

BUILDINGENERGY NYC

From Caution to Catalyst: Turning AI Skepticism into Informed Innovation

Elizabeth Kelly, EDK Solutions
Andrea Mancino, Bright Power

Curated by Jodi Smits Anderson & Ariel Sosa

Northeast Sustainable Energy Association (NESEA) | October 15, 2026

Introductions and Agenda:

Thanks for joining us!

Welcome and Intro from NESEA (5 min)

Andrea Mancino, CEO, Bright Power (10 min)

Elizabeth Kelly, Principal, EDK Solutions (10 min)

Discussion (20 min)

Q&A (remainder of time)



From Caution to Catalyst

A mission-driven look at AI

Andrea Mancino, CEO, Bright Power
NESEA BuildingEnergy NYC | October 15, 2026

The concerns are legitimate

WHAT WE HEARD

How does a company focused on decarbonizing buildings square that mission with the energy demands and environmental impacts of AI?

A note from someone in our community, paraphrased



Fair to ask

Energy and water demand, jobs, privacy, and community impact are real. We start by saying so.



Mission unchanged

We exist to accelerate the equitable transition to a zero-carbon future in buildings.



A tool, not an identity

AI is one way to advance that mission. It is not who we are.

Improving the world we actually have

“The greenest building is the one that never gets built.”

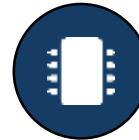
There's truth in that.



Buildings are going to be built.



Energy is going to be consumed.



Technology is going to advance.

Bright Power has never been in the business of waiting for a perfect world. We've always been in the business of improving the one we actually have.

How we think about AI



Impact over hype

We don't pursue technology because it's exciting. We pursue it because it helps us solve climate problems.



Automate around people

Remove repetitive work so our people spend more time on expertise, judgment, and relationships. Not replacement.



Measure, don't assume

AI has a real footprint. We weigh it against demonstrated benefits instead of assuming a net positive.



Willing to change course

If an application doesn't deliver meaningful benefit, we change course.

Garbage in, garbage out. The source data and the context matter most.

Where we are, honestly

Active

- Strict in-house AI policies
- Extreme focus on data governance and security
- Using AI to take on repetitive work (examples coming up)
- Humans accountable and in control

Researching

- Greener, more responsible ways to use AI
- Standards for responsible adoption
- The footprint of the tools we use

Incubating

- Helping make data centers more efficient: cooling, grid integration, carbon performance
- Addressing impacts on neighboring communities: infrastructure strain, water and energy demand, environmental justice

Examples

Product and Workflow



Automation is not the same as AI

Automation

Rules-based. The same steps run the same way every time.

Example: Direct coding and macros, and connecting systems so data flows between them instead of being entered by hand in multiple places.

AI

Handles what rules can't. It interprets messy, unstructured information, then drafts, summarizes, and flags patterns for a person to review.

Example: Reading utility data and audit information to surface opportunities, with the audit team checking the output.

Garbage in, garbage out. The two get conflated, but with either one the source data and the context matter most.

What automation gave us



What we automated

Connections from our modeling tools to our reports, in the areas that don't require critical thinking.



What it gave us

More output per person per month. Enough to visibly improve margin and slow the need for new hires.



For our people

Morale improved. People focus on the analysis and the exciting parts of a project, not the tedious ones.

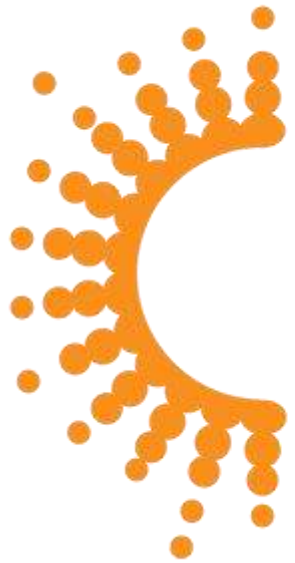
The risk: don't accept the data as gospel. Quality control stays with a person.

Where AI speeds up decarbonization



People stay in the loop: engineers can sit alongside the software for energy capital planning.

Enter....



Bright Power AI

Model Scenarios, Understand the Numbers



- Model multiple retrofit scenarios side by side
- See CO₂ trajectory vs. LL97 cap — instantly
- Hover any year to see fine exposure

