Alberta Energy Regulator

Liability Management Performance Report

2024

November 2025

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The purpose of this report is to improve transparency about industry's management of oil and gas liabilities with the implementation of the new liability management programs.

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Executive Summary

In July 2020, the Government of Alberta announced the liability management framework, and the Alberta Energy Regulator (AER) released new requirements through *Directive 088* in December of 2021. This report provides an overview of industry performance in relation to liability management and the impact of requirements and programs implemented to reduce oil and gas liability over time.

The purpose of this report is to improve transparency about industry's management of oil and gas liabilities with the implementation of the new liability management programs. The report also helps the AER develop closure work baselines that assess industry as a whole and individual licensees. This report will be updated annually, and additional data will be added as the liability management program expands.

2024 Highlights:

- The industry-wide closure spend requirement remained unchanged at $700 million.
- The orphan fund levy remained unchanged at $135 million.
- Over $1 billion was spent on closure. This comprised the licensees' reported eligible spend of $900 million, surpassing the requirement by 28%, and the industry-funded Orphan Well Association (OWA) spend of $119 million.
- 85% of licensees were compliant with their 2024 mandatory closure spend. There are 69 noncompliant, active licensees with $6.4 million in outstanding quotas, which is less than 1% of the industry-wide closure spend requirement.
- Industry continues to work on the backlog of inactive infrastructure. Between 2022 and 2024, the inactive well count decreased from 91 000 to 78 000 (14% decrease).

Section I. Oil and Gas Infrastructure

The energy industry has been a driver of Alberta's economy for decades, resulting in various infrastructure on the landscape (wells, facilities, and pipelines). Figure 1 shows the various infrastructure life-cycle stages (active, inactive, decommissioned, and reclaimed).

Ultimately, all infrastructure and energy development sites must be permanently and safely decommissioned, assessed, remediated if necessary, and reclaimed. These activities are known as "closure." The obligation to carry out and pay for this work (known as "liability") rests with industry.

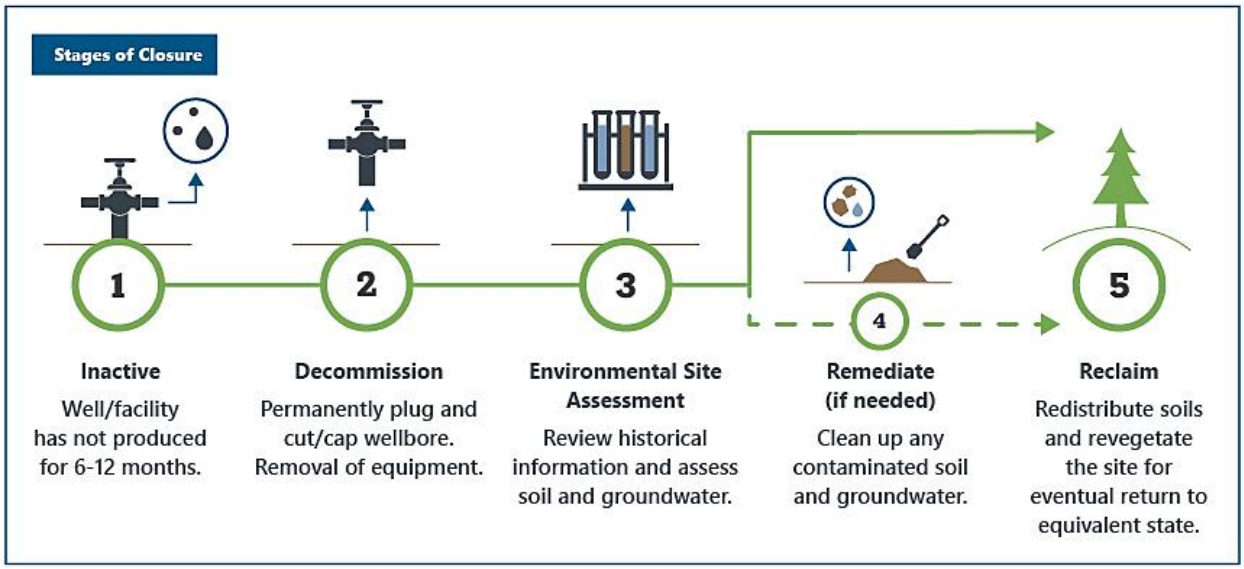


Figure 1. Stages of Closure

Liability is associated with all energy infrastructure, regardless of its stage in the life cycle. However, close attention is paid to the amount of liability associated with inactive infrastructure as it no longer generates income for a licensee to pay closure costs.

Figure 2 shows that the closure rate and drilling rate do not match. Consequently, inactive infrastructure within the province has increased 5% annually. If closure activities had been carried out at the same pace as energy development, the growth of inactive infrastructure may have been curtailed.

Since 2020, the inactive well trend has reversed and continues to trend downwards and may be levelling off (see figure 2). Although this is a positive trend, continued effort and focus by industry are essential to maintaining this downward trajectory.

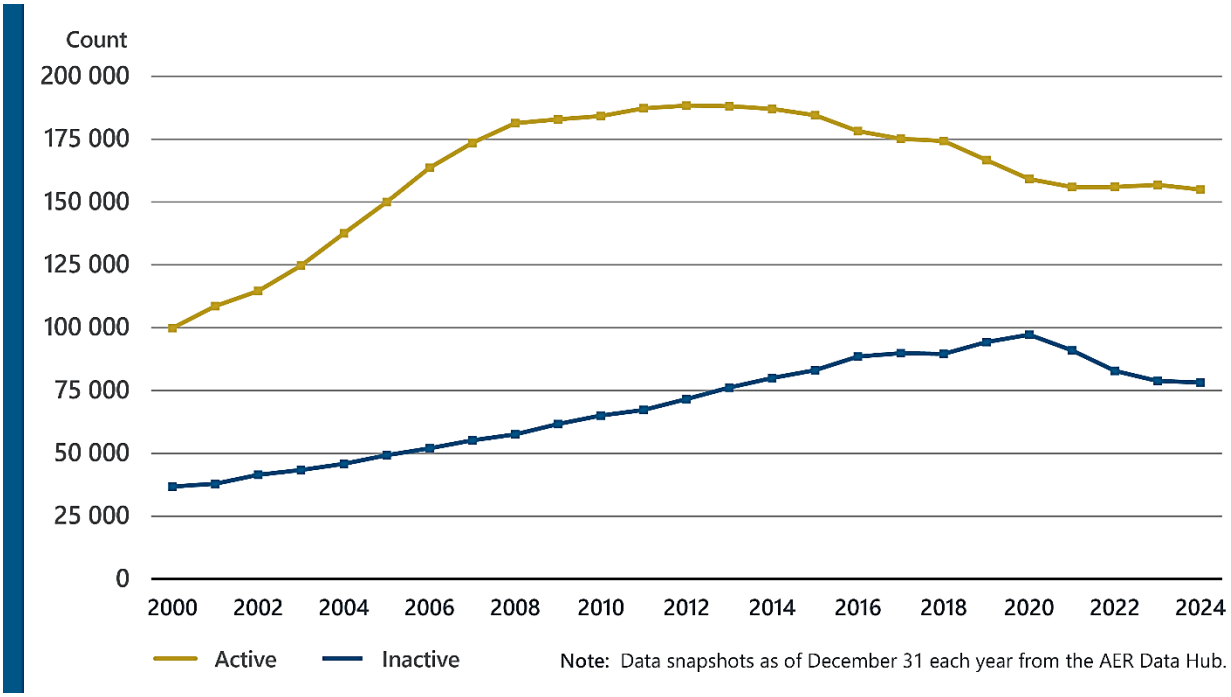


Figure 2. Number of active and inactive wells, 2000–2024

In 2014, the AER introduced the Inactive Well Compliance Program (IWCP) to address the growing number of inactive wells that were noncompliant with *Directive 013* suspension requirements. By the end of the program in 2021, approximately 37% of the wells brought into compliance were decommissioned, and 6% were reclaimed instead of being suspended. The remaining wells remained inactive.

With the introduction of the IWCP, licensees have prioritized decommissioning older wells rather than suspending them. In 2014, 55% of the wells decommissioned were older than 10 years, and only 20% were over 20 years old. In 2024, over 90% of the decommissioned wells were older than 10 years and 67% older than 20 years (see figure 3).

