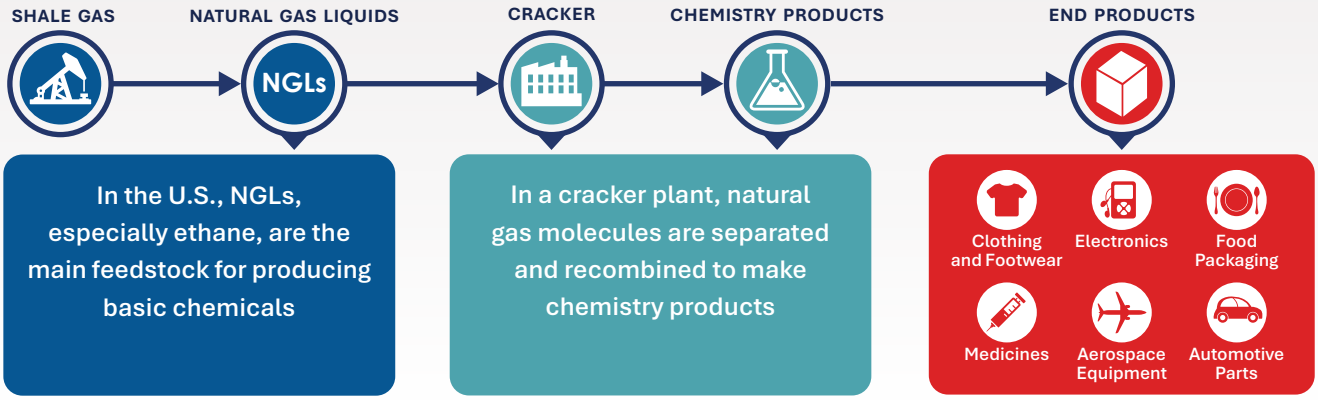
Natural Gas and American Chemistry

American Chemistry Council

How Chemical Makers Use Natural Gas

Fuel & Power: To generate heat, steam, pressure, and electricity at our facilities

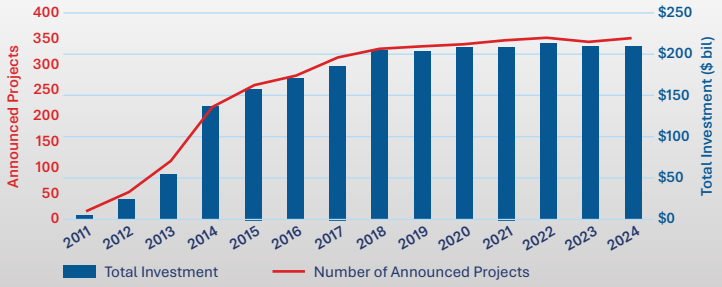
Feedstock: As the source of natural gas liquids (NGLs) we use as raw material to make our products



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 - 2024



Chemistry Grows Our Economy and Creates Jobs

JOBS

554,000
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

$13 BILLION
R&D investment by business of chemistry

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

INDUSTRIES SUPPORTED

Automotive
Building and Construction
Agriculture
Food and Beverage
Computers and 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

$164 BILLION

$633 billion
One of America's largest manufacturing industries

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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.

The chemical industry 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.

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

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

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.

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

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

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

Ensure reliable infrastructure to transport energy 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.

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

*ACC, Federal Reserve Board, Bureau of the Census, EIA

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