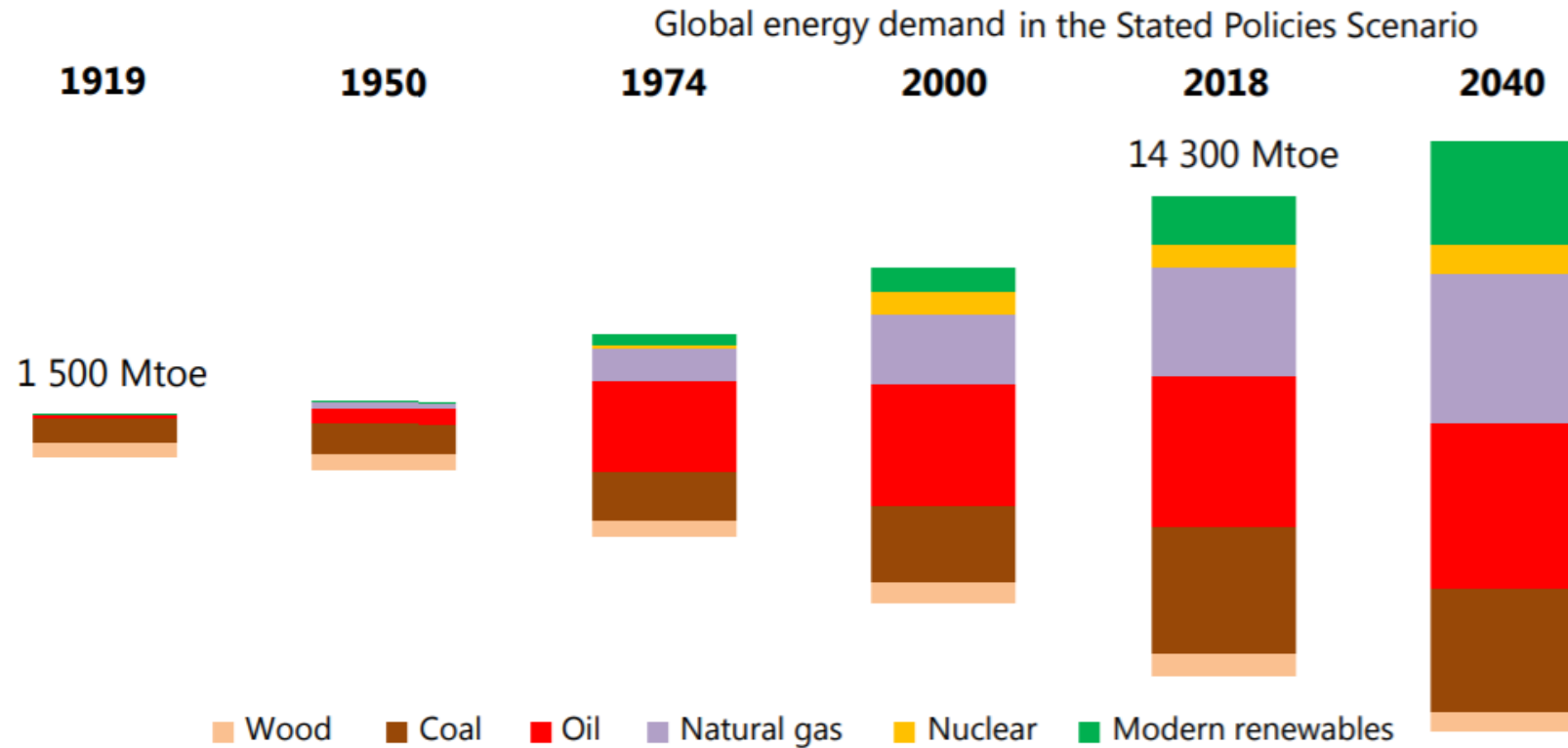


Future of Petroleum Engineering: Shauna's Perspective

Perspectives from energy history



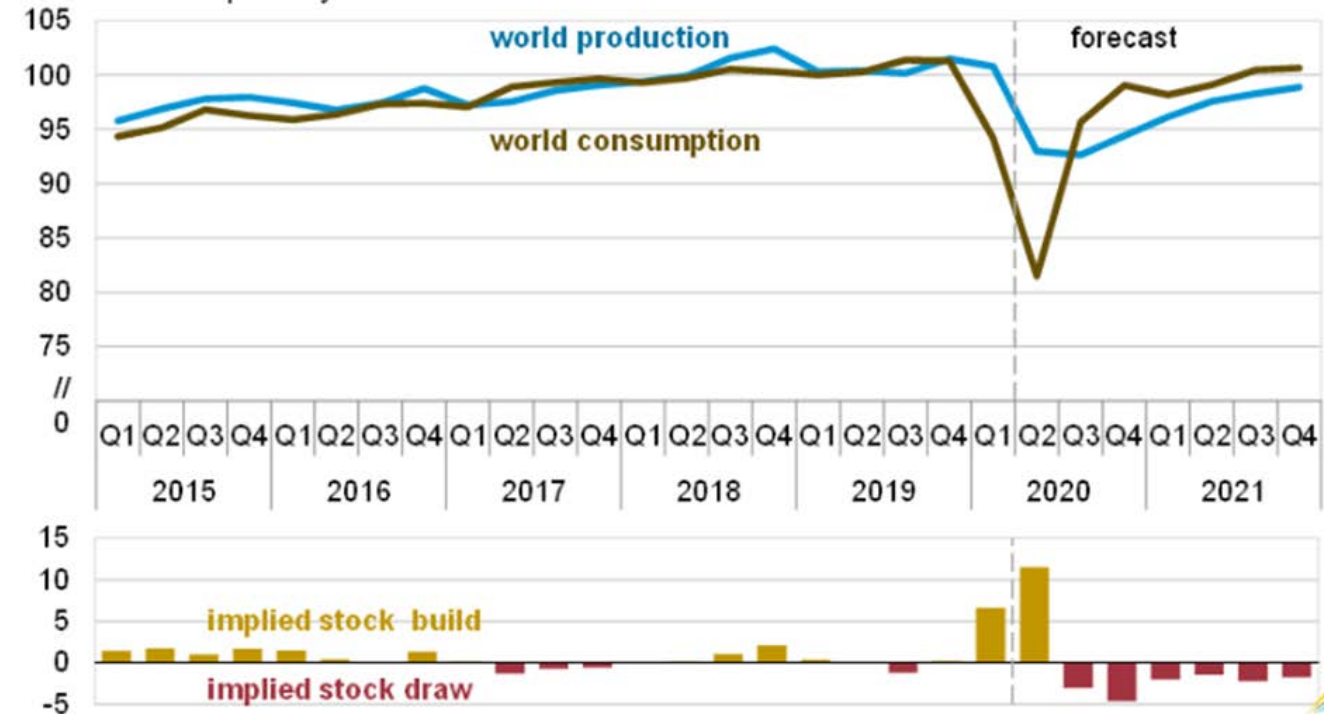
The last century has witnessed multiple transitions to and from different fuels and technologies
