

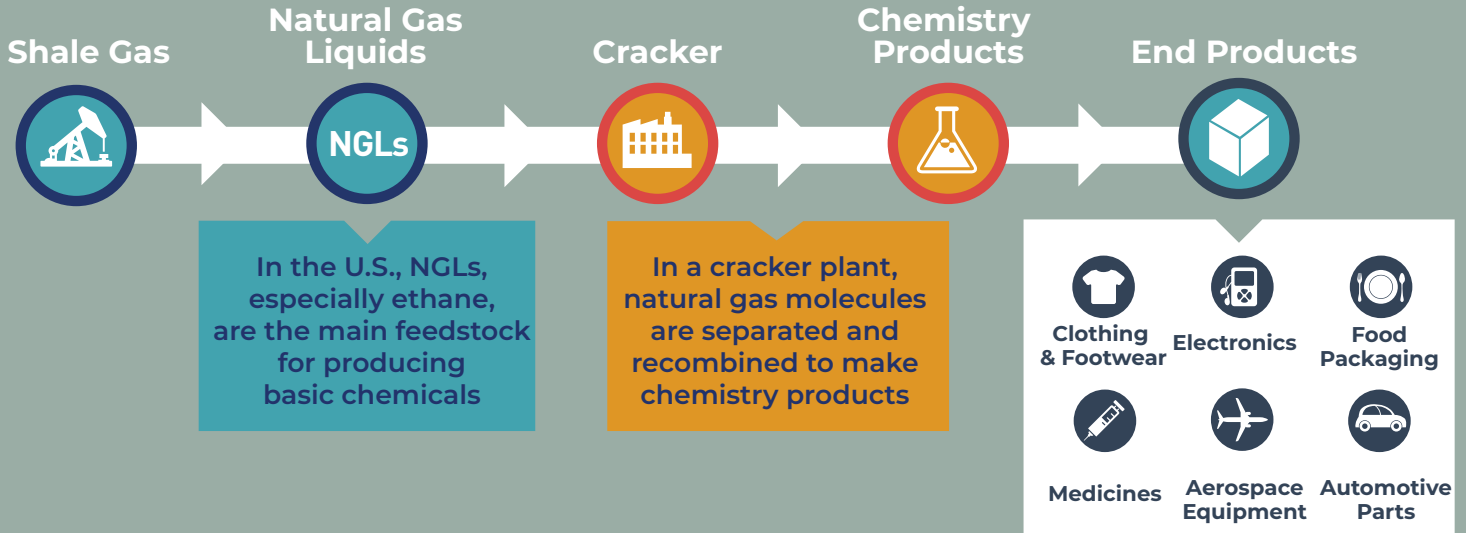
How Chemical Makers Use Natural Gas



FUEL & POWER:
To generate heat, steam, pressure, and electricity at our facilities



FEEDSTOCK:
As the source of natural gas liquids (NGLs) we use as raw material to make our products

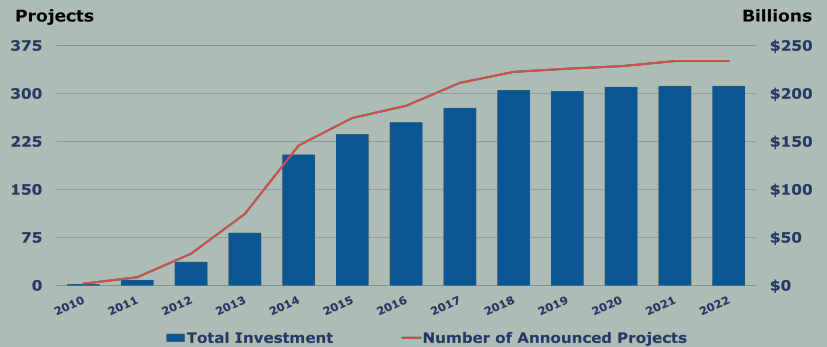


Shale Gas Supports New Chemistry Investment



**ADVANTAGE:
UNITED STATES**

Plentiful & affordable natural gas/NGLs are attracting chemical company investment from around the world.



Source: ACC analysis, 2010 - 2022

Chemistry Grows Our Economy and Creates Jobs

JOBS

537,000
Number of skilled American jobs in the chemistry industry

4.1 Million
Total number of jobs generated in the chemistry industry and elsewhere in the U.S. economy

INNOVATION

\$11 billion
R&D investment by business of chemistry in 2021

INDUSTRIES SUPPORTED

- Automotive
- Building & Construction
- Agriculture
- Food & Beverage
- Computers & Electronics
- Medical Equipment/Supplies
- Health Care Services
- Household Appliances

and many others

TRADE

10%
Percentage of U.S. goods exports produced by the chemistry industry

\$153 billion
in 2021

Virtually All
of all manufactured goods are directly touched by the business of chemistry*

\$517 Billion
One of America's largest manufacturing industries

Natural Gas Enables Energy and Climate Innovation

Creating Solutions

Many energy-saving and renewable materials and technologies rely on chemistry and plastics.



High-performance building insulation and windows



Renewable energy solutions



Energy-efficient lighting



Lightweight parts for vehicles and aerospace



Electric vehicle equipment and infrastructure



Battery storage



PVC water pipe



Insulation and coolant systems

Driving Innovation



ACC members are taking action to reduce the industrial greenhouse gas (GHG) intensity of their supply chains, operations and products.



Under Responsible Care[®], ACC members track and report the energy efficiency of their facilities and GHG emissions. ACC makes this information publicly available.



The chemistry industry is a leader in the use of combined heat and power, also known as cogeneration—the simultaneous production of electricity and heat from the same source. CHP facilities are often twice as efficient as older coal-burning electric utilities.



The chemical energy has been a pioneer in the development of catalytic technologies. Catalysts are added substances that increase the rate of chemical reactions so that less energy is used per unit of product. Today, about 90% of all chemical processes employ catalysis in production.



Advanced recycling technologies allow us to make new, high-quality plastics out of used plastics – reusing the energy content over and over again.



Natural gas production and infrastructure will be needed to deploy innovative lower emissions technologies (e.g. hydrogen; carbon capture utilization, and storage (CCUS)).

Policy Priorities



Implement responsible, state-based regulations that enable robust natural gas production.



Encourage the development and adoption of innovative lower emissions technologies (e.g., hydrogen, CCUS).



Ensure reliable infrastructure to transport supplies and support resilient supply chains.



Expedite implementation of research and funding programs for lower emissions technology innovations, hubs, and infrastructure.



Ensure a timely, efficient regulatory permitting process.



Support a broad range of energy and manufacturing technologies, solutions, programs and policies.