

# Optimized solutions from an energy specialist

Total Energy Control

Energy Efficiency Consulting Services

**Schneider**  
 Electric

Make the most of your energy™

# Meeting your energy needs with unprecedented flexibility



## Energy Saving System Optimization Opportunities:

- Compressed Air
- Boiler/Steam
- Chilled Water
- HVAC
- Electrical
- Lighting
- Industrial Gas
- Water/Wastewater
- Refrigeration
- Process Heating/Cooling

In these times of unpredictable energy costs, stressed electrical grids, environmental concerns, more stringent legislative mandates and aging facility infrastructures, you need more than off-the-shelf products to meet your evolving energy needs. You need a dedicated partner with the energy consulting expertise and proven capabilities to make a positive impact on your operations and business.

To reduce the total cost of energy at your facility, make Schneider Electric your first choice. As your trusted energy advisor, we apply our 100+ years of industry excellence to give you the right mix of energy efficiency solutions needed to stay competitive and profitable. Total Energy Control, our comprehensive and customizable suite of energy services and solutions, provides you with the flexibility to implement an energy plan based on an accurate and thorough energy analysis of your operations.

We specialize in achieving energy-efficient solutions for facilities just like yours. Our team of Professional Engineers, Certified Energy Managers, and Leadership in Energy and Environmental Design (LEED®) Accredited Professionals work with you to help ensure the success of your energy strategy. Total Energy Control delivers an engineered analysis of both the supply and demand side interactions of your operation to identify and prioritize energy projects to contain costs, minimize risks and improve bottom-line performance. Our solutions are supported through one call expertise from the Schneider Electric Project Manager assigned to answer your energy-related question and provide project accountability for the ongoing success of our recommendations and plans.

No matter your business, we provide the right level of solutions to meet your specific energy needs.

# Much more than a traditional energy audit

Schneider Electric's Energy Solutions organization delivers the right mix of consulting services and solutions to reduce energy usage and costs for a broad range of companies across multiple industries. With most programs, our services started as short-term energy or system studies. Through a high level of demonstrated expertise, guaranteed accountability and proven results, many of these engagements evolved into enhanced energy studies and action plans that achieved even greater savings.



## Energy Action Plan

The main project deliverable of our energy services is an Energy Action Plan report that takes a practical look at energy use, efficiency, environmental impact and the potential savings at your facility. Each report is organized by the three major tasks that outline our approach for analyzing and documenting the necessary information to support your energy objectives:

- **Utility Analysis**
- **Base Load Profile**
- **Opportunity Identification**

Findings will be presented to your personnel and any other stakeholders that you choose to involve. Each recommendation will be fully explained and all recommendations will be presented on the basis of energy savings, cost savings and economic payback criteria.



## Trusted, real-world solutions

*From the start, the Total Energy Control team from Schneider Electric delivered a very thorough and comprehensive energy analysis of our facility. Their attention to detail and professional reporting provided an easy to follow outline of real-world energy saving solutions and enabled us to create an actionable energy strategic plan. As a trusted and valued energy advisor, we highly recommend their services.*

– Director of Facilities,  
Florida Hospital, East Orlando

The Energy Action Plan summarizes the potential savings and recommended efficiency projects to optimize each facility's energy usage.

Industrial Manufacturing Facility (Typical)		
Specifications	Potential Savings Identified	Recommendations
<p><b>Size:</b> 1.2 million square feet</p> <p><b>Total investment:</b> \$968,800</p> <p><b>Total savings:</b> \$728,610</p> <p><b>Percentage savings:</b> 15.3%</p> <p><b>Simple payback (years):</b> 1.4</p>	<p><b>Lighting</b> 10%</p> <p><b>Utilities</b> 28%</p> <p><b>HVAC</b> 33%</p> <p><b>Process</b> 29%</p>	<p><b>Lighting</b></p> <ul style="list-style-type: none"> <li>■ Implement energy-efficient lighting projects</li> </ul> <p><b>Utilities</b></p> <ul style="list-style-type: none"> <li>■ Natural gas firm to interruptible</li> <li>■ On-site Nitrogen production</li> <li>■ Boiler feed pump VFD implementation</li> <li>■ Air compressor optimization</li> </ul> <p><b>HVAC</b></p> <ul style="list-style-type: none"> <li>■ Condenser pump control</li> <li>■ Cooling tower fan control</li> <li>■ Enthalpy control</li> <li>■ Enterprise Energy Management dashboard</li> </ul> <p><b>Process</b></p> <ul style="list-style-type: none"> <li>■ Reuse water for plating</li> <li>■ Equipment setbacks</li> <li>■ Heater barrel insulation</li> <li>■ Molding hydraulic pumps</li> <li>■ Energy-efficient motors</li> </ul>

