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Welcome New Climate Leaders Partners:

Johnson Controls, Inc.

Noble Corporation

Oracle Corporation

Featuring Clean Energy

This edition of Carbon Copy features actions Climate Leaders Partners are taking to reduce GHG emissions through the use of green power and combined heat and power systems. This edition also highlights a few of EPA's Clean Energy Programs as well as the World Resources Institute's Green Power Market Development Group. One of the EPA's clean energy programs, the Combined Heat and Power Partnership works with industry, states and local governments, universities, and other institutional users to facilitate the development of efficient combined heat and power projects. Another one of the EPA's clean energy programs, the Green Power Partnership, enlists commercial, nonprofit, and public organizations to purchase green power as a portion of their electricity needs. Climate Leaders Partners have access to many of the tools and services provided by these programs. More information on EPA's Clean Energy resources can be found on the web at www.epa.gov/cleanenergy.

What do Climate Leaders Partners Need to Know about Clean Energy?

Clean energy plays an important role in reducing GHG emissions. The purchase of green power and the use of CHP systems can be a very effective approach to achieving GHG reductions. Depending on their electricity market, consumers may have the choice to buy green power directly from a supplier, to participate in "green pricing" programs, or to buy Renewable Energy Certificates (RECs). Both of these options can provide a company with an innovative approach to meeting a GHG reduction target. Another opportunity to achieve GHG reductions is through the installation of CHP systems. In addition to providing environmental benefits, these systems also increase fuel efficiency and enhance electricity reliability.

Protocols on how Climate Leaders Partners measure GHG benefits from green power and RECs are under development. Climate Leaders Partners should consult the Climate Leaders GHG Inventory Protocol Guidance on Direct Emissions from Stationary Combustion Sources as well as the Guidance on Indirect Emissions from Purchases/Sales of Electricity/Steam for methods on estimating their emissions from CHP systems. The protocols are available on our website, www.epa.gov/climateleaders.

Breaking Barriers to Green Power Purchases and Generation

Climate Leaders Partners Staples and FPL Group demonstrate how to take advantage of both sides of the Green Power Market: Demand and Supply. Staples demonstrates how an innovative use of Renewable Energy Certificate (RECs) and solar power can meet a renewable energy goal. FPL demonstrates a leading utility's commitment to clean energy production.

Developing an Integrated Renewable Energy Strategy

Staples, Inc. invented the office superstore concept in 1986 and today is the world's largest office products retailer. With  that was easy.sm 60,000 associates, the company is committed to making it easy to buy a wide range of office products, including supplies, technology, furniture, and business services. With 2003 sales of \$13 billion, Staples serves consumers and businesses ranging from home-based businesses to Fortune 500 companies in the US, Belgium, Canada, France, Germany, Italy, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom. Headquartered outside of Boston, Staples operates approximately 1,600 office superstores and also serves its customers through mail order catalog, e-commerce and contract businesses. More company information is available at www.staples.com

Staples joined Climate Leaders in 2003. Their commitment to reduce their environmental impact is evidenced by their four cornerstones of environmental commitment:

- Purchase and promotion of products containing post consumer recycled materials
- Recycling initiatives
- Energy conservation and renewable power procurement
- Environmental education for associates and customers

To achieve their renewable power procurement goal, Staples pursued two innovative approaches, the purchase of Renewable Energy Certificates (RECs), and onsite solar energy generation.

Renewable Energy Certificates

Staples initially considered a traditional renewable power purchase from a utility to increase their use of renewables from less than 2% to 5% in 2003. However, challenges such as administrative complexities, high transaction costs, lack of product options and competition in many markets, inability to aggregate total load and leverage purchase, and dealing with over 200 utilities/ESCOs led Staples to take a different approach.

Staples investigated RECs as an alternative option. RECs represent the renewable attributes of a specific quantity of renewable energy. After evaluating various renewable energy options, Staples decided that a REC purchase was simpler than a direct renewable energy purchase, while providing the same environmental benefits. Through their involvement with the World Resources Institute's Green Power Market Development Group, Staples purchased 46 million kilowatt hours per year of RECs, becoming part of the largest REC deal in the United States. This purchase allowed Staples to double their 2003 goal, and renewable power now accounts for ten percent of their total U.S. power requirements. The RECs purchased by Staples are generated by wind, biomass and landfill gas resources.

