



Energy Analysis & Alternative Energy

Energy Analysis & Design

- Energy Conservation Studies
- Energy Management Systems
- Combined Heat & Power
- Solar Energy
- Wind Energy
- Geothermal Heating & Cooling
- Energy Audits
- Utility Billing Analysis

Energy Audits & Utility Billing Analysis

Many large energy consumers are not fully aware of the energy savings that can be realized through simple changes in billing structure or equipment operations. GEi can trend electrical and gas usage and billing information, review available alternative rate structures, identify energy-intensive equipment or processes, and recommend strategies to modify energy usage and/or rate plans to reduce expenditures.

Renewable Energy

As utility costs inexorably rise and renewable energy technologies mature, installation of solar panels or wind turbines on your home or business becomes a more economically viable proposition. Impending greenhouse gas reduction legislation can only tip the scales further in favor of renewable technology. GEi can perform a site and electrical usage analysis to determine the optimum system configuration for your application, and provide complete design & installation services to move you into a greener future today.

Combined Heat & Power

Combined Heat & Power, or CHP, is a system that significantly increases fuel efficiency by using waste heat from an electrical generator to serve thermal loads that would otherwise utilize electricity or fossil fuel. For example, a gas turbine might provide some or all of a facility's electrical power while also providing steam for space heating or process loads. GEi can perform a comprehensive analysis of any facility to determine if load profiles are suitable for CHP installation, determine a recommended generation capacity based on electrical and thermal load data, and provide an economic analysis including expected annual savings and simple payback period. If CHP is viable, GEi can provide complete engineering design services for the plant.

