

CGA Energy Nexus & Annual Technical Conference 2024

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Alberta Energy Outlook

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Agenda

- Report Highlights
 - Prices
 - Primary energy production
- Reserves
- Energy in Alberta
 - Well activity
 - Bitumen production
 - Oil removals
 - Capital expenditures
 - Emerging Resources
 - Carbon capture, utilization, and storage (CCUS)

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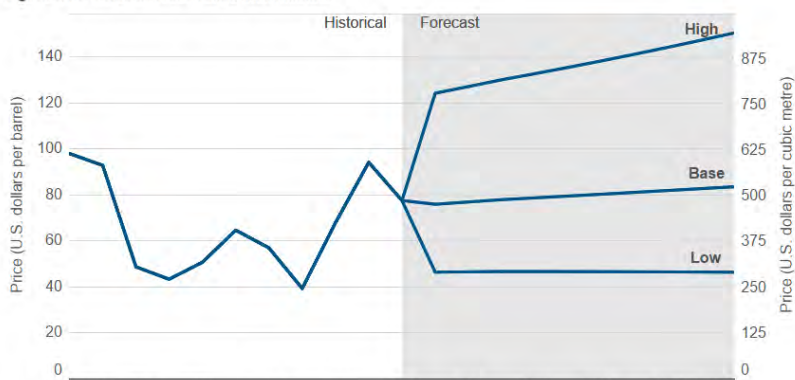
REPORT HIGHLIGHTS

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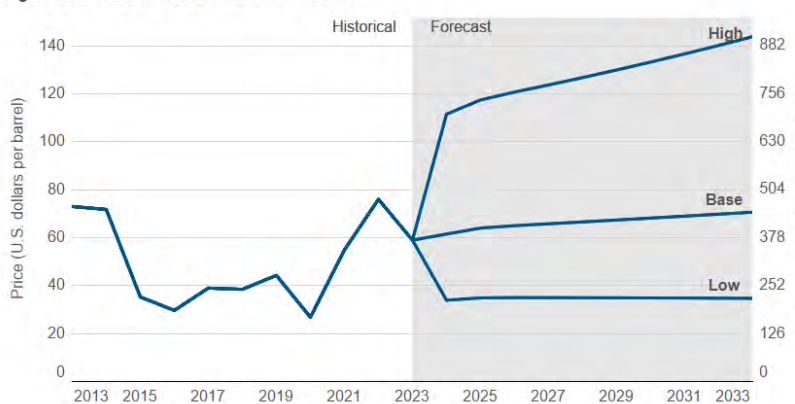
Crude Oil Prices

Figure S1.2 Price of West Texas Intermediate



WTI (US\$/bbl)	2023	2024	2033
High		\$124	\$150
Base	\$77.62	\$76	\$83
Low		\$46	\$46

Figure S1.3 Price of Western Canadian Select

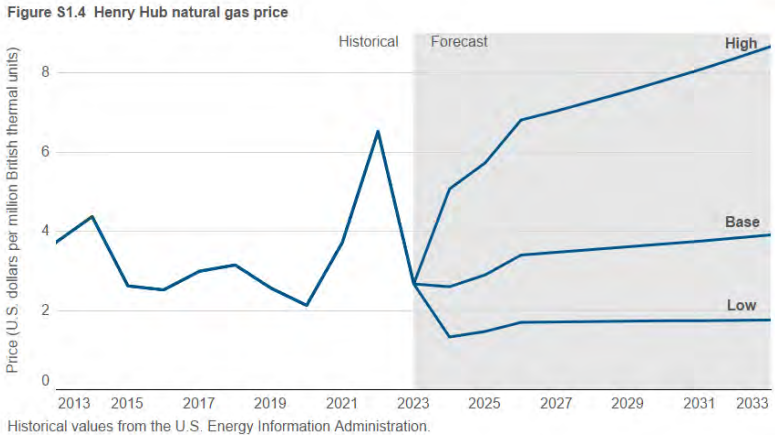


WCS (US\$/bbl)	2023	2024	2033
High		\$112	\$143
Base	\$58.97	\$62	\$70
Low		\$34	\$34

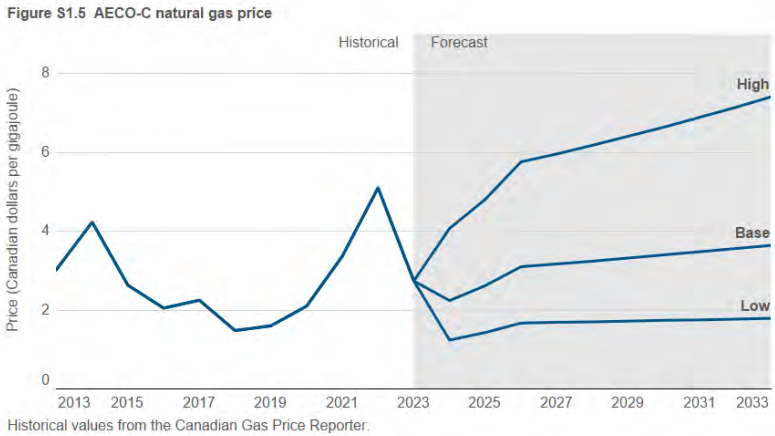
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Natural Gas Prices



Henry Hub (US\$/MMBtu)	2023	2024	2033
High		\$5.10	\$8.70
Base	\$2.67	\$2.60	\$3.90
Low		\$1.30	\$1.80

