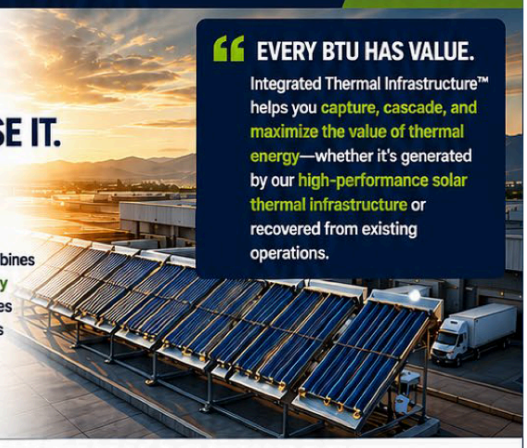
US GAS & ENERGY
INTEGRATED THERMAL INFRASTRUCTURE™

EXECUTIVE BRIEF SERIES
MAXIMIZING THE VALUE OF THERMAL ENERGY™

CS-106

MORE THERMAL ENERGY. MORE WAYS TO USE IT. MORE VALUE FROM EVERY BTU.

Integrated Thermal Infrastructure™ combines high-performance solar thermal energy with available facility heat, then cascades that energy through multiple applications to create greater efficiency, reliability, and financial returns.



EVERY BTU HAS VALUE.

Integrated Thermal Infrastructure™ helps you capture, cascade, and maximize the value of thermal energy—whether it's generated by our high-performance solar thermal infrastructure or recovered from existing operations.

TWO POWERFUL SOURCES. ONE INTELLIGENT SYSTEM.

THERMAL ENERGY INPUTS

HIGH-PERFORMANCE SOLAR THERMAL INFRASTRUCTURE™
On-site generation of high-grade thermal energy from the sun.



AVAILABLE FACILITY THERMAL ENERGY
Recoverable heat from refrigeration systems, equipment, and operations.



INTEGRATED THERMAL INFRASTRUCTURE™

CAPTURE. CASCADE. MAXIMIZE.

Advanced controls and thermal storage deliver the right energy to the right place at the right time.

MULTIPLE ENERGY RETURNS

ORC / STIRLING POWER GENERATION
Convert high-grade heat to on-site electricity.

ABSORPTION COOLING
Heat-driven cooling without high electrical use.

HOT WATER
Domestic hot water for facilities and operations.

SPACE HEATING
Comfort heating for buildings and spaces.

PROCESS HEAT
Consistent, reliable heat for industrial processes.

THERMAL STORAGE
Store energy for use day or night.

OTHER APPLICATIONS
Green hydrogen, desalination, snow melting, and more.

MORE HEAT. MORE CAPACITY. GREATER POTENTIAL.

The greater the available thermal capacity, the greater the opportunity. More heat enables higher power output, more cooling, and greater returns across your operation.



THE BENEFITS FLOW THROUGH YOUR BUSINESS.

LOWER OPERATING COSTS
Reduce purchased electricity, fuel, and water costs.

GREATER ENERGY SECURITY
On-site generation and storage improve resilience.

ENHANCED FINANCIAL RETURNS
Turn existing and solar-generated heat into measurable profitability.

REDUCE CARBON FOOTPRINT
Lower emissions and support sustainability goals.

OPERATIONAL FLEXIBILITY
One system supports many needs—today and tomorrow.

DISCOVER THE POWER OF THERMAL ENERGY

See how Integrated Thermal Infrastructure™ can unlock the full potential of your facility. Capture more. Use more. Profit more.

THERMAL ASSESSMENTS
Identify opportunities. Quantify potential.

CUSTOM SOLUTIONS
Engineered for your facility, your goals, your future.

LIFETIME SUPPORT
Performance that continues delivering value for decades.

CS-106 MODULE | ALL INDUSTRIES MULTIPLE APPLICATIONS | CEO | CFO AUDIENCE Strategy | Operations | Sustainability | USGasAndEnergy.com