



The Oil and Gas Industry in Net Zero Transitions

23 November 2023

The oil and gas industry landscape

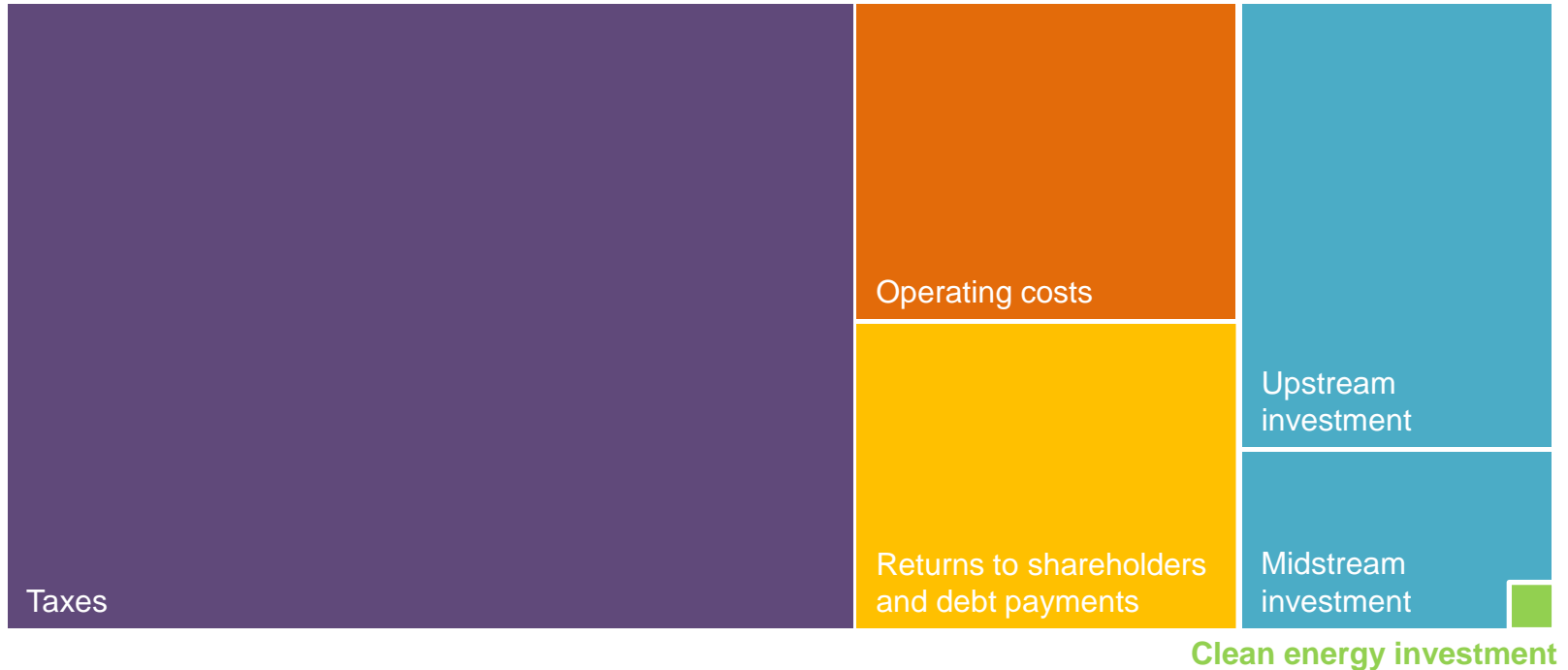