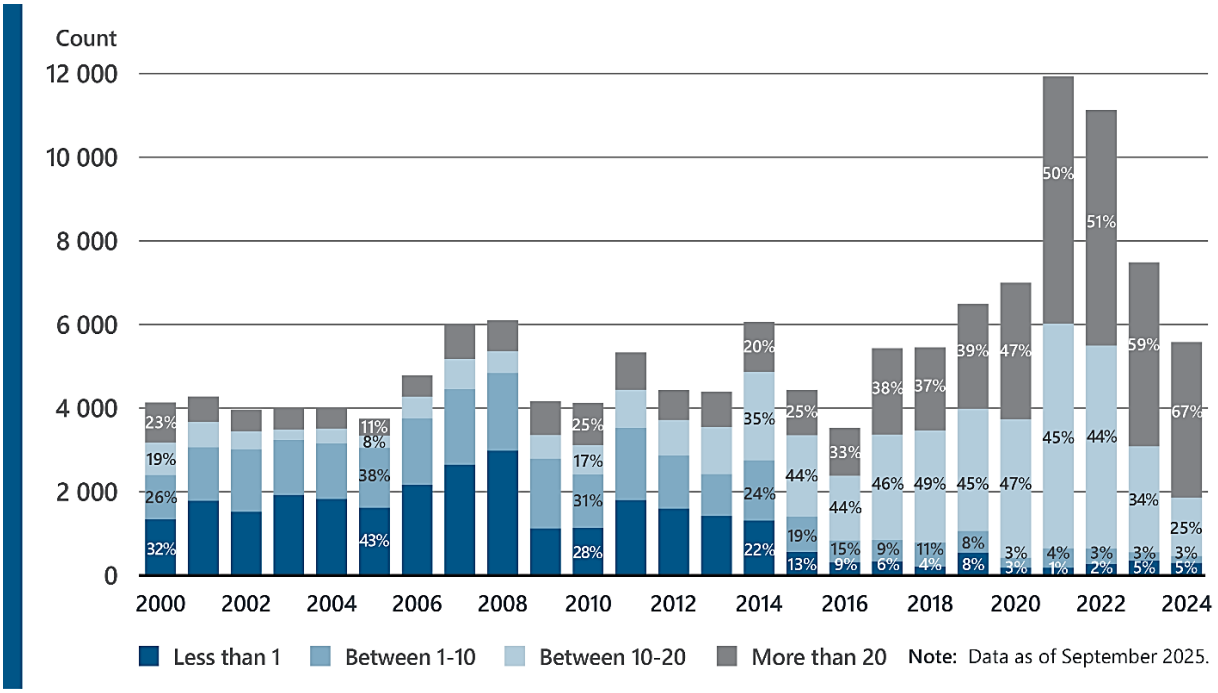


Figure 3. Industry decommissioned wells by age, 2000–2024

Figure 4 illustrates the duration that wells are inactive before decommissioning. The figure does not include active wells that have been decommissioned; therefore, the well count in figure 4 is lower than for figure 3. Historically, licensees focused on decommissioning recently inactive wells (less than 10 years inactive). Additional effort is required to prioritize the decommissioning of long-term inactive wells that are no longer economically viable and potentially more complex.

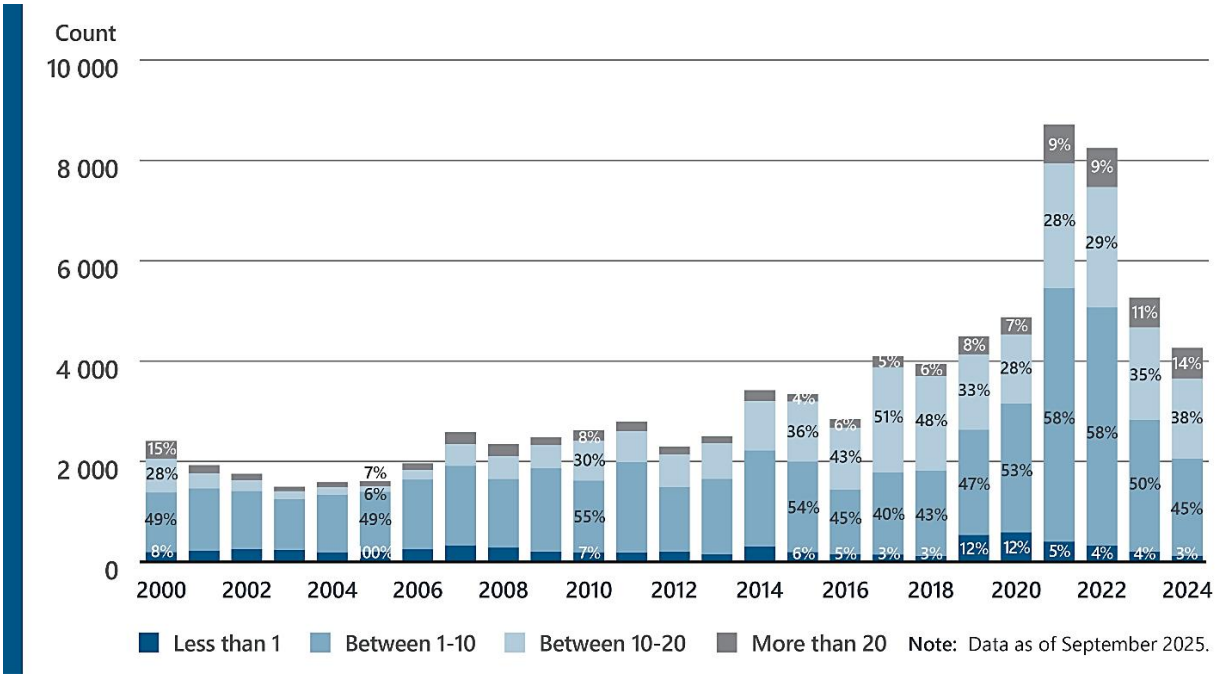


Figure 4. Industry decommissioned wells by years inactive, 2000–2024

Tracking well and facility life-cycle trends over time will help us monitor industry's progress on closure obligations and liability management. Our goal is for industry to convert inactive inventory in a timely manner to being decommissioned and reclamation certified.

Figure 5 shows the life-cycle status of wells from 2000 to 2024, and figure 6 shows facilities from 2019 to 2024. Throughout 2023 and 2024, licensees provided information to validate their facility operational life-cycle status. Consequently, licensee data validation resulted in some of the facilities changing status from inactive to active. In 2024, any facility where the operational life-cycle status could not be verified was identified as inactive. (See *Bulletin 2023-34* for more information on how we improved the quality of facility life-cycle status data.)

