

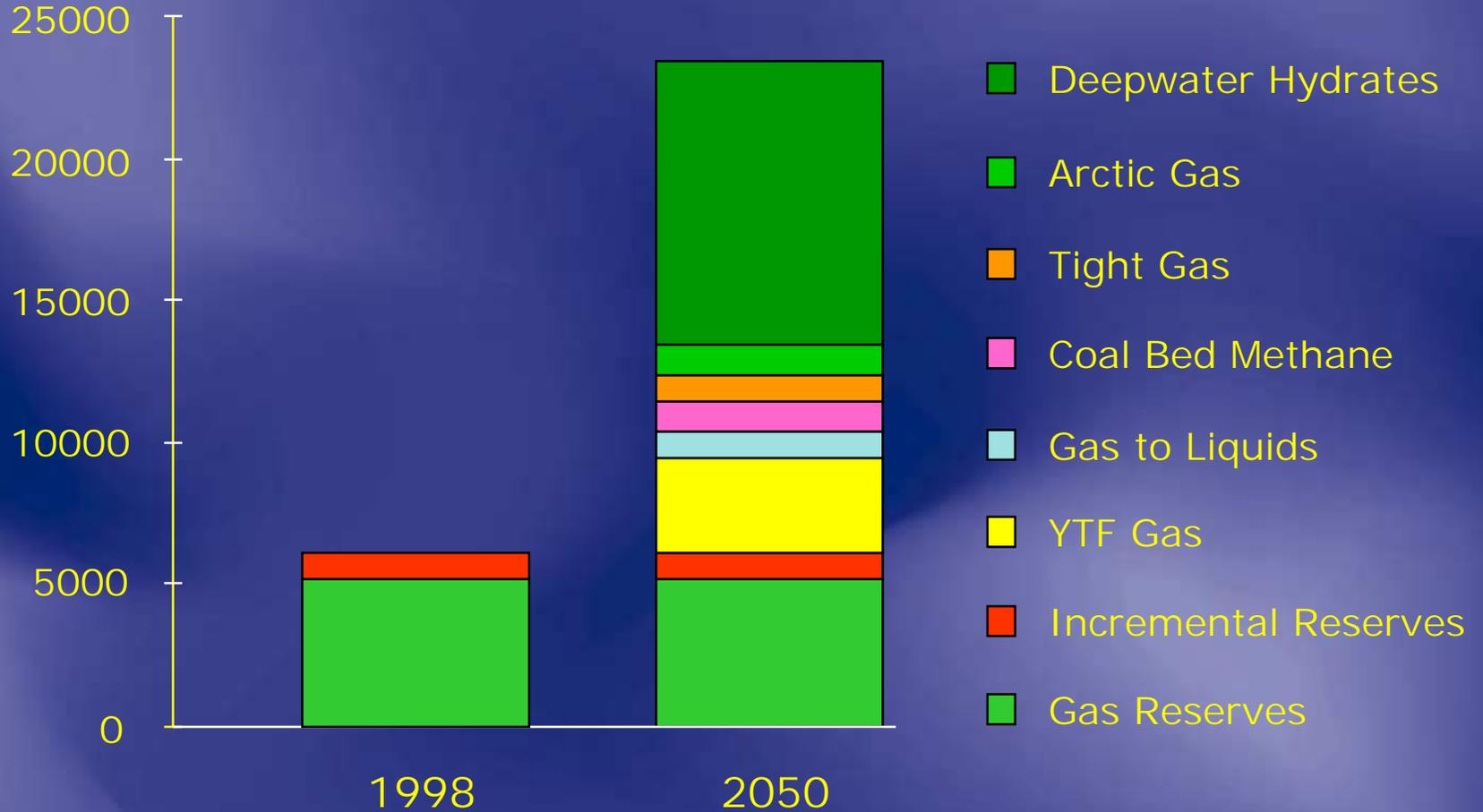
Technology's Role in the Changing Natural Gas Paradigm