Staples' purchase of 46 million kilowatt hours per year is equivalent to the annual power consumption of more than 4,000 homes.

Staples derived a number of benefits from the REC purchase, including:

- Lower cost due to leveraged pricing through aggregated loads and more open competition
- Greater variety of renewable options
- Simplified transactions – one contract and one bill, with no change in utility provider vs. potentially 200+ different contracts, bills, and renewal dates
- Exceeding corporate GHG targets

Staples estimates that their REC purchase avoids the release of approximately 34 million pounds of the greenhouse gas carbon dioxide into the atmosphere per year, relative to national average power plant emissions, which is equivalent to avoiding the emissions of more than 2,800 cars per year.

This purchase supports Staples' environmental commitments and corporate social responsibility goals, reduces the company's corporate GHG footprint and impact on climate change, reduces operating expenses associated with purchased power, and provides Staples with a competitive advantage.

Solar Services Model

Staples' historic view of building and owning onsite solar energy was that it had a high initial cost, poor return on investment, and other technologies and strategies could generate similar GHG benefits and better rates of return. As an alternative to this option, SunEdison, a local utility, proposed to Staples the "Solar Services Model." In the solar services model Staples would act as a "host" for the PV system, which would be owned and operated by SunEdison. Staples buys the distributed power generated off of the system via a long term

purchased power agreement at or below the bundled price off of the grid. The solar services model involves 4 different entities: Staples, BP Solar, Socially Responsible Investors and SunEdison. BP Solar provides the technical expertise and product for the installation, the investors have an appetite for the accelerated depreciation and tax benefits of owning the system, and SunEdison facilitates the agreement.

Staples cost effectively added solar to their portfolio

This approach allows Staples to cost-effectively add solar to their portfolio. Staples also benefits by using the solar portion of their load as a hedge against future fuel surcharges. Further, Staples derives load shedding benefits from a facility which is already very energy efficient, and saves money. Finally, the company can claim the GHG emissions offsets associated with that portion of the load being generated from solar.

The risk to parties is minimized as a result of this agreement. Staples can assign the rights to the purchased power agreement to a future tenant or landlord and this mitigates risk to Staples. BP Solar guarantees that a certain number of kilowatt-hours are generated through their array, and if there is a shortfall, BP Solar pays their investors for the difference. The solar services model provides a cost per kWh at or below cost of power off the grid, and the opportunity for Staples to integrate solar into their overall renewable energy strategy at an affordable cost.

Providing a Green Power Supply

Climate Leaders Partner
FPL Group is the nation's largest developer, owner, and operator of wind-



powered generating plants, and one of the largest providers of electricity-related services in the country.

FPL Group, Inc. is a nationally known organization focused on energy-related products and services. The Company includes Florida Power & Light Company (FPL), the largest electricity provider in Florida, and FPL Energy, LLC, the unregulated arm of FPL Group providing electric generation in 26 states. As one of the nation's largest providers of electricity-related services, FPL Group is committed to meeting the demand for cost-effective production of electric power while sustaining, protecting and enhancing the environment. In 2002 FPL Group ranked first out of 28 major electric utilities surveyed in an environmental assessment conducted by Innovest, an independent advisory group. FPL also received a 2001 Program Champion Award for their reuse activities from the Environmental Protection Agency's WasteWise program, the third time they have received this honor.

FPL Energy is the nation's largest developer, owner, and operator of wind-powered generating plants, producing approximately 40 percent of all wind-generated energy in the U.S.

FPL Group is meeting future energy needs through the construction of clean generating assets including natural gas-fired, simple and combined cycle generation, and renewable generation. FPL Energy is currently a major wholesale power generator, operating plants fueled by wind, hydro, natural gas, solar, and biomass. It is the nation's largest developer, owner, and operator of wind-powered generating plants, producing approximately 40 percent of all wind-generated energy in the country. FPL Energy wind generation includes 43 projects generating over 2700 net-MW of wind across 15 states, including the largest wind farm in the west: the Stateline Energy

Center on the Oregon-Washington border. FPL Energy's non-emitting generation assets also include 370 MW of hydroelectric power and the operation of the two largest solar plants in the world, the Solar Electric Generating Stations in California's Mojave Desert.

