

**Battery Storage:**  
**The next**  
**generation of**  
**Drilling**

**Green Battery Storage**  
**An Efficient &**  
**Environmentally**  
**Friendly Hybrid**  
**Solution**

## Hybrid Power Systems for Drilling Rigs

The marine & offshore oil & gas industries are coming under immense pressure to reduce emissions & improve the sustainability of their operations.

As drilling contractors strive to reduce operating costs while meeting tighter emissions standards, generators combined with energy storage, are revolutionising how power is deployed in drilling applications.

**CNE** is pioneering ways to help drilling contractors meet emissions reduction targets without sacrificing durability and performance.

With the aid of **CNE** energy storage system, which has been designed to optimise power generation on drilling rigs, due to the demanding applications of drilling operations, customers require extremely responsive performance that electric-powered systems are known to provide.

With **CNE** energy storage system, gas/diesel engines can achieve comparable transient performance by responding to changing demands with quick surges.

Drilling rigs have highly variable power consumption for drilling & dynamic positioning, by incorporating **CNE** energy storage system, it is possible to reduce the runtime of diesel engines and keep them operating on an optimised combustion level.

## The Benefits

The application of energy storage for drilling rigs ultimately enables companies to fundamentally change the way they operate assets. A summary of the key benefits is outlined below:

### **Reliability & Improved redundancy schemes:**

Diesel engines are slow to handle large, abrupt load changes. Using batteries to provide temporary power allows operators more flexibility and provides the opportunity for new redundancy schemes, thus ensuring safety, lower operating costs & improved uptime throughout operations by reducing the number of generators on the platform.

### **Fuel Reduction Cost & Lower Emissions:**

Along with the green credentials, **CNE** Hybrid System can reduce the amount of fuel used over a project. It is possible to optimise the loading on combustion units, such as diesel generators, which reduces specific fuel consumption and associated emissions. This is particularly beneficial on drilling rigs, where power plants have highly variable power demand for drilling, dynamic positioning, and station-keeping.

## Conclusions

The integration of energy storage with the power supply and distribution system of a drilling rig represents an important step towards improving the environmental sustainability of the oil and gas industry. Overall, energy storage solutions integrated with natural gas, dual-fuel, or diesel technology can reinvent drilling operations by lowering fuel costs, maximizing capital efficiency, and meeting lower emissions regulations.