



# Environmental Sustainability Program

Case Studies & SION60

# Sustainability Projects

## Framing Sustainability Projects

**Leadership engagement at Vail Health initially centered on:**

- Financial sustainability
- Regulatory and compliance considerations

**Sustainability gained traction by being presented as:**

- Cost savings & avoidance
- Risk management
- Regulatory readiness

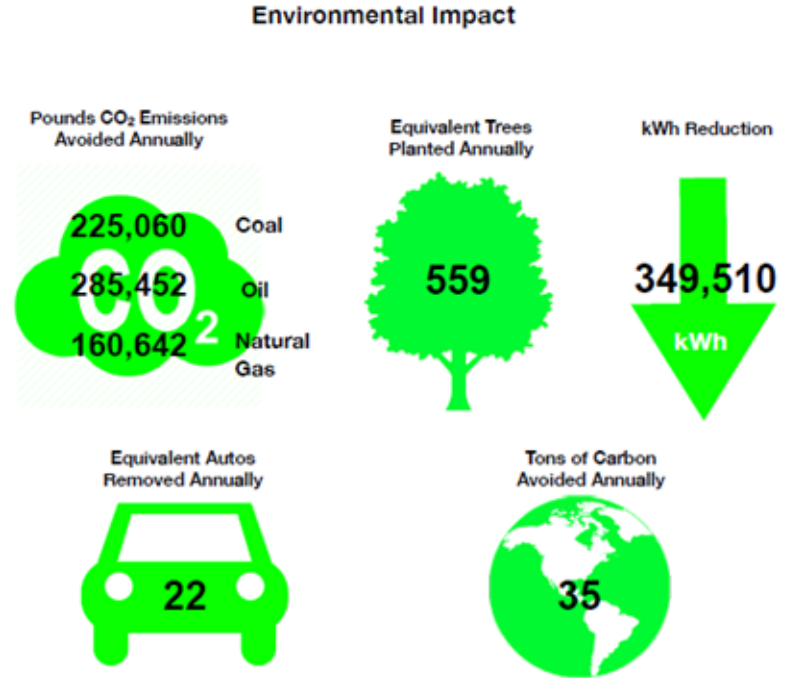
**Public policy and ordinances can be the best way drive change that does not have a strong ROI**



# Vail Health Case Study- LED Retrofit

## Why LED Retrofit?

- Compliance
  - Fluorescent ban in Colorado
  - Meet state EUI Standards
- Energy Savings
  - Financial Sustainability
  - 70% reduction in operational cost
  - ROI 2.93 years
- Rebates
  - State & federal rebates are shrinking

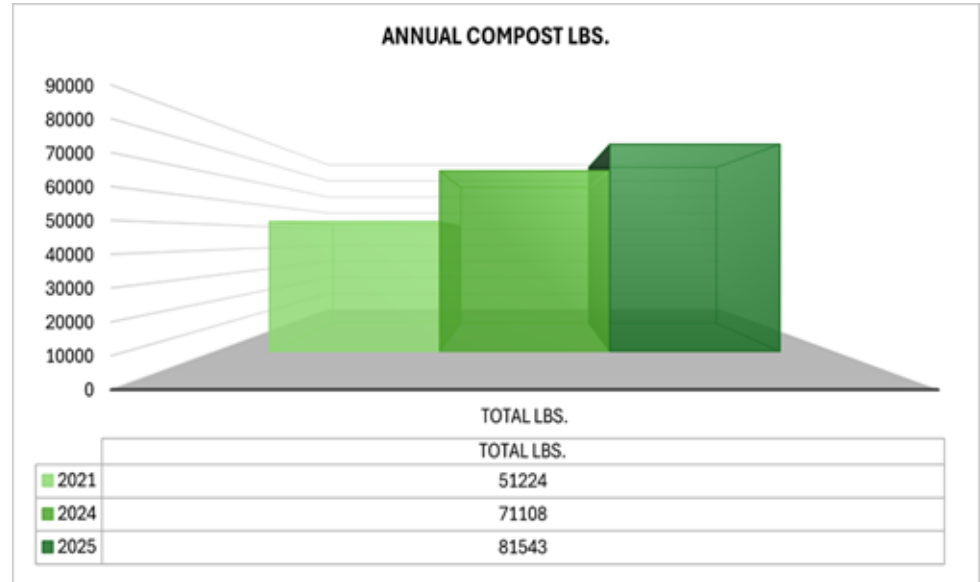


# Vail Health Case Study- Composting

Why was composting selected as an early initiative?

