



# **Cleveland State University Center on Energy Policy**

**Maxine Goodman Levin College of Urban Affairs**

**March 3, 2010**

# Levin College Forum Program

Distributed Generation and Industrial Energy: Reducing Costs  
and Increasing Efficiencies

Moderator: Andrew R. Thomas

- Developing Renewable Energy on Industrial Sites -- Dr. Charles Reith
- Senate Bill 221 and the General Outlook for Northern Ohio Energy Intensive Businesses Going Forward -- Matt Brakey
- Improving Your Energy Productivity Through the Use of 'Reasonable Arrangements' (Special Contracts) – Sam Randazzo
- The Financial Engineering Aspects for Renewable Energy Projects” – Craig Kasper

# CSU Center for Energy Policy

- Mission: *to help overcome social and institutional barriers to the implementation of technical solutions to existing energy challenges.*
- Faculty Director: Dr. Bill Bowen
- Executive in Residence: Andrew R. Thomas
- Funding: Cleveland, Gund and Generations Foundations

## Why Industrial Energy Use is a focus of CSU Energy Policy Center

“[T]he Cleveland metro area is a high-cost place to do business. Cleveland ranks 31st ... in total business cost.”

*“The primary reason for Cleveland’s high business cost ranking is energy. Energy costs in Cleveland are 25 percent above the U.S. average.”*

Source: INNOVATION AND ENTREPRENEURSHIP INDICATORS, Ctr. for Econ. Development, Cleveland State Univ.

# Ohio: The Colossus of Carbon

- **Rank among States:**
  - Population: 7 (11.5 mm) (2007)
  - Industrial Energy Consumption: 4
  - Carbon Dioxide emissions: 4
- **Electricity Production:**
  - Coal: 88%
  - Nuclear: 10%
- Sources: Ohio Office of Energy Efficiency; Voinovich Center on Public Affairs

# Carbon and the Ohio Investment Problem

- Every dollar of GDP created in Ohio requires the emission of 37 percent more greenhouse gases than the US average.
- Ohio has only \$3 in venture funding for every \$1,000 of gross state product.
  - National Average \$12; California \$70
  - New Green jobs have not offset the 107,000 manufacturing jobs the state has lost in the past two years.
    - Maregonelli: “Gray Power”, *The Nation*, January 28, 2010

## Why Distributed Generation is a focus of CSU Energy Policy Center

- Most Critical Energy Policy Decision of Our Times.
  - Decisions today will shape energy policy for next 50 years
- Urban areas have no space to add infrastructure, rural areas cannot afford it.
- Renewable power and efficiency favor DG.
- EPRI: expect 80% rise in utility rates by 2050 with centralized power production model.
- Jobs!!!

# Why DG is Important to Ohio

## Distributed Generation:

- Reduces Carbon and Energy Costs/Increases Energy Efficiency
  - Energy lost from industrial heat in Ohio could generate as much electricity as 8 nuclear plants
- Returns Money to the Local Economy
  - 50-95% of every dollar spent on centralized energy leaves the local economy
  - \$1.40 local return for every \$1.00 spent on DG.

» Sovacool, Electricity Journal, May 2009

# Role of CSU Center on Energy Policy

- No one seriously challenging the current regulatory framework favoring centralized grid.
- Center will examine what is being done elsewhere, what Ohio is doing, and consider ideas on how to encourage distributed generation.
- The general public seldom differentiates between a vested interest and an independent expert

# CSU Energy Policy Center



Thank you!