

# Energy Efficiency, Sustainability: Industry Perspectives

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# Presentation Agenda

- ❑ Status of Energy Efficiency and Clean Energy Industry
- ❑ ERS Services and Business Areas
- ❑ Sample ERS Projects
- ❑ Discussion

# Energy Efficiency Activity 2010

- ❑ Northeast (New England, NY, NJ): > \$1Billion
- ❑ California: > \$1 Billion
- ❑ Pacific Northwest: \$300 Million
- ❑ Midwest: \$400 Million
- ❑ Southeast (Texas, Florida, Georgia): \$500 Million
- ❑ Southwest: \$200 Million

# Looking Forward...

- ❑ Great State Legislative Support Over Last Five Years
- ❑ Many Programs Still Ramping Up
- ❑ NY, CA Others Have Reaffirmed Carbon Reduction Goals
- ❑ Despite Economic Challenges, States and Cities are Restating Their Commitment to Sustainability
- ❑ Major National and International Efforts Anticipated

# About ERS

- ❑ Established in 1995
- ❑ Office Locations
  - North Andover, MA
  - New York, NY (Times Square)
  - Augusta, ME
  - Santa Clara, CA
  - Portland, OR
  - College Station, TX
- ❑ 60 Employees
- ❑ Continued Growth
- ❑ Unique Work Culture



## ❑ Types of Services

- Engineering and Technical Assistance
- Program Design and Implementation
- Energy Program Evaluation
- Sustainable Building Development

## ❑ Sources of Funding

- Utility Sponsored Programs
- State Sponsored Programs
- Federal Sponsored Programs
- Large Private Corporations and Organizations

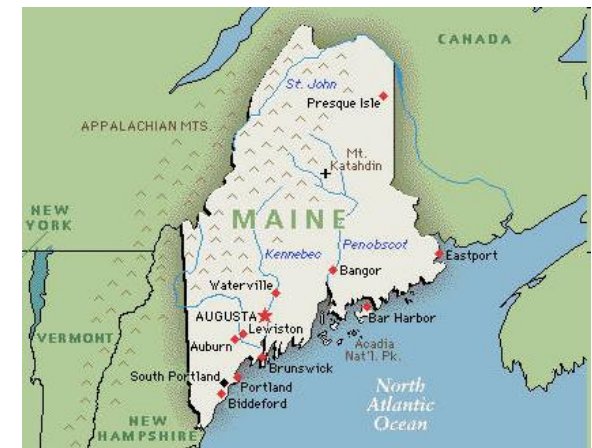
# Energy Program Evaluation

- ❑ Evaluation Program Design and Planning
- ❑ Engineering Data Collection
- ❑ Measurement, Verification, and Analysis
- ❑ Survey Instrument Development
- ❑ Net-to-Gross Survey Administration
- ❑ Realization Rate and Attribution Analysis
- ❑ Testimony
- ❑ Benefit-Cost Analysis



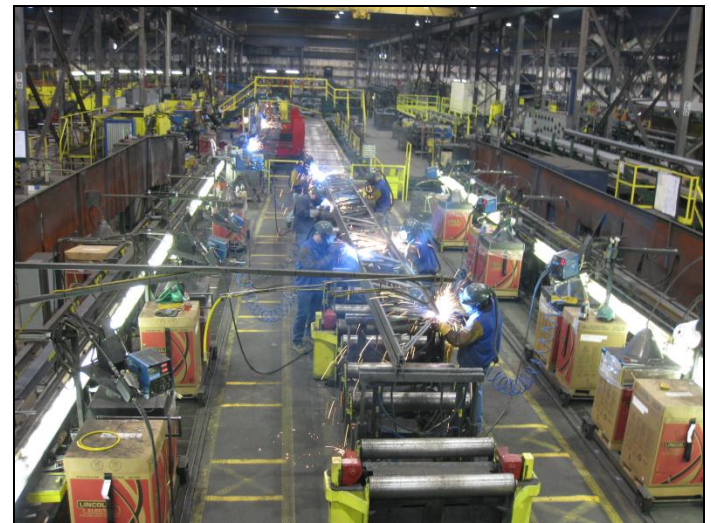
# Case Study Project: Efficiency Maine Program Design and Delivery

- ❑ Design and Delivery of State-Wide Energy Efficiency Program
- ❑ Business Program for Existing Commercial and Industrial Facilities
- ❑ New Construction Program for Commercial Facilities
- ❑ Residential Efficient Products
- ❑ Technologies
  - Lighting
  - HVAC
  - Controls
  - Refrigeration
  - Compressed Air
  - Industrial Process
- ❑ ERS Runs All Promotional, Market Development, Project Review, Technical Analysis, and Inspection Activities



# Case Study Project: NYSERDA Industrial & Process Efficiency Outreach

- ❑ Provide outreach services and technical assistance to industrial facilities across NY
- ❑ Energy savings based on energy intensity reductions (ex: kWh consumed per part produced)
- ❑ Focus on facilities with demand > 2MW
- ❑ Goals:
  - Electric: 840,000 MWh by 2013
  - Gas: 1,680,000 MMBtu
- ❑ Parallel paths approach:
  - Facility site visits
  - Public agencies
  - Trade allies
  - Customer events



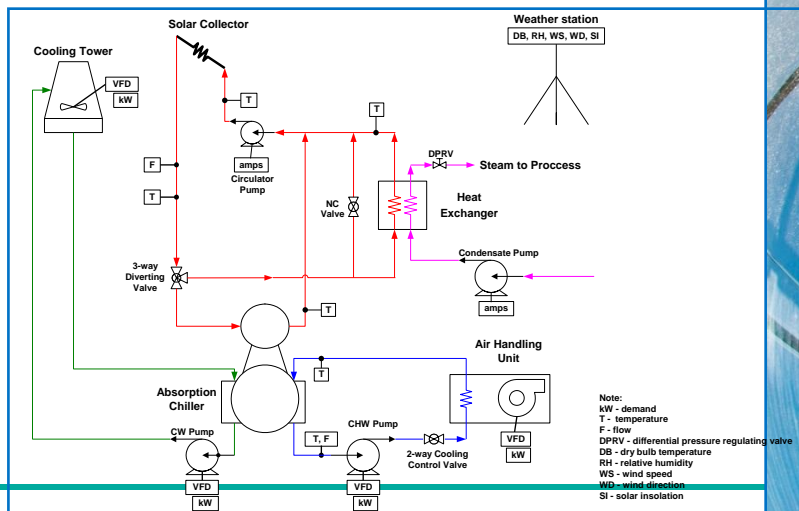
# Case Study Project: High Performance Schools Research and Protocol Development

- ❑ Collaborative for High Performance Schools (CHPS)
  - Better performing students, teachers, buildings
- ❑ Northeast CHPS Protocol
  - Site development
  - Indoor air quality
  - Energy consumption
  - Renewable energy
  - Daylighting
  - Transportation
  - Green communities
  - Recycled, recyclable, and local materials
- ❑ New – High Performance Renovations for Existing Schools



# Case Study Project: Steinway and Sons Solar Thermal Cooling Project Development

- ❑ Solar Driven Absorption Chiller Project
- ❑ Process Heating (Steam Generation from Solar)
- ❑ Space De-Humidification/Cooling
- ❑ Space Heating
- ❑ Demonstration Project (largest system of it's kind)
- ❑ Industrial Application



# Contact Information

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