

TRANSCRITICAL CO₂ BOOSTER WITH PARALLEL COMPRESSION & EJECTORS (TCBPE)

TOTAL COST OF OWNERSHIP (TCO) &
RETURN ON INVESTMENT (ROI) ANALYSIS

DELIVERING SHORT PAYBACK & LONG-TERM SAVINGS



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Cost Savings Opportunities

FINANCIAL BENEFITS OF CHOOSING A TCBPE CO₂ SYSTEM

- Utility/government rebates available in many areas
- Improved temperature stability resulting in enhanced product appearance and life
- Significant lifetime refrigerant savings
- Savings with installation materials and labor
- A 5-10% energy use savings over HFC's
- NO leak management programs and fines for failure to comply
- NO phase-out and retrofit potential with current regulations



TRANSCRITICAL CO2 (TCBPE)

TCO Evaluation

KEY INPUTS FOR TCO/ROI CALCULATOR

Store Information		
Location information	Atlanta, GA	
MT loads	460	kBtu/hr
LT loads	220	kBtu/hr
System life	20	years
Square footage	40,000	sqft
Refrigeration Information		
HFC charge (407A)	2700	Lb
CO ₂ charge	700	Lb
Annual leak rate	15	%
HFC cost (R-404)	\$10.00	Lb
New HFC cost (after a retrofit)	\$11.00	Lb
HFC annual cost increase	25	%
CO ₂ cost	\$2.50	Lb
CO ₂ annual cost increase	3	%
HFC Install/Service Costs		
Install material cost (no refrigerant)	\$4.38	Sqft
Install labor costs	\$6.80	Sqft
Annual service costs (no refrigerant)	\$0.24	Sqft
Annual service cost increase	3	%
Reduced spoilage cost	\$0.30	Sqft
Retrofit costs	\$2.88	Sqft
Energy/Environmental Costs		
Energy costs	\$0.10	KWh
Annual HFC electrical use	1,524,420	Total KWh
Annual energy inflation	2.9	%
Energy savings with TCBP	10	%
Energy rebate of equip costs	-7	% of total

Trans-critical CO₂ Booster versus R-407A HFC System

CO₂ systems with case controllers pull down faster than HFC. This helps improve the appearance and quality of many refrigerated foods boosting shelf life and taste.

Energy savings of 10% from TCBPE CO₂ system

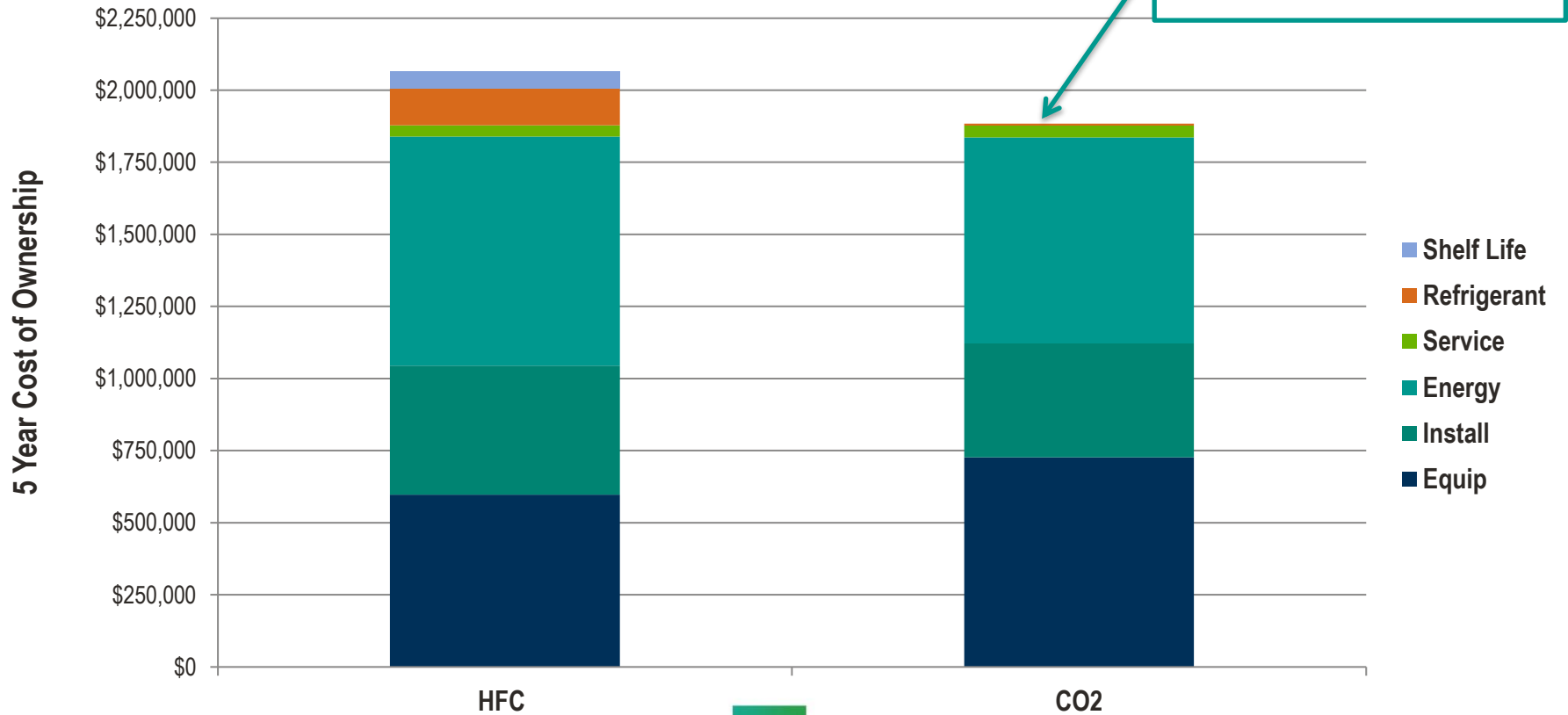
Eligibility for rebate from Georgia Power of at least 7% of equipment costs due to energy savings and GWP reduction