Global oil and gas production in 2022



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

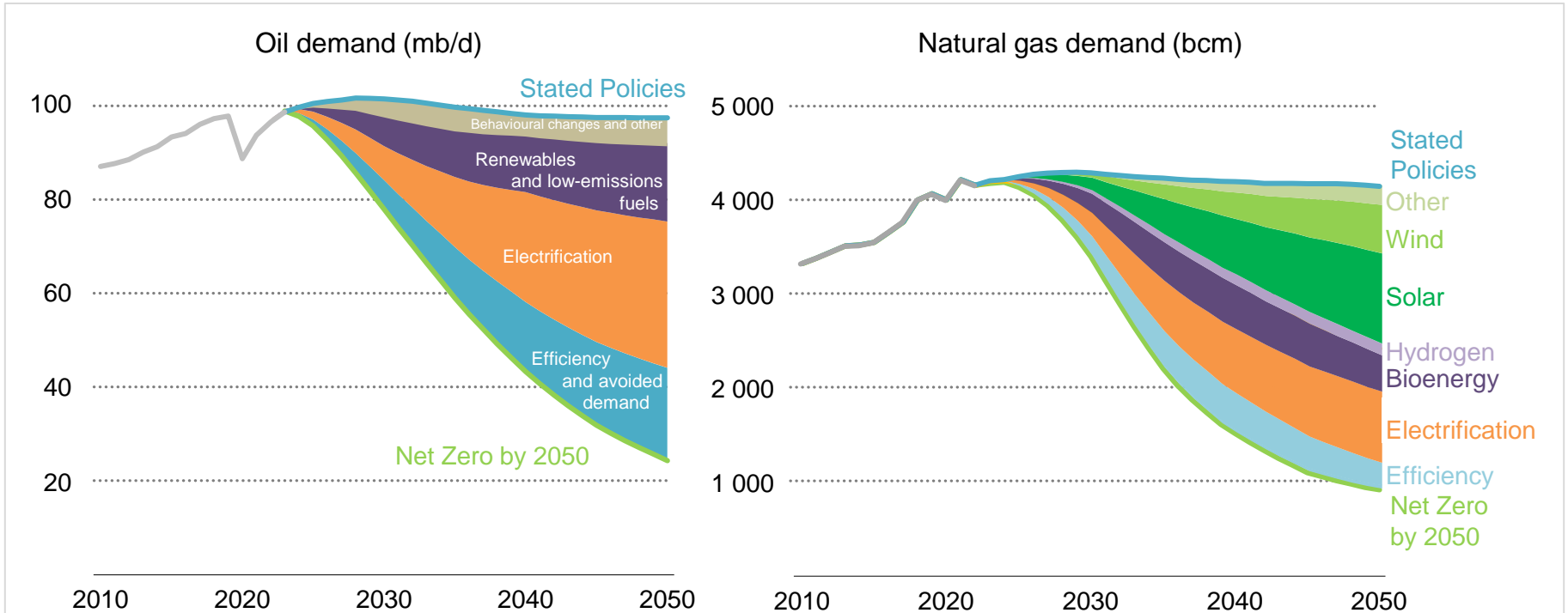
Where does the money go?