Over the last two decades, DSM projects have enabled FPL to avoid the construction of six new power plants

Other efforts utilized by FPL Group to reduce GHG emissions include introducing a green power program for FPL customers and expanding Demand Side Management (DSM) projects that improve the energy efficiency of FPL customers. The programs include a Web-based home energy survey available at www.fpl.com to help customers understand how they are using power and find ways to maximize energy efficiency in their homes. This encourages customers — often via rebates — to adopt high-efficiency heating, ventilation, air conditioning, lighting, window treatments and roof and ceiling insulation. FPL also offers a voluntary "On-Call" program where customers elect to have FPL briefly interrupt some of their electric appliances for short periods during times of high electricity demand in exchange for credits on their bill.

Over the last two decades, DSM projects have enabled FPL to avoid the construction of six new power plants in Florida. Internal fuel switching and DSM efficiency measures are also important in the reduction of greenhouse gas (GHG) emissions. Through continued efficiency improvements, the utility has reduced its operating and maintenance costs per kWh by 40 percent since 1990. FPL Group presents a fine example of how an investment in green power supply is economically beneficial, both to the company and its customers. More information about FPL can be found on the web at www.fpl.com.

Assistance Meeting Green Power Goals: EPA's Green Power Partnership and WRI's Green Power Market Development Group

EPA's Green Power Partnership

In 2001 EPA launched the Green Power Partnership to assist and promote organizations that commit to using green power for a portion of their electricity needs. The innovative, collaborative nature of this voluntary program gives interested organizations access to EPA resources that highlight the value and reduce the transaction costs of green power.



Commercial, industrial, and public sector organizations interested in becoming Green Power Partners pledge to procure an amount of renewable energy proportional to their annual electricity use. Partners may use any combination of direct green power purchase, renewable energy certificates or on-site generation to fulfill their obligation.

Benefits of the Partnership

The Green Power Partnership aims to expand awareness and use of renewable energy by providing information, support, and recognition for those organizations making green power a significant part of their energy choice. Green Power Partners enjoy the following benefits and services:

Information & Support—A full range of program support services and materials, including technical information on buying green power, case studies, and a purchasing toolkit. Partners also have access to current market information, sample procurement RFPs, and guidance on product comparison.

Peer Exchange—A network of green power providers, other Green Power Partners, and

related local and national environmental organizations is at partners' disposal.

Public Recognition—National recognition, through EPA awards and press announcements, is provided. EPA also works with partners to customize their communications plans and coordinate local and regional promotions. A link from the Green Power Partnership web site to your organization is provided as well as EPA web site recognition as a Partner and collaborative environmental leader.

Partnership Logo—Partners have access to the Green Power Partnership logo for use in advertisements and other consumer and media materials.

How to Join

Each Partner Commits to:

- Signing a one-page Letter of Intent
- Choosing a green power supplier, green-tag marketer or on-site generation option
- Procuring/generating an amount of renewable energy that is proportional to annual electricity use
- Reviewing and reporting their green power commitment annually to EPA

Commitment Levels

Commitments are proportional to a Partner's electricity consumption. The chart below shows the minimum required Partner commitment to green power. In addition, half of the minimum commitment must be met through new renewable energy resources.

Annual Electricity Usage (kWh)	Green Power Partnership Minimum Commitment
>100,000,000	2%
< 100,000,000	3%
< 10,000,000	6%
< 1,000,000	10%
< 100,000	15%

Interested in Learning More?

For more information about the Green Power Partnership, visit the Web site at www.epa.gov/greenpower or call Kurt Johnson at (202) 343-9231 or Matt Clouse at (202) 343-9004.

World Resources Institute's Green Power Market Development Group

Convened in 2000 by the World Resources Institute (WRI), the Green Power Market Development Group is a unique commercial and industrial partnership dedicated to building corporate markets for green power. The Group is transforming energy markets to enable corporate buyers to diversify their energy portfolios with green power and reduce their impact on climate change. The Group seeks to develop 1,000 megawatts of new, cost-competitive green power by 2010 – enough energy to power 750,000 homes. The Group corporate partners are Alcoa Inc., Cargill Dow LLC, Delphi Corporation, The Dow Chemical Company, DuPont, FedEx Kinko's, General Motors, IBM, Interface, Johnson & Johnson, Pitney Bowes, and Staples.



