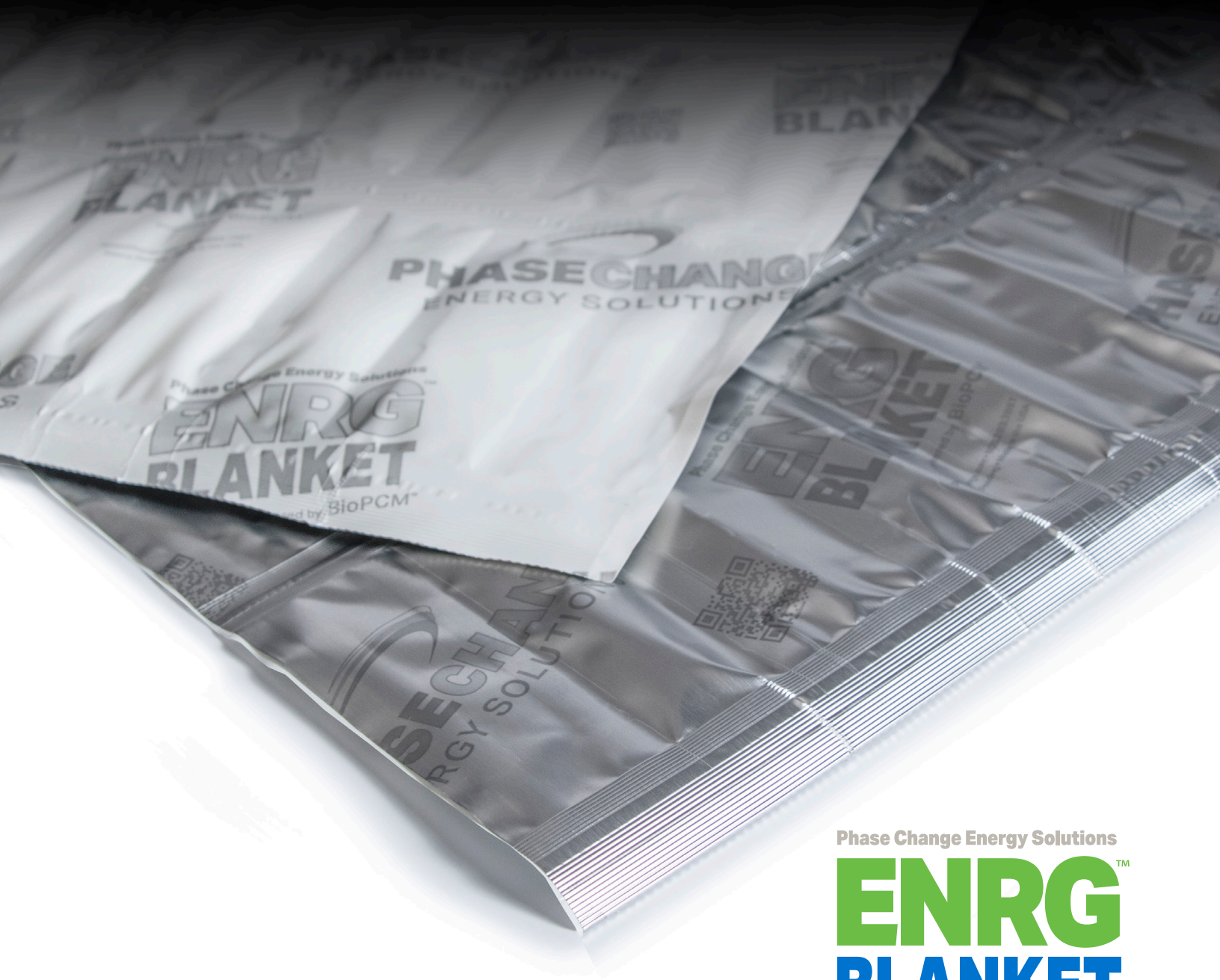


Phase Change Energy Solutions

ENRG BLANKET™

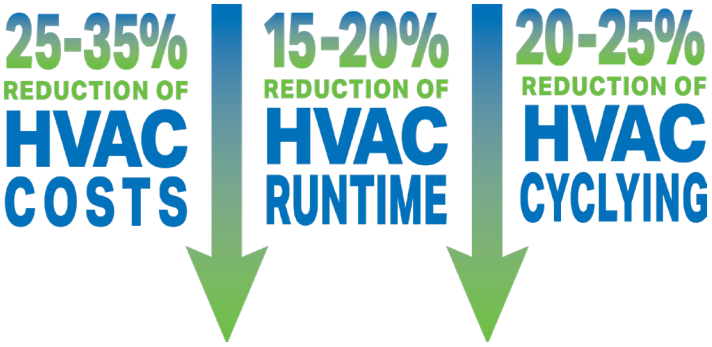
powered by BioPCM®

ENRG Blanket™ goes to work immediately to save energy and reduce carbon emissions

ENRG Blanket is a proven cost-effective solution for reducing energy costs. Non-toxic and non-corrosive, BioPCM® is a sustainably sourced plant-based phase change material.

PHASECHANGE
ENERGY SOLUTIONS

ENRG Blanket™ is powered by BioPCM®, a proprietary phase change material developed and manufactured by Phase Change Energy Solutions



ENRG Blanket is a proven and cost-effective means to reduce energy consumption. It works together with traditional HVAC units, reducing HVAC power consumption by 25-35%, run time by 15-20% and cycling frequency by 20-25% (depending on building type, orientation, age, location and equipment make and age) — all while maintaining a consistent and stabilized temperature in accordance with industry standards.

In most locales, savings from ENRG Blanket will return its fully-installed cost in less than four years, and in many cases less than three. Additional savings are realized through peak load shifting in locales that charge demand fees, increased HVAC life-expectancy and reduced maintenance and repair costs.

