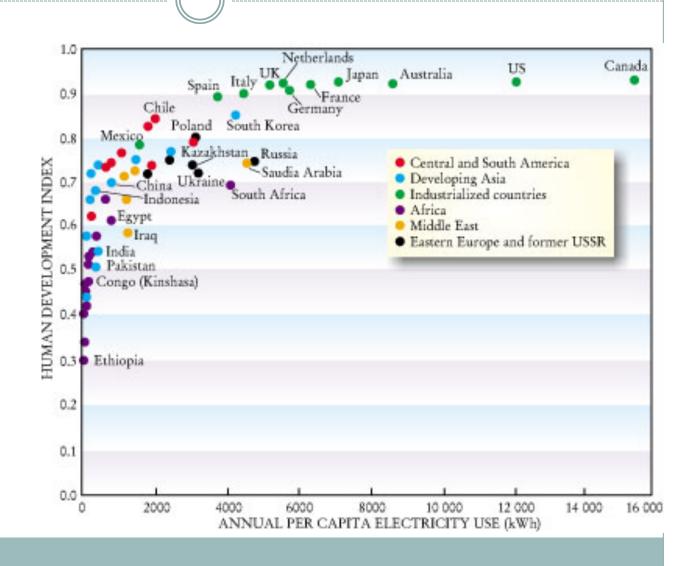
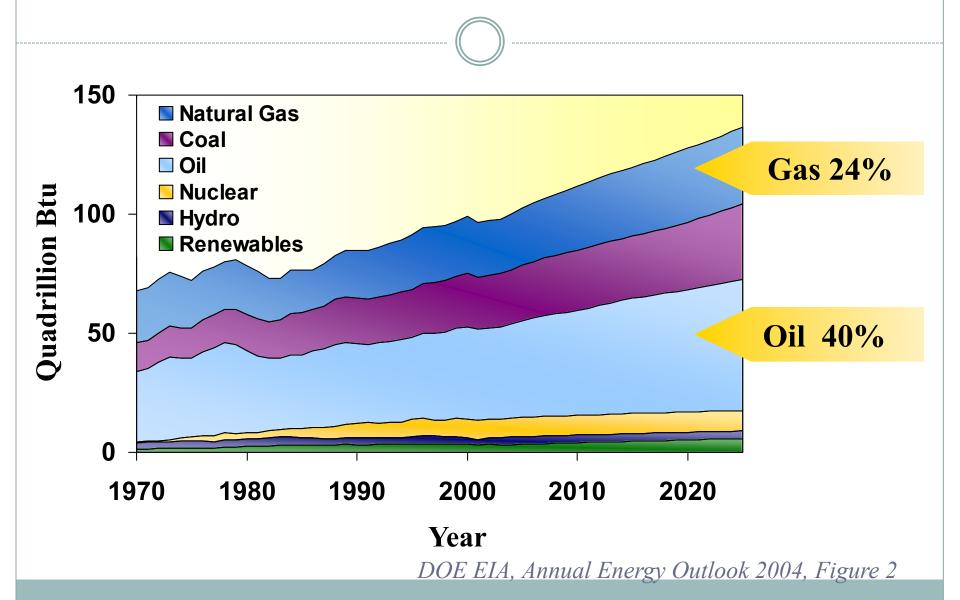
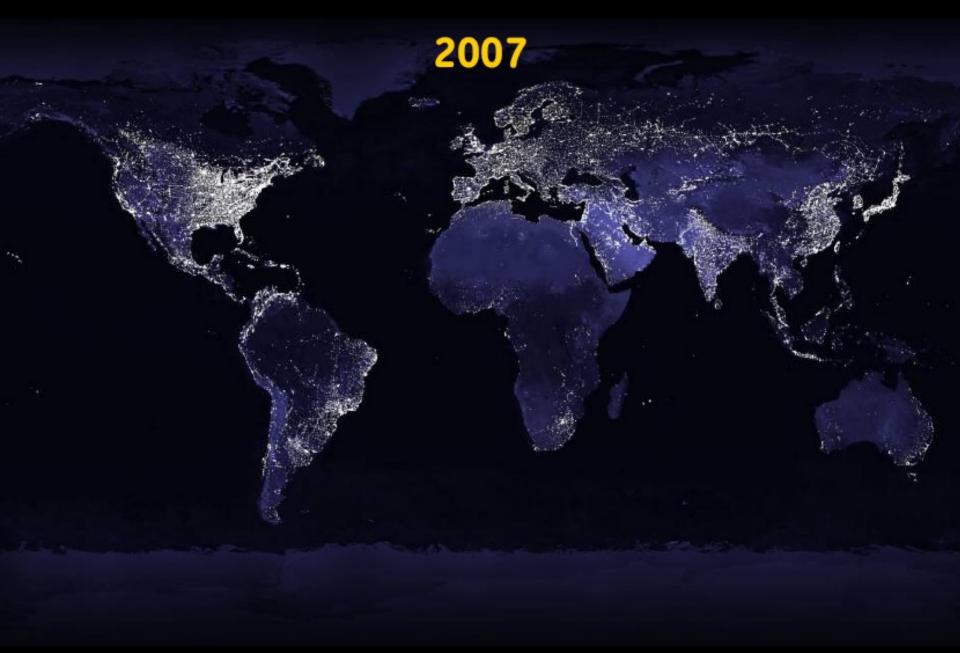
Energy is a key to quality of life