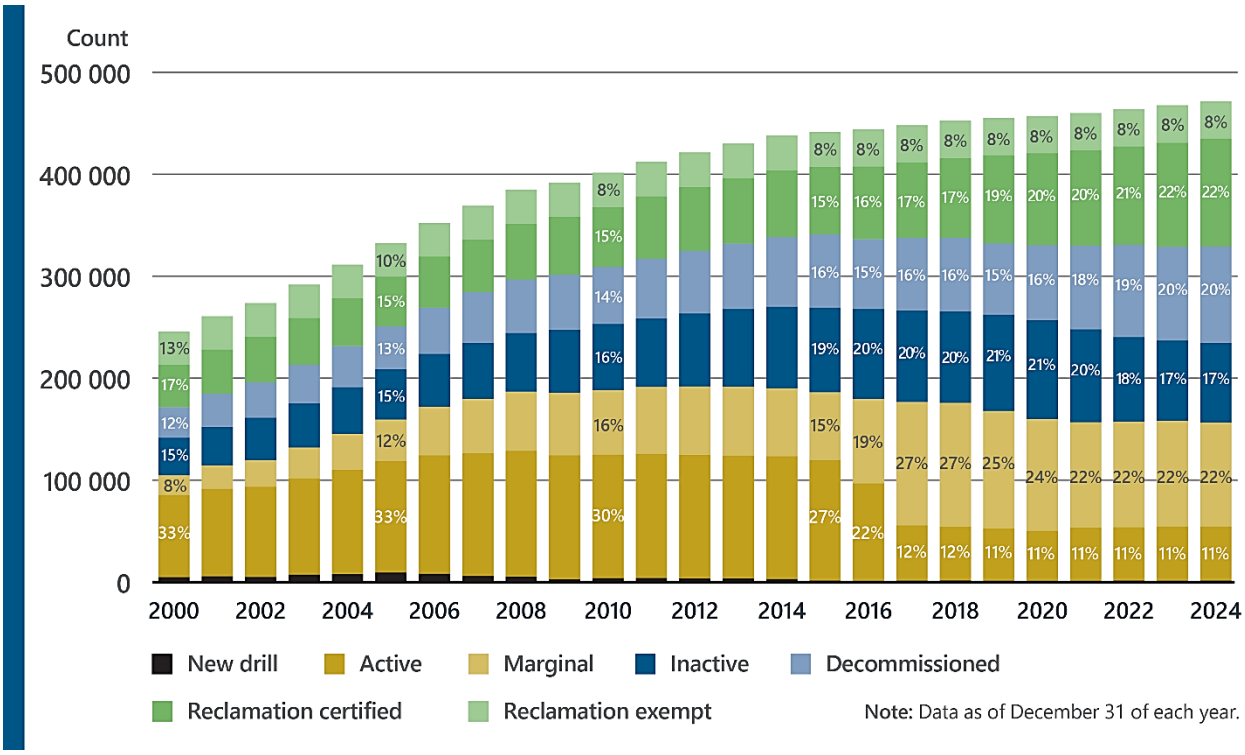
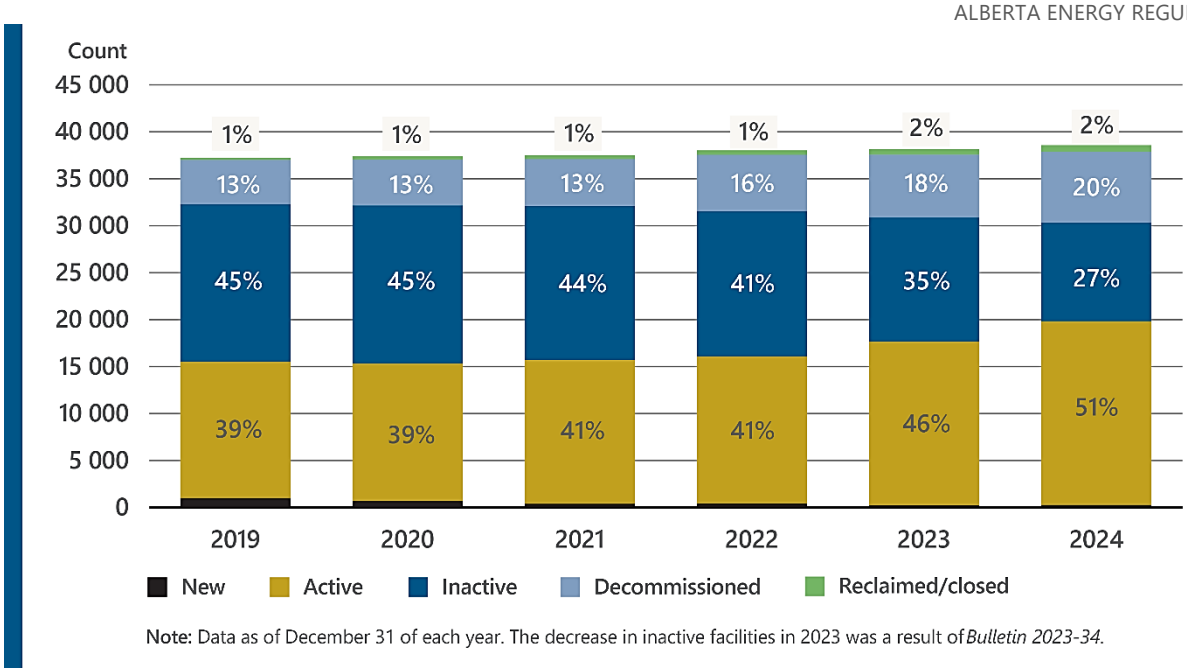


Figure 5. Number of wells by life-cycle status, 2000–2024

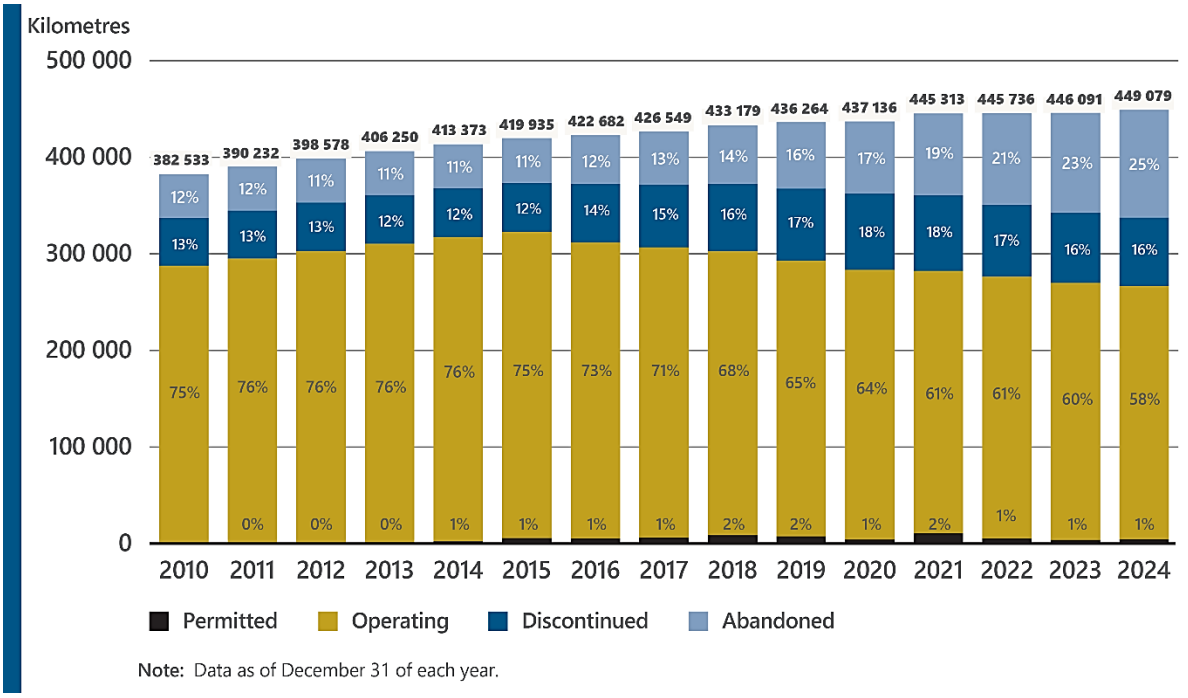


Note: Data as of December 31 of each year. The decrease in inactive facilities in 2023 was a result of *Bulletin 2023-34*.

Figure 6. Number of facilities by life-cycle status, 2019–2024

For more information on the pipelines we regulate, see our pipelines topic on our website.

A pipeline licence is approved ("permitted" status) and then moves into operations ("operating" status). A pipeline status of "discontinued" corresponds to an inactive well. When the pipeline status is "abandoned," it has met the criteria for abandonment. Licensees apply to change the pipeline licence status in accordance with the *Pipeline Rules* and *Directive 065*. The AER will then review the application and either approve or deny it based on relevant information. Figure 7 shows the total length of "operating" pipelines decreasing since 2016. In 2024, 58% of the pipeline length is "operating," while 41% of the pipeline length is "discontinued" or "abandoned."



Note: Data as of December 31 of each year.

