

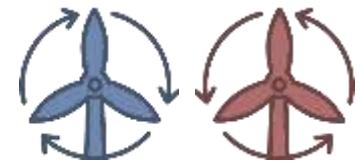
Green Campus For an Enduring World



G C F E W

Contents

- Rainwater Harvesting for Flushing
- PaveGen Floor Tiles –harvesting footsteps
- Horizontal dual-way Wind Turbines



Rain Water Harvesting



**Filtered Rainwater for
Sinks**

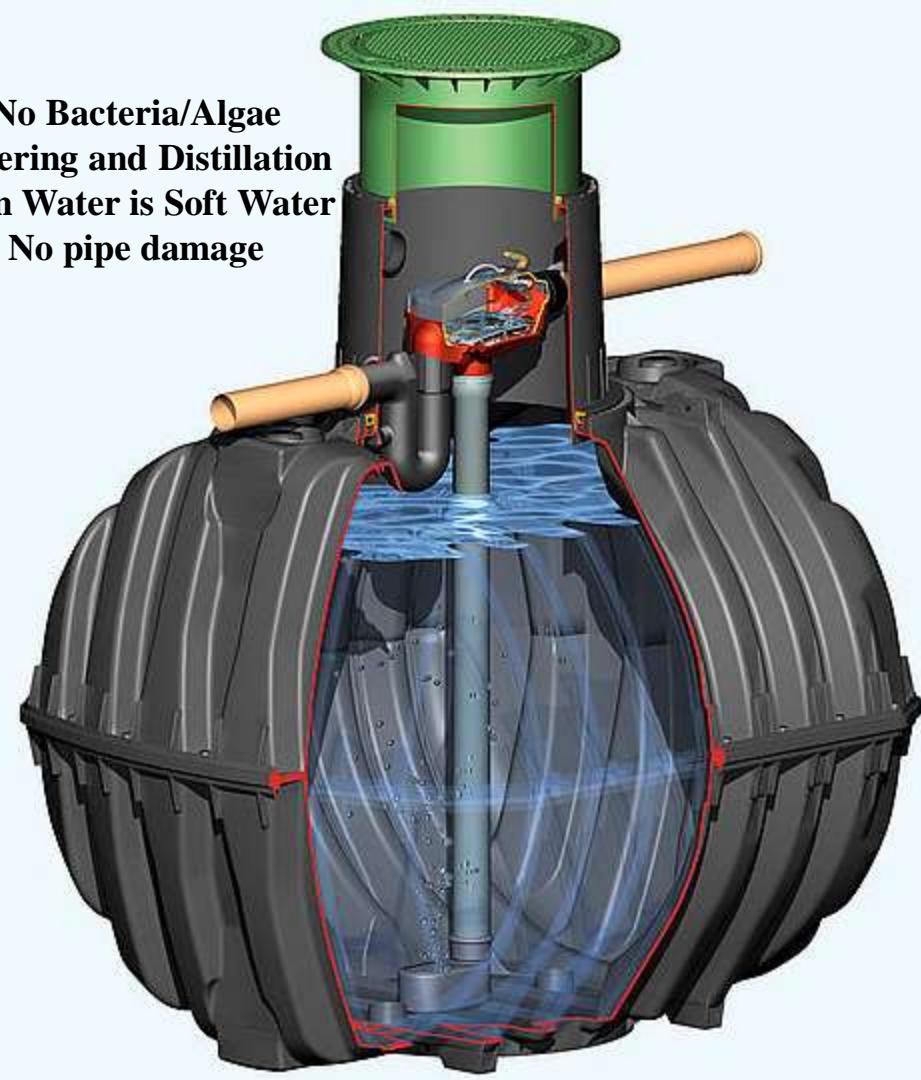
