Energy's History in Alberta

Pre 1715 | 1715-1899 | 1900s | 1910s | 1920s | 1930s | 1940s | 1950s |1960s 1970s | 1980s | 1990s | 2000s | Present

Although hydrocarbons have been present in Alberta for millions of years, the earliest recorded use of bitumen dates back less than 300 years ago, and the first use of hydrocarbons to generate energy in Alberta date back just over a century ago.

Pre 1715

560 million years B.C. - Plants absorb solar energy and use it to convert carbon dioxide and water into oxygen and carbohydrates such as sugar, starch and cellulose; these carbohydrates and other organic materials eventually settle on the ground and in stream, lake and sea beds and, as they become more deeply buried, are transformed by heat and pressure into solid, liquid or gaseous hydrocarbons known as fossil fuels.

1715-1899

Year	Event
1715	The first known reference to the Athabasca oil sands was made by Captain Swan, a Cree chief acting as a middleman between the native hunters of the west and the fur factories of Hudson Bay. Swan told Governor James Knight in council at York Fort in 1715 about a river feeding the Churchill River where he found “Gum or pitch”. In 1719 Swan returned to York Fort, where Henry Kelsey had replaced Knight as governor. He gave Kelsey a sample of “that Gum or pitch that flows out of the Banks of that River.”
1788	Alexander Mackenzie writes of bituminous seeps among Alberta's Athabasca tar sands, into which a six-metre pole could be inserted "without the least resistance".
1792	Coal is discovered in Alberta by fur trader, explorer, surveyor and mapmaker Peter Fidler with the Hudson's Bay Company. He made the discovery near Drumheller.
1807	Coal gas first used to light streetlamps in London, England.
1821	Natural gas piped through hollow logs to Fredonia, New York.
1836	Coal gas first used in streetlamps in Montreal.
1841	Coal gas first used in streetlamps in Toronto.
1842	Geological Survey of Canada established to explore for coal and other minerals.
1854	Abraham Gesner of Halifax, Nova Scotia, opens a plant in New York to convert coal into kerosene, a new synthetic lamp oil (which replaced whale oil), using his patented process of fractional distillation.
1855	American chemist Benjamin Silliman applies fractional distillation to Pennsylvania rock oil (crude oil) and discovers it produces high-quality lamp oil (kerosene).
1859	Natural gas discovered in New Brunswick.

1860s	Entrepreneurs establish small, primitive oil refineries in Ontario, eastern Europe and the U.S.
1866	James Miller Williams of Hamilton, Ontario creates the world's first vertically integrated oil company, combining in one company all aspects of the business from exploration to retail sales.
1866	Natural gas discovered in south-western Ontario.
1870s	Chemical engineer Herman Frasch invents process to extract sulphur compounds from oil using copper oxide powder; until then, the foul smell of sulphur had prevented oil from being widely used as a fuel.
1874	Development of the first coal powered electricity generators near present-day Lethbridge.
1875	Geological Survey of Canada investigates Athabasca oil sands.
1880	Sixteen Ontario producing and refining companies merge to form the Imperial Oil Company.
1883	Canadian Pacific Railway (CPR) crew drilling for water near Medicine Hat, Alberta, accidentally discovers natural gas 55 kilometres northwest of Medicine Hat. The name of the site at the time was Langevin Siding. By 1910 it was called Carlstadt, and after World War I, the name was changed again to Alderson.
1883	Canada's first single phase AC generators are commissioned in Calgary by the Bow River Lumber Company and Ottawa at Chaudiere Electric.
1884	A second well was drilled just a few meters from the Langevin Siding site. This one produced enough gas to light and heat several buildings.
1886	The Geological Survey of Canada collected natural gas information and presented the paper to the Royal Society of Canada. The paper was called On Certain Borings in Manitoba and the Northwest Territory. Of course, there was no reference to Alberta, since Alberta did not become a province until 1905.
1887	The No. 1 Mine begins coal production in Canmore, Alberta. Mining at Canmore continued until 1979.
1889	Drilling for natural gas begins in south-western Ontario.
1890	Natural gas well drilled at Niagara Falls, Ontario, begins exporting gas to Buffalo, New York.
1890s	Several more natural gas wells are drilled in the Medicine Hat area, producing gas for homes and factories.
1891	The Canadian Electrical Association is formed to represent the industry.
1891	Edmonton Electric Lighting and Power Company is founded and receives approval to build a coal-fired generating plant on the banks of the North Saskatchewan River. Source: Edmonton Power Historical Foundation
1893	Parliament passes bill authorizing funds for Geological Survey of Canada to investigate Athabasca oil sands as a source of petroleum.
1893	The first hydro-generator in Alberta is built on the Bow River. Source: Centre for Energy
1894	Drilling begins at Athabasca oil sands; crews strike a reservoir of natural gas which

	blows wild for 21 years.
1895	Natural gas from Ontario piped to Windsor, Ontario and across the river to Detroit, Michigan.
1898	Imperial Oil's refinery operations consolidated at Sarnia, Ontario.

1900s

Year	Event
1901	As known natural gas supplies dwindle, Ontario government bans exports to U.S.
1901	Medicine Hat (300 kilometres southeast of Calgary) develops its own gas utility.
1902	Edmonton Electric Lighting and Power Company is purchased by Edmonton becoming the first municipally-owned electric utility in Canada. Source: Edmonton Power Historical Foundation
1905	Alberta was proclaimed a province on September 1, 1905. The province was named after Princess Louise Caroline Alberta, the fourth daughter of Queen Victoria. The inauguration ceremony featured an address by Prime Minister Sir Wilfrid Laurier. Approximately 12,000 Albertans were in attendance to witness the ceremony.
1908-09	"Old Glory" was the name of the first major discovery. Development of the Bow Island gas field led to the first pipelines delivering natural gas to Alberta communities.
1909	Calgary Power is formed. Later renamed TransAlta, the company develops into Canada's largest investor owned utility.