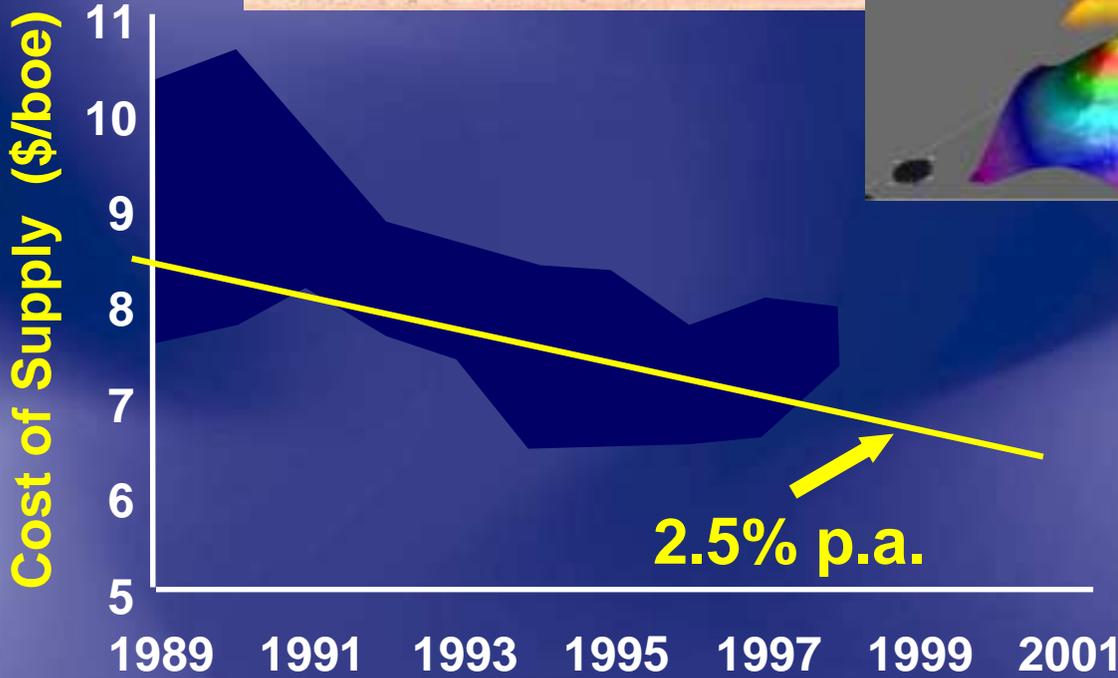
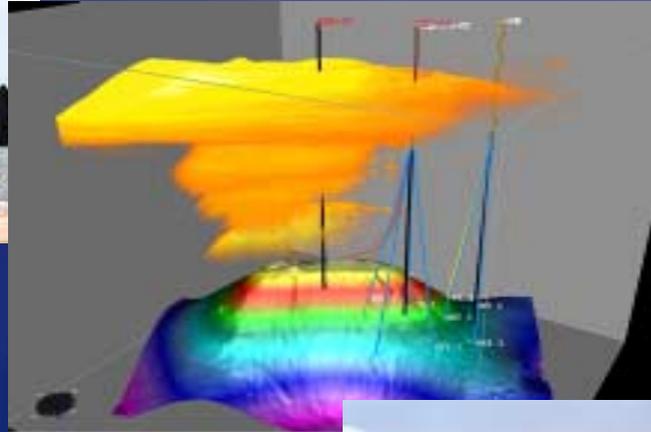
bp

Plentiful Gas Supply

TCF



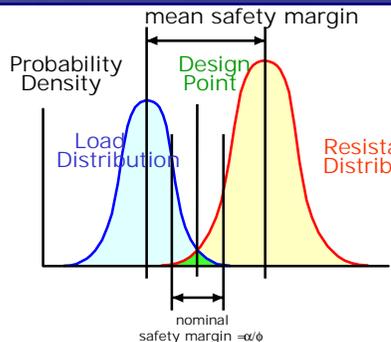
Plentiful Gas Supply - Lower Costs



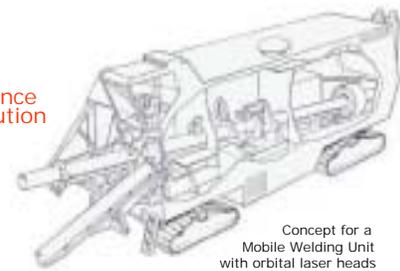
Pipeline cost reduction



Improved Terrain Management



Risk Based Design



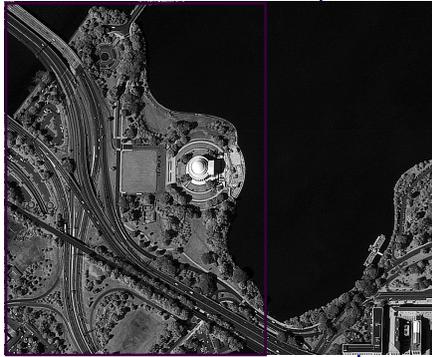
Concept for a Mobile Welding Unit with orbital laser heads and real time inspection