Figure 7. Combined pipeline length in kilometres by licence status

Section II. Estimated Liability and Licensee Capability

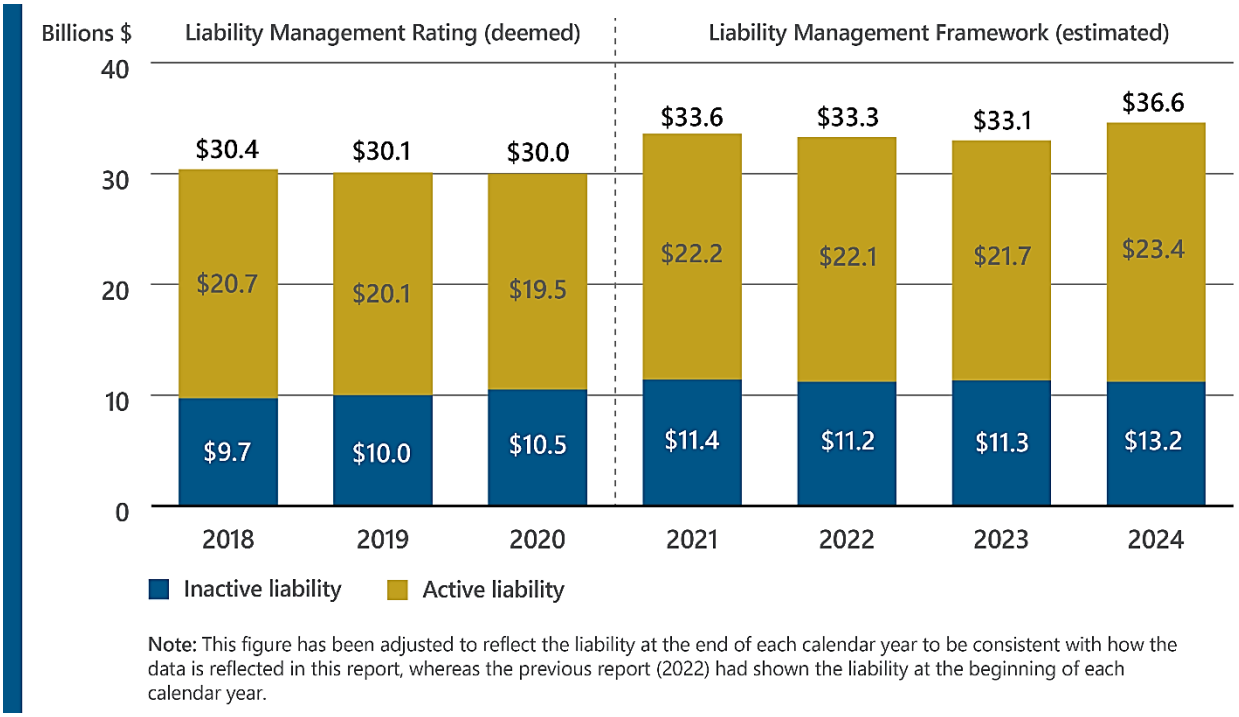
Liability is estimated using calculations outlined in *Directive 011* and through site-specific liability assessments (SSLAs). The estimated liability has changed over the last 20 years due to both changing operational practices and varying costs for closure work. *Directive 011* determines the estimated liability for a licence based on regional costs for different scenarios and infrastructure characteristics. Site-specific estimated liabilities are determined through SSLAs.

Total estimated liability includes decommissioning and reclamation liabilities associated with wells and facilities and for sites with site-specific liability assessments. Figure 8 provides the total, active, and inactive estimated liability.

Historically, "deemed" liability was the liability used for the liability management rating (LMR), and the values in figure 8 correspond with previous LMR reports. In 2020, with the introduction of the new liability management framework, the AER began reviewing and removing historical overrides to calculate the estimated liability. The increased estimated liability in 2021 was due to the inclusion of sweet multiwell batteries that had not been included previously.

It is important to understand that the actual closure cost may not match the estimated cost (or estimated liability). The actual amount spent is reported by licensees as closure spend, which we will use to inform the regional costs listed in *Directive 011*. The estimated liability is assigned to a well, facility, waste management or pipeline licence or approval based on *Directive 011* or an associated SSLA. When a closure milestone is reached (decommissioned or reclamation certificate issued), the estimated liability is reduced by the value assigned from the most recent edition of the directive or the associated SSLA, not the amount actually spent.

Directive 011's decommissioning costs were last updated in 2015. Figure 8 presents 2018–2023 values based on the 2015 costs. The directive was revised (see *Bulletin 2024-16*) with updated well decommissioning costs and raising the total liability to about $36.6 billion as of June 2024. Estimated liability values will continue to improve over time as more closure spend data is collected and analyzed.



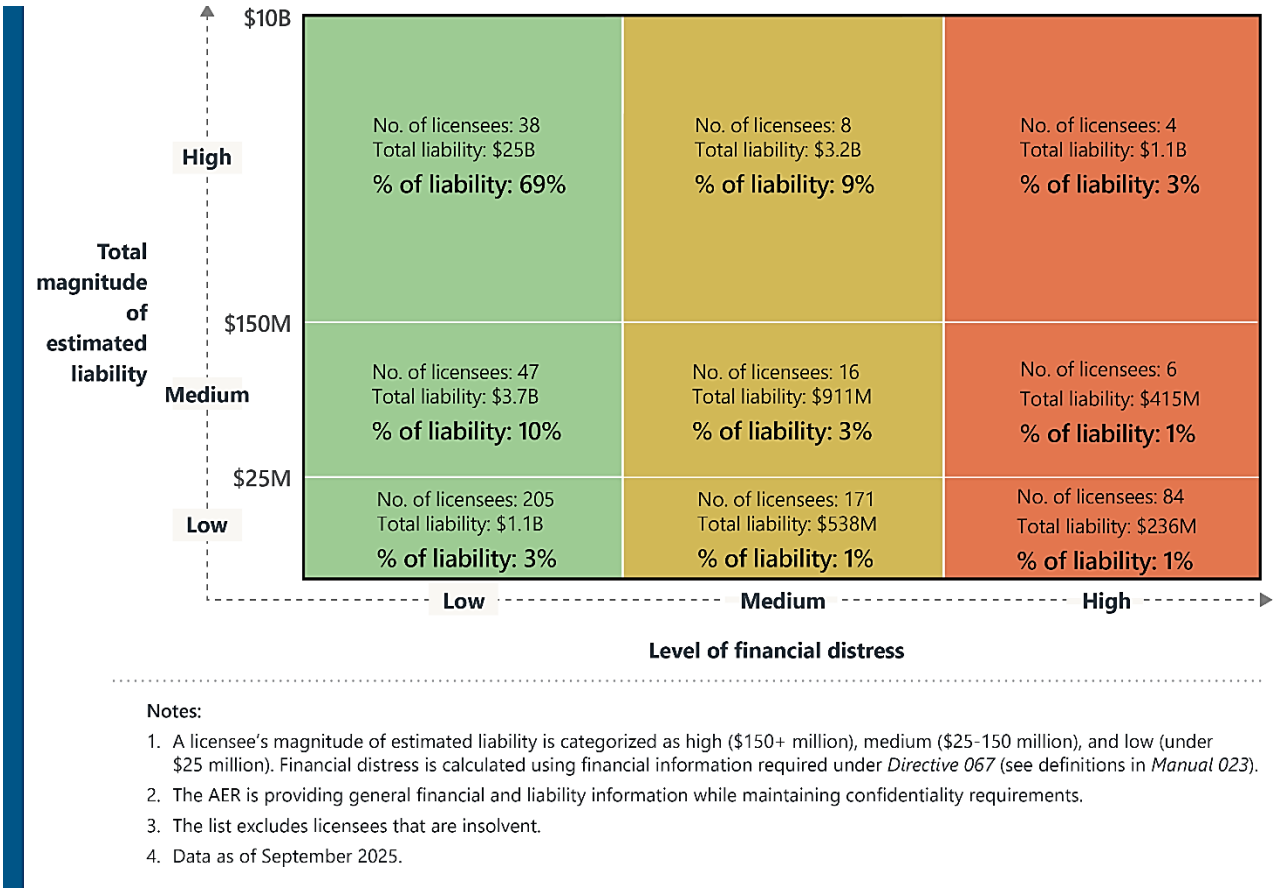
Note: This figure has been adjusted to reflect the liability at the end of each calendar year to be consistent with how the data is reflected in this report, whereas the previous report (2022) had shown the liability at the beginning of each calendar year.

Figure 8. Estimated Liability, 2018–2024

Licensee Capability

In addition to understanding liability, it is essential to understand whether companies can meet their regulatory and liability obligations throughout the energy development life cycle. To do this, we use a holistic licensee assessment (see *Directive 088* and *Manual 023* for details). Two important factors this assessment considers are a licensee's total magnitude of estimated liability and their level of financial distress.

Figure 9 outlines the number of active licensees in each category based on the magnitude of the total estimated liability and their level of financial distress. It highlights the percentage of total liability held by each group. Most of the estimated liability (82%) is held by licensees in low financial distress, whereas 5% of the total liability is held by licensees in high financial distress.



Notes:

1. A licensee's magnitude of estimated liability is categorized as high ($150+ million), medium ($25-150 million), and low (under $25 million). Financial distress is calculated using financial information required under *Directive 067* (see definitions in *Manual 023*).
2. The AER is providing general financial and liability information while maintaining confidentiality requirements.
3. The list excludes licensees that are insolvent.
4. Data as of September 2025.

Figure 9. Licensee liability by magnitude of liability and level of financial distress

Transfers

Holistic licensee assessments are now used in various regulatory processes. Specifically, when licensees want to buy or sell assets, they must submit a licence transfer application to the AER. When transfers are reviewed by the AER, the licensees involved are assessed using numerous factors, including their level of financial distress and the amount of inactive liability included in the transfer (see *Manual 023* for more information). Licensees presenting higher levels of risk are subject to greater scrutiny, which requires the collection of security. Table 1 summarizes transfer applications based on licensee capability.