1910s

Year	Event
1911	Following British decision to convert Royal Navy ships from coal to bunker oil, the Canadian government urges industry to find and develop domestic oil supplies.
1911	Martin Nordegg opened the largest mine in Alberta and created a model town that bears his name to this day. In 1923, Nordegg produced the largest amount of coal of all the mines in Alberta.
1911	Calgary Power builds the first large-scale hydro plant in Alberta, the run-of-river Horseshoe falls hydro plant. Source: TransAlta
1912	270-kilometre pipeline begins carrying natural gas from Bow Island, Alberta, to Calgary to replace coal gas as a heating, lighting and cooking fuel. The 16-inch (40 centimetre) pipeline was complete in just 86 days.
1914-18	First World War establishes oil as a key strategic commodity.
1914	May 14 was a victorious day for Arthur W. Dingman as he and his associates savoured the fruits of their risk-taking with a natural gas discovery at Turner Valley on the edge of Kananaskis Country.
1915	Sydney Ells demonstrates the first commercial use of oil sands. In 1915, he shipped

	several tonnes of Athabasca oil sands by water, sleigh and rail to Edmonton for a road paving experiment.
1915	The Public Utilities Board (PUB) became Alberta's first regulatory agency with the primary responsibility of regulating utility rates and service. At this time in Alberta's history, since utility service was limited, the PUB had extended jurisdiction over a broad range of other matters, including the cancellation of subdivision plans, the approval of utility franchise agreements, the regulation of the sale of shares and securities within the province, the approval of tariffs for provincial railways and the approval of highway crossings by railway branch lines. Alberta Government Telephones (AGT), which was Alberta's only telecommunications company at the time, also applied to the PUB for its rates.

1920s

Year	Event
1920	Oil discovered at Norman Wells, Northwest Territories.
1923	Edmonton switches to natural gas for heating, lighting and cooking following completion of 130-kilometre pipeline from Viking, Alberta.
1924	The discovery of a decade earlier led the way to a deeper zone find just a few kilometres away. Royalite No. 4 put Turner Valley on the oil and gas map.
1926	Dr. Karl Clark, chemist and oil sands researcher, perfects a hot water separation process while working for the Research Council of Alberta and the University of Alberta. It becomes the basis of today's thermal extraction process.
1927	R. C. Fitzsimmons forms the International Bitumen Company and builds a small scale pilot plant near Bitumount, 80 kilometres north of Fort McMurray.

1930s

Year	Event
1930	Under the Natural Resources Transfer Agreement, the Dominion of Canada transferred mineral rights to the province of Alberta, granting the province rights to all minerals, oil and natural gas. Approximately 81 per cent of the subsurface mineral rights are owned by the province.
1930	Alberta Department of Lands and Mines established.
1931	First Alberta Royalty Regulation.
1932	The Turner Valley Conservation Board was established.
1933	In 1933, the falling price of milk was affecting the profitability and viability of milk producers in Alberta. In an effort to provide price stability, the Government of Alberta declared milk a public utility. The Public Utilities Commission (renamed the Alberta Utilities Commission (AUC) in 2008) began setting the minimum price that milk producers would receive (the wholesale price). The Commission was also put in charge of licensing and regulating milk producers and distributors. In 1969, the

	Government of Alberta created the Alberta Milk Control Board, and while the AUC's jurisdiction over the regulation of milk production was surrendered to the Board, it continued to set minimum wholesale prices. In 1991 the Government of Alberta deregulated the minimum retail price of milk.
1934	The first natural gas export license was issued by the federal department of Trade and Commerce.
1934-35	After more than 50 years of production, the second oil well to be discovered in Alberta was closed off (abandoned) with a few wheelbarrows of cement. The closing off process was still in its infancy and abandonment operations continued until 1954.
1936	Invention of nylon, the first plastic made from petroleum products.
1936	Under the Fuel Oil Licencing Act, Alberta's 1000 fuel dealers were required to obtain a licence from the Public Utilities Board.
1936	Oil leg discovered in the Mississippian zone at Turner Valley.
1936	Rotary drilling rigs indicated oil existed at greater depths than oil found in earlier discoveries.
1938	The Petroleum and Natural Gas conservation Board, became the Energy Utilities Board (EUB then the Energy Resources Conservation Board (ERCB), on June 17, 2013 the Alberta Energy Regulator (AER) took over to provide full-lifecycle regulatory oversight of energy resource development in Alberta.

1940s

Year	Event
1941	Alberta shifted the royalty rates on oil from a flat rate of 10 per cent to a choice of a 12.5 per cent flat rate or a five to 15-per-cent royalty based on production levels.
1943	Pipeline built from Portland, Maine, to refineries in Montreal to overcome wartime danger to East Coast tanker traffic.
1943-45	Canada's first offshore oil well drilled from artificial island off Prince Edward Island, to a depth of 4,500 metres and at a cost of $1.25 million; no commercial qualities of oil or gas were found.
1944	U.S. Army Corps of Engineers completes the Canol Pipeline, an expensive but short-lived pipeline system carrying crude oil from Norman Wells to a new refinery at Whitehorse, Yukon, and refined oil products to Fairbanks and Skagway, Alaska.
1947	After drilling 133 dry holes across Western Canada, Imperial Oil strikes oil at Leduc, Alberta, on February 13, transforming Canada into an oil-rich nation.
1948	Imperial Leduc No. 2 found oil in the Devonian reef which formed during the Devonian period, the “Age of Fishes” (395 to 345 million years ago) until this discovery, oilmen thought that you could not find oil from that time period. The town of Devon, Alberta, is named after this.
1948	The Alberta royalty rate is capped at 16 and two thirds per cent.
1949	Alberta Department of Lands and Mines succeeded by two new departments: Lands and Forests, and Mines and Minerals.

