figure 1, Charts 3-6*). This volatility is much greater than the volatility Albertans are prepared to accept when it comes to government spending on core programs, not to mention the macroeconomic problems that accrue from rapidly increasing or drastically reducing public expenditures.
- The revenue stream from non-renewable natural resources could shrink in the future if: (a) demand and/or prices fall; (b) conventional resource production declines; and (c) new resources coming on stream (e.g., oil sands, coalbed methane, tight gas) are more expensive to produce, thus generating smaller royalty returns for the provincial government. The only certainty here is uncertainty.

- Resource revenues have gone primarily into current consumption. Indeed, since the early 1980s, we have directed all resource revenues, including the interest earned by the *Alberta Heritage Savings Trust Fund*, into consumption. Of the \$122.9 billion in resource revenue collected from 1977/78 to 2004/05, 91.4% went into general revenues while only 8.6% went into the *Heritage Fund* (see *Appendix 2, Chart 2*). This consumption-to-savings ratio of 10.6 to 1 departs markedly from advice tendered to individuals by wealth management professionals.

The bias towards current consumption rather than savings raises the fundamentally important ethical issue of intergenerational equity. Although the province's non-renewable resource endowment belongs to both present and future generations, the emphasis on current consumption erodes the endowment for future generations. The public management challenge of natural resource revenues, therefore, goes well beyond short-term opportunities for tax relief and/or increased government spending – it also embraces intergenerational equity and the investments required to achieve it.

How, then, can Alberta achieve financial sustainability in the face of volatile and unpredictable prices for non-renewable natural resources? How can Albertans balance intergenerational equity with current consumption? And, how can Albertans capture the transformative power of natural resource wealth?

The answers lie in creating an investment strategy for Alberta, one that can serve as a model for other provinces in the West.

FIGURE 1: Resource Revenues as a % of Alberta's Total Revenue, and the Volatility of Oil and Natural Gas Prices

CHART 1: Resource Revenues as a % of Total Revenues, 1969/70 to 2004/05^(F)

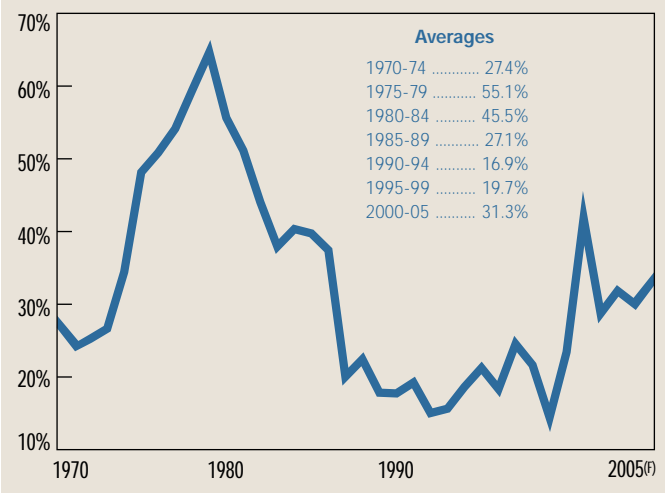


CHART 4: North American Crude Oil Prices (Real 2004 \$CDN), 1970-2004^(F)

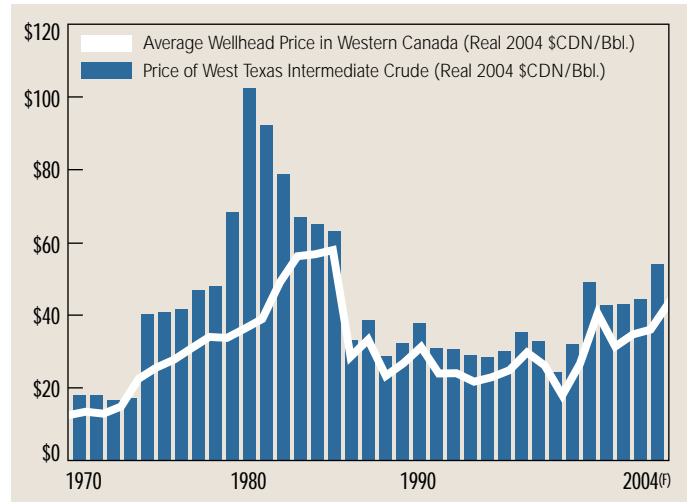


CHART 2: Profile of Alberta's Resource Revenues, 2004/05^(F)

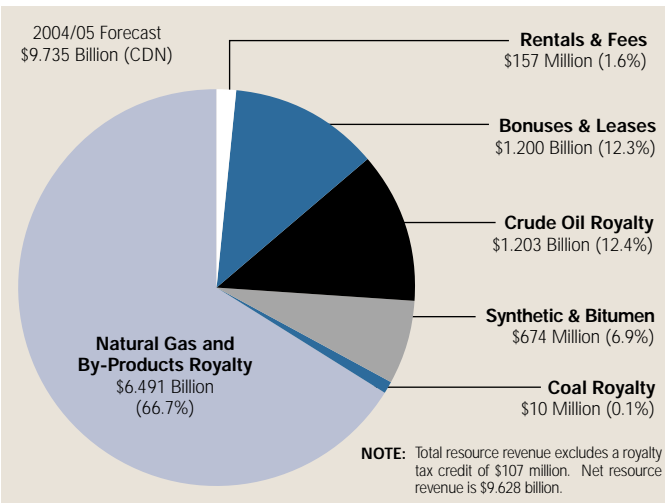


CHART 5: Price for Natural Gas in Alberta (Nominal \$CDN), 1970-2004^(F)

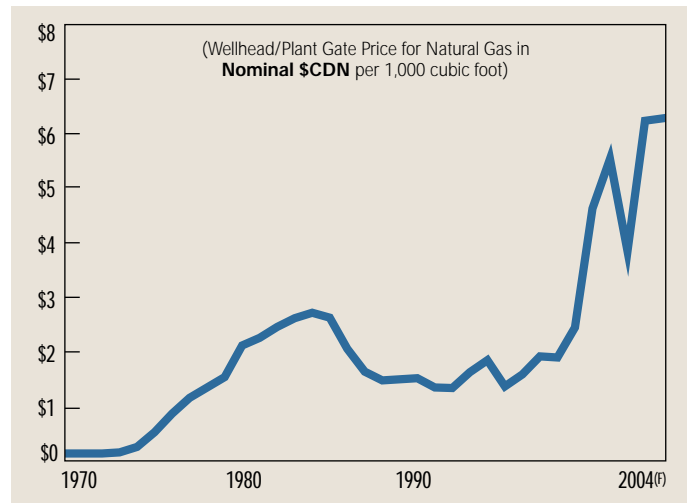


CHART 3: North American Crude Oil Prices (Nominal \$CDN), 1970-2004^(F)

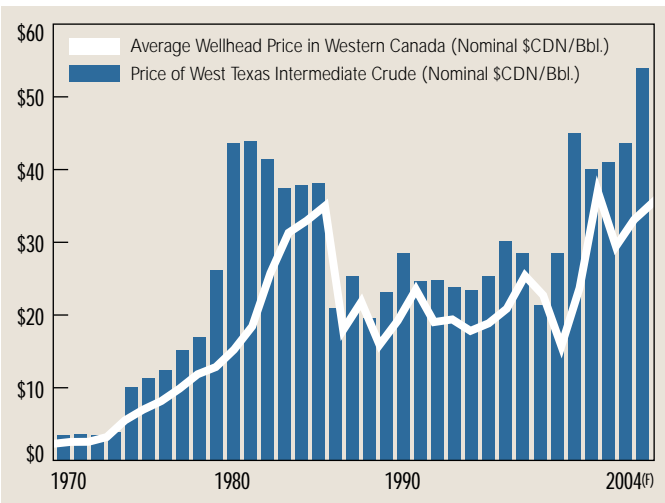
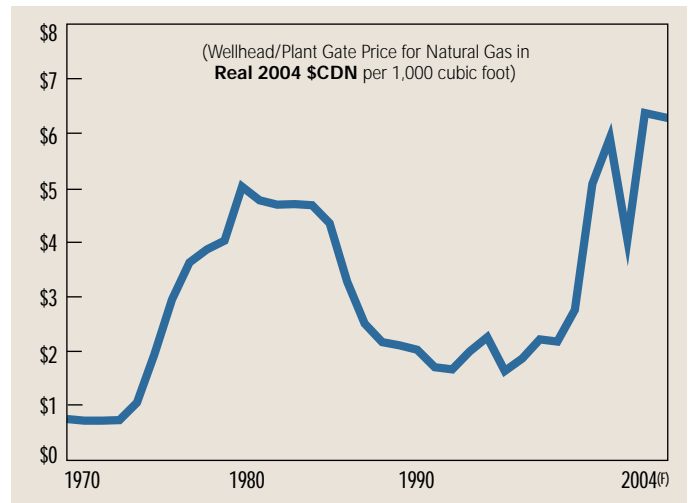


CHART 6: Price for Natural Gas in Alberta (Real 2004 \$CDN), 1970-2004^(F)



AN INVESTMENT STRATEGY FOR ALBERTA

Thinking through the elements of a successful investment strategy conventionally begins with the disposition of budget surpluses. However, a strategy that is fueled exclusively by surpluses runs into the political reality that the size of any surplus is open to adjustment. Unanticipated surpluses can be eliminated by making unbudgeted expenditures. Such expenditures may be in response to unforeseen disasters (e.g., drought, BSE), but they may also be *ad hoc* spending decisions made simply because the money is there (e.g., natural gas rebates). In a similar fashion, surpluses in a given year can be eliminated in the following year by ratcheting up budgeted expenditures. As a consequence, an investment strategy must go beyond budget surpluses to the disposition of natural resource revenues from which surpluses are derived.

ALBERTA'S NATURAL RESOURCE WEALTH CONTRIBUTES SUBSTANTIALLY TO CANADA:

- In 2004, Albertans paid an estimated \$25.6 billion in taxes to the federal government and got back an estimated \$16.3 billion in government services. That is a difference of \$9.3 billion, or \$2,914 per Albertan.
- On a per capita basis, Alberta contributes more than any other province. In 2002, the last year for which data are available for all provinces, Albertans contributed \$2,492 per capita to the federal government, compared to \$1,749 for Ontario residents and \$377 for residents of British Columbia. All other provinces were net recipients.
- Alberta does not receive equalization payments from the federal government.
- The recent creation of income trusts in the energy sector has significantly reduced corporate tax revenues for Alberta (income trusts do not pay corporate income tax) while distributing income to unit-holders, the majority of whom are not Albertans or, for that matter, Canadians. Tax revenues are therefore collected by other governments.

Source: Alberta Finance, *Fiscal Spotlight*, January 27, 2005.



Two conceptually distinct approaches can be taken to natural resource wealth and the public revenue it generates. The *spending option* entails the full expenditure of natural resource revenues on existing programs, new programs, and/or capital projects. Supporters of this option point, for example, to the infrastructure debts and deficits still faced by municipal governments and post-secondary institutions, to the need to invest in children, and to the financial pressures of growth epitomized by Fort McMurray but felt across the province. Spending now, moreover, is seen as the way to build the skilled labour force and infrastructure platform for future prosperity. Supporters also note that Alberta's good fortune may not last, and therefore we should spend while we have the capacity to do so. This may lead to unsustainable levels of spending and unrealistic expectations on the part of Albertans.

The *investment option* entails investing a portion of the revenue generated from the sale of natural resources, and then later spending the income earned on such investments rather than the initial principal. An investment strategy thereby converts a depleting natural resource endowment into a permanent financial endowment. Additional spending is not precluded, it is simply deferred.

The Canada West Foundation strongly endorses a blend of the two options. Given, however, that an investment option is not yet in place and additional spending is already in full swing, the Foundation urges the creation of an investment strategy, in effect putting some of the money "in the bank" and spending the income, not the principal.



Of course, the distinction between spending and investing is not straightforward. For example, those who support greater spending on education today often refer to this as *investing in our children or investing in our future*. The notion of investment is used very broadly, and often loosely in public debate. At the same time, investing is not an end in itself – it is a way of generating income that can be used at a later time. The critical difference, therefore, is between investing initially in financial assets that will generate income further down the road, or spending now on human capital (or natural capital, or infrastructure) that may yield indirect future income through enhanced economic prosperity.

The Alberta Government's 2002 *Financial Management Commission* came to the following conclusion: "A new fiscal framework should provide for a gradual but sustained reduction in our reliance on natural resource revenues and a focused attempt to build financial and other strategic assets to maintain and improve the Alberta Advantage." This recommendation was picked up in the Government's October 2004 strategic plan, entitled "*It's Our Future*."

