Partnering with ISTC to Grow Illinois’ Clean Economy

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Agenda

- Illinois’ Clean Economy
- Office of Energy & Recycling
- Vision for the Future
Illinois’ Clean Economy

- Energy & the environment are critical to the State’s economy
  - Jobs
    - White collar - e.g., energy service performance contract managers, project engineers, plant operators
    - Blue collar - e.g., weatherization contractors, linesman, materials collection, plant assembly workers
  - Economic Development
    - KEY: Avoided energy and materials costs → e.g., low and stable energy prices attract and retain businesses, dollars not spent on new materials be reinvested in other things
    - Marketing, reputation, & property values
    - Indirect impacts of the energy & environmental choices we make
Growing the State’s Clean Energy Economy

- State’s energy mix will continue to rely on all energy sources - fossil, nuclear, and clean energy
- Opportunities for growth in clean energy
  - Utilities & investors are heading in this direction
  - This will only increase with new and emerging Federal standards
- Illinois has regional competitive advantages in this space and is already a leader in some areas

<table>
<thead>
<tr>
<th>Fuel Source</th>
<th>Stay the same</th>
<th>Increase</th>
<th>Decrease</th>
<th>N/A</th>
</tr>
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<tbody>
<tr>
<td>Natural Gas</td>
<td>14%</td>
<td>74%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>Wind</td>
<td>17%</td>
<td>72%</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td>Utility-scale solar</td>
<td>12%</td>
<td>79%</td>
<td>2%</td>
<td>8%</td>
</tr>
<tr>
<td>Hydro</td>
<td>62%</td>
<td>15%</td>
<td>8%</td>
<td>15%</td>
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<tr>
<td>Coal</td>
<td>9%</td>
<td>3%</td>
<td>77%</td>
<td>35%</td>
</tr>
<tr>
<td>Nuclear</td>
<td>35%</td>
<td>16%</td>
<td>21%</td>
<td>27%</td>
</tr>
<tr>
<td>Oil</td>
<td>17%</td>
<td>3%</td>
<td>45%</td>
<td>11%</td>
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<tr>
<td>Distributed energy resources</td>
<td>5%</td>
<td>84%</td>
<td>2%</td>
<td>9%</td>
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</table>
Growing the State’s Recycling Industry

Recycling material versus landfilling creates up to 6-10 times as many jobs, saves energy, reduces GHG, and generates materials that are cycled back into the economy as manufacturing feedstock.

Total estimated economic impact of IL recycling: 111K jobs, $3.6B in payroll, $30.3B in gross receipts, and $1B in local taxes.

Diversion rate has nearly doubled to 37.3% in last 7 years.

But despite this increase, over $360M of recyclable commodities are still landfilled in Illinois annually.
Office of Energy & Recycling

- Bureau administers a range of clean energy and solid waste management programs and policy initiatives
- Goal: Stimulate economic development and create jobs, while producing a cleaner environment and more secure energy future
- All programs are self-supported, by non-General Revenue Fund sources
  - FY15 Revenue ~$100M
  - ~1445 grants and rebates
- The Office is Illinois’ designated “State Energy Office”
- Key Partner Agencies: IEPA, ICC and IPA
Department’s Role in the Clean Economy

- Incentives
  - Grants and rebates for energy efficiency, renewable energy, sustainable transportation, and recycling
  - Eligible entities vary but include Illinois residents, businesses, and public sector

- Technical Assistance & Marketing
  - Formal programs for energy efficiency
  - Some additional support for other areas

- Planning & Policy
  - Medium & long-term planning for energy & recycling
  - Legislative proposals, reviews, and directives
Where Does Our Office Go From Here?

- **Vision:** Grow the State’s economy by leading the Midwest and the nation as a clean energy and environmental leader
  - Make our existing programs better by managing for results
  - Get a bigger bang for the State’s buck by designing programs that leverage public dollars with private investment through clean energy finance
    - Gap analysis & pilots
  - Supporting and attracting Illinois businesses by better marketing our energy resources & planning for Illinois’ long-term energy future
    - Business outreach strategy for non-energy & energy companies - coordinated with the new IL Economic Development Corporation
    - Illinois Energy Roadmap
Roadmap Project Profile

- **Sponsor:** U.S. Department of Energy
- **Source:** State Energy Program
- **Timing:** January 2015 - December 2016
- **Goal:** Develop an *Illinois Energy Roadmap* that identifies the optimized role of energy efficiency and renewable energy to meet current and future policy requirements
- **Proposers:** Illinois Department of Commerce and Economic Opportunity
  Galvin Center (Illinois Institute of Technology)
  Energy Resources Center (University of Illinois at Chicago)
  National Association of State Energy Officials
Project Context

- Illinois has not undertaken an integrated energy planning process in two decades
- The State has established a series of separate policies regarding electricity market design, renewable energy, energy efficiency, and emissions standards
- Additionally, energy policy and regulatory authority is divided among multiple state agencies and regional transmission organizations
- As a result, the State lacks a cohesive approach to meeting state, regional, and pending federal goals
Project Vision

- Identify the market developments that will most likely impact Illinois’ position as a pivotal energy actor within the region
- Clarify how existing and proposed energy policies improve or inhibit Illinois’ ability to benefit from market developments
- Evaluate the potential economic and environmental impact of various energy policy options by applying a rigorous statistical analysis across a range of potential market scenarios
- Develop an Illinois Energy Roadmap that addresses the future direction of the energy sector in the state and region, particularly the role of energy efficiency and renewable energy
Project Objectives, Approach, & Outcomes

Provide a structure to facilitate ongoing engagement between agencies
- Convene primary state energy/environmental/utility agencies

Evaluate Illinois’ options in relation to the regional energy market
- Use statistical modeling to evaluate the ability of the state to meet existing and anticipated policy goals under a range of business as usual scenarios

Engage stakeholders through structured dialogue
- Public process to identify and evaluate approaches that could allow the state to meet current and anticipated policy goals in future years

Develop consensus goals and an implementation plan for meeting those goals
- Develop an integrated policy strategy that links energy, environmental, and economic goals and a Roadmap for agency activities

Advisory Group
Goals Status Report
Policy Review Report
Energy Roadmap & Annual Planning Report
Stakeholder Engagement

- **Stakeholders**
  - Energy market participants (generators, utilities)
  - Policy organizations (consumer, industry, trade)

- **Process**
  - Goals Status Report was open for written comments on primary policy questions February 26\(^{th}\) - March 31\(^{st}\)
  - Hosted 2 public forums
    - Forum 1: Springfield, March 15\(^{th}\) (UIS Campus)
    - Forum 2: Chicago, March 18\(^{th}\) (IIT Campus)

[https://sites.google.com/site/illinoisenergyroadmap/](https://sites.google.com/site/illinoisenergyroadmap/)
Next Steps

- Reviewing and synthesizing comments
- Economic Impact Modeling
- Reconvening Advisory Group
- Policy Review Report
- Policy scenario modeling
- Roadmap
Growing Illinois’ Clean Economy Together

Department Goal

Make our existing programs better

Get a bigger bang for the State’s $?

Supporting and attracting Illinois businesses

ISTC Initiative

Biofuels, Water, SEI, TAP

TAP, E3, Illinois Energy Office Challenge, PNEAC, Sustainability Seminars, Gov’s Awards

What are your ideas??
Thank You! Questions?

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