## Implementation

- Worked to educate staff
- Key lessons learned and early outcomes
- Composting 14.67% increase from FY24-25
- No data for FY2022-23



# SION60 & Vail Health

Vail Health engaged & invested in SION60 in 2024 to assess the following:

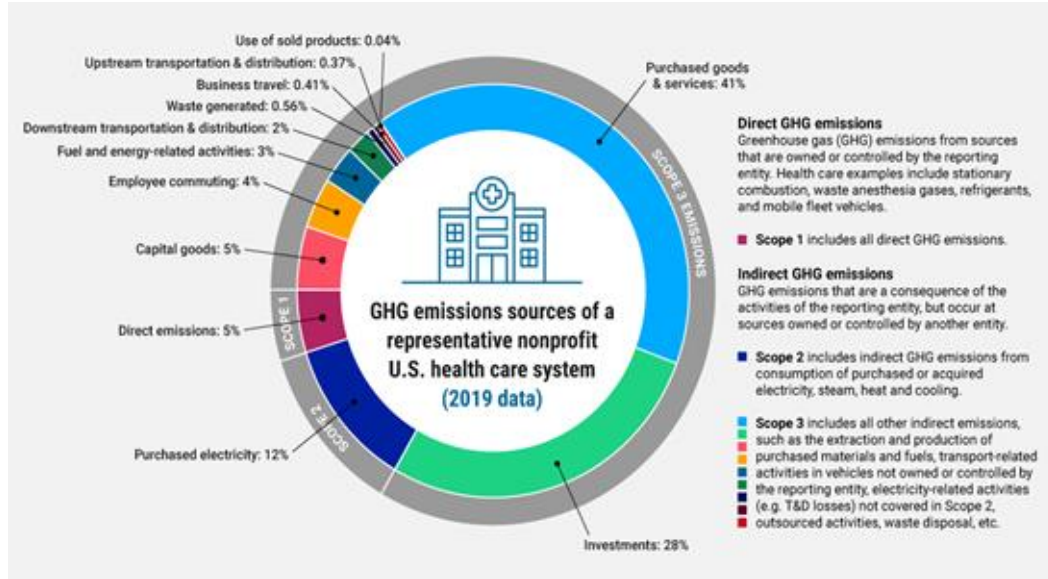
- Carbon footprint
- Energy use
- Emissions

Vail Health Sustainability Department focuses on best practices in the following areas:

- Green teams
- Anesthesia gas
- Compost & waste reduction

There is opportunity to reduce pollution and costs in:

- Electricity
- Natural Gas
- Vehicle fuels
- Supply chain



Source: PracticeGreenhealth, Project Engie, 2019 data



Entities  
1



Facilities  
7



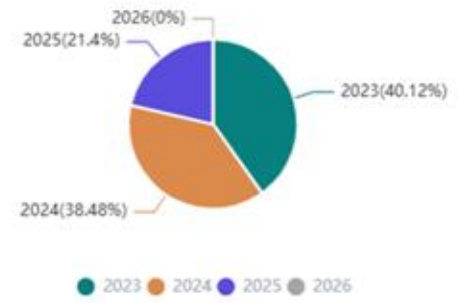
Departments  
1

### All Emissions by Scope (2025)



Total emissions in 2025: **11,183.46** MTCO<sub>2</sub>e

### Total Emissions



### Energy Use Intensity (EUI) (2025)



● Purchased Electricity :308.64 kBTu/sq.ft./yr ● Natural Gas :464.1 kBTu/sq.ft./yr

### EUI Projects

[Browse All](#)

PROJECT NAME	EUI REDUCTION POTENTIAL (IN POINTS)	SITEWIDE SAVINGS (IN %)	PAYBACK PERIOD
CHILLER REPLACEMENT	3 - 7	1 - 25	1 - 25

🔍 Search by Year, Facility, Project...

Year  
2025

Facility  
Vail Health Hospital



EUI CALCULATOR

#	YEAR	FACILITY	PROJECT NAME ↑	ACTUAL EUI (IN KBTU/SQ. FT./YEAR)	NATURAL GAS SITEWIDE SAVINGS (IN USD)	PURCHASED ELECTRICITY SITEWIDE SAVINGS (IN USD)	WATER MANAGEMENT SITEWIDE SAVINGS (IN USD)	EUI AFTER REDUCTION (IN KBTU/SQ. FT./YEAR)	ACTIONS
1	2025	Vail Health Hospital	AIRSIDE ECONOMIZATION FREE COOLING	105.03	4105.74	8999.54	0.00	104.03	⋮
2	2025	Vail Health Hospital	CHILLER PLANT STAGING	105.03	4105.74	8999.54	0.00	104.03	⋮
3	2025	Vail Health Hospital	HYDRONIC DIFFERENTIAL PRESSURE RESET	105.03	2052.87	4499.77	0.00	104.53	⋮
4	2025	Vail Health Hospital	CONDENSER WATER TEMPERATURE RESET	105.03	2052.87	4499.77	0.00	104.53	⋮
5	2025	Vail Health Hospital	DEMAND CONTROLLED VENTILATION	291.12	4105.74	8999.54	0.00	104.03	⋮
6	2025	Vail Health Hospital	HOT WATER SUPPLY TEMPERATURE RESET	186.09	4105.74	8999.54	0.00	185.09	⋮
7	2025	Vail Health Hospital	SCHEDULING, SETBACKS, & AIR CHANGE REDUCTION	291.12	20528.72	44997.72	0.00	100.03	⋮
8	2025	Vail Health Hospital	DUCT STATIC PRESSURE RESET	105.03	4105.74	8999.54	0.00	104.03	⋮



Search by Name..



