The U.S. Chemical Industry

Important to our Economy and to the Way We Live

A robust U.S. chemical industry offers significant economic, strategic, and quality-of-life benefits to the Nation. The United States is the world's largest chemical producer, annually contributing 2.1% of the U.S. GDP. Chemicals are essential to millions of consumer goods and enable hi-tech advances in our aerospace, computing, and telecommunications industries. Sustained delivery of these benefits requires consistent, focused government funding for basic enabling R&D that boosts competitiveness and improves energy and environmental performance throughout the entire economy. In the face of rising energy costs, this R&D is more important than ever.

Industry Snapshot

Value of Shipments	$435.4 billion
Employment	1.04 million
Capital Expenditures	$14.8 billion
Net Trade Balance	$8.28 billion
Net Energy Consumption	6.3 quads

Source: American Chemistry Council

Chemical industry growth is critically important to the U.S. economy.

Millions of American jobs depend upon the chemical industry. Over 36 million Americans work in businesses that rely on chemical products. The chemical industry directly employs over a million people, with almost half working in chemical production and more than 90,000 chemists, engineers, and technicians employed in R&D. The increasingly complex nature of the business requires highly trained and skilled production workers, who earn an average of 25% more than their counterparts in other manufacturing sectors.

Technology advances can propel that growth.

Federally funded research builds the foundation for future innovation.

The energy-intensive chemical industry has made major strides in improving energy efficiency and protecting the environment. The chemical industry uses fossil resources as both fuel and feedstock. While it has reduced the raw materials consumed for fuel and power per unit of output by about 43% since the 1970s, the industry still consumes 6.3 quads per year (equivalent to 2.98 million barrels of crude oil per day) or close to 25% of all energy used in manufacturing. At least 16 major federal statutes and numerous state laws impose significant environmental compliance and reporting requirements on the industry. In 1999 the industry spent nearly $4.9 billion for pollution abatement and control.

Partnership among government, industry, and academia is essential to maintaining our competitive edge in a rapidly expanding global market. Investing billions of dollars annually in R&D, the chemical industry is constantly creating new processes that enhance productivity while improving safety and benefiting the environment. Today, most company-funded R&D investment addresses relatively short-term product development, while the development of basic enabling technology needed to grow the industry is often beyond the risk and payback horizon of individual companies. Collaborative technology innovation not only benefits the chemical industry, it helps to ensure greater prosperity and quality of life for the entire Nation.