Abstract

The Museum of Russian Icons requested a green assessment of the museum and recommendations on how they could improve the sustainability of the museum. Our approach to this problem was to perform an energy audit on their building. After performing the energy audit we were able to confirm that the museum already had a number of green technologies implemented, but there was still room for improvement.

Methodology

- Detailed background research
- Tour Museum
- Interview David Durrant, Sarah Brophy, Tara Young, Steven Strong, Bruce Barton, and Geoff Arthur
- Use an energy audit checklist to analyze the museum
- Collect data using environmental test instruments
- Review the audit data information
- Develop recommendations based on the energy audit results

Results and Recommendations

<table>
<thead>
<tr>
<th>Categories</th>
<th>Results</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lighting</td>
<td>75% LED lighting. Some excessive lighting.</td>
<td>Remove select light bulbs to decrease light intensity and save energy.</td>
</tr>
<tr>
<td>Heating/Cooling</td>
<td>Well Insulated. Central heating system. Temp maintained at 68-72°F.</td>
<td>Due to the sensitivity of the art, heating and cooling procedures cannot be changed.</td>
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<tr>
<td>Photovoltaics</td>
<td>44 photovoltaic panels on roof. 30-31 kilowatts electrical energy generated.</td>
<td>Suggest joint venture with neighboring building to install more photovoltaics. Set up info display panel showing the electrical output of photovoltaics for visitors.</td>
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<tr>
<td>Green Roof</td>
<td>500 square foot green roof. More aesthetic than functional. Reduces the temperature and runoff.</td>
<td>Replace plants. Put informative panel on terrace area explaining how green roofs are beneficial and sustainable.</td>
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<tr>
<td>Recycling</td>
<td>The employees only recycle paper and cardboard.</td>
<td>Recycling stations should be implemented in both the office and the café to recycle more kinds of materials. Educational material should be developed for employees and informative signs posted for visitors.</td>
</tr>
</tbody>
</table>

Conclusion

By performing an energy audit, we confirmed that the Museum of Russian Icons is very energy efficient. By following our recommendations the museum can improve their sustainability and conserve energy. With our suggestions the museum will also be able to spread the green initiative.

The Big Picture

We have determined that the Museum of Russian Icons is a highly green building. Now it is important for the museum to let people know about their green initiatives and the importance of sustainability. The Museum of Russian Icons is a role model for the Clinton community and small museums wishing to go green.