And for Flushing



Technical data

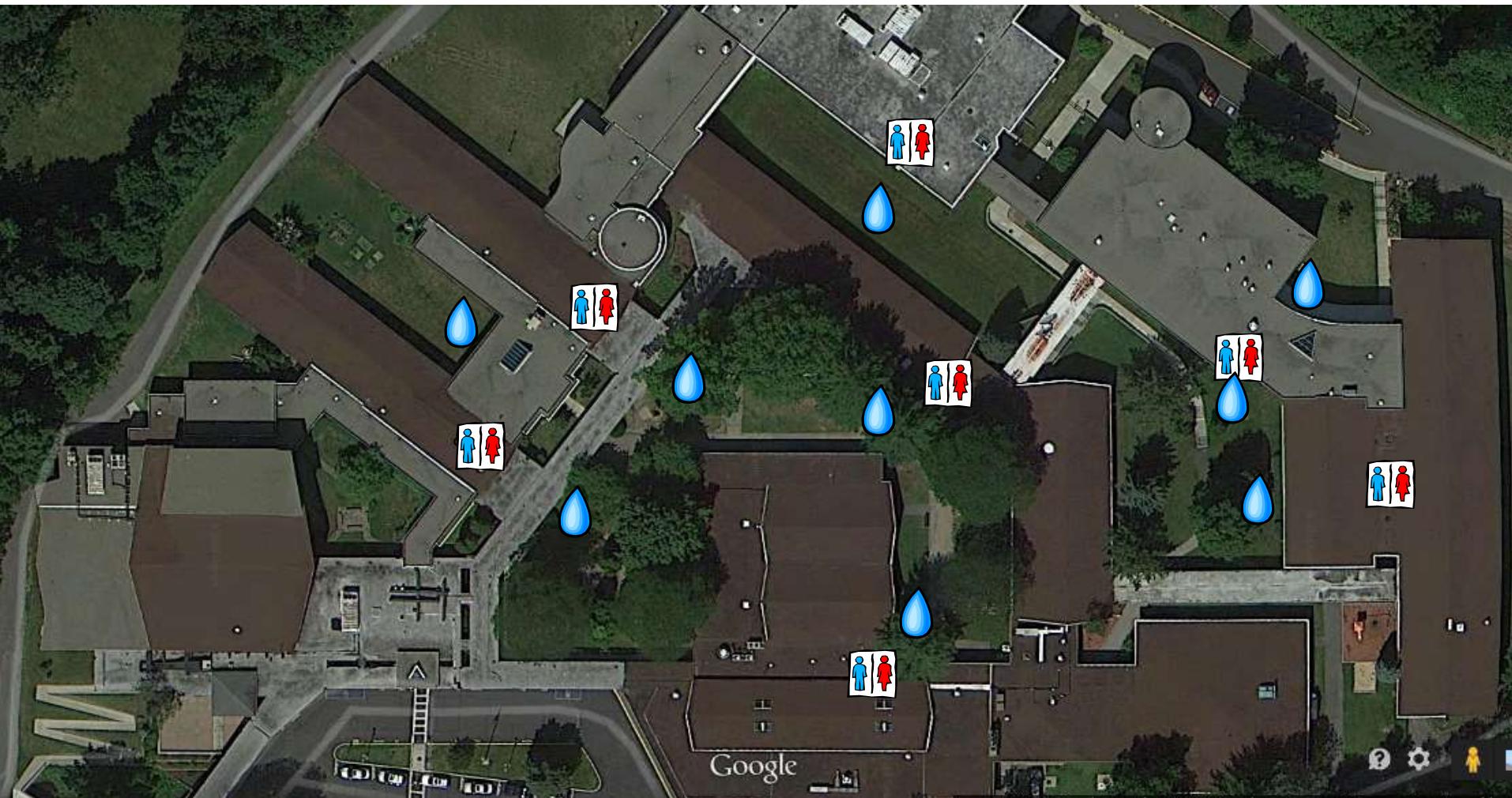
Dimensions/weight:	1,700 US Gallons
Length	94 inches
Width	86 inches
Height (including tank dome)	107 inches
Weight	485 lbs.
Earth covering	31.5 - 47.2 inches
Groundwater stable	up to the mid. of tank
Required earth covering	31.5 inches