Revenue from oil and gas sales



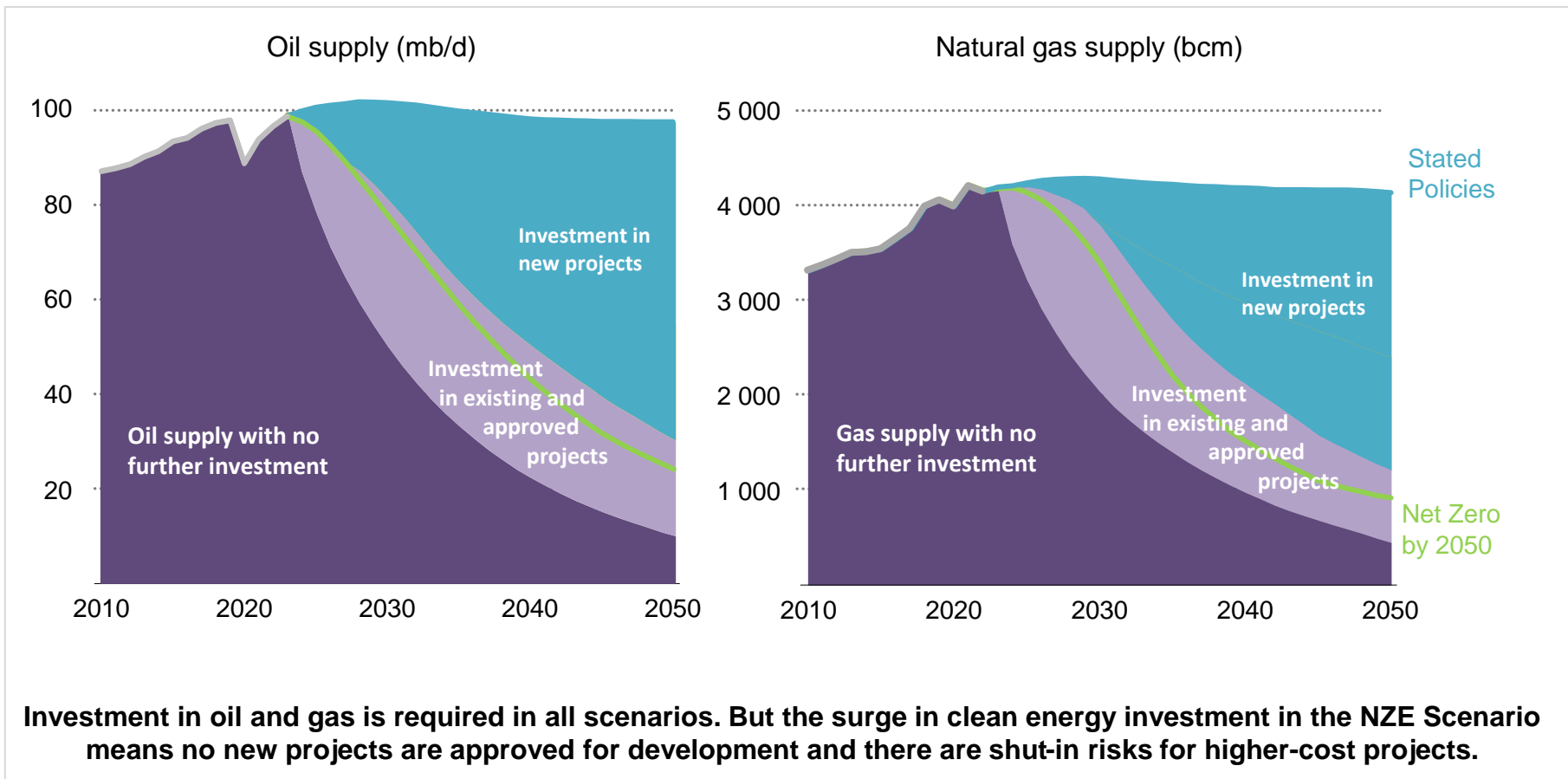
Oil and gas companies have generated around USD 3.5 trillion each year on average in recent years. The largest share goes to governments: only a tiny proportion goes directly to the clean energy economy

Twin peaks, but what lies beyond?