1950s

Year	Event
1950	Oil replaces coal as Canada's largest single source of energy; pipelines established to transport natural gas to Vancouver, Winnipeg, Toronto and Montreal.
1950	Detonation of underground atomic explosive device proposed to melt Athabasca oil sands bitumen to aid commercial development; federal government denies approval.
1951	A sliding scale was established in Alberta Royalty Regulations.
1950-53	First section of the Interprovincial Pipe Line Inc. (now Enbridge Pipelines Inc.) oil pipeline laid from Edmonton to Superior, Wisconsin, in 1953 it was extended to Sarnia, Ontario.
1952	First sulphur recovery plant built in Alberta for sour gas (natural gas).
1953	Trans Mountain Pipeline Company line completed from Edmonton to Vancouver.
1954	The Alberta Gas Trunk Line Company Limited (AGTL), (now called NOVA Gas Transmission Ltd.) was created to build and operate a province-wide natural gas transportation system. In 1957, Alberta gas began to flow through the AGTL (NOVA) system.
1955	Edmonton Electric Lighting and Power Company's Rossdale plant switches from coal to natural gas.
1955	Western Canada's Oil and Gas industry invests more than half a million in development. Source: Oilpatch History
1957	First gas exported by the Westcoast Energy Inc. pipeline system through Vancouver to U.S. markets.
1958	Construction of the TransCanada Pipelines system was completed from Alberta to eastern Canada.
1958	Entwistle resident Einar Opdahl found a diamond on the banks of the Pembina River. The diamond weighed 0.83 carats and was sold for $500.
1959	National Energy Board created by federal government to oversee interprovincial and international energy trade.

1960s

Year	Event
1960	The Gas Utilities Act is introduced, it is still a major part of legislation currently governing the jurisdiction of the ERCB. In the 1960s, urbanization and industrialization increased the number of utility customers by 62%.
1961	Alberta establishes air quality standards that include limits on industrial emissions of hydrogen sulphide and sulphur dioxide.
1961	National Oil Policy directs that all refineries west of the Ottawa valley must use higher priced crude from western Canada.
1961	The Pacific Gas Transmission pipeline (now called Gas Transmission Northwest) is

	built to deliver Alberta gas to customers in the US Pacific Northwest and California.
1967	Great Canadian Oil Sands, now part of Suncor energy Ltd., initiates the world's first large-scale oil sands operation, the Athabasca oil sands at Fort McMurray.

1970s

Year	**Event**
1970s	Natural gas and oil deposits found off the coast of Nova Scotia.
1970s	Dr. Roger M. Butler developed the concept of using horizontal pairs of wells and injected steam to develop certain deposits of bitumen considered too deep for mining. His invention of SAGD technology paved the way for scores of in situ projects changing the oil sands industry. Source: Canadian Petroleum hall of fame.
1970	The Board of Arbitration was formed to handle expropriations formerly the jurisdiction of the Public Utilities Board. The Board of Arbitration is now the Surface Rights Board.
1970	Edmonton's electrical distribution and power plant departments merge and become known as Edmonton Power, construction then begins in its Clover Bar generating station. Source: EPCOR
1972	Alberta plan proposed a mineral tax assessment on remaining recoverable crude oil reserves at fair value with no change in the existing royalty structure, it also included an Exploratory Drilling incentive system. Changes were to take effect in January 1973. Source: Oilpatch History
1972	Federal and B.C. governments impose moratorium on West Coast offshore oil and gas exploration.
1973	Arab oil embargo sets off first global energy crisis. To initiate a capital investment program and to lessen the dependence on foreign oil, the Alberta Energy Company Ltd was created. It would later merge with PanCanadian Energy Corporation to create Encana.
1973	Prime Minister Trudeau decrees 'made in Canada' crude oil prices.
1973	Alberta implemented a price sensitive royalty regime. Prior to that, royalties were paid at a fixed rate.
1973	The *Alberta Petroleum Marketing Act* created the Alberta Petroleum Marketing Commission (APMC) and gave it a two-part mandate: • to act as sole agent of the Crown in disposing of the royalty share of crude oil production from Alberta Crown land (Note: from 1974 onward, the government collected its royalty share in kind, rather than cash. The main objective of taking in-kind is to maximize the value of the Crown's royalties. The Crown Marketing agents are contracted to sell the Crown royalty share along with their own production, thus ensuring a competitive market price is received for the sales of these volumes.) • to act as sole agent of the lessee in disposing of the lessee's share of production from the same lands

This mandate was phased in over six years until April 1980. Before the APMC was set up, individual companies purchased crude oil by private, bilateral agreements based on prices posted by each purchasing company. Prices were based on the purchaser's assessment of the competitive markets being served. APMC Information bulletins

