



CANADIAN ASSOCIATION  
OF PETROLEUM PRODUCERS

BACKGROUND

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# **Oil Sands Economic Impacts Across Canada – CERI Report**

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September 2005

# Oil Sands Economic Impacts Across Canada – CERI Report

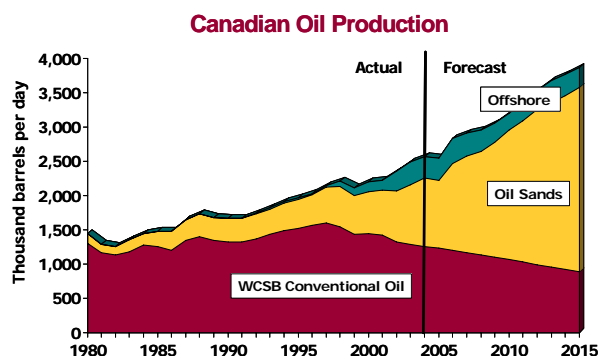
The oil sands sector in Canada has witnessed record levels of investment in the past decade. Projects under construction, or in planning, could generate billions of dollars of additional investment in the coming decades. The expenditures, employment, government revenues and economic impacts of these investments are not only in Alberta but also in Ontario, Quebec and the rest of Canada.

The Canadian Energy Research Institute (CERI) has published a multi-client study titled Economic Impacts of Alberta's Oil Sands that assesses the impact of the investment at the local, provincial, national and international level. Based on this study, the Canadian Association of Petroleum Producers (CAPP) has developed this background to answer some fundamental oil sands questions.

## What is Alberta's oil sands production potential?

Oil sands production has grown four-fold since 1990 and exceeded 1 million barrels per day (b/d) in 2004. A recent CAPP forecast predicts that oil sands production will more than double by 2015 to reach 2.7 million b/d.

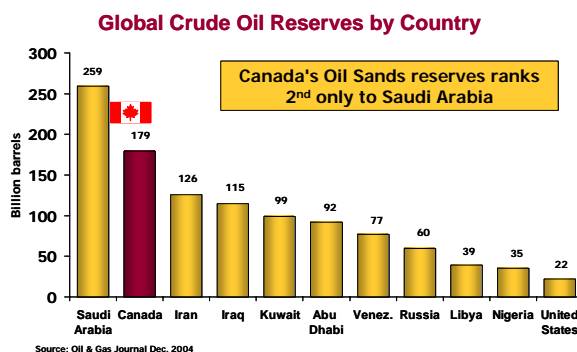
As conventional oil reserves continue to mature in Western Canada, the share of production from oil sands will be of growing significance. Today, oil sands production accounts for one out of every two barrels of supply in Western Canada. By 2015, the oil sands share of production will rise to three out of every four barrels.



## Does Alberta have sufficient oil reserves for future generations?

Alberta's oil sands reserves are estimated at 175 billion barrels deemed economically recoverable with today's technology. Those reserves place Canada second behind Saudi Arabia in the world ranking of crude oil reserves by country.

At current production levels, reserves will sustain production of 2.5 million b/d for over 200 years.



## How much will be invested in Canada to develop the oil sands?

Alberta's first oil sands leases were issued in the late 1950s and today oil sands leases are owned by numerous companies that are actively producing or in planning production.

Over the last 10 years, oil sands investment far surpassed earlier projections. The CERI study assumes \$100 billion in investment over the 2000-2020 period, a level that is generally consistent with CAPP's forecasts. From 1996 to 2004, total oil sands investment was \$36 billion and CAPP forecasts a further \$45 billion of investment by 2015.

## Planned Oil Sands Projects



Syncrude	✗	Suncor	✗
Canadian Natural	✗	Albian	✗
ExxonMobil	✗	SynEnCo	✗
Total (Deer Creek)	✗	Opti/Nexen	✗
PetroCanada	✗	Devon	✗
Japan Can. Oil S.	✗	EnCana	✗
Conoco	✗	UTS/P-C	✗
Imperial Oil	✗	Shell	✗
Husky	✗	Petrobank	✗
EnCana	✗	Murphy	✗
✗	✗	Denoted Mining Projects	

- \$36 billion built from 1996-2004
- Expect \$45 billion new oil sands projects 2005-2015

## Is there sufficient capacity for all these new oil sands projects?

Numerous companies hold leases and many are actively planning greenfield projects. However, total oil sands production growth is also based on a number of major expansions to existing projects.

Project expansions do not require the same level of resources to develop as new projects because they benefit from economies associated with building onto an existing infrastructure and facilities.

Over the next 10 years, a significant portion of the future production actually comes from expansions of projects such as Suncor, Syncrude and Shell Albian. As such, not all the oil sands future activity involves building grassroots projects.

## Are production and supply costs competitive?

Oil sands supply costs vary with the type of production process. In the late 1980s and early 1990s, companies rationalized their production processes in response to lower world oil prices of the 1980s.