Advanced Welding Methods

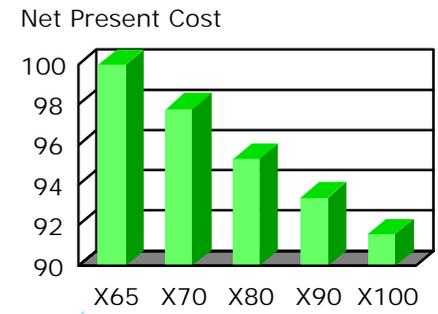
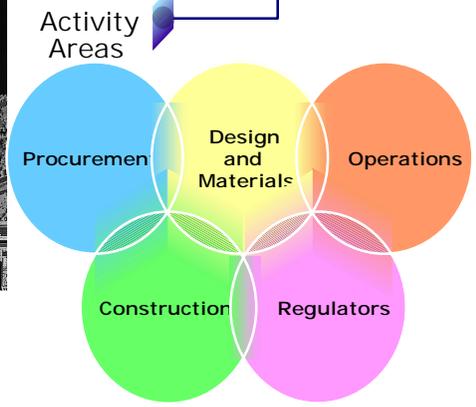


Improved Construction Practices

The CAPEX of Onshore Pipeline Systems is Reducing



Satellite Routing and Surveillance

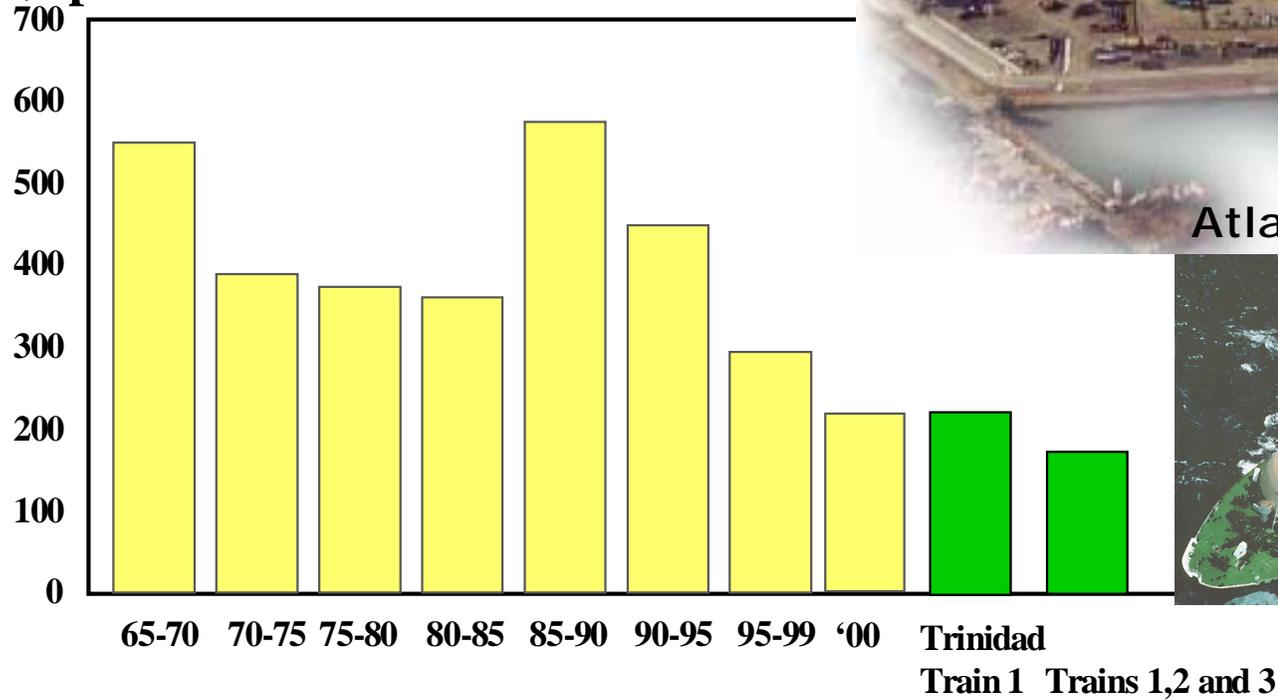


High Strength Linepipe

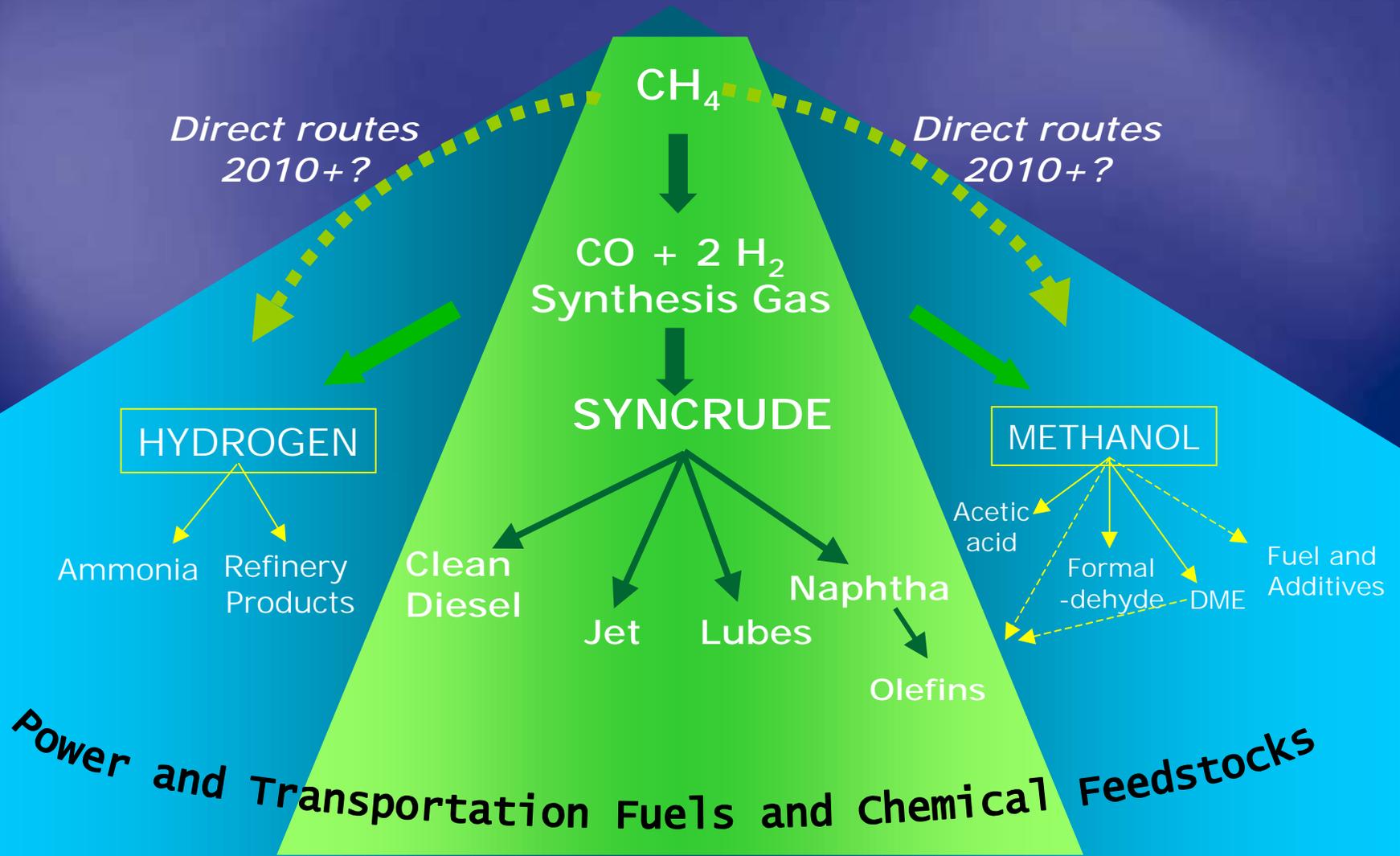