Based on historical HFC refrigerant cost trends
New HFC refrigerant price price after a retrofit

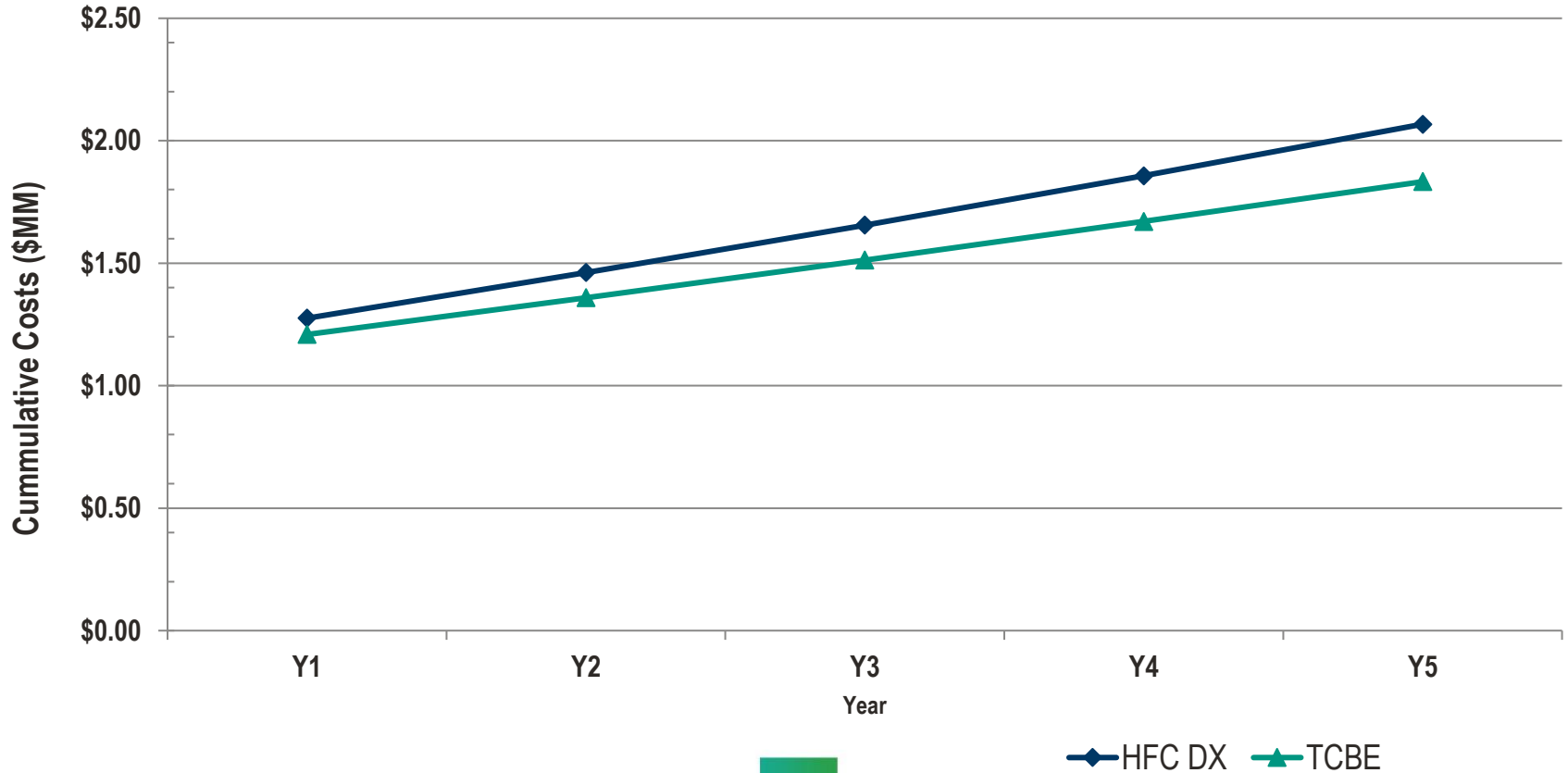
CO₂: Install material costs are 15% lower due to reduced material costs (fittings and piping)
Electrical labor costs are 10% less due to factory wiring of many components with case controllers

