



Conversations for
Responsible
Economic Development

What's fuelling BC's economy?

**Examining the role of the energy sector
in comparison with BC's other economic drivers**

Conversations for Responsible Economic Development - CRED BC

*Building informed discussion about long-term
prosperity on Canada's West Coast*

June 2014

About CRED

Conversations for Responsible Economic Development is a growing collection of professionals and business leaders from the tourism, real estate, tech, health, creative and other service-based sectors who are committed to participating in informed dialogue about long-term prosperity on Canada's west coast.

We love and value the west coast for its creativity, innovation, quality of life and unparalleled natural beauty. This is why we live, work and own businesses here. Our vision is for a prosperous and thriving region economy that safeguards our long-term wealth, the health of local communities, the natural beauty of the region and our "beautiful BC" brand. To us, this is true responsible development.

We believe there is a need for more information about the types of energy and resource development and transportation that are compatible with this vision. Through research and events, we hope to spur conversation about our long-term economic vision for the region – a dialogue that includes a wide range of industries. Where do we see the best opportunities for responsible development? What trade-offs are we willing to accept to create new jobs and grow our wealth? What risks are we unwilling to take? This report aims to contribute to that essential dialogue.

Businesses & organizations are invited to join the conversation at www.CredBC.ca/add-your-name

Our advisers



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Our team



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WHAT'S FUELLING BC'S ECONOMY?

Introduction - why this conversation matters

Why does this conversation matter?

It's often said that British Columbia is a resource-based province. In actual fact, the reality is much more complex.

While it's true that much of BC was built on natural resources, and that even today sectors like technology and construction have a certain amount of inter-relationships with primary resource sectors, the basis of our economy has overwhelmingly shifted to service-based industries. More than four-fifths of us work in services and over 76% of our GDP now comes from those sectors, while just 3% comes from oil, gas and support services.¹ Over the past few decades, a quiet but monumental shift has been taking place.

Putting the energy sector into context

In order to decide whether energy development projects should go forward and, if so, what they should look like, it's essential to have a good understanding of where the sector fits into the bigger economic picture. Of course we know that energy is important to Canada, but how important? In what ways? Is it more or less important than other sectors, and how does it affect other parts of the economy?

This last question is really the crux of the matter - analysis isn't useful in isolation. Instead, it's important to understand whether one sector is growing more quickly or slowly in comparison to others, creating more or fewer jobs, and contributing more or less to our wealth.

Much is made by industry proponents of multiplier effects and how the growth of one sector, for example energy, will also lead to positive knock-on effects in other sectors. This is undoubtedly true - an increase in GDP in any one sector will generally have positive multiplier effects - but it's not the real question: instead, we should be asking if a boost in the energy sector will increase the rest of the economy more or less than a boost to say, the high tech sector. And, additionally, what are the knock-on secondary effects on other sectors and are they being counted?

While this report doesn't attempt to make complex assessments of multiplier effects for different sectors in BC, or indeed measure the complex inter-relationships between sectors, it does aim to share some basic information about GDP, tax revenues, job creation and future trends that can begin to put the energy sector into context alongside other sectors in BC. We hope that it will be the beginning of further, more in-depth analysis of this important issue.

Report compiled by Liz McDowell

WHAT'S FUELLING BC'S ECONOMY?

Sources of wealth and growth

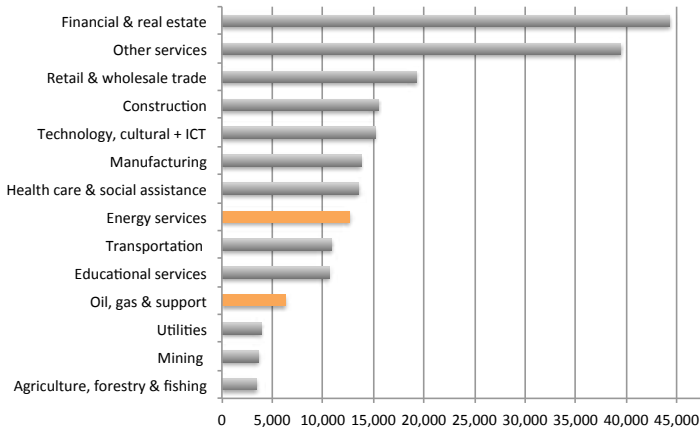
Where does our wealth come from?

When GDP figures for British Columbia are broken down by industry, financial and real estate services make the largest contribution to provincial wealth - more than 23% of GDP. Retail and wholesale trade make up 10% of our GDP, construction makes up 8% and manufacturing contributes a further 7%.

