



Municipal Electric & Gas Alliance New York

Successful Decarbonization takes 6 Steps: Are you missing one?

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Mark LaVigne, PhD
NYSAC Deputy Director
MEGA Executive Director



Agenda

Introductions

Setting the stage for Sustainability

6 Key Steps to Decarbonization

Funding Optionality

Q&A

Constellation Navigator Team



Alex Calder

Manager, Digital Solutions
Business Development



Melissa Heim

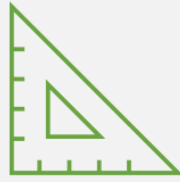
Principal, Commercialization &
Development

Organizations face a variety of challenges to setting and achieving sustainability goals.





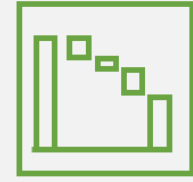
Six Key Steps to Decarbonization



1.
Establish
Baseline
Footprint



2.
Set Emissions
Reduction
Targets



3.
Scenario
Analysis &
Planning

4.
Marginal
Abatement
Model



5.
Fulfillment of
Renewable &
Sustainability
Initiatives



6.
Standardized
Reporting (e.g.,
CDP, GRI, etc.)





Start with a Baseline to get a clear view of your current state.

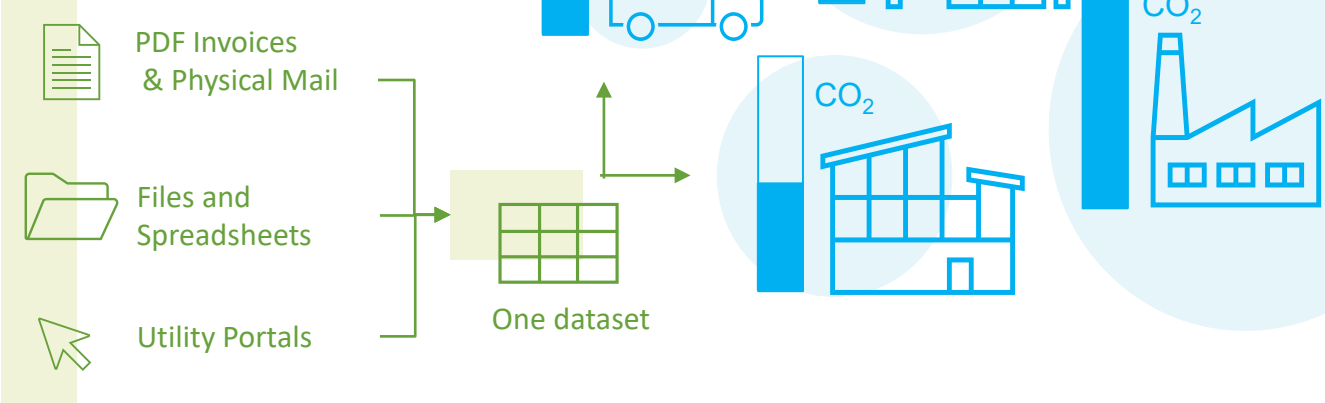
Challenges

- Where do I start? Should I calculate a baseline?
- What type of information should be included?
- How do I aggregate all my utility data?
- Which baseline year should I calculate?

Step 1 Establish Baseline Footprint

Automate Utility Data Ingestion

Minimize manual data entry and help ensure key inputs are not missed in your baseline footprint calculation.