ENRG Blanket consumes no power and requires no maintenance to provide consistent power energy savings over its estimated useful life of more than 100 years.

After years of testing and thousands of installs, representing millions of square feet globally, our customers consistently experience HVAC energy expense reductions of up to 40%. These results have been replicated in existing building renovation and new construction, globally.

The quick, simple installation process can be achieved using only 4 people with two step ladders at a rate of approximately 1,000 square feet per hour for a typical drop ceiling installation. ENRG Blanket has been installed in a variety of applications including several of the world's largest banks, one of America's premier school districts, multiple military bases and the offices of Fortune 100 companies.

Ice is a phase change material

By increasing efficiency, ENRG Blanket can help your team reduce operating expenses and free up resources to support growth, while also addressing global and corporate concern about the impact of power consumption on CO^2 emissions, air pollution and climate change.

Phase change materials (PCMs) are substances that store and release thermal energy as they transistion from one phase to another. During a phase change, molecules rearrange themselves and cause an entropy change that results in the absorption or release of latent heat, meaning the temperature of the material itself remains constant as a great deal of energy is absorbed before melting, and released before freezing.

When heat is applied to a block of ice, the ice and resulting melted water remain at or near 32°F until the phase change is complete, (there is no more ice). The heat is absorbed as latent heat until the ice completely changes phase into water.

Conversely, when heat is removed from a pool of water, the temperature of the water and resulting ice will not fall below 32°F until the water completely changes phase into ice.

Phase Change Energy Solutions designed BioPCM to absorb and release enormous amounts of heat during phase changes. At its target temperature, the BioPCM within a less than one-inch thick ENRG Blanket will store as much heat as a 24-inch thick block of concrete of equal footprint.

BioPCM® is manufactured using sustainably-grown, plant-based by-products, is non-toxic, non-corrosive and has a demonstrated useful life of over 100 years.

Microscopic image of BioPCM during a phase change transition

Phase Change Energy Solutions

ENRG™ BLANKET

powered by BioPCM®

LATENT HEAT

(Absorption and Release)

Enthalpy curves of BioPCM® (Q25) demonstrate excellent energy storage performance through thousands of phase change cycles.

When ENRG Blanket is installed, the BioPCM inside absorbs heat, (melts), when ambient temperature exceeds target room temperature, and releases heat, (freezes), when ambient temperature falls below target room temperature.

Through this recurring process, ambient temperature within the managed environment is stabilized around the target room temperature. As a result, less mechanical, (HVAC), cooling is required, and HVAC power consumption is greatly reduced.

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Features & Benefits

REDUCES HVAC POWER CONSUMPTION
ENRG Blanket reduces HVAC power consumption by up to 40%, run time by up to 20% and cycling frequency by up to 25%. Additional savings are realized in locales that charge fees for peak demand electricity usage.

ATTRACTIVE PAYBACK PERIOD
In most locales, savings from ENRG Blanket will return its fully-installed cost in under four years.

NO OPERATING COST, LONG LIFETIME
ENRG Blanket operates passively, requiring no power and no maintenance to provide consistent savings over its useful life of more than 100 years.

EXTENDS HVAC EQUIPMENT LIFETIME
By reducing HVAC runtime and compressor cycling, ENRG Blanket extends HVAC equipment lifetime and reduces repair and maintenance costs.

REDUCES CARBON FOOTPRINT
Recently installed in 1,500+ telecom shelters, BioPCM reduced annual power consumption by more than 10,000,000 kWh — a CO_2 emissions equivalent to 800,000 gallons of gasoline consumed or 7.5 million pounds of coal burned.

EASY AND QUICK INSTALLATION
ENRG Blanket is delivered in 2'x4' sheets that are easy to handle and install. Phase Change Energy Solutions offers full-service domestic installation services through its network of national, certified installers.

RESPONSIBLY MANUFACTURED
BioPCM is non-toxic and non-corrosive and is manufactured using sustainably grown, renewable plant-based by-products.

MADE IN THE U.S.A.
BioPCM is manufactured and packaged in Asheboro, NC.

ENRG Blanket technical specifications

ENRG Blanket Size	24 in x 48 in x 0.5 in
Assembly	Poly/poly film, poly/foil film, foil/foil film
Target Temp	73°, ENRG Blanket Q23 77°, ENRG Blanket Q25 80°, ENRG Blanket Q27 84°, ENRG Blanket Q29
Thermal Storage Capacity	110 BTU/lb (255 J/g)
Fire Rating	Meets or exceeds ASTM E84, UL 723 and ASTM E800-0 99 standards

Phase Change Energy Solutions is a global leader in the development and deployment of next generation energy efficiency and thermal storage solutions that harness the power of BioPCM, the company's proprietary phase change material. BioPCM products are used to improve whole-building energy efficiency in retail, commercial, hospitality and industrial applications; enable safe transport of sensitive food and pharmaceutical products; and provide enhanced thermal storage capacity for industrial processes.

Fortune 100 banking, telecom, hospitality and technology companies, as well as the U.S. government, have installed millions of square feet of BioPCM products to reduce operating expenses and environmental impact.

ENRG Blanket™ 5-year comprehensive warranty

Phase Change Energy Solutions warrants its ENRG Blanket products, (including BioPCM®), to be free from manufacturing defects and defects in workmanship for a period of 5 years from date of sale. Additional terms and conditions apply. Please refer to complete warranty terms.

PHASECHANGE™
ENERGY SOLUTIONS

Install today. Save tomorrow.

To learn more about Phase Change Energy Solutions and our efficiency solutions

visit www.phasechange.com
email info@phasechange.com
or call 800-283-2887 (U.S.)
336-629-3000 (international)