



## EXPANDING THE DEBATE

### *Investing Wisely Project Discussion Paper Series*

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## Following the Hydrocarbon Jackpot: An Urgent Agenda

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### FIRST THINGS FIRST

The first thing for Albertans to do in 2005 is to look *ahead* into our second century, not back. A dimension of this is to build Alberta as a player in our country; few Albertans want to be anywhere else. First questions are to ask what the sensible individual or family would do if (s)he “hit the jackpot,” and wanted to ensure a better *future*. Why not the same for a province, or country? The first principles are disarmingly simple, although implementation details matter—the devil is in the detail! Yet no details can get it right, if the principles are wrong.

The first order of business would be to clear debts. Next would be prudent budgeting and living to preclude future needless debts, again as an individual or family or government. Finally, a financial legacy is appropriate in sharing any inheritance or lottery jackpot with future generations. Each of these “orders of business” will be discussed.

Debt is the aggregation of deficits, usually including accumulated interest costs. The usual and acceptable way to measure deficit/debt is as a proportion of income (individual or family) or size of economy (government). For the individual or family, the first order of business may be to escape “credit card hell” by restraining spending until *all* charges are paid off *each* month.

For governments, what is essential is that debt not become unsustainable. Sustainable debt is 25% - 30% of the size of the economy. Some would widen this band to 15% - 40% of GNP. By any measure, both the federal and Alberta governments had

accumulated harmfully high levels of debt by the late 1990s; both tackled debt reductions, with notable successes. With any family or government that has “hit the jackpot,” why should there be any debt at all? The Alberta government owns the hydrocarbon resources and thus a stream of energy revenues, and so has hit the jackpot. Alberta cities have not, thus debt is a reality for them, as they have hit no jackpot.

### 1. Conventional Debt

Conventional deficits, accumulating to debt, are expenditures exceeding revenues over a measured timeframe. This will incorporate government operating, and capital budgets, including an appropriate annual share of capital needs for new and rejuvenated projects.

Forces leading to deficits/debt can be insidious. While some governments purposely go into debt, others get into debt despite intentions to the contrary. How can this happen? Simple example: capital projects, especially new ones (e.g., libraries, hospitals) are very appealing in the political process due to visibility.<sup>1</sup> Often the capital cost is the small portion of the overall total cost. The capital facility must be staffed and operated by future operating budgets through the lifetime of the facility. For many facilities the future ongoing operating costs dwarf the initial capital costs.

Even if oil and natural gas prices were half of what they are now, Alberta going back into debt would be wrong. We have good fortune, beyond that of any other province in Canada. Let's not waste it!

1. In contrast, utilities infrastructure is costly and essential but with limited visibility.



We enjoy government services that are partly “financed” by the current generation enforcing transfers *from* future generations. They are too young to vote, or even are unborn. A disquieting conclusion is that, in both current and future terms, we are not paying our way. We owe it to the future to address this issue in a hard-headed but soft-hearted way.

## 2. Infrastructure Debt

While the conventional debt was being paid off in Alberta, a mammoth “infrastructure gap” has emerged. In 2005, the gap is finally being recognized by the Government of Alberta; their estimate is an infrastructure deficit estimate of over \$7 billion. This is far from the full extent of the infrastructure gap in the province. The situation in the largest cities of Edmonton and Calgary is critical. Edmonton’s current infrastructure gap is estimated as \$150 million/year, totalling \$1.5 billion over the decade ahead. Calgary can hardly be less. Without including such infrastructure gaps from where the other one-third of Albertans reside, the global horizon estimate would be in the range of \$10 billion - \$12 billion!

Physical infrastructure includes highways, roads and streets, Light Rail Transit, water and sewer systems, storm drainage, facilities for police, fire and community services. They are all in short supply, at least in urban areas. Social infrastructure requirements in Alberta are a similarly long list. Apart from debate about the benefit-costs results of further oil sands projects, several are here now and the infrastructure must be provided; major road and rail capacity is needed, some of it entirely new. Education infrastructure needs have become

critical, at all levels. The human capital asset is vital now, and undoubtedly will be more so in the future.

Combining conventional government debt and the public infrastructure gap, Alberta *does* carry a major debt liability today. The good news is that finally the infrastructure gap is widely recognized. The further good news is that energy royalties continue to feed into the jackpot. With a well-designed plan, and implementation resolve, Alberta has the capacity to deal with its infrastructure debt over the coming decade and without robbing the Heritage Fund. But there is no time to lose!