Low Cost LNG

Plant Costs

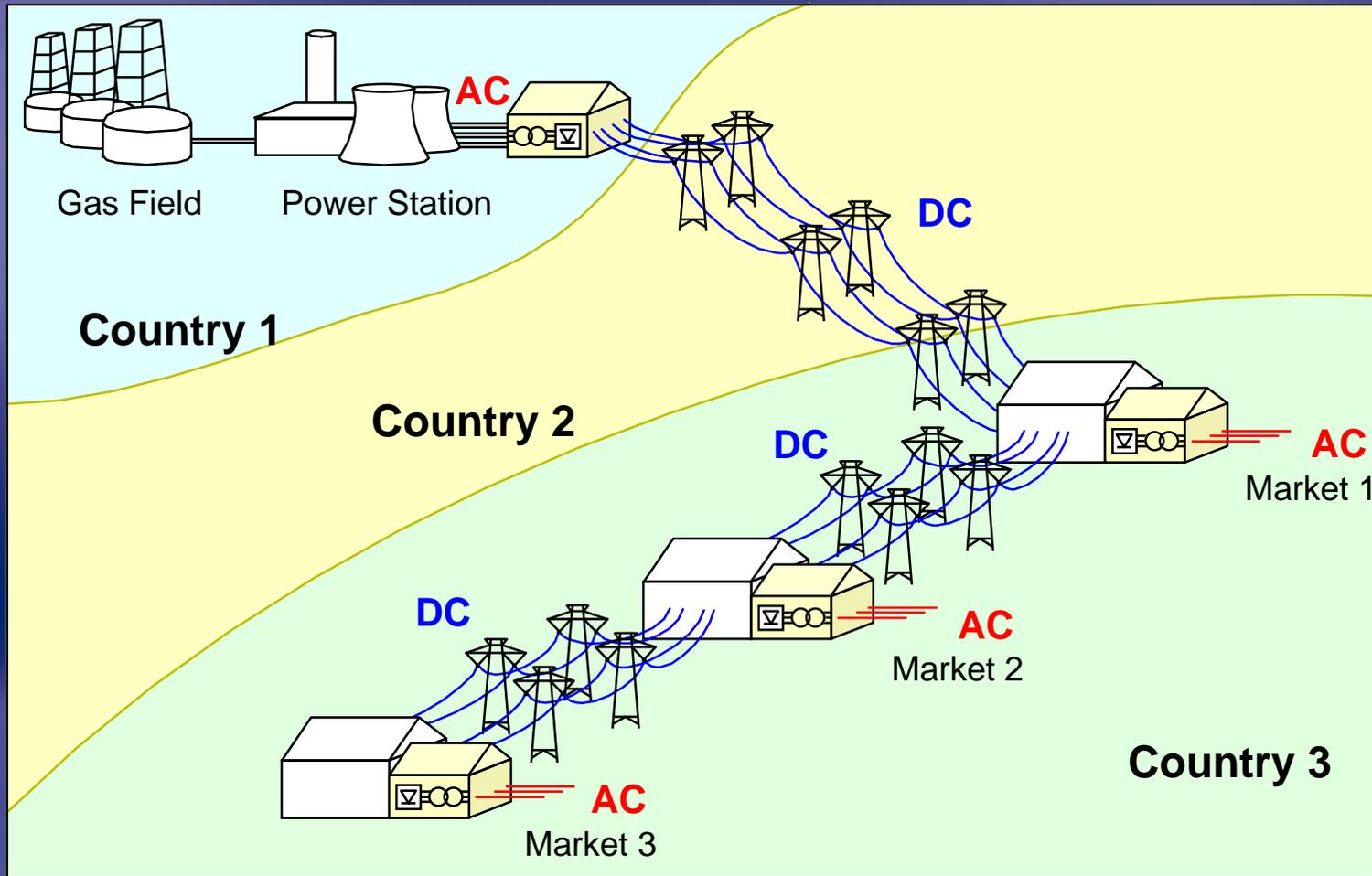
\$/tpa



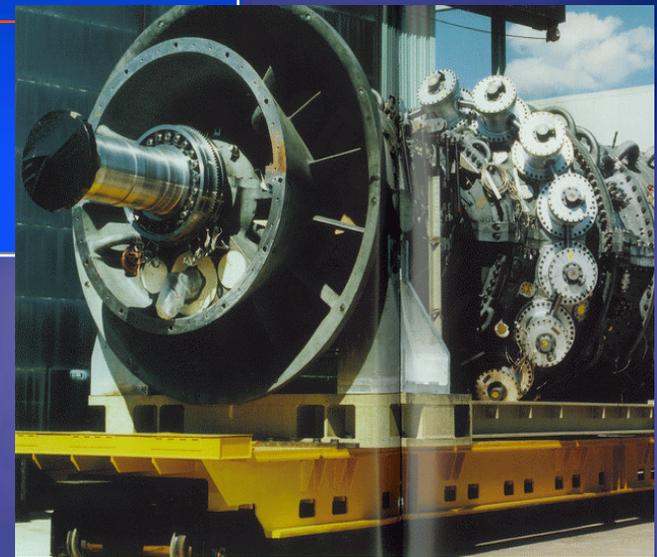
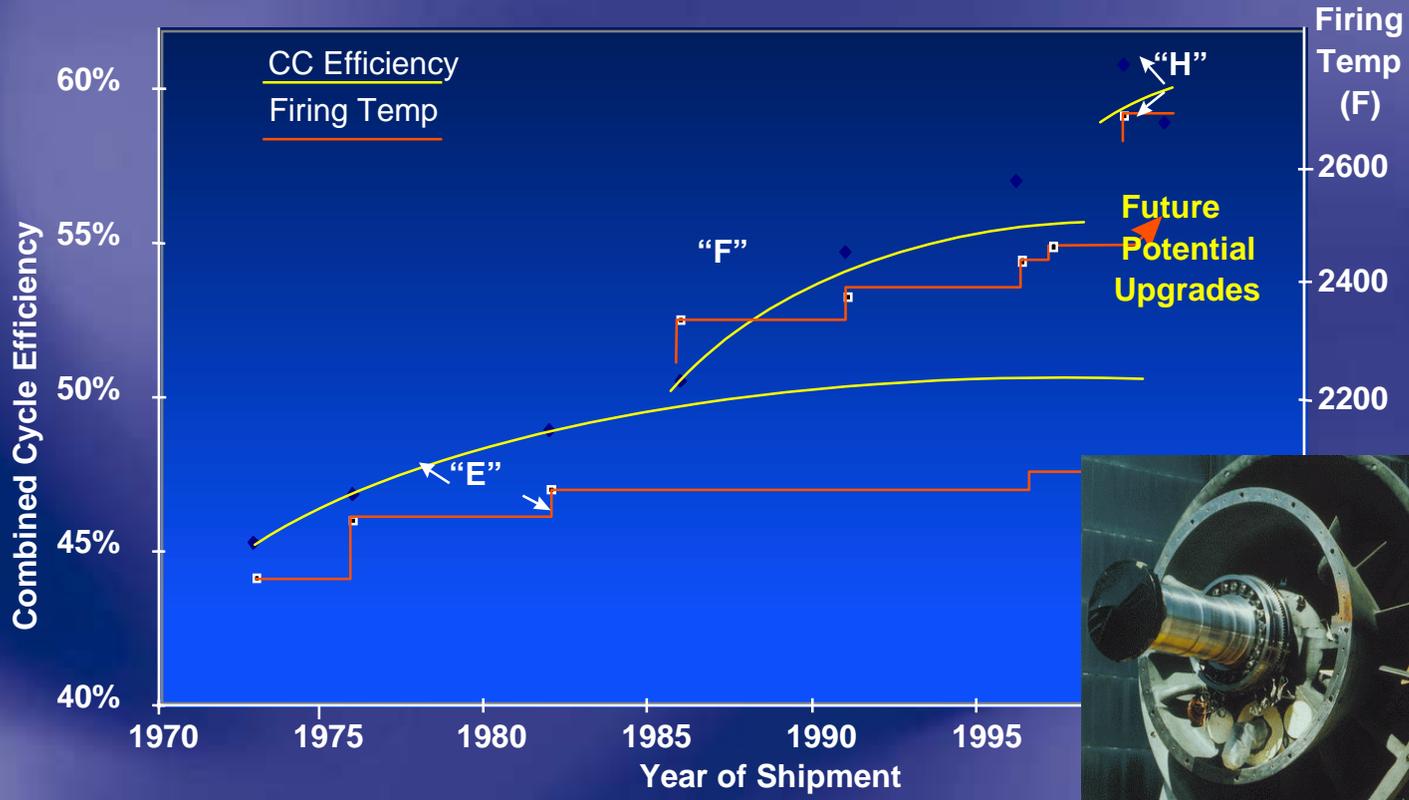
Gas to Chemicals & Fuels



Gas by Wire



Combined Cycle Gas Turbine Efficiency



Gas for Transport – CNG and LPG



Hydrogen



GHG emissions from Power Generation

