

# Alberta's International Exports by Industry A 10-Year Review, 2005 to 2015

May 17, 2016

## Highlights:

Between 2005 and 2015, Alberta's international merchandise exports rose 21% to \$92.3 billion. By comparison, Alberta exports rose 91% between 2004 and 2014. The much lower 10-year growth rate for 2015 is the result of sharply lower oil and gas prices in 2015.

## Overview

In 2015, the value of Alberta's merchandise exports declined by 24% from 2014 to \$92.3 billion. This steep decline can be traced back to slumping oil and gas prices: export prices of both crude oil and natural gas fell 38% in 2015. Alberta accounted for 19% of Canadian exports in 2015, down from a 25% share in 2014.

Because of the 2015 decline, Alberta exports grew by only 21% between 2005 and 2015, compared to a 91% increase between 2004 and 2014. Exports by the rest of Canada (i.e. Canada excluding Alberta) increased 17% between 2005 and 2015. Although the export value of crude oil dropped sharply in 2015, most of the export growth over the 10-year period was the result of a 114% jump in mining and oil and gas exports (Chart 1). The value of crude oil, which accounts for more than one-half of Alberta exports (Chart 2), jumped 154% because of a 132% increase in oil volumes between 2005 and 2015.

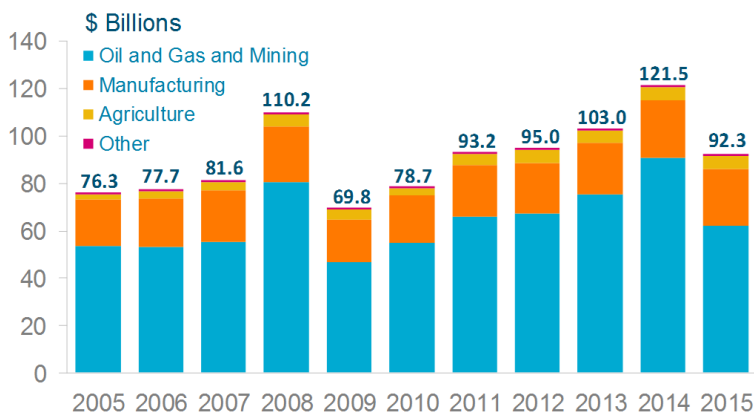
While natural gas was the largest export commodity in 2005, its exports fell sharply by 74% between 2005 and 2015 (Chart 3) as export volumes fell by 31% and prices by 63%.

Manufacturing exports grew by 21% between 2005 and 2015, and the agricultural sector<sup>1</sup> led all sectors with growth of 158%.

## Export Volumes

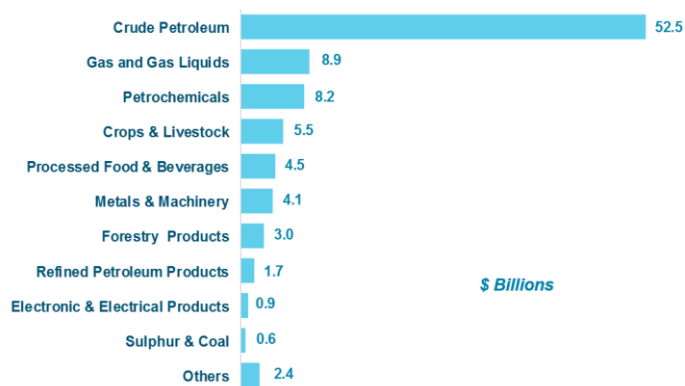
Even though the value of exports rose only 21% between 2005 and 2015, total export volumes rose sharply by an estimated 44%<sup>2</sup> as overall export prices were lower in 2015 than in 2005. This export price decline was mostly the result of the 63% decline in natural gas prices over the 10-year period. The value of exports of oil and gas and gas

**Chart 1**  
Alberta's Goods Exports between 2005 and 2015



Sources: Statistics Canada and Alberta Economic Development and Trade

**Chart 2**  
Alberta's Major Exports in 2015  
Total Commodity Exports: \$92.3 Billion



Sources: Statistics Canada and Alberta Economic Development and Trade

<sup>1</sup> This is the primary agricultural sector and does not include processed agri-foods.