Case Study

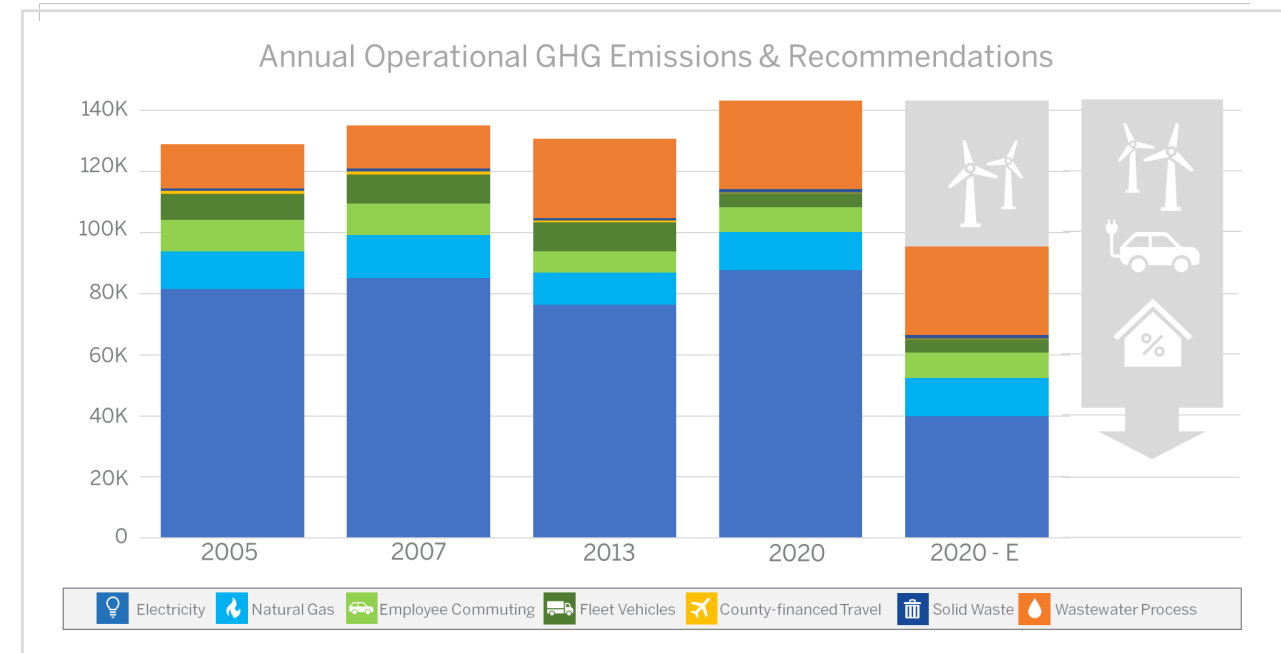
Johnson County, Kansas

Goals set in 2007:

1. Reduce county government operation GHG emissions by at least 33% by 2020, below a 2005 baseline.
2. Reduce GHG emissions associated with energy use in new and substantially renovated buildings occupied and used by Johnson County government to zero by 2030.
3. Reduce community-wide GHG emissions by 80% by the year 2050, below a 2005 baseline.

The Challenge:

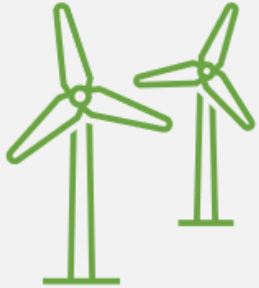
In 2020, the County needed help to measure progress and ensure it had a path to achieving its 2030 and 2050 goals.



The Solution:

The County enlisted Constellation Navigator, to help.

1. ...gathered community data back to 2005.
2. ...calculated a refreshed 2020 baseline, validated completion of its 2020 goal and analyzed progress to its 2030 and 2050 goals.
3. ...provided recommendations in three categories that would help the County achieve its goals: Electrification & Low Carbon Fuels, Renewable Energy, and Energy Efficiency.
4. ...wrote a custom white paper to arm the County with the resources it needed and to help it advocate within its community.



After defining current state, define the destination.

