



WESCO®

Start Your Journey to Energy Savings



WESCO.CA

Start Your Journey to Energy Savings with WESCO

Energy management can be a significant competitive advantage for your organization. WESCO works with numerous partners to create energy management programs that **conserve, manage** and **optimize** energy consumption and provide measurable savings.



WESCO's Energy Audits and Performance Analysis

An effective Energy Management Program identifies and capitalizes on every opportunity to conserve energy and save money.

The first step is to begin a formal audit of a facility's energy use including a review of historical utility data, building performance metrics and operating procedures. This step identifies when, where and why energy is being consumed and the cost impact. Audits can potentially uncover unexpected or hidden details within utility rates, identify rebate opportunities and call attention to the impact of

"external" variables such as weather and production cycles. An energy consumption baseline is established to compare to future-state performance. The analysis can be used to yield a system-wide, power monitoring, energy reduction strategy that includes hardware and software solutions to give you the ability to centrally monitor your company's energy use and generate the data needed to systematically lower your energy costs.

WESCO works with our customers to develop their long-term energy reduction goals and help prioritize projects and capital spend for optimal return on investment (ROI).

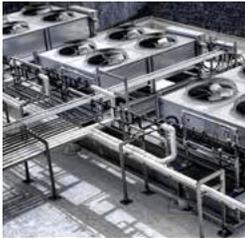
WESCO Assesses your Critical Business Applications to Reduce Energy Use

WESCO's breadth of innovative and energy-saving products can help you meet legislative mandates, demonstrate environmental leadership, and save money by making responsible and cleaner energy choices. Customers have leveraged our products and solutions in the following applications:

- Energy Monitoring and Management
- Lighting Efficiency Retrofits
- Plug Load Control
- Power Quality and Power Factor Correction Solutions
- Power Systems Automation
- Data Centre Power Quality/Thermal Management
- Electric Vehicle Charging Stations



WESCO Targets Operations - *Conserve, Manage, Optimize*



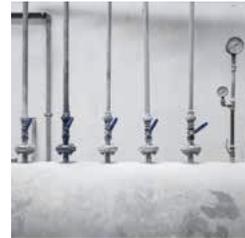
HVAC Pump & Fan Efficiency



Lighting Systems and Controls



Power Factor Correction



Compressed Air Systems and Controls



Factory Floor Automation



Demand Control and Peak Shaving



Data Centre Energy Optimization



Boiler Operation



Power System Upgrades



Water/Waste Water Process Efficiency

A Pathway for Energy Management

WESCO and key partners will help define and guide energy management programs

CONSERVE

LIGHTING RENOVATION SERVICES

Upgrading existing systems to minimize consumption & reduce costs

POWER FACTOR CORRECTION

Evaluating power factor & correcting issues reduces waste & promotes code compliance

DATA CENTRE ASSESSMENT

An overall health assessment of critical power & cooling systems; recommendations for Data Centre optimization & future growth projections are provided

MANAGE

LIGHT MANAGEMENT

Designing complete systems using basic controls & sensors optimizes lighting power & minimizes costs associated with energy consumption & waste

ELECTRICAL SYSTEMS MAINTENANCE ASSESSMENT

Upgrading & maintenance of existing equipment improves electrical system efficiency, reducing costs

OPTIMIZE

DESIGN & AUTOMATION SERVICES

Customizing automation controls aligned to needs increases productivity and energy efficiency

METERING & SOFTWARE ANALYTICS

Review power distribution needs in a facility; designing & integrating electrical distribution equipment, low voltage & data, energy management & lighting control systems into a single Integrated Facility System (IFS)

GOVERNMENT REGULATIONS & ENVIRONMENTAL LEADERSHIP

Being informed and ahead of government requirements provides a competitive advantage and reveals an innovative edge. EV Charging Stations are just one example of the ongoing changes expected from government whose focus is on green and sustainability initiatives

MICRO-GRID ASSESSMENT, DESIGN & CONSTRUCTION

Enhance energy conservation and gain electricity supply security through the implementation of a micro-grid that incorporates energy storage, standby generation and/or renewable energy with a utility grid source

A Pathway for Energy Management

WESCO works with an ecosystem of partners to perform an end-to-end Energy Management needs assessment and submit comprehensive findings and recommendations. Once we understand our customer's needs a four step renovation process to help build your energy savings strategy and business case is deployed:



STEP 1: Needs Analysis

- As part of our proposal process and before we select technologies to be used, we work with your teams to understand key project funding and financial and validation criteria within your company.