1974	The Natural Gas Price Protection Plan was introduced. The Public Utilities Board's role in the plan, which was aimed towards sheltering Alberta consumers from increasing world market prices for natural gas, was set out in the Natural Gas Rebate Act. Under the Act, the Board was required to issue certificates qualifying utilities to receive provincial rebates.
1974	The Petroleum Royalty Regulation allows rebates for eligible costs of injection materials for enhanced oil recovery (EOR) schemes.
1974	Natural gas production in Alberta has only two vintages: old, discovered before 1974 and new, discovered after 1973.
1974	Oil and natural gas pools are classified by "vintage" for royalty calculation purposes. Vintage refers to the date of discovery of the oil or gas pool from which production occurs. Royalty rates for production from newly discovered pools are set lower to reflect the higher average finding and development costs associated with newer smaller pools.
1974	Letters exchanged regarding resources issue between Premier Lougheed and Prime Minister Trudeau. Source: Oilpatch History
1975	Alberta Department of Energy and Natural Resources created by merging two existing departments: Lands and Forests, and Mines and Minerals.
1975	Natural gas prices in Canada became regulated under Federal-Provincial agreement.
1978	Syncrude Canada Ltd., a consortium of oil companies and the federal and provincial governments, opens oil sands mining and upgrading project at Fort McMurray.
1978	The United States began the process of natural gas deregulation.
1979	Alberta´s first ethylene plant was officially opened at Joffre. A second ethylene plant and a polyethylene plant began production in 1984.
1979	First large oil discoveries made at the Hibernia field off Newfoundland.
1979	Canadian oil industry converts to metric.

1980s

Year	**Event**
1980s	First permanent buried pipeline completed in the Canadian Arctic to carry light crude oil from Norman Wells to Alberta.
1980	Medicine Hat, Alberta, replaces coal-fired steam units with Canada's first gas turbine, combined cycle cogeneration system. Source: Centre for Energy
1980	In October, the National Energy Program (NEP) reinforced the 1973 made-in-Canada price policy. The NEP sought to increase both Canadian control and Canadian

ownership of the energy industry. It also sought to protect all Canadians from surging oil prices. The federal government would accomplish their goals through measures such as price controls and federal taxes on oil and gas production. These measures would increase federal government control in the oil and gas industry. To this day, the National Energy Program is a sore spot with many Albertans. The NEP is often cited as an example of federal government discrimination, which increased feelings of western alienation and led to the creation of many western separatist groups. Reasons;

- NEP was an intrusion on provincial rights since control of natural resources falls
  under provincial jurisdiction
- some Albertans felt that the NEP was passed to benefit central Canada
- NEP led to a significant number of oil companies leaving Alberta which left many
  unemployed.
  Source: Alberta Online Encyclopedia

1980	The Constitution Act gives each province the exclusive right to make laws in relation to the development, conservation and management of natural gas in the province.
1981	Calgary Power changes its name to TransAlta Utilities. Source: TransAlta
1982	The Alberta government created the Electric Energy Marketing Agency. The Public Utilities Board was required to set the price at which utilities would sell electric energy to the Electric Energy Marketing Agency. The aim in doing so was to achieve a measure of equalization of electrical rates by averaging the price of generation and transmission across the province.
1982	The *Petroleum Incentives Program Act* is implemented to encourage development of oil and gas in Alberta following the 1980 National Energy Program. Source: Canada's Petroleum Heritage
1982-86	OPEC attempted to set production quotas low enough to stabilize prices. These attempts met with repeated failure as various members of OPEC produced beyond their quotas. During most of this period Saudi Arabia acted as the swing producer cutting its production in an attempt to stem the free fall in prices. In August of 1985, the Saudis linked their oil price to the spot market for crude and by early 1986 increased production from 2 MMBPD to 5 MMBPD. Crude oil prices plummeted below $10 per barrel by mid-1986. Despite the fall in prices Saudi revenue remained about the same with higher volumes compensating for lower prices. Source: West Texas Research Group
1983	The oil and gas servicing incentive program regulation is introduced which authorized the Minister to make grants for eligible well servicing costs of wells, batteries and pipelines.
1984-85	The Progressive Conservative government under Prime Minister Mulroney replaced the Liberal government and signed the Western Energy Accord in 1985 that eliminated the National Energy Program.

1985	Federal government deregulates oil prices, opens Canada's borders to imports and exports.
1985	Oil Royalty holiday programs are introduced to reward successful explorers where previous grant-oriented programs only favoured activity.
1985	Commercial production began at Imperial's Cold Lake cyclic steam injection project. This new method involved injecting high-pressure steam into the bitumen in order to soften and separate it from the sand.
1985-86	Federal government and East Coast petroleum-producing provinces reach agreements to jointly manage offshore oil and gas resources.
1985	Alberta, British Columbia, Saskatchewan and the federal government signed the Agreement on Natural Gas Markets and Prices, which began the process of natural gas price deregulation in Canada.
1985	After 70 years of production, the Turner Valley Gas Plant was shut down. It is now a provincial and national historic site.
1986	The price of natural gas was deregulated by a federal-provincial agreement, the provincial government allowed the Natural Gas Protection Plan to expire, in light of the decline in natural gas prices which occurred after deregulation.
1986	Alberta Department of Energy and Natural Resources is succeeded by two new departments: Energy, and Forestry, Lands and Wildlife.
1988	Alberta Energy published a monthly Alberta Average Market Price (AMP) for natural gas/residue gas. The AMP is given in units of $/1000 ^{3} and $/GJ. The AMP in $/1000 m^3 is used in the royalty rate formula to calculate the Crown's royalty volumes. The AMP in $/GJ is used in the valuation price test. This test specifies that the minimum valuation price that may be applied to the Crown's royalty share of production is 80% of the AMP ($/GJ) in effect during the month of sale.The AMP was effective for the production years 1988 to 1993.
1989	Genesee 2, using coal-fired steam turbine equipment, was the first Genesee generation unit to be completed. Its capacity was 410 megawatts.

