

New LED lights: Going beyond cost savings for the Jewish Federation of Greater Atlanta

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Jewish Federation
OF GREATER ATLANTA



The entrance to the Jewish Federation of Greater Atlanta headquarters

What's the problem?

- Headquartered in a **50,000 square foot building**, the **Jewish Federation of Greater Atlanta (JFGA)** has started to make sustainability initiatives one of its strategic priorities.
- An internal Green Team was formed in 2017 at JFGA to propose ideas for this initiative. Our team offered to **help the Green Team come up with ideas to decrease JFGA's carbon footprint**, and they agreed to hear our proposal.
- Our solution is a **three-tier proposal** to scale up LED lighting throughout the building, with the most ambitious tier **opening a donation channel** specifically for sustainability projects.

Targeted Reduction

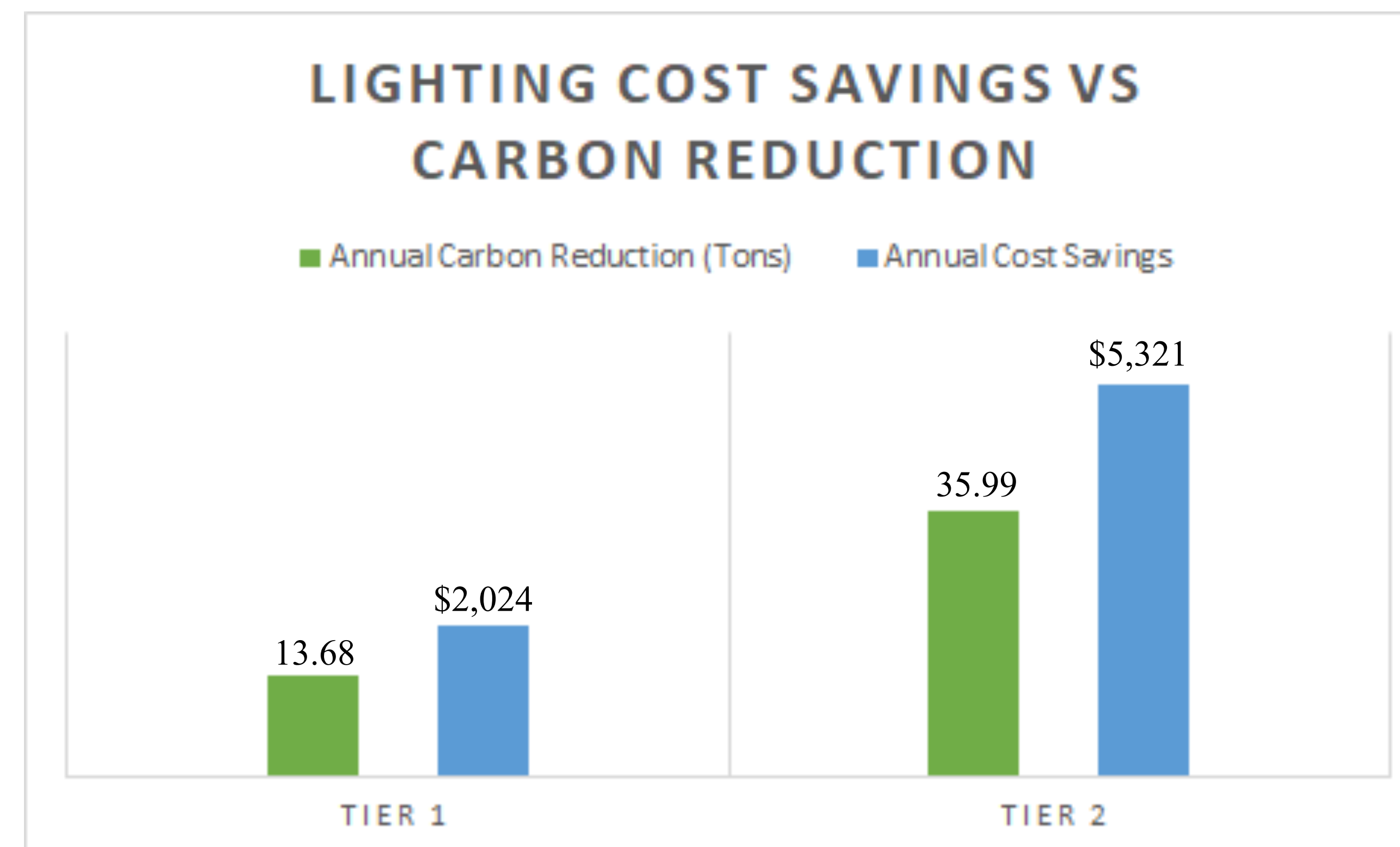
- Tier One**
 - Replace twenty (20) 400-watt lights in the parking light with LED lights
- Tier Two**
 - Replace twenty (20) 400-watt lights in the parking light with LED lights
 - Replace 420 T-8 fluorescent lights in the building with LED lights
- Tier Three**
 - Replace twenty (20) 400-watt lights in the parking light with LED lights
 - Replace 420 T-8 fluorescent lights in the building with LED lights
 - Open up a donation "Green Fund" channel during annual fundraising, dedicated to sustainable projects in the Atlanta Jewish community. Using lighting numbers, each dollar donated could save 0.0027 tons of carbon.