STEP 2: Post Analysis Proposal

- Once an organization's goals are understood, we perform an audit of the equipment's current state and provide recommendations for an upgrade.

STEP 3: Proposal

- We develop a comprehensive proposal with new system recommendations.

STEP 4: Project Execution & Implementation

- WESCO works closely with your project, design and installation teams to ensure that the project time lines and budgets are met.



Maximize Benefits of your Power System

WESCO's broad range of products, services and expertise can help you build for the future. Our energy management process studies all improvement opportunities to support your Energy Management projects.

Lighting Systems & Controls

A corporate lighting and controls strategy can account for energy rates, new technologies, local utility rebates/incentives, code compliance and improvement to work spaces and productivity. WESCO can provide you with insights into energy-efficient lighting options, principles of incentives, and the impact of effective retrofits.



Powering Business Worldwide

Lighting & Plug Load Control

Lighting control systems turn off the lights when a space is unoccupied, and lower artificial lighting when natural light is strong. These systems typically reduce lighting energy consumption by 10% to 30%.

Plug load control provides intelligence and programming to control devices and other electronics plugged into the wall outlet. This can reduce energy consumption from connected equipment up to 50% by shutting it down when your building is empty and not being used.

Power Quality, Distribution & Automation

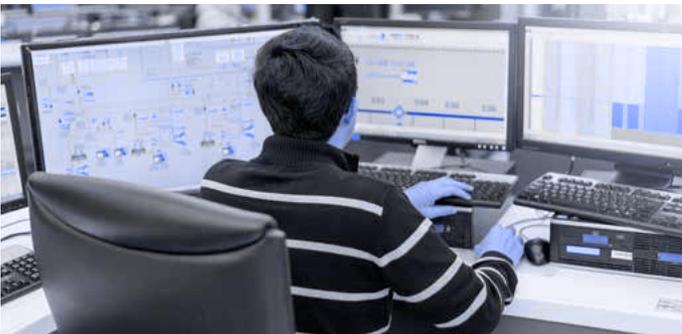
WESCO works with Eaton to provide a wide selection of products and services to save energy and improve efficiency.

Variable Frequency Drives

A variable frequency drive (VFD) adjusts a motor's speed to closely match output requirements, resulting in typical energy savings of 10% to 50%.

Power Xpert Software & Meters

Power Xpert meters detect and analyze potentially costly power quality problems, as well as monitor energy consumption and efficiency in real time throughout a building. Power Xpert software aggregates information into understandable charts and graphs that allow users to easily identify energy-saving opportunities.



Transformers

WESCO works with Eaton to provide a wide selection of products and services to save energy and improve efficiency.

Low Voltage Control

Distributed Low Voltage Control and Power over Ethernet versus individual control allows for energy, load management and control of electrical systems from multiple locations.

Paralleling Switchgear

Eaton's Paralleling Switchgear can be utilized in a number of applications to improve energy efficiency:

- Emergency/legally required standby systems
- Optional standby backup systems
- Distributed generation
- Peak shaving
- Prime power

Engineering & Consulting Services

Engineering and consulting services focus on understanding your requirements and setting strategies for managing the power distribution system to satisfy your business needs.

Power Factor Correction

Power factor correction capacitors help increase system capacity and reduce or eliminate the penalty for low power factor.

Motor Efficiency

Newer single and three phase motor technology can reduce motor losses by up to 20% over designs available 20 years ago. These new motors are designed for optimal efficiency when used in conjunction with Variable Frequency Drives and can reduce energy costs up to 50%.



Turnkey Power System Project Management

WESCO also provides turnkey project implementation with field specialists that can manage a construction project from start to finish, recondition or upgrade equipment, or modernize your power system. Highly trained Eaton engineers can implement improvements identified via the Energy Management Audit and can support all aspects of system design and development

regardless of manufacturer, including:

- Construction planning
- Equipment purchase
- Contract management
- On-site project management
- Commissioning / Start-up
- Personnel training

Data Centres

With the explosion of the Internet, digital content, e-commerce and the need for access to data and Cloud computing, the data centre has become one of the fastest growing consumers of energy. One of the best approaches to reducing data centre power usage is to enhance its physical infrastructure.