No Bacteria/Algae
Filtering and Distillation
Rain Water is Soft Water
No pipe damage



**Grass near bathroom side of Greeley buildings
are suitable places for the Carat
with drainage pipes around the same area**

Possible Locations

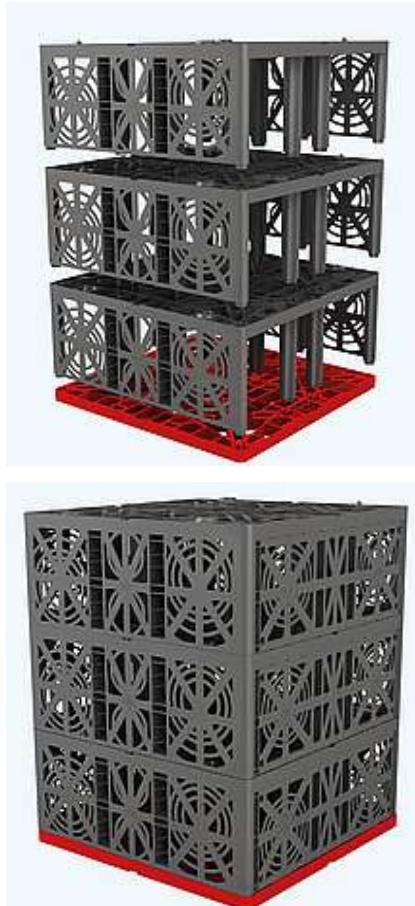


--Possible Tank Location



-- “Popular” Bathrooms

Stormwater Management



Volume	Length	Width	Height	Weight
205L	800 mm	800 mm	320 mm	8 kg

“Energy At your Footsteps”



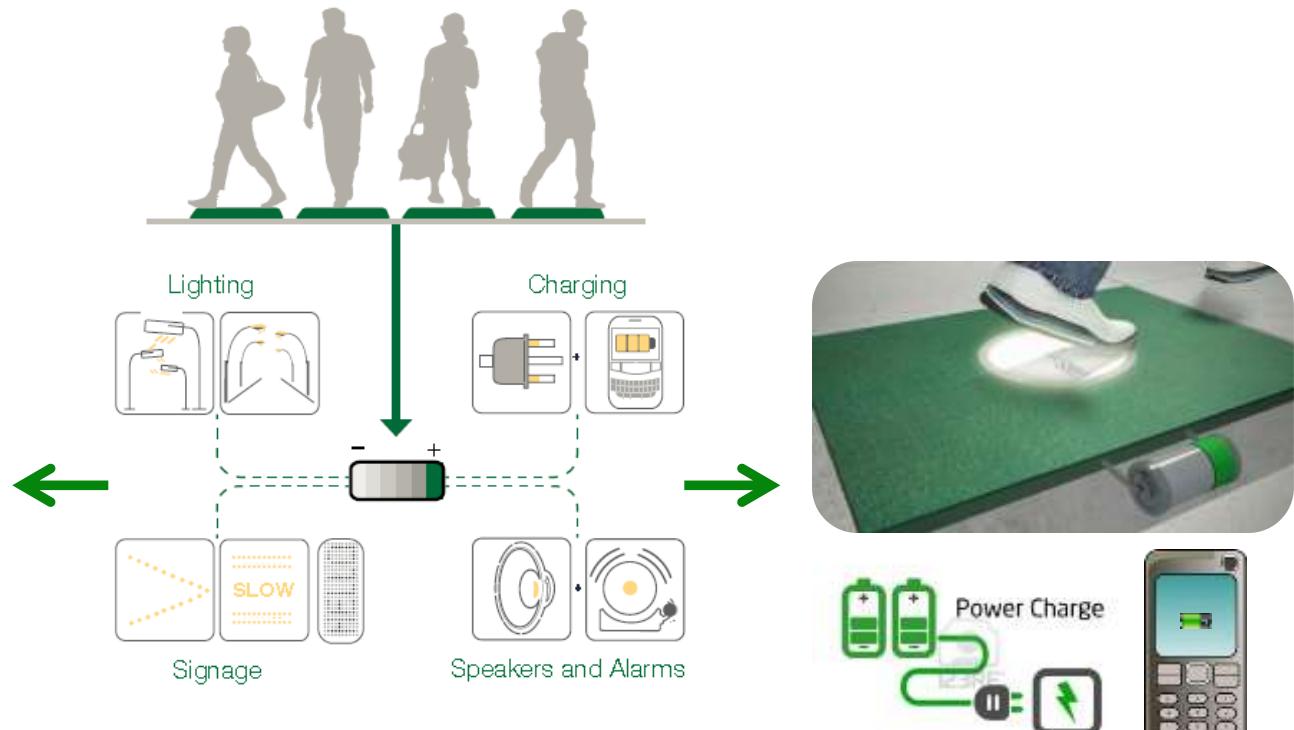
Greeley's **1200+** students can create **Constant Energy** from
their feet to power the school

