Natural Gas Applications: Technology and Policy

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American Fuel & Petrochemical Manufacturers (AFPM)
Who We Are

• Founded in 1902

• Represent over 95% of U.S. refining capacity and petrochemical manufacturing

• More than 300 member companies
  • Refineries
  • Petchem manufacturers
  • Service providers
Who We Are

Refiners and petrochemical manufacturers create essential products that make your life better.
What Are Petrochemicals

• Set of very specific chemical compounds
• Generally speaking a petrochemical is a chemical derived from oil or natural gas
  – Vast majority of petrochemicals are derived from oil or natural gas
  – U.S. mostly uses natural gas
What Are Petrochemicals

WE MAKE THE ETHYLENE, THAT MAKES THE CELLS, THAT POWER PEOPLE BEYOND THE GRID.

WE MAKE THE TOLUENE, THAT MAKES THE SPANDEX, THAT MAKES THE JEANS THAT FLEX WITH YOU.

WE MAKE THE XYLENE, THAT HELPS MAKE RECYCLABLE PLASTIC, AND THAT’S GOOD FOR THE LONG RUN.

WE MAKE THE BUTADIENE FOR A.B.S. PLASTICS, THAT MAKE THE INDOOR FARMS, THAT FEED A GROWING WORLD.
Impacts of US Chemical Industry

• 334 chemical and plastics projects have been announced in the U.S. since 2010
  • Includes new projects and expansions of current facilities
  • 148 are in Texas
• Represents $205 billion investment in the U.S. economy
• 53% of the investment is completed or underway and 40% in the planning phase

Source: American Chemistry Council
Impacts of US Chemical Industry

Chevron Phillips Chemicals Ethane Cracker
Baytown, Texas

• Completed in March 2018 as part of CP Chemicals U.S. Gulf Coast Petrochemicals Project (USGCPP)
• Total investment for USGCPP $6 billion
• At peak construction employed 10,000
• Employs 400 permanent workers
• Peak production will make 3.3 billion lbs per year of ethylene to be used as basis of other products
Impacts of US Chemical Industry

Shell Chemical Appalachia Ethane Cracker
Potter Township, Pennsylvania

- Began main construction phase in November 2017
- Multi-billion dollar investment
- Currently employs 6,000 construction workers
- Will employ 500 permanent workers when complete
- Peak production will make 3.3 billion lbs per year of ethylene to be used as basis of other products
- More than 70% of North American polyethylene customers are within a 700-mile radius of Pittsburgh
Impacts of US Chemical Industry

Sustainability

• Increasing efforts to provide more sustainable petrochemicals, which means more recyclable products
• “Chemical Recycling” is a way to recycle plastic into fuels, petrochemical feedstocks, or even their original building blocks
• Better than traditional “mechanical recycling” to melt down plastics into pellets
• Constantly developing new products and technologies to use plastics in a responsible way
• Formed the Alliance to End Plastic Waste committing $1 billion to help end plastic waste in the next 5 years
Petrochemicals in Action

INEOS Texas Petrochemical Facility Tour
Questions

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