

Area-Based Closure Program

2021 Highlights

In 2021, participants in the Area-Based Closure (ABC) Program achieved the following:

- **8537** licences abandoned
- **2061** licences reclaimed
- **\$550** million reported closure spend
- **\$328** million (60%) was licensee-funded closure



Closure spend was reported for over 28 816 inactive licences.



157 closure projects were submitted into the ABC mapping tool.

The Alberta Energy Regulator's (AER) ABC program was a three-year program that began in 2019 and ended in 2021. The ABC program was a key part of the AER's transition to the new Liability Management Framework (LMF), specifically, the closure spend targets within the Inventory Reduction Program. The LMF is intended to assess and address liabilities under the AER's mandate.

With the ABC program and now the LMF, the AER initiated a greater focus on closure in Alberta. The requirement for closure spending allows licensees to focus on aspects of closure work that fits their liability reduction goals rather than the AER directing specific closure work. A significant benefit of closure spending is that licensees can direct spending towards large-scale, efficient closure.

Figure 1 shows the number of wells abandoned in successive three-year periods, culminating in a substantial increase in the 2019 to 2021 period of the ABC program. The well count includes observation wells and wells that had production, and does not include dry-hole wells.

Another factor in increased closure activity is the funding available through the Alberta [Site Rehabilitation Program](#) (SRP). We expect to see the trend of increasing closure

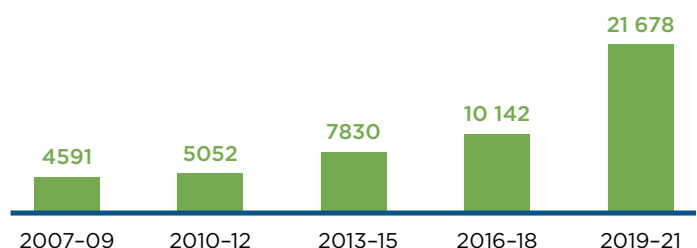
continue now that closure spend targets are mandatory for the industry.

Closure Activity and Spend Summary

Compared with 2020, the number of wells abandoned by ABC participants more than doubled in 2021. Although the number of reclaimed licences dropped by 15% in 2021, reclamation is a multiyear process; we saw remediation spending increase by 40% and reclamation spending by 69% in 2021.

The industry reported total spending increased by 85% from 2020 to 2021. The total reported spend for 2021 was \$550 million, including licensee and SRP funding. The licensee-funded portion was \$328 million. This indicates that the service sector can meet the demands of new closure spend targets.

Figure 1. Abandoned wells in three-year increments



Total Closure Milestones Achieved

Abandoned Licences

	ABC Participants			OWA			Companies not in ABC		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
Wells	8 047	3 930	3 578	1 233	1 827	811	2 561	1 235	2 105
Facilities	438	559	283	103	48	43	63	57	52
Pipelines	52	21	29	4	1	2	105	35	56

Reclaimed Licences

	ABC Participants			OWA			Companies not in ABC		
	2021	2020	2019	2021	2020	2019	2021	2020	2019
Wells	2 034	2 414	2 240	257	167	111	1 043	1 015	1 607
Facilities	27	25	14	5	1	1	63	12	13
Pipelines	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Spend by Infrastructure & Work Type by ABC Participants – this includes SRP

Annual Abandonment Spend per Licence Type

	2021 (\$ million)	2020 (\$ million)	2019 (\$ million)
Wells	307.1	146.9	164.3
Facilities	10.1	7.9	8.7
Pipelines	24.6	11	18.4
Total abandonment spend	\$342.3	\$165.8	\$191.4

Annual Remediation Spend per Licence Type

	2021 (\$ million)	2020 (\$ million)	2019 (\$ million)
Wells	66.1	44.7	60.5
Facilities	7.0	5.9	15.9
Pipelines	0.4	1.4	7.4
Total remediation spend	\$73.1	\$52	\$83.8

Annual Reclamation Spend per Licence Type

	2021 (\$ million)	2020 (\$ million)	2019 (\$ million)
Wells	128.0	77.4	60.9
Facilities	6.5	2.1	3.3
Pipelines	0.09	0.0	3.2
Total reclamation spend	\$134.5	\$79.5	\$67.4

Compliance

SRP funding contributed to increased closure spending. The government-funded portion does not count towards licensee targets, meaning that licensees in the ABC program still needed to provide their portion of funding for closure activities.

Because of the effects of COVID-19, we suspended individual spend targets in 2020. For licensees who participated in the program in both 2020 and 2021, spend from the 2020 program year was allowed to count towards the licensees' 2021 targets.

In 2019 and 2020, all licensees in the program met their approved closure plans. However, following the March 31, 2022, reporting deadline, 15 licensees reported spending less than the target amount. Those licensees were notified that they failed to comply with their approved closure plans. Some licensees corrected their reporting, bringing themselves into compliance. The AER is following its compliance assurance process with noncompliant licensees.

Details on the New Closure Spend Targets Program

The Inventory Reduction Program began in 2022 with mandatory closure spend targets required under [Directive O88: Licensee Life-Cycle Management](#). A minimum annual closure spend target was assigned to all licensees with inactive liability. Inactive liability was estimated using [Directive O11: Licensee Liability Rating \(LLR\) Program: Updated Industry Parameters and Liability Costs](#) and site-specific liability assessments for inactive sites. The mandatory industry spend target for 2022 was \$422 million; \$700 million for 2023.

Although the ABC program has ended, an area-based closure approach is still recommended. Licensees and service providers can continue to collaborate while planning and executing their closure work using the ABC mapping tool to submit proposed and confirmed projects.

The reporting deadline for the 2022 closure spend targets is March 31, 2023. Licensees who do not report sufficient spend to meet their target by the date will be noncompliant.

Participants Who Achieved Their 2021 Closure Spend Target

ARC Resources Ltd.	Husky Oil Operations Limited	Sifton Petroleum Inc.
Athabasca Oil Corporation	I3 Energy Canada Ltd.	Sinopec Daylight Energy Ltd.
Birchcliff Energy Ltd.	Imperial Oil Resources Limited	Spartan Delta Corp.
Bonavista Energy Corporation	InPlay Oil Corp.	Spur Petroleum Ltd.
Bonterra Energy Corp.	Ipc Canada Ltd.	Strathcona Resources Ltd.
Canadian Natural Resources Limited	Journey Energy Inc.	Summerland Energy Inc.
Canamax Energy Ltd.	Knowledge Energy Inc.	Surge Energy Inc.
Canlin Energy Corporation	Longshore Resources Ltd.	Tamarack Acquisition Corp.
Cardinal Energy Ltd.	Novus Energy Inc.	TAQA North Ltd.
Cenovus Energy Inc.	NuVista Energy Ltd.	Tidewater Midstream and Infrastructure Ltd.
City Of Medicine Hat	Obsidian Energy Ltd.	Torxen Energy Ltd.
Cor4 Oil Corp.	Outlier Resources Ltd.	Vermilion Energy Inc.
Crescent Point Energy Corp.	Paramount Resources Ltd.	Vesta Energy Ltd.
Cycle Oil & Gas Ltd.	Perpetual Energy Inc.	West Lake Energy Corp.
Ember Resources Inc.	Perpetual Operating Corp.	Whitecap Resources Inc.
Enerplus Corporation	Pieridae Alberta Production Ltd.	Winslow Resources Inc.
ExxonMobil Canada Resources Company	Prairie Provident Resources Canada Ltd.	Zargon Oil & Gas Ltd.
Harvest Operations Corp.	Primrose Drilling Ventures Ltd.	