1990s

Year	**Event**
1990	Canadian refiners eliminate lead as a gasoline additive, completing a phase-out that began in 1973.
1990	The Gas Utilities Statutes Amendment Act 1990 was passed by the Alberta Legislature, giving non-industrial consumers in Alberta the choice of entering into contracts for gas supply, subject to regulations.
1990	The New York Mercantile Exchange (NYMEX) started trading natural gas futures contracts for delivery at Henry Hub, Louisiana.
1992	Lloydminster upgrader begins processing heavy oil.
1992	The Canadian Association of Petroleum Producers (CAPP) was created, with the merger of the Canadian Petroleum Association and the Independent Petroleum

	Association of Canada. The association represents some 200 producers whose collective production represents nearly 95 per cent of Canada's total crude oil and natural gas output.
1992	At the United Nations Conference on Environment and Development in Rio de Janeiro, Canada and more than 160 other nations adopted a philosophy of sustainable development and agreed to begin limiting emissions of greenhouse gases that may contribute to global climate change.
1993	The Alberta Energy Company (AEC - now EnCana) started reporting daily natural gas spot prices at its gas storage facility at AECO-C, located near Suffield, Alberta.
1994	Functions of Alberta's Department of Forestry, Land and Wildlife are merged into the Department of Environmental Protection, and the Department of Energy is reorganized into five new divisions.
1994	The Cowley Ridge wind plant, near Pincher Creek, Alberta, is completed, becoming the first commercial wind farm in Canada. Source: Centre for Energy
1994	Implementation of the Alberta Gas Reference Price, a monthly weighted average of an intra-Alberta consumers' price and an ex-Alberta border price, reduced by allowances for transporting and marketing gas (Gas Royalty Guidelines 1994).
1995	Alberta adopts Electricity Utilities Act to deregulate energy supply market.
1995	The Alberta Energy and Utilities Board (AEUB) was created, the Public Utilities Board and the Energy Resources and Conservation Board (previously the Petroleum and Natural Gas Conservation Board) in order to provide a more streamlined and efficient regulatory process.
1995	A generic royalty regime for new oil sands projects was recommended to provide a smaller royalty share at the beginning of a development and a larger share for the government after the developers have recovered their costs. This was concept was based on The Oil Sands: A New Energy Vision for Canada a report prepared by the National Task Force on Oil Sands Strategies.
1996	The EUB passed rules implementing natural gas customer choice for small consumers in Alberta.
1996	Edmonton's natural gas, power and water utilities are merged and EPCOR Utilities is formed. Source: EPCOR
1996-97	In 1996 the Electric Utilities Act was passed. The AEUB held a hearing to restructure electric tariffs to implement changes to the electric utility industry that were introduced in the Electric Utilities Act (EUA). Each major utility applied to separate its generation, transmission and distribution costs. The framework for further restructuring of the electric utility industry was established through the Electric Utilities Amendment Act that was passed in 1997.
1997	The Hibernia oil platform was towed to the Hibernia oil field and positioned on the ocean floor in June of 1997 and began producing oil on November 17, 1997. The platform stands 224 metres high, which is half the height of New York's Empire State Building (449 metres) and 33 metres taller than the Calgary Tower (191 metres). Source: About Hibernia

1997	The Kyoto Protocol treaty was negotiated in December 1997 at the city of Kyoto, Japan and came into effect on February 16th, 2005. Source Kyoto Protocol
1997	The generic oil sands royalty regime, the *Oil Sands Royalty Regulation, 1997*, came into effect on July 1, 1997. It established generic royalty terms for all new oil sands projects. At the same time, the federal government extended its accelerated capital cost allowance to oil sands projects to encourage their development.
1996-98	Alberta establishes three new independent bodies (the Power Pool, Transmission Administrator, and Market Surveillance Administrator) to ensure open and competitive access to deregulated power markets.
1999	Alberta Department of Energy is reorganized and renamed the Department of Resource Development; responsibility for forest industry development, and for rural utilities, are incorporated into the new entity.

2000s

Year	**Event**
2000	Alberta establishes retailer licensing and codes of conduct for deregulated electricity markets.
2000	The Government of Alberta implements the Energy Tax Refund.
2000	The largest cogeneration plant in Canada, Joffre comes online. Source: Centre for Energy
2000	Alliance natural gas pipeline begins commercial service after construction complete from Fort St. John, B.C., to Chicago, Illinois.
2000	Major expansion projects completed at Joffre and Fort Saskatchewan, Alberta, to the world's two largest ethylene-based petrochemical plants.
2000	Syncrude's Aurora project is the first remote oil sands plant in Alberta, the project cost about $600 million. Source Syncrude
2001	Alberta Department of Resource Development becomes the Department of Energy.
2001	The Government of Alberta provides rebates to consumers of natural gas as natural gas prices reach record levels. Later in the year, the Natural Gas Price Protection Act was implemented, setting out a formal structure for natural gas rebates in Alberta.
2001	The Electric utility industry was restructured, the Energy Utilities Board no longer regulated wholesale electricity prices and customers could choose their electricity retailer.
2002	First commercial production of natural gas in coal (a.k.a. coalbed methane) in Alberta. In late 2002, an internal review of government rules and regulations related to CBM development began. This review also included the collection of CBM production and geological data.
2002	BioGem Power Systems partners with the Iron Creek Hutterite Colony to build Alberta's first commercial biogas system , the system uses manure produced on the colony as its feedstock and sells electricity into the provincial grid.
2002	AltaLink assumed control of Alberta’s largest transmission system (previously

