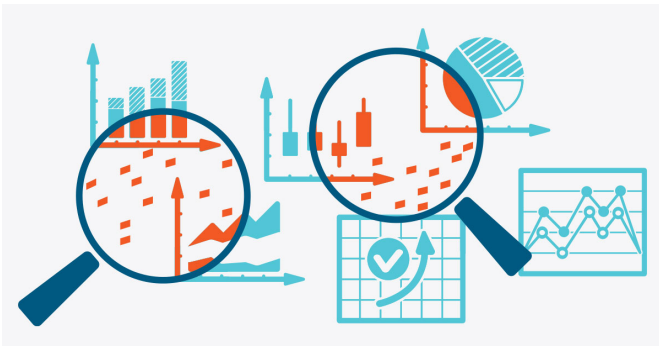


Approaches to Managing Data in Green Business Programs

Cassie Carroll

Illinois Green Business Program

Green Business Engagement National Network (GBENN)



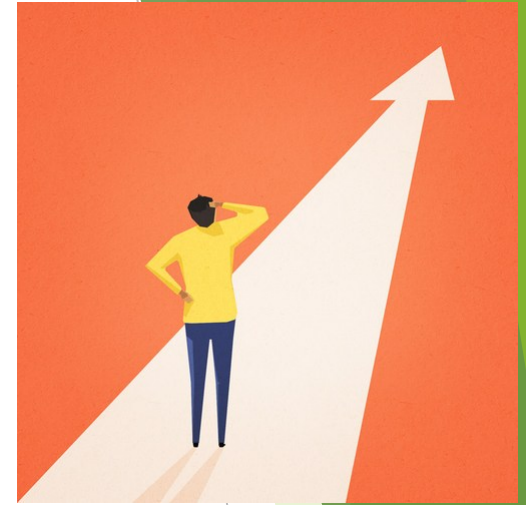
Holistic Climate Impact Approach to Environmental Outcome Data



- ▶ Small measures collectively can make a big impact, but how do we know the biggest impacts in an organization without climate benchmarking?
- ▶ Calculating a climate benchmark:
 - ▶ Pinpoints areas/aspects of a business/building that are emitting the most
 - ▶ Guides impactful decisions and actions motivated by current impacts
 - ▶ Creates clarity for program managers, businesses and their customers on how environmental actions directly reduce climate impacts
 - ▶ Easy to report to key stakeholders - community/regional climate action plans, funders, etc.
 - ▶ Align with national climate reduction initiatives

Find the Purpose for your Program

- ▶ **Why** are you collecting data?
- ▶ **How** will you collect the data?
 - ▶ How much support will your businesses need to collect this information?
- ▶ **What system** will you use to manage the data?
- ▶ **What tools and/or metrics** will you use to calculate environmental outcomes?
 - ▶ What are acceptable sources for global variables? What partners can you work with to help provide/review this information?
- ▶ **Who will you share this data with?**
 - ▶ Do you need to report the data?
 - ▶ Are businesses interested in displaying/sharing this data?
 - ▶ How will consumers/business customers interact with this information?



Track the Most Important Metrics



► Drivers of Data Collection:

- Reporting requirements - funders, partners, stakeholders, etc.
- Alignment with local/regional environmental initiatives
- Program or initiative goals
- Scale of program - i.e. focus on specific sectors vs. most sectors
- Willingness of business community to provide information
 - Always test with a small sample of your business network!

► Set a starting point, grow over time (scale)

► Always get feedback from users - key stakeholders!

Tools as a Resource

- ▶ Benchmark current use
- ▶ Directly calculate environmental outcomes
- ▶ Source metrics and global variables for your calculations
- ▶ Increase efficiency of calculating a variety of environmental/cost outcomes
- ▶ Review reductions post-implementation

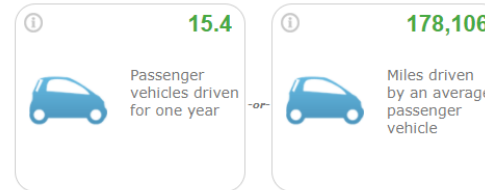
Equivalency Results

[How are they calculated?](#)

