

The Engineering Construction Sector in Alberta

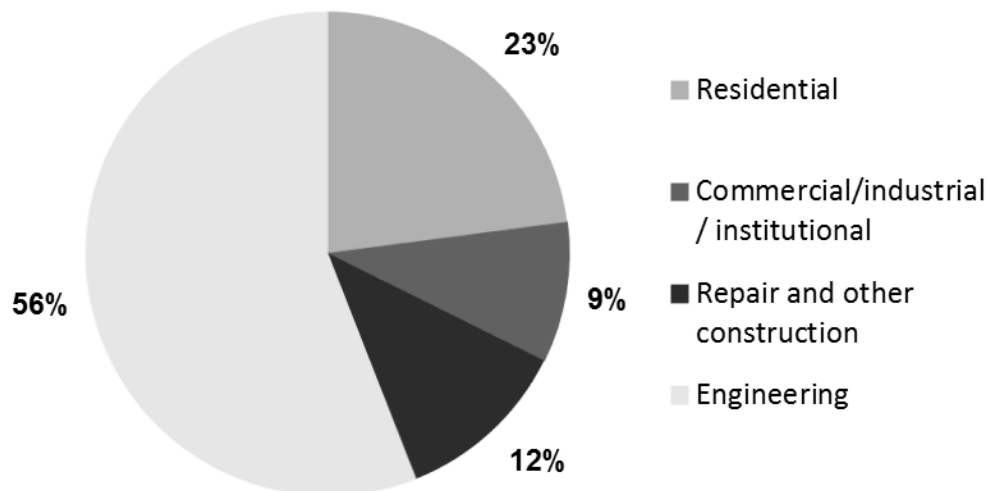
BUILDING ALBERTA'S ECONOMY

'Engineering construction'¹ is the sector in which major plant construction occurs, as well as vital infrastructure such as highways and bridges. This sector accounts directly for about 5.5% of the Alberta economy. More importantly, the large industrial plants being constructed enable the production, upgrading, refining and delivery to market of Canada's most valuable export product – i.e. enables economic activity that – directly and indirectly – originates over 60 percent of Alberta's GDP.²

Within Alberta's engineering construction sector, oil and gas engineering construction (i.e. major plants in the oil sands plus oil wells in conventional fields) accounts for 70% of this sector's GDP, followed by electric power engineering construction at 14% and transportation engineering construction at 8%.

Engineering construction is Alberta's largest construction sub-sector, accounting for 56% of total construction output, as shown in Chart 1, and over 50% of total construction employment.

Chart 1
Construction GDP Shares by Sector in 2013



From a national perspective, Alberta's construction sector is the second largest provincial construction sector - only Ontario's is larger. In 2013, Alberta accounted for about 18% of Canadian GDP but a much higher 26% of Canadian construction output. This is largely driven by the engineering construction sub-sector which accounts for 34% of Canada's engineering construction GDP.

¹ The engineering construction sector comprises establishments whose primary activity is the construction of entire engineering projects (e.g. highways and oil sands projects), and specialty trade contractors, whose primary activity is the production of a specific component for such projects

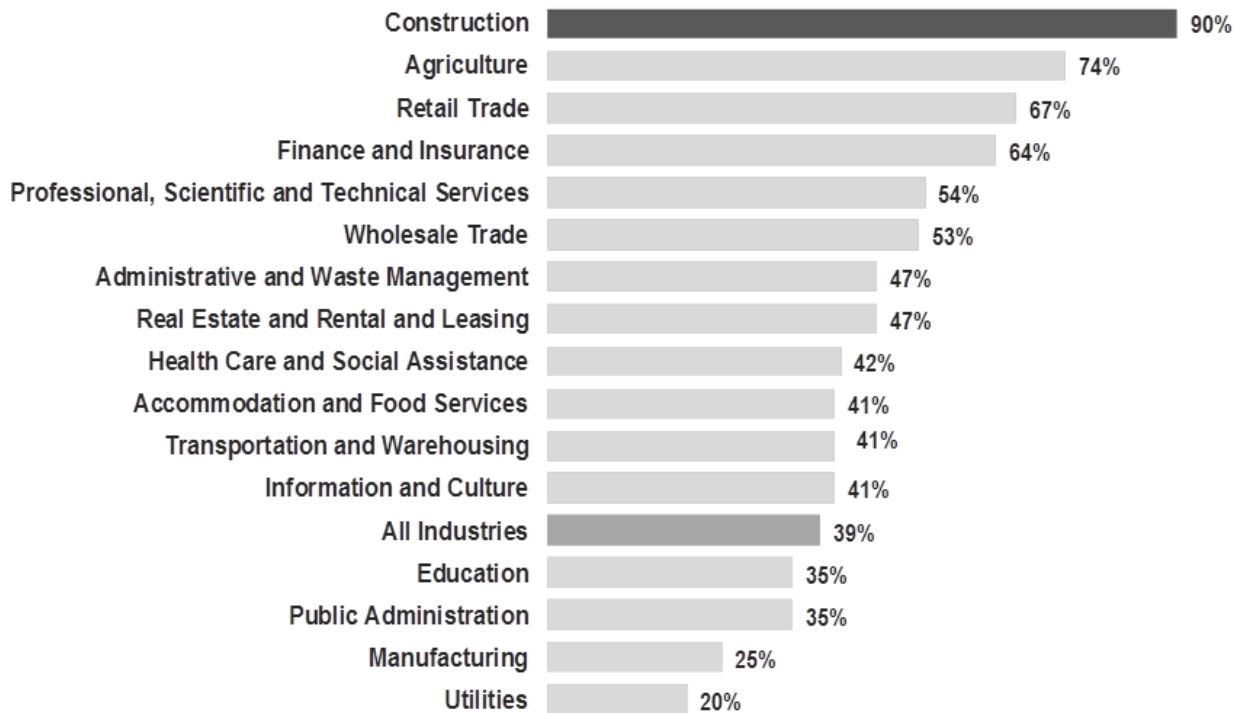
² Task Force on Resource Development + The Economy, Alberta Chamber of Resources

