

Natural Gas End Use: A Vision for Today and the Future

Natural gas is a critical part of any solution to meet current and future energy and carbon reduction challenges. It is an abundant, affordable, efficient, clean, domestic energy source, safely delivered through a proven pipeline system to meet the demands of ever-growing residential, commercial and industrial base. In 2008 alone, natural gas accounted for approximately 24 percent of all the energy the nation consumed.



Natural Gas End-Use Vision

The attributes of natural gas make it a core part of America's solution to today's and tomorrow's energy and environmental challenges.

Existing infrastructure and current end-use technologies in the residential, commercial, industrial and transportation sectors not only provide an immediate way to reduce greenhouse gas (GHG) emissions but when expanded on in future years the net benefits will only continue to grow.

The benefits don't stop with the environment. New technologies that allow for greater access to this vastly abundant fuel could mean the end of

By the year 2030, proposed home, business, industrial and transportation RD&D programs are projected to reduce energy use by more than 5.0 quads, CO₂ emissions by nearly 440 million metric tons, saving consumers \$4 - \$9 billion annually.

significant price volatility, more jobs and increased energy independence.

The immediate and future benefits of the



increased use of natural gas are clear: significant reductions in GHG emissions, greater energy independence and a stronger economy.

A Pathway to the Vision

Ensuring natural gas can cleanly and efficiently meet its expanded role in the low-carbon future envisioned will require collaborative government and industry efforts. These efforts are needed to foster improvements in energy efficiency that can ease the impact of high energy prices while also reducing carbon emissions to help maintain a healthy and vibrant U.S. economy. The proposed research activities discussed herein represent end-use sectors responsible for nearly all the energy consumption in the nation. Common to all proposed research, however, are significant reductions in GHG emissions and energy expenditures.

"Natural Gas End Use: A Vision for Today and the Future" outlines a vision and pathway for the natural gas industry, its customers and other stakeholders. Specifically the plan addresses research, development and demonstration (RD&D) opportunities related to the core residential, commercial, industrial and transportation end-use sectors in the United States.

2008 U.S. Energy Use: % of Total (Source: DOE)