

## Capex in Drilling Markets Surging On Equipment Upgrades

Companies: CAT, ESI.TO, HYZN, LHYFE.PA, NBR, NOV, PLUG, SLB, WFRD, WEGRY

### Research Question:

**What are the capital expenditure expectations in the drilling market for 2022 year over year, and which equipment suppliers will benefit?**

### Highlights

- U.S. drilling sources estimated that capital spending in the U.S. in 2022 will rise 20% to 75% year over year, with expenditures split between major drilling contractors and smaller, privately held drillers.
- Several major drilling contractors have pushed spending on reactivating and upgrading older rigs to “SuperSpec” status. Spending estimates in this category ranged from up 10% to up 190% year over year. The main beneficiary of rig upgrades or purchases of major replacement parts was NOV Inc. (NOV). Caterpillar Inc. (CAT) engines and Weir Group ASR (WEGRY) pumps were category leaders among the major drillers.
- Smaller drillers are mainly replacing parts and components. Capital spending by this group is expected to range from flat to up 75% year over year. NOV, Schlumberger NV (SLB), and Weatherford International PLC (WFRD) were listed as the main part and component vendors, while one source may order Nabors Industries Ltd.’s (NBR) robotic automated technology for use on his rigs.
- The use of hydrogen fuel cells to power rigs for emission control purposes will begin field testing in 2023. Fuel cell manufacturers Hyzon Motors Inc. (HYZN) and Plug Power Inc. (PLUG) will be observed testing hydrogen use at the wellsite.

### On 2022 Drilling Contractor Capex

#### 2022 Drilling Equipment Capex Estimated to Increase 20% to 75%

Capital expenditures by oilfield service providers are set to rise 20% to 75% year over year, with some outlying major drilling contractors upgrading or adding to fleets and causing some major drillers’ expenditures to rise more than 100% year over year. In a follow-up to Blueshift’s [July E&P capex report](#), a drilling industry specialist summed up oilfield service (OFS) capex by saying, “The overall consensus is for a sustained long upcycle increase in demand, which will unfold under a disciplined basis on the part of E&Ps, balanced by a disciplined approach to growth in OFS drilling rig and pressure-pumping fleets.”

#### Major Drillers Reactivating or Upgrading Older Rigs (NOV, CAT, WEGRY)

Four sources working for major drilling contractors agreed that their companies were reactivating rigs from previously idled fleets by upgrading major components in an effort to classify these units as high-end-technology SuperSpec rigs. Expenditures by this group ranged from up 10% to up 190% year over year. Components mentioned by sources included new engines, mud pumps and drill pipe. Three of the four sources mentioned that NOV and some of its divisions, such as Grant Prideco Inc., received orders to upgrade rig components. Another source has ordered replacement mud pumps from the Weir Group. One of the sources mentioned moving toward using more robotics, such as that provided by Nabors Industries, and another has ordered new dual fuel engines from Caterpillar. “We are upgrading several rigs, and NOV will get the lion’s share of our work,” said a source with a major driller. The drilling industry specialist said major costs per rig upgrade currently run from \$2 million on the low end to greater than \$6 million on the high end to convert to a SuperSpec classification.

Supporting the decisions of major drilling contractors to move forward with new capital spending are rates for SuperSpec rigs that are nearing \$40,000 per day, with some long-term contracts nearing three years. Furthermore, contractors are able to pass along costs for certain upgrades and have been able to increase wages for crews and hire new personnel, three major driller sources said. In addition, major drillers are able to layer in additional pricing by including technology rig packages for automation, improved geo-steering, directional drilling, and real-time analytics, either as individual modules or as part of packaged additions. “These kind of packages can add up to \$2,200 a day to daily drilling margins,” said the industry specialist.

#### Smaller Drillers Busy Replacing Parts and Components on Current Fleets (NBR, NOV, SLB, WFRD)

Six smaller, privately held drillers have been busy replacing parts and components from various equipment suppliers, ranging from small, privately owned supply stores to large vendors such as NOV, Schlumberger, and Weatherford. Capex among this

classification of driller ranged from flat to up 75% year over year. At least one smaller driller in the Rocky Mountain area is considering ordering robotic equipment for his rigs, such as that manufactured by Nabors Industries, citing safety reasons. “We’re looking at robotics on the driller floor, which would get individuals out of the danger zone,” he said.

## **Use of Hydrogen Fuel Cells at Wellsites Moving into Testing Phase (ESI.TO, HYZN, LHYFE.PA, PLUG, SLB)**

The use of hydrogen fuel cells to power rigs—thereby reducing or eliminating the need for generator sets using diesel—was highlighted at a conference sponsored by the International Association of Drilling Contractors and attended by Blueshift in Austin, Texas, on Aug. 30-31. In the presentation, a Schlumberger spokesperson said the company is working with Hyzon Motors to field-test hydrogen fuel cells to power a rig owned by Ensign Energy Services Inc. (ESI.TO) sometime in 2023.

However, two sources voiced their thoughts to Blueshift about the use of hydrogen fuel cells:

- “Sustainability could become an issue with these fuel cells because of limited pockets of hydrogen to be sourced and could become very expensive economically because of a lack of infrastructure to support the distribution of hydrogen.”
- “Available fuel cell technology is in the prototype stage and not yet validated at the wellsite yet.”
- “I understand Plug Power signed a contract with pure-play renewable-hydrogen generator Lhyfe [SA/LHYFE.PA] to provide self-contained electrolyzer systems manufactured in the U.S.”

## **Areas to Watch:**

### **Situation in Europe and Russia Still on Natural Gas Radar**

The industry specialist said the situation in Europe, where Russia has weaponized natural-gas exports, is a wild card. “The EU is proactive on facing the disruption, but prices are skyrocketing in Europe but are likely to be offset by government subsidies. The U.S. is still benefiting from increased LNG exports to Europe.”

### **Short-term Flirtation with Modest Oil Oversupply**

The industry specialist also mentioned a short-term flirtation with modest oil oversupply in the global markets. “As an example, the Saudis are seeing the same thing and recently decided to cut 100,000 barrels of oil per day out of the supply in September. These decisions are basically made month to month, so we will watch what happened through December.”

## **Background**

Blueshift Research interviewed a U.S.-based industry specialist who is an expert on U.S. energy industry activities, six small drilling contractors, four major drilling contractors and two sources at the Advanced Rig Technology Conference in Austin, Texas, during late August to discuss capital expenditures in the drilling markets and new technologies aimed at reducing emissions at the wellsite.

## **Next Step**

In its next Energy Trends, Blueshift Research will interview a U.S.-based industry specialist and field representatives to check on early E&P capital spending plans in 2023, the companies that stand to benefit, and any new green power or drilling technologies.

## **Report Coverage Areas and Companies**

Blueshift Research has been reporting on the following oil patch areas since Jan. 27, 2015, including coverage of the following public companies:

- Well Stimulation (HAL, LBRT, NEX)
- Well Services (RNGR)
- Onshore Drilling (HP, NBR, PDS,PTEN)
- Fracing Materials (CRR, FTK, HCLP, SLCA)

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