Providing effective energy strategies for buildings and communities

Breaking down barriers to energy efficiency
I don’t know where to start
Consult with an Expert

Call: 800.214.7954
Email: info@sedac.org

- Quick advice
- Assess need for services
- Referrals to other energy efficiency programs
Will County Partnership with SEDAC

- Community Health Center
- County Office Building
- Court Annex (EMCO)
- Courthouse
- Health Department*
- Adult Detention Facility
- Juvenile Detention Center (RVJC)
- Sheriff’s Facility*
- Sunny Hill Nursing Home
- Highway Departments
Will County Court Annex

Will County wanted to find strategies to reduce annual energy costs in their Court Annex.

Kathy Pecora, grant assistant, reached out to SEDAC for help.
Will County Juvenile Detention Center

Will County wanted to find strategies to reduce annual energy costs

Kathy Pecora, grant assistant, reached out to SEDAC for help.
I don’t know where to focus my efforts. Which energy systems or buildings should I address first?
How SEDAC can help

- Site visit
- Review of utility bills and architectural plans
- Benchmarking
- Portfolio analysis
- Review of energy systems
Understand your building’s energy use

• How much energy are you using?
• What does it cost you?
• How do you purchase energy?
• How do loads and demand impact your operations?
• What systems or equipment are your worst offenders?
• What are your biggest targets for energy savings?
Benchmarking

SEDAC can benchmark a portfolio of buildings to identify those with high energy usage and large potential for savings.
I don’t have energy efficiency expertise. Which boiler should I choose? What are the latest lighting recommendations?
Independent, expert advice

SEDAC can provide a detailed list of energy reduction measures

- High Efficiency HVAC
- Air sealing
- Occupancy Control
- Variable Frequency Drives
- Efficient Lighting
Recommendations for Will County Community Health Center

- Lighting upgrades
- Occupancy Sensors
- Variable Frequency Drives
- Demand Control Ventilation
Recommendations for Will County Juvenile Detention Center

• Lighting upgrades + Occupancy sensors
• Demand Control Ventilation
• Retrofit Thermostat System with Direct Digital Controls
• Upgrade to condensing boilers
• Install Combined Heat and Power system
I don’t know how much this is going to cost, and how much it will ultimately save.
Comprehensive economic analysis

- Identify low-cost to no-cost energy savings improvements
- Provide potential energy and cost savings for recommendations
- Provide cost of installation and payback
- Provide life-cycle-cost analysis
Will County Court Annex

How much energy and money would be saved with the energy efficient improvements?

<table>
<thead>
<tr>
<th></th>
<th>Energy savings</th>
<th>% cost savings</th>
<th>Energy cost savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Facility Savings</td>
<td>11.5%</td>
<td>13%</td>
<td>$18,500</td>
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</table>
Will County Juvenile Detention Center

How much energy and money would be saved with the energy efficient improvements?

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<tbody>
<tr>
<td>Annual Facility Savings</td>
<td>1,540,000 kWh</td>
<td>19.1%</td>
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</tbody>
</table>
I need to get buy-in from the people in charge and energy users
Getting “buy-in”

• Build an energy efficiency team
• Speak of value of project over time, not initial cost
• Look for other benefits: reduced maintenance, better comfort, safety, etc.
• Talk about what administrators care about: saving money for staff, equipment, scholarships, etc.
I need help finding and applying for incentives to pay for energy projects
**Will County Court Annex**

**Could incentives help pay for energy upgrades?**

<table>
<thead>
<tr>
<th>Measures</th>
<th>Recommended Incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighting Measures</td>
<td>$15 per lamp installed</td>
</tr>
<tr>
<td>Occupancy Sensors</td>
<td>$0.16 per watt countrolled</td>
</tr>
<tr>
<td>Variable Frequency Drives</td>
<td>$92 per horsepower controlled</td>
</tr>
<tr>
<td>Demand Control Ventilation</td>
<td>$0.38 per sf</td>
</tr>
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</table>
Will County Juvenile Detention

Could incentives help pay for energy upgrades?

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</tr>
<tr>
<td>Boiler upgrade</td>
</tr>
<tr>
<td>Thermostat Direct Digital Controls</td>
</tr>
<tr>
<td>Demand Control Ventilation</td>
</tr>
<tr>
<td>Total Incentives</td>
</tr>
</tbody>
</table>
I need help implementing energy efficiency recommendations
Implementation Assistance

SEDAC can help you decide which recommendations to prioritize and give you advice on how to implement these recommendations.
I updated the lighting in my building a few years ago. What should I do next?
Make SEDAC your long-term energy partner

Chances are there is more you can do. Call to see if you are eligible for other public sector energy efficiency programs and incentives.

SEDAC information center
• Energy Savings Advice
• Announcements
• Newsletters
• Fact Sheets
• Workshops and webinars
• Website