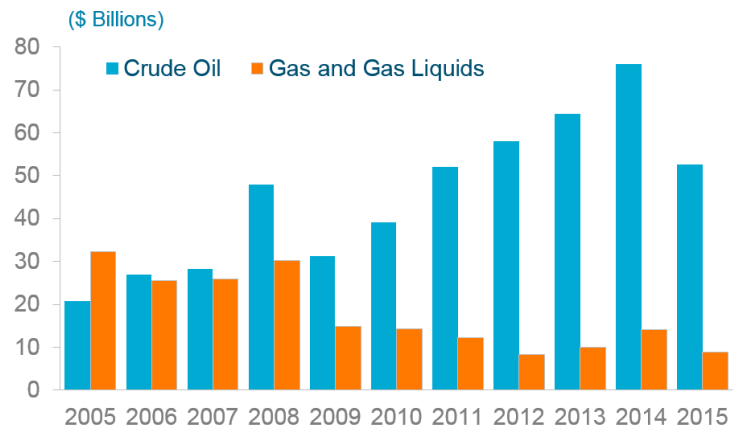
<sup>2</sup> Growth in export volumes was derived by 1) multiplying the 2005 export volumes for individual commodities by their 2015 price levels, 2) summing up the re-estimated values for 2005 for these commodities, and 3) dividing the sum of the 2015 values by the re-estimated 2005 value.

liquids rose 16% and volumes rose 74% during that time period driven by 132% surge in crude oil volumes as a result of the huge production increase in the oil sands region. When we exclude oil and gas, export volumes for non-energy commodities rose only 8%. Export volumes of agricultural products, such as wheat, canola and cattle, rose 50% between 2005 and 2015. However, although the manufacturing sector saw the value of its exports rise 21% over the 10-year period, most of that increase was the result of higher prices as export volumes rose only 2%.

### Mining and Oil and Gas<sup>3</sup>

Mining and oil and gas commodities account for the largest share of Alberta exports – this sector's share ranged from a low of 52% in 1998 (when crude oil and natural gas prices were low) to a high of 75% in 2014 when both oil and gas prices were relatively high for most of the year and crude oil volumes reached record levels. In 2015, its share fell to 67% as a result of the sharp price declines for oil and gas (although crude oil volumes had another record setting year). Mining and oil and gas exports totaled \$62.1 billion, a 31.7% decrease from the previous year, and the lowest export value since 2010.

**Chart 3**  
**Alberta's Oil and Gas Exports between 2005 and 2015**



Sources: Statistics Canada and Alberta Economic Development and Trade

Even though the value of crude oil exports fell by 31% in 2015 these exports still rose 154% between 2005 and 2015 to \$52.5 billion. Oil volumes increased 133% over that period, with most of the volume growth coming from rising oil sands production. Oil export volumes have surged by 74% in the past five years as both conventional oil and oil sands production have increased. Oil prices peaked in 2008 and have fallen since then, declining by 38% in 2015, but were still 9% higher in 2015 than they were in 2005. Crude oil has been Alberta's largest export commodity since 2006 and in 2015 accounted for 57% of Alberta's merchandise exports.

Much of the volume growth for crude oil came from rising in-situ (or SAGD) oil sands production. Between 2005 and 2015 in-situ bitumen production more than tripled and now exceeds oil production from mining operations. Production of bitumen and synthetic crude oil from mining operations increased by more than two-thirds over the same period.

Prior to 2006, natural gas and gas liquids<sup>4</sup> were Alberta's top export commodity as a result of rising prices and volumes. However, since 2005 volumes of gas and gas liquids have fallen by 31% as

<sup>3</sup> The mining and oil and gas sector is dominated by energy commodities, such as crude oil, gas and gas liquids, coal and electricity, but also includes a few non-energy commodities such as peat and sulphur.

<sup>4</sup> Gas liquids include propane, butanes and other liquefied petroleum gases.

Alberta's conventional natural gas reserves are decreasing while prices fell by 60% during that period because of the US' huge shale gas reserves which have had a downward impact on prices. Between 2005 and 2015, the value of gas and gas liquids exports declined by 72% from \$32.2 billion in 2005 to \$8.9 billion in 2015. Natural gas exports totaled \$8.0 billion in 2015, down 75% from 2005: volumes fell by 31% during that period, while gas prices were about 63% lower in 2015 than in 2005. Exports of propane declined by 38% to \$789 million: volumes fell 4% between 2005 and 2015 and prices dropped by 35%.

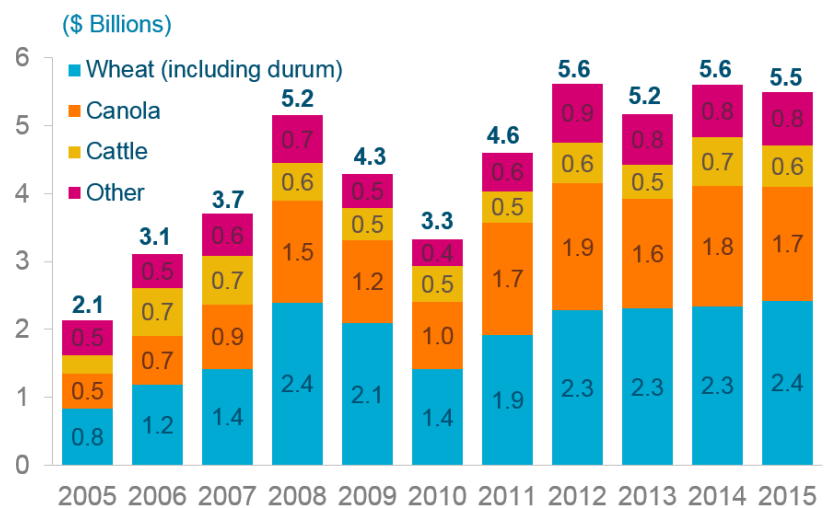
Other mining and oil and gas exports include sulphur and coal. Sulphur exports totaled \$303 million in 2015, 31% less than the 2005 value of \$437 million, and well below 2008's peak of \$1.9 billion. The value of coal exports rose until 2011 to a record level of \$886 million (up from \$198 million in 2005), as a result of rising international bituminous coal prices and strong growth in export volumes, before declining to \$290 million in 2015 as prices and volumes declined.