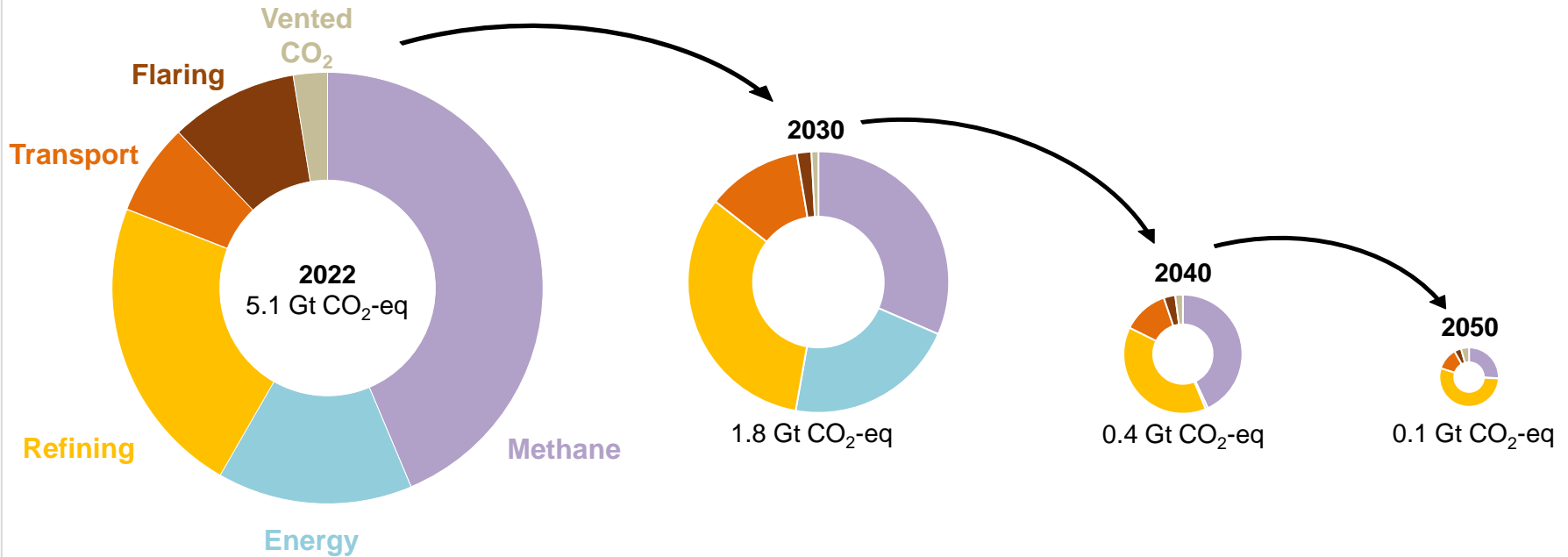
Today's momentum behind clean energy transitions is sufficient to generate peaks in oil and gas demand by 2030, but much more needs to be done to bring demand down in ways that meet national & global climate goals

The investment dilemma



High time to clean up the industry's act

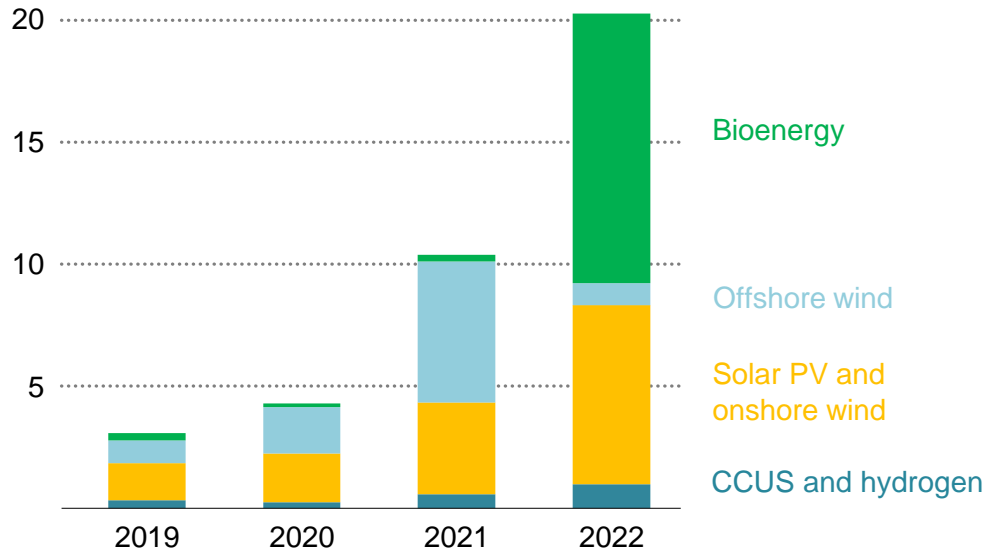
Scope 1 & 2 GHG emissions from oil and gas supply in the NZE Scenario



