

ENERGY SECTOR IN THE ALBERTA HUB REGION



Alberta HUB
Where opportunity comes to life

The Alberta HUB region offers excellent investment opportunities into its core oil and gas industry. The region is located on the second largest oil and gas reserve in Alberta, the Cold Lake Oil Sands area and overlaps into the southern part of the Athabasca Oil Sands, the largest.

The Alberta HUB region offers investors diversification possibilities from their existing service offerings or for new start up support businesses. Currently, the Alberta HUB region oil and gas sector represents an estimated \$5.7 billion in GDP.

**Over 700
Upstream
Oil Service
Companies**

Alberta

**Over
50 Oil/Gas
Producing
Companies**

Alberta

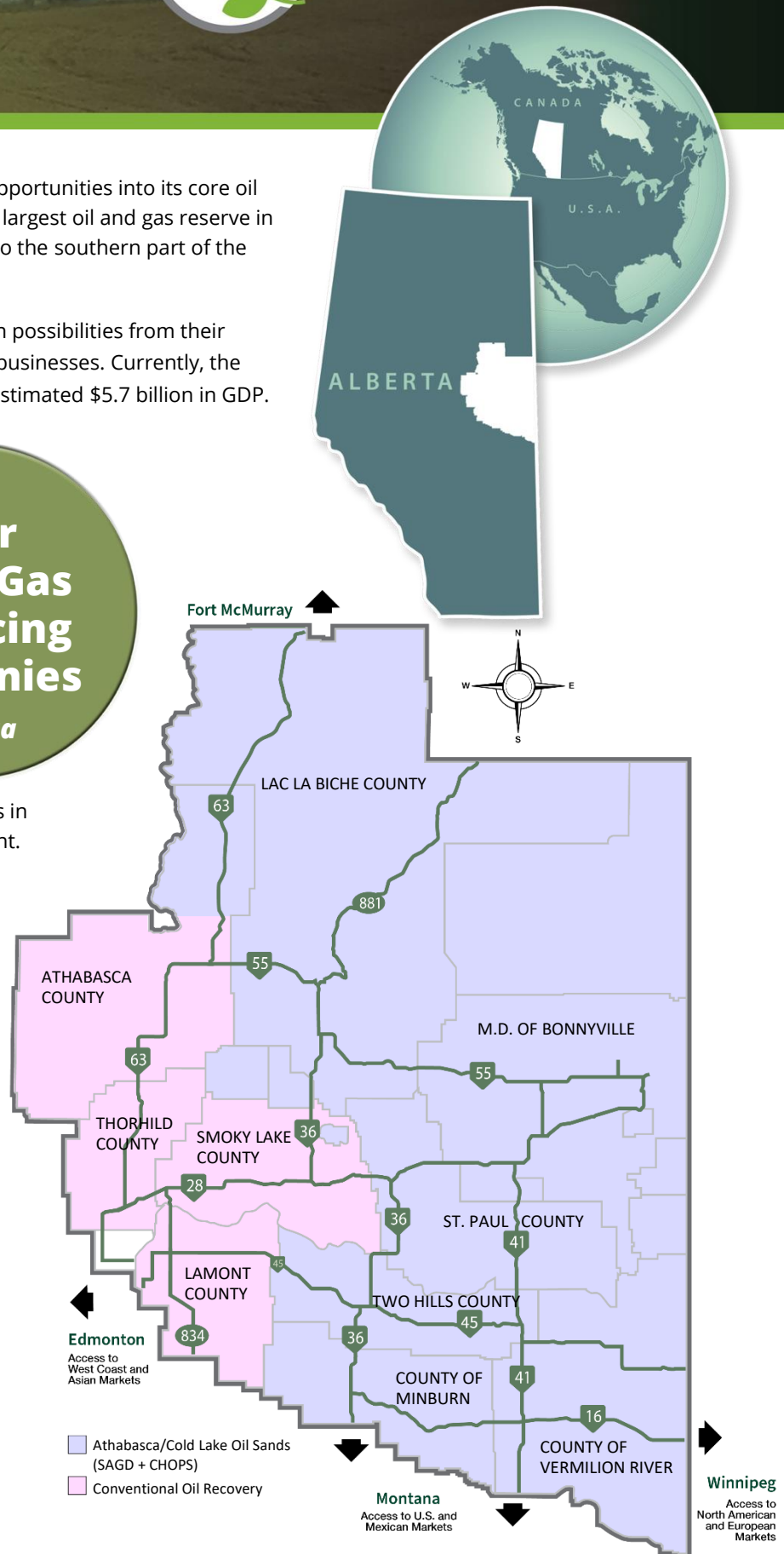
Companies operating in Canada's oil sands are leaders in environmental innovation and technology development.