The main destination of Alberta mining and oil and gas commodities is the US, which accounted for 99% of energy exports in 2015, as virtually all oil and gas is shipped to the US. Nevertheless, exports to other destinations totaled about \$526 million in 2015, as exports of coal and sulphur are destined primarily for non-US markets, such as Japan, South Korea, China and Australia, and \$107 million of crude oil was exported to China.

### Primary Agriculture

Over the past 10 years, exports of unprocessed agricultural products rose 158% to \$5.5 billion, as a result of higher prices for crops and cattle and a doubling of wheat and canola volumes. In 2015, crops accounted for 86% of primary agricultural exports and live animals for 14%. Wheat was Alberta's largest agricultural export at \$2.1 billion in 2015 (Chart 4), followed by canola (\$1.7 billion), live cattle (\$584 million), durum wheat (\$271 million) and barley (\$193 million).

**Chart 4**  
**Alberta's Agricultural Exports between 2005 and 2015**



Sources: Statistics Canada and Alberta Economic Development and Trade

Crop exports rose 175% between 2005 and 2015 to \$4.7 billion. The value of crop exports is heavily influenced by local weather conditions and global prices (influenced by rising demand from emerging markets and for bio-fuels). Exports of wheat (excluding durum wheat) rose 215% over that period to \$2.1 billion and canola exports rose 242% to \$1.7 billion – both as a result of higher

prices and volumes. Other crops, such as peas, beans, barley and flaxseed, also had strong export growth.

The value of livestock exports was highly volatile over the past decade, influenced by the BSE disease and mandatory Country of Origin Labelling regulations in the US. Livestock exports rose from \$410 million in 2005 to \$911 million in 2014, but fell to \$773 million in 2015. Live cattle exports reached \$608 million in 2015, compared with only \$273 million in 2005 because of the after-effects of BSE which seriously reduced cattle exports from 2003 to 2005. The value of hogs fell by 23% mainly because of a decline in the average weight per hog.

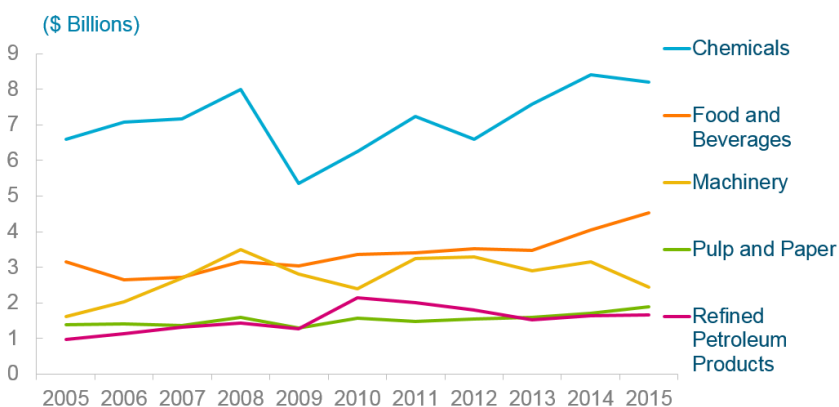
The largest market for Alberta's agricultural products is the US, which accounted for 24% of exports in 2015. Other large customers include China (18% in 2015), Japan (11%) and Mexico (6%).

### Manufacturing

After falling sharply in 2009, manufacturing exports rebounded by 34% between 2009 and 2015 to \$23.9 billion and exceeded the 2005 level by 21%.

The chemical sector has maintained its number one spot throughout the entire period (Chart 5) and food and beverages ranked second for most of the 11 years.