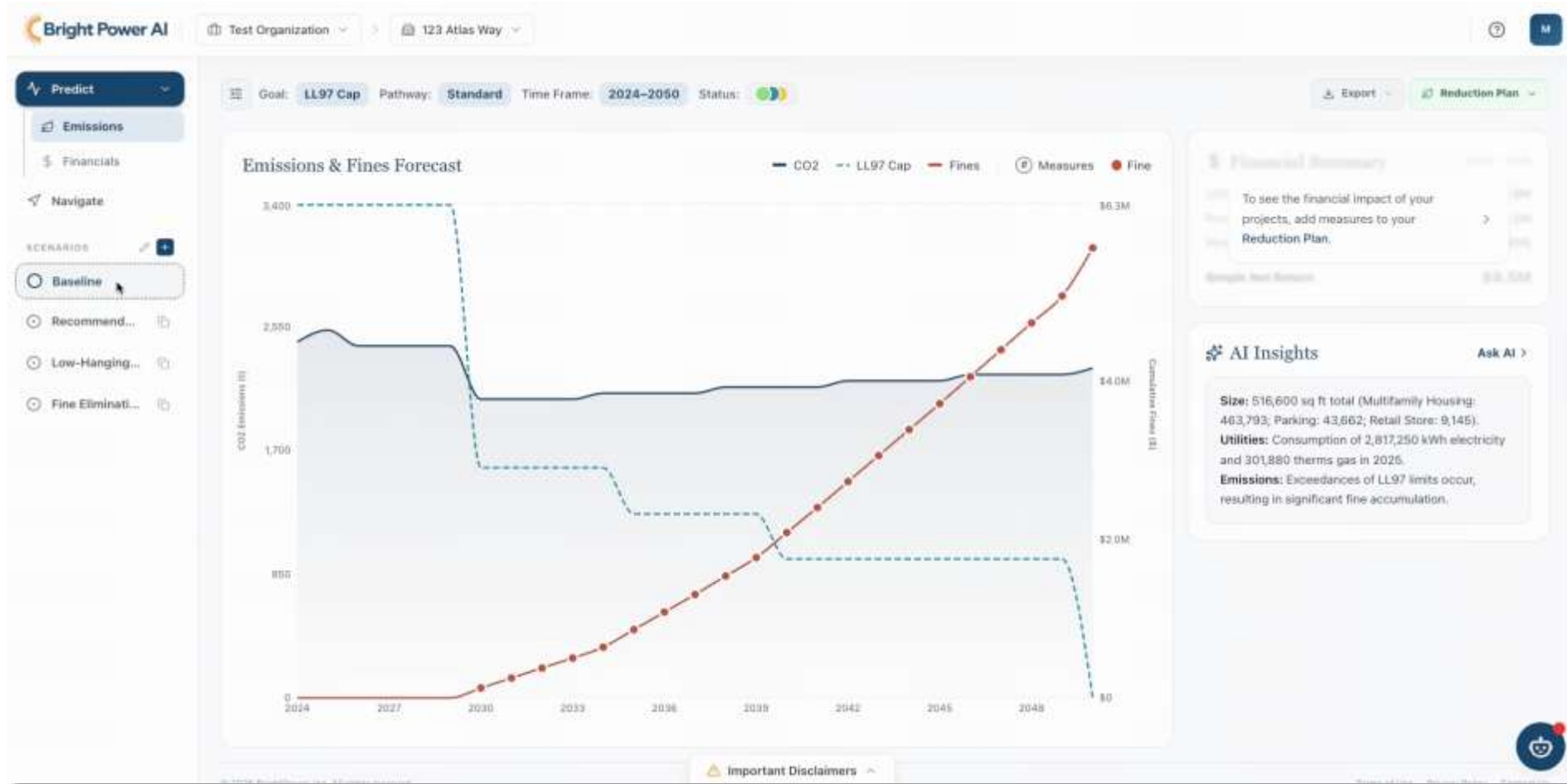
✓ **Recommended Scenario — Net Return: \$2.4M**

\$ Financial Summary		2024 – 2040
Utility Cost Savings		\$3.1M
Penalties Avoided		\$2.0M
Measure Cost		(\$5.9M)
Simple Net Return		-\$796K

Smart planning shows your break-even point for every scenario — before you commit capital.

Real Data. Real Experts. Real Results.

Predict: A software solution with dedicated energy consultants you can call



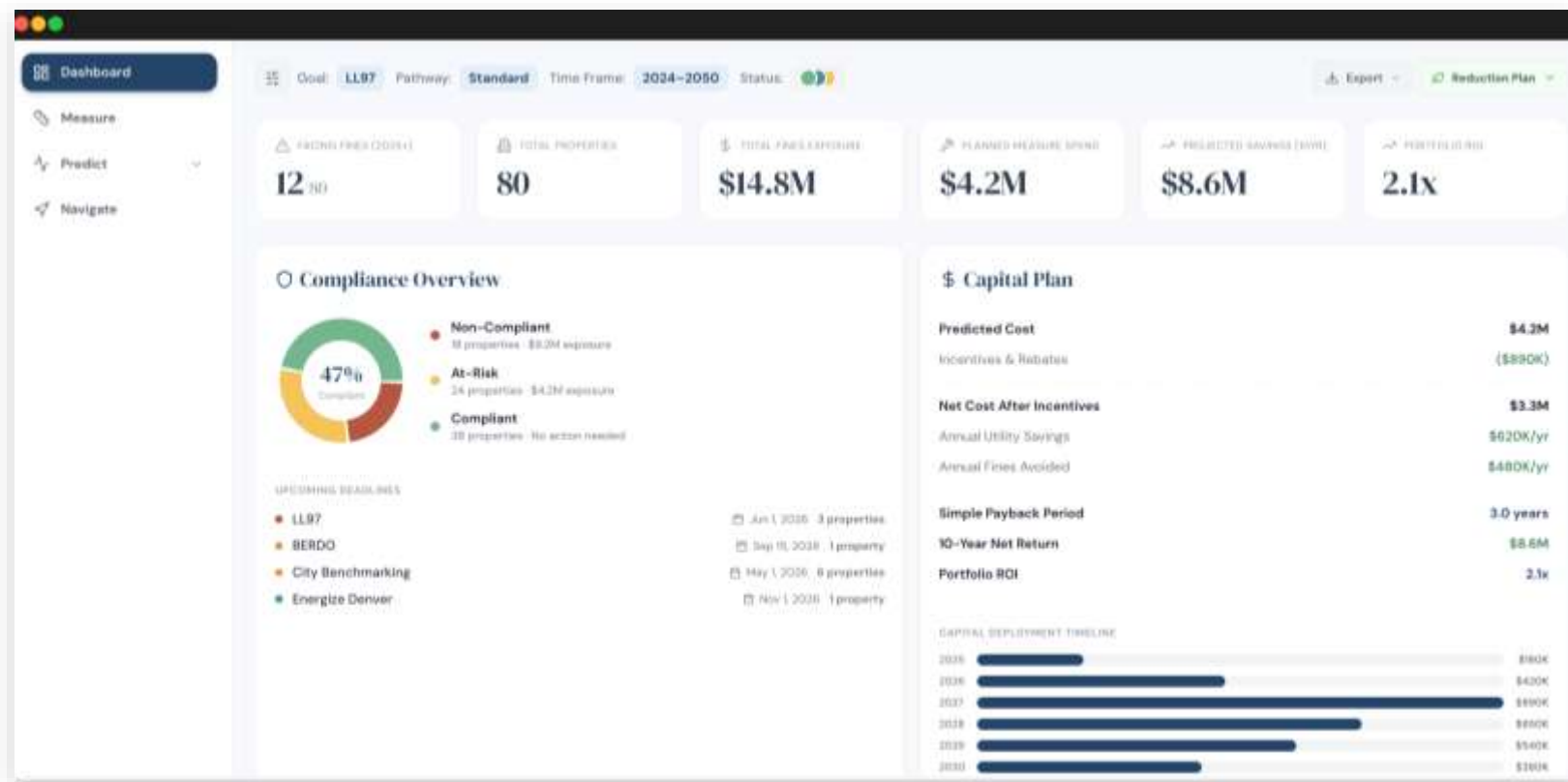
✓ Your actual audit data powers every insight