## 3. Legacy Debt

Most Albertans will know the outline history of the Alberta Heritage Savings Trust Fund (AHF). It was begun in 1976 with a base amount of \$1.5 billion, and 30% of oil and natural gas royalties revenues was allocated to the Fund. In 1982 this was halved to 15%, and such transfers were eliminated in 1987. Until 1982 earnings yields were ploughed back into AHF; since then *all* such earnings have been diverted to provincial government general revenues. The size of AHF reached \$12 billion in the 1980s, but it has languished ever since. Looking ahead, should the policies of the last two decades continue?

Have we been fair to our children and grandchildren? If not, there is an exceedingly large debt owed into the Heritage Fund. What would bring it up to the size it would have been if initial policies had continued to now? A careful calculation would be necessary to determine that debt amount, but it is very large. If this legacy debt is added to the infrastructure debt, Alberta

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indeed is deeply in debt now. A major policy choice needs to be made.

At the very least we of the current generation should commence to treat future generations fairly.<sup>2</sup> To do so, a rational path is to learn from our farming forebears. A tried and true method of farmland rentals is two-thirds for the operator and one-third for the owner; tweaking arrangements may reflect fertilizer, herbicide or other particular costs. Royalties are not taxes, but are payment shares to the owner. The farm-share mantra would suggest a 33.3% royalty rate for Alberta oil, natural gas and bitumen. This was approximately the result of Alberta government resources policy royalty revisions in the 1970s. There was tweaking by royalty differentiation of old versus new oil and gas finds, as well as offset considerations for costs of secondary and tertiary production recovery. How do current royalty shares paid compare for oil, natural gas and bitumen production from public lands in Alberta? If less than the one-third proportion (they are!), accountability to the people of Alberta is needed. A wide-ranging and transparent debate is strongly recommended.

What share of natural resource revenues should be set aside for future generations? Again, a one-third proportion seems reasonable. Two-thirds would be for the current generation, for purposes their elected representatives determine. Under the proposed arrangement, children and grandchildren would be entitled to a one-third share. That is, one third of the one-third, or *one-ninth*. In round numbers, this is a royalty rate of just over eleven percent. This money should be set aside in a legacy fund such as the Alberta Heritage Fund.

**Grandchildren\$**=Hydrocarbon Royalties (1/3)x Intergeneration Transfer (1/3) = Royalty share (1/9) = 11.1% royalty rate for future generations (22.2% for current use). Surely we Albertans of today can do no less for future generations?

## INVESTING FOR SUSTAINABILITY

### 1. Pre-Build Our Future

The first thing to understand about economic strategy is that economic *strength* has two pillars: prosperity, and stability. Precarious prosperity is not strength; stability without prosperity is more like hopelessness. The second thing to understand is

that the key is *productivity*. The third thing is to recognize that productivity does not happen by itself, but instead as the *nexus* of physical/financial capital and human capital embodying knowledge, practical skills and work ethic. Alberta risks spending too much on current consumption and not investing enough in the future, witness the crumbling infrastructure and needed facilities simply not built. Alberta needs to refocus from “cash basis” (balance the books this year, letting the chips fall where they may) to an “asset focus” of planning, organizing and ramping up our physical and educational assets effectively to take on the increasingly competitive world. It is not going to get easier, and why would it? Alberta needs to invest in tangible assets that enhance productivity.

Our hydrocarbon lottery jackpot should be a blessing, but it can be a curse. Jackpot energy funds can be used to confront economic problems and finance transitions to a new era of economic strength—a blessing. Or such a flush of monies can provide a mask for deep economic problems that languish as the province becomes less competitive. Not only must a jurisdiction build on existing strengths, it must formulate policies to establish and harness new economic strengths. This was done in the 1970s when the petrochemical industry was established pursuant to aggressive Alberta Government economic policy; assurance of ethane feedstock supply was possible under natural gas regulation by government. Value-added strategies, such as capital investment and worker training, research and innovation, and flexibility are the basis for competitiveness with USA, China and India in the future. The core of improved productivity is human capital development, buttressed by educational opportunities.

Government’s job is to provide the framework for economic strength, both prosperity and stability. It needs to ensure available incentives to drive entrepreneurial successes. The private sector’s job is to generate wealth, distributed as rewards for effort and risk taking. The government’s further job is equality of opportunity, though not results, for its citizens.