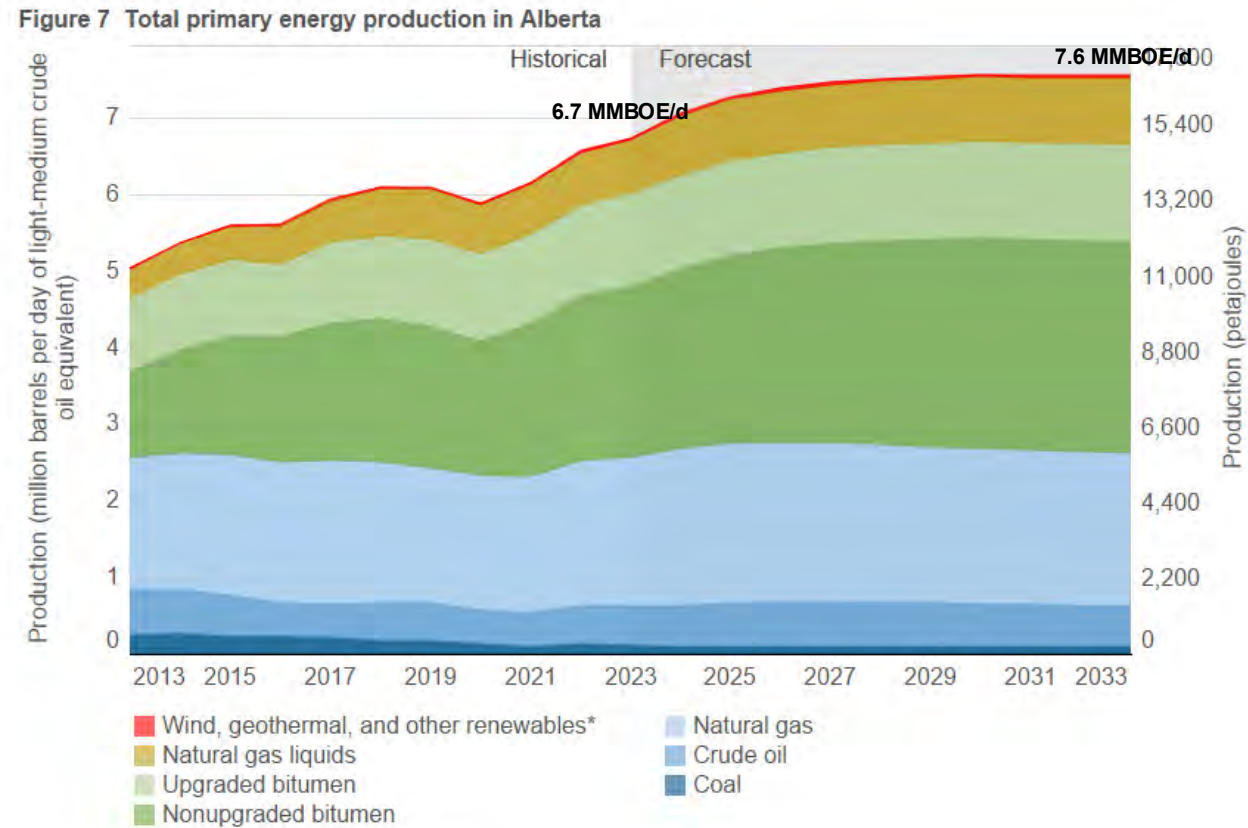


AECO-C (Cdn\$/GJ)	2023	2024	2033
High		\$4.10	\$7.40
Base	\$2.74	\$2.20	\$3.60
Low		\$1.20	\$1.80

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Energy Production



* Geothermal data included in 2020 to 2033.

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RESERVES

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Resource Categories

Figure R1.1 Resource Classification

	 Conventional	 Low Permeability	 Shale	 Coalbed Methane	 Bitumen	 Coal
Resources Type >	Crude oil, natural gas, natural gas liquids	Crude oil, natural gas, natural gas liquids	Crude oil, natural gas, natural gas liquids	Natural gas	Oil sands, carbonate-hosted crude bitumen	Subbituminous bituminous, metallurgical bituminous thermal
Trapping >	Buoyancy/seal	May be buoyancy/seal, relative permeability effects, or other factors	Adsorption on kerogen, in pores and fractures	Adsorption in coal micropores and fractures	High viscosity	Accumulates in thick organic deposits
Reserves Evaluation >	Deterministic COGEH, IPACE	Probabilistic COGEH, SPEE monograph 3 and 4	Probabilistic COGEH, SPEE monograph 3 and 4	Probabilistic COGEH, SPEE monograph 3	Probabilistic IPACE	Deterministic CRIRSCO general

COGEH = Canadian Oil and Gas Evaluation Handbook

SPEE = Society of Petroleum Evaluation Engineers

CRIRSCO = Committee for Mineral Reserves International Reporting Standards

IPACE = Inter-Provincial Advisory Committee on Energy

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Established Reserves

Recoverable and Produced	Crude Bitumen (10 ⁶ m ³)	Crude Oil (10 ⁶ m ³)	Natural Gas (10 ⁹ m ³)	Coal (10 ⁹ tonnes)
Cumulative production	3 044	2 966	5 499	1.7
Remaining established reserves	25 048	288	718	33.1
Annual production	197.9	29.7	115.0	0.011

Note: Includes bitumen, natural gas and crude oil outside of oil sands areas, coalbed methane, and coal.