- Cable Management and Containment Solutions - Optimizing containment solutions and cable management improves airflow and cooling efficiency.
- IT Equipment Operation - Increasing the voltage to IT equipment reduces operating current and cooling load.
- Scalable or Eco-Mode UPS - Installing a scalable uninterruptible power system (UPS) allows a customer to take advantage of efficiency gains inherent to a UPS operating near its capacity. At typical low loading levels this can result in 50% less power loss.
- High Efficiency PDUs and RPPs - Utilizing Power Distribution Units (PDUs) and Remote Power Panels (RPPs) with more efficient transformer technology will improve efficiency by 2-3% and reduce cooling load.



- Smart Lighting - AC and DC Power over Ethernet (PoE) Smart LED lighting can reduce lighting energy costs by more than 50% over conventional sources and reduce the load on cooling systems. Sensors built into the lighting system that deliver occupancy, temperature, humidity and other data can be integrated into the building management system to provide facilities with additional insights into building operations and security.
- Data Centre Infrastructure Management (DCIM) - These solutions can also be integrated with DCIM to provide a holistic view of a data centre's current state and where opportunities for improvement exist.



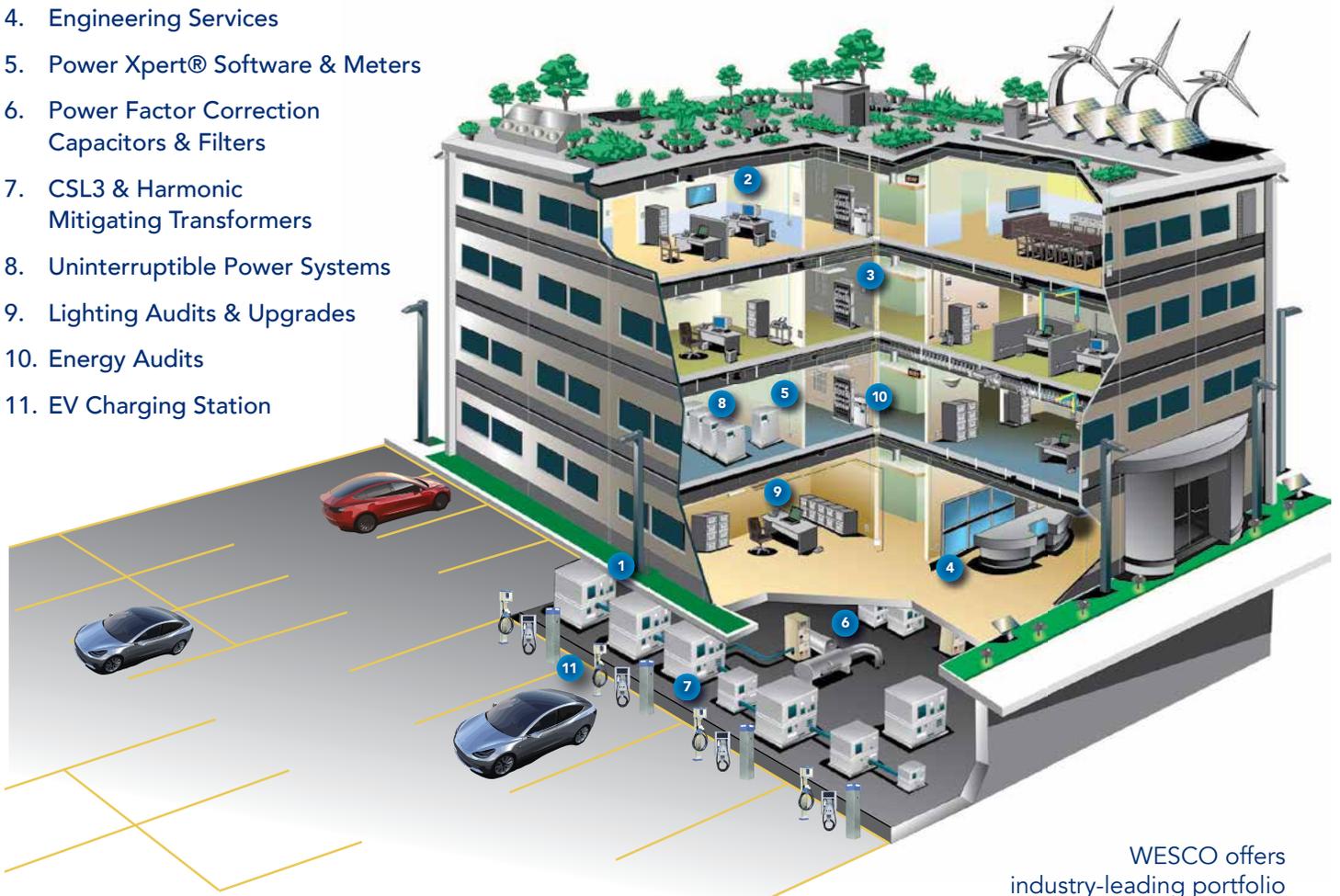
Electric Vehicle (EV) Charging Stations

With the increased focus on green and sustainability initiatives and government investment in EV infrastructure in many areas of the country there is a growing requirement for the availability of EV charging stations at the workplace and home. WESCO provides level 1, 2 and 3 EV charging stations.

Maximize Benefits of your Power Systems

When building your energy savings strategy, be sure to assess your entire power system to deliver maximum benefits.

1. Paralleling Switchgear
2. Lighting Control
3. Variable Frequency Drives
4. Engineering Services
5. Power Xpert® Software & Meters
6. Power Factor Correction Capacitors & Filters
7. CSL3 & Harmonic Mitigating Transformers
8. Uninterruptible Power Systems
9. Lighting Audits & Upgrades
10. Energy Audits
11. EV Charging Station



WESCO offers industry-leading portfolio of products and services to support your Energy Management projects.