	owned by TransAlta) to become the first independent transmission provider in Canada. Source: AltaLink
2002	Natural gas royalty framework is revised to be based on in-stream components.
2002	Alberta's first propylene facility became operational in Redwater.
2003-09	The Government of Alberta implemented the Natural Gas Rebate Program to protect Alberta consumers from high natural gas prices. The program ended on March 31, 2009.
2003	The Government of Alberta passes the Electric Utilities Act, setting the stage for further development of a fair and open competitive electricity market. Under the act, the Power Pool of Alberta and the provincial transmission administrator are merged to form an Independent System Operator, the Alberta Electric System Operator (AESO). AESO manages the competitive electricity wholesale spot market.
2003	In September 2003, a pre-consultation was held with a number of Coalbed Methane stakeholder groups to identify and prioritize issues. Landowners, agriculture producers, academics, the energy industry, and environmental groups participated. This led to the Coalbed Methane/Natural Gas in Coal Multi-Stakeholder Advisory Committee (the MAC) that was established in November 2003 to provide advice and guidance on the Coalbed Methane consultation process.
2004	Changes are introduced to Alberta's retail electricity and natural gas industries, providing consumers with a choice of utility retailers. A customer choice website is developed to help Albertans select providers later this becomes the Utilities Consumer Advocate (UCA).
2004	The $200 million Innovative Energy Technologies Program was announced.
2005	Alberta's Mineable Oil Sands Strategy (MOSS), was produced by a steering group that included representatives from environmental organizations, First Nations, industry and government. They were asked to revise plans for consulting on policy principles the draft for discussion documents, Mineable Oil Sands Strategy and Fort McMurray Mineable Oil Sands Integrated Resource Management Plan were submitted in October.
2005	Genesee Unit 3 is completed. The 450 megawatt unit is Canada's first generation facility to use supercritical combustion technology for greater fuel efficiency and significantly lower emissions. (Clean Coal)
2005-06	Record land sale 9,196 parcels were sold for a total bonus of $2,165,464,637.16, average price per hectare was $693.82.
2006	Alberta's Nine-Point Bioenergy Plan is announced, providing $239 million in bioenergy program funding to support development in the province.
2006	The Government of Alberta approved an allocation of $200 million over four years to create the Energy Innovation Fund (EIF). The EIF is a provincial initiative that supports building world-class knowledge, expertise and leadership to responsibly develop our vast energy resources for the benefit of current and future generations. (news release)
2006	The Oil Sands Ministerial Strategy Committee was directed by Cabinet to develop a

	coordinated short term action plan to address the social, environmental and economic impacts of oil sands developments, Investing in our Future: Responding to the Rapid Growth of Oil Sands Development Final Report, was released in December.
2006	The highest average price ($774.57) per hectare for petroleum and natural gas sales is reported during the first quarter of 2006.
2006	The Oil Sands Consultations Multistakeholder Committee (MSC) begins oil sands consultations throughout Alberta. This series of information meetings were held throughout the province to give Albertans an opportunity to add their voice into how the province's oil sands should be developed.
2006	Planning for regional land use plans began in 2006. It started with Albertans asking for a broader land-use management plan, moved to a series of ideas groups and consultations and then the creation of the Land Use Secretariat and the first Regional Advisory Councils. The proclamation of the *Alberta Land Stewardship Act* made it possible to support regional plans in 2008 the Land-use Framework (LUF) website was launched.
2007	Bioenergy Grant Program recipients receive funding.
2007	The Alberta government eliminates the Alberta Royalty Tax Credit Program (ARTC). The decision follows a review and consultation with industry and stakeholders.
2007	Setting out a vision and identifying principles to guide the future development of Alberta's oil sands are highlighted in the Oil Sands Consultations Multistakeholder Committee (MSC) Final Report and the Aboriginal Consultation Final Report released in July.
2007	The Oil Sands Sustainable Development Secretariat was created to address rapid growth issues in the oil sands regions of Alberta. The Secretariat collaborates with ministries, industry, communities and stakeholders to address the social, infrastructure, environmental and economic impacts of oil sands development. It acts as a main point of contact for inquiries from the public, industry and stakeholders on the government's plan for managing growth in the oil sands.
2007	The Government of Alberta tasks an independent, expert Royalty Review Panel to examine the province's energy royalties and tax regime. The panel was asked to focus on all aspects of the royalty system, including oil sands, conventional oil and gas, and coalbed methane. Their report was released on September 18th.
2007	Drake Landing Solar Community is announced in September. The planned neighbourhood near Okotoks is heated by a district system that gathers solar energy and stores it underground in the summer, then uses it to heat homes during the winter. Source: Drake Landing Solar Community
2007	Premier Stelmach announces Alberta's New Royalty Framework on October 25. The Framework will see Albertans benefit from increased royalties generated by an internationally competitive energy industry.
2007	The Incremental Ethane Extraction Policy (IEEP) is a 10-year initiative to encourage increased ethane extraction by providing royalty credits for increased ethane consumption by petrochemical facilities in Alberta.