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Emergent Reserves

Recoverable and Produced	Crude Oil (10 ⁶ m ³)	Condensate/ Natural Gas Liquid (10 ⁶ m ³)	Natural Gas (10 ⁹ m ³)
Initial established reserves	54.4	145.1	387.7
Cumulative production	31.0	85.7	238.5
Remaining established reserves	23.4	59.4	155.9

Note: Includes low permeability and shale resource portions of the Montney and Duvernay Formations.

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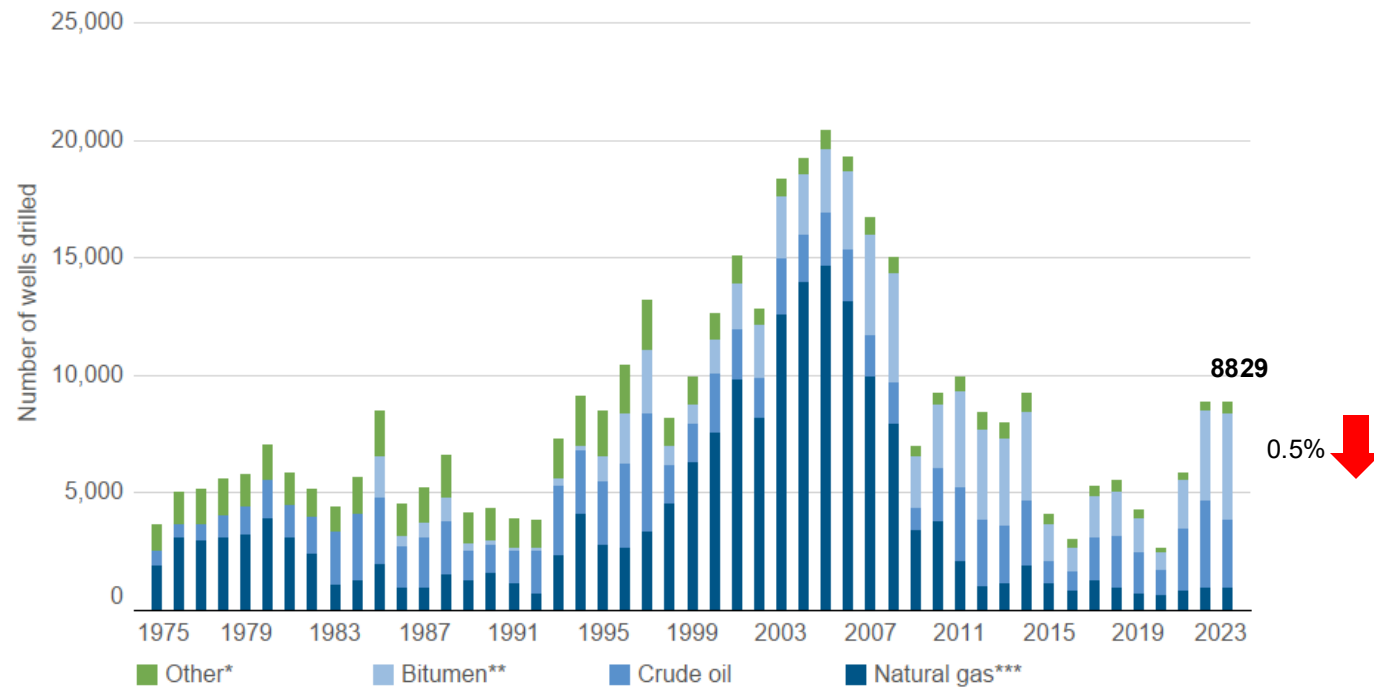
ENERGY IN ALBERTA

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Well Activity

Figure 13 Historical drilling activity in Alberta



* Includes unsuccessful, service, and suspended wells.