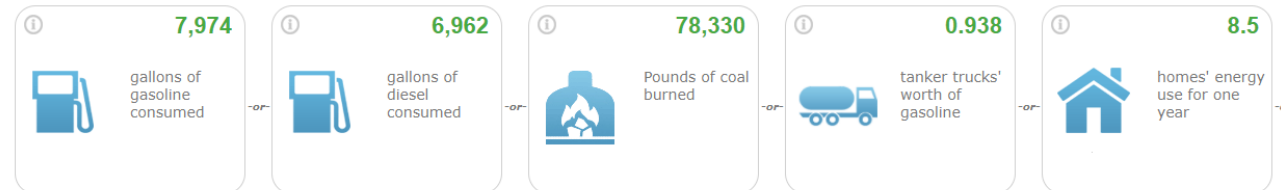
The sum of the greenhouse gas emissions you entered above is of Carbon Dioxide Equivalent. This is equivalent to:

70.9 **Metric Tons**

Greenhouse gas emissions from



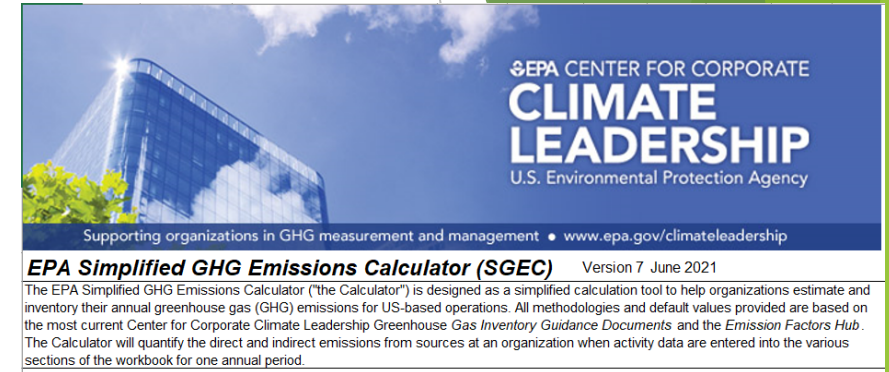
CO₂ emissions from



Tools for Climate Benchmarking

► Broad Climate Tools:

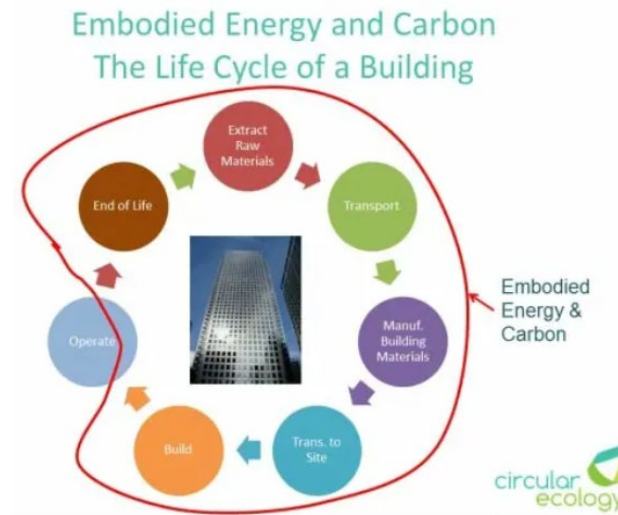
- CoolClimate Network Business Calculator
 - Holistic business GHG profile
 - <https://coolclimate.berkeley.edu/business-calculator>
- EPA Simplified GHG Emissions Calculator
 - Annual GHG tool for small businesses
 - <https://www.epa.gov/climateleadership/simplified-ghg-emissions-calculator>
- EPA Greenhouse Gas Equivalencies Calculator
 - Can calculate by specific unit of energy or by emissions data
 - <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>
- P2 Cost Calculators
 - Cost savings for GHG reductions
 - <https://www.epa.gov/p2/pollution-prevention-tools-and-calculators>



Tools for Climate Benchmarking

► Specialized Tools:

- EPA ENERGY STAR Portfolio Manager
 - Energy information, but also tracks waste and water!
 - <https://www.energystar.gov/buildings/benchmark>
- EPA WARM Tool
 - Waste reduction and elimination benefits
 - <https://www.epa.gov/warm>
- EPEAT Benefits Calculator
 - Electronics environmental benefits
 - <https://epeat.net/calculators>
- ICE Tool
 - Embodied carbon in building materials - lifecycle database
 - <https://circularecology.com/embodied-carbon-footprint-database.html>
- Responsible Purchasing Network Green Cleaning P2 Calculator
 - Janitorial and building cleaning
 - <http://www.responsiblepurchasing.org/janitor/index.asp>
- i-Tree Tool
 - Benefits of trees on energy reduction and other factors
 - <https://www.itreetools.org/>

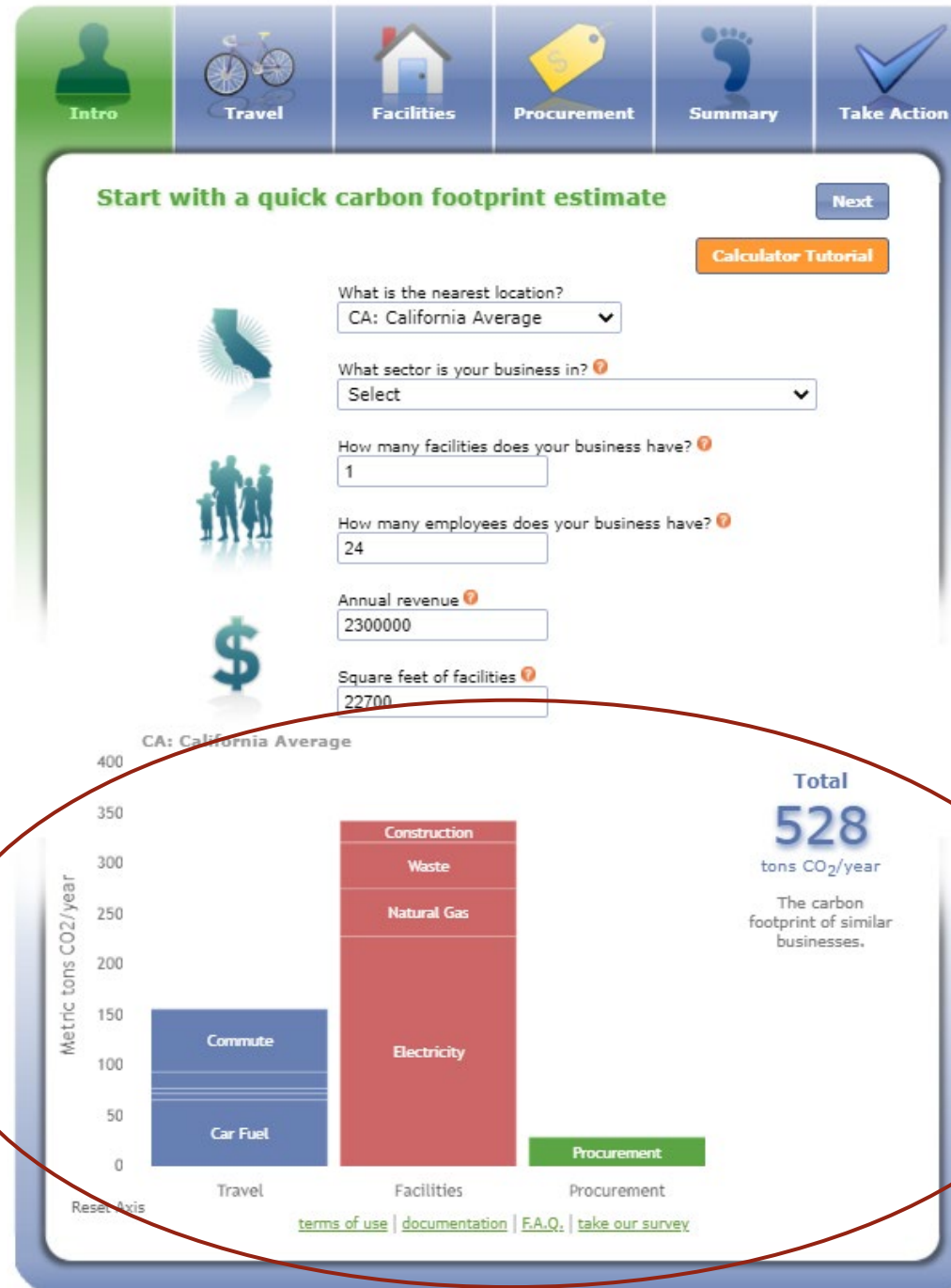


Using Tools to Calculate Climate Reduction



CoolClimate Calculator University of California Berkeley

<https://coolclimate.berkeley.edu/business-calculator>



EPEAT Benefits Calculators

<https://epeat.net/calculators>

Great webinar explanation of tools from the NE Recycling Council (includes EPA WARM and ReCon tools, much more):