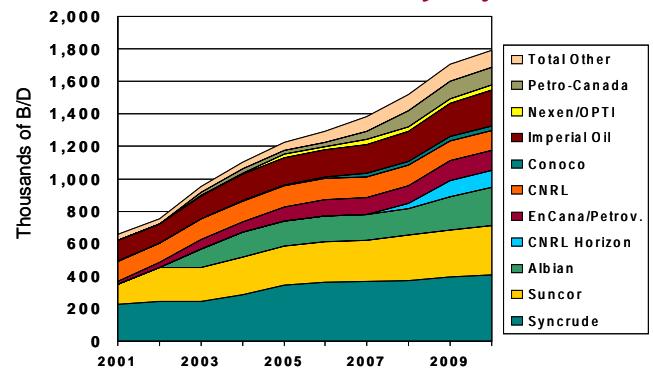
Oil sands production costs are competitive with rival sources of supply, such as deep-water offshore developments. A number of recent advances in oil sands technology are expected to further reduce costs as development matures.

## Are lower production costs the main reason for the investment?

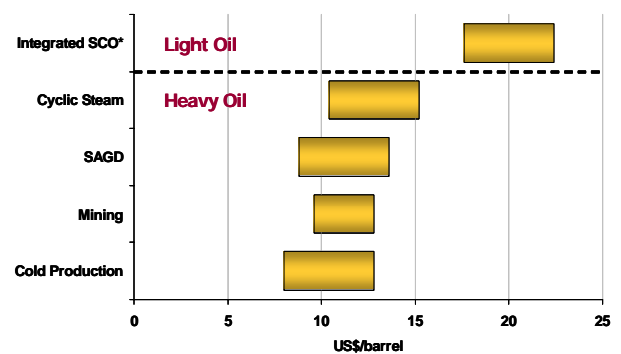
Lower production costs have been an important factor driving investment. However, in 1996, the Federal and Alberta governments established generic oil sands fiscal terms to make oil sands investment more competitive with oil developments elsewhere in the world.

Investment dollars for oil sands projects compete with projects in areas like the U.S. Gulf of Mexico or the west coast of Africa. Governments' vision to develop a royalty and tax regime that provides long-term fiscal certainty is a key factor that supports the current oil sands growth forecasts.

**Oil Sands Production by Project**

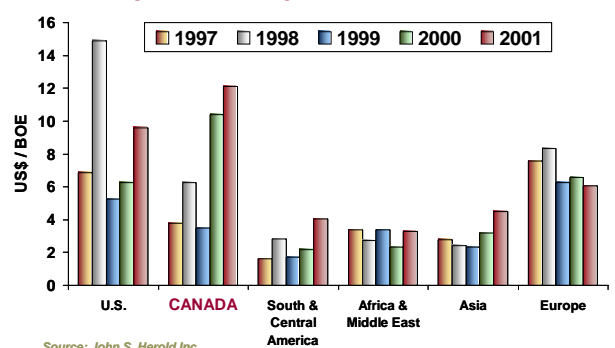


**Oil Sands Supply Costs by Recovery Type**



\* Surface mining, extraction & upgrading  
Source: NEB Based on C\$2003 converted @ US\$0.80/C\$.

**Regional Finding and Development Costs**



Source: John S. Harold Inc.

## How does Alberta’s oil sands development impact the rest of Canada?

Developing Alberta’s oil sands provides benefits for all of Canada. The goods, materials and services used to construct and operate in-situ oil sands projects, mines and upgraders come from across Canada. Many of the components —, such as tires, trucks, gauges, valves, pumps, etc. — are produced in the industrial regions of Eastern Canada.

The CERI study provides a comprehensive analysis of these benefits and measures these impacts in terms of dollars and jobs. Using expected investment profiles, the study measures impacts based on:

- gross domestic product;
- employment and labour income; and
- revenues to government.

Much of the analysis includes assessing these benefits on a relative basis. The impact is measured in not only millions or billions of dollars, but also as the percentage of the impact. For example, the study found 44 percent of the employment generated by oil sands investment is outside of Alberta, with 16 per cent of the jobs in Ontario.

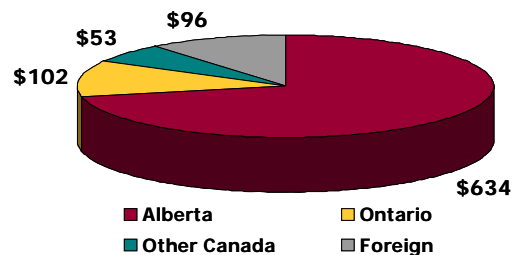
## Do governments outside Alberta receive benefits from oil sands?

A large portion of the economic spinoffs from oil sands development relates to employment that is generated outside Alberta. The impact of the income associated with people who make the materials, goods and services used by the oil sands sector generates significant taxes to other governments in Canada.