### 2. Education Infrastructure

The human capital asset is more vital now than ever before. Our future cannot afford a second-rate, let alone a third-rate, education system. Alberta’s future will be enhanced if our schools are the best in the country. “Best” means length/

2. AHF Policy Drivers: Fairness to future generations; Strengthen and diversity economy; Quality of life improvements; and “Rainy Day” revenue source. Fairness is overwhelmingly the primary driver.

breadth/depth. We need the best in education beginning with kindergarten, and lengthening through high school and post-secondary education. Also needed is the breadth of diverse education programming, always built on the core skills of reading, mathematics and science. Education must always be an available bootstrap opportunity for the disadvantaged! Enriched education programming can permit students to plumb the depth of subjects beyond the core requirements. Education: knowing a lot about something, and a little about a lot of things. Quality university education tops off this build-up of human capital assets. Research is vital.

A specific suggestion is for the Alberta government to recommit its highly successful former donation-matching policy. It adds leverage to private donations, especially endowments donations when matched 2-for-1. Both immediate and permanent funding becomes available. The real barrier is inadequate investment in education. Education requires financial resources, including attracting and retaining the best teachers. What is really expensive is poor quality education. Our children and grandchildren deserve the best, to enhance their futures and that of society at the same time.


### 3. Alberta Heritage Savings Trust Fund

The dominating event of Alberta's energy resource development was the Natural Resources Transfer Act of 1930. Federal-to-provincial ownership of (most) public resources was a hallmark in provincial status for Saskatchewan and Alberta in 1905. Economic rents from resources ownership is the pivotal concept underlying the Alberta Heritage Fund. Is it reasonable to expect *only* this generation to benefit? Or instead, should some of the benefits be spread fairly to future generations? If yes, it is incumbent on each Alberta generation to ensure that it happens.

Looking forward, it is recommended that one-third of hydrocarbon energy royalty monies be directed to the Alberta Heritage Savings Trust Fund. Further, that the Fund management be as an endowment.<sup>3</sup> Endowment policy provides that the first priority is preservation of the capital base purchasing power; this means inflation-proofing as the immediate call on financial yield, and then permitting only "Harvard Rule" (4.5 - 5.0%) draw of yield disposition each year. With prudent investments, the endowment will grow over time.

There is significant future congruence between infrastructure needs and the Heritage Fund. Improvements in economic infrastructure were expected to pay off in economic terms, but not in direct financial yield. Improvement in social infrastructure would pay off in lifestyle dividends and help to attract and retain citizens, but again without an expectation of financial returns.

## DIRECTIONS FOR A MODERN ALBERTA FUTURE

1. Alberta needs to change its basic policy approach from cash management to asset management; that is, from day-to-day operations and events to planned building and effective utilization of physical, financial, and human capital assets.
2. Alberta needs to toughen its focus onto the future, and accept that there are inevitable tradeoffs over time. Longer-term "gains" tend to be distant, diffuse and uncertain; short-term "pains" tend to be immediate, specific and certain. That's why there is "heat in the kitchen."
3. Alberta needs to review its hydrocarbon royalties, and re-engage a fair allocation to future generations with a building and revitalized Alberta Heritage Fund. AHF must be managed as an endowment for the future, preferably by arms-length trustees like the Alaska Permanent Fund.
4. Alberta needs a "ground to ground" investment strategy, which will take a major portion of our hydrocarbon jackpot (from the ground) and invest it onto and under the ground (infrastructure). There is much to be done, and urgently.
5. Alberta needs to invest in education, at all levels, with urgency. Poor education is what's expensive for society.
6. Alberta would be wise to get "out of the faces" of other Canadians. Too often we have behaved unacceptably. It is time to hunker down, talk less, and work harder with our noses to the grindstone. Let's lower our profile, and increase our own efforts as we build both Alberta and Canada. 

3. Policies for financial management of endowments are in place at the University of Alberta, and can serve as a model for the Alberta Heritage Fund.

## What is your vision for the future of western Canada?

Canada West Foundation announces a new western Canada-only student essay contest with \$5,000 available in prize money.

**the NEXT**  
Generational Transformations West

Students in the four western Canadian provinces (aged 17-30) are invited to share their thoughts on the future of the region.

***How do you see the West changing?***

***What role do you see for yourself in the West of the future?***

***What is YOUR vision for the future of western Canada?***

Young western Canadian residents (aged 17-30) attending (or planning to attend) a post-secondary institution in 2006-07 are eligible to earn prizes by submitting an essay before March 1, 2006. Visit the Canada West Foundation's new NEXT West Generation website at: **[www.cwf.ca/nextwest](http://www.cwf.ca/nextwest)** to download the full details and essay coversheet.

The contest grand prize includes \$2,000, a trip to Calgary to present your essay in person and the winning essay will be featured in a Canada West Foundation publication. Prizes of \$1,000 will also be awarded to the top essay from each western province.

