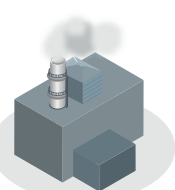


Glycol Dehydration Greenhouse Gas Emissions (GHG) Reduction in Western Canada



The total opportunity for GHG reduction in dehydration facilities in Western Canada, based on low-cost methods, is estimated to be about 1.1 MT/yr.

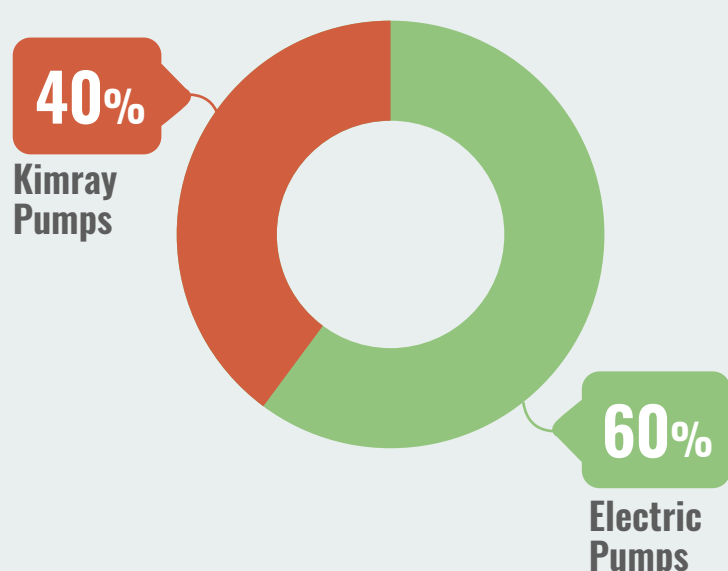


These low-cost methods include stripping gas reduction, glycol circulation optimization and pump replacement.

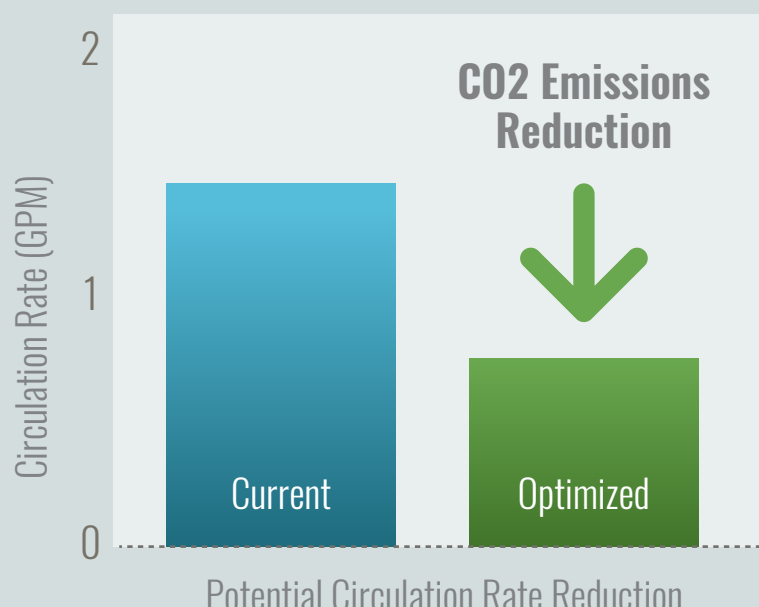


Pump replacement projects usually pay back in less than a year, without considering potential GHG credits. Stripping gas reduction and glycol circulation optimization projects require little or no capital.

Circulation rate optimization and pump reduction



The best GHG reduction opportunity for Circulation Rate Optimization and Pump Reduction projects are for Energy Exchange (Kimray) pumps. 40% of Glycol pumps are Kimrays.

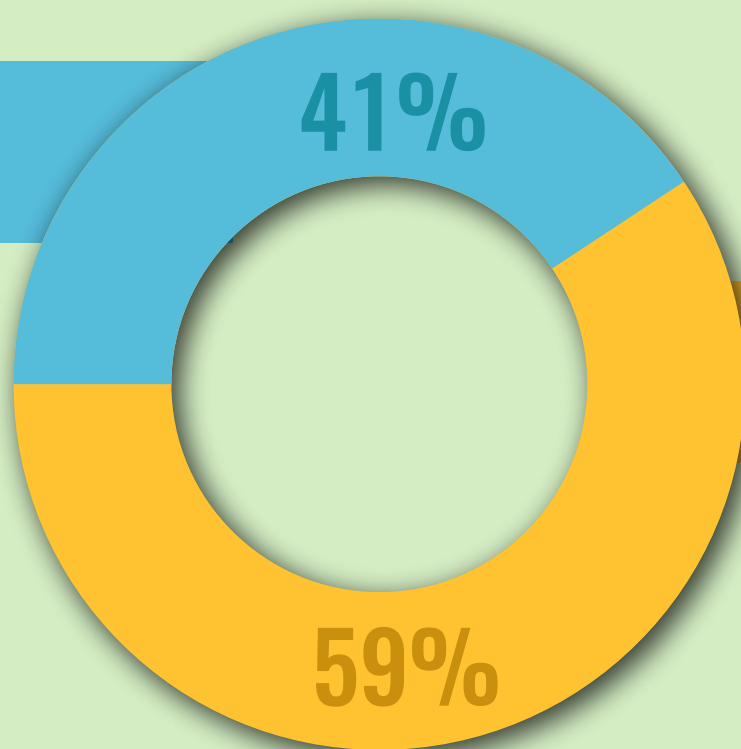


Most Dehydration Facilities overcirculate glycol. On average, facilities can safely reduce the circulation rate from 1.45 USGPM to 0.75 USGPM.