By contrast, oil, gas and support services make up just 3% of BC's GDP. When secondary energy services, including renewables, are added into the equation, the total contribution to provincial GDP only rises to 11%.²

2012 British Columbia GDP contribution by sector

In millions of chained 2007 dollars



Energy in the national context

Across Canada, the numbers are similar. The oil sands make up just 2% of Canada's GDP and when conventional oil & gas extraction is added in, the total rises to only 6% of our wealth, a proportion that has actually fallen in recent years.³

While these numbers are still significant, they make it clear that the oil and gas sector is certainly not one of the biggest sectors in BC or even in Canada.

Which sectors are fuelling future growth?

Future trends by sector

A survey of the high tech sector carried out in 2012 by consulting firm KMPG gave an overview of which industries are growing and which are shrinking in BC.⁴

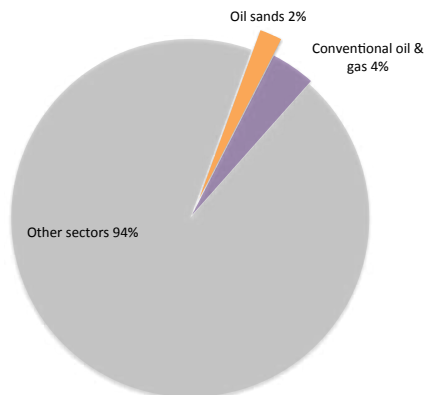
According to their research, the sectors showing the most growth are:

- Construction
- High tech
- Finance and real estate
- Retail trade
- Professional, scientific and technical services,

And the sectors that are shrinking in size are forestry, mining, oil & gas, and manufacturing. The BC government's 2013 Small Business Profile echoed these findings.⁵

These trends indicate that there's a lot of future potential in service-based and other value-added sectors, and not much in the extractive industries. It should be noted, however, that if the BC government's plan to significantly expand LNG production is successful, this might slow the rate at which the oil and gas sector's economic importance is shrinking.

Oil & gas sector contribution to Canada's GDP



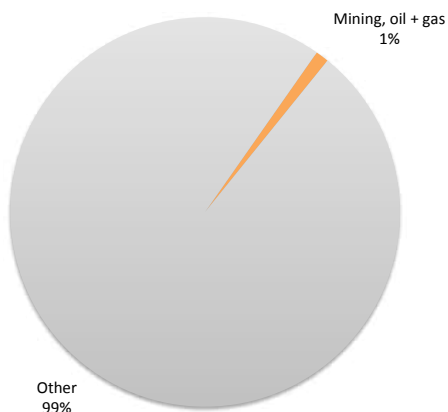
WHAT'S FUELLING BC'S ECONOMY?

Sources of jobs and tax revenues

Where are the jobs?

Across the province, the mining, oil and gas sector combined employs just 1% of the workforce, or approximately 25,000 people. ⁶

Percentage of BC workforce in oil, mining & gas, 2012



In comparison, the province's biggest employers are:

- Construction – 205,000 jobs
- Manufacturing – 164,000 jobs
- Tourism – 127,000 jobs
- Real estate & property development – 121,000 jobs ⁷

The film sector adds an additional 36,000 jobs and the high tech sector employs 84,000 people – more than oil, mining, gas and forestry combined.

Across Canada, the numbers are relatively similar. The industrial sectors that employed the most people in 2011 were retail trade, health and social assistance and manufacturing, with more than 11% of Canadians working in retail trade. ⁸

By comparison, less than 1% of Canadians work in the oil sands. According to the Canadian Association of Petroleum Producers, 112,000 people are employed directly and indirectly in the oil sands, out of a total Canadian workforce of approximately 17.9m people. ⁹

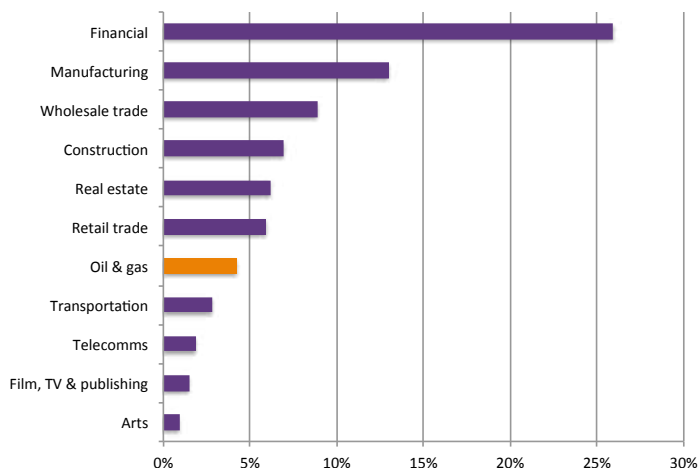
Who contributes the most to social spending?