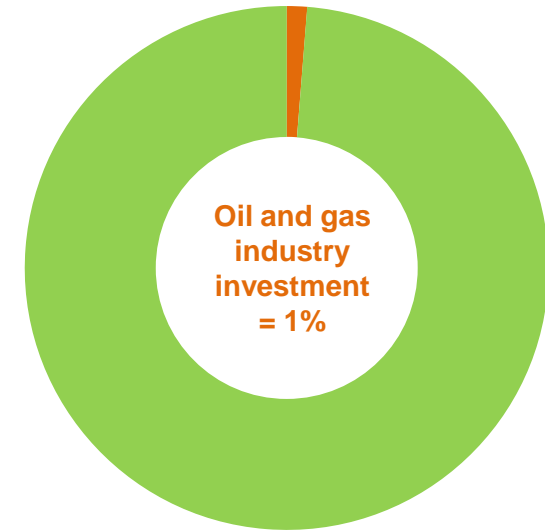
Global emissions oil and gas operations are larger than energy-related emissions from the United States. Much more ambitious targets, plans and accountability are needed, especially over the crucial period to 2030

The oil and gas industry invests in a range of clean energies

Investment in clean energy by oil and gas firms
(Billion USD)



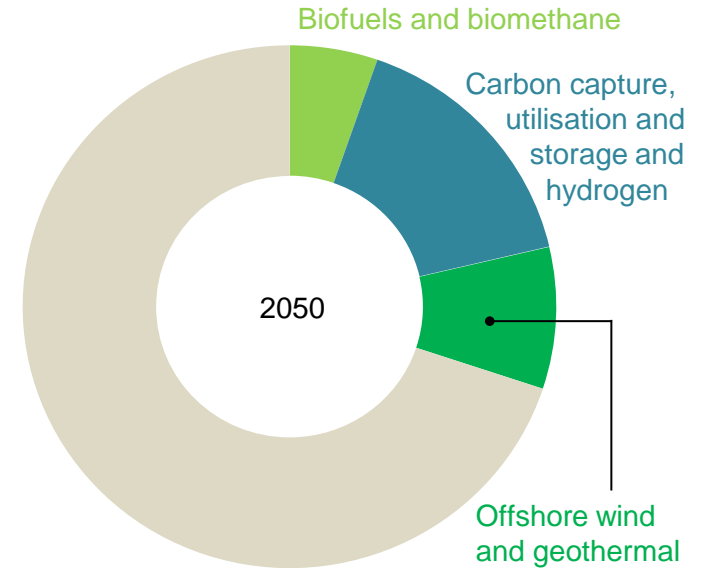
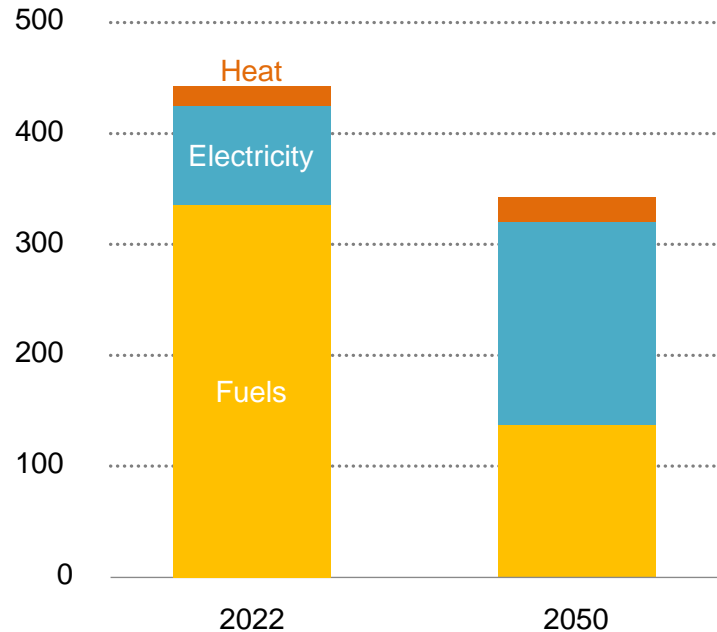
Global investment in clean energy