Major Oil Producers:

- ARC Resources Ltd
- Athabasca Oil Corp.
- Canadian Natural Resources
- Cenovus Energy
- ConocoPhillips Canada Resources Corp.
- Harvest Operations Corp.
- Imperial Oil
- Meg Energy Corp.
- Strathcona Resources
- Suncor Energy Inc.
- Vermilion Energy Inc.
- Whitecap Resources Inc.

**The Alberta HUB
region is comprised
of two sub-sectors:**

- Oil and Gas producers
- Oil and Gas service companies



ALBERTA HUB REGION OIL PRODUCTION

The Energy sector continues to be a strong foundation industry for the Alberta HUB region that is built on years of experience, ample natural resources and proven success to evolve with a changing economic landscape. Annual oil production from facilities located within the region has been consistent year over year, with total cumulative production over six years of 1.5 billion BOE.

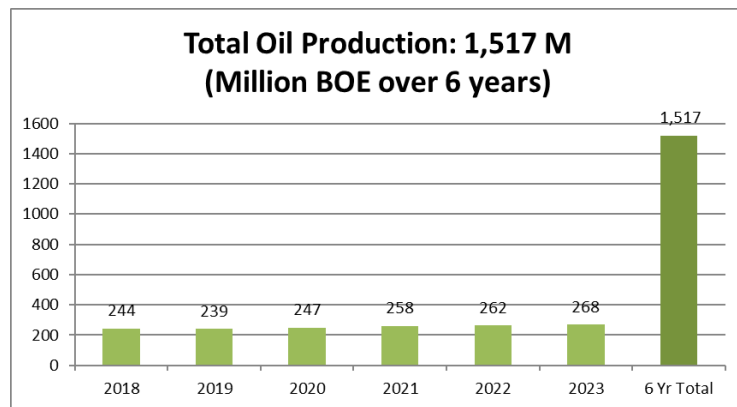


Figure 1: Based on m³ conversion rate of 6.2898107704

Production by County and Method

Oil in the region is primarily produced through unconventional and conventional means. Unconventional recovery of heavy bitumen oil is done via two methods:

- Steam Assisted Gravity Drainage (SAGD)
- Cold Heavy Oil Production with Sand (CHOPS) using progressive cavity screw pumps

Conventional recovery of more refined oil is extracted via submersible pumps or pump jacks.

In-Situ thermal and CHOPS recovery is found in the region's Counties of Lac La Biche, St. Paul and the M.D. of Bonnyville,

while the Counties of Athabasca, Vermilion River, Minburn, and Two Hills extract via CHOPS. The region's western Counties of Athabasca, Lamont, Thorhild and Smoky Lake focus production on conventional oil.

According to the International Energy Agency, by 2040, global energy demand is expected to grow by 27 per cent. Canada can help meet this global demand through our vast wealth of energy resources, technology, services and untapped potential. The Alberta HUB region will be a strong contributor towards meeting this demand.

County	Total Oil Production (BOE/year)	Total Oil Production (BOE/day)	In-Situ Thermal - SAGD (BOE/day)	CHOPS (BOE/day)	Conventional (BOE/day)
Lac La Biche County (LLBC)	69,856,924	191,389	56,500	134,889	
Minburn County No. 27	768,106	2,104		2,104	
Vermilion River County	8,908,385	24,407		24,407	
Bonnyville No. 87 (incl. Id 349)	175,151,503	479,867	437,400	42,467	
St. Paul County No. 19	8,543,609	23,407	13,700	9,707	
Two Hills County No. 21	522,219	1,431		1,431	
Total Unconventional	263,750,745	722,605	507,600	215,005	-
Smoky Lake County	482,954	1,323			1,323
Thorhild County	1,061,629	2,909			2,909
Lamont County	1,124,610	3,081			3,081
Athabasca County	1,324,274	3,628			3,628
Total Conventional	3,993,468	10,941	-	-	10,941
Alberta HUB Region Total	267,744,213	733,546	507,600	215,005	10,941
<i>RM Wood Buffalo serviced by LLBC</i>	<i>128,443,500</i>	<i>351,900</i>	<i>351,900</i>		
Total incl. Out-of-Region Servicing	396,187,713	1,085,446	859,500	215,005	10,941

Source: Alberta Energy Regulator (2023) and Oil Sands Magazine (2023). Data based on best estimation and is subject to change.