✓ Local law expertise built in — LL97, LL84 & more

✓ Engineers available to validate & refine your plan



Instant Visibility Across Your Portfolio



\$14.8M

Total fines exposure tracked



2.1x

Portfolio ROI on planned measures



3 yrs

Simple payback period

See every building's carbon emissions, fine exposure, and capital plan — in one place.



The goal isn't AI. The goal is impact.

Now, a conversation with Elizabeth

Guardrails that keep humans
accountable

The power of small decisions made
quickly

Caution as a path to innovation

From Caution to Catalyst

Baby steps, vibe-coding, and discovery.

Elizabeth Kelly, EDK Solutions
NESEA BE NYC – October 2026

EDK
SOLUTIONS

The Challenge

MACRO

Climate change is an existential threat.



THE PARADOX OF CHOICE

NYC = 1,000,000 snowflakes $\neq$ a pipeline



Too much data.
Not enough clarity.



MICRO

Zero coding skills.
Limited data-analysis skills.

The Opportunity

01

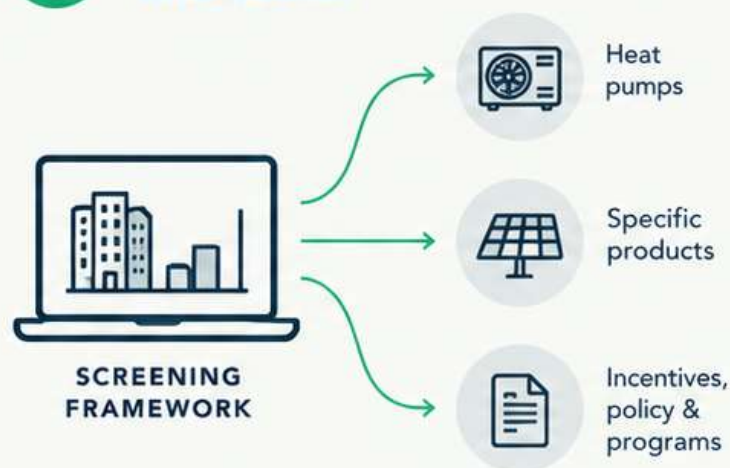
My force multiplier.

Using new tools to help accelerate decision making, lower pre-development cost, and limit decision paralysis.



02

Build. Adapt. Scale.



Create a repeatable screening framework that can evaluate many buildings without starting from scratch. Update the framework to incorporate new technologies, specific products, incentives, regulations, or policy priorities.

From bespoke analysis to a flexible, reusable decision tool.

03

Turn building data into capital allocation decisions.

	IMPACT	READINESS	EST. SAVINGS	PRIORITY
	● ● ● ●	● ● ● ●	\$\$\$	1
	● ● ● ●	● ● ● ●	\$\$	2
	● ● ● ●	● ● ● ●	\$\$	3
	● ● ● ●	● ● ● ●	\$	4

