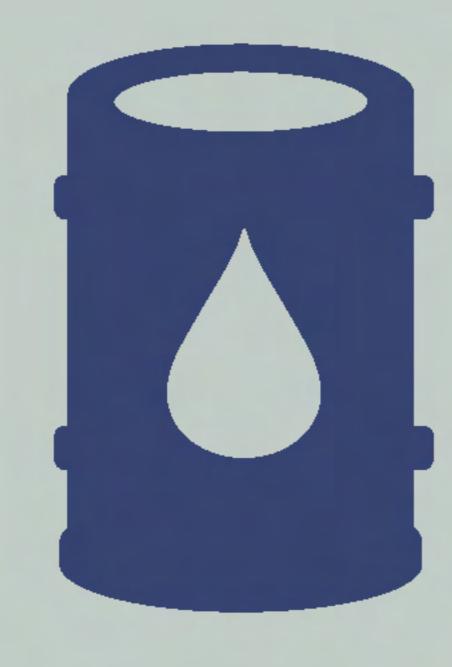
AMERICAN CHEMISTRY ANDENERGY



HOW CHEMISTRY USES ENERGY



FUEL & POWER:

To generate heat, steam, pressure, and electricity at our facilities



FEEDSTOCK:

As a raw material to make ourproducts

Shale Gas



Natural Gas



Cracker



Chemistry



In the U.S., NGLs, especially ethane, are the main feedstock for chemistry

In a cracker plant, energy molecules are separated and recombined to make chemistry products



CLOTHING & FOOTWEAR



ELECTRONICS



FOOD PACKAGING



MEDICINES



AEROSPACE EQUIPMENT



AUTOMOTIVE **PARTS**

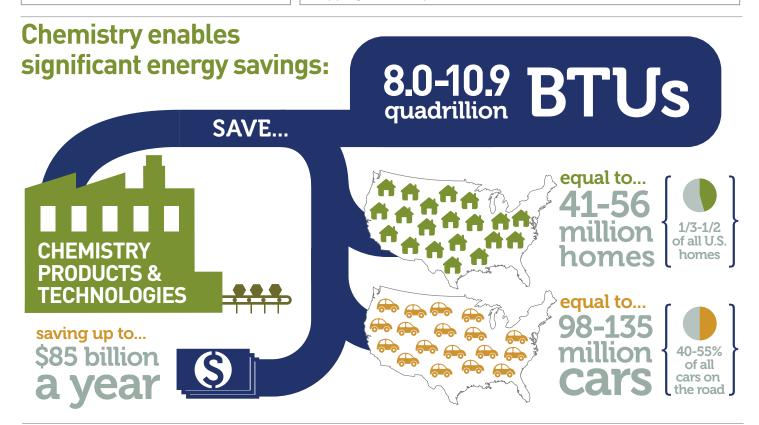


ENERGY EFFICIENCY



Chemistry is creating solutions for a strong, secure, and sustainable future

Chemistry is creating solutions that empower Americans to improve energy efficiency, making our nation's energy supplies go further while lowering energy costs for businesses and families. Many energy-efficient solutions rely on innovations in chemistry – from lithium-ion batteries that power our laptops and mobile phones and will drive the next generation of electric cars, to high-performance building insulation and windows, to lightweight plastic packaging and auto parts that reduce energy needs in shipping and transportation.



Industrial energy efficiency, including CHP, can help keep electricity reliable & affordable

The chemical industry is a leader in the use of combined heat and power (CHP), also known as cogeneration, which provides electric power and heat from a single fuel source. Because energy is generated close to where it's needed, little is lost in transmission. CHP facilities are often twice as efficient as older coal-burning utilities. Increased use of CHP and other forms "distributed generation" could ease a major transition in the power sector as many coal-fired plants are retired.

POLICY PRIORITIES

- Federal policymakers must enact legislation to improve energy efficiency in the residential, commercial, and industrial sectors
- States must adopt updated energy efficiency building codes
- ✓ Policies and regulations must recognize and support the potential of technologies such as CHP

The chemistry industry has achieved significant energy efficiency gains

Energy efficiency improvement in the U.S. chemical industry since 1974

Energy efficiency improvement by Responsible Care® companies since 1992



Energy efficiency helps chemical companies reduce operating costs and remain competitive