

Backgrounder

Explaining water use performance

Calgary Head Office
Suite 1000, 250 – 5 Street SW
Calgary, Alberta T2P 0R4
Canada

[Water use performance](#) is about more than looking at who uses the least or who recycles the most. It's about looking at each company, how they operate (e.g., mining or in situ), and the size and age of their projects. Here are some things to keep in mind when looking at performance. www.aer.ca

Oil Sands Mining

Because every mineable oil sands operation is unique, we looked at nonsaline water use intensity (i.e., the amount of nonsaline water needed to produce one barrel of oil equivalent [BOE]) and recycling as measures of performance for the five years from 2012 through 2016.

- Albion Sands and Suncor had the lowest nonsaline water use intensities, averaging 2.0 and 1.8 barrels of nonsaline make-up water per BOE produced, respectively.
- CNRL Horizon had the highest nonsaline water use intensity, averaging 3.6 barrels of nonsaline make-up water per BOE produced.
- Syncrude recycled the most water, averaging 239 million cubic metres; Suncor recycled the least, averaging 61 million cubic metres.
- Although Suncor recycled the least, it also had the lowest water use intensity over the same five-year period, showing how performance can be measured in many ways.

Learn more in our water use report for [oil sands](#) mining.

In Situ

Every in situ project is different, and there is no single way to measure performance. However, older fully operational projects require less nonsaline water because larger amounts of it return to the surface and can be recycled by companies. To show the difference, here's how projects of different ages compared in terms of nonsaline water use intensity in 2016.

- Projects that started production in 2003 or earlier, such as Cenovus Foster Creek, Suncor MacKay River, and Imperial Cold Lake, had average intensities of 0.07, 0.20, and 0.21 barrels of nonsaline make-up water per BOE produced in 2016.
- Newer projects, such as Husky Sunrise and Athabasca Hangingstone, which started production in 2015, had average water use intensities of 1.42 and 0.59 barrels of nonsaline make-up water per BOE produced in 2016.

Learn more in our water use report for [in situ](#).