An **Interactive** Equipment to go **Off-Grid** and **Educate**
Students of Environmentalism

Harvested Energy Can be used in Many Ways

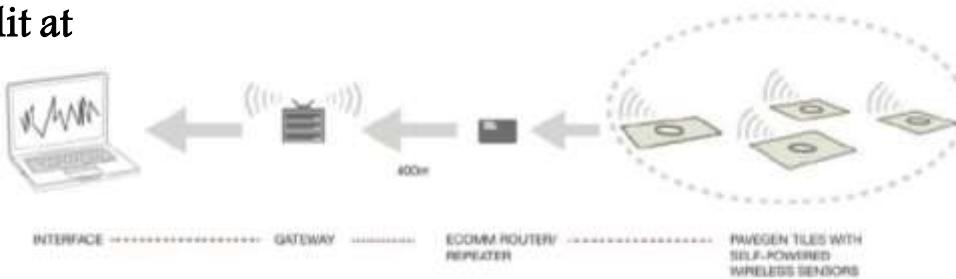
Lighting and an Interactive Mobile Device Charge Station powered by PaveGens

Are one of many ways PaveGen can be interactively used in Greeley



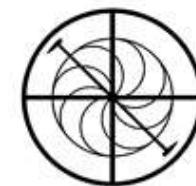
PaveGens **Light** up when stepped on and Can be programmed to stay lit at night

Easy Wireless Monitoring

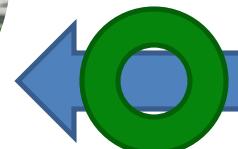
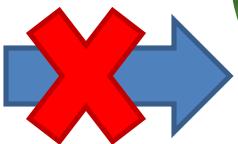


Power Outlets powered Directly by PaveGens

Wind Energy



Aerotecture International Inc.



Greeley's Flat Roofs are Perfect
for series of horizontal
Mini-Turbines

Too Large for the
Suburbs and Cities



Small but Generates a
Whole Lot

Able to be placed
Sideways

Chappaqua Statistics:

Average Wind Speeds:

14.20 mph

Average Rainfall:

48.90 inches



Greeley's Flat rooftops allow a Large amount of Mini-Turbines and enhance the Flow of wind with little obstruction

Mini-Turbines will Allow Greeley and Any Other Location to harness wind energy and cut energy usage in Half

