



Carbonsight
by Autocase

Carbonsight Case Study

Real estate investment company
builds cost-effective carbon roadmap
using Carbonsight

PREPARED BY

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About Carbonsight:

[Carbonsight](#) is a revolutionary real estate portfolio decarbonization tool designed to assist building owners and sustainability managers in their journey towards net zero carbon.

By leveraging advanced analytics and cutting-edge technology, Carbonsight enables sustainability teams and real estate organizations to identify, analyze, and develop a plan to reduce their properties' carbon footprint cost effectively.

This case study highlights the impact that Carbonsight offered to a building owner with approximately 150 properties across the country.

Case Study Client Profile:



Name: NDA Real Estate Firm ("GreenRE") with their on-call sustainability consultant



Type: Mid-sized real estate investment and management company



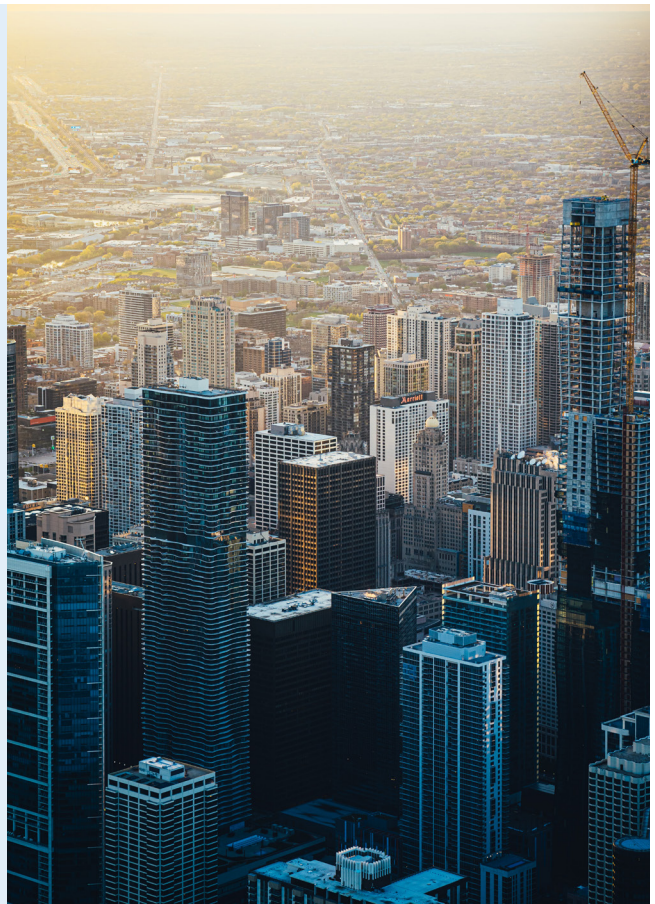
Portfolio Size: 100-250



Geographical Distribution: Nationwide, USA



GreenRE invests in properties across multiple product types including office, retail, and residential among others.



Client Objectives:

GreenRE recognized the growing importance of environmental sustainability and set a goal of reducing building-related operational carbon emissions (scope 1 and 2) by 50% within 10 years.

Client Challenges:

Lack of centralized data:

With over 100 properties located throughout the U.S., GreenRE struggles with collating and analyzing energy consumption data from their various properties into one place. The absence of a centralized system hindered their ability to assess overall portfolio performance and prioritize properties that were ripe for retrofits.

No meaningful plan of action:

While GreenRE had identified high level policies & strategies that could help reach their firm-wide emissions target, they did not have an asset-by-asset plan of action to meet the portfolio goal. In addition, they needed an implementation plan that was cost effective and adaptable over time as their portfolio grew.

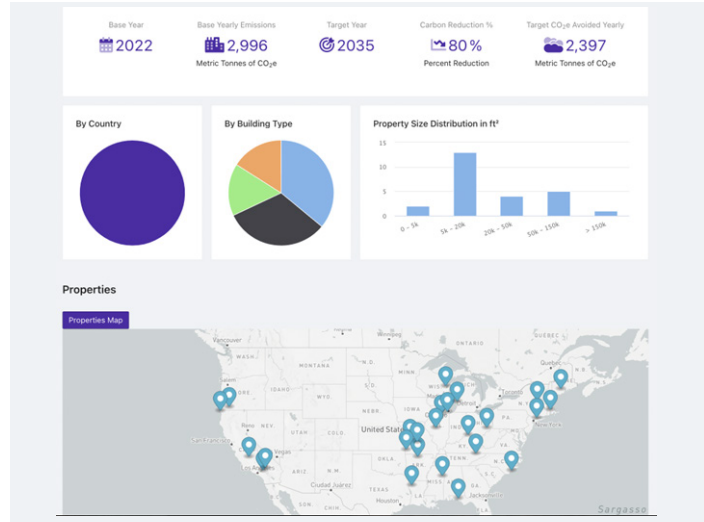
Time-consuming processes:

GreenRE's sustainability consultants were using spreadsheets as a way to manually deliver this work. The team wanted a streamlined solution that allowed them to (1) save time finding location-based emissions, (2) avoid errors calculating results, and (3) allow for a dynamic results dashboard to filter by their unique property & fund characteristics.

Solution: Carbonsight Implementation

GreenRE partnered with their on call sustainability consultant to leverage Carbonsight to create a comprehensive real estate decarbonization plan tailored to their specific portfolio.