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

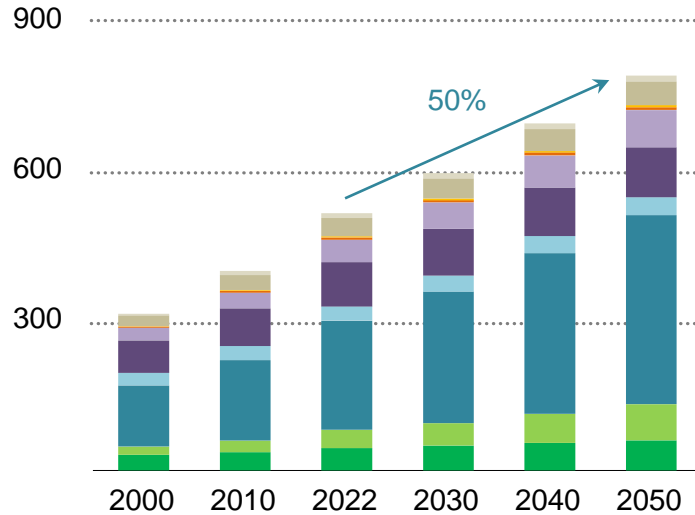
Global final energy consumption in 2022 and in the Net Zero Emissions by 2050 Scenario



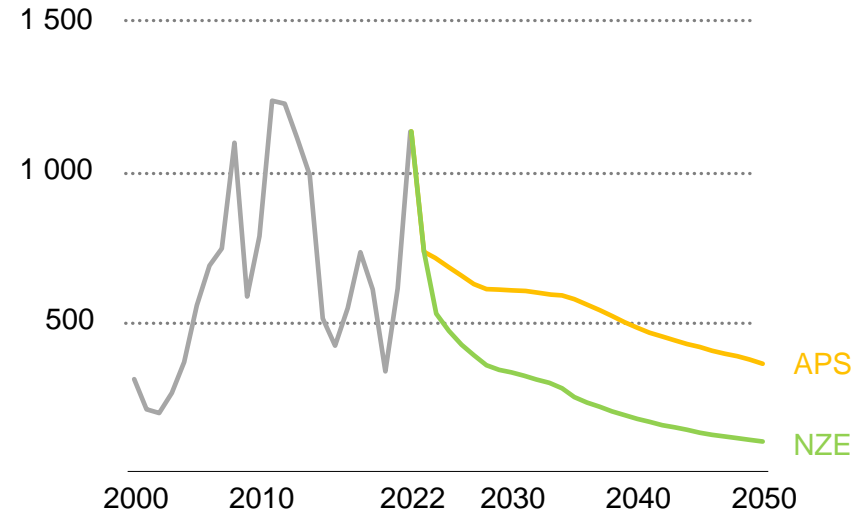
A wide range of technologies are required to get the world to net zero emissions; electricity cannot do it all. Sectors with a close affinity to oil and gas company expertise make up 30% of a net zero emissions energy system

A diversified development model for producer economies

Population in established producer economies (million people)



Oil and natural gas net income (Billion USD)



■ Algeria ■ Angola ■ Nigeria ■ Venezuela ■ Iran
■ Iraq ■ Oman ■ Qatar ■ Saudi Arabia ■ United Arab Emirates

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

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