The case for an Alberta investment strategy, for investing now and spending the earned income later, rests on four principal pillars:

- First, although an investment strategy limits additional program spending in the short-term, the long-term story is very different once income begins to grow as the investment fund grows. By waiting until later to spend, Alberta will eventually be able to spend more and will be able to do so in perpetuity.
- Second, an investment strategy reduces the volatility of revenues derived from natural resources. For example, to the extent that resource revenues flow directly into the General Revenue Fund, market volatility results in volatility with respect to revenues available for program support. Conversely, if some portion of resource revenues is invested, and only income generated by that investment flows into general revenues, volatility is reduced. (This approach reduces revenue volatility for the General Revenue Fund, but it has no impact on the consolidated budget balance, which accounts for all revenues received during a fiscal year.) Although the inevitable swings of a "boom and bust" resource-based economy can never be eliminated, they can be modulated through an investment strategy.

THE QUESTION OF TAX RELIEF:

Another option is to use natural resource revenues to further reduce levels of corporate and personal taxation. In this respect, there is no question that relatively low tax rates provide the foundation for Alberta's competitive advantage. Nor is there any question that this advantage must be protected and continually fine-tuned. What is less clear, however, is the extent to which it should be further enhanced through additional substantive tax cuts, for the *Alberta Advantage* also rests on the province's quality of life, the skills of the provincial labour force, and public policies that foster creativity and innovation. Competitive tax rates are an essential component, but not the totality of, the *Alberta Advantage*.

Furthermore, tax cuts may not be sustainable, and given that it is easier to cut than to increase taxes, low tax rates invite deficit financing when natural resource markets weaken. Tax cuts would in effect shift the financing burden from personal and corporate taxes to natural resources, thereby increasing reliance on the one revenue source that is most volatile and may not be sustainable.

A tax reduction strategy runs counter to intergenerational equity by transforming a natural resource endowment that should span generations into a windfall for current taxpayers. Surplus funds do not come out of the pockets of taxpayers, but ultimately out of the ground from non-renewable resources. It is difficult, therefore, to argue that any surplus should be given back to today's taxpayers. If budget surpluses are to be "returned" to Albertans, future generations have as much a claim as do present generations.

There may be greater utility in using the transformative potential of natural resource wealth to restructure the provincial tax regime along the lines of our global competitors, and in ways that would strengthen Alberta's attractiveness to increasingly mobile human capital.



■ Third, an investment strategy promotes greater intergenerational equity. To at least some degree, natural resources are an endowment for future generations, and thus some proportion of today's revenues should be invested to provide a financial return for future generations, thereby offsetting the diminished resource endowment. By contrast, the full flow of natural resource revenues into general revenues shifts the tax burden from individuals and corporations today to individuals and corporations in the future. As Figure 2 shows, individual Albertans generally enjoy the lowest provincial tax burden in Canada, something that contributes hugely to Alberta's competitive advantage. (Some groups, such as low-income residents of British Columbia, face lower tax rates than do analogous groups in Alberta.) Nonetheless, the fact remains that Alberta is using a depleting asset to finance today's consumption, and is doing so without having any investment strategy in place as a counterweight.

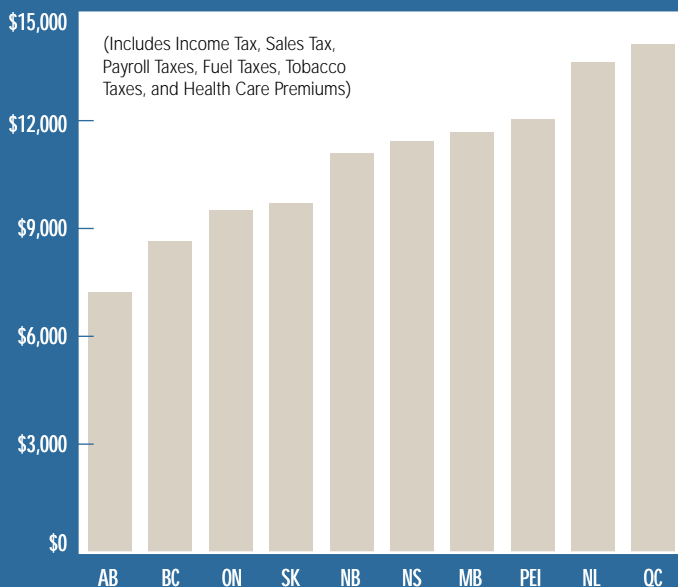
■ Fourth, an investment strategy provides more flexibility in responding to unanticipated future developments. Increased spending today will lock in programs for what we anticipate will be future needs. However, if we are wrong, if priorities change, then financial flexibility will be constrained. In short, an investment strategy offers greater strategic nimbleness and flexibility.

For these reasons, an investment strategy for Alberta makes good sense – it reflects the fiscal prudence and discipline that have been provincial watchwords for the past decade.

The power of an investment strategy depends on both the income earned on investments (interest and capital market returns) and the magnitude of investment. The more that is saved, the more income that is generated. The Canada West Foundation recommends that a prudent investment strategy for Alberta should dedicate a fixed proportion of non-renewable natural resource revenues for investment, a proportion that is protected from current consumption.

Here it is important to stress that the Alberta government has already taken a significant step in this direction. The *Alberta Sustainability Fund* was created to reduce provincial expenditure fluctuations that might otherwise result from volatility in resource prices. The *Fiscal Responsibility Act* initially required that annual non-renewable resource revenues above \$4 billion be transferred to the fund, thereby limiting the amount of resource revenue that can be used for budget purposes to \$4 billion annually. However, the 2005/06 budget announced that this limit will increase to \$4.75 billion a year. Although this creep towards consumption rather than investment is somewhat at odds with the recommendations of this report, the much more important difference is that the provincial government's current strategy is still tied to the disposition of surplus funds (any funds exceeding \$4.75 billion).

FIGURE 2: Provincial Taxes Paid in Canada, 2005
(Two Income Family Earning \$100,000 Annually and Two Children)



By contrast, the investment strategy recommended here is tied directly to natural resource revenues, and not to more transient surpluses – investments would be pursued come financial hell or high waters.

Determining the proportion of resource revenues that should be dedicated for current consumption and the proportion that should be invested for future consumption (and future generations) is very difficult. It is also the most important issue Albertans face as they map out a strategy for the province's second century. The Canada West Foundation recommends a dedicated investment of 50% of non-renewable natural resource revenues, calculated over a five-year rolling average to accommodate unforeseen fluctuations in resource revenue receipts. This would mean an even generational split between current consumption and investment for the future.

The choice, therefore, is not between spending and investing, for even with an investment strategy in place there would still be ample room for current consumption – for fighting fires of any description – and addressing infrastructure debts or investing in human capital. However, an investment strategy would mean that if falling resource revenues threaten to put the government into a deficit position, the shortfall would be met through the *Sustainability Fund* rather than through curtailing investment. A persistent or structural shortfall would have to be addressed through the general tax base (e.g., personal income taxes and corporate taxes) or by a cut in expenditures. This would be more consistent with the long-term financial sustainability of Alberta than diverting 100% of revenues from non-renewable resources into current expenditures, as Alberta has done since the early 1980s. It would also impose greater financial discipline on the provincial government as any spending increases would encounter greater taxpayer resistance.

Alberta's general tax base is very robust, and there is no need to exhaust the natural resource endowment to meet the demands

of current consumption. If Albertans today insist on a high level of public expenditures, they should be prepared to foot the bill out of their own pockets rather than out of the pockets of their children and grandchildren. Advocating an investment strategy for the province does not mean turning our backs on students, on infrastructure needs or on the disadvantaged. But, it does mean that spending demands have to be weighed against the essential need to preserve Alberta's competitive tax advantage. There is no "free ride" through the expenditure of natural resource revenues, and thus there is an additional check on the size and growth of government. Investing for tomorrow necessarily brings greater discipline to bear on spending for today.

INVESTING WISELY PARTICIPANT:

"What we're talking about here is an endowment given to Alberta simply because of where the oil is. It's special. It's not ordinary, and we should not fritter it away."

Although agreeing on both the need for an investment strategy and the magnitude of investment are important first steps, they are only steps. *An investment strategy also needs a principled framework and an animating vision.*

DETERMINING THE SPLIT:

Determining the appropriate division of natural resource revenues between current consumption and investment for the future is a difficult and controversial matter. The split depends in part on the ethical balance between the needs of current and future generations. However, it also depends upon highly variable forecasts about the future price for, and thus provincial revenue returns from, natural resources. Optimistic forecasts support a split that leans toward the needs of future generations whereas more pessimistic forecasts lean toward protecting the current spending capacity of the provincial government. The Canada West Foundation's middle-of-the-road recommendation of a 50/50 split will be reviewed through expert commentary and public consultations this fall.



A PRINCIPLED APPROACH TO INVESTMENT INCOME

If Albertans decide to dedicate a fixed proportion of non-renewable natural resource revenues to an investment strategy, an important question still remains: *how can we use investment income to build a sustainable legacy for tomorrow?* Although detailed answers to this question will come from the Canada West Foundation's public consultations in the fall (discussed below), at this point we can sketch in a principled framework within which more detailed proposals can be placed:

- 1) The natural resource revenues dedicated to investment must be protected from the short-term exigencies of the day. Here participants in the *INVESTING WISELY* process were concerned that an investment strategy could easily be derailed, with investment funds slipping into operating funds. This is what happened in the early 1980s. An instrument analogous to the *Taxpayers Protection Act* could help governments stay the investment course by requiring consent through referendum before any deviation from the investment strategy.
- 2) Expenditures from the investment strategy should not exceed investment income. If the provincial government stays the course by investing 50% of revenues from non-renewable natural resources, then the integrity of any investment funds will be protected – real growth in the principal is ensured despite inflation. (An investment strategy based on surplus funds alone, and not on a dedicated proportion of natural resource revenues, would require inflation-proofing, thus generating sharply reduced annual payouts.)
- 3) Investment decisions should minimize negative externalities for Alberta's neighbours, and for the regional and national economies. Although investment decisions should first and foremost address the needs and aspirations of Albertans, ways should also be sought to create positive benefits for Canadians outside Alberta, and indeed for the larger continental and global communities.

NORWAY, ALASKA, AND ALBERTA

Norway and Alaska, which have created endowment funds from natural resource revenues, have less concern about externalities. Norway is a national community rather than a province within a federal state, and Alaska is one of the smallest states in the US – its decisions are hardly felt in the broader economy.

This is not the case for Alberta, with 10% of the national population, 80% of Canada's conventional oil reserves, and 65% of current oil production, including oil sands (see Appendix 6). Both Alberta's much greater potential impact on the national economy and pre-existing regional tensions within Canada are realities that must be kept in mind.

- 4) Expenditures authorized from investment income should be sustainable, not requiring ongoing expenditure support from general revenues. If, for example, investment income is used for capital expenditures, such allocations should also cover operating, maintenance, and even replacement costs. There are few real "one-off" expenditures.
- 5) The expenditure of investment income should meet the criterion of generational equity. Investment income should leave a permanent legacy for the province, one that will spread today's good fortune across future generations.





- 6) The use of investment income should have a strategic focus. It is doubtful in the foreseeable future that Albertans will be able to generate investment income that will come close to matching current levels of expenditure. In order to generate investment income equal to one year of currently budgeted expenditures, Alberta would need an investment fund of approximately \$500 billion, over 40 times the existing *Heritage Fund*. It will simply not be possible to do everything, and if investment income is spread too thinly over too many projects - if it is not used strategically - the impact will be diluted to the point of ineffectiveness.

- 7) Albertans should be prepared to invest in good times and in bad. Alberta's current financial situation enables us to strike while the iron is hot - to put into place an investment strategy for the long haul. The more difficult political task will be to continue striking if or when the iron cools.

INVESTMENT VEHICLES:

To support an investment strategy for Alberta is not to support any particular investment vehicle. In response to a string of earlier budget surpluses, the Government of Alberta created the Alberta Heritage Savings Trust Fund (The Heritage Fund or HSTF) in 1976.

The Heritage Fund provides one model for moving forward, but it is by no means the only model. Alaska and Norway have created very different investment models for volatile, non-renewable natural resource revenues, and their results diverge markedly from the Alberta experience (see Figure 3 and Appendices 2-4 on pages 16-21).

INVESTING WISELY PARTICIPANT:

"An uncertain future makes the case for saving now."

FIGURE 3: Relative Size of Alberta's Heritage Fund, Alaska's Permanent Fund, and Norway's Petroleum Fund

	ALBERTA HERITAGE FUND	ALASKA PERMANENT FUND	NORWAY PETROLEUM FUND
Fund Size in the National Currency	\$11.362 Billion CDN (2005)	\$27.400 Billion US (2004)	1.244 Trillion NOK (2005)
Fund Size in US Currency	\$9.476 Billion US (2005)	\$27.400 Billion US (2004)	\$196.230 Billion US (2005)
Fund Size Per Capita in \$US	\$2,919 (US) Per Capita	\$41,804 (US) Per Capita	\$42,615 (US) Per Capita
Fund Size as a % of GDP	6.3% of Provincial GDP	87.2% of State GSP (2003)	70.6% of National GDP
Fund Size as a % of Net Financial Assets	79.6% of Net Financial Assets	88.0% of Net Financial Assets	80.3% of Net Financial Assets
Fund Size as a % of Gross Liabilities	67.8% of Gross Liabilities	809.0% of Gross Liabilities	198.2% of All Government Debt
Fund Size as a % of Government Revenue	39.5% of Annual Revenue	316.4% of Annual Revenue	158.5% of Annual Revenue
Fund Size as a % of Government Expenditure	46.5% of Annual Expenditure	480.2% of Annual Expenditure	190.0% of Annual Expenditure

AN INVESTMENT STRATEGY FOR CREATIVE LEADERSHIP

In addition to a principled framework, an investment strategy needs an animating vision. Investment per se is not enough - it must be investment directed towards a clearly defined purpose or goal. But, what might that goal be?