In 1999, with less than 5 % of the world's population, the US generated 30 % of the world's GDP (Gross Domestic Product), consumed 25 % of the world's energy, and emitted 25 % of the world's carbon dioxide."



Oil and gas provide about two-thirds of energy consumed





From John Lavelle – GE Gasification

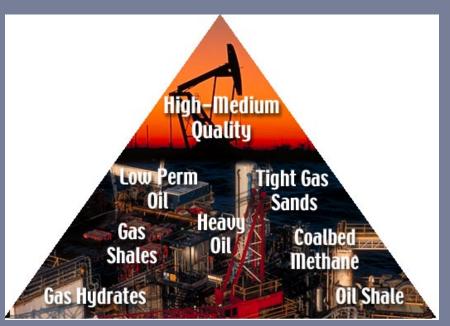


From John Lavelle – GE Gasification

Resources are getting harder to extract

Conventional

1 gallon of reservoir = 1 pint of oil



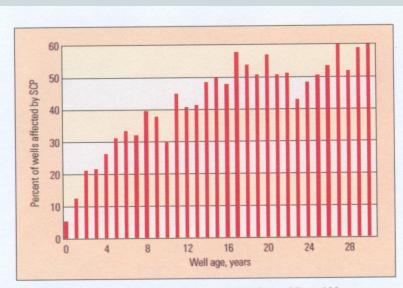
Increased Cost Lower Yield Fracking Required

Unconventional

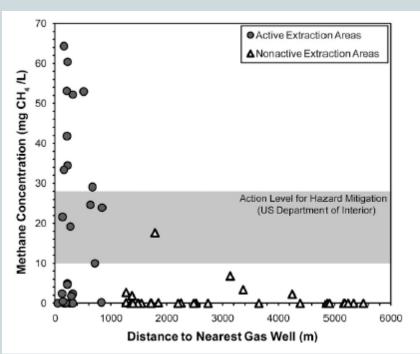
1 gallon of reservoir = 2.4 teaspoons of oil

Rhetoric versus Data

'Well design and construction make leaks almost impossible'



^ Wells with SCP by age. Statistics from the United States Mineral Management Service (MMS) show the percentage of wells with SCP for wells in the outer continental shelf (OCS) area of the Gulf of Mexico, grouped by age of the wells. These data do not include wells in state waters or land locations.



Brufatto et al. 2003, Oilfield Review

Osborn et al. 2011 PNAS