The Carbonsight platform offered the following key features:



1. Data Centralization:

- With the property data that was readily available, the client was able to add it into Carbonsight using one of its easy upload features.
- Carbonsight's default energy baselines were able to provide robust energy baselines for the properties that had incomplete historical energy use data.
- Carbonsight's location-based utility rates, grid emission factors, and future projections saved time having to find these for each property location.

2. Ready-made platform:

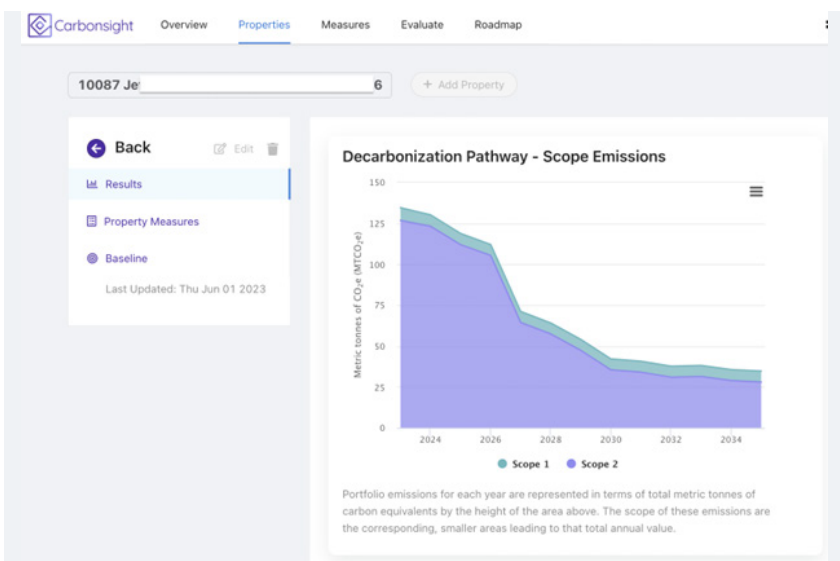
- Carbonsight's ready-made platform overcame the hurdle of creating a tool from scratch in spreadsheets. The tool allowed the sustainability consultant to add decarbonization measures for each asset, along with their upfront cost, then quickly compare their impact on a CO₂ and ROI basis.
- Carbonsight's iterative workflow enabled the consultant to build a roadmap and adapt it on-the-fly based on GreenRE's feedback in order to develop a portfolio-wide decarbonization plan that would hit targets on-time and within budget.

3. Filter by fund and other property characteristics:

a. Carbonsight’s results dashboard allowed GreenRE to filter the roadmap based on things like location, asset type, and other unique characteristics to instantly see how the decarbonization impacts compare across typology and climate zone. They were also able to use the dashboard to disentangle emissions by the whole building, individual tenant spaces, and landlord spaces.

4. Portfolio-wide plan as well as individual property plan:

a. Each property has its own capital budget for decarbonization. Carbonsight was able to drill down from the portfolio-wide view into each individual property to assess each asset’s decarbonization pathway and cost.



Carbonsight Decarbonization Pathway:
 Visualize Scope 1 & Scope 2 portfolio emissions for each year of the decarbonization pathway.

Carbonsight Financial Results:

Deep dive into key financial levers including capital costs, operational utility costs and more.



Results and Benefits:

1. Portfolio & Asset-by-Asset Implementation Plan:

a. Using Carbonsight, the sustainability consultant was able to deliver an interactive, robust, and adaptable asset-by-asset decarbonization plan of action for the entire 100+ asset portfolio in less time than using spreadsheets.

b. Because GreenRE has individual budgets for each asset's decarbonization efforts, they were able to use Carbonsight's building-level results data showing the costs and CO2 savings for each property, simplifying the capital budget process.

Roadmap Action List Table View

See below your measures applied to properties that have been selected in the Evaluate page. Coming soon! Track the status of your action items in Carbonsight.

Measure Name	Energy Type	EUI Amount Saved		EUI Percent Reduction	CO ₂	Year	Capex per Property	
		kBTU/year/ft ²	kBTU/year					
Floor Insulation	Natural Gas	2.25	65,802.00	5%	N/A	2025	\$14.40	→
Air-side economizer	Natural Gas	2.70	78,962.40	6%	N/A	2026	\$0.86	→
Chilled Water Temperature Reset	Electricity	1.35	39,481.20	3%	N/A	2027	\$0.72	→
Cool roof	Electricity	3.60	105,283.20	8%	N/A	2029	\$4.32	→
Solar	Solar	N/A	N/A	N/A	N/A	2030	\$0.10	→
Electrification	Electricity	N/A	N/A	N/A	N/A	2030	\$10.00	→

Carbonsight Roadmap Action List (Table View):

See reduction measures applied to individual properties and quickly visualize EUI Amounts saved, EUI percentage reductions, Capex per Property and the Implementation Year per measure.

Results and Benefits (continued):

2. Saved Money Building the Plan:

a. Carbonsight eliminated the manual data collection and uploading processes, saving both GreenRE and the sustainability consultant hundreds of hours previously spent on doing this work in spreadsheets. This freed up valuable time and resources, allowing the consultant to focus on the high-value work and saved tens of thousands of dollars for the owner.

3. Competitive Advantage:

- a. The company's tangible action plan to decarbonize resonated with environmentally-conscious tenants and investors. They are excited about the prospect of now positioning themselves as an industry leader.
- b. GreenRE was left with a living dashboard from the consultant that could be updated to reflect changes to the plan after the consulting engagement had ended.



WANT TO LEARN MORE?

WE'D LOVE TO GIVE YOU A DEMO.

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