At the very least, there is a need to "protect our seed corn," to ensure that all natural resource revenues are not spent on current consumption. Given the volatility inherent in a resource-based economy, there is also a need to smooth out the peaks and valleys in provincial revenues. In this sense, the *Heritage Fund* came to be seen as a rainy day fund that would generate operating funds should energy prices and hence natural resource revenues fall. The Calgary Chamber of Commerce captured this goal in the third recommendation of *It's Our Future: A Policy Framework for Debt-Free Alberta (October 2004)*: "That the Government implement an enduring revenue strategy for Albertans to mitigate against diminishing natural resource revenues."

However, these passive notions do not take us as far as we need to go. If we are to tap the transformative power of natural resource wealth, we need an investment strategy that builds on existing strengths, recognizing that Alberta will be in the energy game for a long time. Alberta is energy, and will be for the foreseeable future even though the energy industry may be transformed.

Moreover, building an investment strategy around doomsday scenarios is out of step with Alberta's optimistic and entrepreneurial culture. Albertans need more than a "cash under the mattress" investment strategy premised on the assumption that the day will come when oil and natural gas are gone. An investment strategy designed only to generate replacement income lacks vision and public appeal - it would be far better to invest today to ensure that we never need a rainy day fund.

INVESTING WISELY PARTICIPANT:

"Our goal should not be to put money in the bank to withdraw when it is needed. The investment must be there for a grander purpose, to create something positive, to avoid the tough times through smart strategic investment."

THE HERITAGE FUND:

The statutory mission of the Alberta Heritage Savings Trust Fund is "to provide prudent stewardship of the savings from Alberta's non-renewable resources by providing the greatest financial returns on those savings for current and future generations of Albertans."

The Canada West Foundation therefore recommends an investment strategy for creative leadership. The goal is straight forward although not easily attained: *To make Albertans leaders in innovation, to unleash creativity, thus making Alberta "Canada's laboratory."* The attributes of a high-performance society, and thereby determinants of success in global competition, are becoming increasingly clear:

- *Strategic investments in infrastructure, research, and technology transfer.*
- *Communities with an unsurpassed quality of life to attract and retain the very best people.*
- *A bountiful natural environment with sustainable land and water policies.*
- *Educational capacity for building human capital.*
- *An investment environment that rewards innovation and risk-taking.*

At its core, an investment strategy is all about sustainability. A well-designed strategy would enable Albertans to build upon existing strengths, pursue diversification based on those strengths, and position the Alberta economy and society for the opportunities of tomorrow. Although investment funds will not accomplish this alone, they could certainly facilitate both entrepreneurial creativity and national leadership.

INVESTING WISELY PARTICIPANTS:

"Alberta should not be a place simply to make money, and then go live somewhere else to get your quality of life. We have to ensure that Alberta itself is not spoiled. We want Alberta to be a place where you come because it has a high quality of life."

"I don't see a vision of who we are and where we are going. Saving and hoarding won't give us the future we need."

CONCLUSIONS

The decisions we make today with respect to the public management of natural resource wealth will have profound consequences for future generations. They will quite literally shape the nature of the province for generations to come. It is therefore essential to look beyond Alberta's present surplus conditions, and to explore how the revenues from non-renewable resources can be used today to prepare for the opportunities of tomorrow. We rest on our laurels at our peril, and at the peril of future generations.

With this in mind, the Canada West Foundation recommends a principled and vision-based investment strategy for non-renewable natural resource revenues - a strategy to capture the transformative potential of natural resource endowments. *More specifically, an investment fund should be established, fueled by a dedicated commitment of 50% of Alberta's non-renewable natural resource revenues and enshrined in legislation that can only be amended through a public referendum.* The visionary goal would be to diversify, globalize, and improve the sustainability of the Alberta economy in ways that would create long-term benefits for Albertans, western Canada, and indeed all Canadians.

INVESTING WISELY: AN INVESTMENT STRATEGY FOR CREATIVE LEADERSHIP is designed to serve as a catalyst for an informed provincial debate on the transformative potential of natural resource wealth. Although the report develops a comprehensive rationale for an investment strategy, it is above all a call for action. *There is indeed "a tide in the affairs of men, which taken at the flood, leads on to fortune."*



NEXT STEPS:

The intent of *INVESTING WISELY* is to start, rather than end, a constructive and vigorous policy debate. How, then, can momentum be built behind this call for action? For its part, the Canada West Foundation will do a number of things in Phase 2 of the project:

- Discussion papers on the need for a provincial investment strategy have been commissioned from a number of leading Alberta economic thinkers including Dr. Herb Emery, Dr. Ron Kneebone, Dr. Melville McMillan, and Dr. Allan Warrack. These papers will be released in the early fall and will be incorporated in the Phase 2 report.
- The Foundation is commissioning research reports for the fall on a variety of investment funds, large and small, that have been used elsewhere (e.g., the Norwegian Petroleum Fund, The Gwaii Trust, the Alaska Permanent Fund).
- On October 24 in Calgary and October 27 in Edmonton, the Canada West Foundation will host major public consultations on how an investment strategy, and therefore investment income, might best be deployed to meet 21st Century visions of Alberta. Particular emphasis in this process will be given to the voice of young Albertans.
- The Foundation will pull together the results of those consultations in a bookend report to *INVESTING WISELY*, to be released before the end of 2005.

Creating an investment strategy is not an end in itself; it is a means for capturing the transformative potential of natural resource wealth. It is a means towards sustainable transformations. This in turn raises two critically important and difficult questions. First, what aspirations do Albertans have for their second century? Second, how can an investment strategy and the revenues it generates best serve those aspirations? This is the hard part, and the Canada West Foundation looks forward to pulling together the advice of Albertans in Phase 2.

None of this is easy. Still, there is no more important issue on the province's public policy agenda. Albertans have a huge opportunity – will we seize the day, and will we do so in a way that builds national assets and regional strength?

APPENDIX 1: A REVIEW OF ALBERTA FINANCES

In 1973, the OPEC crisis sparked a significant increase in the price of oil. As a result, the Government of Alberta saw its revenues increase both dramatically and steadily. By 1977/78, almost 60% of Alberta's total provincial government revenue accrued from oil and natural gas royalties (Chart 1). The onset of the 1981 recession stalled the growth in resource revenues, which fell to 40% of total revenue. This yielded smaller budget surpluses and even a deficit by the end of fiscal 1982/83 (Chart 3).

In 1986, oil prices underwent a realignment, with the annual average West Texas Intermediate Crude price falling by 46.2% between 1985 and 1986. By the end of the 1985/86 fiscal year, less than 20% of Alberta's provincial revenues accrued from resource revenue. Despite the drastic revenue shock, government expenditures continued on an upward track (Chart 2).

CHART 1: Tax, Resource, and Total Revenues, 1977/78 to 2004/05^(f)

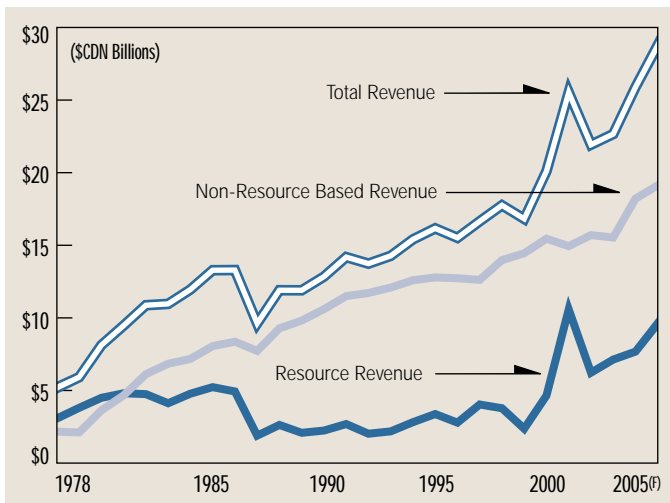
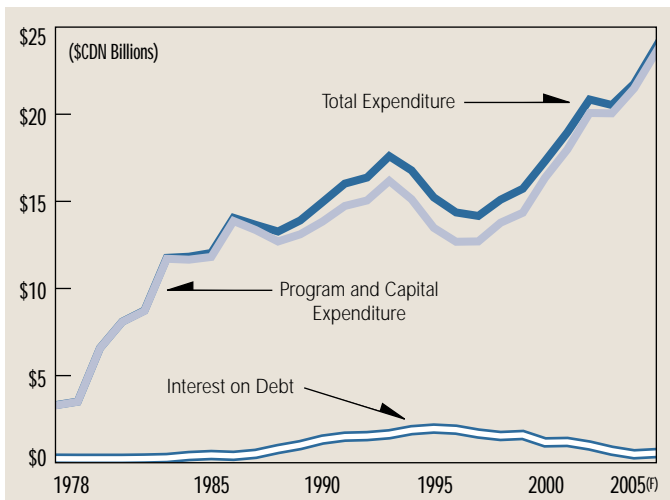


CHART 2: Program, Interest, and Total Spending, 1977/78 to 2004/05^(f)



The result was a series of large deficits from 1985/86 to 1993/94 (Chart 3). During that period, the province deficit financed over \$19 billion worth of expenditures, pushing the province's accumulated debt to \$23 billion, and moving the government from a positive net worth of \$12.6 billion in 1984/85 to a negative \$8.3 billion net worth by 1993/94 (Chart 4).

In 1993/94, a newly elected provincial government made significant cuts to expenditures in an effort to bring the budget into balance (Chart 2). At the same time, resource revenues began to grow slightly and a series of small surpluses resulted. Starting in the fiscal year 1999/2000, world energy prices experienced a significant and ongoing increase. The resulting resource revenue boom allowed the province to record very large budget surpluses. The provincial debt was eliminated at the end of the fiscal year 2004/05.

CHART 3: Consolidated Budget Balance, 1977/78 to 2004/05^(f)

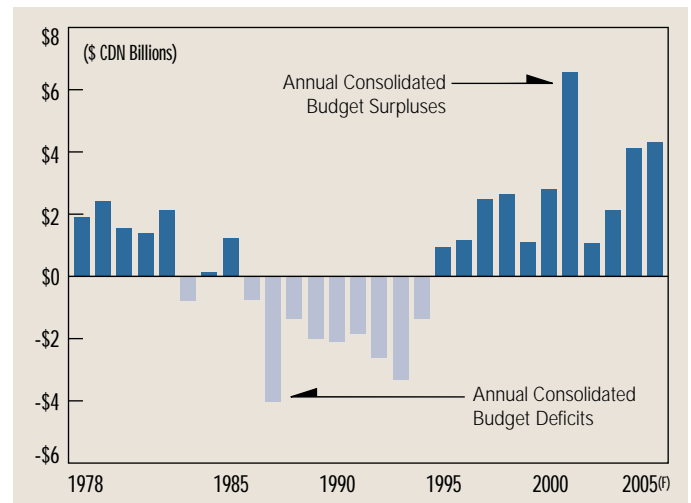
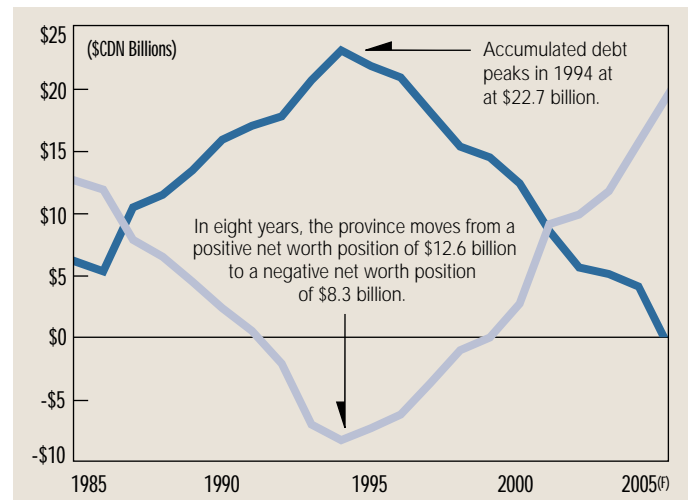


CHART 4: Accumulated Debt and Net Financial Assets, 1984/85 to 2004/05^(f)



