Growing the Green Economy

Green Collar Jobs Summit
Chris Slattery, Senior Associate Director

April 30, 2010
Delta Institute
Delta Institute’s 2020 Goals

- Achieve green ratings for 100 buildings & develop 200 sustainability programs
- Generate $250 million in investments for pollution prevention, remediation and reuse
- Create 50 cutting-edge sustainable models for community economic development
- Reduce carbon emissions by 12 million tons
- Make green choices a part of mainstream thinking
Presentation Overview

- Economic opportunity in **targeted sectors**
- **Focus on employers** – existing base of businesses in targeted sectors
- What **support needs for employers** in targeted sectors?
Review Three Target Sectors Today

- Green Buildings
- Energy Efficiency/Alternative Energy
- Green Products & Services
Green Building
Green Building: Examples of Jobs

• Green Tech Jobs: architects, energy auditors

• Green Collar Jobs:
  – Construction
  – Landscaping laborers
  – Semi-skilled trades (electrical equipment installers)
Green Building: Sample Employers

- **Construction/landscaping materials:**
  - Lake Street Landscaping  
    [http://lakestreetsupply.com](http://lakestreetsupply.com) (green roof material)

- **Green Building Product Manufacturing:**
  - Serious Materials [www.seriousmaterials.com](http://www.seriousmaterials.com) (window manufacturer)

- **Green Building Product Sales:**
  - Shaw Carpets [www.shawfloors.com](http://www.shawfloors.com) (green carpeting)
Green Building: What’s driving growth?

- Recognition programs like LEED

<table>
<thead>
<tr>
<th>City</th>
<th>Certified</th>
<th>Silver</th>
<th>Gold</th>
<th>Platinum</th>
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<th>TOTAL Pending</th>
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<td>1</td>
<td>2</td>
<td>3</td>
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Green Building: Policies & Incentives

• “Greenest City in America”; Chicago Green Building Standards

• Chicago Green Roof Grants & TIF SBIF
Green Building: Policies & Incentives

• Building retrofit and remediation grants
  – EECBG ($25 M awarded to CMAP)
  – Low-income housing improvements grants
    • weatherization grants
    • lead abatement grants
Green Building: Support for Employers – Create Demand for Products & Svcs

Identify and help market local products that meet green building (LEED) standards
Green Building: Support Employers

- Marketing support through “Made in Chicago”
- Delta’s [www.buyingbetter.org](http://www.buyingbetter.org) includes green building and green office supply products
Green Building: Support for Employers

• Provide R & D support for new product development
  – Pittsburgh Green Building Alliance
  – grants to companies and universities for new product dev’t

• Entrepreneurship centers
Green Building: Support for Employers

- Green building contract specifications – specify you want solar not just LEED

- L.A. Community College District example
Green Building: Support Employers

- Small business development support
- Contractor training
- Help accessing financing and incentives
Green Building: Creating A Resource Network

• Local Resources & Support Organizations
  o USGBC
  o Made in Chicago campaign
  o Industrial retention organizations
  o Entrepreneurship centers
  o Green Business Development Center
  o Unions – building trades
Energy Efficiency & Alternative Energy
Energy-Related Jobs

• Green Tech Jobs
  – Energy consultants
  – Operating engineers
  – Wind data specialists

• Green Collar Jobs
  – Construction trades - equipment installers
  – Environmental services – geothermal drilling technicians
  – Advanced manufacturing – renewable energy equipment components
Energy: Sample Employers

Renewable energy systems installation:
– SoCore Energy [www.socoreenergy.com](http://www.socoreenergy.com) rooftop solar energy developer
– Gabriel Labs [www.gabrielenvironmental.com](http://www.gabrielenvironmental.com) geothermal drilling services
– Recycled Energy [www.recycled-energy.com](http://www.recycled-energy.com) combined heat & power systems

Renewable energy component manufacturers:
Energy: Local Competitive Advantages

• Location – close to “big wind”

• Existing business base
  o 10 International Wind North American HQ
## Energy: Local Competitive Advantages

### Wind Farm Economic Impact Model

<table>
<thead>
<tr>
<th></th>
<th>Jobs</th>
<th>Earnings</th>
<th>Output</th>
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</thead>
<tbody>
<tr>
<td><strong>During Construction Period</strong></td>
<td></td>
<td></td>
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<tr>
<td>Project Development – Labor and Services</td>
<td>67</td>
<td>$4.2</td>
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<tr>
<td>Turbine Supply Chain Impact</td>
<td>306</td>
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<tr>
<td>Induced Impacts</td>
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<tr>
<td><strong>Total</strong></td>
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<tr>
<td><strong>During Operating Years (annual)</strong></td>
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<tr>
<td>Onsite Labor</td>
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<td>$0.4</td>
<td>$0.4</td>
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<tr>
<td>Local Revenue and Supply Chain</td>
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<td>$0.3</td>
<td>$1.7</td>
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<tr>
<td>Induced Impacts</td>
<td>7</td>
<td>$0.2</td>
<td>$0.8</td>
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<tr>
<td><strong>Total</strong></td>
<td>20</td>
<td>$1.0</td>
<td>$2.9</td>
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</table>