<https://nerc.org/conferences-and-workshops/webinar2>

Environmental Benefits Calculators Webinar Recording & Presentations

- [Recording](#)
- [Environmental Benefits Calculators Links](#)
- [EPA WARM & ReCon Tools](#)
- [EPEAT Environmental Benefits Calculator](#)
- [ReFed Impact Calculator](#)

EPEAT Benefits Calculators

GEC's interactive environmental benefits calculator allows purchasers to measure and report the environmental benefits gained from purchasing electronic products covered by the EPEAT ecolabel. The benefits calculator also enables purchasers to estimate how they can achieve further environmental reductions by using products longer and responsibly recycling them when taken out of service.



Imaging Equipment



TVs



Mobile Phones



Servers



Computers and Displays



Results

Computers and Displays

+ Desktop Computer

+ Monitor

+ Notebook Computer

+ Tablet Computer

+ Integrated Desktop Computer

RESET

GET RESULTS



Responsible Purchasing Network Janitorial Calculator

<http://www.responsiblepurchasing.org/janitor/index.asp>

List of Products

Name of Building: ABC Building
Title of Your Estimate: Green Saving
Address: 111 Street, New City, MA 11223

Enter product weights here. Use the converter to find out the weight in pounds. Unit Converter

---> List the Cleaning Products That You Use

	Do You Use This Product?	Your Estimate Annual Amount (lbs/yr)	GS-37 or GS-40	Buy Aerosol Cans	Buy Ready to Use Containers	Buy Concentrates		Haz Mat %
						Hand Mix	Dispenser	
Hard Floor Care								
Sealer	<input type="radio"/> Yes <input checked="" type="radio"/> No	0	<input type="radio"/> Yes <input checked="" type="radio"/> No	N/A	<input checked="" type="radio"/>	<input type="radio"/>	N/A	0
Floor Finish	<input type="radio"/> Yes <input checked="" type="radio"/> No	0	<input type="radio"/> Yes <input checked="" type="radio"/> No	N/A	<input checked="" type="radio"/>	<input type="radio"/>	N/A	0
Finish Restorer	<input type="radio"/> Yes <input checked="" type="radio"/> No	0	<input type="radio"/> Yes <input checked="" type="radio"/> No	N/A	<input checked="" type="radio"/>	<input type="radio"/>	N/A	0
Stripper	<input type="radio"/> Yes <input checked="" type="radio"/> No	0	<input type="radio"/> Yes <input checked="" type="radio"/> No	N/A	<input type="radio"/>	<input checked="" type="radio"/>	N/A	0
Baseboard Stripper	<input type="radio"/> Yes <input checked="" type="radio"/> No	0	<input type="radio"/> Yes <input checked="" type="radio"/> No	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	N/A	0
Neutral Floor Cleaner	<input type="radio"/> Yes <input checked="" type="radio"/> No	0	<input type="radio"/> Yes <input checked="" type="radio"/> No	N/A	<input type="radio"/>	<input type="radio"/>	N/A	0
Dust Mop Spray	<input type="radio"/> Yes <input checked="" type="radio"/> No	0	<input type="radio"/> Yes <input checked="" type="radio"/> No	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	N/A	0

Use this amount for estimating hazmat content, or enter your own information.

If you choose GS-37 or GS-40, then you might also have to change the hazmat %. Check the MSDS.

Green Changes to Implement

Name of Building: ABC Building
Title of Your Estimate: Green Saving
Address: 111 Street, New City, MA 11223

Check which choice applies to you. You can choose one at a time, or all at once.

These are typical reductions you might get. Enter your own estimate if it matches your site better.