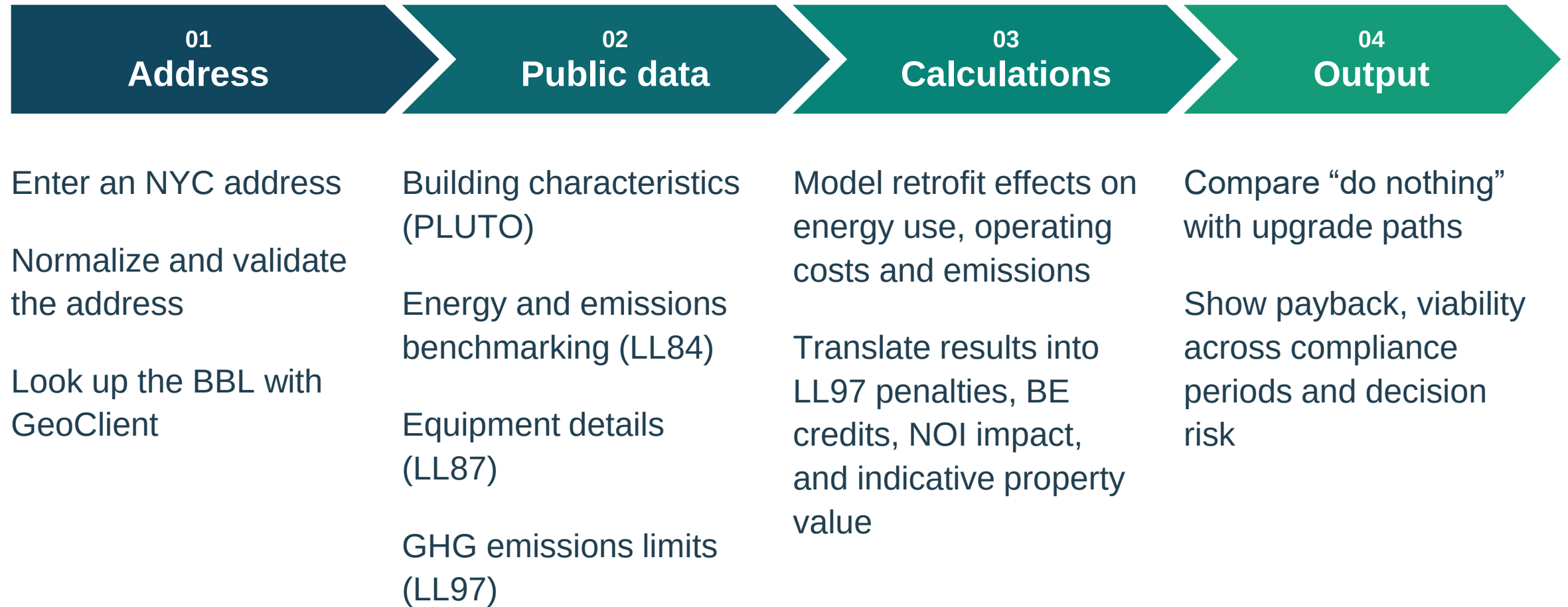
Frame results in terms decision-makers can act on: potential costs and savings, incentives, investment timing, and which buildings or measures warrant further investment.

From "What does the data tell us?" to "Where should we deploy capital?"



One framework. Many buildings. Better decisions.

The Process



The Result

MAIN MENU

 Search Address

 Calculations

Address Search

BBL Search

CSV Import

Search for an address in New York...

Calculate

Location on the map





Cost-Effective Through 2034 ^[1]

PTHP will save \$485,694.445 vs PTAC through 2034 (energy + LL97 fines)

PTAC vs PTHP: Executive Summary

Address:

hidden

Built: 1973

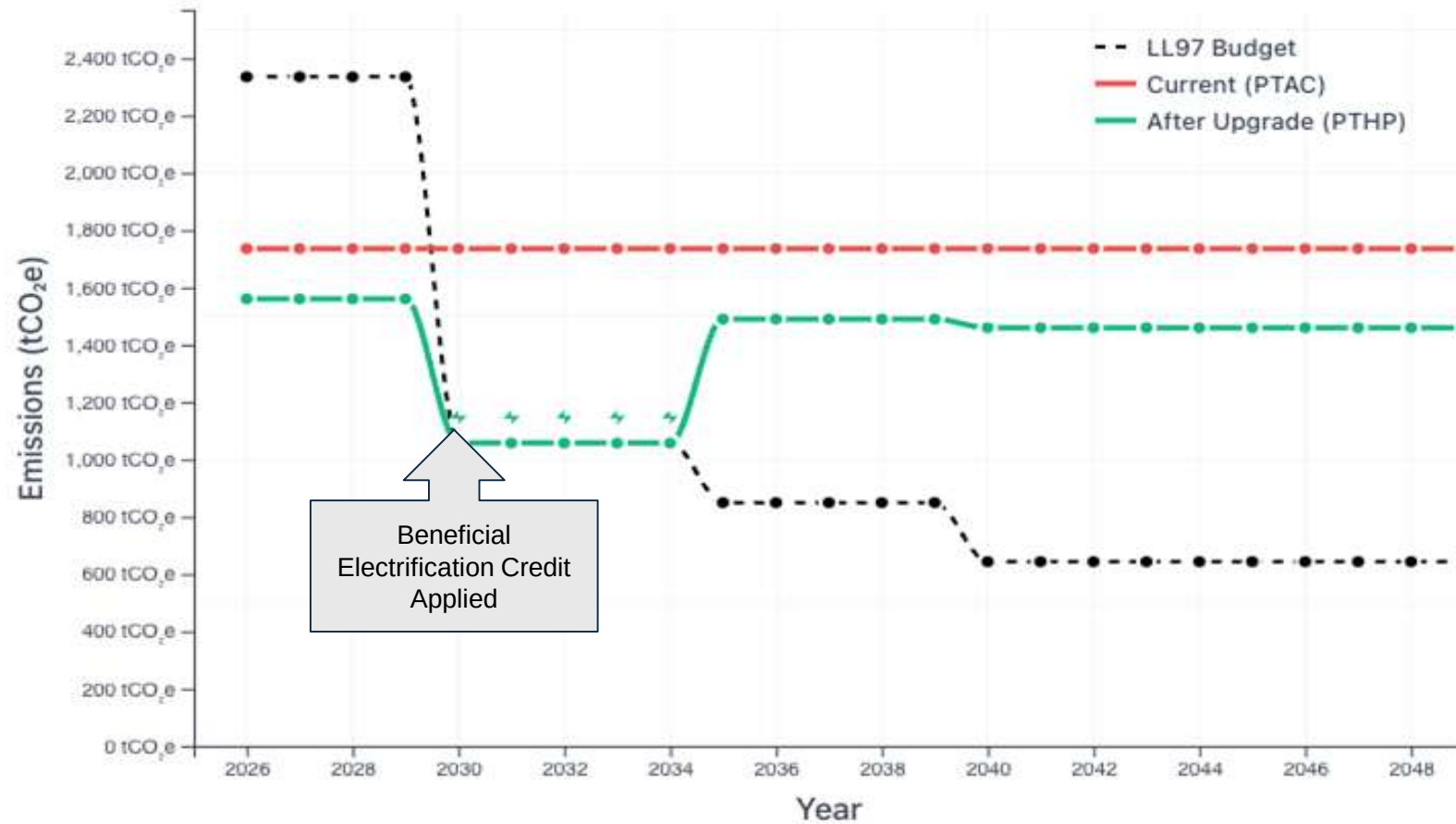
Sq Ft: 364,623

Units: 210

PTAC Units: 500

Metric	PTAC	PTHP	Difference
Annual Energy	6,308.9 MMBtu	2,298.0 MMBtu	-4,010.9 MMBtu
Annual Energy Cost	\$189,150	\$235,724	+\$46,574
Annual Loan Payment	N/A	\$86,327	-
LL97 Fine 2027	\$0	\$0	-\$0
Carbon Emissions 2027	1,735.8 tCO ₂ e	1,560.3 tCO ₂ e	-175.5 tCO ₂ e
Total Operating Cost 2027	\$189,150	\$235,724	+\$46,574

LL97 Compliance Schedule



Total Credit-Years

5

Available for allocation

Currently Allocated

5 years

0 remaining

Total Savings

\$602,504

From BE credits

Avg Savings/Year

\$120,501

Per allocated year



Year-by-Year LL97 Analysis

Detailed compliance and fee breakdown for each year (2026-2049)



Financial Impact Summary

Total savings over 24 years (2026-2049)



Total LL97 Fines Avoided

\$1,974,590



Total BE Credits Applied

5 credit-years

Years with BE credits applied



Emissions Reduction

Total carbon impact over 24 years

Total Emissions Reduced

5,821.6 tCO₂e

tCO₂e eliminated

Reduction Percentage

14.0%

Lower than baseline

Carbon Offset Equivalent

692,771

Tree seedlings grown for 10 years

LL97 Milestone Compliance (with PTHP) ^[17]