Activities

The Group is pursuing several types of green power opportunities: electricity and heat from renewable resources, and “clean” energy technologies such as hydrogen fuel cells. The Group promotes the long-term viability of the green power market by:

- i. **Increasing the attractiveness of green power to corporate energy users.** The Group is reducing the cost of green power by aggregating its purchasing power and by developing innovative purchasing models and products.

- ii. **Increasing corporate buyer awareness & capacity.** The Group is increasing corporate energy managers' understanding of green power technologies, economics, and markets in order to facilitate green power purchases. It has developed analytical tools such as the Green Power Analysis Tool and shares lessons learned through its *Corporate Guide to Green Power Markets* series.
- iii. **Communicating policies that reduce market barriers to renewable energy.** Based on experiences in the marketplace, Group members have raised awareness of public policies that reduce the barriers to green power. Activities include giving Hill briefings and publishing policy papers.
- iv. **Replicating Group successes.** The Group is sharing strategies & lessons learned with large energy users outside of the Group including other companies, large building owners, and government agencies. It also shares tools for completing green power purchases including draft contract language and guidelines for writing request for proposals (RFPs).

Benefits of partnership

The collaboration provides many benefits to Group partners including:

- Accelerated process of learning about corporate green power markets;
- Analyses of green power products, suppliers, projects, and incentives;
- Access to a network of energy and environmental managers experienced with green power;
- Shared strategies and lessons learned;
- Opportunities to aggregate purchases and thereby reduce costs; and
- Public recognition for green power purchases and investments.

Successes to date

To date, all twelve Group members and WRI have participated in green power projects and purchases totaling 123 MW. These purchases have occurred at 250 facilities across 22 states and the District of Columbia.

The Group and individual members have emerged as top corporate buyers for a number of renewable energy products. For instance, in September 2003, the Group completed the largest aggregate corporate purchase of renewable energy certificates ever in the United States. Climate Leaders Partner Johnson & Johnson is one of the top corporate users of wind and solar power. GM, also a Climate Leaders Partner, has become the largest non-utility corporate end user of landfill gas for thermal energy in the country. Furthermore, Dow and GM are collaborating in the largest hydrogen fuel cell deal in history.

Working together, the Group is fulfilling its vision of overcoming key economic, market, and policy barriers facing green power and is charting a course for a clean energy future in the U.S.

For more information on the Green Power Market Development Group, please visit its web site at www.thegreenpowergroup.org or contact:

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Benefits of Combined Heat and Power

Climate Leaders Partners Caterpillar and NiSource are actively implementing Combined Heat and Power for its cost-effectiveness and environmental benefits.

Seizing the Opportunity for Cost Savings and Environmental Benefits



Caterpillar joined Climate Leaders in 2003. For more than 75 years, Caterpillar Inc. has been building the world's infrastructure, and in partnership with Caterpillar dealers, is striving to drive positive and sustainable change in every continent. A Fortune 100 company, Caterpillar is the world's leading manufacturer of construction and mining equipment, diesel and natural gas engines, and industrial gas turbines. The company is a technology leader in construction, transportation, mining, forestry, energy, logistics, electronics, financing, and electric power generation. Caterpillar invested more than \$665 million in research and technology in 2003 and the company's employees have earned more than 2,400 patents in the past five years. Caterpillar products and components are manufactured in 49 U.S. facilities and in 58 other locations around the globe.

In addition to being a Climate Leaders Partner, Caterpillar has a long-standing commitment to protecting and preserving the environment. The company plays an active role in organizations including the Global Mining Initiative, Tropical Forest Foundation, World Business Council for Sustainable Development and others. But Caterpillar isn't just talking about the environment- it is also taking action at its own facilities.