Although BC Stats doesn't gather data on the tax contributions of different sectors at a provincial level, StatsCan does make this information available on a national level.

In total, the oil and gas sector, that is oil sands plus conventional oil and gas, contributed 4.2% of all corporate taxes in 2011. Compared to financial services (25%) and manufacturing (13%) this number is relatively low. ¹⁰ It is also significantly smaller than the proportion of federal corporate taxes paid by the oil & gas sector in 2006 of 9.4%. ¹¹

Particularly considering that the manufacturing sector is widely reported to be struggling and has decreased in size significantly over the past decade, manufacturing businesses contribute much more towards social spending for big ticket items like schools and hospitals than the energy sector as a whole.

Federal corporate tax revenues, 2011



WHAT'S FUELLING BC'S ECONOMY?

Trends across Northern BC

What are the trends in Northern BC?

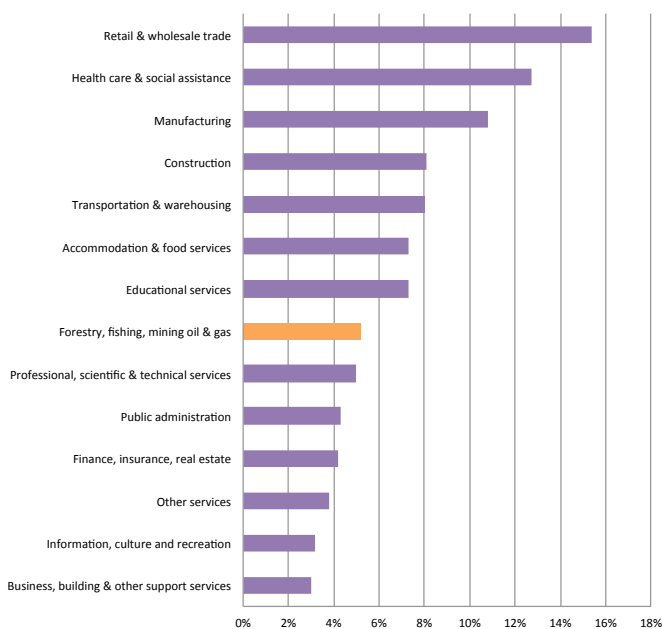
Where are the jobs?

Around one in ten employed people in BC work in manufacturing, and about the same proportion holds true in the Northeast, Cariboo, and North Coast & Nechako regions. The majority of those manufacturing jobs are value-added services including wood products, paper and metal.

As it turns out, primary resource jobs play a fairly small role. Within this, the extractive industries (oil, mining and gas) play an even more marginal role.

In Prince George and the surrounding Cariboo region, only 5.2% of the population works in primary resources – that's fishing, forestry, mining, oil and gas combined. And until the rise of pine beetle infestation and softwood lumber disputes, those were mostly forestry jobs.¹²

Cariboo Region - jobs breakdown by industry 2011



What is driving growth?

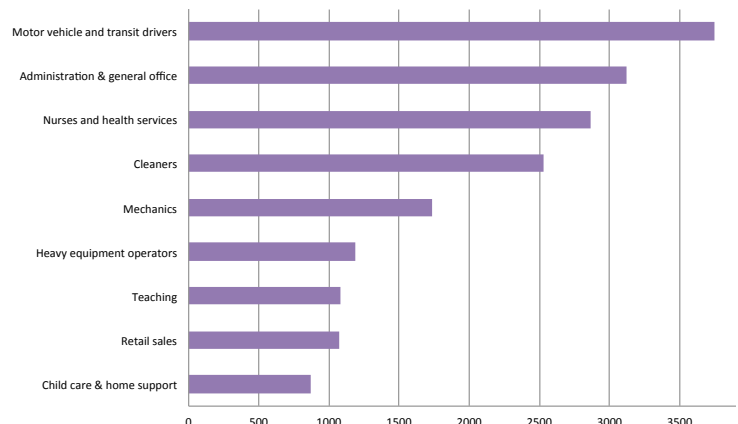
Across BC, educational and health related jobs are expected to see the biggest growth in demand over the next few years as labour markets adapt to an aging population and other demographic changes. These predictions also apply to northern communities.

In the Northeast, North Coast & Nechako and Cariboo, the careers with the highest number of expected job openings between now and 2020 are bus and other motor vehicle driving, administration and office work, nursing and cleaning. Across the three regions, demand for workers in the oil, mining and gas sectors is expected to grow at a roughly equal pace to the average.