Step 2

Set Emissions Reduction Targets

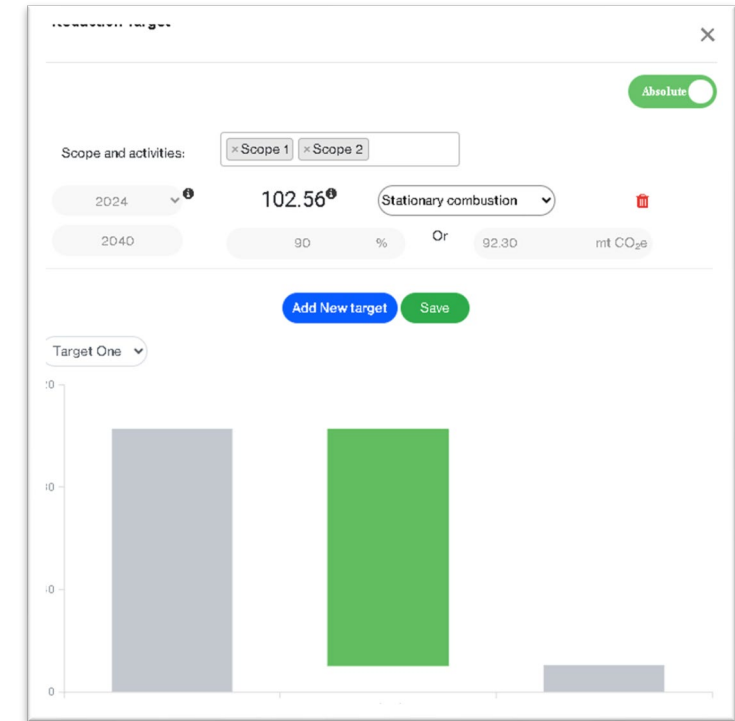
Challenges

- How can I set realistic emissions reduction targets?
- How do I know what would be an achievable timeline?
- How do I know if my goals are inline with SBTi (Science Based Targets)?

Understand Areas of Opportunity for Greatest Reduction

Rank-ordering locations by highest emissions allows you to determine what is feasible for reduction opportunities.

This gives you the ability to model impacts of energy efficiency or electrification against your goal



Test different scenarios that could help take you from current state to your goal.

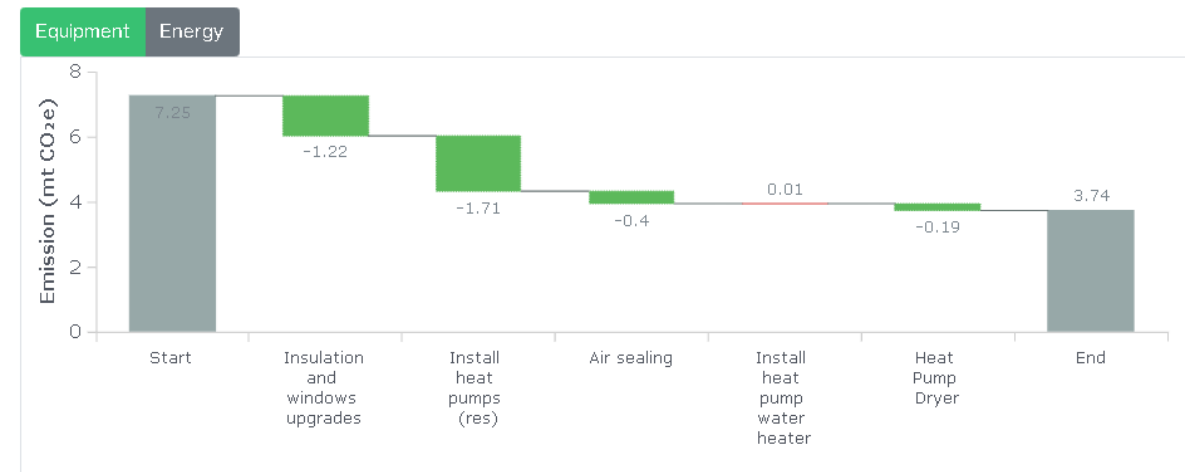
Challenges

- How do I know what my options are?
- How do I know which options will be the most impactful?
- How can I begin to shape this into a clear roadmap?

Test different paths to find the best fit.

Dynamic Waterfall and Scenario Analysis tools can help you compare options without needing extensive research or knowledge.

