

Title: Carbon Intensity Reduction: Quantifying Greenhouse Gas Reduction Estimates for Surface Controlled Gas Lift

Abstract:

In recent decades, the energy industry has pushed to reduce Green House Gases (GHG). As the industry improves efficiency and adapts to these new standards, it is important to estimate and quantify these reductions to maximize improvement.

When surface controlled downhole gas lift valves are used to optimize and increase efficiency in wells, **less gas** is used to produce **more hydrocarbons**. There is a reduction in gas compression concurrent with an increase in production. In addition to a few basic assumptions, the percent increase in oil production and the percent decrease in gas usage is all that is needed to estimate the ongoing Carbon Intensity reduction that surface controlled gas lift offers.

This presentation will offer a simple formula to estimate CO₂ emission reduction as well as the assumptions required for its derivation. Even though this was developed specifically for surface controlled gas lift valves, it has wide applicability to any gas lift optimization exercise.