Shale Gas Ethane-Propane Problems to be Solved

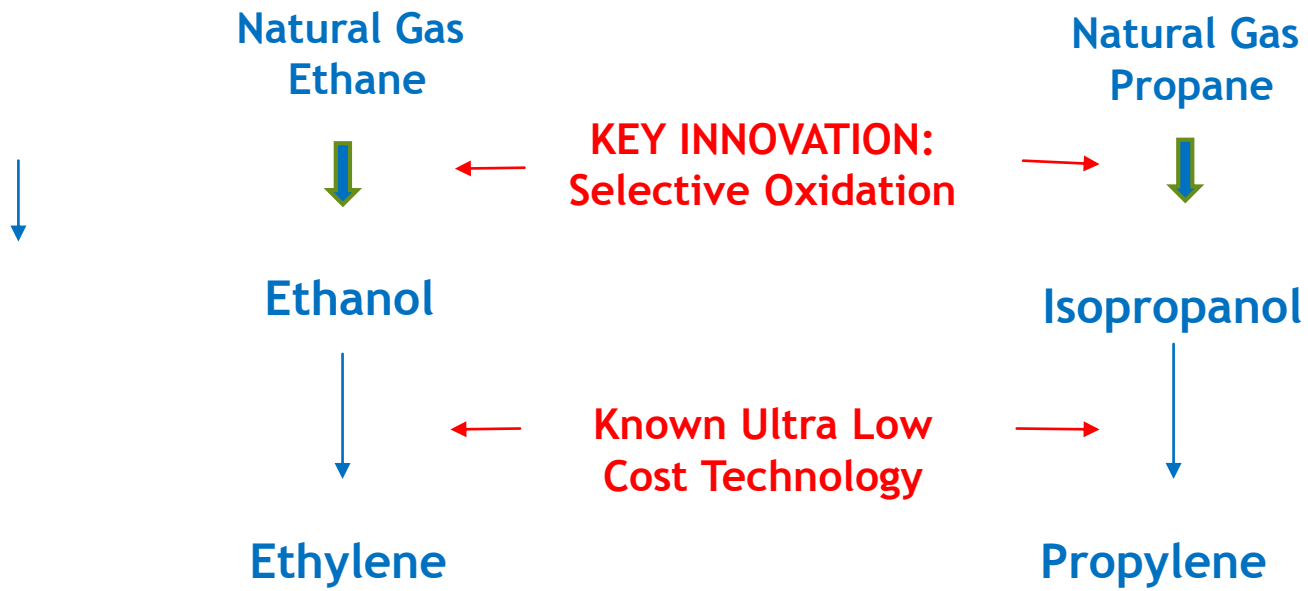
I. ***The investment cost and economy of scale required for a new ethane to ethylene cracker are too high to be of commercial interest.***

II. ***The investment cost and economy of scale required for a new propane to propylene dehydrogenation plant are also too high to be of commercial interest.***

III. ***Since ethylene and propylene are gases current cracking and dehydrogenation technologies require significant downstream investment and risk to insure full unit capacity utilization required for good economics.***

“KPT LLC Technical Team Solution”

Simple Proprietary Process to Economically Convert Natural Gas Ethane to Ethanol and/or Propane to Isopropanol



Why It Will Work:

1. **The historical problems of oxidation selectivity, catalyst usage/cost, productivity and control have been solved. Continuous lab demonstration is underway.**

2. **The unique ability to selectively and economically oxidize ethane to ethanol and propane to isopropanol with a low investment and reduced economy of scale requirement is a "game changing" technology.**

3. **Moreover the technology makes utilization of shale gas ethane and propane to produce ethanol and isopropanol respectively cost advantaged and commercially viable.**

Customer Value Proposition:

Major chemical companies considering building an ethane cracker or propane dehydrogenation plant should be interested because the process:

a. Provides a low cost means to potentially lower either ethylene or propylene production cost by up to 5 cents per pound.
b. Lowers the financial risk of building a new cracker.
c. Lowers the downstream investment required by traditional technologies.

KPT LLC Funding Needs: Phase I = $75K, Phase II = $240K

1. Support Process Development @ MATRIC
2. Support development of IP and licensing packages.
3. Support process development, design and economics..