

# Where Oil & Gas Fits Into the Future of Global Energy

*The honest, big-picture view every engineer should have*

If the headlines have ever made you question your career choice, this guide is for you. Here is a clear, realistic look at how oil & gas fits into the next several decades of global energy.

## Eight Realities Shaping the Next Era of Energy

- **Demand reality check** - global energy demand is still rising overall; oil & gas remains a majority share of the primary energy mix for the foreseeable future.
- **An "and," not an "or"** - credible industry outlooks describe an energy addition, not a clean swap; oil & gas, renewables, and nuclear will coexist for decades.
- **Natural gas as the transition fuel** - lower carbon intensity than coal, critical for grid reliability alongside intermittent renewables, and central to LNG export growth.
- **CCUS and hydrogen** - oil & gas companies are uniquely positioned, with subsurface expertise and existing infrastructure, to lead carbon capture and blue/green hydrogen projects.
- **Geothermal overlap** - drilling and reservoir skills transfer almost directly; several majors are already diversifying here.
- **Petrochemicals & materials demand** - plastics, fertilizers, and industrial feedstocks keep oil demand structurally high independent of transportation fuel trends.
- **Capital discipline era** - the industry has shifted from growth-at-all-costs to shareholder returns and efficiency, changing which skills and roles are in demand.
- **Talent gap opportunity** - an aging workforce and a smaller graduate pipeline mean early- and mid-career engineers who stay have outsized career runway.

**Bottom line:** A career in oil & gas today is not a bet against the future. It is a bet on being the bridge to it.