2007-11	Construction of Keephills 3, Canada's most advanced coal-fired facility will use supercritical boiler technology which features higher boiler temperatures, higher pressures, and a high-efficiency steam turbine. The new plant will emit approximately 60 to 80 per cent less sulphur dioxide (SO2), nitrogen oxides (NOX), mercury (Hg) and 24 per cent less CO2 while producing the same amount of power.
2008	The governments of Alberta and Canada release *Canada's Fossil Energy Future: The Way Forward on Carbon Capture and Storage*, which provides advice on how governments and industry can work together to facilitate and support the development of carbon capture and storage opportunities in Canada.
2008	Alberta's Micro-Generation Regulation is introduced, making it easier for individual Albertans to produce their own renewable power. The regulation allows Albertans to generate their own environmentally friendly electricity and receive credit for extra power sent into the electricity grid.
2008	The first successfully reclaimed site is certified in the Alberta Oil Sands, near Fort McMurray. Source: Syncrude
2008	On January 1, 2008, the Alberta Utilities Commission Act split the EUB into two new regulatory bodies, the Energy Resources Conservation Board (ERCB) and the Alberta Utilities Commission (AUC). The AUC is responsible for the distribution and sale of electricity and natural gas to Alberta consumers. On June 17, 2013 the Alberta Energy Regulator (AER) succeeded the ERCB to provide full-lifecycle regulatory oversight of energy resource development in Alberta.
2008	In March Building Confidence: Improving Accountability and Transparency in Alberta's Royalty System (Valentine report) was released with royalty recommendations. One of the recommendations was to post historical royalty data. Current royalty information
2008	On June 30, 2008, the Department of Energy announced a statement outlining the Bitumen Valuation Methodology (BVM) which it proposed to implement on January 1, 2009. The Bitumen Valuation Methodology (Ministerial) Regulation was implemented on January 1, 2009. The BVM was implemented to determine a value to calculate oil sands royalty for bitumen produced in oil sands royalty projects where all or a substantial portion of the production is either upgraded on site, or sold or transferred to affiliates. More information is in IB 2012-07.
2008-09	The Government appointed a Nuclear Power Expert Panel in 2008 to prepare a report on nuclear energy. In March 2009 the Panel releases their report, in April Nuclear Power consultation began. It involved a workbook open for public feedback, randomly enrolled discussion groups, stakeholder discussion groups, and a telephone survey. Participants included 4,832 individual Albertans and a broad range of stakeholder groups. Results from the consultation were compiled into a report released on December 14, 2009.
2008-09	In April 2008, the Carbon Capture Development Council was created, the council had a number of deliverables. In July 2008, Premier Ed Stelmach announced a $2 billion fund to advance carbon capture and storage (CCS) projects in Alberta to help reduce emissions by up to five million tonnes annually by 2015. In 2009 four projects

proponents signed Letters Of Intent (LOIs) with the Government of Alberta.

2008-09 In August 2008, the Government released a Bitumen Royalty-In-Kind (BRIK) Request for Expression of Interest (REOI) inviting interested parties to make a submission detailing their interest, and explaining how they could participate in using the government's BRIK volumes. Work continues in 2009 with RFP's, discussion papers and an industry paper.

2008 The Provincial Energy Strategy released in December 2008 charts the course of Alberta's energy future. The strategy is a long-term action plan for Alberta to achieve clean energy production, wise energy use and sustained economic prosperity.

2008 The Renewable Fuel Standard is part of the Provincial Energy strategy.

2009 The Alberta New Royalty Framework announced in 2007 takes effect on January first.

2009 The Oil Sands Sustainable Development Secretariat releases a 20 year plan, Responsible Actions: A Plan for Alberta's Oil Sands.

2009 Bill 50, the Electric Statutes Amendment Act 2009, is given first reading in the legislature.Under Bill 50, the Government of Alberta will be responsible for identifying the need for critical infrastructure projects.

2009 A Memorandum of understanding is signed with Houston's Rice University to combine nanotech
expertise to advance clean energy efforts.

2009 EPCOR announces plans to transfer its power generation business to the newly created Capital Power Corporation, which will operate as a stand-alone public company.
Source: Capital Power

2009 In the summer a number of electricity transmission information sessions are held around the province.

2009-10 **Royalty Archive information**
News Release Province announces three-point incentive program for energy sector (March 3, 2009)

Alberta's Royalty System - Jurisdictional Comparison by Price Waterhouse Coopers (September 2009)

Natural Gas and Conventional Oil Investment Competitiveness Study (fall 2009)
Competitiveness background information

Energizing Investment A Framework to Improve Alberta's Conventional Oil and Natural Gas Competitiveness Review (March 11, 2010)

Project Committee Final Report on Alberta's Natural Gas & Conventional Oil Investment Competitiveness by Sierra Systems (March 11, 2010)
Current royalty information

2010 (Present)

Year	Event
2010	In March the Bioenergy incentive programs are extended.
2010	The Soldier Settlement Board (SSB) came into being in 1917 with the mandate to provide land for returning war veterans. The veteran would acquire title to the surface, but the minerals were reserved in the SSB name and administered by the Government of Canada. In 2001, Alberta Justice filed a Statement of Claim on behalf of Alberta Energy for the SSB minerals and revenues earned by Canada on those minerals since October 1, 1930. After several years of negotiations, on April 1, 2010, Alberta Land Titles Office registered the mineral titles in Alberta's name.
2010	**A Royalty Competitiveness Review was announced on May 27.** News Release Alberta stimulates new energy investment, new technologies Related resources; Webinar (enter your email address to access the archive) Questions and Answers - Energizing Investment Phase 2 (webinar document) New Well Royalty Regulation approved (March 23, 2011) Competitiveness Frequently Asked Questions about the competitiveness review Current royalty information
2010-11	Alberta, British Columbia and Saskatchewan launched the New West Partnership on April 30th, 2010 creating an economic powerhouse of nine million people with a combined GDP of more than $550 billion. In December provinces united to improve access to Asian markets. MOU The New West Partnership website launched in April 2011. In December 2011 the Premiers committed to an Ottawa mission.
2010	Record land sale set in 2010 netted more than $2.39 billion. This surpasses any other year in history and is the first time the province has exceeded $2 billion in sales. The province also established a new high for the average price per hectare, the July 7 sale netted an average price of $2,185.03 per hectare, exceeding the previous high of $2,084.86.
2010	In August the Public Involvement in the Shell Quest Environmental Assessment was released.
2010	**Energizing Investment Industry Royalty sessions were held in October.** Related resources; Competitiveness Review Changes, Training Session (October 12 & 13, 2010) Joint Industry/ Alberta Energy Crown Royalty Information exchange (October 22, 2010) Frequently Asked Questions following the exchange Current royalty information
2010- 11	The AUC is directed to gather information and report back to the Minister on three key initiatives to enhance conservation, development of green energy sources and the regulatory process.