TCBPE COST ADVANTAGE

5 YEAR - COST OF OWNERSHIP

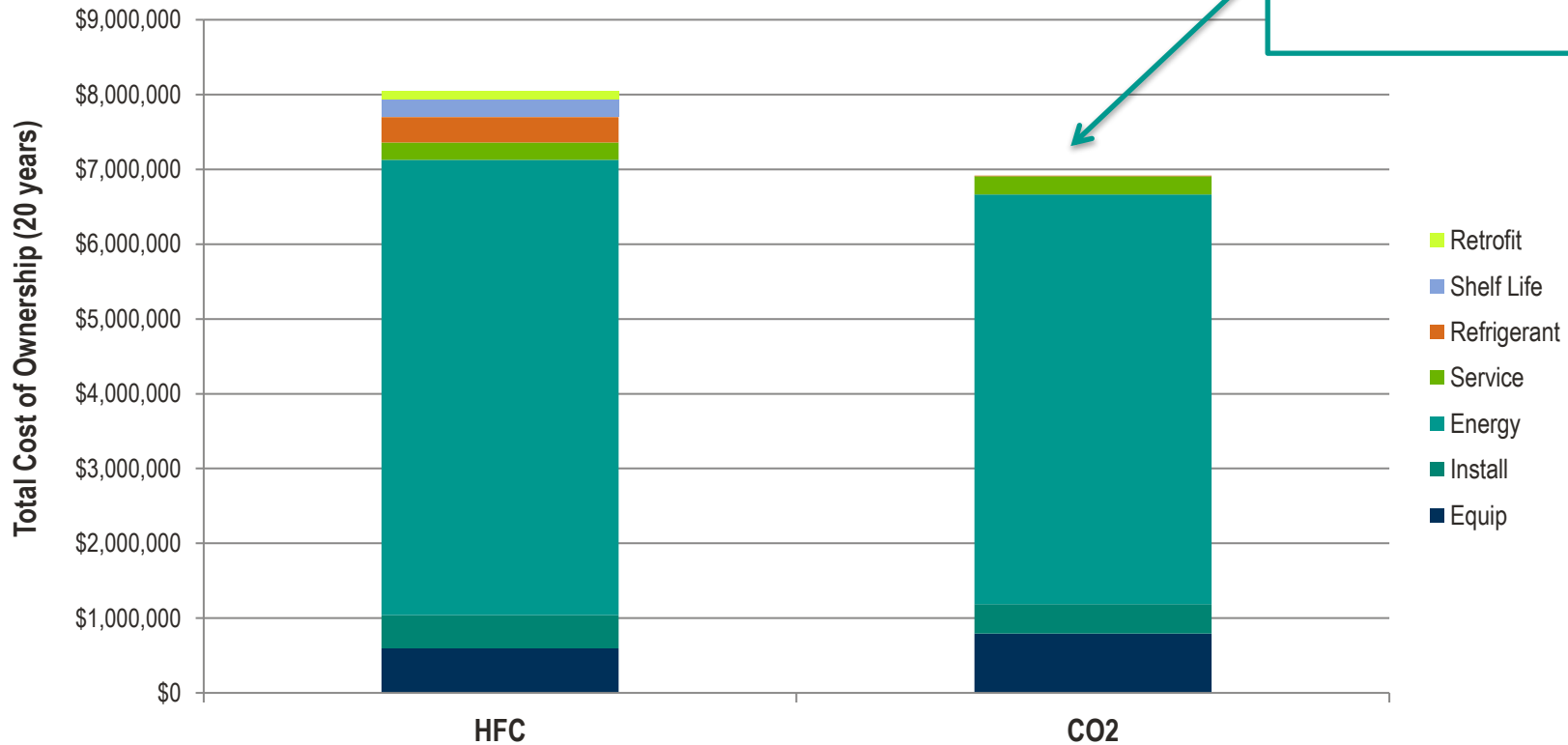


5 YEAR COST SAVING WITH TCBPE SYSTEM