With the end of deficit-financing and the elimination of the provincial debt, Albertans are starting to debate what should be done with future budget surpluses. To inform this discussion, some context is helpful. *Charts 5 to 7* explore what the province has done since the 1993/94 fiscal turn-around:

- From 1993/94 to 2004/05, the province has managed almost \$44 billion in surpluses and unbudgeted windfalls accruing from higher than expected natural resource revenues and higher than anticipated tax receipts (*Chart 5*).
- Two-thirds of the \$44 billion (66.1%) has been used to increase the net assets of the province. This occurred in three ways. First, in the early years, unanticipated resources went toward reducing budgeted deficits. This consumed 6.5% of all windfall revenue from 1993/94 to 2004/05. Second, the province's accumulated debt was eliminated. Since 1993/94, the province has repaid \$23.2 billion in debt, an amount that consumed 52.8% of all surpluses and windfall revenues from 1993/94 to 2004/05. Third, \$3.0 billion was saved - \$2.5 billion was used to create the *Sustainability Fund*, and \$500 million was dedicated to the *Alberta Heritage Science and Engineering Research Endowment Fund*.
- One-third of the \$44 billion in surpluses and windfall revenues were consumed, or will eventually be consumed. Throughout the 1990s, the government generally kept a lid on *budgeted* spending. But when anticipated surpluses were magnified by resource and tax revenue windfalls, the government did increase spending. Almost \$10 billion (22.1%) of all surplus and windfall revenues since 1993/94 have gone toward *unbudgeted* program and capital expenditures. Some of the spending was dedicated to providing disaster-related assistance (e.g., forest fires, BSE, drought assistance) but significant portions were also *ad hoc* cash injections into priority programs (e.g., one-time operating grants to regional school boards and health authorities). Just over \$500 million went toward unbudgeted tax relief, while a similar amount was used to cover higher than anticipated interest costs on debt. The remainder was put away to be spent in the future. Just under \$3 billion was dedicated to future capital spending in the *Capital Fund*, while just under \$1 billion will be spent out of the *Sustainability Fund*.
- With respect to spending priorities, it is not hard to see where the provincial government's focus lies. Since the fiscal turn-around in 1993/94, spending on health care has increased from \$4.2 billion to \$9.0 billion in 2004/05 (*Chart 6*). This is a 115.6% increase in just over ten years (*Chart 7*). Health care spending has grown at a rate almost double that of total program spending (59.5%). Spending on education increased by 58.3%, and social services expenditures grew by 44.0%. All other forms of spending increased by only 19.9%.

KEY DATA SINCE THE FISCAL TURN-AROUND

CHART 5: Use of Budget Surpluses and Windfall Revenues, 1993/94 to 2004/05^(F)

(\$CDN Billions)	AMOUNT	PERCENT
SAVING (Increasing or Preserving Provincial Assets):		
Reducing Provincial Debt	\$ 23.206	52.8%
Financing the Budget Deficit	2.843	6.5%
Creating the Sustainability Fund	2.500	5.7%
Injection into the HSTF	0.500	1.1%
SPENDING (Decreasing Provincial Assets):		
Unbudgeted Program Spending	\$ 9.693	22.1%
Future Capital Spending	2.939	6.7%
Unbudgeted Costs of Interest	0.544	1.2%
Unbudgeted Tax Relief	0.535	1.2%
Future Spending (Sustainability Fund)	0.998	2.3%
Other Uses	0.155	0.4%
TOTAL (All Budget Surpluses and Windfalls):	\$ 43.913	100.0%

CHART 6: Provincial Program Spending by Function, 1993/94 and 2004/05^(F)

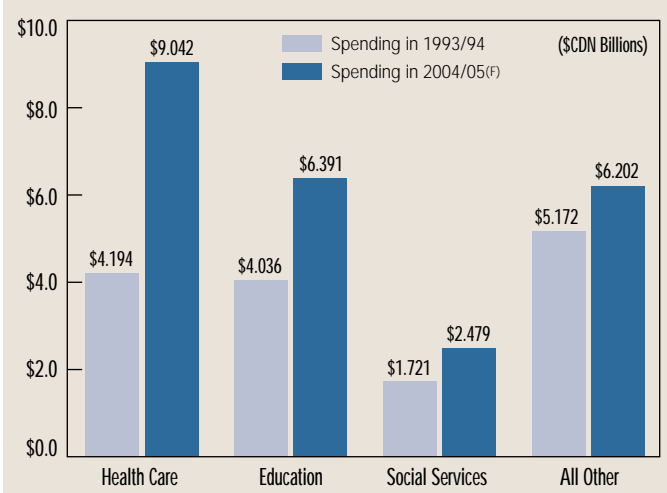
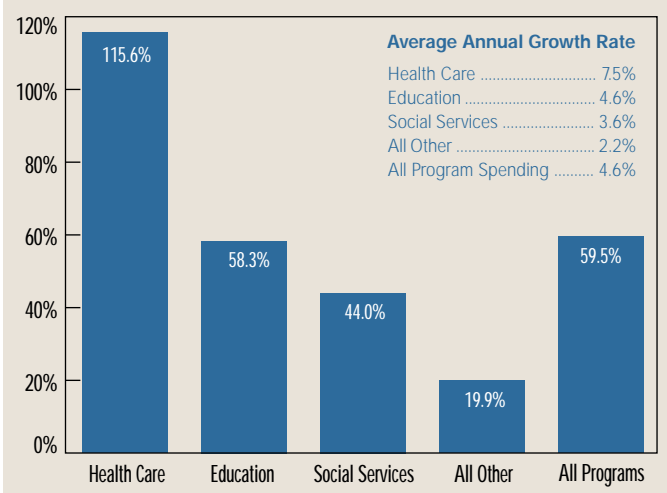


CHART 7: % Increase in Program Spending by Function, 1993/94 to 2004/05^(F)



APPENDIX 2: ALBERTA'S HERITAGE FUND

HISTORICAL HIGHLIGHTS OF THE FUND

1976: The Heritage Savings Trust Fund is created on May 19, 1976. The Heritage Fund will receive 30% of resource royalty revenue annually, and income earned (less spending on approved capital projects) is to be re-invested. A \$1.5 billion (CDN) transfer of investments in the general revenue account is deposited to the Heritage Fund, along with \$620 million in resource revenue.

1977: Three divisions are created. The Capital Projects Division funds Alberta-specific projects, the Canada Investment Division loans funds to other provinces, and the Alberta Investment Division holds equity in provincial Crown corporations and loans funds to the private sector.

1980: The Commercial and Energy Investment divisions are created to maximize returns and develop Alberta's energy resources. A \$300 million Medical Research Endowment is created. The Canadian Investment Division limit is expanded to 20% of Heritage Fund assets. All provinces can also borrow at the rate reserved for the most credit-worthy province. The Alberta Investment Division provides loans at favourable rates to Alberta Government Telephones (AGT) for telecommunications expansion and to municipalities, schools, farmers, and small business through Alberta Municipal Financing Corporation (AMFC), Alberta Opportunities Corporation (AOC), Alberta Agriculture Development Corporation (AADC), Alberta Housing Corporation (AHC), and Alberta Home Mortgage Corporation (AHMC).

1981: Alberta Heritage Scholarship Fund is created. The National Energy Program (NEP) is announced. The NEP consists of federal price controls and oil and gas production and export taxes.

1982: Recession, high interest rates, and the NEP stall the Alberta economy. Lending under the Canadian Investment Division is suspended.

1983: Heritage Fund income is "temporarily" used to reduce Alberta's first budget deficit in years. Resource revenue to the Heritage Fund is reduced from 30% to 15%. Interest rate shielding programs for small business and homeowners is financed by the Heritage Fund.

1985: All income from the Heritage Fund is to be diverted to general revenue on an ongoing basis.

1987: Oil prices fall 50%. In 1988, the Heritage Fund will be "capped" – all resource revenues and fund income will divert to general revenue.

1991: All Heritage Fund investments are reviewed. For increased liquidity, the Heritage Fund sells its investment in AGT to Telus, and mortgages held by AHMC to private institutions. The two privatizations amount to a combined \$1.6 billion CDN.

1993: The new Klein government creates the Financial Review Commission to study the province's finances. Investments of the Heritage Fund are written down, resulting in a \$601 million (CDN) loss. The Heritage Fund shifts from a focus on economic development to maximizing income for the long-term.

2005: With no deposits revenue and no re-investment of income, fund assets stall at \$11.4 billion (CDN).

The question of what to do with windfall natural resource revenue is a debate Albertans have had before - the years after the 1973 OPEC crisis presented a royalty bonanza never seen before, or since. In 1976, the province responded by creating the *Heritage Savings Trust Fund*. The *Heritage Fund* received 30% of all resource revenues annually, and income earned by the fund was re-invested (less amounts that were spent on capital projects).

With the collapse of oil prices in the mid-1980s, the annual deposit of royalty revenue was reduced from 30% to 15%, and the fund's earnings were transferred to general revenue. By the late 1980s, the fund was "capped" - all resource revenues and annual income were diverted to general revenue on an ongoing basis. Today, resource revenues still flow into general revenues (*Chart 1*). Two years ago, the province decided to create the *Sustainability Fund*, which now receives all resource revenue in excess of \$4.75 billion. Whether this constitutes real investment is open to dispute - the *Sustainability Fund* acts as a contingency reserve where funds can be withdrawn for emergency expenditures.

It is interesting to review Alberta's history with resource revenue. From the creation of the *Heritage Fund* in 1976/77 to the 2004/05 fiscal year, the province has collected \$122.9 billion CDN (\$93.6 billion US) in resource revenue (*Chart 2*). Of that amount, only \$10.5 billion CDN (8.6%) was deposited into the *Heritage Fund*. The rest accrued to general revenue, mostly to support government spending - whether current spending or repaying past spending that was deficit-financed.

The advantage of investing volatile resource revenues can be seen in *Chart 3*. While Alberta's resource revenues have fluctuated wildly since 1977/78, the income generated by the *Heritage Fund* has been more stable. But much of this advantage was eclipsed by the earlier decision to cap the *Heritage Fund* in the late 1980s. That decision simply postponed an eventual reckoning with a structural shift in Alberta's fiscal capacity. At the same time that the fund's annual earnings flat-lined, the province still ran deficits. Further, Alberta is still highly dependent on the vagaries of international energy markets. Capping also meant the fund would cease to grow (*Chart 4*). While a part of this resulted from the fact that *Heritage Fund* assets were written down in 1993 and capital spending continued from the fund until 1995, the lack of regular deposits and any re-investment of income, combined with the effects of inflation, mean the *Heritage Fund* is worth less in 2005 than it was in 1987.

Clearly, the *Heritage Fund* could be much more. Yet, it is not insignificant. The fund represents almost \$3,000 US for each and every Albertan and 6.3% of provincial GDP. The fund constitutes almost 80% of the province's net financial assets, and it could finance the entire provincial government for five and one half months (fund assets are 46.5% of 2004/05 forecasted expenditures).

The benefits of investing windfall revenues are brought into sharper focus in *Chart 6*. The original \$10.5 billion that was deposited into the *Heritage Fund* between 1976/78 and 2004/05 has produced over \$26 billion in income over the same time period. The great bulk of this income (\$23.2 billion or 86.2%) was used to finance ongoing government expenditures - on a consistent year over year basis. But, only \$2.2 billion (8.3%) was ever re-invested. With the return of hefty oil and gas revenues, should Albertans revisit the *Heritage Fund*?

