What Does WVU Industrial Extension do?

**MISSION**
To help small- and medium-sized businesses in West Virginia strengthen their business through innovation and growth services.

- Decision support through information and research
- Cost reduction tools and techniques
- Market expansion and innovation
- Hands on implementation assistance
- Productivity and process improvements
- Application of new technologies
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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
What is an E3 Assessment?

• Energy Use Assessment
• Lean Process Assessment
• Carbon Footprint
• Overview of current energy usage and cost for each system
• Low cost, easy to implement changes to reduce use or cost
• Recommendations for long term, capital investment to further reduce cost and use
Energy Assessment

• All systems that consume electric, natural gas, propane, fuel oil, and all other types of fuel or energy.
• Lighting systems
• Motors and drives
• Compressed air systems
• Steam systems and boilers
• Fans and HVAC systems
• Pump systems
• Hydraulic systems
• Refrigeration systems
• Building envelope and condition
Process Assessment

• Gap analysis of 12 key lean process concepts
• In-plant observations of manufacturing operations
• In-plant observations of material processing and potential waste points
Who does the Assessments?

- All assessments are conducted by a team of personnel from the WVU Industrial Extension Service and the WVU Industrial Assessment Center.
Typical Finds

• Most businesses are spending too much on lighting.
• Most HVAC systems are inefficient or incorrectly sized, and waste energy.
• Most buildings are under insulated and lose substantial amounts of heat.
• Many compressed air systems are operating inefficiently or are incorrectly sized.
• Most equipment is operating with old electric motors and wasting energy.
WV E3 Impacts

• In four years we have conducted 56 assessments

• Energy saving recommendations that would result in:
  – 12,486,378 KWH reduced
  – 122,468 mmBTU in natural gas
  – $4,751,107 in processing/operations costs
  – 6,101,068 square feet of facilities assessed
For More Information

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