# Select the right level of service and support needed for your facility

We give you the unprecedented flexibility to optimize your energy solutions based upon your specific needs. From standalone studies for addressing individual cases to the implementation of comprehensive energy action programs with ongoing support and guaranteed results, you can choose the right type and proper depth of energy solutions required to perfectly match any situation.

By pairing our energy services with a specific program level, the results are tailored solutions that perfectly align with your exact energy efficiency needs.

Customized Solution Example <input checked="" type="checkbox"/>					
Renewable Energy – Alternative Fuels Planning	LEED® Certification Planning/ Design	System Energy Studies	Carbon Footprint Analysis	Rebates Incentives Financial Analysis	Demand Response Study
Essential <input type="checkbox"/>	Essential <input type="checkbox"/>	Essential <input checked="" type="checkbox"/>	Essential <input checked="" type="checkbox"/>	Essential <input type="checkbox"/>	Essential <input type="checkbox"/>
Enhanced <input checked="" type="checkbox"/>	Enhanced <input checked="" type="checkbox"/>	Enhanced <input type="checkbox"/>	Enhanced <input type="checkbox"/>	Enhanced <input checked="" type="checkbox"/>	Enhanced <input checked="" type="checkbox"/>

## Solution Programs

Our solution programs are structured into two distinct levels that allow you to select the depth of energy services required.

Essential Program	Work Scope	
A straight-forward energy program consisting of a <b>moderate</b> energy audit and action plan	<ul style="list-style-type: none"> <li>■ Data gathering/on-site evaluation</li> <li>■ Utility trending and analysis</li> <li>■ Review of equipment and processes</li> <li>■ Analysis of metered data (base load profile)</li> </ul>	<ul style="list-style-type: none"> <li>■ Energy modeling</li> <li>■ Identification of projects and recommendations with analysis of associated savings</li> <li>■ Financial analysis</li> </ul>
Enhanced Program	Work Scope – Essential Program PLUS	
A more extensive energy program consisting of an <b>all-encompassing</b> energy audit and action plan that is scalable in size	<ul style="list-style-type: none"> <li>■ Project management</li> <li>■ Quarterly meetings</li> </ul>	<ul style="list-style-type: none"> <li>■ Semi-annual on-site survey/review</li> <li>■ Ongoing Energy Consulting support</li> </ul>

# Energy Efficiency Consulting

Our full range of energy services cover a wide variety of energy analysis and planning studies to develop detailed Energy Action Plans for your facility:

	Description	Key Benefits
<b>Renewable Energy – Alternative Fuels Planning</b>	Study to evaluate the customer site for possible renewable energy solutions and investigate economics of these options for the facility.	<ul style="list-style-type: none"> <li>■ Outlines potential energy savings through renewable resources</li> <li>■ Ensures facility is operating as green as possible</li> <li>■ Provides details on available funding incentives</li> </ul>
<b>Leadership in Energy and Environmental Design (LEED®) Certification Planning/Design</b>	Promotes greener buildings through a scalable site certification and/or planning process to a set level of LEED participation (Certified, Silver, Gold, Platinum).	<ul style="list-style-type: none"> <li>■ Provides guidance and support to simplify LEED certification process</li> <li>■ Results in more energy-efficient facilities</li> <li>■ Establishes greener energy practices</li> <li>■ Creates higher performing and more environmentally friendly buildings</li> </ul>
<b>System Energy Studies</b>	Evaluation of the facility on the basis of building systems, equipment use, processes and policies with attention to energy consumption related to supply and demand.	<ul style="list-style-type: none"> <li>■ Recommendations to reduce energy consumption</li> <li>■ Suggestions to modernize facility infrastructure and energy processes</li> <li>■ Applies energy saving through facility improvement measures</li> </ul>
<b>Carbon Footprint Analysis</b>	Detailed analysis of the customer's Carbon Footprint to determine amount of environmental impact of your products, services and facility.	<ul style="list-style-type: none"> <li>■ Identifies environmental impact of facility</li> <li>■ Highlights energy use and carbon emissions</li> <li>■ Enhances reputation in community through greener operations</li> </ul>
<b>Rebates/ Incentives Financial Analysis</b>	Study to determine energy-related rebates/incentives available to customers from utilities and governments (local, state & federal) as related to specific energy programs and financial feasibility for the customer's specific projects/plans.	<ul style="list-style-type: none"> <li>■ Discovers fund availability for energy efficiency projects</li> <li>■ Outlines the financial incentives available for larger scale energy-efficiency upgrades and retrofit projects</li> <li>■ Allows you to take advantage of incentives to maximize the energy efficiency of new facilities</li> </ul>
<b>Demand Response Study</b>	Analysis of facility energy performance/requirements and demand response potential for load curtailment participation.	<ul style="list-style-type: none"> <li>■ Determines best Demand Response funding scenarios from utilities and/or 3rd party energy providers</li> <li>■ Increases ability to manage energy consumption as an asset</li> <li>■ Helps reduce energy usage in response to changing supply condition</li> <li>■ Gives you the flexibility of reduction before power grids reach critical levels</li> </ul>