2026

✓ **Compliant**

2030

✓ **Compliant**

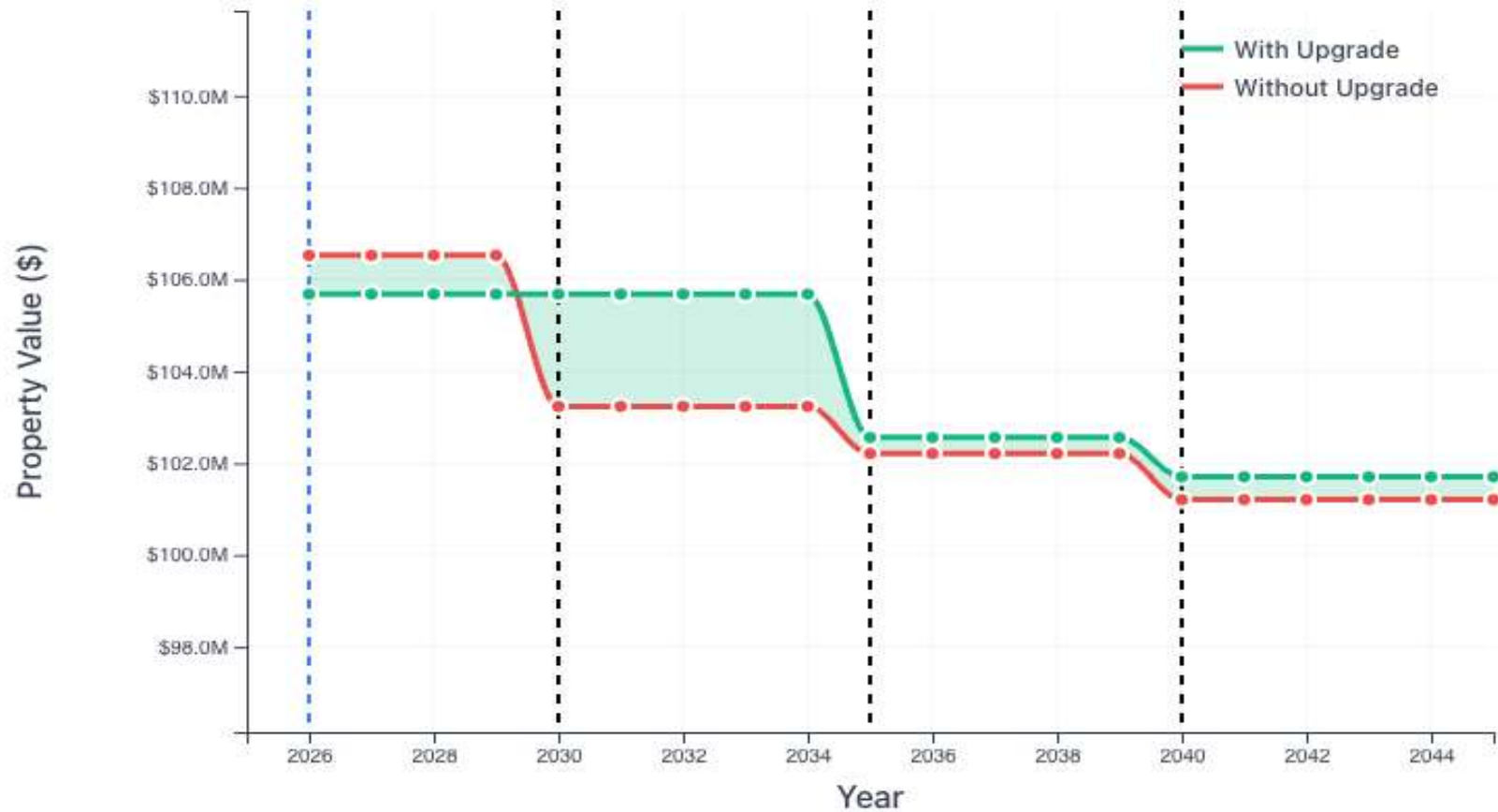
2035

✗ **Non-compliant**

2050

✗ **Non-compliant**

Property Value Over Time

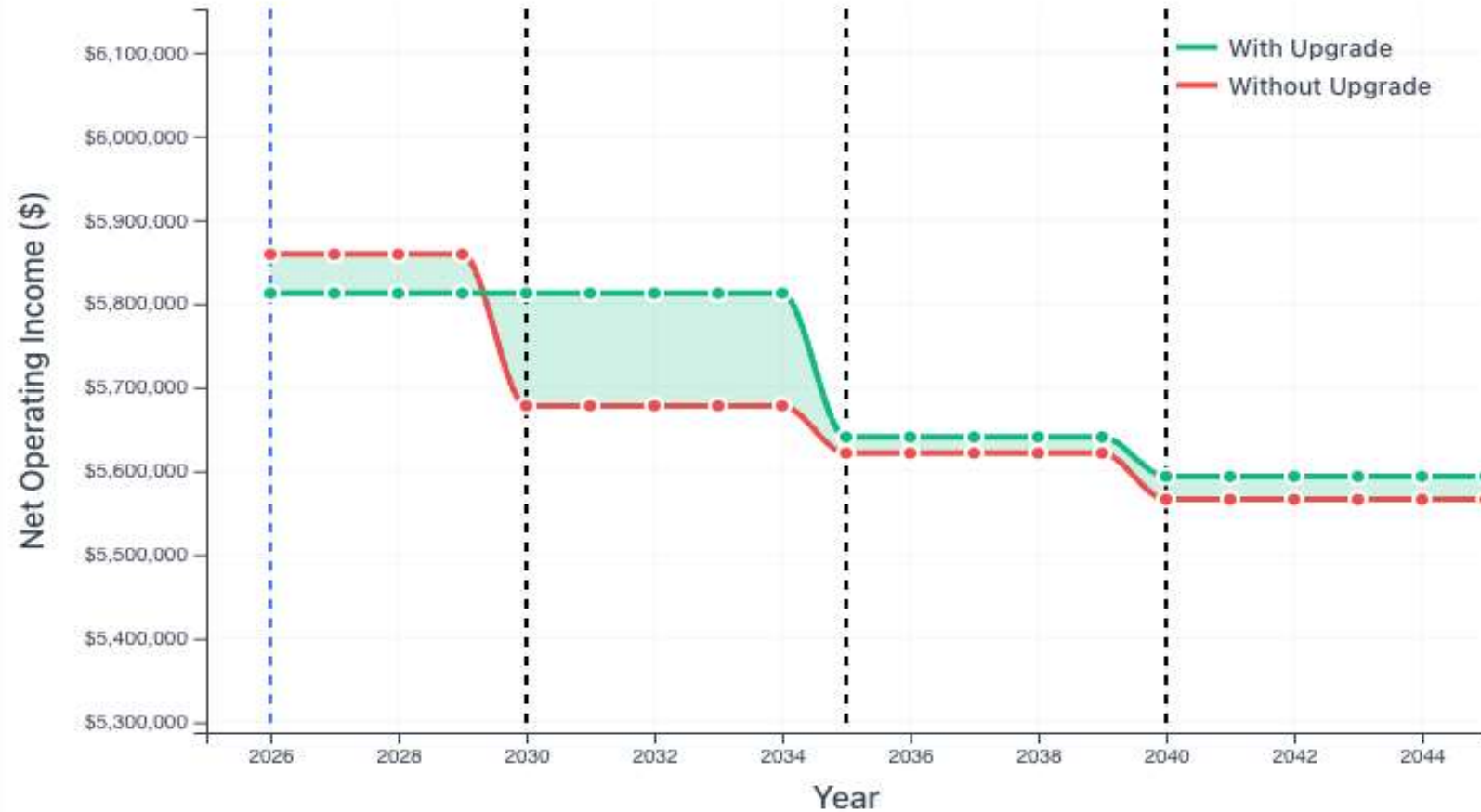


* All values are presented in nominal dollars and are not adjusted for inflation.

Drivers:

- Avoided Penalty Cost
- BE Credit Savings
- Energy Price Escalations
- Financing Costs
- Inflation

Net Operating Income Over Time



* All values are presented in nominal dollars and are not adjusted for inflation.

Drivers:

- Avoided Penalty Cost
- BE Credit Savings
- Energy Price Escalations
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☒ BE Credit Year Rules

UPGRADE YEAR	CREDIT DURATION	APPLICATION WINDOW	DOB COEFFICIENT
2025	Any 5 years	2025-2034	0.0013
2026	Any 4 years	2026-2034	0.0013
2027	Any 3 years	2027-2034	0.00065
2028	Any 2 years	2028-2034	0.00065
2029	Any 1 year	2029-2034	0.00065

Current upgrade year: 2026 - You have 4 credit-years to allocate within the window.