Tier One for the Parking Lot					
Rating (watts)	kWh	Metric Tons of CO2 per light	Consumption (Metric Tons of CO2)	Overall Reduction in Carbon Emissions	# of Ford Fusions
400 Watt Light at 12 hours per Day	400	1.752	1.303488	18.248832	13.686624
LED Light at 12 hours per Day	100	0.438	0.325872	4.562208	1.244238545
Total Consumption (Metric Tons of CO2) = (rating * hours of usage per day * 365) / (1000) * # of light bulbs					
Tier Two for Whole Building & Parking Lot					
Rating (watts)	kWh	Metric Tons of CO2 per light	Consumption (Metric Tons of CO2)	Reduction in Main Areas	Reduction from Bathroom/Conference rooms
Fluorescent Light at 12 hours per Day	32	140.16	0.10427904	37.1233324	17.4015648
LED Light at 12 hours per Day	17	74.46	0.05339824	19.7217344	9.67385856
Fluorescent Light at 12 hours per Day	32	140.16	0.10427904	6.67385856	4.90111488
LED Light at 6 hours per Day	17	37.23	0.02769912	1.7274368	
Tier Three					
Rating (watts)	kWh	Metric Tons of CO2 per light	Consumption (Metric Tons of CO2)	Overall Reduction in Carbon Emissions	# of Ford Fusions
400 Watt Light at 12 hours per Day	400	1.752	1.303488	18.248832	13.686624
LED Light at 12 hours per Day	100	0.438	0.325872	4.562208	1.244238545