** Includes producing and evaluation wells.

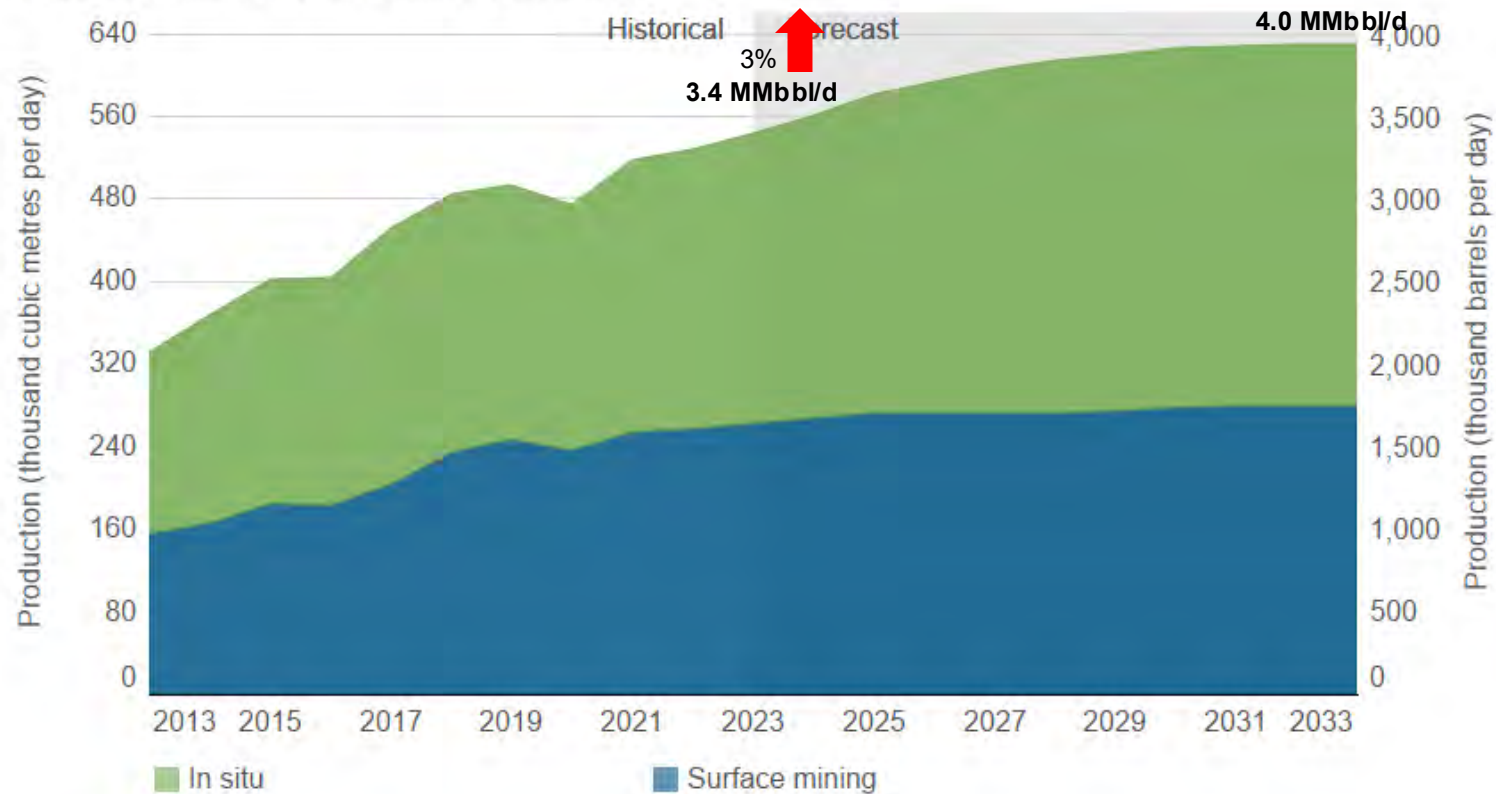
*** Includes coalbed methane wells.

