Industry at a Glance

Alberta boasts world class technologies and services that are in demand throughout the world. Fossil fuels continue to dominate the world energy mix but the need to meet higher environmental standards, as well as recent global economic challenges, place pressure on the industry to find new and improved methods for extraction and processing. Generating billions of dollars in revenue, the oil and gas sector has become a horizontally integrated cluster demanding the latest of technologies.

The Alberta Energy Regulator forecasts that by 2023 bitumen production will rise from the current 2.1 million barrels per day to 4.1 million barrels per day. Several technical challenges must be overcome for the energy industry to remain competitive and environmentally aware. Examples include air, water and land management, natural gas substitution, infrastructure constraints, and improved recovery and processing methods. The oil and gas sector is a key player in meeting these challenges. Through advancements made in technology and innovation, businesses in these sectors position themselves to become vital suppliers of technologies and services to the global marketplace.

Areas of Expertise

The oil and gas sector is wide-ranging and includes equipment, services, and technology used in the extraction of conventional and unconventional oil, natural gas and coal bed methane, and coal. The core areas of expertise include:

Products and Services: Upstream-related oil and gas equipment and services include seismic and geological services, drilling and completions, and advanced production techniques. This important industry sector focuses on such areas as: multilateral drilling technologies, non-invasive drilling fluids, swell packer stimulation technologies, coiled tubing expertise and benefits, innovative pumping technologies, non-traditional well configurations, and geosteering of horizontal wells in real time.

Oil and Gas Equipment (Predominant/Proactive Sector): Alberta has the world’s third largest proven crude oil reserves after Saudi Arabia and Venezuela. Canada is the world’s third largest supplier of natural gas, with Alberta accounting for 80% of Canadian production. Alberta’s oil and gas industry is constantly growing along with its need for technology and services. The Alberta Government is committed to improving extraction technologies for conventional oil production; i.e. advanced seismic and horizontal drilling.

Research and Development: Equally important is continued research and development efforts pertaining to unconventional gas development. Specifically, industry leaders feel that R&D efforts are required regarding deep coal, coal fines mitigation, sheared coal reserves, co-mingling coals with variable reservoir properties, reservoir characterization from drill cuttings, fracture design and fluid selection, fracture and produced fluid recovery, drilling and fracture stimulation of under-pressured and water sensitive reservoirs, stratified reservoirs, frac sand supply and use, and use of non-potable water for drilling and fracturing operations.
Opportunities

Alberta has the potential to become the world’s leading energy provider. It has a world-class resource next to the largest market in the world. Only 21 per cent of the world’s proven oil reserves are accessible to private sector investment (not state controlled) of which more than half (53%) are in Alberta’s oil sands, which represents considerable investment opportunities in Alberta’s oil sands.

Unprecedented demands and resource constraints on the energy sector have resulted in companies seeking out new and innovative processes, demonstrated through an increased focus on research and technology. In regards to the heavy oil and oil sands industry, opportunities exist to reduce the use of water and natural gas and to decrease overall environmental impacts. On a similar front, Alberta’s natural gas industry is exploring ways to improve well economics by reducing the cost of explorations and increasing well productivity through technology and process improvements. As a whole, technology development and adoption, and process improvements are key components to increasing the competitiveness of Alberta’s oil and gas industry.

How we Can Help

The Alberta Government can provide your company with contacts and information on potential partnerships and investment opportunities in the oil and gas sector in the province. We can help you:

- Gain insight into the challenges and opportunities of the oil and gas sector in Alberta
- Build strategic alliances with local and international partners
- Connect you with relevant industry officials

Industry Resources

Visit the oil & gas technology & services at [www.albertacanada.com/oilandgas](http://www.albertacanada.com/oilandgas) to learn about:

- Industry facts and opportunities
- Policies and regulations
- Key stakeholders and industry associations
- News and events

Contact Information

For further information about Alberta’s oil & gas industry contact:

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