

FRAC SAND SUPPLY & DEMAND AUSTRALIA

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Natural gas is an essential commodity for modern Australia. It's needed for power generation and is an indispensable feedstock for manufactured products such as fertilizers, plastics & chemicals. The distinction between "unconventional" gas & "conventional" gas is simply based on the type of rock the gas is found in. Both "conventional" & "unconventional" natural gas is methane. CSG & Shale gas is almost pure methane whereas conventional gas may also contain ethane, propane, butane, and other hydrocarbons. Gas demand in eastern Australia continues & will increasingly need to be supplied from unconventional sources such as coal seam & tight shale gas formations which generally need the use of hydraulic fracturing techniques to allow the economic extraction of gas. Frac sand competes with ceramic proppants which are all imported. Frac sand must meet the tight specifications outlined by API RP-56. Key factors include: crush resistance, sphericity / roundness, acid solubility & sizing. The demand will rise as more production holes are commenced to stimulate gas production in the years ahead. Only ~ 4% of coal seam gas holes in the Surat Basin have needed frac sand in recent years but this is expected to rise to 40% within 3 year. The frac sand grade used is primarily 20/40# with smaller quantities of 16/30#, 40/70# & 70/100# making up the balance. There are few producers of frac sand in Australia. Logistics is a key component of the delivered price. There is a trend towards the end users preferring delivery in pneumatic tankers.