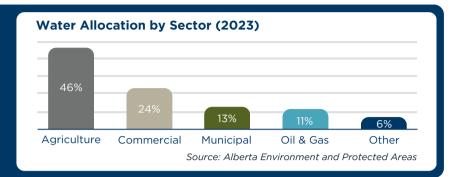
5

FAST FACTS ON ALBERTA'S UPSTREAM OIL & GAS WATER USE



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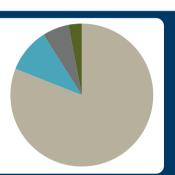
The oil and gas industry has the fourth largest water allocation in Alberta, representing **11 per cent** of the total licensed volume (as of 2023).



2

Fresh Water Use by Sub-sector (2022)

- Oil sands mining (81%)
- Hydraulic fracturing (10%)
- In situ oil sands (6%)
- Enhanced oil recovery (3%)



The oil and gas industry used **261.5 million cubic metres** of fresh water in Alberta in 2022. Most of this water was used for oil sands mining.

3

Most of the Alberta oil and gas industry's water needs are met with **recycled water**.

Water Use Sources (2022)

- Recycled water (82%)
- Fresh water (17%)
- Alternative water (1%)



4

Fresh water use intensity varies by sub-sector, ranging from 0.22 to 2.47 bbl/BOE.

Average Fresh Water Use Intensity by Sub-sector (2013 - 2022) Number of barrels (bbl) of water needed to produce one barrel of oil equivalent (BOE) In situ Hydraulic fracturing Enhanced oil recovery O.22 O.54 O.71 2.47

5

10-Year Change (2013 - 2022)		
Hydrocarbon production (BOE)	1	109%
Fresh water use (m ³)	1	16%
Fresh water use intensity (bbl/BOE)	1	22%

The Alberta oil and gas industry's average fresh water use intensity **improved by 22 per cent** from 2013 to 2022.