Table 1. Transfer analysis by licensee capability, 2022 to 2024

Year	Assets Transferred To	Well Count	Facility Count	Pipeline Count	Total Liability (millions)	Inactive Liability (millions)	Security Collected (millions)	% of Security Collected Relative to Inactive Liability
2022	Licensee with more capability	1263	120	324	$94.70	$41.80	$0.14	0%
	Licensee with less capability	197	38	36	$16.70	$13.70	$1.02	7%
	New licensees	2489	268	332	$189.10	$68.90	$5.93	9%
2023	Licensee with more capability	4693	524	589	$348.90	$130.00	$0.07	0%
	Licensee with less capability	459	90	162	$62.50	$19.40	$0.40	2%
	New licensees	7003	619	925	$576.60	$142.30	$25.37	18%
2024	Licensee with more capability	1741	126	111	$76.70	$23.30	$0.20	1%
	Licensee with less capability	1557	273	429	$197.50	$73.60	$0.50	1%
	New licensees	2702	364	663	$274.30	$118.20	$24.70	21%

Note: Licensee capability is assessed through the holistic licensee assessment, including their level of financial distress. New licensees are defined as having a new business associate (BA) code registered with the AER within the last three years. The data shown has been adjusted to reflect the transfers by application decision date, whereas the previous report had shown the liability by application date.

When licences are transferred, the amount of inactive liability collected as a security deposit depends on the financial capability of the receiving licensee:

- For financially more capable licensees, transfers typically do not result in a high percentage of inactive liability being collected as security. The receiving licensee has a low or medium financial distress level and does not fall within the highest ranges in tables 9 or 10 of *Manual 023*.
- For financially less capable licensees, transfers typically result in a higher percentage of inactive liability being collected as security. The receiving licensee has a medium or high financial distress and does not fall within the lowest ranges in tables 9 or 10 of *Manual 023*.
- For new licensees, transfers typically result in the highest percentage of inactive liability being collected as security. New licensees do not have an established history with the AER and are considered a higher risk until we have more information on their capabilities and performance.

In 2024, most transfers were from existing licensees to new licensees ($274 million in estimated liability transferred to new licensees). As a result of these transfers, 21% of the inactive liability value was collected via security.

Section III. Closure Spend and Activity

Liability reduction occurs through closure work. There are two mechanisms in Alberta to reduce industry liability: the Orphan Well Association (OWA) and the Inventory Reduction Program (IRP).

To ensure that the OWA has an operating budget, the AER issues an annual orphan fund levy to licensees. In 2024, the levy was maintained at $135 million. The levy is in part used for closure costs when an energy company is unable to meet its obligations to safely and responsibly close its infrastructure. For more information, see our Orphan Energy Sites webpage.

The IRP focuses on licensee reducing their liability by bringing sites to full closure and increasing the amount of land returned to equivalent capabilities. The program has two components: closure nomination and closure quotas.

Closure Nomination

For closure nomination, eligible requesters can nominate sites for closure. To be eligible for the program, the well or facility must be in an inactive or decommissioned state for five or more years. Some of the sites that met these criteria and were not fully closed under the Government of Alberta's Site Rehabilitation Program (SRP) were transferred to closure nomination. In all, 1332 sites transitioned from the SRP program to the closure nomination program in 2023. A total of $41.7 million has been spent on these sites.

In 2023, 62 sites were nominated under the closure nomination program, with a $374 000 spend reported. In 2024, 48 sites were nominated for closure under the closure nomination program, with a $1.46 million spend reported.

Closure Quotas

For closure spend, the AER sets a minimum amount of money that industry must spend on closure activities each year to ensure that licensees are focusing on their closure obligations. The industry-wide closure spend requirement is then divided among licensees (their mandatory closure spend). When closure work (decommissioning, environmental site assessment, remediation, and reclamation) is completed, industry reports the costs to the AER. This information is used to assess whether licensees meet the minimum spend requirement, assess compliance actions (if necessary), and support updates to estimated liability values. In 2024, the industry-wide closure spend requirement was set at $700 million.

For more information, see *Directive 088* and *Manual 023*.

Commodity prices are a significant factor in determining the annual industry-wide closure requirements. The AER completed an analysis of historical average commodity prices for oil and gas,

comparing current commodity prices with the historical average. The analysis resulted in the following conclusions:

- For West Texas Intermediate (WTI) crude oil prices, the average 2024 price was $75.72 US$/bbl compared with the average price of $51.72 US$/bbl from 1970 to 2024. The 2024 WTI commodity price was much better than the historical average.
- For Henry Hub (HH) natural gas prices,, the average 2024 price was $2.41 US$/MMBtu compared with the average price of $5.90 US$/MMBtu from 1994 to 2024. The 2024 HH commodity price was much lower than the historical average.

Before the introduction of closure quotas, the AER collected industry closure spend data through the voluntary area-based closure (ABC) program (2019 to 2021). See below for links to the previous highlight reports.

- ABC Program Highlights
- 2022 Closure Quota Highlights

Closure Spend Summary 2022–2024

The financial expenditure for the various closure activities is referred to as "closure spend." This section focuses on the industry-funded OWA spend and the eligible closure spend (as defined in *Manual 023*) reported by industry for closure quotas. Refer to the ABC highlight reports above for closure spend under the ABC program.

In 2024, the OWA completed $119 million in closure work. For more information, refer to the OWA annual reports, which summarize its fiscal-year performance.

Industry reported eligible spending of $900 million, exceeding the requirement by 28%. Figure 10 shows the cumulative closure spend from the OWA and industry.

In total, $1 billion was spent on closure work in 2024.

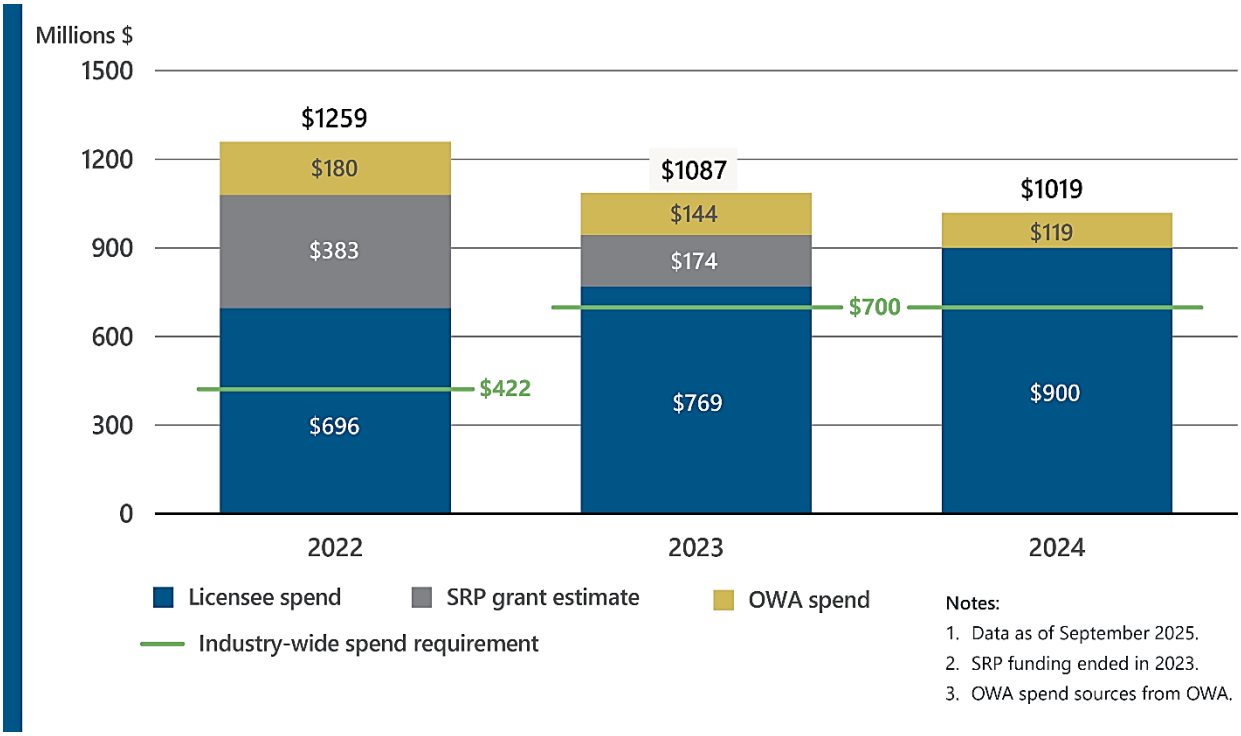


Figure 10. Total closure spend and future industry-wide spend requirements, 2020–2024

In 2024, the OWA continued to focus on remediation and reclamation, as shown in figure 11, with 34% of closure spend on reclamation activities.

