The Oil and Gas Industry in Net Zero Transitions

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The oil and gas industry landscape

Global oil and gas production in 2022

Majors

National oil companies

Internationally focused national oil companies

Independents

Attention often focuses on the majors, but they hold less than 13% of global oil and gas production & reserves. National Oil Companies account for more than half of global output and close to 60% of oil and gas reserves.
Oil and gas companies have generated around USD 3.5 trillion each year on average in recent years. The largest share goes to governments: only a tiny proportion goes directly to the clean energy economy.
Today's momentum behind clean energy transitions is sufficient to generate peaks in oil and gas demand by 2030, but much more needs to be done to bring demand down in ways that meet national & global climate goals.
The investment dilemma

Investment in oil and gas is required in all scenarios. But the surge in clean energy investment in the NZE Scenario means no new projects are approved for development and there are shut-in risks for higher-cost projects.
High time to clean up the industry’s act

Global emissions oil and gas operations are larger than energy-related emissions from the United States. Much more ambitious targets, plans and accountability are needed, especially over the crucial period to 2030.
Oil and gas company investments in clean energy technologies is on the rise, reaching one third of all investment in CCUS and bioenergy, but represent just 1% of clean energy investment in 2022.
Clean energy solutions requiring oil & gas skills grow in importance

A wide range of technologies are required to get the world to net zero emissions; electricity cannot do it all. Sectors with a close affinity to oil and gas company expertise make up 30% of a net zero emissions energy system.

Global final energy consumption in 2022 and in the Net Zero Emissions by 2050 Scenario
A diversified development model for producer economies

Today’s producer economies retain energy advantages even as the world moves away from fossil fuels, but collaboration is essential to give producers a stake in the clean energy economy.