OUTPUT GROWTH

Between 2003 and 2013, engineering construction was one of the fastest growing sectors in the province with output growth of 116%, compared with a 39% increase in overall Alberta GDP. This is surprising, considering that this sector was hard-hit by the global economic crisis in 2009 (sectoral GDP fell 35%), but a strong rebound yielded a large net gain (sectoral GDP rose 81% between 2009 and 2013).

Chart 2

Alberta GDP Growth by Industry



Different sub-sectors drive growth at different times: oil and gas engineering construction GDP increased by 92% between 2003 and 2013 (including crisis and rebound); over the same period, GDP in the electric power engineering construction sub-sector more than quintupled. In 2013, oil and gas construction investment reached a record high of \$47.6 billion, while construction investment in electric power nearly doubled between 2012 and 2013 to \$5.0 billion. Based on a Statistics Canada survey on investment intentions, oil and gas construction investment is expected to reach \$49.3 billion in 2014 while electric power investment could fall to \$3.8 billion.

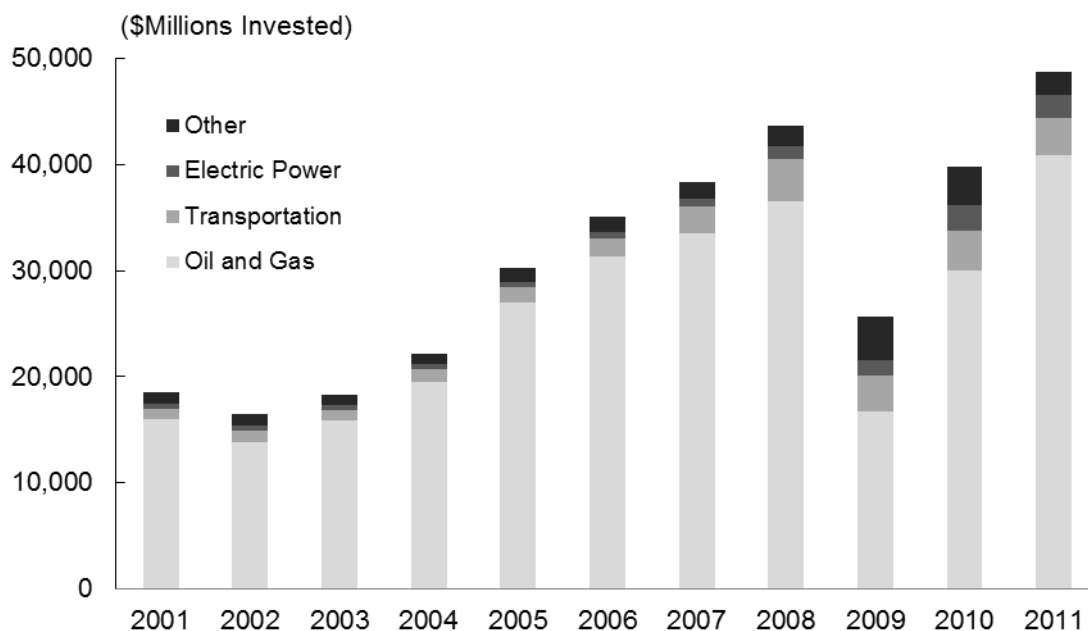
The Conference Board of Canada in its latest forecast for Alberta expects strong growth in energy investment spending between 2015 and 2017, averaging 9% per year.

REVENUE GROWTH

In 2011, revenues in the engineering construction sub-sector totaled about \$49 billion, with about 75% attributed to oil and gas engineering construction. The growth history is illustrated in Chart 3.

The two largest expenditure categories for oil and gas engineering are drilling of development wells and construction of (mainly oil sands) production facilities, at about \$15 billion each in 2011. Other sizeable categories include: exploration drilling; drilling, pre-mining, research; oil and gas pipelines; natural gas processing plants; geological and geophysical expenditures.

Chart 3
Capital Expenditures on Engineering Construction



Source: Statistics Canada

EMPLOYMENT GROWTH

In 2012, the entire construction sector employed about 264,000³. Between 2003 and 2008, the number of employees in Alberta's engineering construction sector grew by more than 60% to 142,295. The economic crisis triggered a decline of more than 34,000 in 2009, rebounding to 147,565 in 2012. The decline in 2009 was experienced most strongly in oil and gas engineering construction, where the sub-sector decline was 47,000 workers (offset by gains in other sub-sectors to yield the net of 34,000). In 2013, employment again grew strongly in the overall construction sector, by about 20,000 from 2012.

³ Note: this estimate includes construction workers that are on the payrolls of companies that are not part of the construction industry, e.g. workers that perform own-account construction work in the manufacturing sector