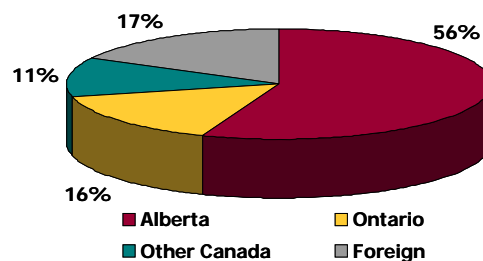
The CERI study shows the largest percentage of the government revenue (taxes and royalties) accrues to the Federal Government, not Alberta. Over the 20-year study period, CERI estimates the total government revenues at \$123 billion dollars (income tax, royalties, corporate tax, provincial sales tax, GST, property tax, etc.) as a result of investment and development in oil sands.

The government shares of the revenues are: federal 41%, Alberta 36%, and other governments and municipalities combined 23%.

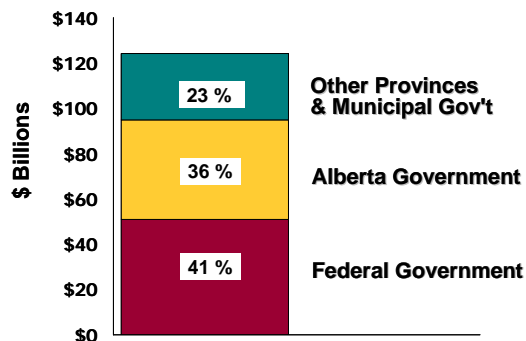
**GDP Activity Distribution (\$ Billions)**



**Employment Impact Distribution**



**Government Revenue Distribution**



## Shouldn't Alberta receive the largest share of the government revenue?

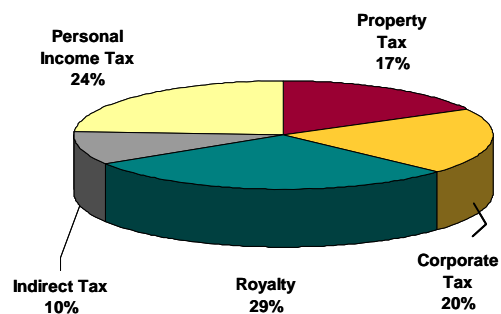
Over the 20-year time horizon of the CERI study, the impact of the employment multiplier effect from the incomes—and the goods and services the people purchase—generates substantial tax-related revenue, especially for the Federal Government. Alberta has a comparatively low overall tax structure (low tax rate, no provincial sales tax) which reduces Alberta's tax impact, of course, benefits Albertans.

## So Alberta receives most of its revenue through royalties not taxes?

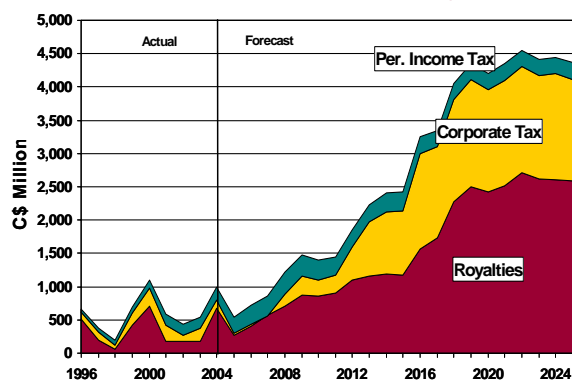
Alberta's primary source of revenue is royalties collected for the mineral rights owned by the province.

A study prepared by the Athabasca Regional Issues Working Group forecasts total oil sands related investment revenue in Alberta at \$58 billion (assumes US \$30 WTI) during the 2004-2025 period. The majority of this revenue is from royalties.

## Total Government Revenue Distribution



## Alberta Revenue Over 2004-25 is \$58 billion



Source: Regional Issues Working Group, Nichols Applied Management

## Conclusion

Alberta's oil sands sector is poised to experience significant growth over the next number of decades. The billions of dollars to be invested in oil sands and the economic and employment benefits that will result are important not only to the economic prosperity of Alberta, but all of Canada.

However, while the opportunity and benefits are large, there are a number challenges to be met in the months and years to come, if the full potential for oil sands development is to be realized.

- Infrastructure – Oil Sands development could be constrained because the pace of growth may exceed the underlying infrastructure related to roads, housing, municipal services, etc. The Alberta government, the Regional Municipality of Wood Buffalo and industry are discussing these issues. Hopefully, solutions will be forthcoming to overcome current constraints.
- Workforce - It is equally critical to ensure there is an adequate workforce of qualified trades, technical and professional people to support the construction and ongoing operations of the oil sands developments. Strong economic growth only compounds the issues that make it difficult to attract workers to Alberta and Ft. McMurray, in particular.
- New Markets and Pipelines - New oil sands supplies require new markets and pipelines to reach these markets. Pipeline projects require time to develop and construct. The market is responding to the looming transportation needs as several pipeline projects are proposed to deliver oil sands crudes to new markets, over the next five and 10 years.