

Energy Management Solutions



1 The Problem

According to the U.S. EPA, the production and use of energy accounts for more than 84% of U.S. greenhouse gas (GHG) emissions, with carbon dioxide (CO₂) contributing to 79% of GHG emissions.¹ Consider energy-efficient lighting, appliances and equipment, HVAC/R optimization, and clean energy solutions as key opportunities to help lower GHG emissions and save money.

2 Solutions that Work



Help reduce your carbon footprint by measuring and consuming less energy through energy-management initiatives or the utilization of renewable energy:

- Maximize the efficiency of your HVAC system
- Use energy-efficient lighting such as LED
- Use energy-efficient appliances
- Set specific, measurable, achievable, realistic and timely (SMART) sustainability goals

3 How Grainger Can Help

AREAS OF FOCUS	THINGS TO CONSIDER	ACTIONS TO TAKE
HVAC & REFRIGERATION	<p>HVAC systems use about 35% of a building's energy.² Heat/cold loss can be reduced by maximizing the efficiency of HVAC equipment, conducting regular preventive maintenance and implementing automation. Undersized or aging HVAC systems are inefficient and require more filter changes and maintenance. Certain refrigerants used in HVAC systems can lead to stratospheric ozone depletion and are regulated by the EPA.</p>	<ul style="list-style-type: none"> • Documenting the last energy audit of your HVAC system • Knowing your HVAC system age and if it's undersized • Listing the refrigerants you are using in your HVAC system and determining if they deplete the ozone
LIGHTING	<p>LED lighting will represent 84% of all lighting sales in 2030 and reduce energy consumption in the lighting sector by 40%.³ Integrated control features (sensing, dimming, instantaneous on/off) provide maximum functionality and efficiency. LED lighting is mercury free. Transitioning to LED lighting helps extend product life, save money and defer landfill disposal.</p>	<ul style="list-style-type: none"> • Discussing energy-efficient lighting and LED alternatives • Noting when you conducted your last lighting audit • Knowing how often you replace light bulbs • Disposing of your current lighting properly
APPLIANCES	<p>Energy-efficient appliances and equipment use technologies that are less energy intensive to reduce the amount of electricity used per product.⁴ Appliance efficiency standards not only save energy but also reduce pollutants, improve electric system reliability, and save significant amounts of money over the life of the equipment.</p>	<ul style="list-style-type: none"> • Using energy-efficient appliances • Conducting and documenting an appliance energy audit • Knowing the age of your appliances
CLEAN ENERGY & ENERGY CONSERVATION	<p>Clean energy is created from sources that naturally replenish themselves such as sunlight, wind, water, etc. Approximately 68% of all energy produced in the U.S. ends up being wasted through various inefficiencies.⁵ Electronics are constantly using energy; even if they're in standby mode. Energy and cost savings can be achieved by applying best energy management practices and purchasing energy-conserving equipment. Reduce the production of GHG by using clean energy and equipment that consumes less energy. In 2021, 46% of all new energy generating capacity came from solar.⁶</p>	<ul style="list-style-type: none"> • Setting goals for lowering your GHG emissions/carbon footprint • Auditing your overall energy usage beyond HVAC and Lighting, for example "vampire" electronics • Considering alternative clean energy options

¹ EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2013 ² DOE An Assessment of Energy Technologies and Research Opportunities—Chapter 5: Increasing Efficiency of Building Systems and Technologies ³ DOE Energy Savings Forecast of Solid-State Lighting in General Illumination Applications ⁴ EES! Energy Efficiency Standards for Appliances, Lighting and Equipment ⁵ LLNL Estimated U.S. Energy Consumption ⁶ SEIA Solar Industry Research Data



SERVICES

- Site Energy Management Assessments
- System Installations & Upgrades
- Turnkey Solutions
- Program Development
- Employee Training



RESOURCES

- Visit [grainger.com/gosustainable](https://www.grainger.com/gosustainable)
- Contact your local Grainger Rep

Sustainability: Energy Management Solutions

HVAC & REFRIGERATION	
GRAINGER PRODUCTS	HOW THEY HELP
 Insulation	Prevent heat and cold from escaping.
 Window & Door Seals	Improve efficiency, save energy and costs.
 Door Closing Devices	Protect from drafts and regulate temperature.
 Door Weatherstripping	Seal leaks and prevent drafts.
 Roof & Leak Coatings	Lower heating and cooling costs.
 Air Filters	Help HVAC systems perform more efficiently.
 Caulks, Sealants & Fillers	Fill gaps and holes around pipes and joints.
 HVAC Controls & Thermostats	Regulate temperature, humidity and pressure in addition to conserving energy.
SERVICES	
Grainger has service providers who can assess your HVAC systems and practices and offer relevant solutions to help save money, energy and reduce GHG emissions.	<ul style="list-style-type: none"> • HVAC System Optimization & Restoration • Roof Restoration
LIGHTING	
GRAINGER PRODUCTS	HOW THEY HELP
Light Bulbs & Lamps	EPP products use less energy and generally contain fewer hazardous materials (ex. Mercury) compared to standard alternatives.
Ballasts & Drivers	
Lighting Fixtures & Retrofit Kits	
 Lighting Controls	Turn on lights only when needed and turn off when not in use.
Emergency & Exit Lighting	EPP products use less energy and generally contain fewer hazardous materials (ex. Mercury) compared to standard alternatives.
Outdoor Lighting	
Rechargeable Flashlights	
 Lamp & Light Bulb Disposal & Recycling Kits	Encourage safe disposal of lamps and light bulbs.
SERVICES	
Grainger has service providers who can assess your lighting program and practices, and offer relevant solutions.	<ul style="list-style-type: none"> • LED Retrofits
APPLIANCES	
GRAINGER PRODUCTS	HOW THEY HELP
Washers & Dryers	Use energy-efficient appliances to help conserve energy and save money without sacrificing performance.
Refrigerators & Freezers	
Dishwashers	
Water Heaters	
Ice Makers & Ice Dispensers	
CLEAN ENERGY & ENERGY CONSERVATION	
GRAINGER PRODUCTS	HOW THEY HELP
 Solar Power	Reduce GHG emissions and promote clean energy use.
AC Motors	Optimize motor efficiency, reduce electrical power consumption and costs, and improve reliability.
 Motor Drives & Speed Controls	Control your motor's performance and reduce the motor's energy consumption.
Batteries & Battery Chargers	Conserve resources and help protect the environment from heavy metals and corrosive materials.
 Door Closing Devices	Protect from drafts and regulate temperature.
 Insulation	Prevent heat and cold from escaping.
Transformers, UPS & Power Supplies	Prevent equipment failures and costly downtime by getting the right voltage to electrical equipment.
SERVICES	
Grainger has service providers who can assess your energy program and practices, and offer relevant solutions.	<ul style="list-style-type: none"> • Solar Energy & Battery Storage Installation • Electrical Vehicle Charging Installations • Steam, Compressed Air & Dust Collection System Services



Look for this icon on [grainger.com/gosustainable](https://www.grainger.com/gosustainable) as it indicates the product category contains environmentally preferable products and other sustainability related products. **To view environmentally preferable products only on Grainger.com, the "Green" filter toggle (lower left-hand side of page) must be turned on within the product pages.**

©2024 W.W. Grainger, Inc. W-FESU240 G0823