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Bitumen Production

Figure S3.1 Alberta crude bitumen production

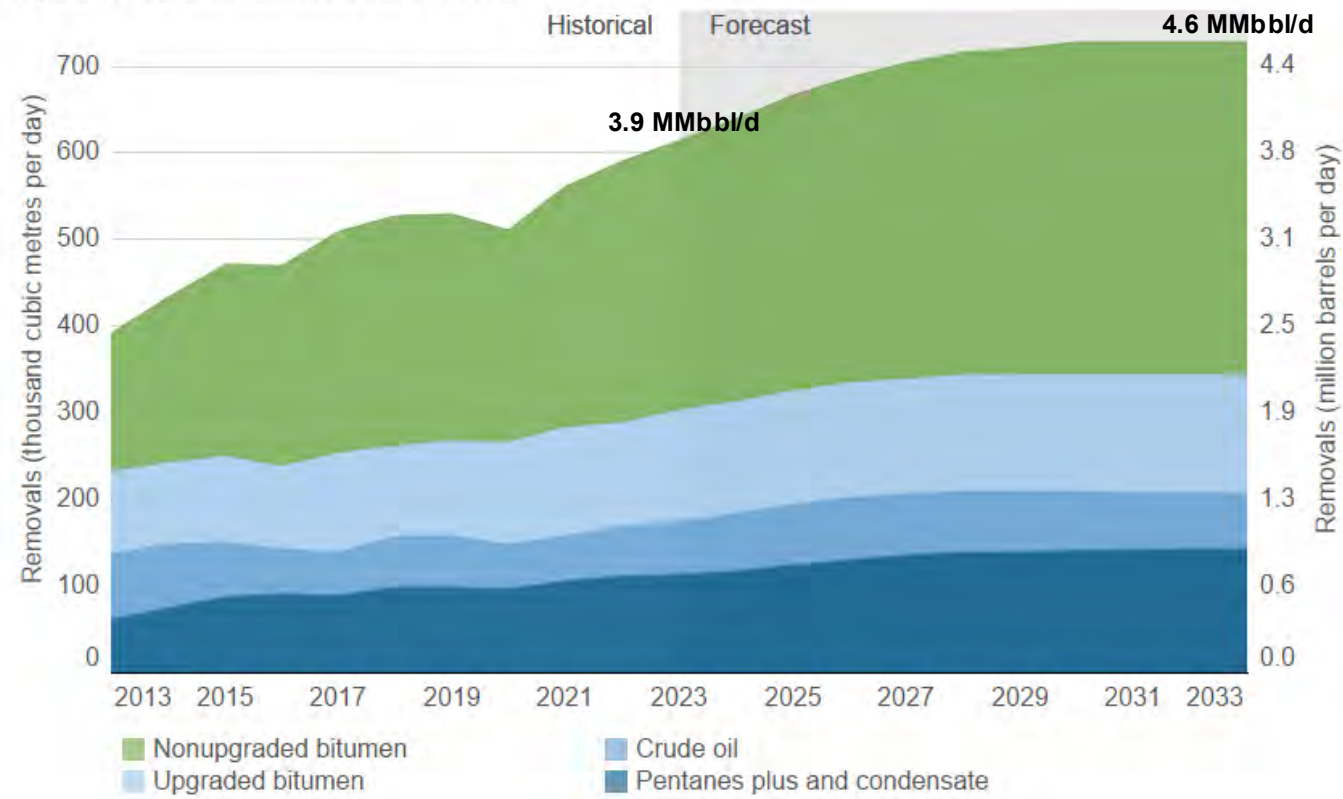


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Oil Removals

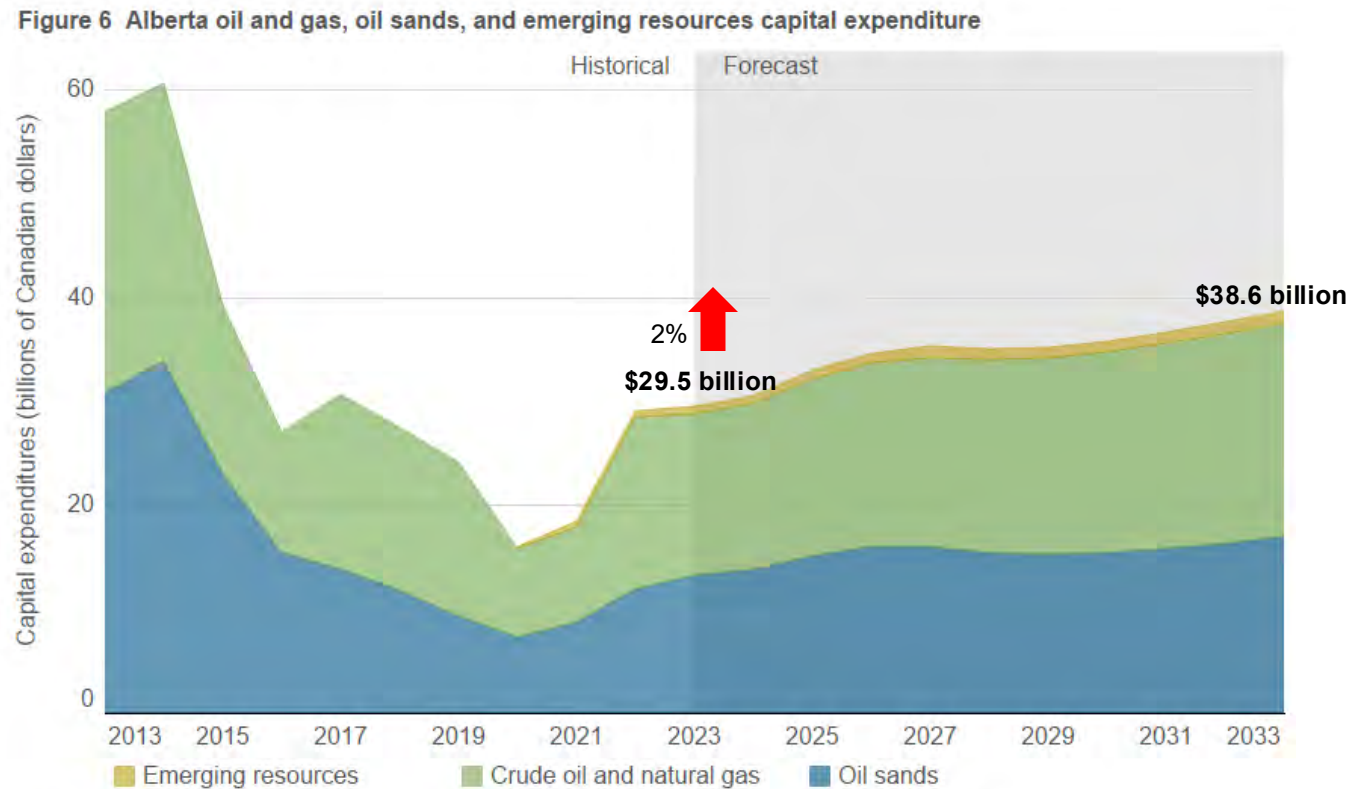
Figure 12 Total oil removals from Alberta