610V AEROTURBINE

Cage Height 10 ft

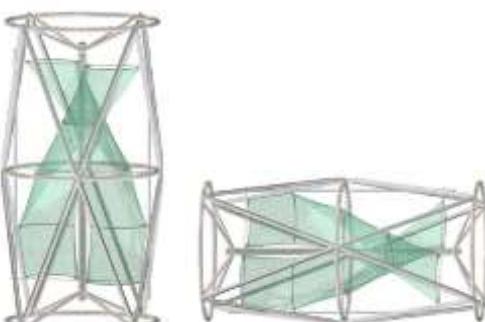
Cage Diameter 6 ft

Rotor Height 109 in

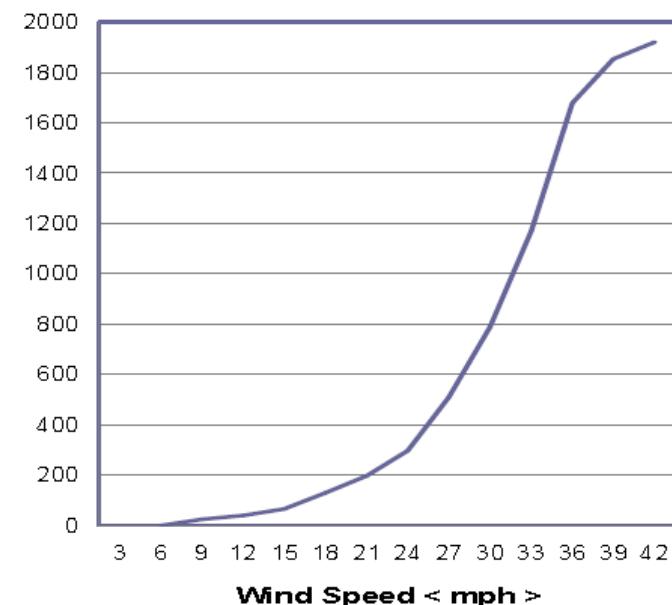
Rotor Diameter 57 in

Rotor Area 43.15 sq ft

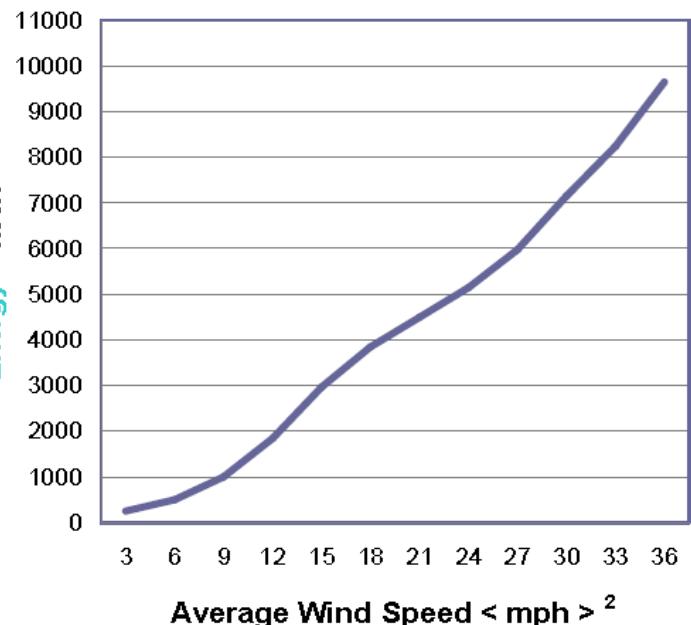
Rotor Weight 86 lbs



Turbine Output Power



Estimated Energy per Year¹



¹ Based on 100% utilization of the Aeroturbine.

² Based on 100% utilization of the Aeroturbine.

The Price of a Better Future?

	Watts per unit	Price per unit	\$/watt	Notes
WIND				
Pacwind				
Seahawk	500	\$3,500	7	module only
Delta 1	2,000	\$4,750	2.4	module only
Delta 2	5,000	\$22,000	4.4	module only
Aeolian	10,000	\$35,000	3.5	module only
Aerotecture				
	1,000	\$15,000	15	module only
	1,800	\$21,000	11.7	module only
AeroVironment				
No canopy	6,000	\$46,000	7.7	turn key
With canopy	6,000	\$73,000	12.2	turn key
Skystream 3.7	1,800	\$5,400 (\$12-15K installed)	3	turbine only (not tower)
Bergey Excel	10,000	\$27,900	2.8	turbine only (not tower)

Horizontals

Alternate

Aerotecture Wind-Turbines

610v Model: ~\$15,000 2000kwh

712v Model: ~\$25,000 3000kwh

GRAF Rainwater Tanks:

Standard Model (1,700 gallons):

\$3,899.95

Pricing August 2012

No. of Pavegen units	Unit Price GBP (£)
5 to 10	~\$ 4,250
11 to 20	~\$ 3,550
21 to 50	~\$ 3,150
50 +	Please enquire

<http://youtu.be/rW9p7yBJCOU>

Our Goal

1. Make Greeley a Exemplar of Economic Environmentalism
2. Teach future Generations about Economic Environmentalism by Showing its Existence
3. Let Greeley Become a Community Outreach Source so that Others may Follow its example.
4. Live with the World, Safely, Sustainably, and Fairly

“Help us, Help You, Help All of Us.”



G C F E W

Chappaqua PTA and CCSD

Revenue Generation Project
Presented by Lucille Rossi
To CCSD Board of Education

May 7, 2014

Revenue Generation Project

- Question:
- Is there a way to leverage existing “money for schools” programs to benefit CCSD?

Background:

- There are three programs, Box Tops, Target RedCard, and AmazonSmile (new) that provide funds to schools.
- Currently these programs are not “actively managed” by any entities in CCSD or PTAs. Some school PTAs will communicate that these programs exist.
- The funds are accepted by the school district and schools, and the funds are then utilized to provide things like supplies and other sundries for each recipient building.



Box Tops for Education

- **Box Top for Education** has generated around \$300 or so per school that participates, but requires some active management – submitting the box tops to General Mills. (only K-8 is eligible)
- Box Tops for Education
<http://www.boxtops4education.com>
- Total lifetime revenue of almost \$3000 with minimal management

Lifetime total for this program is \$4000

Revenue from Box Tops



Target: Take Charge of Education

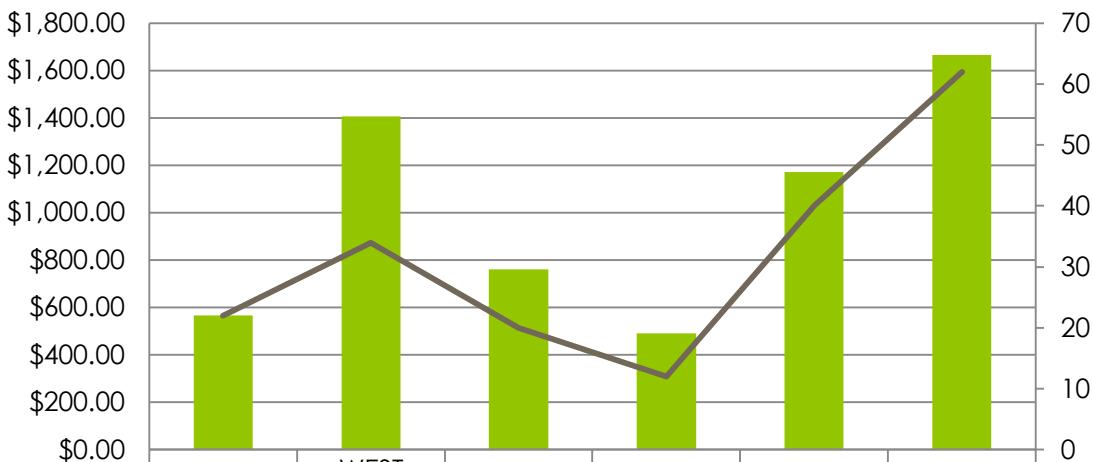


- **Target RedCards** generate between \$500 and \$1500 per school, and requires no management, other than communication reminding people to apply for a card, or assign one of our schools to their existing RedCard.
- Target, Take Charge of Education <https://www-secure.target.com/redcard/tcoe/home?catalogId=10051&langId=-1&storeId=10151&krypto=cQcHDksCxhgmutHxyjlq48%2BIHqzAFPvRjj%2BCK5QVyor4h0nGk1rMzYuRJJKChjT8LUqnEiXjccfX%0AJRWy3V0ESQ%3D%3D&ddkey=http:redcard/tcoe/home>
- 190 current cardholders, lifetime revenue \$31,000

Lifetime donations: \$31K, 190 cardholders

Target Red Card donations to Chappaqua Schools

Target Donations 8/2013



The most recent Target donation to this school (August 2013):

Number of REDcard holders who have designated this school:

Amazon Smile



Customers shop. Amazon gives.