The challenge today is one of scale: global energy use is ten times higher than in 1919.... and growing

IEA 2019. All rights reserved.



World liquid fuels production and consumption balance

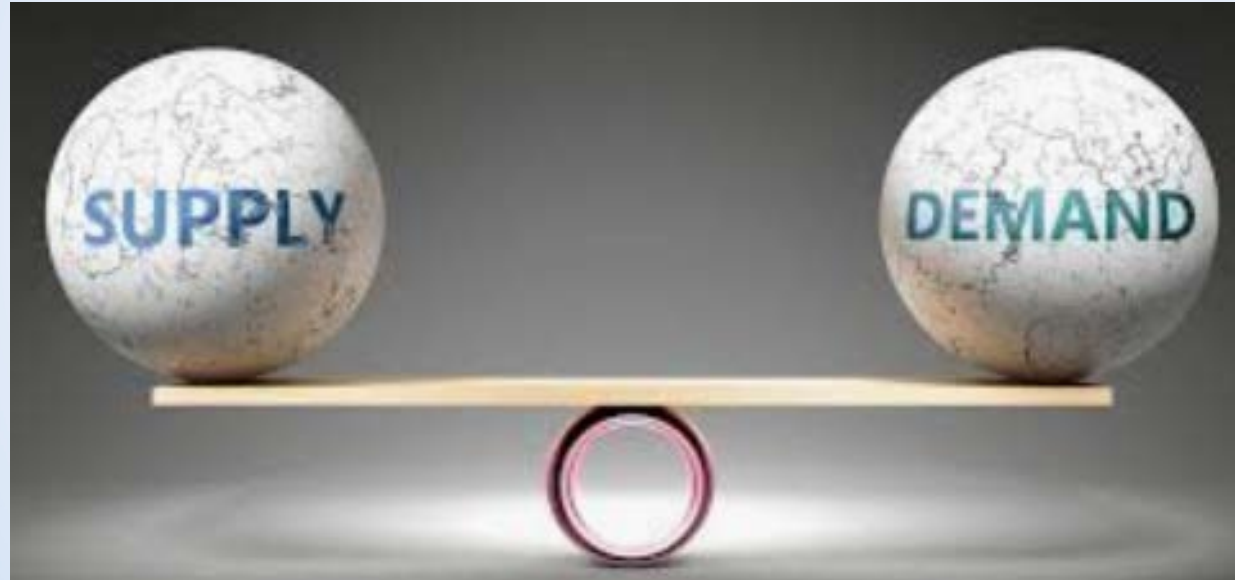
million barrels per day



Source: Short-Term Energy Outlook, May 2020



Will O&G need less petroleum engineers in the future?



