E3: ECONOMY • ENERGY • ENVIRONMENT
SUPPORTING MANUFACTURING LEADERSHIP THROUGH SUSTAINABILITY
A Growth Strategy
For American Manufacturers and Their Communities
What is E3?

A model for collaboration among manufacturers, utilities, local government, and federal resources intended to:

- Invest in local communities
- Address energy and sustainability challenges
- Provide valuable technical training and assessments
- Enable economic growth
The concept is simple

The less money manufacturers spend on waste, the more money they have to spend on hiring new employees, adopting new innovations and expanding markets.
Each E3 community is backed by several federal agencies acting more like a single supportive entity.

Services Checklist
- Lean/green assessment
- Energy assessment
- GHG emissions evaluation
- Workforce training
- Small business counseling
- Implementation support
- Safety review (proposed)
Think of it as a Tune up

Through the E3 framework, "Tune up" American manufacturers and other businesses and position them on a continuous improvement path to accelerate progress to Excellence and Growth.
Benefits for Communities

Economic Growth
- Improved competitiveness of existing manufacturers
- Enhanced ability to attract new business
- Increased manufacturing jobs and/or job retention
- Trained workforce with skills for a sustainable economy

Progress toward Environmental and Climate Change Goals
- Catalyze meeting local government’s environmental and climate change goals
Benefits for Manufacturers

Cost Savings
- Significant cost savings result from increased process efficiencies and reduced waste
- Profitable sustainability practices

Increased Competitiveness
- State-of-the-art sustainable business practices
- Technical support to drive entry into new markets
- Job creation and retention

Access to Technical and Financial Resources
- Additional funding through federal and state programs
- Enhanced skills and capabilities for workers
Benefits for Utilities

Increased Competitiveness
- Invest in local communities
- Strengthen and stabilize industrial rate-payers

Progress toward Environmental and Climate Change Goals
- Catalyze meeting environmental and climate change goals
- Achieve organizational carbon reduction goals
E3 is Growth Services, Technical Assistance and Training
What is Success?

The impact of E3 from a manufacturer:

“The impact reaches far beyond energy, dollars, or the environment. It is about people and community. When TMAC conducted our E3 assessment last we had 100 people employed on the floor. We are now up to 200 employees with plans to grow to 240. *Every dollar that we don’t have to spend on wasted energy or materials is one more dollar that we have available to invest in our workforce.* That has a direct impact on the quality of life for our local community.”

– Linda Jordan, CFO of UEMC

San Antonio, Texas
Welcome to E3: Economy, Energy and the Environment—an initiative designed to help you thrive in a new business era focused on sustainability and, working together, to promote sustainable manufacturing and economic growth throughout the United States.

Working together within the E3 framework, we can:

**Boost** local economies  
**Drive** innovation  
**Increase** manufacturing productivity  
** Foster** development  
**Reduce** environmental impacts  
**Conserve** energy and resources
Waste to Profit P2 and Energy Efficiency Augmentation SRA grant

Implementation of E3 Assessments and Recommendations in Illinois
Partners

- Illinois Sustainable Technology Center (ISTC)
- Illinois Manufacturing Center (IMEC)
  - Waste to Profit Program
  - Green Suppliers Network Program

Developed MOU

Support from:
Energy Resource Center, University of Illinois Chicago
Industrial Assessment Center, Bradley University

EPA 2010 SRA Grant ($50,526)
E3 (Lean, Green and Energy Efficiency)

Assessments Conducted:
- 6 industrial facilities
- 1 municipality

Implementation Results:
- 2,432,292 kWh of electricity
- 58,428 Therms of natural gas
- P2 GHG and Cost Calculators Used to calculate:
  - 2,421 MTCO2e emission reductions
  - $335,674 cost savings
Partnership between IMEC (MEP) and ISTC (P2 TAP) formalized in MOU
Participants recruited from IMEC’s existing Waste to Profit Network
IAC support on energy efficiency projects
ADOP2T approach used, requesting participant priorities, and bench/pilot studies
Clear metric goals and EPA P2 tools to calculate environmental benefits
EPA financial support through SRA Grant
Questions and Contact Information

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