HOW ALBERTA MANAGES RESOURCE REVENUES

CHART 1: Flows of Resource Revenue

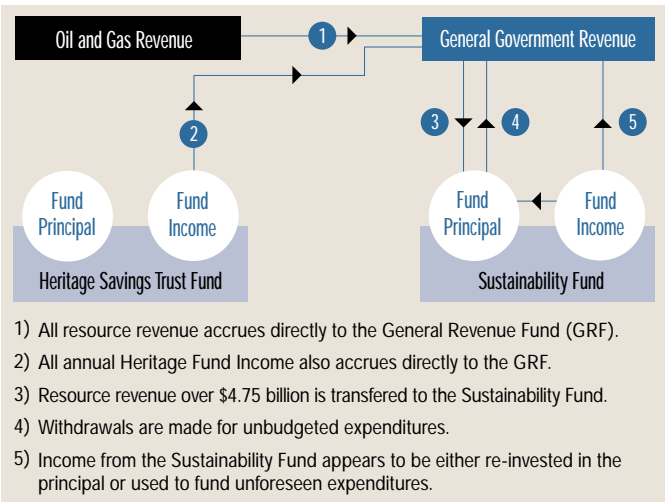


CHART 2: Distribution of Alberta's Resource Revenues, 1976/77 to 2004/05^(f)

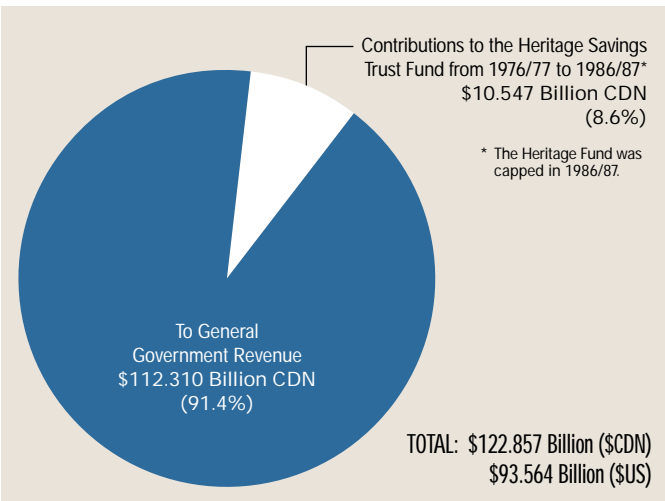
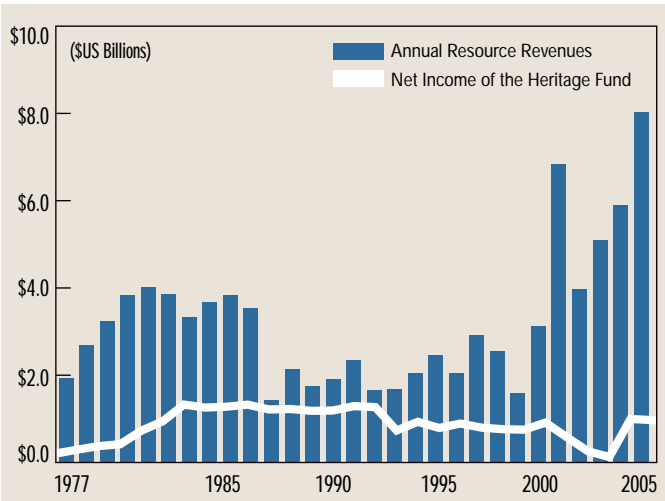


CHART 3: Resource Revenues and Heritage Fund Income, 1976/77 to 2004/05^(f)



KEY DATA FOR ALBERTA'S HERITAGE SAVINGS TRUST FUND

CHART 4: Value of the Heritage Fund, 1976/77 to 2004/05^(f)

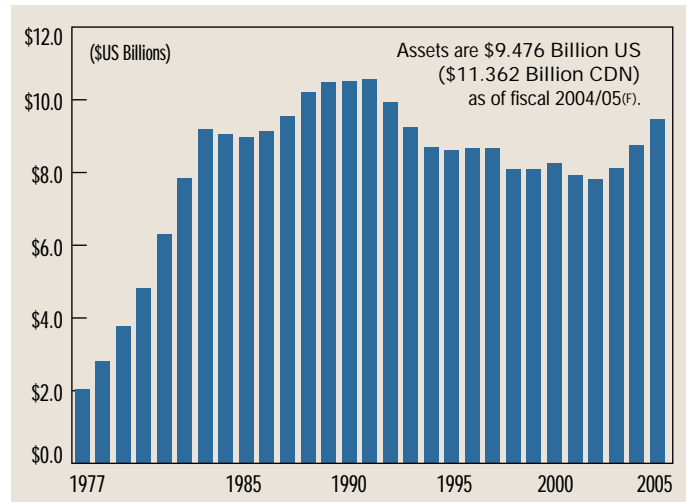
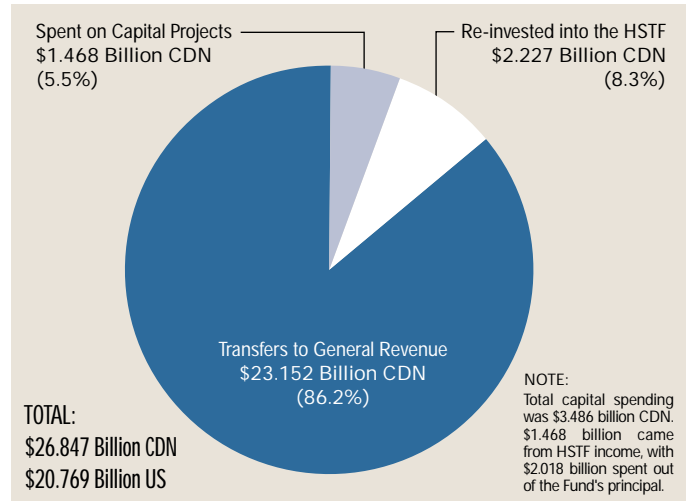


CHART 5: Assessing the Relative Size of the Heritage Savings Trust Fund

Financial Assets of the Heritage Fund at the end of Fiscal 2004/05: \$9.476 Billion US	
Heritage Fund Value Per Capita	Population (2005): 3,246,800 Relative Size of Heritage Fund: \$2,919 US Per Capita
Heritage Fund as a % of GDP	GDP (2005 Estimate): \$150.956 Billion US Relative Size of Heritage Fund: 6.3% of GDP
Heritage Fund as a % of Net Financial Assets	Net Financial Assets (2005): \$11.905 Billion US Relative Size of Heritage Fund: 79.6% of Net Assets
Heritage Fund as a % of Gross Liabilities	Gross Long-term Liabilities (2005): \$13.984 Billion US Relative Size of Heritage Fund: 67.8% of Liabilities
Heritage Fund as a % of Total Revenues	Government Revenues (2005): \$23.980 Billion US Relative Size of Heritage Fund: 39.5% of Revenue
Heritage Fund as a % of Total Expenses	Government Expenses (2005): \$20.382 Billion US Relative Size of Heritage Fund: 46.5% of Expenses

CHART 6: Usage of Heritage Savings Trust Fund Income, 1976/77 to 2004/05^(f)



APPENDIX 3: ALASKA'S PERMANENT FUND

HISTORICAL HIGHLIGHTS OF THE FUND

1969: Following the discovery of one of North America's largest oil fields, Alaska auctions off the drilling rights on 164 tracts of state-owned land at Prudhoe Bay. This lease sale nets the State of Alaska \$900 million in bonuses, a cash windfall representing almost 8 times the annual size of the budget.

1970: The legislature debates what to do with the \$900 million. The state is only 10 years old and is under-developed. A decision is made to use the funds for economic infrastructure (e.g., water, roads, schools, airports) and for health, education, and social services.

1975: Construction begins on the trans-Alaska pipeline to move oil from the North Slope to Valdez. Increases in the price of oil and the construction of the pipeline (at a cost of some \$8 billion) leads to more windfall revenues. There is a sense among Alaskans that the last "boom" was wasted. A consensus emerges that resource revenues should not simply be spent as the money is received.

1976: At the general election of November 2, 66.2% of voters approve an amendment to the State Constitution establishing the Permanent Fund. The amendment details the portion of resource revenues that are to go into the fund.

1977: The first deposit is made to the Permanent Fund, totalling \$734,000.

1980: The Alaska Permanent Fund Corporation (APFC) is created to manage the fund. A special appropriation of \$900 million in surplus resource revenue is also deposited to the fund in addition to the annual constitutional contribution. The first Fund Dividend Program is ruled unconstitutional by the Supreme Court.

1981: Approval of another special deposit of \$1.8 billion in surplus resource revenues is made by the Alaska legislature. The deposits will occur over the 1981-1986 period. The first dividend cheques are mailed to Alaskans. The amount is \$1,000 each.

1984: Financial assets of the Permanent Fund reach \$5 billion US.

1986: The legislature approves a \$1.2 billion transfer in undistributed fund income to "inflation-proof" the fund's principal capital.

1987: The Permanent Fund, with assets of \$9 billion US, is larger than any private endowment or foundation in the US.

1994: Constitutionally dedicated resource revenues deposited into the fund since 1978 total \$5 billion. However, income earned is over \$12 billion, of which \$4.7 billion has been paid in dividends. Most of the remainder has been used to inflation-proof the principal.

1998: For the first time, the annual earnings of the fund exceed state total oil revenues.

2001: The legislature introduces a House and Senate joint resolution which would place before voters a constitutional amendment to provide complete and permanently protected inflation-proofing for the fund.

In 1969, Alaska auctioned off the drilling rights to 164 tracts of state-owned land at Prudhoe Bay, netting the state \$900 million - an amount equal to eight times the annual budget. The consensus was to invest the windfall in much needed state infrastructure. With the increase in oil prices and the start of construction on the trans-Alaska pipeline in the mid-1970s, voters approved a constitutional amendment in 1976 creating the *Alaska Permanent Fund*. Under the State Constitution, 25% of certain oil tax revenues must be deposited annually into the *Permanent Fund*. The remaining 75% is available for general revenue. All income earned by the *Permanent Fund* is re-invested, but a defining feature is the dividends paid out every year to each resident of Alaska. In 1990, the state added the *Constitutional Budget Reserve Fund (CBRF)* to its management of resource revenue. The *CBRF* receives a set portion of certain resource revenues, and all income earned by the fund is re-invested. The fund stabilizes general revenues by funding deficits and receiving the proceeds of budget surpluses (*Chart 1*).

From 1977/78 to 2003/04, the *Permanent Fund* received \$10.8 billion (16.2%) of all resource revenue (*Chart 2*). This amount is similar to the \$10.5 billion (CDN) invested in Alberta's *Heritage Fund*. Yet, Alaska's *Permanent Fund* is worth three times as much - \$27.4 billion (US) in 2004 and almost 90% of Alaska's gross state product (*Charts 4 and 5*). Why the big difference?

First, aside from several one-time cash injections into the *Permanent Fund*, most deposits have been regular - they are constitutionally prescribed. Second, despite a generous dividend program (\$13.1 billion paid since 1982), \$16.6 billion in fund earnings have been re-invested (*Chart 6*). Thus, almost 60% of the fund's net worth today has come via compounding earnings.

Popular misconceptions about the Alaska *Permanent Fund* abound - the dividend program being a prime example. But, Alaska does not simply funnel resource dollars to its citizens. Dividends are paid according to a formula - the last five years of fund earnings are averaged, and then only half of this amount is distributed. Most important, the other half has been retained by the fund, most of which has been used to "inflation-proof" the principal. Even with \$13.1 billion distributed in dividends, the fund is still worth \$30 billion today.

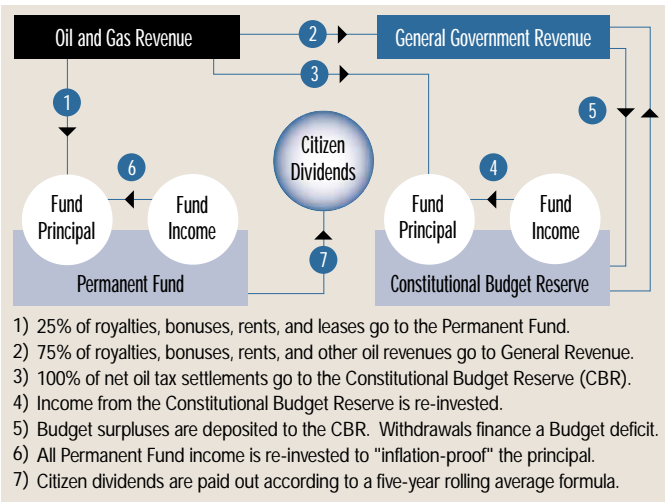
Regular annual investments and the re-injection of a portion of the earnings have had no small effect on Alaska's state finances. For example, in 1998 the earnings of the *Permanent Fund* exceeded state resource revenues for the first time. Perhaps more important is the smoothing effect seen by comparing gross resource revenues with the fund's annual earnings (*Chart 3*). While market fluctuations saw earnings drop precipitously in 2000, they quickly recovered. For most of the last 30 years, the fund's income has grown steadily year after year. Whether dividends or the supporting of general government expenditure is a better use of fund income is clearly open to dispute. But, can the same be said about the effects of investing for the future?