- Review the regulatory approval process for hydroelectric facilities.
- Determine how smart grid technology can be used to modernize the electricity system. Advanced Metering Infrastructure helps consumers make more informed decisions on wise electricity use.
- Review the rules for the regulation of consumer choices for both natural gas and electricity.

2010-11	Bitumen Royalty in Kind (BRIK) begins negotiations in May 2010, in February 2011 an agreement is signed.
2010-13	Carbon Capture and Storage (CCS) ammendment legislation was introduced in November of 2010 to guide how large-scale CCS projects will proceed in Alberta. In March 2011 international expertise was announced to guide commercial scale deployment of CCS. In July 2012 the Shell Quest project was approved by the ERCB with conditions. In February 2013 the funding agreement for the Swan Hills Synfuels project was discontinued.
2010-11	Regulatory Enhancement Task Force delivers several reports from June 2010 to it's final report in May 2011 to better integrate oil and gas policy and the regulatory system.
2011	A program to increase extraction of ethane to support continued growth of Alberta's petrochemical sector is expanded. Ethane extraction during bitumen upgrading reduces greenhouse gas emissions and boosts value-added production. The five-year Incremental Ethane Extraction Program was approved by government in 2006.
2011	The Federal Government partners with industry to bring new Natural Gas technology to market. The federal government will fund $750,000 towards a project facilitated by the not-for-profit industry and stakeholder association, Petroleum Technology Alliance Canada (PTAC). Alberta Energy is also contributing $250,000 towards the total project costs. A clean energy centre is also established for biomass technologies in the same month.
2011	In March some of the old **bioenergy programs** were closed, current bioenergy programs are still available.
2011	Alberta implemented a Renewable Fuels Standard on April 1 requiring an annual average of two per cent renewable diesel in diesel fuel and five per cent renewable alcohol in gasoline sold in Alberta.
2011	ERCB reported over 2,300 successful oil wells were drilled in 2010, more than double the numbers drilled in 2009
2011	The Alberta Electric System Operator (AESO), the province's electricity system planner releases a draft long-term transmission plan in June.
2011	The Innovative Energy Technologies program created in 2004 announces another 6 projects in July bringing the total number of projects to 37.
2011	Alberta hosted Canada's Energy and Mines Ministers' conference in July 2011 in Kananaskis. A Canadian Energy strategy was discussed and a national action plan will be reviewed at the 2012 conference in Prince Edward Island.
2011	An information exchange with Industry and the department was held in October Oil and Gas Royalty Information Exchange. Current royalty information

2011	Alberta Utilities Commission (AUC) introduces changes in October to utility disconnection and reconnection practices to protect vulnerable customers. This unprecedented AUC initiative coordinates energy companies, social agencies and the privacy commissioner.
2011	A new portal site launched in November allows easy extraction of oil sands data making Alberta industry information more transparent. It includes searchable data highlighting such things as facility-specific water use, greenhouse gas emissions, tailings pond size and land disturbance and reclamation.
2011-12	On December 6th the Alberta government announced an independent panel of experts to review plans for two high-voltage transmission lines between the Edmonton and Calgary regions. On February 13th they released their report. On the 23rd government accepted the recommendations, issued a response and agreed to review the variable, regulated retail electricity rate. In March the Alberta government appointed an independent committee to review the electricity retail market to help address the volatility and costs associated with the variable,or default, rate in Alberta's competitive market. The Retail Market Review Committee was set up in March an extension was granted in June and the report was delivered to the Minister in September.
2012	The New West Partnership (Alberta, British Columbia and Saskatchewan) announced new rules to streamline registration on July 1, 2012. In September 2012, Premier Redford and other members promote the New West Partnership in China.
2012	The Oil Sands Sustainable Development Secretariat was with Treasury Board and Infrastructure before returning to Alberta Energy in May of 2012. Comprehensive Regional Infrastructure Sustainability Plans (CRISP) are new long-term and collaborative approaches to planning infrastructure in Alberta's three oil sands areas. The CRISP for the Athabasca Oil Sands Area has been completed, and the CRISP for the Cold Lake Oil Sands Area is currently underway. A CRISP for the Peace River Oil Sands Area will be completed soon.
2012	On June 7th the Plains Midstream Canada's Rangeland pipeline had a release into the Red Deer River via Jackson Creek. Premier Redford issued a statement the following day.
2012	Minister Hughes requested that the ERCB retain an independent third party to examine elements of the province's pipeline system. The ERCB issued a Request for Proposal on the Alberta Purchasing Connection website. On September 10th the ERCB announced that Group 10 Engineering Ltd., was awarded the contract.
2012	On August 22nd the Lower Athabasca Regional Plan (LARP) was announced, it is the first regional plan under the Land-use Framework (LUF).
2012	The Petroleum Registry of Alberta becomes Petrinex (**Petr**oleum. **In**formation. **Ex**cellence.) in November.
2013	In January the government announced changes to protect electricity consumers, the retail market review report was also released.
2013	The Swan Hills Synfuels carbon capture and storage project was cancelled in February.

2013 Five new pilot projects were announced in April under the Innovative Energy Technology Program (IETP).

2013 On June 17th The Alberta Energy Regulator (AER) succeeded the Energy Resources Conservation Board (ERCB).

2013 Premier Redford and Premier Clark from BC sign an agreement for a Deputy Minister's working group on July 26th.