



Let's Get Started!

Would you like to know which renewable energy solutions may be right for you? Curious how much you could save compared with the cost of power off the grid? Want to know how fast your payback period might be? Honeywell can give you answers to all these questions, and more.

Find Out More

To get the process started, just contact your Honeywell representative; visit www.honeywell.com/buildingsolutions or call **1-800-345-6770 ext. 605**.

Honeywell Building Solutions

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Geothermal: Environmentally-Friendly and Economically Sound

Geothermal Solutions from Honeywell

Energy is Everyone's Concern

Finding new ways to keep our energy clean, affordable, secure and efficiently utilized is one of the most pressing challenges of the twenty-first century. Geopolitical instability, climate change caused by greenhouse gases, runaway energy pricing, environmental concerns and energy usage mandates present a bewildering array of energy-related problems. Institutions, businesses and government entities have all experienced sharply rising energy prices in recent years – and face an even more uncertain energy future.

Honeywell understands how vital energy is to the success of your enterprise and mission. We also understand that these increasing and unpredictable energy expenditures make it difficult for you to manage your facility, plan your budget and schedule ongoing capital improvements. We can help.

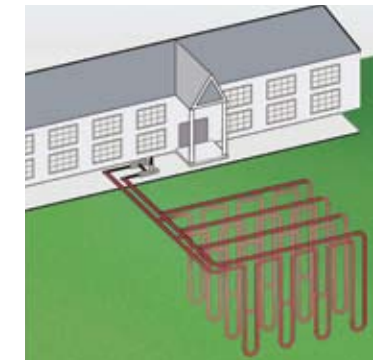
The Proven Honeywell Approach

Honeywell is a global leader in energy management technology, solutions and services. We have the engineering, design, project management and energy market experience needed to integrate an efficient renewable energy solution from start to finish.

Honeywell does not believe in “one size fits all” solutions. We have developed a disciplined, data-driven process to ensure a renewable energy solution that is both environmentally-friendly and economically sound. We have developed an innovative approach that begins with a thorough, customized technology assessment based on your facility, location and energy utilization goals. We can quickly and accurately analyze the full spectrum of renewable technologies that are available in your location and evaluate them based on a variety of economic and environmental criteria. We consider a multitude of variables, including the availability of renewable energy resources in your area, as well as local utility rates and your particular heating and cooling loads. The end result is a precise Renewable Energy Scorecard™ that lets you evaluate the potential impact of a wide range of possible renewable energy solutions.

Once we have determined the renewable energy possibilities that make business and economic sense for you, we can also explore the various ways Honeywell can help make those solutions a reality. We have developed a number of innovative business structures and financing options to help you implement a renewable energy initiative with minimal impact on your capital

budget. These include unique options such as long-term performance contracts and Power Purchase Agreements (referred to by Honeywell as Energy Services Agreements). Through a Honeywell Energy Services Agreement your facilities can be fueled by a renewable resource – with guaranteed energy rates at or below conventional energy rates and no up-front cost. Honeywell performance contracts have delivered more than \$3 billion in energy and operational cost savings to customers since 1992. We can design, finance, install and maintain an economically attractive renewable energy solution that meets your unique needs. The end result is a green solution that can help keep your enterprise in the black.



Geothermal heat pumps utilize the constant earth temperature to supplement both heating and cooling systems, replacing energy that would otherwise be generated from less environmentally-friendly, nonrenewable resources.

water. So, in effect, these heat pumps function as both air-conditioning and heating systems in one, and have the ability to make existing HVAC systems super-efficient in terms of energy usage.

From a financial standpoint, geothermal solutions have a relatively quick payback (based on your location and local power costs). Many geothermal installations generate energy at or below the cost of traditional energy resources. And perhaps more importantly, these solutions can lock in your long-term energy costs, giving you an important hedge against the wildly fluctuating price of energy in the open market.

The environmental impact of geothermal solutions can be significant. Geothermal is renewable, pollution-free and eliminates the emission of greenhouse gases. It is a proven technology that is dependable, easy to maintain and helps support environmental policy directives.

Geothermal initiatives also offer important security benefits, as they utilize abundant domestic resources and reduce our dependence on conventional energy. Geothermal solutions also eliminate the transportation, storage and disposal risks associated with many other more volatile forms of power.

Honeywell's global expertise and performance in renewable energy is unmatched. The amount of energy our projects have saved is equal to eliminating the use of three nuclear power plants for one full year. In just one recent renewable energy project implemented at Fort Bragg (a U.S. Army Post in Fayetteville, N.C.), we reduced CO₂ emissions by 650 million pounds, which is equivalent to removing 52,000 automobiles from the road.

Trust Honeywell for Renewable Energy Solutions that are Environmentally-Friendly and Economically Sound

The future belongs to those with the vision to recognize the importance of energy in our lives, and the foresight to proactively implement new solutions that are renewable, reliable and relevant.

Today's advanced renewable energy strategies can make a dramatic improvement in the productivity, building efficiency and occupant comfort of your enterprise, while protecting the environment and reducing your carbon footprint. The challenge lies in knowing which of these strategies is right for you.

You can trust the dedicated energy experts at Honeywell to work with you and your staff to find those solutions. We begin by preparing a custom Renewable Energy Scorecard to show you the economic impact of the many options available.

If you would like a copy of your personalized scorecard call **1-800-345-6770 ext. 605**.



The Honeywell Renewable Energy Scorecard includes an analysis of your needs based on your location, local power costs and myriad other factors that help determine the economic viability of various renewable energy solutions, including geothermal.

Unearthing New Geothermal Solutions

The term “geothermal” comes from the Greek *geo* (meaning earth) and *therine* (meaning heat). Geothermal energy is tapped using heat pumps to harness the earth's temperature differential for use in super-efficient heating and cooling systems. Although geothermal energy has been around for more than a century, we have now realized its full potential to supplement and/or replace current non-renewable energy resources.

Geothermal is a clean, abundant and reliable source of renewable energy that does not consume any fuel or produce any significant emissions. Geothermal energy solutions are becoming more commonly used, and adoption of geothermal solutions grew at a rate of 40% during the last decade.

Worldwide geothermal capacity is now estimated to be roughly equivalent to the combustion of nearly 30 million tons of coal or the output of almost 10 nuclear power plants. Unlike many other forms of renewable energy, geothermal is independent of climatic variation because the earth's surface layer remains at an almost constant temperature of 50°F-55°F in most locations. Geothermal heat pumps use a system of buried pipes linked to a heat exchanger with ductwork into buildings. In winter, the relatively warm earth transfers heat into the buildings and in summer the buildings transfer heat to the ground and/or heat