**Chart 5**  
**Alberta's Manufacturing Exports – Major Sectors**



Sources: Statistics Canada and Alberta Economic Development and Trade

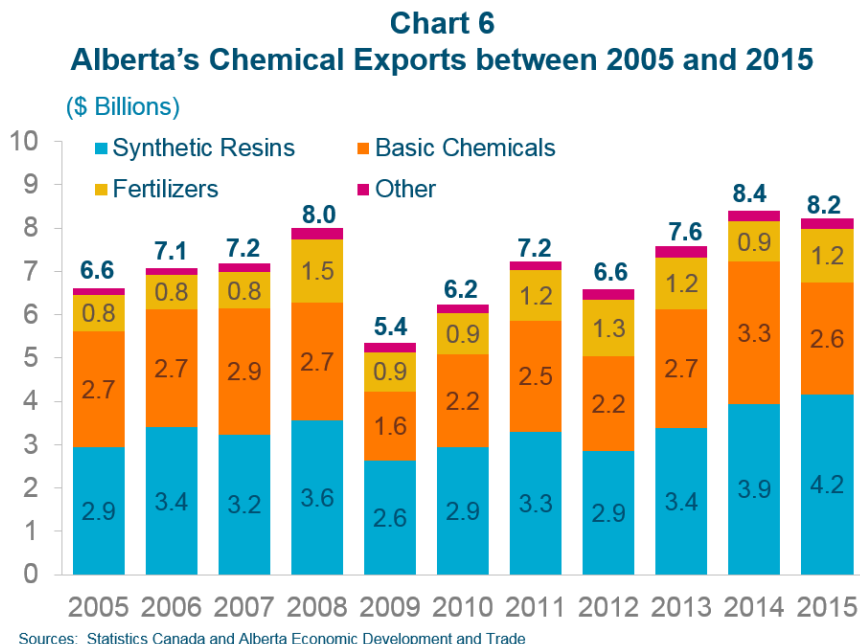
### Chemicals

Starting in 2001 chemicals became Alberta's top manufacturing sector on an export basis and has retained that position since then. Between 2005 and 2015 the chemicals sector accounted for roughly one-third of total manufacturing exports.

Exports of chemicals increased by 24% between 2005 and 2015 to \$8.2 billion. It is estimated that only about one-third of the \$1.6 billion increase in value over that period was the result of higher volumes and that higher prices accounted for two-thirds of the increase.

The largest sub-sector is synthetic resins and fibres (Chart 6), such as polyethylene, that accounted for more than half of chemical exports in 2015, followed by basic chemicals (petro-chemicals), such as ethylene glycol, with a 31% share, and fertilizers, such as anhydrous ammonia, with a 15% share.

Exports of synthetic resins rose 44% over the 2005 to 2015 period to \$4.2 billion as volumes increased 19% and prices rose about 22%. Export volumes rose strongly between 2005 and 2007, but have declined somewhat since then due to a shortage of ethane feedstock. The largest commodities in 2015 were polyethylene (\$1.4 billion) and other ethylene polymers (\$2.5 billion).



Exports of basic chemicals fell by 4% between 2005 and 2015: they rose 23% between 2005 and 2014 to \$3.3 billion as both prices and volumes increased; but tumbled 22% in 2015. The largest commodities in 2015 were ethylene glycol (\$1.3 billion), acyclic hydrocarbons (\$309 million) and styrene (\$270 million).

Exports of fertilizers rose 48% over the same period to \$1.2 billion, as a result of much higher prices; volumes fell close to 20%. The largest commodities in 2015 were anhydrous ammonia (\$751 million) and urea (\$335 million).

The main destination of Alberta chemicals is the US, which accounted for 84% of exports in 2015. Other large customers include China (10%) and Mexico (3%).

### Food and Beverages

Exports of processed food and beverages rose 44% between 2005 and 2015 to a record \$4.5 billion, as volumes fell by 7% during that period while prices increased by about 55%. Most of the export increase was registered during the past two years: they grew by 30% between 2013 and 2015 as exports to the US, Alberta's largest market for food and beverages, rose 49%. The strong appreciation of the US dollar against the Canadian dollar explains about one-half of this recent increase in exports to the US.

The largest sub-sector is meat products (Chart 7), which accounted for \$2.6 billion or 58% of food and beverage exports in 2015. Beef exports totaled \$1.6 billion in 2015, a 20% increase from the \$1.2 billion of 2014 as both volumes and prices were higher. Export values of beef rose 17% between 2005 and 2015 on higher prices. Pork exports were valued at \$468 million in 2015, virtually unchanged from both 2005 and 2014, as higher prices were offset by lower volumes.

The grain and oilseed milling sub-sector exported \$1.0 billion in 2015, a 90% increase from 2005, as both prices and volumes were higher in 2015 than in 2005. However, all of this growth occurred during the first half of that period when export values more than doubled. Exports were about 10% lower in 2015 than in 2010. Canola oil exports more than tripled between 2005 and 2012 to \$814 million

but have fallen sharply since then to an eight-year low of \$330 million in 2014 before bouncing back to \$435 million in 2015. Canola oil-cake and meal reached \$249 million in 2015 and malt \$238 million.