5808 Loch Raven Boulevard, Baltimore, Maryland 21239, United States



Step 3

Scenario Analysis & Planning



Define your implementation strategy



Step 4

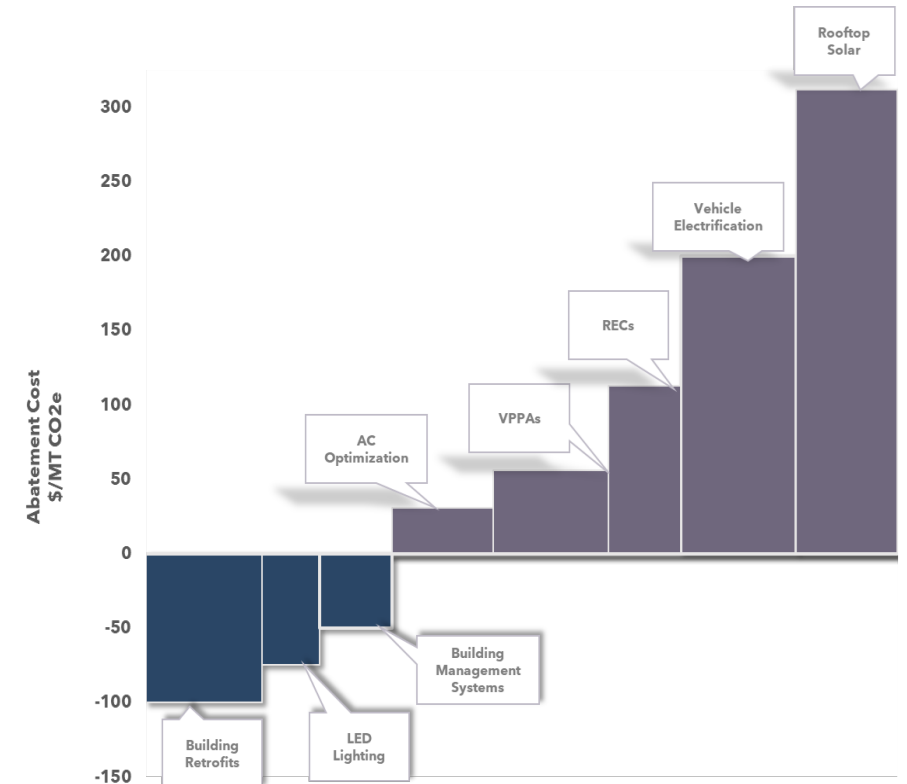
Marginal Abatement Model

Challenges

- How do I know which initiatives to prioritize?
- How do I create an apples-to-apples comparison?

Compare the cost of each initiative and its relative impact.

Solidify your strategy with a Marginal Abatement Cost Curve where we compare the cost of each sustainability initiative relative to the potential greenhouse gas emission reduction displayed in $\$/tCO_2e$





Execute your Strategy

Step 5

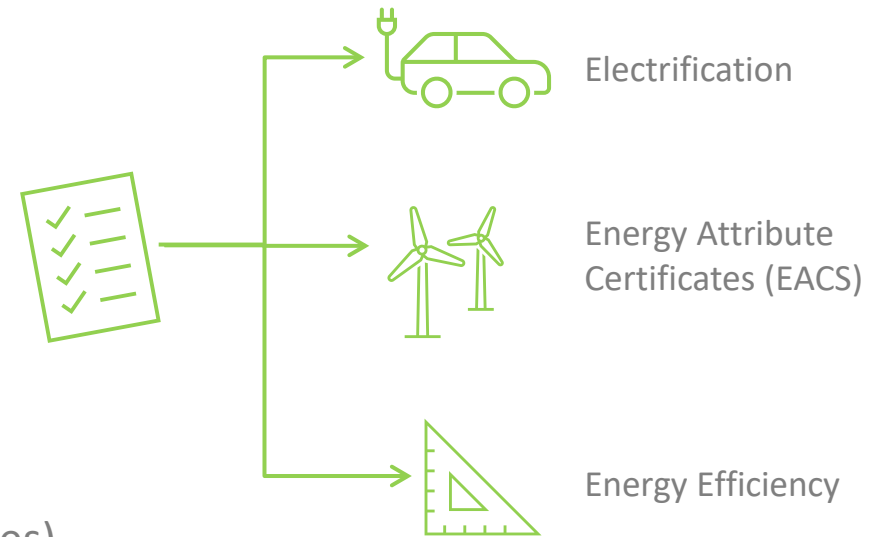
Fulfillment of Renewable & Sustainability Initiatives

Challenges

- Now that I have a strategic framework and plan to reduce my carbon emissions, how do I fulfill these projects?

Solution:

- Onsite Renewable Projects (Constellation Efficiency Made Easy)
- Offsite Renewable Projects, VPPA (CORE+ Constellation Offsite Renewables)
- Energy Efficiency (Constellation Energy Services)
- RECs/EFECs/Offsets/RNG (Constellation Energy)





Report progress and ensure the strategy is on track to meeting your goal.



Step 6

Standardized Reporting (e.g., CDP, GRI, etc.)

Challenges

- How do I ensure my reporting is accurate and compliant?
- I don't have time and resources to dedicate to tedious reporting requirements.

Leverage tools that let you effortlessly export the reports you need when you need them.