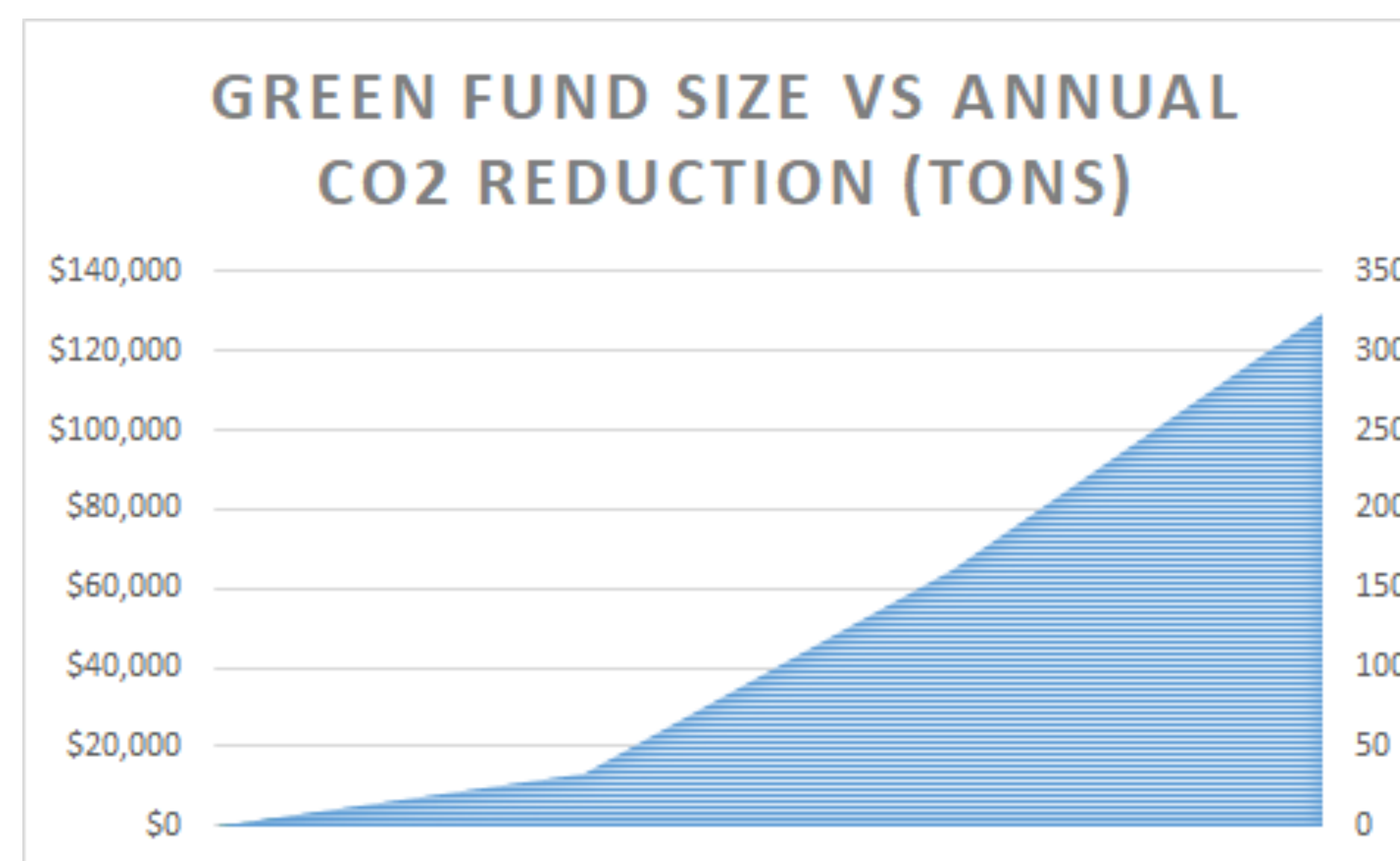
Tier Valuations				
	Total Annual Carbon Reduction	Annual Cost Savings or Donation Increase	Payback Period Years	Value of Project
Tier 1	13.68	2023.56	1.07	\$22,484.00
Tier 2	35.99	\$5,321.00	1.63	\$59,122.21
Tier 3	197.99	\$65,321.00	0.18	\$725,788.88

Note: Based on \$60,000 Donation Increase
Note: Each tier level includes previous tier levels