Per Capita Fund Dividends

1982	\$1,000.00
1983	\$386.15
1984	\$331.29
1985	\$404.00
1986	\$556.26
1987	\$708.19
1988	\$826.93
1989	\$873.16
1990	\$952.63
1991	\$931.34
1992	\$915.84
1993	\$949.46
1994	\$983.90
1995	\$990.30
1996	\$1,130.68
1997	\$1,296.54
1998	\$1,540.88
1999	\$1,769.84
2000	\$1,963.86
2001	\$1,850.28
2002	\$1,540.76
2003	\$1,107.56
2004	\$919.84

HOW ALASKA MANAGES RESOURCE REVENUES

CHART 1: Flows of Resource Revenue



KEY DATA FOR ALASKA'S PERMANENT FUND

CHART 4: Value of the Permanent Fund, 1977/78 to 2003/04

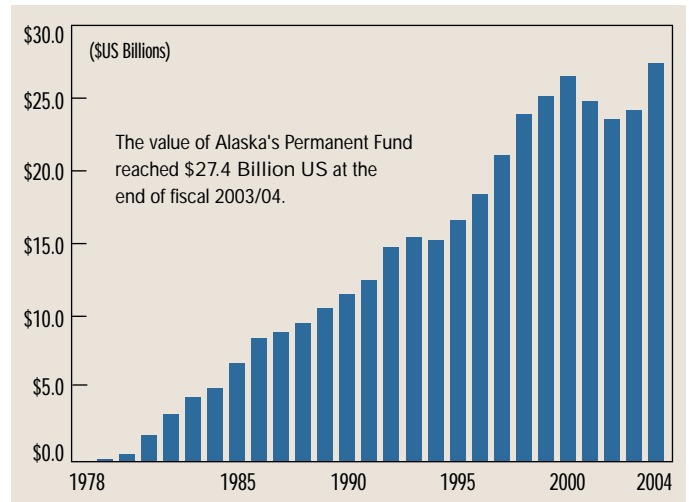


CHART 2: Distribution of Alaska's Total Resource Revenues, 1977/78 to 2003/04

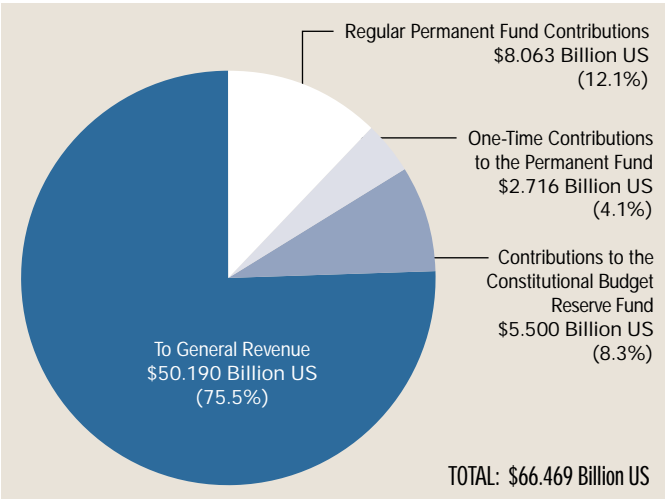


CHART 5: Assessing the Relative Size of the Permanent Fund

Financial Assets of the Permanent Fund at the end of Fiscal 2003/04: \$27.400 Billion US	
Permanent Fund Value Per Capita	Population (2004): 655,435 Relative Size of Permanent Fund: \$41,804 US Per Capita
Permanent Fund as a % of Gross State Product	Gross State Product (GSP 2003): \$31.410 Billion US Relative Size of Permanent Fund: 87.2% of GSP (2003)
Permanent Fund as a % of Net Financial Assets	Net Financial Assets (2004): \$31.141 Billion US Relative Size of Permanent Fund: 88.0% of Net Assets
Permanent Fund as a % of Gross State Liabilities	Gross Long-term State Liabilities (2004): \$3.387 Billion US Relative Size of Permanent Fund: 809.0% of Liabilities
Permanent Fund as a % of Total Revenues	Government Purpose Revenues (2004): \$8.659 Billion US Relative Size of Permanent Fund: 316.4% of Revenue
Permanent Fund as a % of Total Expenses	Government Purpose Expenses (2004): \$5.706 Billion US Relative Size of Permanent Fund: 480.2% of Expenses

CHART 3: Resource Revenues and Permanent Fund Income, 1977/78 to 2003/04

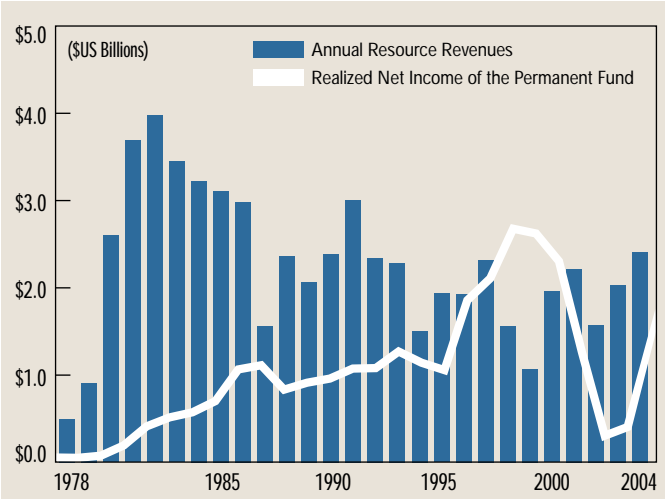
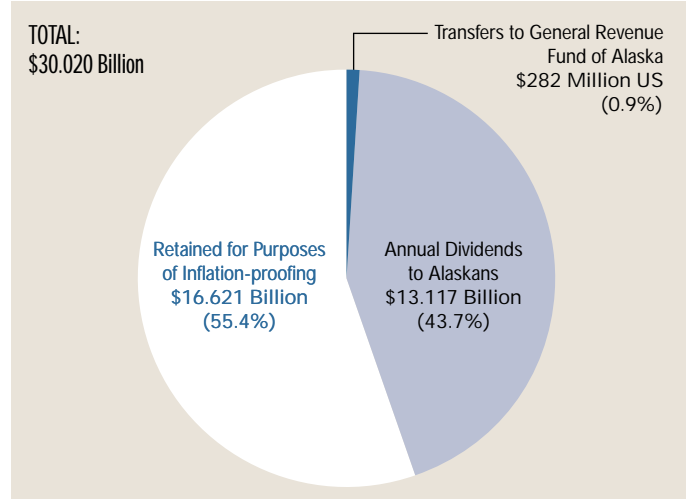


CHART 6: Usage of Permanent Fund Income, 1977/78 to 2003/04



APPENDIX 4: NORWAY'S PETROLEUM FUND

HISTORICAL HIGHLIGHTS OF THE FUND

1990: The Norwegian Government Petroleum Fund is created by an act of the Storting (Parliament) on June 22, 1990. The fund is established to counter a predicted decline in resource revenue and to smooth out the disrupting fiscal effects of highly fluctuating oil prices. The act defines how the government is to dispose of all petroleum-based resource revenues. All resource taxation plus the government's annual net cash flow from its own oil and gas activities are deposited annually into the fund. The fund's income is also re-invested. The Storting annually approves an appropriation from the fund to finance the "non-oil" budget deficit at the end of the fiscal year.

1990-1994: For the first five years following the creation of the fund, no deposits are made. The act creating the fund specified that no deposits were to be made until the consolidated budget balance of the central government was brought from a deficit position into surplus.

1995: The first deposit is made into the Petroleum Fund. It is a modest start, since the deposit amounts to only two billion Norwegian Kroner (about \$310 million US) or 0.5% of the central government's total revenue for the 1994/95 fiscal year. Funds are deposited in an account at the Norges Bank, which manages the fund on behalf of the government. The government's account is matched by an equivalent amount which Norges Bank has invested in foreign securities. The return on these foreign securities determines the return on the Petroleum Fund.

1996: For the first time, oil production from Norway's North Sea fields exceeds three million barrels per day. Production has taken decades to reach this point. In 1973, Norway was producing only 32,000 barrels per day. Production slowly eased passed the one million barrel mark per day as late as 1987. It is only in 1992 that production reached its current level of about 3 million barrels per day, leading to the prospect of significant resource revenue.

1998: A change is made to the investment policies guiding the Petroleum Fund. The fund can now invest up to 50% of its portfolio in international stock markets.

2001: Norway makes its single largest annual deposit into the Petroleum Fund, just over \$270 billion US. This is over eight times the amount deposited only two years ago in 1999 (\$3.3 billion US).

2003: Due to the large size of the Petroleum Fund relative to the small number of people in Norway (about 4.5 million) the fund has become a hot political issue. There are three major themes to the ongoing national discussion: 1) some believe the government should be using more of the current resource revenue dollars to solve certain economic and social challenges rather than simply saving the wealth; 2) some question whether the investment policy of the Petroleum Fund is ethical; and 3) some believe that the high exposure of the fund's assets (about 40% in 2003) to the fluctuating stock market entails too much risk. The debate is ongoing.

Unlike Alberta's *Heritage Fund* or Alaska's *Permanent Fund*, the creation of Norway's *Petroleum Fund* is a recent phenomenon. The fund was established in 1990 by an act of the *Storting*, Norway's parliament. The purpose of the fund is to invest parts of the large national trade surplus that accrue from the Norwegian petroleum sector. A driving force behind the initial creation of the *Petroleum Fund* was a commonly shared belief that revenues from Norway's North Sea oil fields have reached their peak, and will decline significantly over the next decades as production declines. Two arguments were advanced in the debate establishing the fund: first, the national government must prepare to counter the effects of the anticipated decline in resource revenue income. Second, the government should smooth out the fiscally disrupting effects of highly volatile oil prices and oil tax and royalty revenues.

While the fund was established in 1990, no deposits were made until the end of the 1994/95 fiscal year. Until that time, the budget of Norway remained in a deficit position. The government decided that deposits to the *Petroleum Fund* would only occur when the budget was brought into surplus. Today, all oil and gas resource revenue, plus the net earnings of state oil and gas interests, are deposited annually into the *Petroleum Fund*. Interest earned in the fund is re-invested. The government draws up a budget that includes no resource revenue. This budget anticipates a "non-oil" deficit, which is then funded at the end of the year by an appropriation from the *Petroleum Fund* principal to general revenue (*Chart 1*).

The effects of Norway's strategy are hard to ignore. Since 1994/95, Norway has collected \$223.8 billion US in resource revenue. Of this amount, over \$138.4 billion (61.8%) has been invested in the *Petroleum Fund*, and \$56.3 billion (25.1%) has been used for general revenue purposes. The remainder has been used to offset the government's costs of its public oil and gas activities (*Chart 2*). In only ten years, the *Petroleum Fund* has grown to \$196.2 billion US, and the government predicts it could reach \$331.7 billion by 2010 (*Chart 4*).

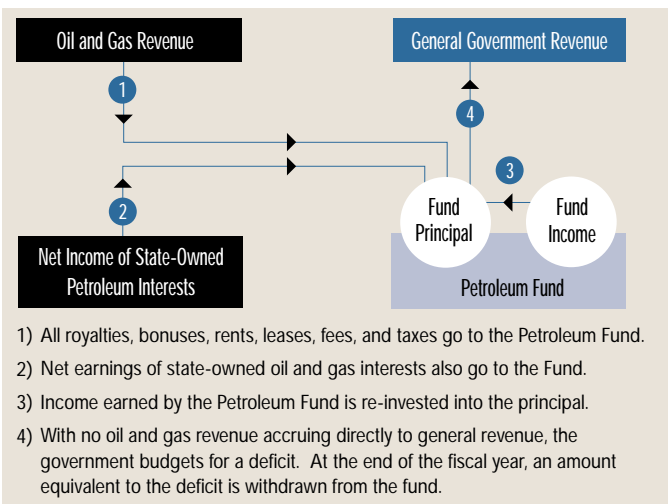
A unique set of circumstances has landed Norway in this position. First, world energy markets since the mid-1990s have been robust - prices have risen to levels not seen since the early 1980s. But this also corresponded to a drastic increase in oil production from the North Sea. Only in 1996 did oil production in Norway pass the 3 million barrels per day mark (about twice Alberta's current conventional and oil sands production). In 1973, Norway was only producing 32,000 barrels per day. It has taken decades for Norway to develop its North Sea oil resources, and at the same time that production was being maximized prices also soared. The result has been resource revenue windfalls of almost unimaginable proportions.

In comparative terms, the *Petroleum Fund* represents \$42,615 US per capita and 70.6% of the national GDP (*Chart 5*). The fund could sustain the entire operations of the central government, including social assistance and security costs, for almost two years (fund assets are worth 190.0% of annual expenditures).

The *Petroleum Fund* has already generated \$167.7 billion US in income from 1994/95 to 2004/05, all of which has been re-invested into the fund. Compared to current annual resource revenues, that amount is still quite small (*Chart 3*). However, the income earned has been very steady, and demonstrates a consistent growth pattern. Currently, the *Petroleum Fund* is managed by the Norges Bank. The funds are matched by bank funds that are invested in foreign securities, and the bank's interest on those securities is deemed to be the income generated by the fund. While Norway is a sovereign nation and a strict comparison with Alberta is likely out of the question, are there lessons to learn from Norway's recent experience?