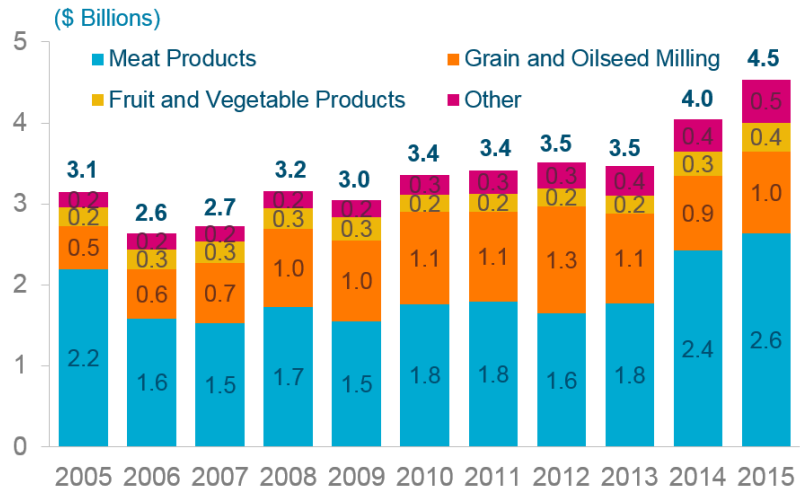
The main destination of Alberta food and beverages is the US, which accounted for 56% of exports in 2015, up from a 42% share in 2010. Other large customers include China (14%), Japan (11%), Mexico (5%) and South Korea (4%).

### Machinery

In Alberta, most of the machinery produced and exported is destined for the oil and gas fields. Therefore, this sector's performance is closely tied to oil and gas prices which in turn impact investment in machinery and equipment by the oil and gas sector. Exports of machinery nearly doubled between 2005 and 2014 but declined by 23% in 2015 to a five-year low as oil and gas producers are cutting back on

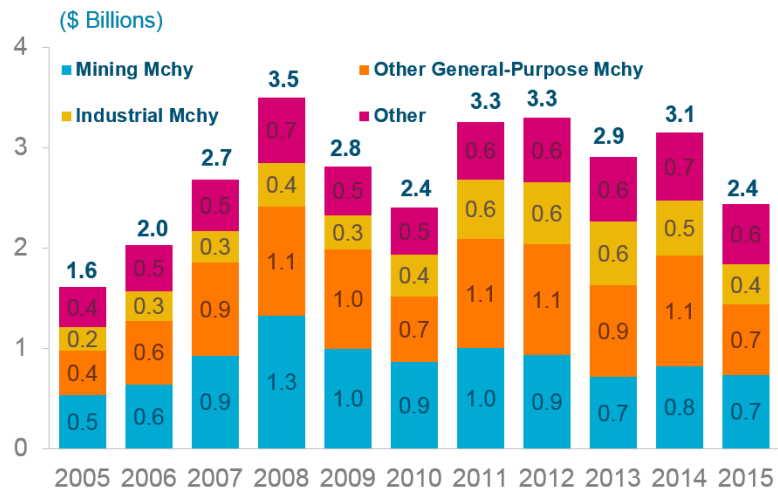
purchases of machinery and of services from oil and gas service companies which purchase drilling and exploration machinery. Machinery exports rose from \$1.6 billion in 2005 to \$2.4 billion in 2015.

**Chart 7**  
**Alberta's Food and Beverage Exports between 2005 and 2015**



Sources: Statistics Canada and Alberta Economic Development and Trade

**Chart 8**  
**Alberta's Machinery Exports between 2005 and 2015**



Sources: Statistics Canada and Alberta Economic Development and Trade

The largest sub-sector is mining machinery, which is dominated by oil and gas related machinery in Alberta. This sub-sector accounted for \$732 million in exports in 2015, down from \$821 million in 2013, but 38% higher than the \$531 million in 2005. The largest export commodity group is oil and gas field boring and sinking machinery (including parts) with a value of \$562 million in 2015, up from \$389 million in 2005. The next largest export commodity group is derricks and cranes including parts (\$106 million).

The second largest sub-sector in 2015 was general-purpose machinery with \$712 million in exports, a 59% increase from the 2005 value of \$449 million, but sharply lower than the \$1.1 billion that was exported in 2014. Oil field pumps and parts for pumps are the largest commodity group in this sub-sector with \$277 million in exports in 2015, down 46% from 2014, followed by lifting, handling, loading or unloading machinery including parts (such as well servicing rigs) at \$158 million, pulleys and tackles and parts therefore at \$138 million, and air and gas compressors at \$48 million.

Exports of industrial machinery totaled \$429 million in 2015, down from \$548 million in 2014, but 89% higher than the \$227 million that was exported in 2005. The largest commodity group is machines and mechanical appliances with individual functions, mainly oil and gas field wireline and down-hole equipment, with \$383 million in exports in 2015.

The main destination of Alberta machinery is the US, which accounted for 64% of exports in 2015. Other large customers include China and South Korea (3% each in 2015).