Annual BE Credit Value

Based on upgrade completion year 2026

667.8 tCO₂e

per year applied

Coefficient: 0.0013 tCO₂e/kWh (Lower rate - early completion bonus)

Select Years for BE Credits (4/4)

Auto-Optimize

2026

2027

2028

2029

2030

2031

2032

2033

2034

Impact of Current Selection

Years Selected

4

Total Savings

\$111,873

Avg per Year

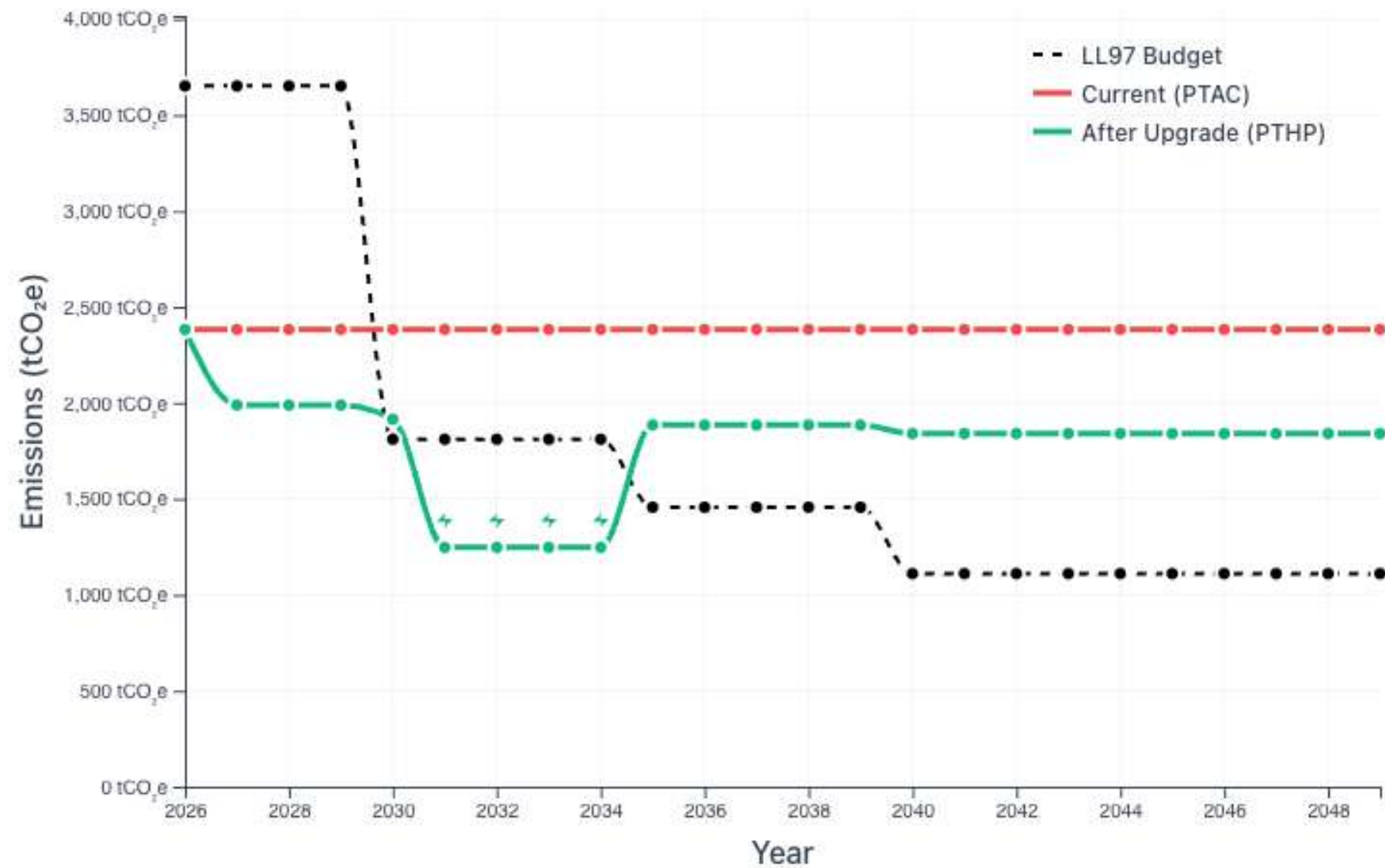
\$27,968

Cancel

Save & Recalculate

A photograph of a multi-story brick building with several windows, partially obscured by green trees in the foreground.

LL97 Compliance Schedule



[Building Overview](#)[Energy Cost](#)[Retrofit Cost](#)[Financing](#)[LL97](#)

Edit Assumptions

Click Edit Assumptions to modify calculation parameters and assumptions.

