



Energy Cost Reduction Program Development

Energy Audits

Whether you are a small business, a large commercial facility, or a manufacturing operation, it's important to take advantage of any advice, any program and any incentives that will help you save money on your energy bills. Energy savings positively impact your bottom line immediately, which is great news for your budget! Sustainable energy savings require a robust energy management plan and the first step towards that is an energy audit.

The Opportunity

An energy audit is a fundamental step in your energy cost reduction program. It provides you with a comprehensive road map of the opportunities and their impact on your carbon footprint. A good energy audit not only lists all the energy cost reduction opportunities, but also provides an accurate estimate of savings and the implementation cost of each measure along with their impact on your GHG emissions. Energy audits also includes benchmarking which gives you an idea of where you stand in terms of energy efficiency as compared to your peers.

How Star Energy can help

Star Energy offers multiple levels of the energy audits. We work with you in identifying your needs and make sure that the level of energy audit will satisfy your financial approval criteria and conform to the long-term sustainability goals of your organization.

Our energy audits use exclusive data base that we have developed over the last 10 years of working with thousands of client facilities. We benchmark your energy consumption to give you a clear picture of how you are faring as compared to your peers on energy efficiency.

Our energy audits are comprehensive and cover all sources of energy, including electricity, natural gas/ heating oils etc. We also cover water where you are paying for water consumption.

Issues

- Rising energy cost resulting in reduced operating profits
- Constantly pitched for new products by vendors but not sure if they are good for the facility
- Have budget to perform retrofits but not sure which measure will give best returns on investment
- Have advanced controls and newer equipment but not sure if they are optimized for energy efficient operation
- Older equipment is in operation beyond its useful life but do not have a good business case for replace vs repair
- Major incentives are available for retrofits replacing older equipment, but they often require detailed engineering analysis

Service levels

Benefits

<i>Activity</i>	Ashrae Level 1	Ashrae Level 2	Ashrae Level 3
<i>A site visit for data collection and identification of energy consuming equipment</i>	✓	✓	✓
<i>Collection and analysis of utility bills data</i>	✓	✓	✓
<i>Calculation of Energy Use Intensity (EUI) & Benchmarking analysis</i>	✓	✓	✓
<i>Developing a weather-normalized baseline for energy consumption</i>		✓	✓
<i>Data analysis & detailed energy savings calculations and reporting of savings and/or abnormal trends</i>		✓	✓
<i>Thorough cost and financial analysis</i>		✓	✓
<i>Rigorous engineering analysis/simulations and detailed field data gathering</i>			✓

- Pinpoint problem areas and prioritize your energy efficiency upgrades.
- Uncover enough opportunities, which when implemented will make your facilities better than your peers.
- Reveal your usage patterns, identify waste, over-expenditure and make you fully aware of where your energy dollars are going.
- Prevents unnecessary operation of equipment, which can help in reducing overall maintenance costs.
- Provide a strong business case for the implementation of recommended measures.

Energy Audits Levels

	<i>Level 1 audit</i>	<i>Level 2 audit</i>	<i>Level 3 audit</i>
<i>Accuracy</i>	40%-50%	25%-30%	5%-10%
<i>Level of efforts</i>	Low	Medium	High
<i>Completion time</i>	1-2 weeks	4-6 weeks	8-12 weeks



Star Energy is an energy management company specializing in delivering comprehensive energy cost reduction programs throughout North America. Our experience in working with major clients has helped us to develop customizable programs that not only maximize returns on retrofit capital but also improve asset values and the life of mechanical and electrical systems. We have worked with major utilities across the US and Canada to optimize the eligibility of our programs for incentives to reduce implementation costs and improve paybacks. Part of our program customization relates to our client's annual energy reduction targets and their available retrofit capital.

Star Energy Solutions Inc. | Oakville, Ontario | sales@starenergy-solutions.com | (416) 800-7774 Ext. 1