### **Paper Products and Wood Pulp**

Exports of paper and wood pulp increased by 36% between 2005 and 2015 to a record \$1.9 billion. This relatively large 10-year increase is the result of a 25% jump in pulp prices and increased volumes of wood pulp and newsprint. After falling by 18% in 2009 to a 12-year low because of the global recession, pulp and paper exports rose 46% between 2009 and 2015 on higher pulp prices and rising newsprint volumes.

The largest destination of Alberta pulp and paper is the US, which accounted for 53% of exports in 2015, followed by China (26%), Japan (9%) and South Korea (5%). Exports to the US increased by 32% over the 2005 to 2015 time period; exports to China more than quadrupled; exports to Japan were stable; and exports to South Korea fell by almost one-half.

The largest export commodity group is wood pulp, with a value of \$1.7 billion in 2015, up from \$1.2 billion in 2005. During that time period, export volumes rose from about 2 million air dried tonnes in 2005 to 2.3 million tonnes in 2015 and prices increased by about 25%. Other large export commodities include:

- Newsprint - \$124 million in 2015
- Paper and paperboard - \$40 million



- Sacks and bags - \$25 million

### **Petroleum and Coal Products**

Exports of refinery products grew by 72% between 2005 and 2015 to \$1.7 billion: export volumes increased by 54% during that period; prices rose 12%. All of the volume growth during that period was the result of surging volumes in 2015 of fuel oils such as bunker fuel and gasoline. Prices rose steadily between 2009 and 2014 but declined by about one-quarter in 2015 because of lower crude oil input costs.

The main destination of Alberta refinery products is the US, which accounted for 95% of exports in 2015, followed by Japan (2%). The US share was relatively stable over the 2005 – 2015 period, averaging 94% per year.

The largest export commodity group is petroleum oils and oils obtained from bituminous minerals, such as motor gasoline, diesel fuel and other fuel oils, with a value of \$1.2 billion in 2015, up from \$593 million in 2005. Other large export commodities include:

- Petroleum bitumen (not raw bitumen but the refined product primarily used for asphalt) - \$201 million in 2015
- Liquefied propylene and butadiene - \$133 million
- Petroleum coke - \$68 million

### **Primary Metals**

Exports of primary metals (such as nickel and steel pipes) totaled \$1.1 billion in 2015, unchanged from 2005. These exports peaked at \$2.3 billion in 2007, but then declined by more than one-half between 2007 and 2009 because of plunging nickel and cobalt prices, and have remained weak since then as a result of continued price weakness and plummeting orders from a number of markets such as China and Belgium.

The top two destinations of Alberta primary metals are the Netherlands and the US, each of which accounted for about one-third of 2015 exports. Other major markets include Japan (10%) and China (4%). Exports to the Netherlands rose 141% over the 2005 to 2015 period, and exports to the US 3%.

The largest export commodity group is nickel products, with a value of \$546 million in 2015, down from \$579 million in 2005. During that time period, export volumes rose from about 32 million kilograms in 2005 to 34 million in 2015 while prices dropped about 15%. Nickel prices fell by more than one-half between 2007 and 2015, for instance the price of unwrought nickel fell from \$38 per kg in 2007 to a 12-year low of \$15 per kg in 2015. Other large export commodities include:

- Cobalt - \$171 million in 2015
- Line pipe for oil or gas pipelines - \$104 million

- Bars and rods of steel - \$84 million
- Iron/steel casing, tubing and pipe used in drilling for oil or gas - \$45 million

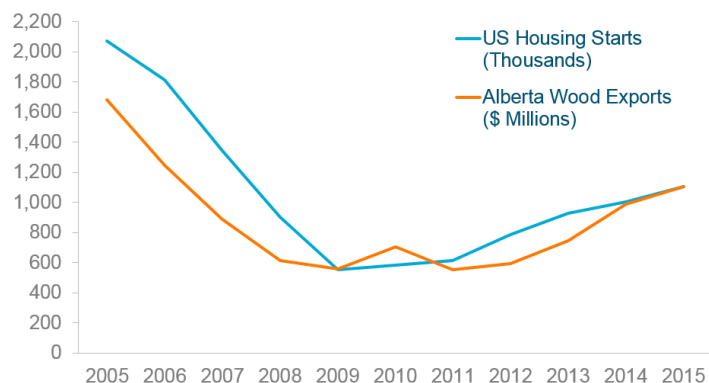
### Wood Products

Exports of wood products (such as lumber and oriented strand board) declined by 67% between 2005 and 2011 to a 17-year low of \$551 million, because of a similar decline in US housing starts over the same period (Chart 9). Although exports have risen 80% since 2011 to reach a nine-year high of \$1.1 billion in 2015 on an improving US housing market, they still declined by one-third between 2005 and 2015.

The main destination of Alberta wood products is the US, which accounted for 95% of exports in 2015, followed by Japan at 3%.

The largest sub-sector is sawmills and wood preservation, with a value of \$673 million in 2015, up 9% from 2014, and up 4% from its 2005 value of \$645 million. Lumber volumes fell by 30% between 2005 and 2009 and lumber prices also dropped by 30%. Export volumes rose 42% between 2009 and 2015, while export prices have risen by about 53% during that period.