Boom and bust

An important dimension of the job markets in these three regions is their cyclical nature of growth and retreat. Across Northern BC, labour market shortages (not enough workers to meet demand) are expected for part of the decade, along with other periods of excess labour market supply (more workers than jobs) as large infrastructure projects wrap up. For example, in the Cariboo region the demand for workers is expected to exceed supply from 2011-2020.

Expected job openings in northern BC (2010-2020)



WHAT'S FUELLING BC'S ECONOMY?

Industry snapshots

Industry snapshots

This report closes by profiling a few sectors that we expect will play an important role in future economic development in British Columbia. Some, like the high tech and tourism sector, are already well established while others, like clean tech, are still emerging and demonstrate significant potential.

High tech sector

- Employs over 84,000 people— more than forestry, mining, oil & gas, and utilities combined
- Contributes \$15.5 billion annually to provincial GDP (5.9% of total GDP)
- One of BC's fastest-growing sectors, with an increase of around 38% between 2002-2009
- Currently represents 10% of BC's exports
- Average wages in the sector: \$63,000
- Starting salary for a web developer: \$80,000¹³



In addition, the high tech sector in BC shows a tremendous opportunity for growth. At the moment, it is under-performing both globally and within Canada, mostly due to a lack of investment. If the sector performed on par with the Canadian average, it would contribute \$2.5 billion a year more to provincial GDP and create 23,000 more jobs.¹⁴

Green jobs

The BC government defines this industry as including clean energy supply & storage, clean transportation, green building and energy efficiency. Together the industry was responsible for 123,000 jobs and \$15 billion in GDP in 2011. Public policies and programs have supported recent growth; however, the sector is still new and vulnerable to risk – barriers include trouble finding skilled workers and lack of investment capital. The emerging clean tech sector, in particular, is limited by a lack of capital.¹⁵

Tourism sector

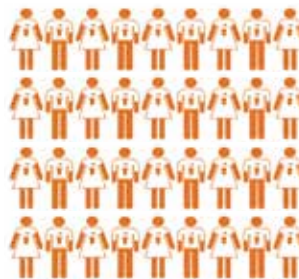
The tourism sector is one of the biggest employers in British Columbia, with over 127,000 jobs - five times more than the oil and gas sector. In 2012, it was responsible for \$7.58 billion of provincial GDP.¹⁶ It is arguably also the sector that has the most to lose from increased extractive industry development, as areas with high mining, oil and gas development tend to experience a trade-off of lower tourism revenues.

The beer sector

In 2013, the Conference Board of Canada released a report showing that the 'beer economy' represents more than 1% of all jobs in Canada, supporting 163,200 people. The sector includes brewers, distributors, retail sales, transportation and wholesale distribution, and agricultural products. When direct and indirect employment effects are taken into consideration for both sectors, more people are employed by the beer sector than in the oil sands.

Although oil and gas jobs may be more highly paid on average, these jobs are likely to be more geographically distributed and more accessible to new workers, students and people needing part-time work.

Beer vs. oil



163,000 jobs
Beer economy



112,000 jobs
Oil sands economy

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Concluding thoughts

Conclusion

As BC's economy experiences rapid growth in service and knowledge-based sectors, businesses that specialize in everything from whale watching to mobile app development are fast gaining importance. Although primary resource industries have historically been a core part of the provincial economy, the sector as a whole is no longer the main source of wealth for British Columbians. Within this, extractive industries - oil, mining and gas - play an even smaller role in contributing to jobs, tax revenues or GDP, both in southern BC and in northern communities. Instead, the province's main economic drivers are now based around innovation, creativity and the knowledge economy.

As a result, any decisions about extractive industry development must consider the full economic impacts - both costs and benefits - with particular consideration to emerging and rapidly growing industries that generate good, lasting jobs for British Columbians and contribute meaningfully to our province's wealth.

SOURCES AND END NOTES

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2. Source taken from the same data table as above
3. From Statistics Canada CANSIM table 379-0031 considering NCAIS sectors 211114 (unconventional oil & gas extraction) and 211113 (conventional oil & gas extraction) in 2007 chained dollars. Data can be downloaded from <http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=3790031&paSer=&pattern=&stByVal=1&p1=1&p2=31&tabMode=dataTable&csid=>
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10. Data taken from Statistic Canada CANSIM table 180-0003
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16. Data on tourism jobs taken from the BC Tourism and High Technology Satellite accounts <http://www.bcstats.gov.bc.ca/StatisticsBySubject/Economy/EconomicAccounts/SatelliteAccounts.aspx>
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18. Report from the Conference Board of Canada November 2013: "From Farm to Glass: The Value of Beer in Canada" http://www.conferenceboard.ca/press/newsrelease/13-11-05/beer_industry_boosts_the_canadian_economy.aspx



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