**396M BOE/Year
(1M BOE/Day)
Serviced by the
Alberta HUB
Region**

**Regional Oil
& Gas Sector
contributes
\$5.7B in GDP
(est.)**

**Close to
60,000
Wells**

Represents total production of facilities located within the Alberta HUB region only. Excludes additional facilities located outside the region but are serviced by the Alberta HUB region.

ALBERTA HUB REGION INVESTMENT OPPORTUNITIES

Leverage the many assets of the Alberta HUB region, with over **\$18 Billion** worth of oil investment already underway or planned.

Natural Gas - Maximizing the Extraction Process

Natural gas is produced along with the oil (via CHOPS and SAGD). This gas - "solution or casing gas" - is being captured and is either used to run wells/facilities or cleaned and sold to heat homes.

There are investment opportunities to leverage existing resources in the region and work with oil companies to re-use the low cost, excess gas as an alternative to flaring.

Research, Development and Training

Numerous opportunities exist for research and development in addressing environmental impacts and technological enhancements.

According to a study, Canadian companies spend about \$1.4 billion a year on clean technology investments and 75 percent of that comes from our oil and natural gas industry (more than all other industries – combined).

Study by Global Advantage Consulting Group for the Clean Resource Innovation Network

Many technologies have been developed in the region with the most notable being Progressing Cavity Pumps (PCP), which can tolerate large amounts of sand and viscous oil. Opportunities exist to develop:

- Products or services to increase efficiencies (lower operations costs, increased recovery speed)
- Advancements in technology to address environmental issues and improve profitability to offset fluctuations in the energy market

The Sector is heavily supported by Transportation and Utilities Infrastructure

Over 80 million BOE/year or 30% of total oil production is being shipped by truck on the region's highways to then be pipelined to export markets

Lakeland College offers partnership and learning opportunities through their combined heavy oil and power engineering programs. The College's Energy Centre is one of the best equipped and modern steam labs in Canada with the only once-through steam generator (OTSG) at a post-secondary institution.

Portage College

With a focus on driving economic development and supporting business growth, Portage College plays a crucial role in the region's success. 100% of employers surveyed say they would hire another Portage College graduate.

By providing skilled labour specific to key industries, the college meets the demands of the top economic drivers in the Alberta HUB region.

Through strong partnerships with industry, Portage College supports sectors such as energy, technology, tourism, environment and sustainability, agriculture, and applied research, ensuring a skilled workforce and fostering innovation.

Portage College Boyle campus sits on 207.89 acres of land to provide hands-on training for our Heavy Equipment Operator program.

Alberta HUB Advantage

Drone operations in the HUB Region are providing wildlife protection, safer worksites, and more efficient and productive operations. Visit aeriumanalytics.com and [IN-FLIGHT Data \(inflightdata.ca\)](http://IN-FLIGHT Data (inflightdata.ca))

ALBERTA HUB REGION INVESTMENT OPPORTUNITIES

Environmental Monitoring

There are investment opportunities in the use of drones to monitor active and shut-in wells:

- Pipeline management and detection in thousands of oil wells in region
- Mineral exploration/exploitation
- Spill tracking
- Power transmission line monitoring
- Infrastructure Monitoring
- Reclamation and remediation of shut-in oil wells



Maintenance and Repair

Consultative and/or maintenance services will help oil businesses develop a successful maintenance strategy to predict repairs and determine a regular maintenance schedule. Proactive maintenance will boost well oil production rates and revenues by alerting well operators to conduct maintenance and repairs before equipment failure happens.



Alberta HUB
Where opportunity comes to life

Northeast Alberta
Information HUB Ltd.
www.albertahub.com

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