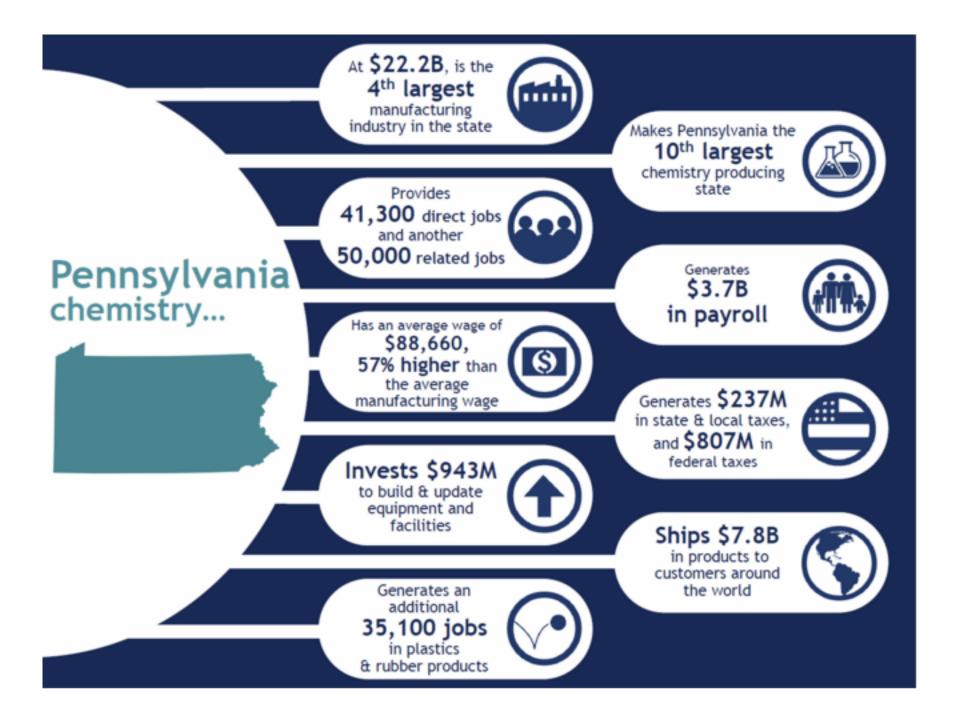


Pennsylvania Chemical Industry Council Your Advocate for the Business of Chemistry



Manufacturing Jobs Pennsylvania

20,000 40,000 60,000 80,000 100,000 0 Fabricated metal product Food Machinery Chemical Primary metal Transportation equipment Plastics and rubber products Computer and electronic product Electrical equipment and appliances Miscellaneous mfg. Printing and related support activities Paper Wood product Nonmetallic mineral product Eurniture and related product Beverage and tobacco product Petroleum and coal products Apparel Textile product mills Textile mills Leather and allied product



Pennsylvania Member Companies

Petrochemical

Braskem Monroe Philadelphia Energy Solutions Shell Sunoco

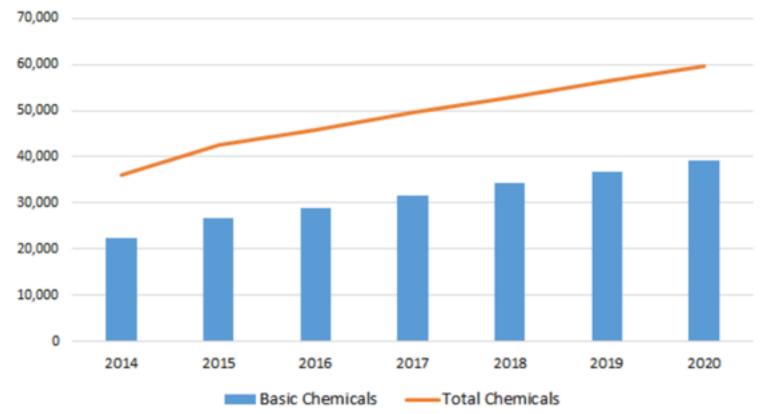
Chemical

Ashland BASF Covestro Dow DuPont Eastman Nova Pressure Quaker



US Chemical Capex to Rise Over 7% per year in 2016-2018

Capital spending (million \$)





Planned New Ethane Crackers

Company	Capacity (Tons)	Location	Announced Start Up
Sasol	1500000	Louisiana	2018-2019
ExxonMobil	1500000	Texas	2017
Chevron Phillips	1500000	Texas	2017
Dow Chemical	1500000	Texas	2017
Formosa	1200000	Texas	2017
Oxychem/Mexichem	544000	Texas	2017
Axiall/Lotte	1000000	Louisiana	2018
Formosa	1590000	Louisiana	N/A
Total	1000000	Texas	2019
Braskem	1100000	West Virginia	N/A
Shin-Etsu	500000	Louisiana	N/A
Williams	1500000	Louisiana	N/A
PTT/Marubeni	1000000	Ohio	2024
Odebrecht/Braskem	1000000		On Hold
Appalachian Resins	275000	Monroe County, Ohio	On Hold
Badlands/Vinmar	1500000	North Dakota	N/A
Aither Chemicals	272000	Charleston, West Virginia	N/A
Shell	1500000	Pennsylvania	N/A



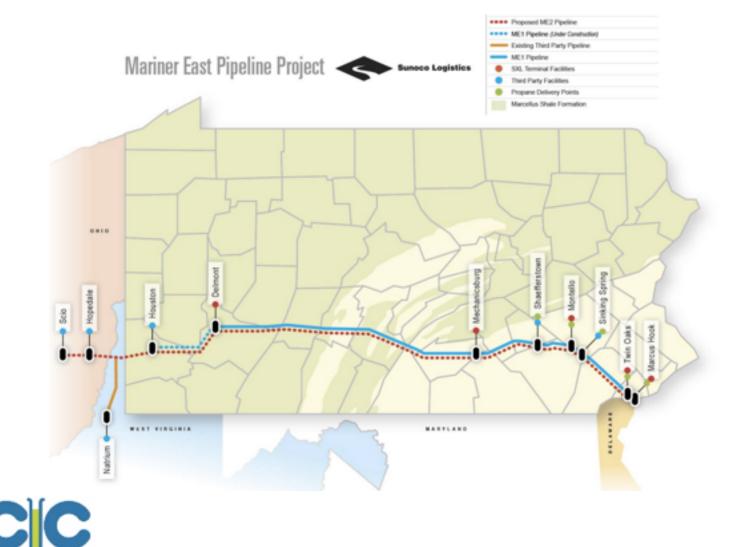
Source: Petrochemical Update

Shell Ethane Cracker





Sunoco Logistics Mariner East 1&2



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Philadelphia Energy Solutions



PHILADELPHIA ENERGY SOLUTIONS



Regional Utilization

- Leverage Basic Building Blocks
- Capital Investment Incentives
- Trained Workforce
- Infrastructure
- Long Term Value Added Jobs



Questions?

