

SUSTAINABLE SUSTAINABILITY: SOMETIMES, SIMPLE IS BETTER



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Our industry has undergone a notable shift towards embracing, implementing and investing in sustainable efforts amid global concerns about climate change and environmental impact. Many major oil companies are investing in renewable energy sources as we look to diversify and make strides in energy inclusivity. Long-term and short-term strategies amongst operators and service companies alike are consistently communicated and we continue to see strides in new technologies that support all our efforts. We as an industry want to do better, and every day, we are.

As the rigs of the past are transformed into the rigs of the future, strategic decisions must be made using existing assets that do not require complete refurbishment. As relative carbon impact is analyzed in an energy landscape, with the need to uphold strict capital investment standards, solutions are developed for today's drilling rigs that can make significant strides without being overly complex.



MAKING AN IMPACT IN THE DRILLING PHASE

Power consumption during drilling operations involves managing steady average loads easily handled by rig gensets. Certain operations, however, like drilling in the intermediate section, require more engines and higher loads due to high flow rates and torque requirements. During these times, peak loads can reach up to 3,000 kW. Outside of these operations, less engines are needed, so not properly adjusting creates excess usage, burning unnecessary fuel. By utilizing engine load threshold data, we can instead achieve optimal engine use universally, **regardless of rig type or specification.**

That part is important, because in order to make a solid impact in reducing overall GHG emissions, these solutions must be scalable.



ENGINES WORKING SMARTER, NOT HARDER

In a two-well comparison, the engine management initiative showcased impressive results. Well 2 demonstrated savings of 902 gallons of diesel and 9.2 tons of CO₂e compared to Well 1. Extrapolated annually, this equates to a staggering 16,500 gallons of diesel and 181 tons of CO₂e per rig.

THE SCALABLE PART

The program, initially aiming for under 30% underloaded engine time, exceeded expectations. Before launch, only 25% of the rig fleet achieved this target. A year later, 48% regularly met the goal, almost doubling initial metrics. Fast forward to today, and 69% of the fleet consistently operates below the 30% target. With significant annualized savings in fuel cost, effective engine management becomes a cost-effective way to further our sustainability goals.

AN ECO-FRIENDLY FUTURE

As the industry continues to march towards a sustainable future, flexibility and continuous innovation become the cornerstones. The journey of rigs towards reduced fuel consumption and lower emissions marks a significant step in fulfilling aspirational goals for a more efficient and more sustainable oil and gas sector. It gives us all optimism as we work together to create our industry's next chapter.



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