

# Strategic Overview of the Industrial Technologies Program

## MISSION

Improve the energy intensity of the U.S. industrial sector through a coordinated program of research and development, validation, and dissemination of energy efficiency technologies and operating practices.

## GOALS

Between 2002 and 2020, contribute to a 30% improvement in energy intensity by the energy-intensive Industries of the Future.

Between 2000 and 2010, commercialize over 10 industrial energy efficiency technologies through RD&D partnerships.

## CURRENT SITUATION

Large efficiency opportunities exist in the energy-intensive industries

Technical challenges are complex and varied

High technical and financial risk inhibit investment in efficient process technology

Severe private underinvestment in efficiency R&D

U.S. manufacturers face fierce global competition

Large capital investments required for new technology commercialization

Capital stock turnover is slow

## STRATEGIES

Focus on energy-intensive Industries of the Future

Use public-private partnerships

Identify Grand Challenges

Implement balanced portfolio of R&D, validation, dissemination

Perform process-specific R&D in the IOFs (long-term impact)

- Aluminum
- Chemicals
- Forest Products
- Glass
- Metal Casting
- Mining
- Petroleum Refining
- Steel

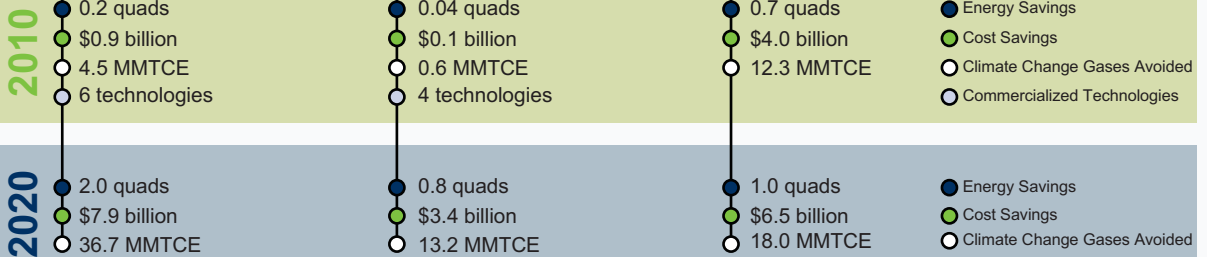
Perform enabling, crosscutting R&D (long-term impact)

- Materials
- Combustion
- Sensors & Automation

Perform technology delivery activities (near/mid-term impact)

- Tools Development & Training
- Plant Assessments
- Emerging Technologies
- Allied Partnerships
- Technical Outreach

## EXPECTED RESULTS OF CURRENT PORTFOLIO\*



\*Based on fiscal year 2003 technology portfolio. Assumes continued public and private RD&D investments comparable to current levels. Total results may be lower due to competing technologies that target the same market opportunity.