## Performance engineering partnership creates efficiency

*At RagingWire, energy efficiency is a top of mind concern. We partnered with Schneider Electric to conduct an energy efficiency study on the mechanical side of our operation. From this, we have co-developed various ongoing programs to study processes to make transformation and delivery more efficient, thereby reducing our total power to critical power ratio. This, plus ongoing process performance studies, creates better performance, more efficient operations and better value in the overall system.*

– Chief Engineer, RagingWire



### Project Expertise:

- Industrial Manufacturing
- Food and Beverage
- Petroleum-Chemical
- Healthcare
- Commercial Buildings
- Pulp and Paper
- Government Facilities
- Automotive
- Utilities
- Water/Wastewater
- Pharmaceutical

## Identify, plan and sustain energy savings

The Total Energy Control process is one of continuous interaction and improvement. Together, we will develop a customized plan to meet your expectations, work to reduce the total cost of energy at your facility, and deliver the guaranteed results you need. If energy efficiency is your goal, the Total Energy Control program from Schneider Electric is your solution.

### Assurance you can count on

Together, we can reduce the total cost of energy at your facility by delivering the results you need. Without trust, partnerships are meaningless, and our program has a well-earned reputation for delivering as promised. Working with a variety of companies in multiple industries, we know that static guarantees are very limiting. We will work with you to personally tailor satisfaction assurance guidelines that will meet your payback criteria, organizational needs and business expectations.



### **Green Technologies:**

- Solar Photovoltaic
- Solar Thermal
- Landfill Gas
- Wind
- Digester Gas
- Hydropower
- Biomass

## **Making businesses both green and profitable**

Going “green” is both a corporate responsibility and business challenge. Total Energy Control is the affordable way to achieve sustainability goals by helping to turn energy saving into business growth. By optimizing energy use for greener operations, including alternative/renewable energy sources, installation/upgrade of more efficient building systems, and/or the reduction of energy consumption, you will realize the economic advantages of healthier working environments, reduced operating costs, improved productivity, and enhanced shareholder value.

By benchmarking your current energy use and carbon footprint, we can work with you to jointly develop an Energy Action Plan that helps determine your environmental impact with an outline of energy-saving opportunities and projected results. From this, we can then implement outlined recommendations by using either our proven energy efficiency solutions or on your own with ongoing project support from Schneider Electric. This process helps to not only reduce your carbon footprint, but also allows for greener operations and a stronger bottom line.



# Take the next step in energy efficiency with the most trusted name in power

Recognized as a global specialist in energy management, Schneider Electric is renowned for creating safe, reliable and highly efficient energy solutions. Our Energy Efficiency Consulting teams will partner with you to successfully deliver a comprehensive range of energy service to meet your business and operational needs while reducing energy costs.

## > Put our experience to work for you.

Find out how our Total Energy Control solutions can make a difference for your facility. To learn more, visit [www.PowerLogic.com/tec](http://www.PowerLogic.com/tec) or talk to one of our experts at **+1-866-466-7627**.

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