Tier I & II

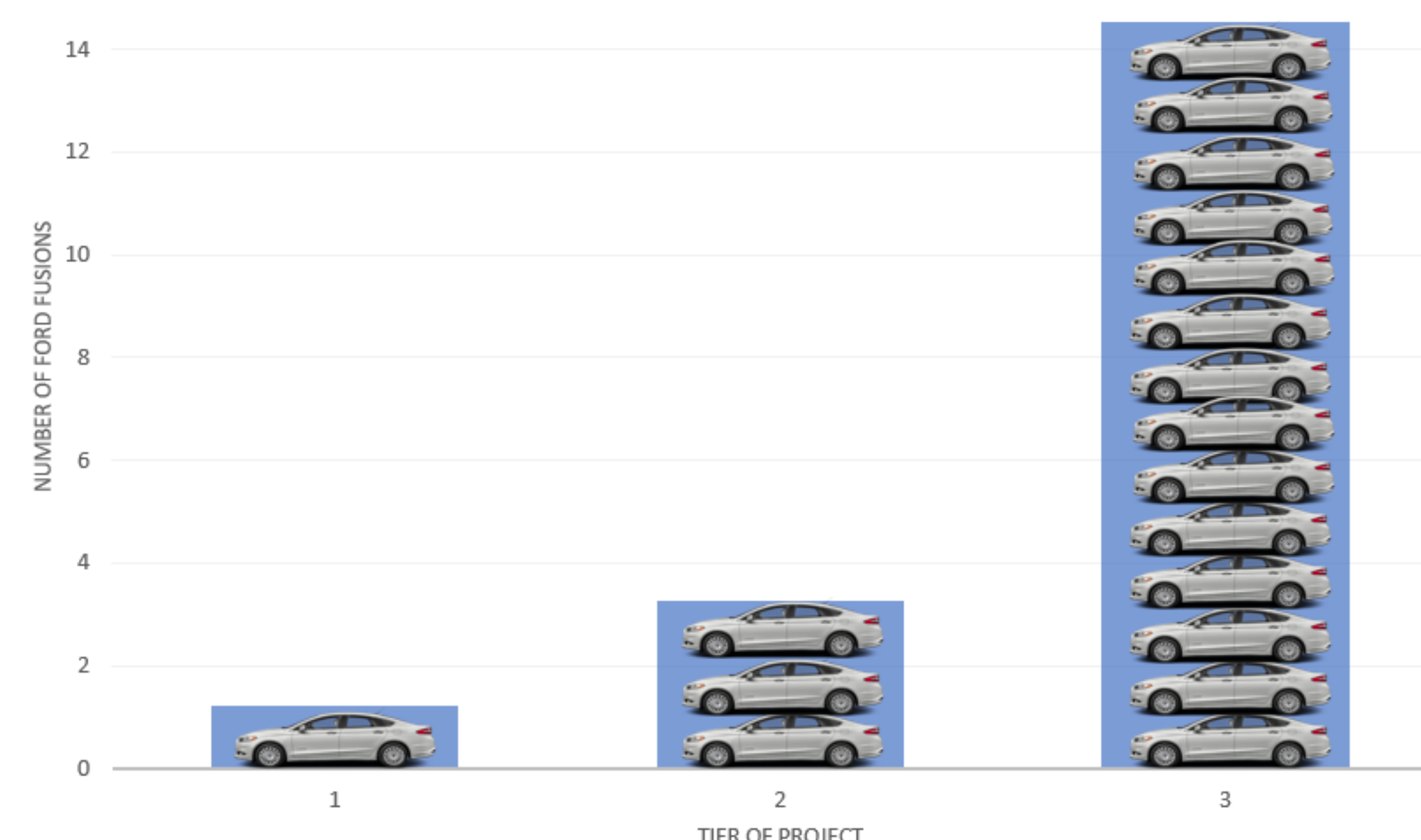


Tier III



Carbon Reduction

of Ford Fusions taken off the Road per Tier



Co-Benefits

- If JFGA moves forward with Tier 1 or Tier 2, **that project can be a model** for organizations applying to the Green Fund (Tier 3)
- Better interior lighting = better staff productivity
- Benefits beyond cost savings** and carbon emission savings
 - Improve JFGA's brand equity and reputation
 - Attract talented individuals to work at JFGA
 - Increase donations; expand the donor pool to include green-conscious individuals

Current Status

- Three site visits, **met with key stakeholders** including:
 - Facilities Director – Jerry Smith
 - VP of Atlanta Jewish Foundation – Itai Tsur
 - Development Officer – Ryan Kaplan
 - CFO – Marcie Beskind
- Conducted stakeholder interviews** to discuss impact of our project:
 - Development-Ryan Kaplan
 - Facilities-Jerry Smith
- Onsite proposal presented to Ryan Kaplan on 4/23/18**
 - Tier I and II can be implemented if payback period is between 2-3 years
 - Will seek meeting with CFO to move forward

Final Proposal

- Allocate for Tier I and Tier II **renovations in 2018-2019 fiscal year facilities budget.**
- Pilot the Green Fund during the 2018 fundraising season.** Send communications to current donors announcing the pilot, and include fields on JFGA's website and in its mailings for individuals to elect to donate to the Green Fund.
- Monitor donations received for pilot Green Fund.** If significant contributions occur, this would signal to JFGA that the Green Fund provides value to its donor community and could be built into its yearly allocations process.