Caterpillar's Aurora, Illinois plant is a 350-acre site that houses Caterpillar's Wheel Loaders & Excavators Division. The 2700-

employee facility started operations in 1958 and covers over 4 million square feet of manufacturing area. The plant was an excellent candidate for cogeneration, or combined heat and power (CHP), for a number of reasons, including:

- Aging coal boilers, baghouse, and coal elevators
- Obsolete parts and controls
- Inefficient and unreliable
- Significant expenses needed (\$6-9 million) to upgrade coal boilers

In addition to the aging physical plant, electricity deregulation in Illinois offered the plant a choice: stay with the incumbent utility, switch to an alternative retail electric supplier, or generate some or all of its own power. If the plant switched to an alternative supplier, it would have been assessed a Customer Transition Charge (CTC) of up to two cents per kilowatt-hour by its utility to recover stranded costs. Self-generation, however, avoided the higher cost of electricity, the CTC, as well as unplanned outages and other volatility. It was clearly the best choice.

A turnkey installation was performed by Caterpillar subsidiary Solar Turbines Incorporated, which included engineering, procurement, construction, project management, and commissioning. The main installation consists of two Solar *Taurus*™ 70 Gas Turbine generator sets and two Deltak Heat Recovery Steam Generators. The *Taurus* gas turbine generator sets have the following specifications:

- ISO rated at 7.5 MW each for a total of 15 MW
- Dual fuel capacity
- SoLoNOx (Solar's low emission, dry combustion technology)
- Evaporative coolers option

The Deltak boilers provide a total of almost 300,000 lbs/hr of steam to supplement 60,000 lbs/hr of free steam generated by the turbines. The rest of the installation

included general plant upgrades, including three Enerflex gas compressors, new breakers, switchgear and protective relaying, synchronization panel and distribution power meters, and upgraded controls on existing gas/oil fired boilers.

Caterpillar projects energy savings of \$2 million per year as a result of the CHP installation

As a result of the installation, Caterpillar's Aurora facility has realized many benefits. The plant now has state-of-the-art CHP technology, higher overall efficiency, the latest air pollution controls, and remote monitoring and diagnostics. Caterpillar projects energy savings of \$2 million per year as a result, in addition to avoiding the CTC and eliminating unplanned outages. Finally, from 2000-2002, the plant reduced air emissions significantly: NOx by 47 percent, SOx by 72 percent, and CO₂ by 72 percent.

Caterpillar saw the opportunity to not only upgrade plant technology, but also to realize cost savings and environmental benefits. For more information about Caterpillar, visit www.cat.com. For more information about Solar Turbines, visit www.solarturbines.com.

CHP in Smaller Applications



NiSource, Inc, a Fortune 500 holding company with headquarters in Merrillville Ind., joined Climate Leaders in 2004.

NiSource's core operating companies engage in natural gas transmission, storage and distribution, as well as electric generation, transmission and distribution. NiSource operating companies deliver energy to 3.7 million customers located within the high-demand energy corridor stretching from the Gulf Coast through the Midwest to New England.

Thanks to NiSource Energy Technologies (NET), a subsidiary of NiSource Inc., combined heat and power systems are showing up in previously unlikely locations. NET markets and sells distributed power generation systems to commercial and small industrial customers. These small, on-site generating systems enhance power quality, improve reliability and operate with or without the local electric grid. The company is focused on targeting early adopters of distributed technology. Below we profile NET's combined heat and power installations at a hotel, a YMCA, and a steel processing center.

Hilton Garden Inn, Chesterton, Indiana

NiSource Energy Technologies installed a combined heat and power distributed generation system at the Hilton Garden Inn in Chesterton, Indiana. The installation of this advanced technology is the first step of a larger Department of Energy contract to develop a modular-packaged Integrated Energy System (IES) for the hotel/motel industry.

The IES, which generates electricity for the hotel, initially includes three 30-kilowatt microturbines, heat recovery heat exchangers, and an advanced control system. The waste heat is utilized to supplement heat for the water supply, spa, and swimming pool, as well as provide space heat for the hotel's common areas. The microturbines, housed in a separate building on the hotel's property, currently generate approximately half of the four-story hotel's average electrical load requirement.

Key Benefits:

- Increased reliability for a portion of the Hilton's critical systems, with back up generation.
- Environmental advantages.
- Energy efficiency through the use of by-product heat to supplement the building's hot water and heating requirements, which reduces the

amount of fuel needed and energy wasted.