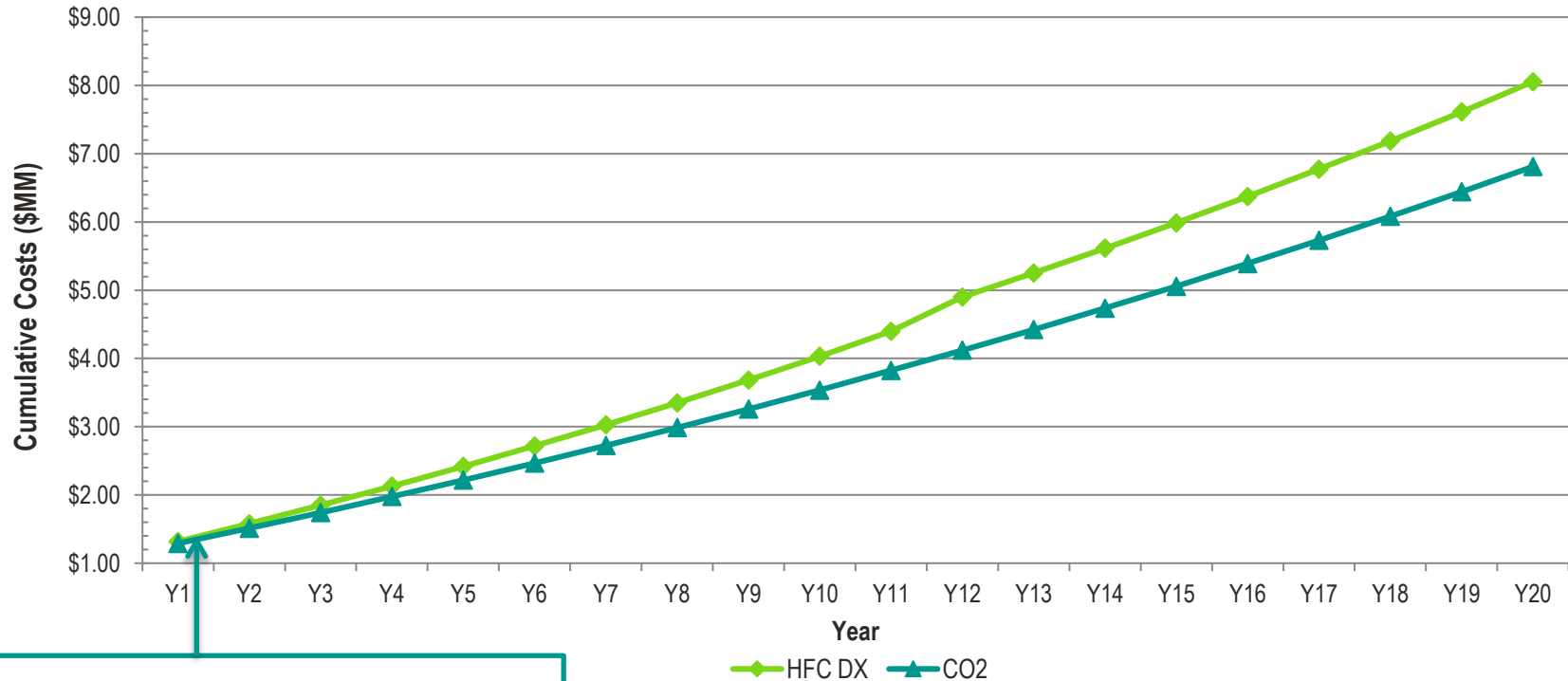
TCBPE COST ADVANTAGE

TOTAL COST OF OWNERSHIP (20 YEAR LIFE)