---> Purchasing Controls


	Already Done	Won't Do	Will Do	Have Not Done	Typical Reduction %
Buy/Mix According to Shelf Life Manage inventory	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	2
Track the expiration date on products, and be sure that you use them up before this date. Buy less, so that you don't have to throw away any expired product. Return unused samples to vendors!					
Buy Non-Aerosols	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	15
Where there is a choice, buy products as concentrates. Even a RTU (ready-to-use) trigger spray is better than an aerosol.					
Buy or Rent Pre-treated Dust Mops	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	5
Some laundry services offer pre-treated mops.					

---> Improve Mixing

	Already Done	Won't Do	Will Do	Have Not Done	Typical Reduction %
Install a Mixing Station or Designate a Chef for All High-Use Products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	20
Install a generic mixing station or one that is custom-made for the brand of products that you use. Or, have a dependable worker or supervisor do the					

Responsible Purchasing Network Janitorial Calculator

<http://www.responsiblepurchasing.org/janitor/index.asp>

**Forecast of Chemical Use Reductions**

Name of Building: ABC Building
Title of Your Estimate: Green Saving
Address: 111 Street, New City, MA 11223

	Reduction %	Total Product	Hazmat Content	% HazMat
Amounts Used Before		1013	99.1	10
---> Purchasing Controls				
Buy/Mix According to Shelf Life	2	19.18	1.98	
Buy Non-Aerosols	15	0	0	
Buy or Rent Pre-treated Dust Mops	0	0	0	
---> Improve Mixing				
Mixing Station or Designated Chef	20	185.1	16.67	
---> Product Changes				
Less Toxic Ingredients	0	0		
Use Fewer Products	0	0		
---> Work Changes				
Vacuuming Techniques	0	0		
Clean By Need Not Schedule	0	0		
Training Emphasis / Monitor Use	0	0	0	
Microfiber Mops	0	0	0	
---> Other Changes				
Auto-Flush Valves	0	0	0	
Building Perimeter Mats	0	0	0	
Floor Mats Below Urinals	0	0	0	
Reductions From Making Changes		204.28	18.65	
Amount Used After Changes		809	80.4	10

[Generate Excel](#)

This page shows the overall results you can expect for the products and changes you selected. To see details, do another estimate where you enter just one product or just one change.

Use this button to save your results as an Excel spreadsheet.



Managing Programs and Data

The background of the entire image is a scenic landscape. In the foreground, a calm lake reflects the sky and the surrounding environment. A hot air balloon with a yellow and red checkered pattern is floating in the center of the lake. Behind the lake is a dense forest of tall evergreen trees. In the background, a range of rugged mountains is visible under a clear blue sky.

Good for Nevada. Great for Business.

Mission

Educate and assist Nevada businesses and organizations in achieving green business certification to increase economic prosperity and create sustainable communities.

Vision

Transition to a thriving, sustainable economy that ensures a healthy Nevada for generations to come.

Values

- Leadership & Innovation
- Education
- Sustainability
- Community
- Healthy & Wellbeing
- Vibrant Network





Our Partners





Certified Nevada Green Businesses

June 2021

INNOVATORS



CARE Chest
of Sierra Nevada



MERCHOLOGY
YOUR LOGO + BRANDS YOU LOVE

CERTIFIED



STRANGE
bikinis



My Reno
Computer
Tutor



HARLEY-DAVIDSON
FINANCIAL SERVICES



SPACE
CADET



d'terra law
LLC




COMSTOCK FARM

Farms | Family Farm



GreenBizTracker

An online platform makes it easy for businesses to register and get started, track their efforts, and become certified.

 FIND A GREEN BUSINESS

Type of Business
View All ▾

State
Nevada ▾

Category
▾


County
View All ▾

Zip Code
Zip

City

Business Name, Keyword

SEARCH

 APPLY TO BE A GREEN BUSINESS

Find new ways for your business to be more efficient, healthy, and attract new customers. Get EnviroStars recognition!

APPLY NOW

Already have an account?

LOGIN HERE

Forgot your password?