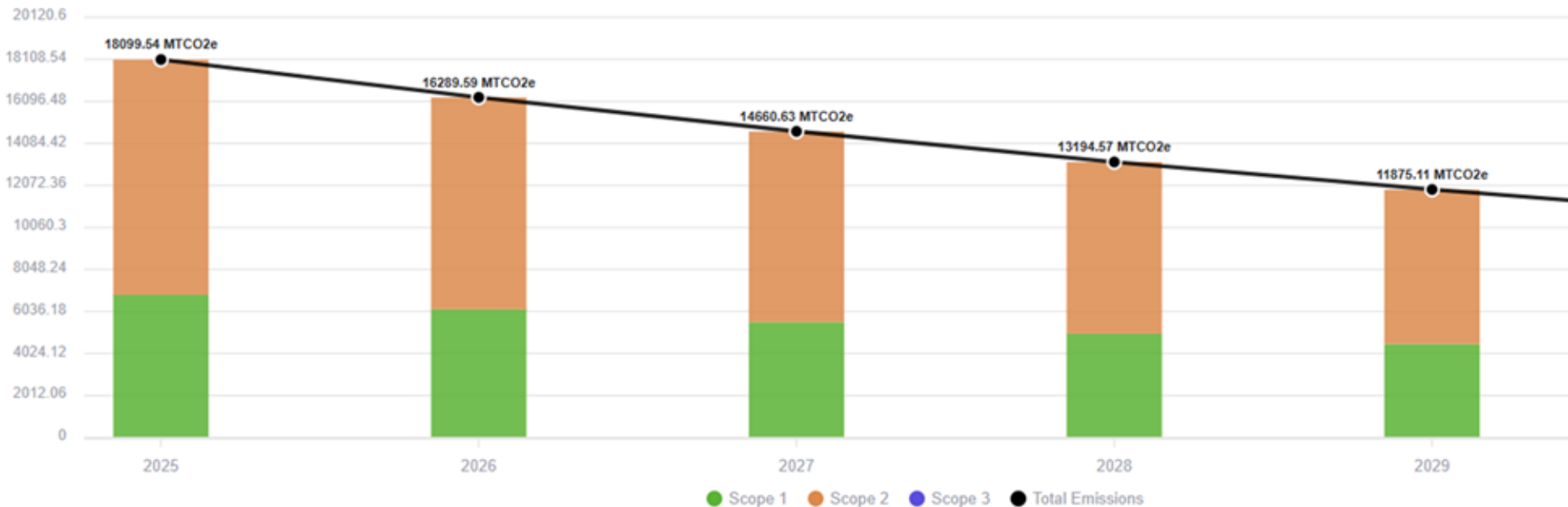
REFRESH

#	NAME	EUI REDUCTION POTENTIAL (IN POINTS)	SITEWIDE SAVINGS (IN %)	PAYBACK PERIOD	PAYBACK PERIOD TYPE
1	CHILLER REPLACEMENT	3 - 7	1 - 25	1 - 25	Years
2	COOLING TOWER REPLACEMENT	1 - 3	1 - 5	12 - 20	Years
3	VARIABLE FREQUENCY DRIVES	1 - 3	1 - 5	1 - 3	Years
4	LIGHTING UPGRADE	1 - 5	5 - 15	3 - 8	Years
5	WATERSIDE ECONOMIZATION	5 - 15	5 - 10	3 - 7	Years
6	DIRECT DIGITAL CONTROL DDC - BUILDING AUTOMATION	5 - 15	8 - 10	10 - 15	Years
7	BOILER REPLACEMENT	5 - 15	8 - 12	10 - 20	Years
8	COMMISSION OUTSIDE AIR MINIMUMS	2 - 5	5	1 - 2	Years
9	SUPPLY AIR TEMPERATURE RESET	2 - 5	2 - 4	1 - 12	Months
10	DUCT STATIC PRESSURE RESET	1 - 2	1 - 2	1 - 12	Months
11	SCHEDULING, SETBACKS, & AIR CHANGE REDUCTION	5 - 20	5 - 10	1 - 12	Months

← Projections

Projection Year: 
 Choose Scope: 
 2024 Emission (MTCO<sub>2</sub>e)\*: 
 Enter Reduce % Emission: 
 Select Target Year\*:

Reductions by Year | Scope



# Summary

- Vail Health partnered with SION60 to advance sustainability through data-driven, financially aligned initiatives
- Early projects (LED retrofits and composting) delivered measurable cost savings, compliance readiness, and staff engagement
- Sustainability is now embedded as a long-term strategy supporting operational efficiency, community values, and environmental impact