**Chart 9**  
**Alberta's Wood Product Exports and US Housing Starts**



Sources: Statistics Canada and Alberta Economic Development and Trade

Exports of the veneer, plywood and engineered wood products sub-sector have been even more volatile, tumbling from \$898 million in 2005 to \$106 million in 2011. In 2015, the sub-sector's exports grew strongly by 27% from the previous year to \$390 million. Volumes of oriented strand board (osb) declined by 87% between 2005 and 2012, but have more than quadrupled since then. Prices have risen strongly since the 2008-2009 recession.

The sector's largest export commodities in 2015 include:

- Lumber - \$646 million
- Oriented strand board (osb) - \$321 million
- Medium density fibreboard (mdf) - \$46 million

### Transportation Equipment

Exports of transportation equipment (primarily aerospace equipment) increased by 60% between 2005 and 2015 to \$838 million. This is primarily the result of large increases in exports of turbo propellers and jets, from \$335 million in 2005 to \$519 million in 2015, and of motor vehicle parts.

The main destination of Alberta transportation equipment is the US, which accounted for 63% of exports in 2015. Other markets include Switzerland (8%) and China, Italy and France (5% each).

The largest export commodity group is turbo propellers and jets, followed by:

- Motor vehicle parts - \$111 million
- Special purpose motor vehicles (for the oil and gas sector) - \$81 million

### **Fabricated Metals**

Exports of fabricated metals (primarily iron and steel products, such as taps, cocks and valves for oil and gas fields) rose 29% between 2005 and 2015 to \$629 million. After reaching a record \$806 million in 2014, fabricated metals exports dropped by 22% in 2015 because of weak demand from international oil and gas producers and service companies.

The main destination of Alberta fabricated metals is the US, which accounted for 64% of exports in 2015. Other markets include Thailand (3%) and the United Kingdom, United Arab Emirates, Saudi Arabia and China (2% each).

The largest export commodity group is taps, cocks, valves and similar appliances (including parts), with a value of \$291 million in 2015, up from \$177 million in 2005, but lower than the \$346 million in export sales in 2014. Other large export commodities include:

- Miscellaneous articles of iron and steel (such as casing heads and supports for tubes or pipes) - \$95 million
- Tube or pipe fittings, of iron or steel - \$33 million
- Springs and leaves (for springs) - \$33 million
- Reservoirs, tanks, vats and similar containers, of iron or steel - \$31 million
- Structures and parts of structures, of iron or steel - \$29 million

### **Computer and Electronic Products**

Prior to 2006, communications equipment dominated Alberta's computer and electronics exports, mainly because of the presence of NorTel in the province. However, this sector's exports have declined sharply, both because of the tech bust that took place after 2000 and NorTel's pulling out of the province. Exports of electronics peaked in 2000 at \$4.5 billion, making it manufacturing's largest sector on an export basis in that year. Exports declined steadily since 2000 to \$1.2 billion in 2005 and to a low of \$551 million in 2010. During the past five years this sector has seen a small rebound in its exports to \$650 million in 2015.

The main destination of Alberta's electronics is the US, which accounted for 52% of exports in 2015, down from a 69% share in 2005. Other markets include China (7%) and the United Arab Emirates (6%).

Back in 2005, \$596 million or about one-half of this sector's \$1.2 billion exports were of telecommunication equipment (such as transmission equipment). Telecom exports now total about \$93 million.

The largest export commodities in 2015 include:

- Instruments and apparatus for physical or chemical analysis (for instance gas or smoke analysis apparatus) - \$112 million
- Surveying or geophysical instruments - \$96 million
- Instruments and apparatus for measuring or checking the flow, level, pressure or other variables of liquids or gases - \$81 million
- Radar apparatus and radio navigational aid apparatus - \$78 million

### **Other Manufacturing**

Some of the largest export commodities not included in the above categories are:

- Metal furniture - \$106 million in 2015
- Fibreglass insulation - \$55 million
- Plastic tubes, fittings and pipes and hoses - \$54 million
- Boards, panels and other bases for electric control or the distribution of electricity - \$53 million
- Plastic plates, sheets, film, foil and strip - \$51 million
- Portland cement - \$35 million

### **Summary**

Although much of Alberta's success in shipping its goods to international markets was until recently tied to rising prices and volumes of crude oil, especially from the oil sands, many other sectors also saw strong export gains during the past decade. The value of Alberta's goods exports rose 21% between 2005 and 2015, and crude oil and natural gas and gas liquids exports rose 16% due to higher oil volumes. The fastest growth was registered by primary agriculture, which saw its export value rise 158% between 2005 and 2015 as both the crops and livestock sub-sectors grew strongly. Manufacturing exports rose 21% on strong growth in the food and beverage, machinery, refined petroleum products, transportation equipment and pulp and paper sub-sectors.