**6.0%**

annual interest rate

Interest Rate Override

Reset

Default: 6.0% (based on typical commercial loan rates)

**15 years**

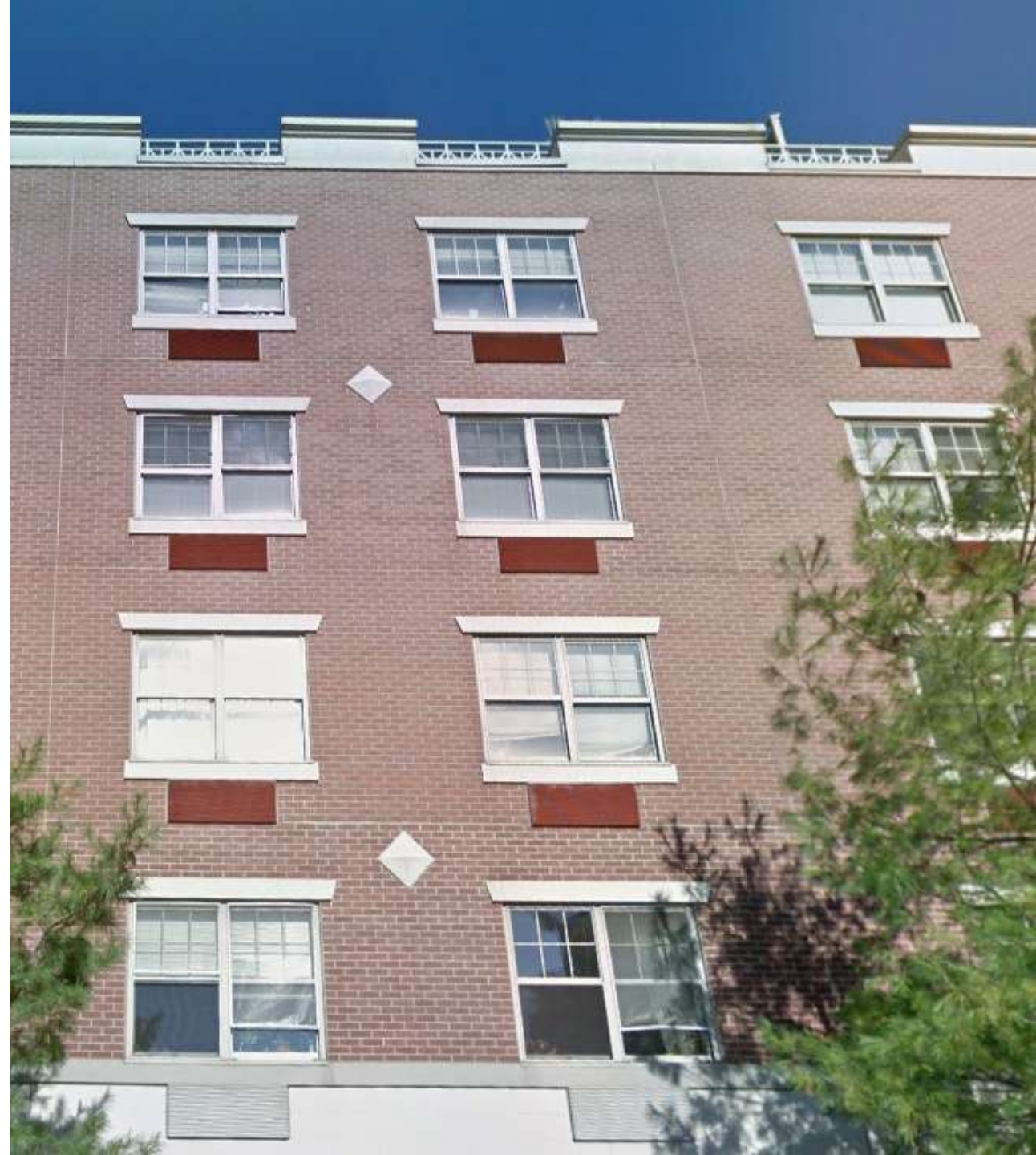
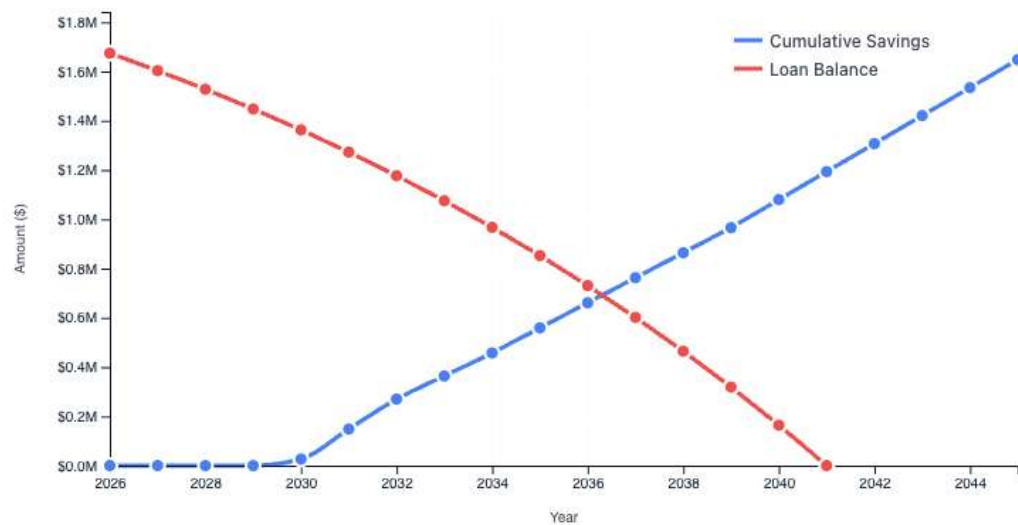
loan term

Loan Term Override

Reset

Default: 15 years (typical for commercial energy efficiency loans)

Cumulative Savings vs Loan Balance





elizabeth@edk-solutions.com

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Q&A

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Please fill out an evaluation for this session



or: [*nesea.org/eval*](https://nesea.org/eval)

Northeast Sustainable Energy Association (NESEA)

Thanks for Joining us!