Does your country have the demand for the number of petroleum engineers that its institutions are graduating?

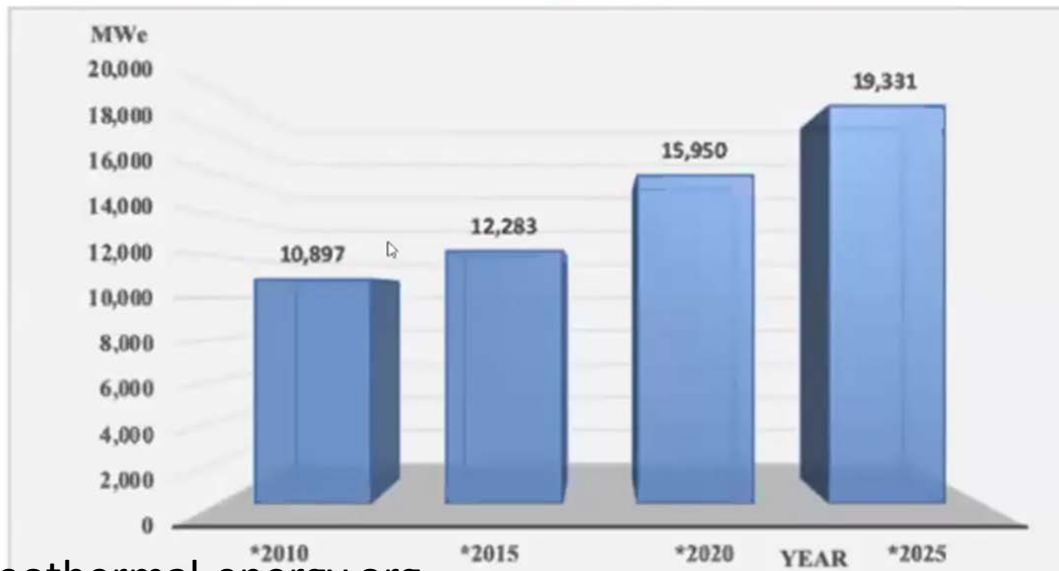
What other industries need these skills?

- reservoir engineering (primary, secondary, tertiary recovery)
- fluid flow through porous media,
- properties of petroleum fluids
- formation evaluation
- drilling, completion, production fundamentals
- geology and fundamentals of geomechanics

Emerging industries for a Petroleum Engineer

- Geothermal
 - Since 2015, over 2600 wells drilled internationally

World Total Installed Capacity 2010 to 2025

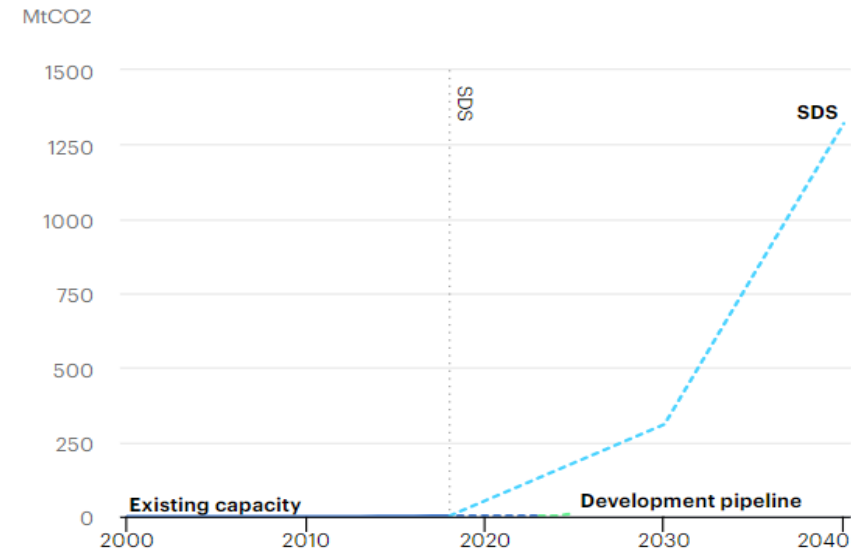


Geothermal-energy.org

- Carbon capture, utilization and storage (CCUS)

Large-scale CO₂ capture projects in power generation in the Sustainable Development Scenario, 2000-2040

Open



iea.org

Being a petroleum engineer is not enough – you have to be a good one.

- Solid foundation in the fundamentals from a recognized institution.
- Grades will get you the interview, but its your soft skills that will get you the job.
- Adding value (\$\$ / bbls)



Future of Petroleum Engineering: Final thoughts.....

- Petroleum engineers will be needed for the next 30+ years to provide the supply needed by the global demand.
- Universities need to take accountability for graduating more petroleum students than their own local industry can support.
- Petroleum engineers have a unique skillset of understanding the subsurface. Look for opportunities beyond oil and gas, as they are increasing.
- The more value you bring (and demonstrate) to your employer, the longer of career you will have.