- Energy management flexibility, since the customer can often generate a portion of their own electricity needs.
- More predictable power costs, since distributed generation systems can reduce exposure to the volatile power market.

Breeden YMCA, Angola, Indiana

In December of 2002, a 120 kW microturbine-based combined heat and power (CHP) system went into full service at the Breeden YMCA facility located in Angola, Indiana. The CHP system includes two Capstone® C60 microturbines, one Unifin heat exchanger, and a novel thermal priority control scheme that has assisted in reaching system efficiencies of 64.7%.

During normal operation, the system operates in sync with the electric grid. In 2003, the 120 kW CHP system provided 629,820 kWh of electricity, or 45.8% of the total electricity used by the YMCA. Should the utility grid experience a power outage, the microturbine CHP system will automatically disconnect from the grid, operate in stand-alone mode and power the critical loads in the building. As a result of their high electric service system reliability, the Breeden YMCA now serves as a disaster relief center – a facility open to serve the public even during utility power outages. Another benefit of the system is the hot exhaust from the microturbines, which passes through a heat exchanger that transfers up to 750,000 btu/hr of thermal energy from the exhaust gas to the building's hot water heating loop (190 °F hot water). The heat exchanger is piped in prior to the existing boilers, making the recycled heat from the CHP system the first priority heat source. The existing facility boilers only have to operate on extremely cold days when the building requires more heat than is available from the microturbines. An added

benefit of this system is that during the summer months, the facility boilers do not turn on, which keeps the mechanical room from overheating – a problem experienced prior to installing the CHP system.

Key Benefits

- Provides increased electric reliability.
- YMCA now serves as a disaster relief center.
- Reduces the amount of atmospheric pollutants (NO_x) per kWh produced by 90%, compared to the local coal-fired power plant.
- Provides a real-time educational tool for the Tri-State University in the area of alternative energy sources.
- Reduces both energy consumption and total energy costs.
- Allows the YMCA to stabilize energy costs and minimize exposure to energy price fluctuations.

Stripco Inc. Steel Processing Center, Osceola, Indiana

NiSource Energy Technologies installed a combined heat and power (CHP) distributed generation system at Stripco located in Osceola, Indiana. The CHP system uses one 60 kW microturbine and heat exchangers that use natural gas to generate electricity to the building. In addition, the system's by-product heat supplements the heat for various work stations within the plant and the office building. The recovered heat energy from the micro turbine displaces a large portion of the current electrical heating requirements needed to maintain the mill oil temperature. It can provide limited power back-up to administration building in the event of an extended electrical grid power failure.

Key Benefits:

- Reduced annual energy costs by approximately \$60,000.

- Provides additional environmental benefits for Stripco Inc.
- Creates improved gas load profile, allowing for increased gas price options.
- Promotes innovation and cross community educational opportunities by being the early adopter of new state-of-the-art technology.
- Produces a high heat utilization factor
- Provides back-up power for the plant and administration building during an outage.
- Eliminates lost sales due to outage down time.
- Improves worker productivity and plant safety.
- Improves final product quality due to ability to raise the oil temperature on a consistent basis.

These projects demonstrate the numerous benefits of installing CHP, not just for large industrial companies, but also for smaller facilities. These systems provide not only cost and energy savings, but also environmental benefits, power reliability and other community benefits. For more information about NiSource, visit www.nisource.com.

Encouraging cost-effective CHP Projects: the EPA's CHP Partnership



CHP offers energy and environmental benefits over electric-only systems in both central power generation and distributed generation applications. CHP achieves increased efficiency in fuel use, reduced emissions of air pollutants and greenhouse gases, and enhanced reliability of the electrical grid. CHP can be used with a variety of technologies for industrial,

commercial and even residential applications.

What is Combined Heat and Power?

CHP is the sequential or simultaneous generation of two different forms of useful energy – mechanical and thermal - from a single primary energy source in a single, integrated system. CHP systems usually consist of a prime mover, a generator, a heat recovery system, and electrical interconnections configured into an integrated whole. The prime mover is any engine used to convert fuel to shaft power or mechanical energy. The generator converts the mechanical energy into electricity. The heat recovery system captures and converts the energy in the prime mover's exhaust into useful thermal energy. The mechanical energy from the prime mover is most often used to drive a generator for producing electricity, but may also drive rotating equipment such as compressors, pumps and fans. The thermal energy from the heat recovery system can be used either for direct process applications or indirectly to produce steam, hot water, hot air for drying or chilled water for process cooling.