Standardized reporting frameworks in Carbon Accounting platform + Advisory team to develop

Third Party Assurance capabilities through Carbon Accounting platform

CDP	<i>Carbon Disclosure Project</i>
GRI	<i>Global Reporting Initiative</i>
SASB	<i>Sustainability Accounting Standard</i>
GRESB	<i>Sustainability Accounting Standard</i>
TCFD	<i>Task Force on Climate-related Financial Disclosures</i>
GHG	<i>GHG Protocol</i>

Bringing Data & Map to Life



“The Alaska Municipal League (AML) is a voluntary, nonprofit, nonpartisan, statewide organization of 165 cities, boroughs, and unified municipalities, **representing over 97 percent of Alaska’s residents.**”

-akml.org/about/

Supporting a Carbon-free Future for the State of Alaska

This unique strategy provides state-level data standardization and decarbonization analysis tools while also providing each unique community with a dynamic online geospatial dashboard to help them engage with community members and assess strategies that may directly reduce emissions within their own towns, cities, and tribal lands.



The GHG Software Platform

- EPA Methodology compliant, state-wide **GHG Emissions Calculator**
- An online geospatial dashboard and modeling tool – **one custom map for each of 229 cities, towns, and tribal lands**



Baseline GHG Emissions Inventory

- Uses a combination of estimated and actual data to provide a complete view
- **Calculate GHG and criteria air pollutant inventories:**
 - Simplified: stationary combustion and transportation emissions
 - Robust: industrial processes, wastewater, solid waste, agriculture, forestry, and fishing activities.



Reporting and Scenarios

- **State-wide summaries and detailed, by-community breakdowns**
- Community reports will be accessible and available for download on each map
- Scenarios for addressing emissions **specific to residential, commercial, industrial, and transportation sectors.**



Implementation and support

- **Consultative support** to explain reports and underlying assumptions
- Support in comprehending the data and reporting to **aid decision-making for the state**

New York Rebates & Incentives Programs



Rebate Opportunities*:

- Lighting and Controls
- HVAC and Controls
- Refrigeration
- Kitchen Equipment
- Compressed Air
- New Construction and/or Major Renovation

Top NY Utilities with Rebates:

Central Hudson Gas & Electric
Consolidated Edison
National Grid NY
NYSEG
RG&E
Orange and Rockland
PSE&G Long Island

Constellation's Rebates & Incentives Team



We work with you at every stage of the process to help you take advantage of rebate opportunities, implement the optimum projects, and demonstrate tangible ROI for your sustainability measures.

*Please be aware that rebate eligibility is utility-specific and subject to change.

Contact Us



Alex Calder
Carbon Accounting

Manager, Digital Solutions
Business Development

Alexander.Calder@Constellation.com



Melissa Heim
Constellation Navigator

Principal, Commercialization
& Development

Melissa.Heim@Constellation.com



Mark LaVigne
Power Supply

Executive Director – MEGA

Mlavigne@megaenergy.org





Appendix



Navigate your Environmental and Operational Goals

Constellation Navigator delivers a clear path for its customers to set and meet their goals.

THE CHALLENGE

The journey to set and reach energy and sustainability goals can often feel like uncharted territory.

It's easy to get lost amidst the complexities of:

- Gathering and deciphering intricate energy data
- Setting and reaching net-zero emissions targets
- Managing utility resources efficiently.

THE EXPERTS, TOOLS, & STRATEGIES

Constellation Navigator combines expertise with powerful technology platforms to chart a course to environmental and operational goals.



Sustainability Advisory

Our sustainability experts work to understand your challenges and formulate a plan of action to help you reach your goals.



Carbon Accounting

Create an actionable carbon reduction roadmap rooted in clean, accurate emissions data.



Rebates Administration

Let us save you time by managing the end-to-end rebate and incentives process to put dollars back in your budget.



Data & Analytics

Automatically ingested, reliable, data, with access to clear visualizations for all the metrics that matter.