Greenhouse Gas Reduction Potential

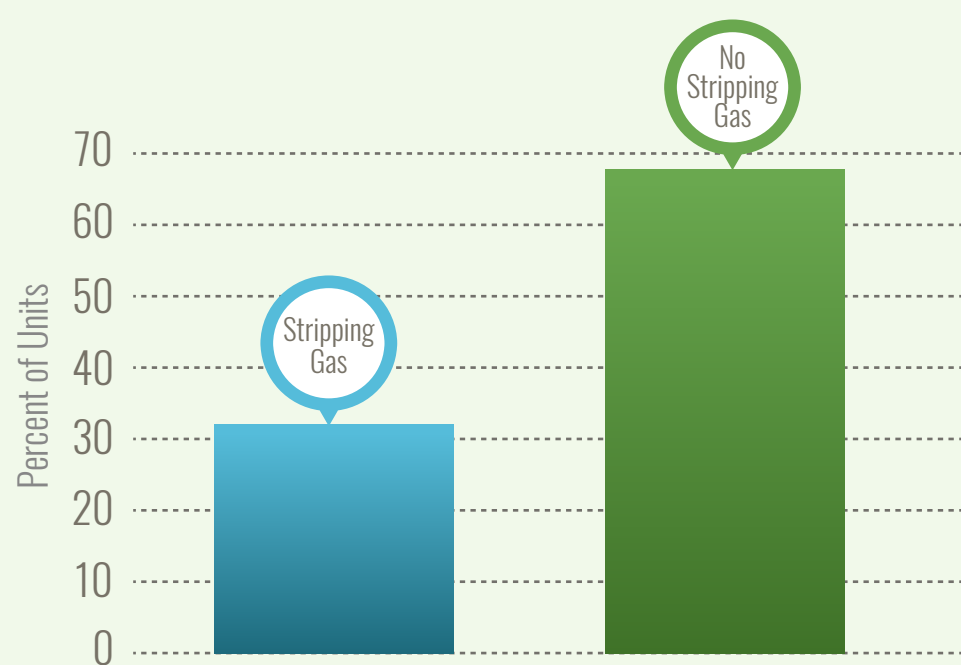
Stripping gas optimization:

It is estimated that the total GHG reduction opportunity for stripping gas optimization in dehydration facilities in Western Canada is about 0.45 CO₂E MT/yr.



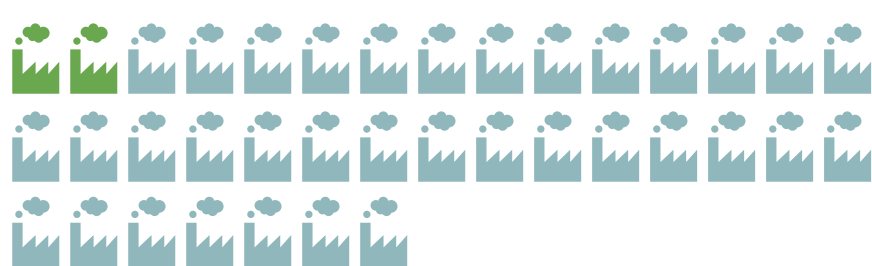
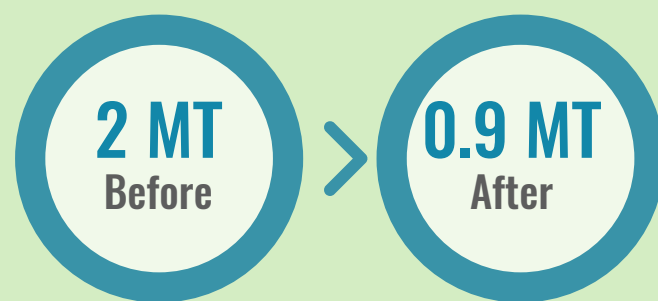
Circulation optimization:

It is estimated that the total GHG reduction opportunity for glycol circulation optimization in dehydration facilities in Western Canada is about 0.65 MT CO₂E MT/yr.



32% of facilities report stripping gas use. However, stripping gas use is often mis-reported, and it is believed that there could be many more facilities using it.

The GHG emissions associated with Glycol Dehydration Facilities can be reduced by over 50% through low-cost methods.



■ Glycol Dehydration ■ Other Oil & Gas Emissions

It is estimated that glycol dehydration facility emissions represent about 5% of GHG emissions in the oil & gas industry.



The opportunity

There is an opportunity to significantly reduce GHG emissions in dehydration facilities - with the potential to reduce the GHG emissions by over half through low-cost methods.

This infographic was created from aggregate data for 600 operating dehydration facilities. It is estimated that there are 2000 operating dehydration facilities in Western Canada.



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