\$1.2 Million in Lifetime Savings
~\$60,000 in Annual Savings

PAYBACK & ADDITIONAL LIFETIME SAVINGS WITH CO₂ TCBPE



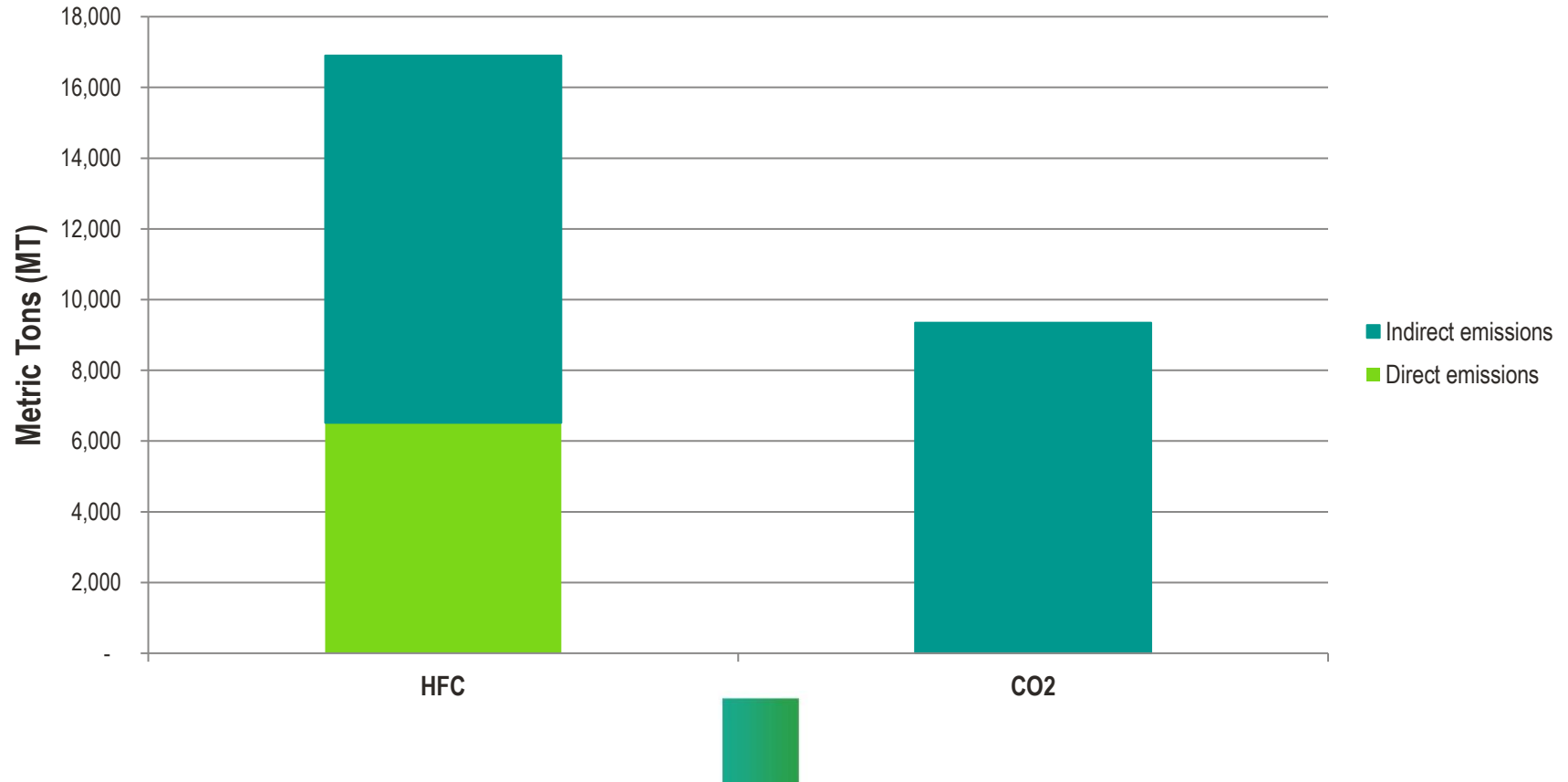
Immediate Payback
With rebate of 7% of equipment costs (\$50K),
initial costs could be less than HFC R-407A
system



Environmental Benefits

20 YEAR LIFE CO₂ EQUIVALENT EMISSIONS

CO₂ Delivers A Significant Sustainability Impact



Understand Your Choices

ENSURE YOU REAP THE BENEFITS WITH YOUR CO₂ SYSTEM

Experience the SleepWellSM Natural Refrigerant Promise

- **Classroom and hands-on training for contractor and retailer staff**
- **On-site start-up and commissioning support**
- **Ready trouble-shooting assistance**
- **Clear and comprehensive manuals and drawings for responsive repair**
- **Parts support for system components**
- **Tried-and-true global platform**

Begin Your Journey to Trouble-Free Savings Today

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