Utility Bill Management

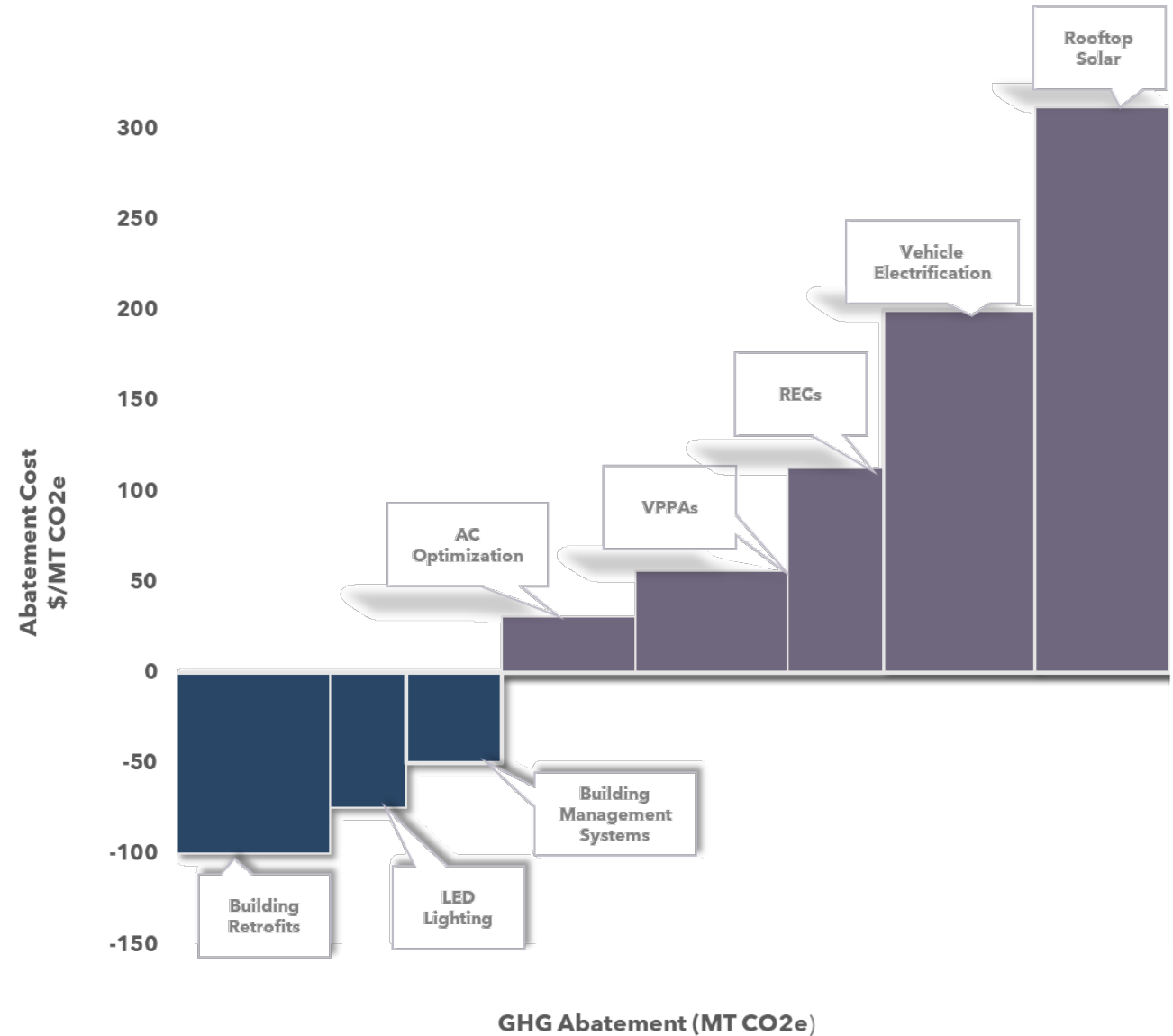
A comprehensive solution for the entire billing and payment lifecycle.

The Marginal Abatement Cost Curve

Determine which sustainability initiatives to implement by completing an “apples-to-apples” comparison of cost/savings & potential GHG emissions reductions of each initiative (displayed in \$/tCO₂e)

Leverage data-driven analysis to aid in decision making and prioritization.