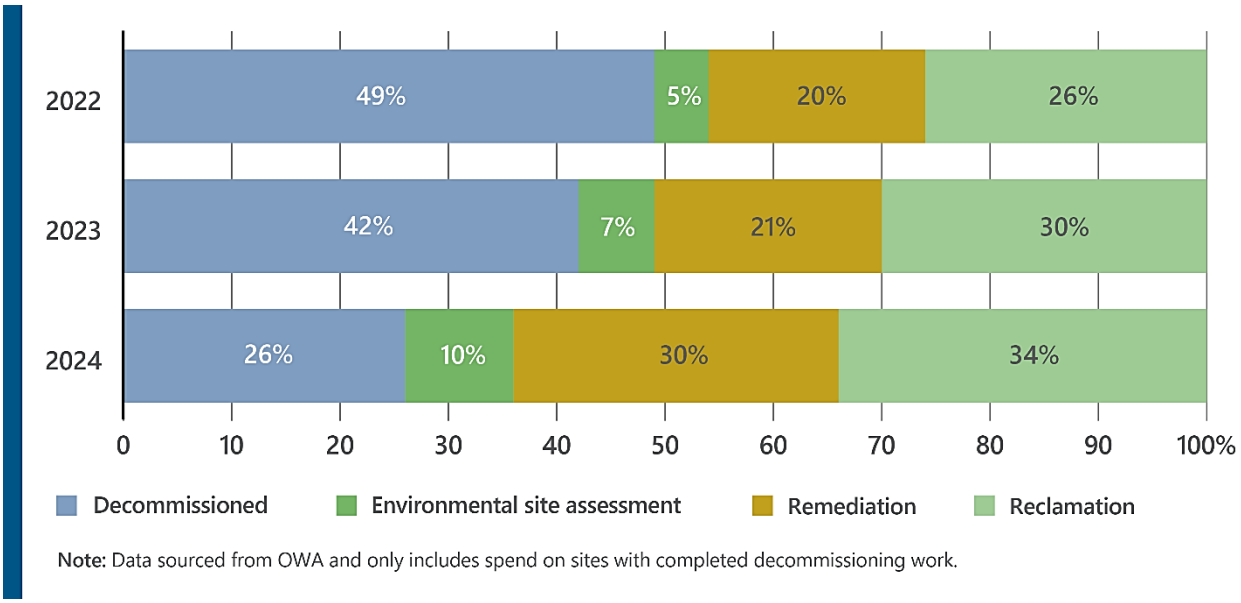
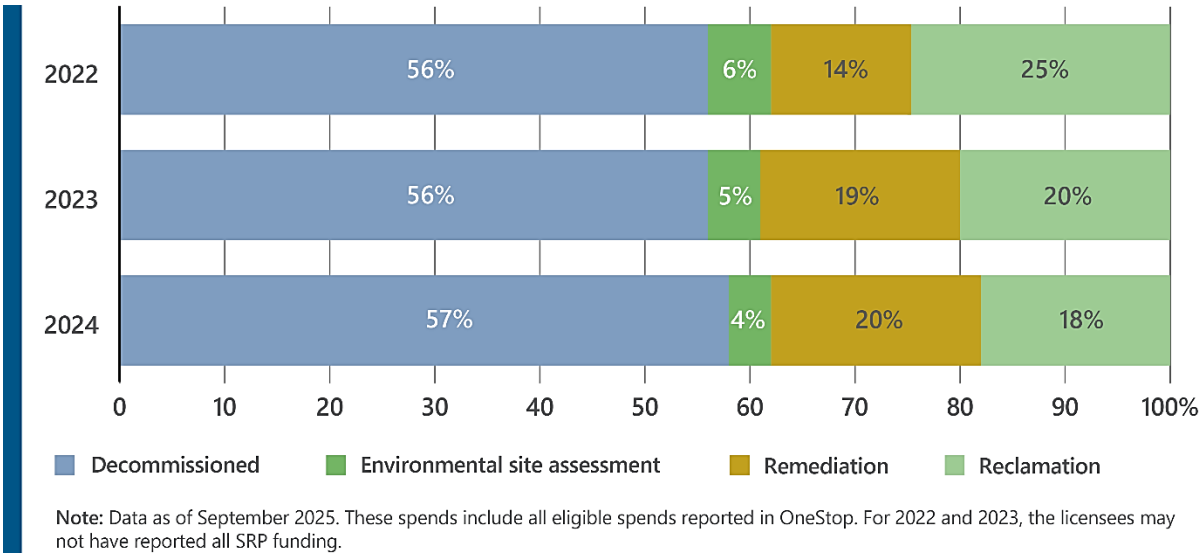


Figure 11. Distribution of OWA spend by closure category, 2022–2024

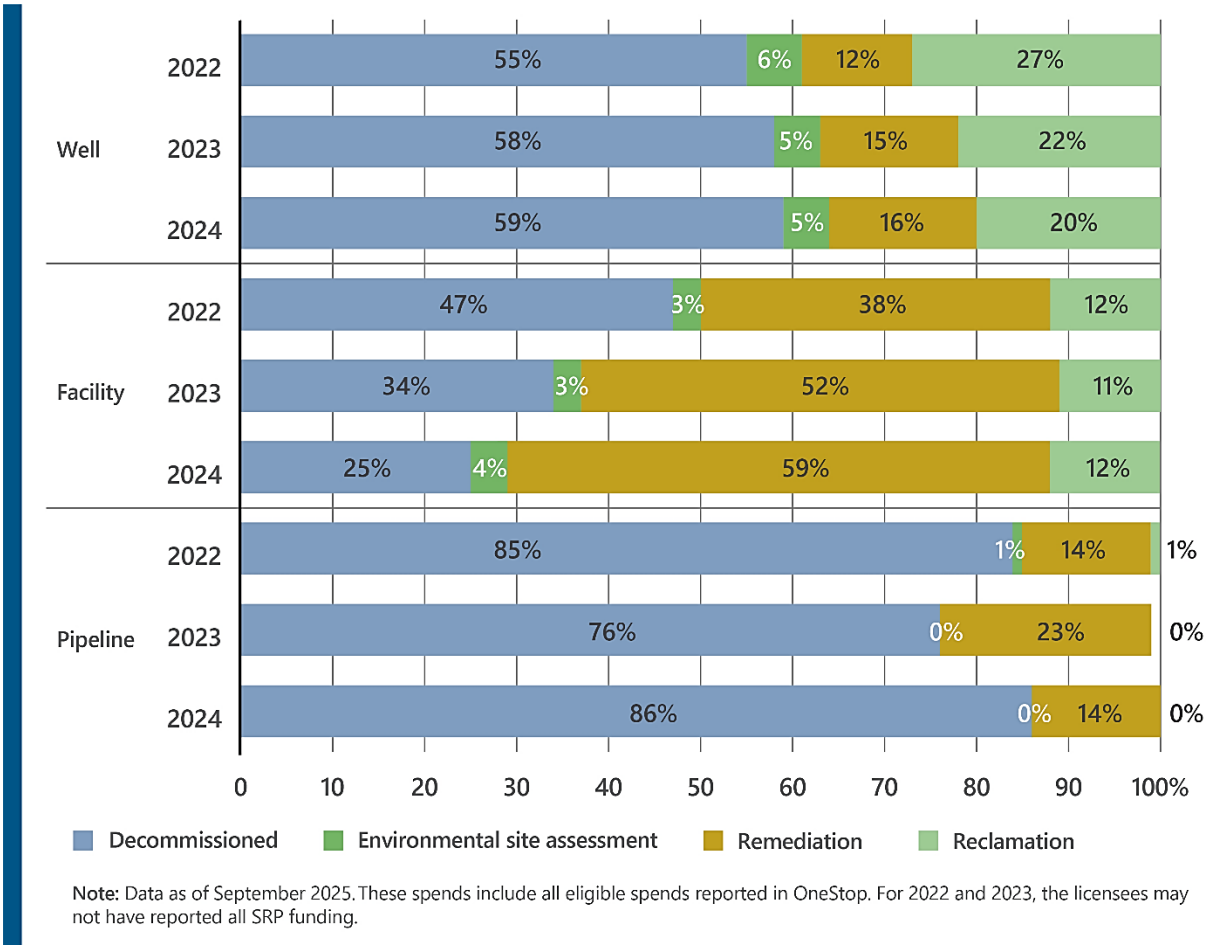
Licensees have consistently focused on closure decommissioning activities, as shown in figure 12, with less spent on reclamation activities in 2024.



