Mission: Improve our nation's energy security, climate, environment, and economic competitiveness by transforming the way U.S. industry uses energy.

Opportunity: U.S. Industry consumes 32 Quads/yr, produces ~25% of global manufacturing, employs 15 million people and supplies >60% of U.S. Exports

Reducing U.S. industrial energy intensity is essential to achieving national energy and carbon goals

www1.eere.energy.gov/industry

ORNL HAS WORLD CLASS TECHNICAL COMPETENCIES AND FACILITIES

- Nation's largest concentration of open source materials research
- Nation's most diverse energy portfolio
- World's most powerful open scientific computing facility
- 4,400 employees
- 3,900 research guests annually

KEY STRENGTHS
- Advanced Materials
- Energy Technology
- Computing Science and Engineering
- Nuclear Science, Engineering and Technology
- Biotech and Environmental Sciences and Technology

HOW WE CAN WORK TOGETHER
- Work with you on cooperative R&D projects
- Subcontract with you
- Perform work for you under contract
- Make facilities available for your use
- Host your personnel via visiting research appointments
- License technology to you
- Consult for you

ORNL NATIONAL LABORATORY

- Industry Technologies Program
- Research Projects at ORNL
- Advanced Materials for Clean Energy Technologies
- Energy Efficient Processes
- Nanomanufacturing
- Supporting Technologies at ORNL
- High Temperature Materials Lab
- Spallation Neutron Source
- Top Winners as of 2008

Save ENERGY Now

- 718 Assessments performed during 2006–2008
- ORNL support for assessments completed in 2006–2008
  - Technical review of reports
  - Training of assessment experts
  - ORNL leads team that will deliver assessment and support resources to industrial customers
  - Enhanced assessments
  - Support for improved assessment implementation
  - Technical assistance
  - Improved outreach for industrial plants

Energy Efficient Processes

- Flexible Hybrid Electric Drive Technology
- High Magnetic Proton Pumping – a fast, clean, new-traveling artwork
- Improved heat recovery in biomass fluidifier
- Near net shaping manufacturing of near-net-shape titanium powders for industry

Nanomanufacturing

- Enhanced material properties for energy savings, energy production and energy storage
- Nanotubes for catalysis and corrosion resistance
- Nanoscale electronics for nuclear treatment
- Nanoscale electronics for energy storage

Supporting Technologies at ORNL

- Corrosion-resistant materials
- Materials for waste heat recovery
- Materials for energy storage
- Materials for next generation photovoltaics
- Novel energy efficient joining
- Wear resistant nanostructured materials
- Combined Heat and Power (CHP)
- Sensors, information and communications technology
- Advanced Refractory Materials