ENERGY TASK FORCE

Members

- President C. Murphy, ESF
- President R. Cross, Morrisville
- P. Carney, Utilities Manager, Binghamton
- E. Delaney, VP Administration, Nassau CC
- J. DeSantis, Asst. VP Facilities, Oswego
- M. Dolan, Chair, University Faculty Senate Operations Committee
- R. Jansma, Dir. Physical Plant, Oneonta
- A. Provenzano, Dir. Physical Plant, Stony Brook
- J. Russo, Utilities Manager, Buffalo University
- W. Shaut, VP Finance & Management, Cortland
- D. Schottler, Asst. VP Facilities, Monroe CC
ENERGY TASK FORCE

Members

- W. Simpson, Energy Manager, Buffalo University
- C. Wiezalis, President, University Faculty Senate
- T. Mannix, Assoc. General Manager, SUCF System Administration
- E. Easton, Manager, Energy Procurement
- J. Fox, Director, Energy Management
- P. Pileggi, Assoc. Vice Chancellor, Hospitals & Clinical Services
- D. Sheppard, Sr. Assoc. Vice Chancellor, Finance & Business
The University will assume a **national leadership role** in energy sustainability, research, education, technology, economics and public policy through the **transformational integration of practice, teaching and research**.
One of largest energy users in NYS

- More than 90 million GSF in 2,829 buildings
- Annual energy consumption: 11.446 trillion BTUs—equal to 67,000 homes
- Nearly $300 million projected utility costs for 2006-07
The University Today

Energy Accomplishments

- 38.47% energy reduction per OGSF since 73-74, 16.38% since 89-90
- $1.148 billion in cumulative cost savings
- $100 million+ invested in energy conservation since 1992, $121 million of projects currently in design or construction
- SUNY Electricity Buying Group saves campuses $1 million annually
- Natural gas contracts provide savings and predictability
# Energy Efficiency Peer Comparisons

SUNY compares favorably with national peer averages

<table>
<thead>
<tr>
<th>Carnegie Classification</th>
<th>Average of APPA Respondents*</th>
<th>SUNY Campuses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctorial/Research Extensive</td>
<td>189</td>
<td>141</td>
</tr>
<tr>
<td>Doctorial/Research Intensive</td>
<td>150</td>
<td>114</td>
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<tr>
<td>Masters</td>
<td>114</td>
<td>118</td>
</tr>
<tr>
<td>Baccalaureate</td>
<td>131</td>
<td>111</td>
</tr>
</tbody>
</table>

* Average Annual MBTU/GSF

Source: Association of Higher Education Facilities Offers (APPA)
Current Challenges

- Volatility in energy prices
- Growth in enrollment, residence hall power usage, and campus research facilities
- Aging infrastructure, deferred maintenance, limited capital funding for plant upgrades
- Energy management and procurement expertise varies widely among campuses
- Quality/consistency of data for benchmarking, best practices, planning and analysis
Energy Task Force Goal Areas

- Conservation and Sustainability
- Transformational Opportunities
- Management and Planning
Campus Conservation Targets

- Reduce campus energy consumption 37% by 2010
- Cap and Reduce Green House Gas Emissions 20% by 2014
- Increase use of Renewable Energy 30% by 2014
- Increase use of biofuels 10% by 2010
- Develop five new Combined Heat and Power projects by 2010
- New and rehabilitated buildings must meet or exceed the L.E.E.D. Silver standards
Decrease Consumption
“Reduce Electricity Usage 37% by 2010”

Energy Consumption Target*

<table>
<thead>
<tr>
<th>Year</th>
<th>BTUs per Square Foot</th>
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<tbody>
<tr>
<td>2006</td>
<td>142,110</td>
</tr>
<tr>
<td>2007</td>
<td>135,005</td>
</tr>
<tr>
<td>2008</td>
<td>128,254</td>
</tr>
<tr>
<td>2009</td>
<td>121,842</td>
</tr>
<tr>
<td>2010</td>
<td>112,366</td>
</tr>
</tbody>
</table>

*From 1989-90 Baseline

37% lower than 1990
Reduce Environmental Impact
“Decrease Green House Gas Emissions 20% by 2014”

State University of New York
Emissions - Tons Per AAFTE

<table>
<thead>
<tr>
<th>Year</th>
<th>Tons Emissions</th>
<th>Tons Per AAFTE</th>
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</thead>
<tbody>
<tr>
<td>2000-01</td>
<td>1100715.2</td>
<td>6.7418935</td>
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<td>2001-02</td>
<td>1016935.5</td>
<td>6.0589577</td>
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<td>2002-03</td>
<td>1101925.1</td>
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<td>2003-04</td>
<td>1119496.8</td>
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<td>2004-05</td>
<td>1095113.6</td>
<td>6.2643429</td>
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<td>2005-06</td>
<td>1137623.3</td>
<td>6.4264153</td>
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</tbody>
</table>
Increase Use of Renewable Energy

“Use 30% Renewable Energy by 2014”

State University of New York
Renewable Energy Usage

30% in 2014
Increase Use of Renewable Energy

“Bio-Fuels”

Increase use of bio-fuels 10% by 2010
Develop Combined Heat and Power
“Five New CH & Power Projects by 2010”

- Stony Brook 40MW
- Old Westbury 1.9MW
- Potsdam 3.5MW
- Binghamton 5-8MW

Energy Efficiency
America’s electric grid efficiency has stagnated at about 32% efficiency

Fossil Electric Generation Efficiency (at plant, W/O T&D)
Source: EIA, Annual Energy Review 1996
Design and Construct New Buildings Using Silver+ LEED Criteria

US Green Building Council
LEED: Leadership in Energy and Environmental Design
Advance SUNY’s Education Mission in Energy and the Environment

- Academic Programs
  - Energy and environmental programs
- General Education
- K-12 Teacher Education
- Work Force Training
- Raise Awareness
Expand University Energy-Related Research

- Expand Energy-Related Research to Achieve National Leadership
Build Strategic Alliances with Public and Private Interests
Optimize “System-ness”

- Greater inter-campus communications and cooperation
- Best practices
- Campus-based initiatives
- Externally funded projects
Energy Procurement and Risk Management

- **Energy Procurement**
  - Competitively priced
    - Fossil Fuels
    - Renewable fuels
    - Electricity

- **Risk Management**
  - Control price risk to 5% of budget
  - Based on sound policies and procedures
Role with Regulatory Commissions

Assume a Proactive Role in Rate Cases

- New York State Public Service Commission
- Federal Energy Regulatory Commission
Questions or Comments

Thank You