Green Business Action Areas



Energy



Transportation



**Pollution
Prevention**



Wastewater



Solid Waste























Water



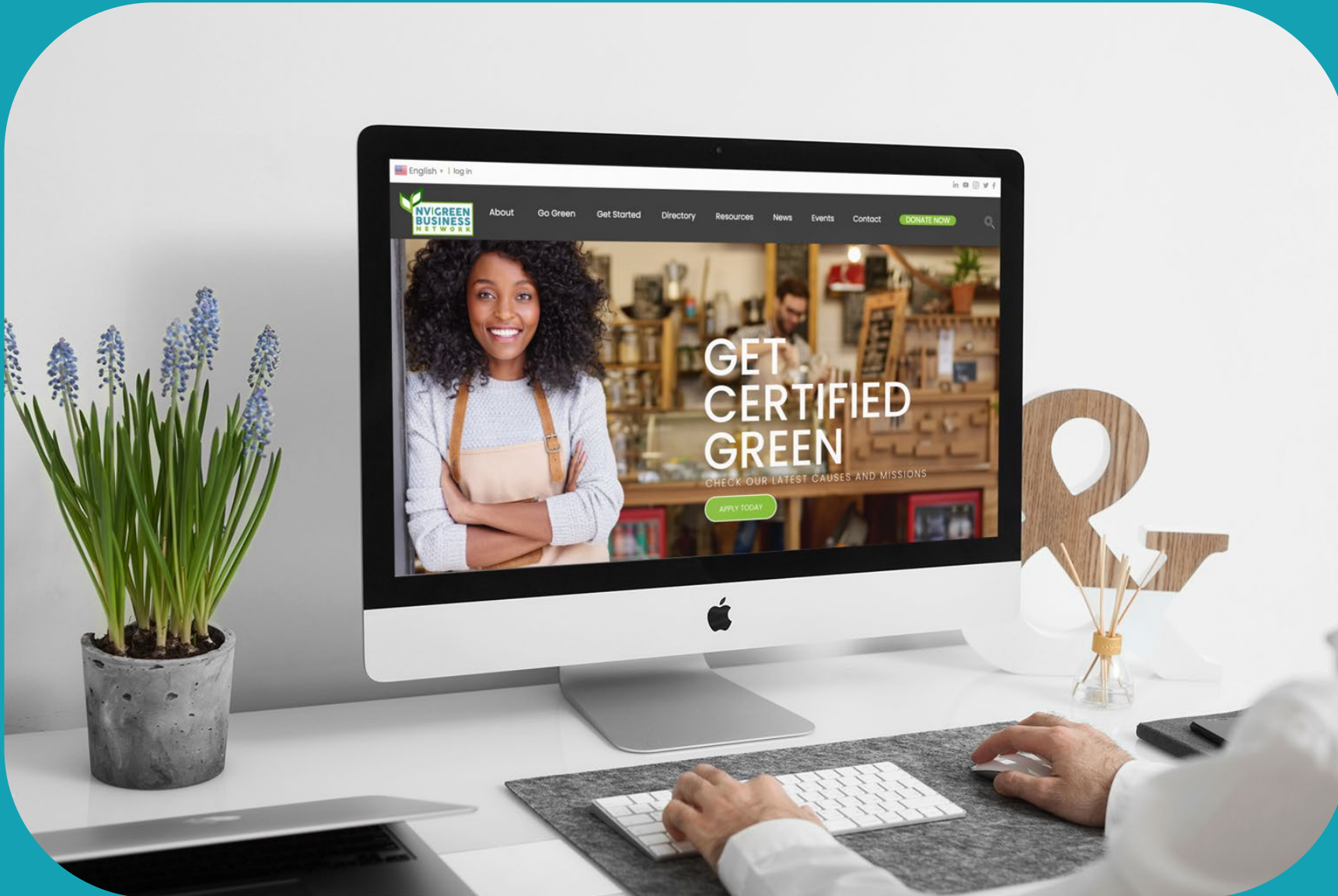


Get Recognized



	TIER 1 LEADER	TIER 2 CHAMPION	TIER 3 INNOVATOR
Get assistance, resources & rebate information.			
Business listings connect consumers.			
Certificate & member seal.			
Featured in social media.			
Local government recognition.			
Showcased on website testimonials.			
Showcased on GreenBizTracker ad slider.			
Newsletter headline story.			
Nomination for award.			