HOW NORWAY MANAGES RESOURCE REVENUES

CHART 1: Flows of Resource Revenue



KEY DATA FOR NORWAY'S PETROLEUM FUND

CHART 4: Value of the Petroleum Fund, 1995-2005

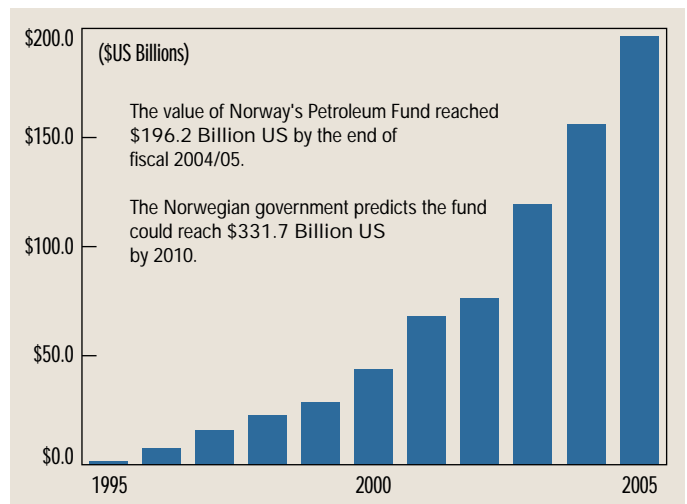


CHART 2: Distribution of Norway's Total Resource Revenues, 1995-2005

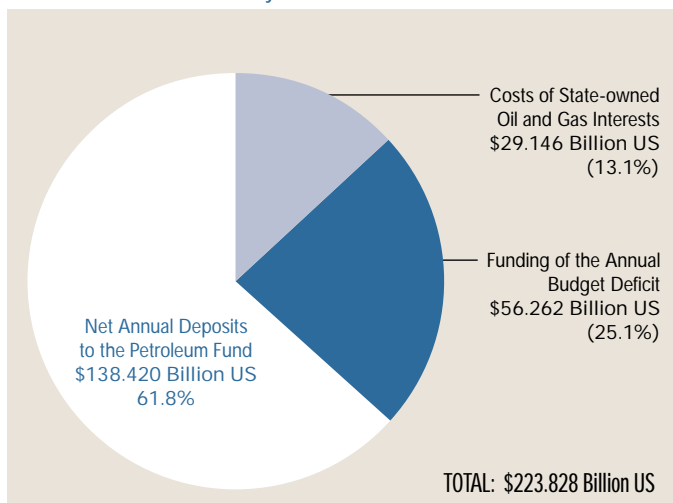


CHART 5: Assessing the Relative Size of the Petroleum Fund

Financial Assets of the Petroleum Fund at the end of Fiscal 2004/05: \$196.230 Billion US	
Petroleum Fund Value Per Capita	Population (January 2005): 4,604,745 Relative Size of Petroleum Fund: \$42,615 US Per Capita
Petroleum Fund as a % of GDP	GDP (2005 Estimate): \$277.8 Billion US Relative Size of Petroleum Fund: 70.6% of GDP
Petroleum Fund as a % of Net Financial Assets	Government Sector Net Assets (2005): \$244.5 Billion US Relative Size of Petroleum Fund: 80.3% of Net Assets
Petroleum Fund as a % of Gross State Liabilities	Government Sector Debt (2003): \$99.0 Billion US Relative Size of Petroleum Fund: 198.2% of Public Debt
Petroleum Fund as a % of Total Revenues	Central Government Revenues (2005): \$123.8 Billion US Relative Size of Petroleum Fund: 158.5% of Revenue
Petroleum Fund as a % of Total Expenses	Central Government Expenses (2005): \$103.3 Billion US Relative Size of Petroleum Fund: 190.0% of Expenses

CHART 3: Resource Revenues and Petroleum Fund Net Income, 1995-2005

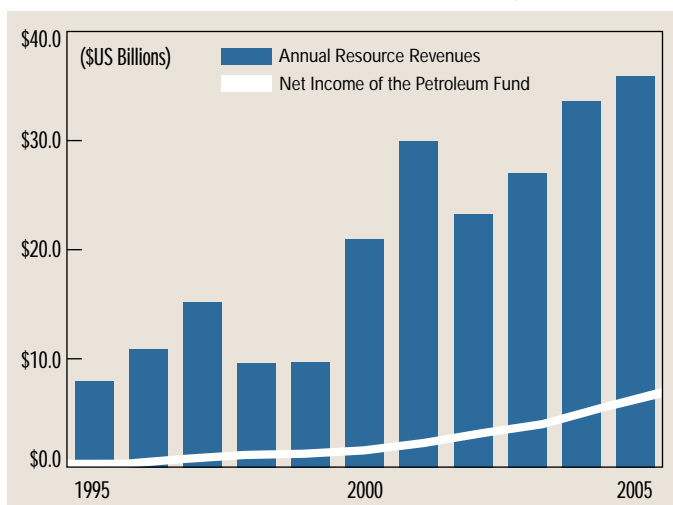
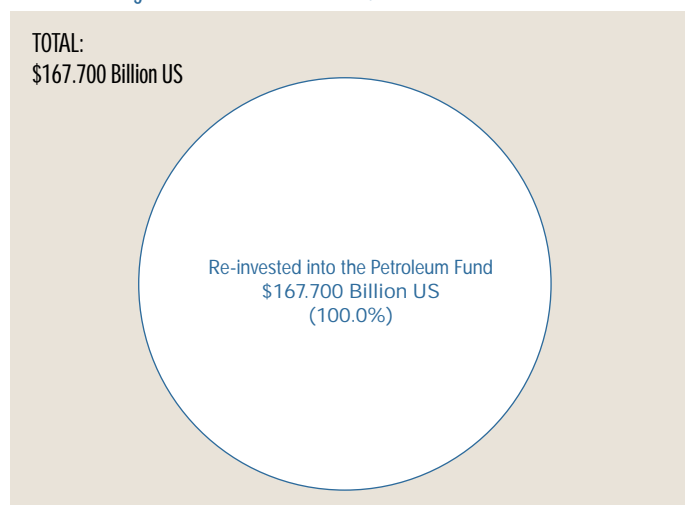


CHART 6: Usage of Petroleum Fund Income, 1995-2005



APPENDIX 5: INTERNATIONAL OIL AND GAS DATA

CHART 1: Proven Reserves of Crude Oil and Natural Gas by Country

2004 Proven Reserves of Recoverable Crude Oil in Billions of Barrels		2004 Proven Reserves of Recoverable Natural Gas in Trillions of Cubic Feet	
Saudi Arabia	261.900	Russia	1,680.000
Canada*	178.893	Iran	940.000
Iran	125.800	Qatar	910.000
Iraq	115.000	Saudi Arabia	231.100
Kuwait	99.000	United Arab Emirates	212.100
United Arab Emirates	97.800	United States	189.044
Venezuela	77.800	Algeria	160.000
Russia	60.000	Nigeria	159.000
Libya	36.000	Venezuela	148.000
Nigeria	25.000	Iraq	110.000
United States	21.891	Indonesia	90.300
China	18.250	Australia	90.000
Mexico	15.674	Malaysia	75.000
Qatar	15.207	Norway	74.800
Algeria	11.314	Turkmenistan	71.000
Norway	10.447	Uzbekistan	66.200
Kazakhstan	9.000	Kazakhstan	65.000
Brazil	8.500	Netherlands	62.000
Azerbaijan	7.000	Canada	59.069
Oman	5.506	Egypt	58.500
Total Top 20	1,199.982	Total Top 20	5,451.113
Rest of the World	65.044	Rest of the World	627.479
World Total	1,265.026	World Total	6,078.592

*NOTE: About 4.5 billion of Canada's reserves are conventional and 174.4 billion are in the oil sands.

CHART 2: Average Daily Production of Crude Oil and Gas by Country

2002 Crude Oil Production in Thousands of Barrels Per Day		2001 Marketed Natural Gas Production in Billions of Cubic Feet Per Day	
Saudi Arabia	7,634.400	United States	56.521
Russia	7,408.200	Russia	56.195
United States	5,745.500	Canada	19.792
Iran	3,444.300	United Kingdom	10.762
China	3,389.700	Algeria	8.142
Mexico	3,177.200	Netherlands	7.526
Norway	2,990.200	Iran	6.907
Venezuela	2,603.900	Indonesia	6.868
United Kingdom	2,291.700	Uzbekistan	6.104
Canada	2,170.600	Norway	5.759
Nigeria	2,117.900	Saudi Arabia	5.485
United Arab Emirates	2,082.000	Malaysia	5.000
Iraq	2,023.000	Turkmenistan	4.663
Kuwait	1,894.200	United Arab Emirates	4.230
Brazil	1,455.200	Argentina	4.074
Libya	1,318.500	Venezuela	3.663
Algeria	1,306.000	Mexico	3.567
Indonesia	1,267.000	Australia	3.247
Oman	896.700	Qatar	3.025
Angola	896.400	China	2.932
Total Top 20	56,112.600	Total Top 20	224.462
Rest of the World	10,729.600	Rest of the World	35.003
World Total	66,842.200	World Total	259.465

CHART 3: Proven Reserves of Crude Oil and Natural Gas by Continent

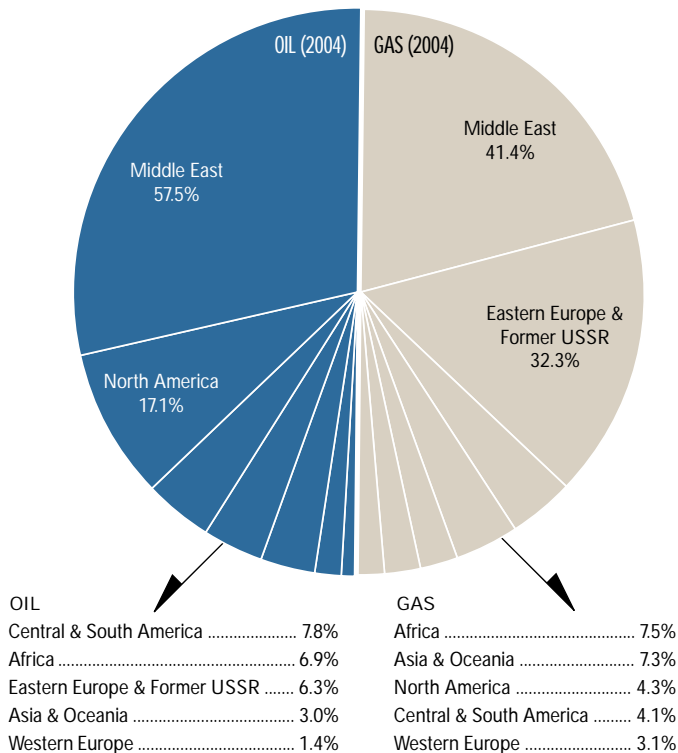
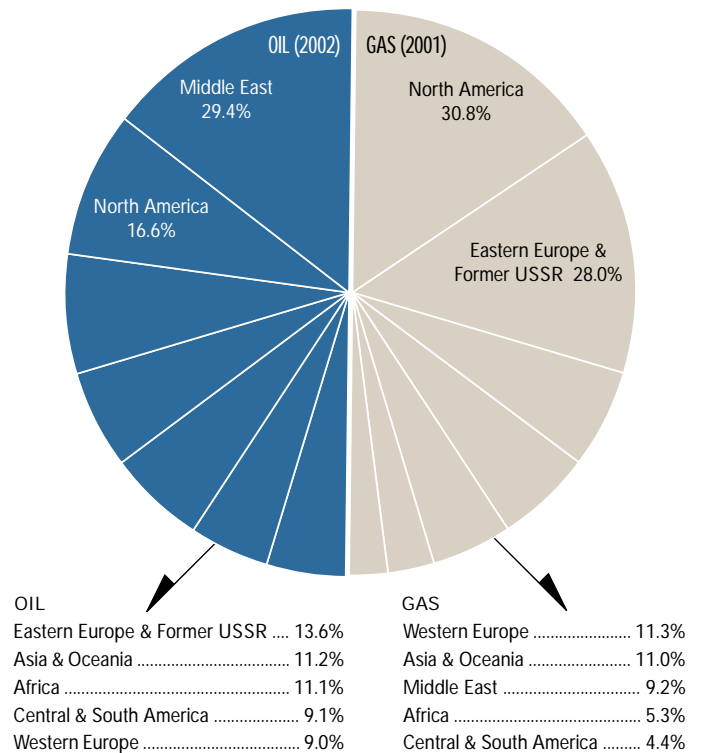


CHART 4: Average Daily Production of Crude Oil and Gas by Continent



APPENDIX 6: ALBERTA OIL AND GAS IN CONTEXT

CHART 5: Oil and Gas Fields in Alberta, and Major Oil and Gas Basins in North America, 2003