By combining the electrical and thermal energy generation in one process, CHP systems can achieve overall effective electrical efficiencies of 50-70% as compared with an average 33% efficiency for simple electric generation. CHP requires at least 35% less fuel than traditional electricity and steam production.

About the Partnership

The CHP Partnership is a voluntary program designed to foster cost-effective CHP projects. Through the Partnership, EPA engages the CHP industry, state and local governments, and other stakeholders in cooperative relationships to expand the use of CHP.

What CHP Tools and Services Does EPA Offer?

EPA is developing tools and services designed to facilitate Partners' development of CHP projects. The Partnership's tools and services fall into five general categories:

- Market development and enhancement.
- Public recognition of Partners.
- Outreach and educational tools and services.
- Technical assistance to aid CHP project development.
- Assistance with regulatory policies and permitting.

To assess whether one of your facilities is a good candidate for CHP, consider the following questions:

1. Do you pay more than \$.06/ kWh on average for electricity (including generation, transmission and distribution)?
2. Are you concerned about the impact of utility costs on your business or future rate increases?
3. Is your facility located in a deregulated electricity market?
4. Are you concerned about black-outs? Is there a substantial financial impact to your business if the power goes out for 1 hour? For 5 minutes?
5. Does your facility operate for more than 5000 hours/ year?
6. Do you have a fairly constant thermal load (steam, hot water, chilled water, hot air, etc.)?
7. Does your facility have an existing central plant?
8. Do you plan to replace, upgrade or retrofit central plant equipment?
9. Do you have a facility expansion or new construction project planned?
10. Have you already implemented demand side management and still have high energy costs?
11. Are you interested in reducing your facility's impact on the environment?

If you have answered “yes” to 3 or more of these of these questions, your facility may be a good candidate for CHP. The EPA CHP Partnership offers free Level 1 Feasibility analysis services for some projects and can make referrals to others who perform these types of analyses. For more information on this service, please call Kim Crossman, Program Manager, EPA CHP Partnership at (202) 343-2208 or send an email to crossman.kim@epa.gov with any questions or for more information on technical support services.

Interested in learning more?

If you are interested in joining or just learning more about the CHP Partnership, visit their website at www.epa.gov/chp or e-mail chpteam@epa.gov. The team will call you to discuss your interests and the requirements and benefits of joining the CHP Partnership.



Climate Leaders News:

The following Climate Leaders Partners have recently announced GHG reduction goals:

The Collins Companies of Portland, Oregon pledges to reduce total U.S. greenhouse gas emissions by 18% from 2000 to 2010.

First Environment, Inc. of Riverdale, New Jersey pledges to reduce and offset their U.S. greenhouse gas emissions to achieve zero net emissions by 2008.

Hasbro, Inc. of Pawtucket, Rhode Island pledges to reduce total U.S. greenhouse gas emissions by 30% from 2000 to 2007.

Roche Group US Affiliates of Basel, Switzerland pledges to reduce total U.S. greenhouse gas emissions by 10% from 2001 to 2008.

Climate Leaders welcomes the following new Partners:

Johnson Controls, Inc. Milwaukee, Wisconsin

Johnson Controls, Inc., is a global market leader in automotive systems and facility management and control. Johnson Controls, founded in 1885, has headquarters in Milwaukee, Wisconsin and operates in over 66 countries. Its sales for 2003 totaled \$22.6 billion.

Noble Corporation Sugar Land, Texas

Noble Corporation, founded in 1921, is a leading provider of diversified services for the oil and gas industry worldwide. Noble performs contract drilling services with a growing fleet of premium assets including semisubmersibles, drillships, jackups and submersible rigs.

Oracle Corporation Redwood Shores, California

Oracle is the world's second largest independent software company, whose technology can be found in nearly every industry around the world and in the offices of 98 of the Fortune 100 companies. Oracle is the first software company to develop and deploy 100 percent internet-enabled enterprise software across its entire product line: database, business applications, and application development and decision support tools.