WESCO®

One Source for Everything you Need.



Why Choose Us?

- Our flexible approach in developing solutions means that WESCO delivers what our customers need, when they need it.
- Our highly experienced team has worked with a variety of organizations in the commercial, industrial, retail, government and institutional markets.
- We work with industry-leading suppliers to source products that meet the requirements of our customer's system upgrades and standardization initiatives.
- WESCO has a network of partners who are energy professionals that can help you take control of your energy costs and use new technologies to reduce operating expenses.

WESCO LOCATIONS ACROSS CANADA - VISIT A BRANCH NEAR YOU!

To find your nearest WESCO branch address, visit www.wesco.ca/branches.htm

Abbotsford BC	Surrey BC	Red Deer AB	Mississauga ON	Sept-Îles QC
Burnaby BC	Vancouver BC	Estevan SK	Ottawa ON	Val-d'Or QC
Castlegar BC	Victoria BC	Regina SK	Sarnia ON	Moncton NB
Fort St. John BC	Calgary AB	Saskatoon SK	Sudbury ON	Dartmouth NS
Kamloops BC	Edmonton AB	Winnipeg MB	Windsor ON	Sydney NS
Kelowna BC	Fort McMurray AB	Hamilton ON	Chicoutimi QC	St. John's NL
Kitimat BC	Grande Prairie AB	Kingston ON	Longueuil QC	
Nanaimo BC	Lloydminster AB	Kitchener ON	Pointe-Claire QC	
Prince George BC	Nisku AB	London ON	Québec QC	
Richmond BC	Peace River AB	Markham ON	Rimouski QC	

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WESCO Distribution Canada LP is the Canadian operating arm of WESCO International, an industry-leading Fortune 500 distributor. Our family of companies provide electrical, industrial, and communications MRO and OEM product, construction materials, broadband cable, telecommunications, utility, safety and training solutions, advanced supply-chain management and logistics services.

Headquartered in Pittsburgh, Pennsylvania, WESCO operates nine fully automated distribution centres and 500 full-service branches throughout North America and around the world. Major markets served include commercial, institutional & industrial construction, industrial processing & manufacturing, government, electrical utility, communications & security and property management (power & lighting controls). WESCO's specialty is global accounts support & integrated supply.