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Capital Expenditures

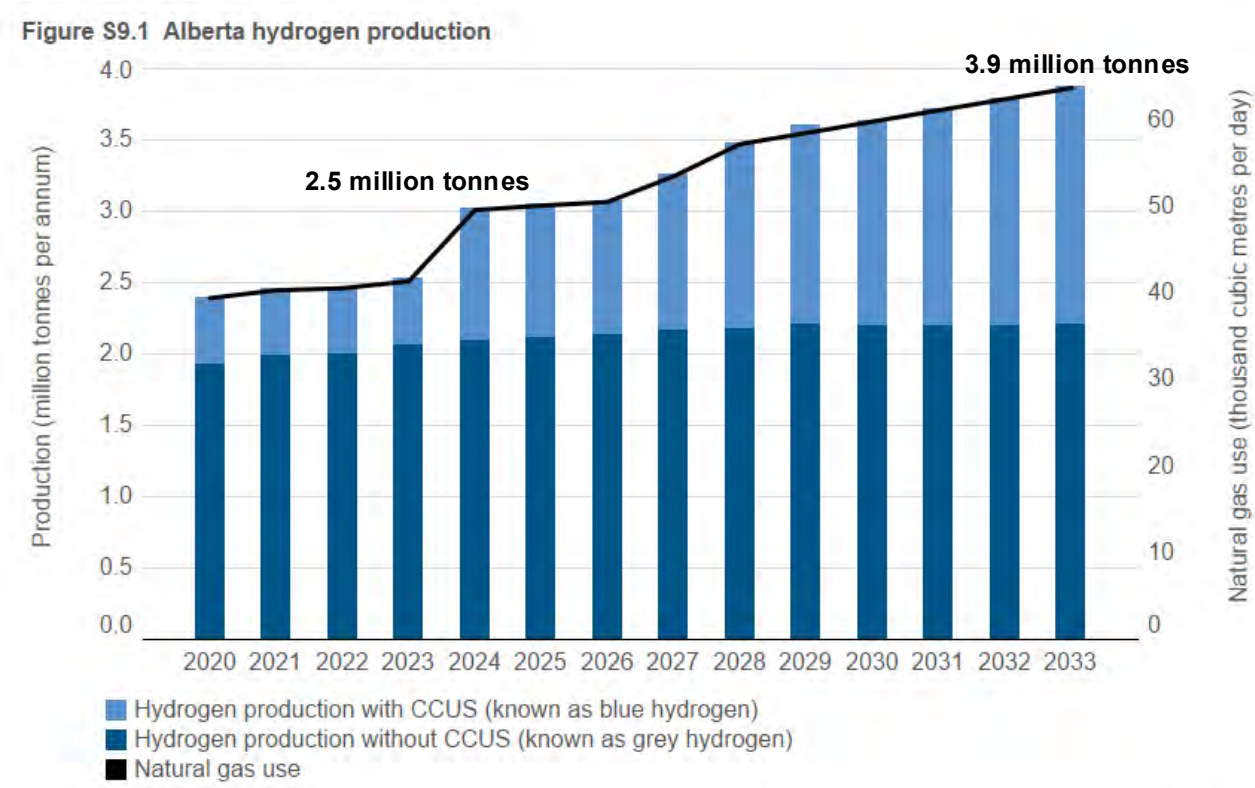


Oil sands, crude oil, and natural gas historical values from CAPP. 2023 values are estimated.
Emerging resources include geothermal, hydrogen, helium, and lithium. Historical figures are estimated.

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Hydrogen



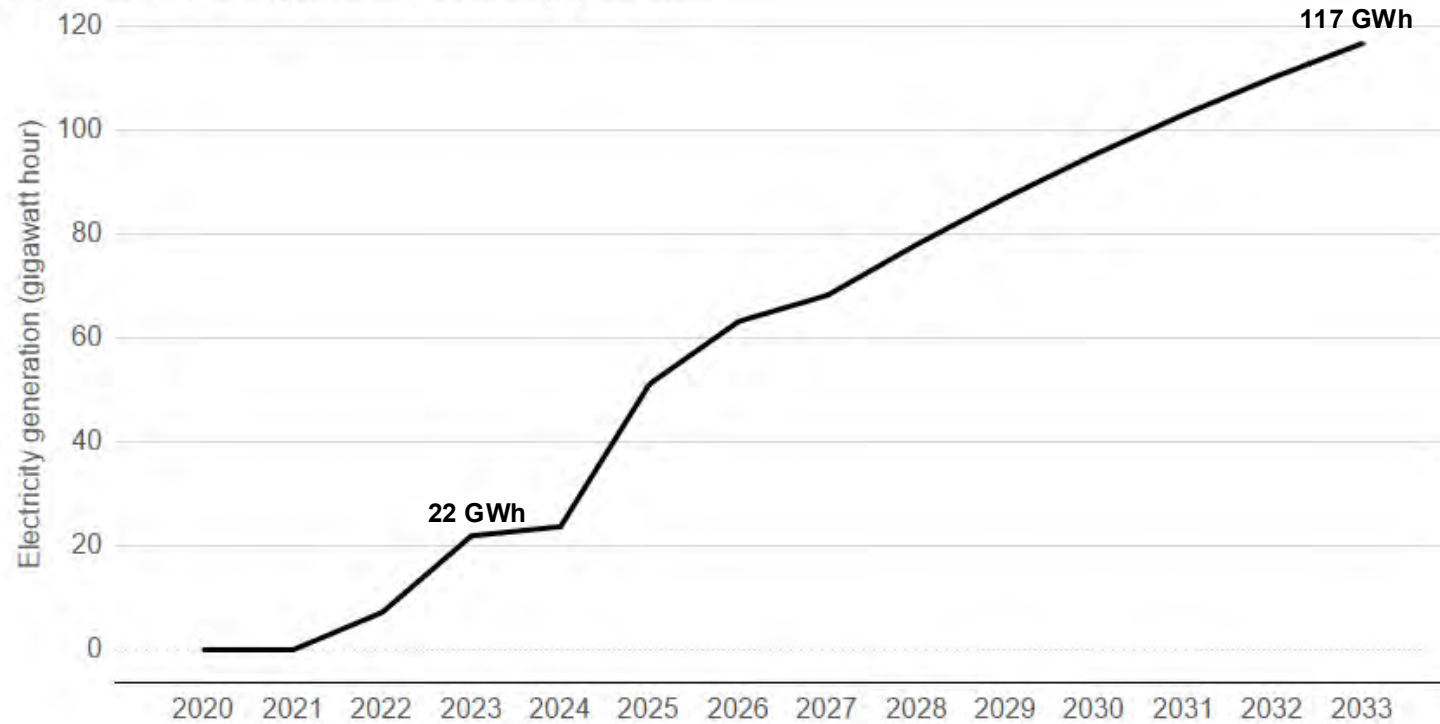
Note: Based on 2020 hydrogen production data from the Alberta Hydrogen Roadmap and publicly available information, we estimate and forecast the hydrogen production. CCUS represents Carbon Capture, Utilization, and Storage.