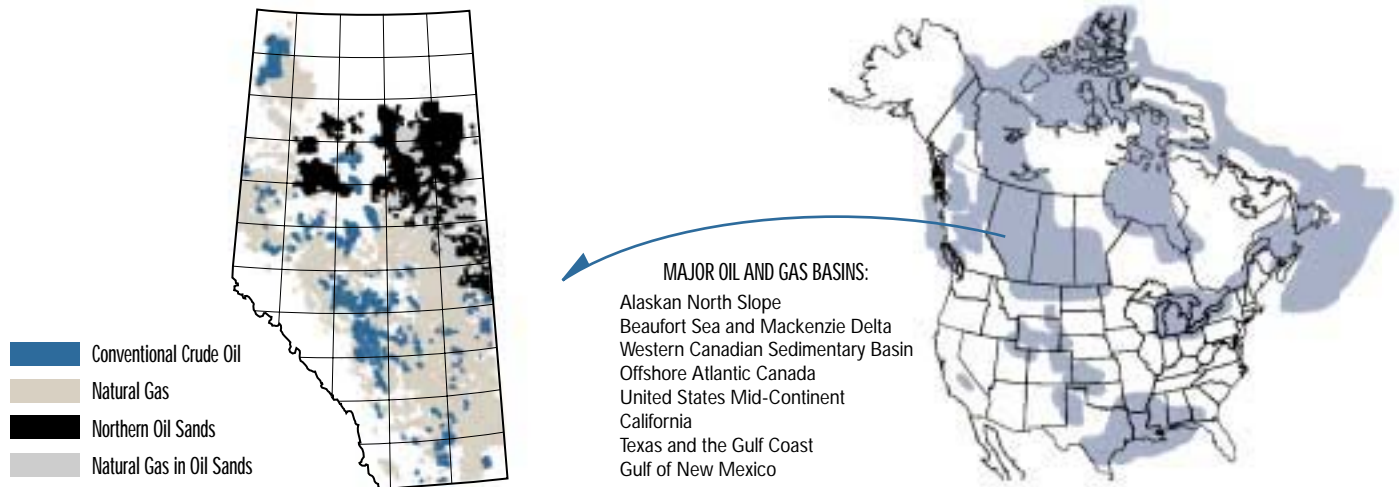


CHART 6: Proven Reserves of Crude Oil, 2003

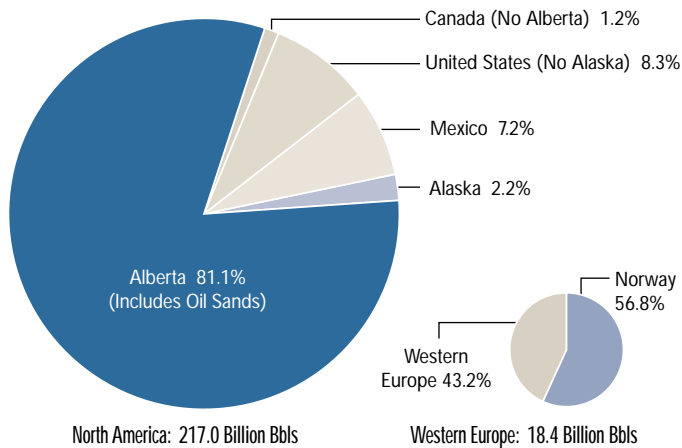


CHART 7: Proven Reserves of Natural Gas, 2004

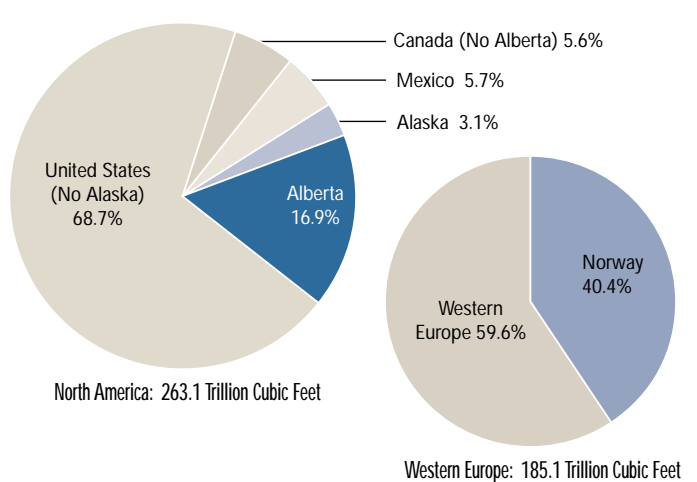


CHART 8: Crude Oil Production, 2002

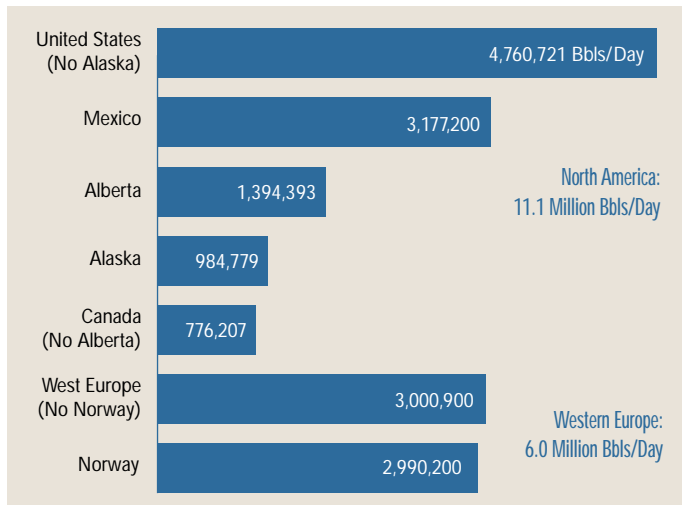
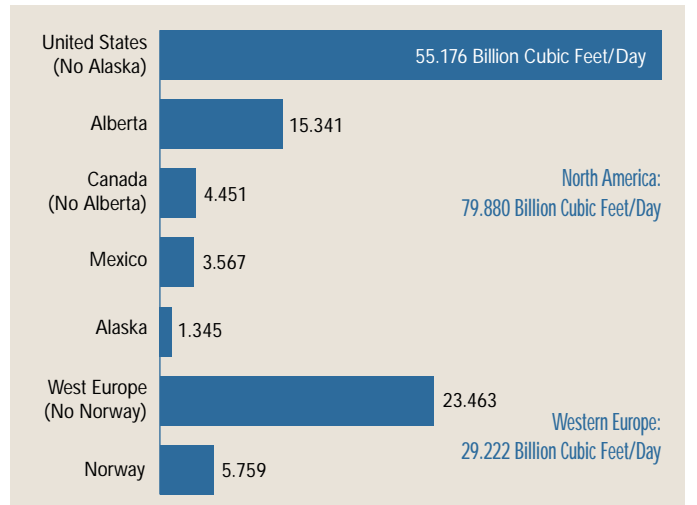


CHART 9: Natural Gas Production, 2001



APPENDIX 7: INVESTING WISELY PARTICIPANTS

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VP, External Relations, NAIT

Aitrell, Chris

President, AllStar Jobs

Barnard, David

President & Vice-Chancellor, University of Regina

Boeda, Paul

President & CEO, Canadian Wealth Management

Bone, William M.

President, Carthy Foundation

Bonnycastle, Richard (Dick)

Chairman, Cavendish Investing Ltd.

Brown, Alice

Director, Canada West Foundation

Bruce, Ian

President & CEO, Peters & Co. Ltd.

Bruce, Ken

Vice-Chair, Investment Banking,

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Burgener, Jocelyn

Director of Public Affairs,

Calgary Chamber of Commerce

Burgener, Peter

Partner, BKDI Architects

Byrne, Paul

President & CEO, Grant MacEwan College

Carr, Jim

President & CEO, Business Council of Manitoba

Cavanagh, Peter

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Elton, David K.

President, Max Bell Foundation

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Ivany, J.W. George

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Kuchinka, Ron

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Markin, Allan

Chairman, Canadian Natural Resources Ltd.

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Ramsden-Wood, Ruth

President, United Way of Calgary and Area

Renner, Ted

President, Kiara Resources Inc.

Riddell, Clay

Chairman & CEO, Paramount Resources Ltd.

Ritchie, Robert J.

President & CEO, Canadian Pacific Railway

Roach, Robert

Director of Research, Canada West Foundation

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President & CEO, Glenbow Museum

Rogan, Doug

Wood's Homes

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Stanners, Michèle

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Westbury, Robert

Chair, Telus Edmonton Community Board

Wetter, Les

Industry & Government Liaison, Ducks Unlimited

Wilkinson, Gloria

ERWP, BRBC, SCPA, CPAA

Wilson, W. Brett

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Woitas, Clayton

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Yatscoff, Randall

President & CEO, Isotechnika Inc.

Yedlin, Deborah

Business Columnist, Globe & Mail

ABOUT THE CANADA WEST FOUNDATION

In 1970, the One Prairie Province Conference was held in Lethbridge. Sponsored by the University of Lethbridge and the Lethbridge Herald, the conference received considerable attention from concerned citizens and community leaders. The consensus at the time was that research on the West (including BC and the Canadian North) should be expanded by a new organization. To fill this need, the Canada West Foundation was created under letters patent on December 31, 1970. Since that time, the Canada West Foundation has established itself as one of Canada's premier research institutes. Non-partisan, accessible research, and active citizen engagement are hallmarks of the Foundation's past, present, and future endeavours. These efforts are rooted in the belief that a strong West makes for a strong Canada.

OUR VISION: A dynamic and prosperous West in a strong Canada.

OUR MISSION: A leading source of strategic insight, conducting and communicating non-partisan economic and public policy research of importance to the four western provinces, the territories, and all Canadians.

Canada West Foundation is a registered Canadian charitable organization incorporated under federal charter (#11882 8698 RR 0001).

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DATA SOURCES

Figure 1 (Page 5):

Charts 1 and 2 were derived by CWF from Alberta Budgets and the Public Accounts (1970 to 2005) and the third Fiscal Update for 2004/05. In Charts 3 and 4, the price of West Texas Intermediate Crude is from www.economagic.com and the average Wellhead Price for Western Canada is from the Canadian Association of Petroleum Producers (CAPP). Currency conversions were calculated from the Bank of Canada and the OANDA online currency exchange. Inflation-adjusted prices use the CPI from Statistics Canada and the Bank of Canada. 2005 prices are based on the average price from January to April. Charts 5 and 6 were derived from data supplied by CAPP.

Figure 2 (Page 8):

Figure replicated by CWF from the Government of Alberta's 2005/06 Budget.

Figure 3 (Page 11):

These data are based on the analysis found in Appendices 2-4 (pages 16-21).

Appendix 1 (Pages 14-15):

Derived by CWF from Government of Alberta budgets, public accounts, and various fiscal updates (1993-2005).

Appendix 2 (Pages 16-17):

Historical analysis and data were secured by CWF from annual reports of the Heritage Fund (1976-2003) as well as the Government of Alberta's budgets and Public Accounts. Population and CPI data were secured from Statistics Canada.

Appendix 3 (Pages 18-19):

Historical analysis and various data were secured from publications (annual reports, financial reports, promotional brochures) published by the Alaska Permanent Fund Corporation. Statistical data was provided directly to CWF from the Alaska Permanent Fund Corporation. Population, GDP, and other economic data were secured from documents published by the Alaska Department of Revenue and the Consolidated Annual Financial Report of Alaska.

Appendix 4 (Pages 20-21):

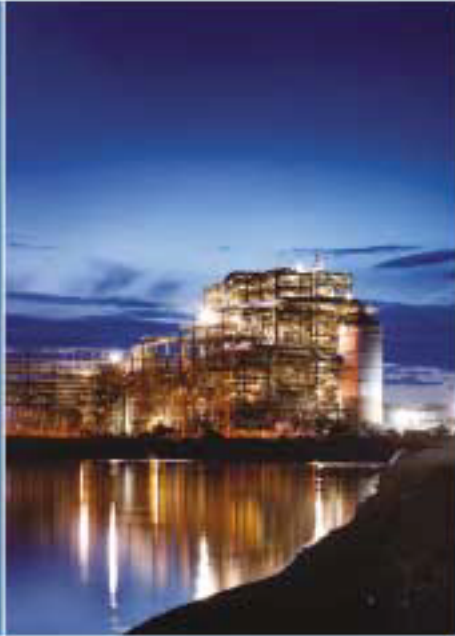
Primary data sources include the annual reports of the Petroleum Fund and the annual Budget and Public Accounts of the Norwegian national government. Historical analysis and additional data were secured from www.wikipedia.org as well as the Norges Bank, the central bank of Norway. Norway crude oil production was secured from www.economagic.com.

Appendix 5: (Page 22):

Crude Oil reserves data found in Chart 1 were secured by CWF from the Oil and Gas Journal. Crude reserves are as of January 1, 2004. Reserves include condensate. Canadian reserves of crude oil include the northern Alberta oil sands. Without the oil sands, Canada's reserves of conventional crude drop to only 4.5 billion barrels, moving it from second place to a position outside the top 20 countries with the highest reserves. Proven reserves of Natural Gas are also from the Oil and Gas Journal and are current as of January 1, 2004. Crude oil and natural gas production in Chart 2 are from the Energy Information Administration (US). Note that natural gas production here is marketed production only. Charts 3 and 4 are based on the same data sources with figures broken out by country and continent.

Appendix 6 (page 23):

Chart 5 was replicated by CWF from graphics originally published by the Alberta Department of Energy and the Energy Information Administration. Charts 6 through 9 were derived by CWF by combining various data published by the Alberta Department of Energy and the Energy Information Administration.



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