Note: Data as of September 2025. These spends include all eligible spends reported in OneStop. For 2022 and 2023, the licensees may not have reported all SRP funding.

Figure 12. Distribution of industry spend by closure category, 2022–2024

Evaluating licensee closure spend by infrastructure type, figure 13 shows the breakdown of closure spend in 2024 was similar to 2023 for wells and pipelines mostly on decommissioning. For facilities, we have seen a shift from more decommissioning activity in 2022 to more remediation activities in 2024.



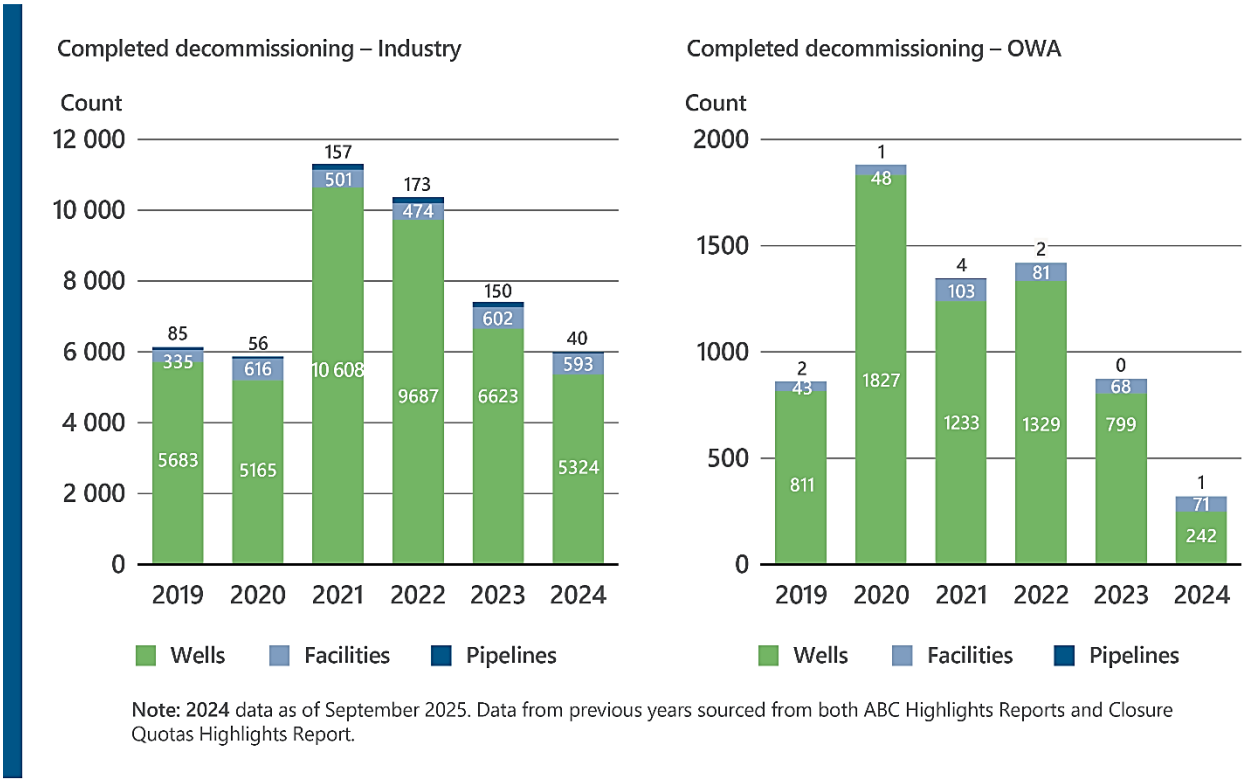
Note: Data as of September 2025. These spends include all eligible spends reported in OneStop. For 2022 and 2023, the licensees may not have reported all SRP funding.

Figure 13. Industry spend by infrastructure type by closure category, 2022–2024

Closure Activity Summary 2019–2024

Figures 14 and 15 show the closure milestones achieved by industry and the OWA. Figure 14 highlights that between 2019 and 2021, closure work was primarily driven by the licensees participating in the voluntary ABC program, whereas activity since 2022 is related to closure quotas.

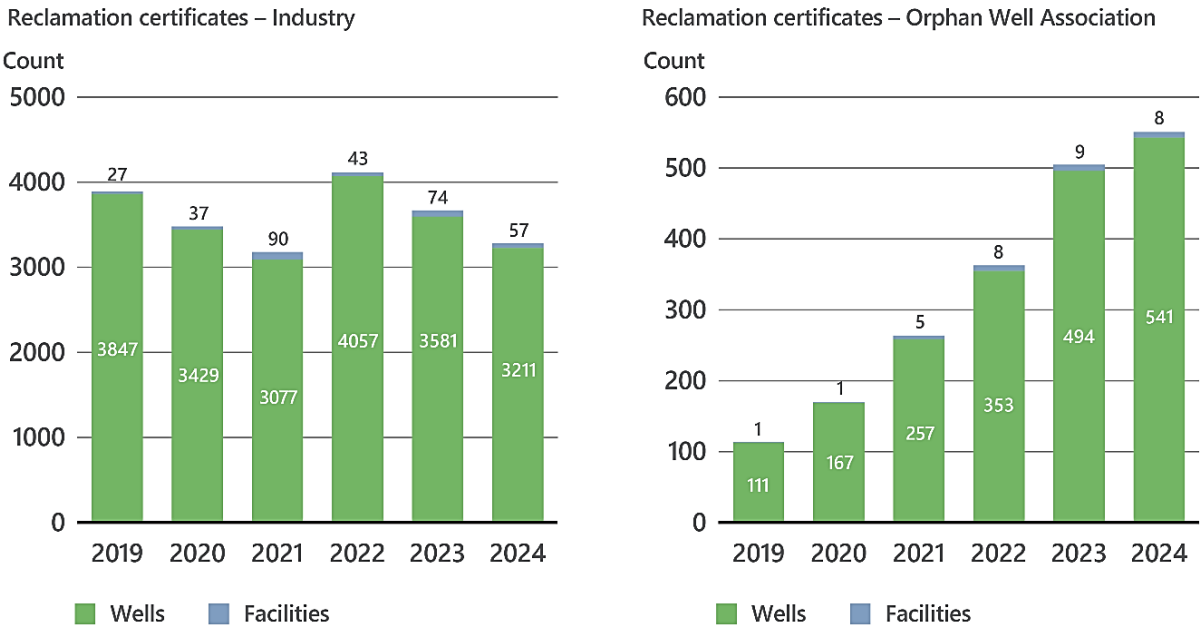
Funding from the SRP began in 2020. Most of the SRP funding (75%) was provided in 2021 and 2022, with the remainder at the start of 2023 (see figure 10). No SRP funding was provided for 2024. Most of the wells decommissioned by industry were in 2021 and 2022 (see figure 14), with a decrease in 2023 and 2024. While licensee spend has increased each year (see figure 10), the loss of SRP funding has reduced the total spending for 2024, with less decommissioned infrastructure. Similarly, the OWA results in 2024 show the same trend with the closure decommissioning milestone.



Note: 2024 data as of September 2025. Data from previous years sourced from both ABC Highlights Reports and Closure Quotas Highlights Report.

Figure 14. Industry and OWA decommissioning, 2019–2024

While the number of industry licences receiving a reclamation certificate in 2024 declined from 2023, the OWA continued to increase its reclamation certification over the past five years (see figure 15).



Note: 2024 data as of September 2025. Data from previous years sourced from both ABC Highlights Reports and Closure Quotas Highlights Report.

Figure 15. Industry and OWA reclamation certification, 2019–2024

Section IV. Impact on Liability Estimates

Well and facility life-cycle statuses change each year. New infrastructure is added, reactivated, and closure milestones are achieved by industry and the OWA (see figure 16). In 2024, the number of wells receiving reclamation certification continues to increase. The inactive well population decreased slightly because some infrastructure was decommissioned, some moved from active to inactive, and others were reactivated (inactive to active).