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Geothermal

Figure S9.2 Alberta geothermal electricity generation



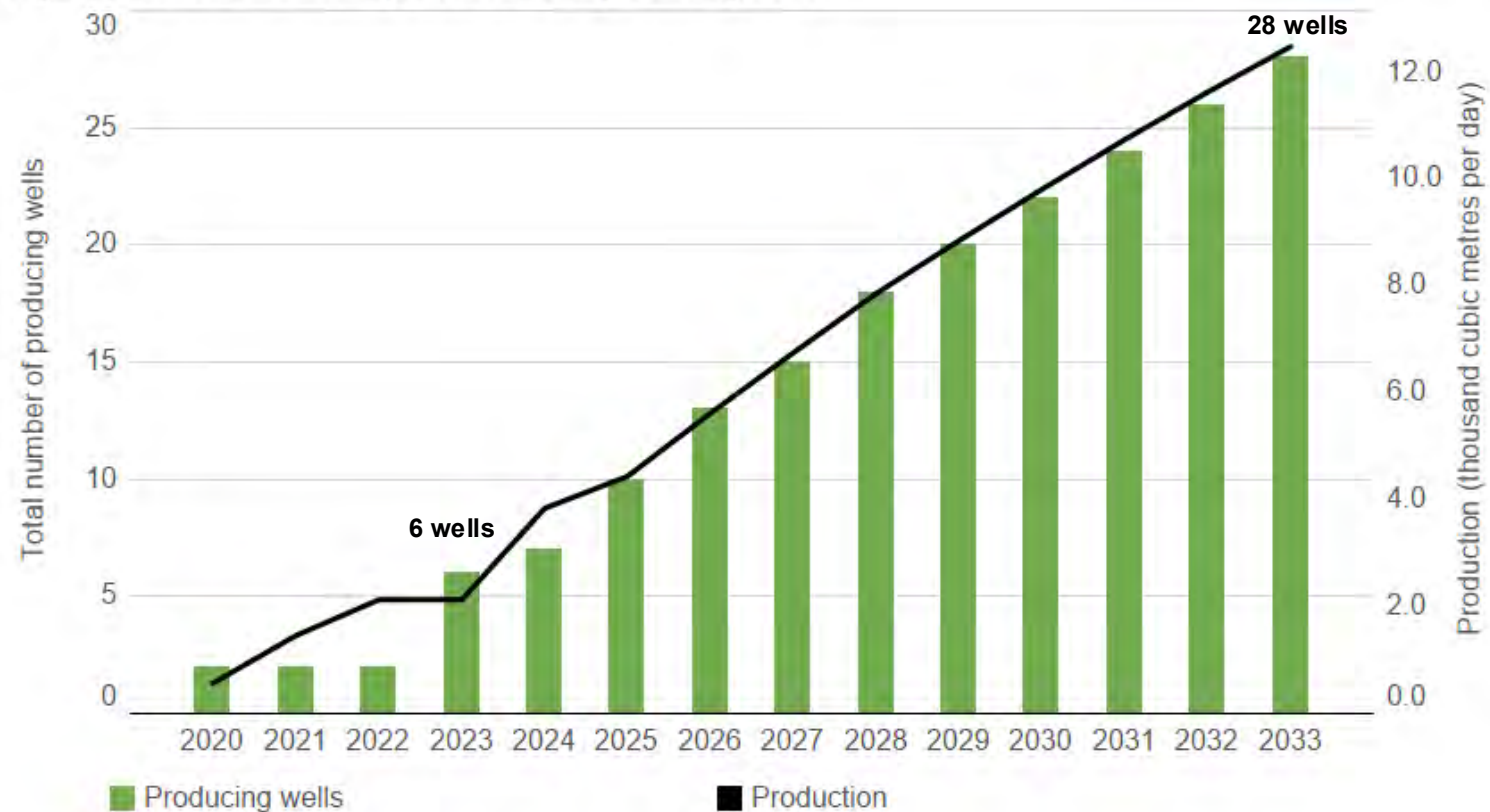
Note: Data was revised using new available information.