Source: Wind Power America – JEDI Wind Model  
(www.windpoweringamerica.gov)
Energy: Local Competitive Advantages

- Roughly 2,000 potential renewable energy component manufacturers
Energy: Local Competitive Advantages

- Renewable portfolio standard
Energy: Policy Barriers for Small Wind and Solar Generation
Energy Incentives – a complex web…

<table>
<thead>
<tr>
<th>IL Energy Incentives</th>
<th>DCEO</th>
<th>Utility Programs (ComEd, Peoples Gas, Ameren)</th>
<th>IL Clean Energy Community Foundation</th>
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<td>Biogas/biomass grants</td>
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<td>EE Affordable Housing Construction</td>
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<tr>
<td>Public Sector New Construction &amp; Retrofits</td>
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<tr>
<td>Large Customer Energy assessments</td>
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<td>Public Sector EE grants</td>
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<td>Public &amp; Nonprofit RE grants</td>
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<td>Solar &amp; small wind rebates</td>
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<td>X</td>
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<tr>
<td>Residential appliance rebates</td>
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<td>X (separate gas &amp; electric)</td>
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<td>Business energy efficiency equipment upgrades</td>
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<td>X (separate gas &amp; electric)</td>
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<tr>
<td>Business new construction</td>
<td></td>
<td>X (electric only)</td>
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<tr>
<td>Large scale renewables</td>
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</table>
Energy Incentives

• Residential Retrofits
  o Illinois Energy Efficiency Portfolio Standard (EEPS)
    http://smartenergy.arch.uiuc.edu/html/EEPS.html
  o DCEO Urban Assistance Program
    http://www.commerce.state.il.us/dceo/Bureaus/Community_Development/Urban+Assistance/
Energy Incentives and Financing Options Could be Stronger

- Market-rate housing
- Limited incentives in IL
- MI on-bill financing
Energy Incentives

- **Business Retrofit Incentives & Financing**
  - ComEd Smart Ideas
  - Federal tax credits
  - Small business loans - 504

- **Public and Nonprofit Building Retrofits**
  - IL Clean Energy & Community Foundation grants
Energy: Invest in Manufacturing

- Investing in manufacturing
  - R & D – Toledo thin-film solar success story
  - Small Business Development Centers
  - Grants for retooling
- Building supply chains:
  - Manufacturing support groups
    - CMC/Jane Addams Resource Center – wind supply chain work
    - CMRC – wind supply chain
    - SSMMA – business retention outreach and trade show support
  - Trade shows
Support for Component Manufacturers

- Toledo, OH, Success Story: 6,000 jobs in solar manufacturing. Key elements of success:

  - R&D support from University of Toledo center for PV innovation & commercialization
  - Business assistance from nonprofit economic development corporation
  - Advanced Energy Development Fund ($150M)
Green Products and Services
Green Products & Services: Jobs

• Green Tech Jobs:
  – Engineering – new product development
  – Chemists, biochemists
  – Agronomists

• Green Collar Jobs:
  – Product assembly, packaging, delivery
  – Farm laborers
Green Products & Services: Employers

• Examples:
  – Product manufacturers
    • Gilasi – recycled-content glass countertops
    • Anco Products – recycled-content insulation
    • Portion Pac – less toxic cleaning products
  – Services
    • Green Choice Bank
    • Green restaurants and hotels
Green Products & Services: Local Competitive Advantages?

- More Research Needed on Existing Business Base

- Existing Support Groups:
  - Chicago Sustainable Business Alliance
  - Chicagoland Chamber of Commerce Green Business Forum
  - Delta Green Business Development Center
  - Local First
Green Products & Services: Local Competitive Advantage

- Policies & Incentives that support green businesses and institutions
  - Green Cleaning requirement for Illinois Schools
  - Healthy Hospitals
  - Clean Air Counts
Green Products: Strategies to Support Employers

- Technical Assistance
  - Green Product or Business Certifications

- Green Business centers

- Marketing Support
  - Made in Chicago
Green Products & Services: Support for Employers

- Entrepreneurship Centers
  - Chicagoland Entrepreneurial Center

- Small Business Development Centers
  - Loan guarantees
  - Micro loans

- “Green Exchange” –
Conclusion

• Supporting green businesses creates green jobs.

• Businesses need support that goes beyond job training.

• More funding and partnerships are needed to support employers in targeted sectors.
Key Green Job Partnership Activities

• Research and outreach to understand the existing employer base for each sector (ideally on a sub-regional level)

• Identify business support groups and formalize a resource network for each sector

• Develop new resources to support each sector
Windy City Power

• Small wind turbines on urban sites with flexibility to move from site to site

• Job creation through local suppliers

• Need for help with regulatory issues
Fos Biofuels

- Creates biofuel from used cooking grease
- Recently received $218k from DCEO
- 12 FT employees in 1 year
Architectural Services Group

- New MBE weatherization contractor
- Working with Delta and CEDA on executing contracts
- 5 new FT hires
Delta Resources

- Sign up for *Growing the Green Economy* newsletter at: [www.delta-institute.org/greeneconomy](http://www.delta-institute.org/greeneconomy)

- GO Biz – Green Opportunities for Business at [www.delta-institute.org/greenbusiness](http://www.delta-institute.org/greenbusiness)