When we strip out the impact of rising or falling export prices over the 10-year period, Alberta's export volumes have increased by an estimated 44% during that period, mainly as a result of a 132% volume increase for crude oil and a 50% increase in primary agricultural exports. Looking forward, Alberta exports continue to be on a downward trend in 2016 and are down by a further 24% in the first quarter of this year compared with the same period of 2015. This decline is again mainly the result of falling oil and gas prices. However, Alberta exports of commodities other than oil and gas are also declining this year. For instance, exports of machinery fell 43% in the first quarter and of fabricated metals 32%. Although oil and gas prices have risen recently total Alberta exports are still expected to be lower in calendar year 2016 than in 2015.

### Alberta International Exports by Industry

EXPORTS By Industry (\$Millions)	2005	2010	2011	2012	2013	2014	2015	%Change 2005-2015	%Change 2014-2015
<b>Primary Agriculture</b>	2,132.2	3,328.3	4,595.6	5,620.5	5,165.7	5,599.8	5,503.2	158.1%	-1.7%
Crops	1,722.6	2,685.6	4,017.4	4,907.7	4,541.2	4,688.5	4,729.9	174.6%	0.9%
Livestock	409.5	642.7	578.2	712.9	624.5	911.3	773.3	88.8%	-15.1%
<b>Primary Forestry</b>	4.0	3.0	3.2	2.6	2.7	2.9	3.3	-17.0%	14.6%
<b>Mining &amp; Energy</b>	53,650.8	54,724.2	65,901.6	67,357.9	75,339.3	90,857.9	62,088.0	15.7%	-31.7%
Crude Oil	20,714.8	39,201.6	51,990.0	57,950.4	64,440.8	76,025.9	52,546.5	153.7%	-30.9%
Natural Gas & Natural Gas	32,200.9	14,280.2	12,332.3	8,408.5	9,977.3	14,068.8	8,856.4	-72.5%	-37.0%
Coal	201.3	729.5	886.4	661.8	645.1	462.2	290.5	44.3%	-37.1%
Sulphur	437.1	452.0	638.2	273.0	219.8	229.5	303.4	-30.6%	32.2%
Other Mining & Energy	96.7	60.8	54.7	64.4	56.4	71.6	91.2	-5.7%	27.3%
<b>Manufacturing</b>	19,715.4	20,086.1	22,019.2	21,338.4	21,781.4	24,261.5	23,888.5	21.2%	-1.5%
Chemicals	6,607.4	6,245.2	7,233.5	6,601.1	7,584.6	8,409.1	8,215.1	24.3%	-2.3%
Food, Feed & Beverages	3,143.8	3,361.3	3,412.6	3,513.3	3,460.4	4,042.1	4,528.8	44.1%	12.0%
Machinery	1,608.1	2,397.5	3,252.6	3,292.8	2,902.4	3,145.2	2,433.3	51.3%	-22.6%
Petroleum & Coal Products	1,388.0	2,151.9	2,000.9	1,785.4	1,510.1	1,707.9	1,884.2	35.7%	10.3%
Paper Products & Wood Pulp	963.1	1,563.3	1,476.9	1,549.0	1,600.6	1,628.7	1,660.1	72.4%	1.9%
Primary Metal Products	1,680.3	1,373.3	1,473.3	1,208.0	1,072.8	989.7	1,107.3	-34.1%	11.9%
Wood Products	1,088.3	707.3	551.3	590.5	743.1	1,134.2	1,085.7	-0.2%	-4.3%
Electronic Products	524.5	550.9	603.4	674.9	705.9	807.6	838.0	59.8%	3.8%
Transportation Equipment	1,163.7	473.4	553.4	568.4	687.1	674.4	649.7	-44.2%	-3.7%
Fabricated Metal Products	488.3	575.6	683.7	782.3	684.6	805.5	629.1	28.8%	-21.9%
Plastics & Rubber Products	239.0	189.8	245.0	282.3	312.7	313.9	247.2	3.4%	-21.2%
Electrical Equipment	255.5	216.7	251.2	218.6	244.9	282.6	239.3	-6.3%	-15.3%
Non-Metal Mineral Products	166.4	97.6	82.2	88.4	82.6	126.9	156.1	-6.2%	23.0%
Furniture & Related Products	225.5	82.7	93.5	81.7	82.6	104.5	132.7	-41.1%	27.0%
Other Manufacturing	173.6	99.7	105.7	101.7	107.0	89.3	81.8	-52.9%	-8.4%
<b>Other Exports</b>	777.4	601.6	697.1	729.1	717.9	762.2	834.7	7.4%	9.5%
<b>Total Goods Exports</b>	76,279.7	78,743.2	93,216.8	95,048.5	103,007.	121,484.3	92,317.7	21.0%	-24.0%

Source: Statistics Canada. Industry aggregations by Alberta Economic Development and Trade