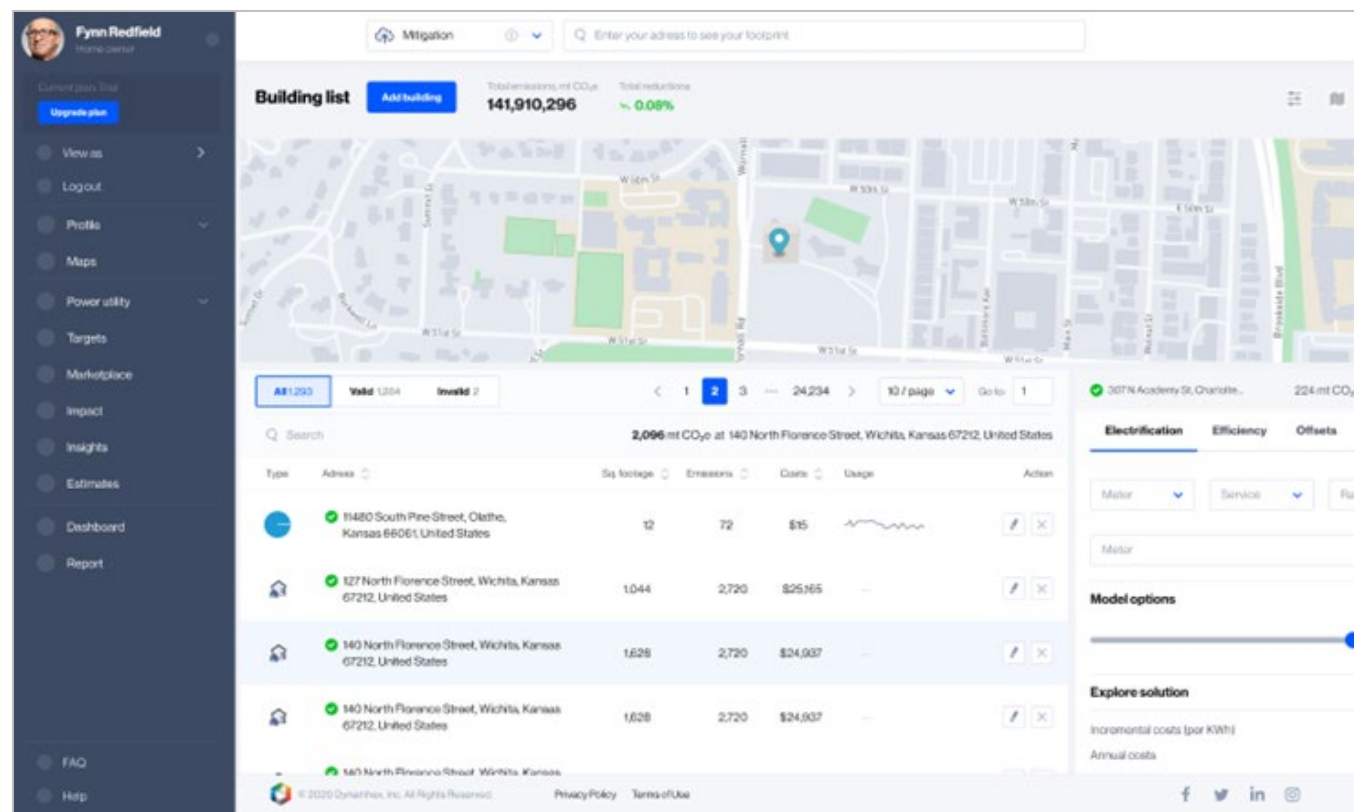
Achieve climate goals with a roadmap and climate action plan using the findings from the abatement curve.



The Carbon Accounting Platform

A subscription-based, online platform that helps commercial, governmental and industrial customers with emissions reporting, sustainability target-setting, and planning.

- 1 Establish a Baseline.**
Assess buildings, facilities, fleets and other consumption.
- 2 Set Climate Targets.**
Create clear targets and timelines to achieve climate goals.
- 3 Build a Roadmap.**
Calculate your climate roadmap showing solutions that help you hit your goals on-time and on-budget.



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Contact Us



Alex Calder
Carbon Accounting

Manager, Digital Solutions
Business Development

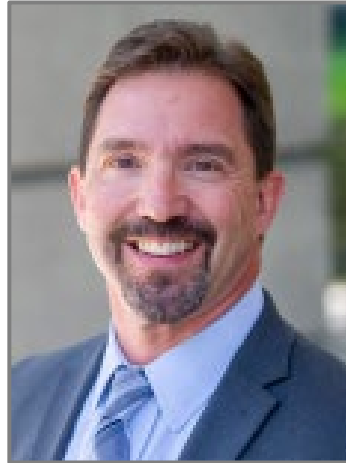
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