Amazon donates 0.5% of the price of eligible AmazonSmile purchases to the charitable organizations selected by our customers.

- AmazonSmile (smile.amazon.com) is operated by Amazon, and when you shop on AmazonSmile, the Amazon Smile Foundation will donate 0.5% of the purchase price to an eligible charitable organization.
- Chappaqua Central School District is an authorized recipient.

Proposal

- Revenue Generated from these programs can be used to purchase a specific item.
- Projects with environmental/energy efficiencies have been identified as desired initial projects.
- Involve entire CCSD/Chappaqua community.
- This would give the community a tangible goal, we can track against the goal, and know that the funds are being used for something that would otherwise be an expense to CCSD.

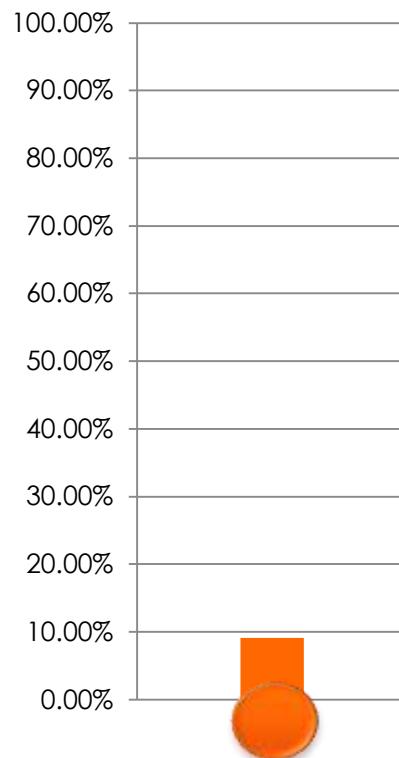
Benefits of a cohesive program:

- Educationally - there are some classes and clubs that can study the technology used in these projects
- Environmental - these help our district become "greener"
- Financially - they help our district save money because
 - 1) the funds come from outside district budget, eg. box top/target and
 - 2) savings on energy costs.

Tracking and Reporting

Project list

	descrip	school	cost	tracking	Rvenue
				period	received
Project 1	environmental	ccsd	\$10,000		
project 2	environmental	ccsd	\$10,000	1	\$2,500
Project 3	environmental	ccsd	\$10,000	2	\$3,600
Project 4	environmental	ccsd	\$10,000	3	\$2,800
Project 5	environmental	ccsd	\$10,000	4	\$5,000
Project 6	environmental	ccsd	\$10,000	5	
Project 7	environmental	ccsd	\$10,000	6	
Project 8	environmental	ccsd	\$10,000	7	
Project 9	environmental	ccsd	\$10,000	8	
Project 10	environmental	ccsd	\$10,000	9	
Project 11	environmental	ccsd	\$10,000	10	
Project 12	environmental	ccsd	\$10,000	total	\$13,900
Project 13	environmental	ccsd	\$10,000	goal	\$150,000
Project 14	environmental	ccsd	\$10,000	percent	9.27%
Project 15	environmental	ccsd	\$10,000	to goal	
			\$150,000	goal	



What do we need?

- Project manager: Chappaqua PTA district-wide chair to manage across the schools and community
- Note: BoxTop Program requires processing of boxtops (collecting, counting, mailing into GM)
- Each of 6 schools: PTA committee chair
- Each of 6 schools: environmental student clubs
- One district wide volunteer to handle non-school efforts (community interface)
- Communication: promotion/marketing
- Data: tracking and reporting of Revenue
- Energy Savings: tracking and reporting