REDUCE

Reduce emissions and energy costs with AI-powered HVAC for your retail portfolio

Small and medium sized buildings make up a significant part of the commercial building stock which accounts for nearly half of global energy usage. HVAC systems in buildings are responsible for **40%** of this energy consumption, yet **30%** is wasted due to inefficient operations.

BrainBox AI's AI-driven, cloud-based HVAC optimization solution connects to your existing HVAC systems and autonomously sends real time control commands to minimize HVAC-related emissions and energy consumption.

BrainBox AI Value Creation:

Up to 40% reduction in HVAC carbon emissions ↓ -40%	• Accelerate reduction in scope 1 & 2 emissions • Meet or exceed your ESG targets • Access and track your unique emissions data • Comply with energy efficiency and emissions limits
Up to 15% reduction in store OPEX/utility/ maintenance costs ↓ -15%	• Improve your OPEX across stores through HVAC energy cost reduction • Decrease maintenance costs and service calls
Up to 60% improvement in customer comfort and dwell time ↑ 60%	• Improve air quality for customers and associates • Improve customer experience and dwell time
Up to 50% extension of equipment service life ↑ 50%	• Reduce equipment runtime • Increase ROI on existing assets and defer CAPEX replacement

Increase appeal

- Improve the look and feel of your space with sleek, modern thermostats (if required)

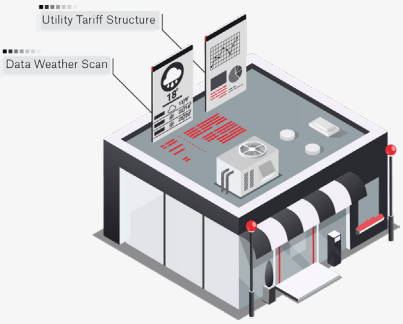
Preserve product quality

- Preserve optimal product quality and avoid product waste with humidity and dew point optimization

Improve associate experience

- Obtain visibility of store temperatures and remote control of setpoints
- View carbon emissions and energy consumption reduction portfolio-wide

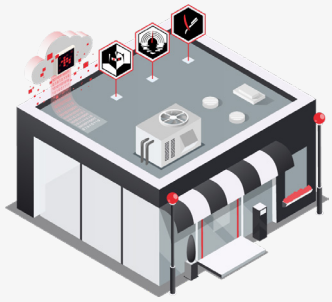
How it works



STEP 1

MAPPING AND LEARNING

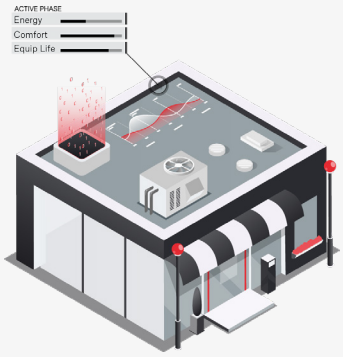
- Connects to your HVAC system through your existing networked control system or via the implementation of cloud-connected AI-enabled thermostats
- Maps your system's point names using industry-standard Haystack tagging and normalises the data set
- Runs virtual tests to choose the algorithms that are right for your building based on its unique thermal behavior



STEP 2

REAL-TIME OPTIMIZING

- External information such as current and forecasted weather as well as utility tariff structures are fed to our AI engine
- Predicts the future state of your building with 99.6% accuracy to guide decision-making
- Writes back to individual pieces of HVAC equipment, making necessary adjustments every 5 minutes
- Optimizes RTU coordination, humidity & dewpoint control (when applicable), and demand control ventilation



STEP 3

CONTINUOUSLY IMPROVING

- Observes and learns how the building evolves with changing climate patterns, while also adapting to upgrades or changes in HVAC equipment
- 24/7 monitoring service keeps track of key alarms and potential issues ensuring optimized HVAC equipment usage

"At SAIL we are all outdoor enthusiasts. We believe it's our responsibility to contribute to the fight against climate change. Making our HVAC more efficient with BrainBox AI is a great step forward. The results in the pilot store were quite successful. We saw a reduction of our utility spend, the ability to reduce carbon footprint, and an overall comfort increase for our clients and employees."

SAIL

Nicolas Gaudreau | VP Marketing, SAIL

Access full SAIL Outdoors case study

"The scalability and impact of BrainBox AI has really helped us in the race against climate change. We are very proud of this partnership and our journey. In a few months, the initial 20 locations have seen a 26% reduction in HVAC electricity use and 25% in HVAC carbon emissions."

SleepCountry

Craig De Pratto | CFO, SLEEP COUNTRY CANADA

Access full Sleep Country case study