The facility life-cycle project has clarified the situation concerning facility licences. Licences for facilities that were never constructed were cancelled, resulting in fewer facilities in 2024 than in 2023, as well as data validation showing that more facilities were active than inactive.

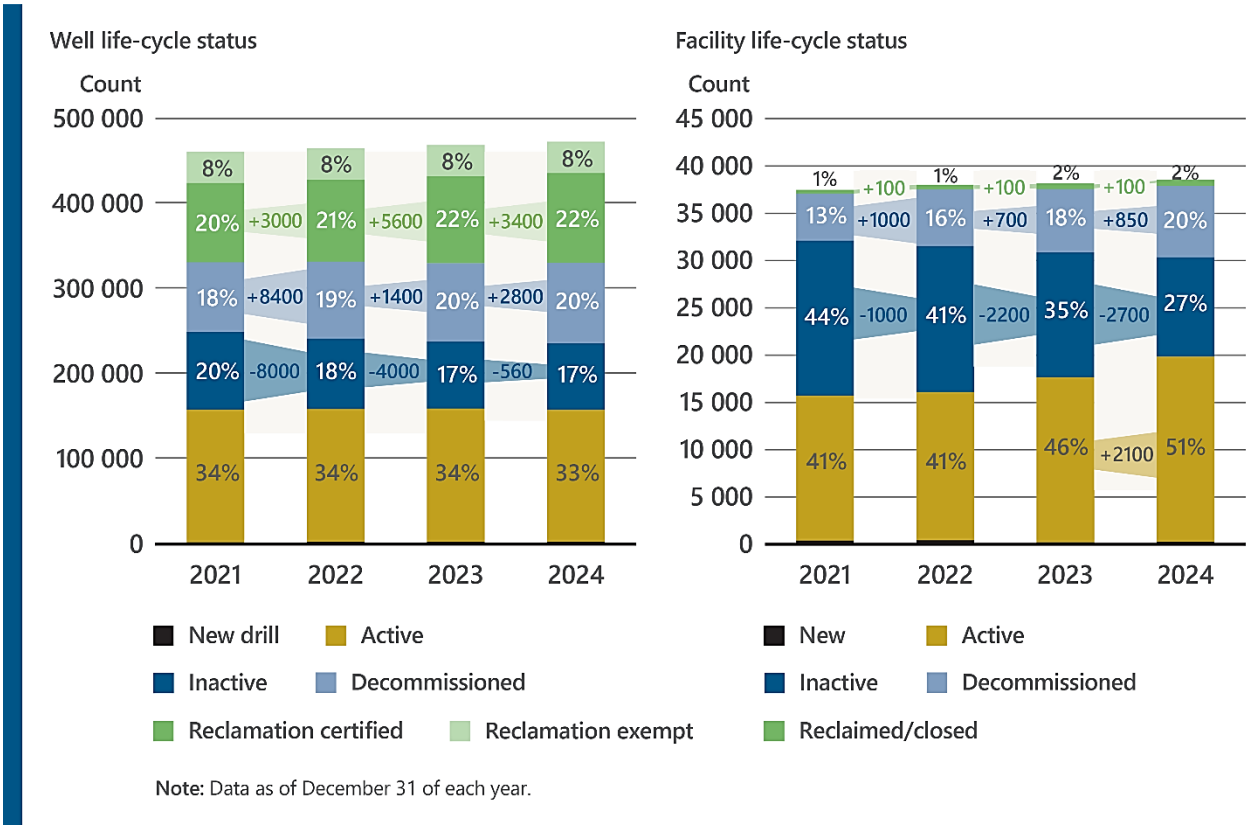


Figure 16. Change in life-cycle status, 2021–2024

Total estimated liability changes every year. Liability is added each year with new activity, just as it is reduced through closure work. There is no one-to-one linkage between closure spend and the reduction of estimated liability. A $700 million quota does not mean a $700 million decrease in the estimated liability. This is because estimated liability only decreases once a closure milestone is achieved (e.g., after decommissioning work is complete and submitted or after a reclamation certificate is issued). Closure work is progressive, working towards a milestone, but milestones are not always achieved within a reporting year (e.g., to achieve a reclamation certificate, local vegetation sometimes takes several seasons to re-establish).

Table 2 breaks down the spend for closure work in progress and the spend for sites that achieved a closure milestone (i.e., decommissioned or reclaimed). Remediation and reclamation activities take longer to complete; therefore, most of this spend is on sites that have yet to reach a milestone and are still in progress.

As previously discussed, when a closure milestone is achieved, the estimated liability is reduced by the value from the most recent edition of *Directive 011* or the SSLA, not the amount actually spent.

- Figure 14 shows that 6271 wells, facilities were decommissioned in 2024. Table 2 shows $308 million spent on decommissioning (closure milestone). However, this results in an estimated liability reduction of $354 million based on liability values in *Directive 011* and the SSLAs.
- Figure 15 shows that 3817 wells and facilities were reclaimed. Table 2 shows $7.5 million spent on reclamation activities in 2024, However, this results in an estimated liability reduction of $99 million.

Table 2. Industry closure spend in progress and achieving a milestone, 2022–2024

	Closure In Progress Spend ($ millions)				Closure Milestone Spend ($ millions)	
Year	Decommissioning	Environmental site assessment	Remediation	Reclamation	Decommissioning	Reclamation certified
2022	161.1	62.4	144.2	251.8	419.2	5.0
2023	178.9	45.7	175.3	179.8	339.6	2.0
2024	209.1	38.9	178.8	157.8	308	7.5

Note: Data as of September 2025.

Closure Spend Compliance

Each licensee with inactive liability has a mandatory closure spend requirement. Licensees that met the requirement spent equal to or more than their mandatory spend or provided security in lieu of closure work. Licensees that did not meet their mandatory spend were able to come into compliance by providing security for the difference between their mandatory closure spend requirement and their closure spend reported. Licensees that did not provide security are still noncompliant.

For the 2024 mandatory closure spend, 85% of licensees were compliant either through completing closure work or providing security. There are 69 noncompliant, active licensees with $6.4 million in outstanding quotas, which is less than 1% of the industry-wide closure spend requirement.

More information can be found on the interactive licensee dashboard where stakeholders can review individual licensee information.

Table 3 summarizes the amount still owing in security for 2022, 2023, and 2024.

Table 3. Outstanding closure quota compliance and security owing, 2022–2024

Year	Outstanding closure security owed ($ millions)
2022	2.7
2023	4.2
2024	6.4
Total security owed	**13.3**

Note: Data as of October 2025, data continues to change as compliance activities are undertaken.

Licensee-specific compliance actions (i.e., limited eligibility, global refer status, issuance of an order) can be found on the AER Compliance Dashboard.

Table 4 lists the 22 active licensees who were noncompliant for 2022, 2023, and 2024 for closure spend quota.

Table 4. Active licensees noncompliant with 2022, 2023 and 2024 mandatory spend

Licensee name	Total security owed
1099477 Alberta Ltd.	$2 855.00
935821 Alberta Ltd.	$24 788.06
Altima Resources Ltd.	$113 639.80
Ascensun Oil and Gas Ltd.	$599 941.39
Bay Trail Resources Ltd.	$7 418.00
Bluestone Resources Inc.	$37 896.00
Crimson Oil & Gas Ltd.	$521 411.96
Deccan Energy Ltd.	$93 321.21
Jaycor Resources Inc.	$43 567.08
Kasten Energy Inc.	$1 221 753.98
Mooncor Energy Inc.	$64 817.02
Mutiny Oil & Gas Ltd.	$134 197.36
Pantera Silver Corp.	$2 855.00
Petebrook Investments Ltd.	$5 709.00
Regnum Energy Ltd.	$73 923.54
Renergy Petroleum (Canada) Co., Ltd.	$905 693.34
Ridgeway Petroleum Corp.	$5 882.00
Seol Energy Inc.	$375 981.48
Sunshine Oilsands Ltd.	$494 247.00
Topeka Energy Inc.	$4 714.50
Tri-Energy Resources Ltd.	$47 869.15
True North Oil & Gas Limited	$4 714.50

See “Additional Information” on the Liability Management Performance Report webpage for the following:

- Interactive dashboards for licensee-specific information and regional-specific information. Only active licensees are included in this year’s report.
- A list of companies and their compliance with 2024 closure quotas. Only licensees with inactive liability from inactive or abandoned well or facility licences receive closure quotas.

Licensee compliance with the orphan fund levy can be found on the LM Reporting webpage.