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Helium

Figure S9.3 Alberta helium production and producing wells

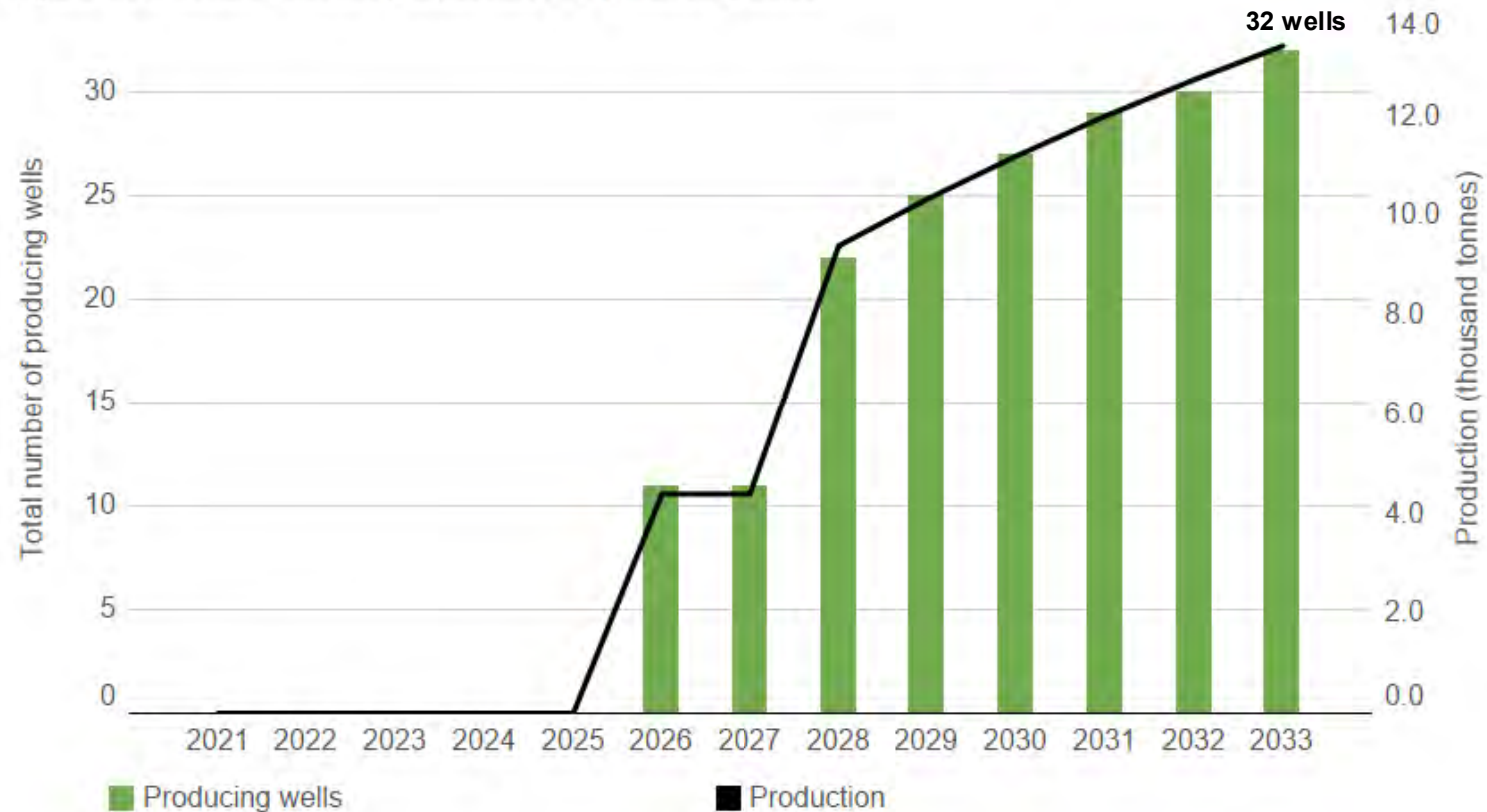


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Lithium

Figure S9.4 Alberta lithium production and producing wells

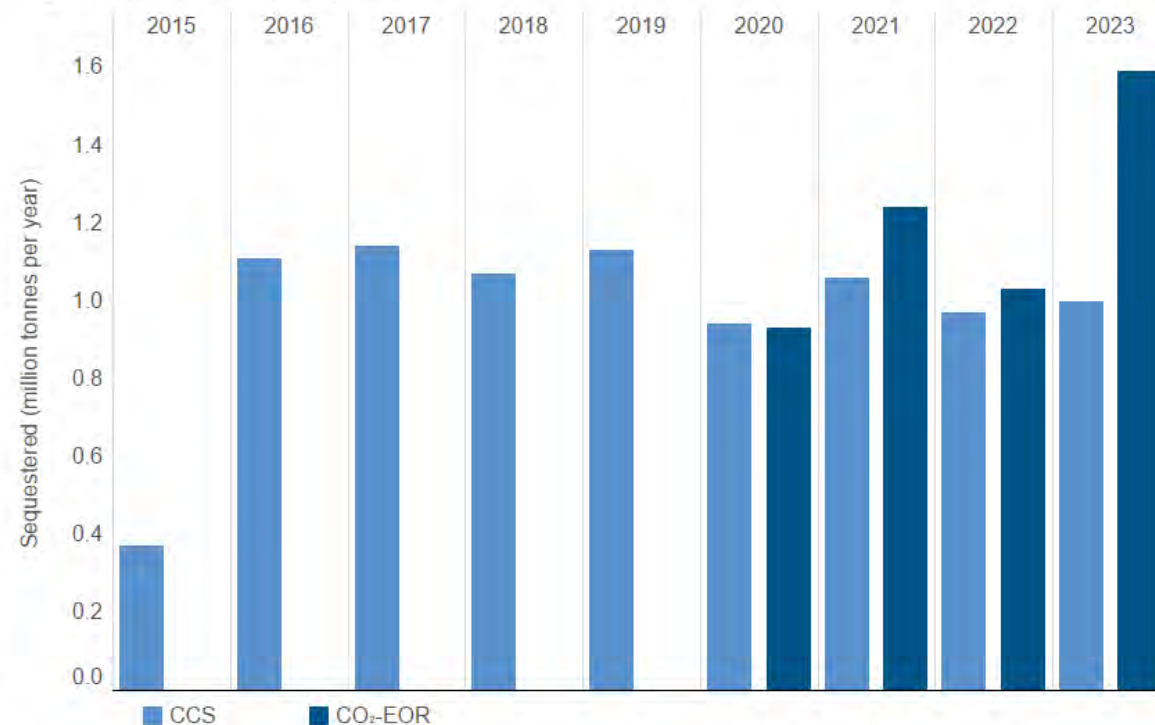


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Carbon Capture, Utilization, and Storage (CCUS)

Figure S10.1 Alberta CO₂ sequestration



Historical values are sourced from Petrinex. 2023 values are preliminary.

Values do not include CO₂ sequestered via acid gas disposal and CO₂-EOR projects that sequester less than 100,000 tonnes per year.

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QUESTIONS?

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THANK YOU