Contact: info@greenupnow.biz

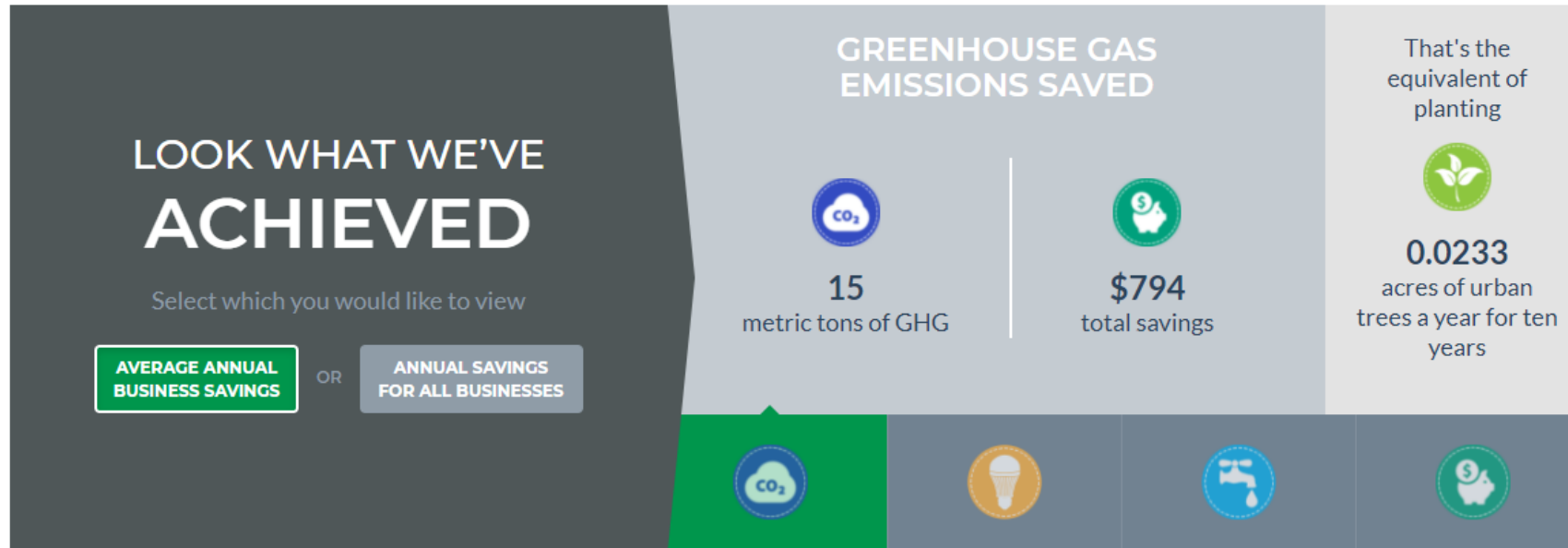


Visit www.nvgreenbusiness.org

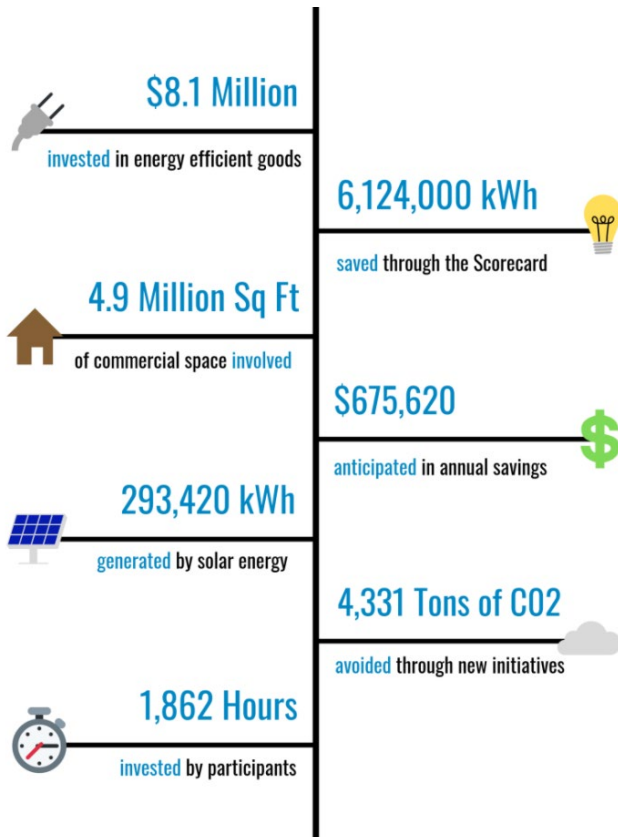
www.nv.greenbiztracker.org



COLORADO
Green Business Network

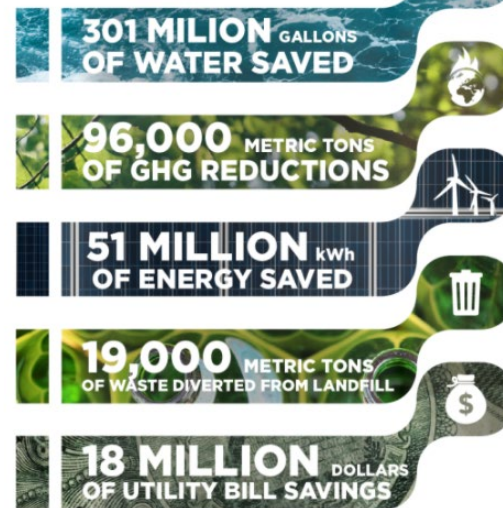


Communicating Results



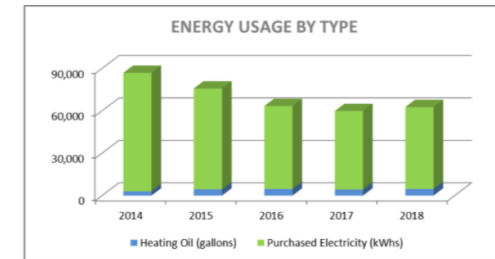
OUR IMPACT in 2020

Businesses that join our network **conserve** precious resources, **prevent** harmful pollution, and **enhance** their bottom-line.



Energy

The amount of purchased electricity decreased by 29% in comparison to our 2014 baseline. The decrease in purchased electricity was mostly achieved by LED lighting retrofit. To date 77% of the lighting at Greenburgh Nature Center was converted to LED.



77% OF THE LIGHTS CONVERTED TO LED

8 Greenburgh Nature Center

Sustainability Report 2018

GREEN
CALIFORNIA
GREEN BUSINESS
NETWORK



GREENHOUSE GAS EMISSIONS SAVED

Green businesses have saved **77,716,732** lbs of CO2 with a total savings of **\$132,118**. That's the equivalent of:

Planting **120,805** Acres of Urban Trees

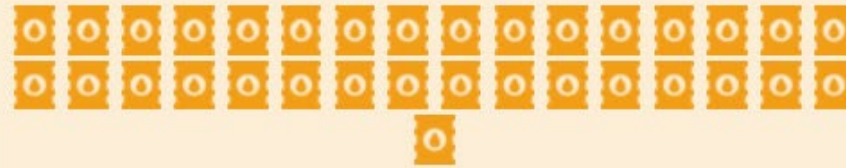


(The number of icons in this visualization has been capped to not overload the scorecard)

HAZARDOUS WASTE REDUCED

Green businesses have saved **60,159** gallons of hazardous waste with a total savings of **\$38,357**. That's the equivalent of:

1,077 Fifty-five Gallon Drums of Hazardous Waste



(The number of icons in this visualization has been capped to not overload the scorecard)

ENERGY SAVED

Green businesses have saved **200,767,062** kWh with a total savings of **\$20,341,719**. That's the equivalent of:

Powering **18,424** houses for an entire year



(The number of icons in this visualization has been capped to not overload the scorecard)

MERCURY REDUCED

Green businesses have saved **1** grams of mercury.

VOCS SAVED

Green businesses have saved **1,435** lbs. That's the equivalent of:

1,435 lbs of volatile organic compounds (VOCs) prevented from contributing to ground level ozone smog.

Thank you!



Don't fall down the metrics
rabbit hole!

Keep it simple and stick to
your goals/purpose!

Cassie Carroll

Illinois Green Business Program

Green Business Engagement National Network

Cassie@illinoisgba.com

331-305-4422

