Green Suppliers Network
E3: Columbus
(Energy, Economy, Environment)
# The Process

<table>
<thead>
<tr>
<th>REVIEW TYPE</th>
<th>University of Dayton Industrial Assessment Center and TechSolve, the Ohio Manufacturing Extension Partnership.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Green Suppliers Network</strong></td>
<td>A “lean” and “clean” review is performed by the review team on a process or product line. The review will identify opportunities in kWh conservation, gallon reduction in water conservation, gallon reduction in water pollution, pounds reduction in air emissions and pounds reduction in solid waste. Manufacturers will be trained on Lean and Clean tools to build internal capacity for continuous improvement.</td>
</tr>
<tr>
<td><strong>Energy Assessments</strong></td>
<td><strong>Energy assessments</strong> are conducted by the review team. The team will use tools from the DoE’s Energy Efficiency and Renewable Energy programs. Additionally, expertise from the DoE’s Industrial Assessment Centers may be incorporated.</td>
</tr>
<tr>
<td><strong>Carbon Footprint Analysis</strong></td>
<td>Recently developed US EPA tools which provide assistance in Green House Gas (GHG) Management for small businesses and low emitters will be incorporated to ensure that those manufacturers less familiar with GHG analysis can provide meaningful data in support of the E3 project and the City of Columbus.</td>
</tr>
</tbody>
</table>
The Players

- USEPA
- USDOCS – NIST MEP
- State of Ohio
- USDOE
- AEP – (utility)
- City of Columbus
- DOL, SBA
- SWACO
Win for State of Ohio
- Shovel ready project which may qualify for stimulus package money
- Opportunity to partner with Obama administration
- Paired with SB 221 proves Ohio's focus on developing a green economy
- Recognition from US EPA, DoE, and NIST for greening Columbus

Win for City of Columbus
- Recognition from US EPA, DoE, and NIST for greening Columbus
- Access to congressional funds to further pilot associated programs
- Recognition by “Conference of Mayors” Proactively addresses upcoming carbon legislation in a viable manor

Win for Federal Partners
- Provides proof of concept that voluntary greening projects can work
- Provides lessons learned on how to modify implementation strategy for future cities
- Assists with agency goal of GHG reductions and education on GHG options

Win for AEP
- Gets AEP closer to 1000 MW by 2012 savings (85% to come from customer programs)
- Helps to meet Clinton Global Initiative to educate consumers on sustainability by
  Fosters good corporate citizenship by promoting goals of CERES and PUCO
- Supports CDP reporting

Win for manufacturers
- Increases productivity while reducing production costs
- Reduces environmental impact of their product creation
- Proactively addresses upcoming carbon legislation in a viable manor
- Potential competitive advantage due to early adoption activities

W⁵ = Win Ohio Win City of Columbus Win Manufacturers Win Federal Partners Win AEP
Implementation Timeline

Step 1: List of potential manufacturers generated based upon electricity demand (for those in the ‘large’ category) and for supplier to AEP and/or affiliation with other GSN champions (for those in the ‘medium’ and ‘small’ categories). Target number would be approximately 35 manufacturers.
   Timeframe: December 2008 - January 2009

Step 2: Discuss benefits of E3 project with Mayor’s office and AEP executives. E3 project includes lean & clean review, energy audit and carbon footprint analysis for each company.
   Timeframe: January 2009 - February 2009

Step 3: Contact initial 5 companies, confirm interest and begin pilot performance to confirm proof of concept and develop “lessons learned” for future participants of the E3 project. Carry out reviews, energy audit and carbon footprint analysis for 5 pilot companies.
   Timeframe: March 2009 – August 2009

Step 4: Gather data on proposed savings (WALE), and on carbon reporting for pilot group of E3 manufacturers within City of Columbus. Publish report discussing project, savings and future implementation learnings.
   Timeframe: October 2009

Step 5: Contact additional potential companies and confirm participation for 25 to 35 manufacturers.
   Timeframe: November 2009 – December 2009

Step 6: Perform balance of project with 25 to 35 manufacturers using pilot’s lessons learned. Carry out reviews, energy audit and carbon footprint analysis for these 25 to 35 manufacturers.
   Timeframe: January 2010 – August 2010

Step 7: Gather data on proposed savings (WALE), and on carbon reporting for this larger group of E3 manufacturers within City of Columbus. Publish final report discussing project, savings and future implementation learnings. Provide recognition to City of Columbus and to participating manufacturers as a E3 participant by the US EPA.
   Timeframe: October 2010
Project commitment

- AEP suppliers
- Substantial solid waste generators
- Greenhouse gas credits
- Confidentiality concerns
  - Pet food company
  - Steel foundry
- Funding sources
Project commit & delivery status

- Metal fabricator
- Bottling company
- Auto parts manufacturer
- Steel foundry
- Pharmaceutical manufacturer
Metrics and implementation

• Post assessment assistance not yet resolved
• Metrics reporting
  – Water use, air, solid & haz waste
  – Economic/lean metrics
  – Energy kWh, $, CO₂
• Intern stimulus funds (DOL)
• Utility and state incentives