



**CITY OF HENDERSONVILLE**  
**ENVIRONMENTAL SUSTAINABILITY BOARD**  
City Operations Assembly Room | 305 Williams St. | Hendersonville, NC 28792  
Thursday, September 19, 2024 – 3:30 PM



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## AGENDA

1. **CALL TO ORDER**

2. **APPROVAL OF AGENDA**

A. (Agenda breakdown attached)

3. **PUBLIC COMMENT**

A. Public Comment - 10 minutes

4. **APPROVAL OF MINUTES**

A. Approval of August 2024 ESB meeting minutes

5. **NEW BUSINESS**

A. Brooklyn Community Garden update: Jane Grossman - 10 minutes

6. **OLD BUSINESS**

A. Sustainability Demonstration Station update, Virginia Tegel, Chair - 5 minutes

B. Water drinking fountain at Ecusta Market & Cafe and Sustainability Demonstration Station:  
Virginia Tegel, Chair - 5 minutes

Model being considered:

[https://www.webstaurantstore.com/elkay-emasm-ezh20-stainless-steel-surface-mount-non-filtered-mechanically-operated-bottle-filling-station/438EMASM.html?utm\\_source=google&utm\\_medium=cpc&gclid=CjwKCAjwoq3BhB3EiwAYqYoEpORNrWQTaYY-65eEJ3fZcS9xle4xqZFj6QHo9tUbZSxPCiyqVL4RRoC1AMQAvD\\_BwE](https://www.webstaurantstore.com/elkay-emasm-ezh20-stainless-steel-surface-mount-non-filtered-mechanically-operated-bottle-filling-station/438EMASM.html?utm_source=google&utm_medium=cpc&gclid=CjwKCAjwoq3BhB3EiwAYqYoEpORNrWQTaYY-65eEJ3fZcS9xle4xqZFj6QHo9tUbZSxPCiyqVL4RRoC1AMQAvD_BwE)

C. Hendo Earth Fest: Frank Stewart and June Shelp, Vice-Chair and Member - 10 minutes

D. Symbolic Monarch Migration: Jill Carter, Member - 5 minutes

E. Community Wildlife Habitat Certification: Jill Carter, Chair - 5 minutes

F. Green Business Partnership: Jane Edgar, Member - 15 minutes

G. Tree Board collaboration: Virginia Tegel, Chair - 5 minutes

- H. Native Plant Sale: Virginia Tegel, Chair - 5 minutes
- I. Vote on amending bylaws to include student board member: Virginia Tegel, Member (3 minutes)
- J. Safe Routes to School program: June Shelp, Member (5 minutes)

<https://www.ncdot.gov/divisions/integrated-mobility/safety/Pages/safe-routes-school.aspx>  
<chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ncdot.gov/divisions/integrated-mobility/safety/Documents/safe-routes-to-school-description.pdf>

**7. SUSTAINABILITY MANAGER UPDATE**

- A. Caitlyn Gendusa: Staff liaison, 5 minutes

ESB retreat (planning for FY26 budget, confirm priorities/subcommittees and how they relate to Sustainability Strategic Plan & Comp. Plan

Current/upcoming work & projects: waste reduction grant, sustainable fleet transition policy, elective pay reimbursement, Sustainability Strategic Plan Annual Report

**8. CITY COUNCIL UPDATE**

- A. Lyndsey Simpson, Mayor Pro Temp. - 5 minutes

**9. ADJOURNMENT**

*The City of Hendersonville is committed to providing accessible facilities, programs and services for all people in compliance with the Americans with Disabilities Act (ADA). Should you need assistance or an accommodation for this meeting please contact the City Clerk no later than 24 hours prior to the meeting at 697-3005.*

<b>Agenda date</b>	<b>topic</b>	<b>Energy Grady/Jane</b>	<b>Transportation June/Gina</b>	<b>Waste Mgt Virginia/Frank</b>	<b>Land Mgt Jill</b>	<b>Water Omar/Tanya</b>
9/19/25	Brooklyn Community Garden				X	
	Sustainability Demonstration Station			X		
	Water drinking fountain at Ecusta Market & Cafe and Sustainability Demonstration Station					X
	Hendo Earth Fest	X	X	X	X	X
	Symbolic Monarch Migration				X	
	Community Wildlife Habitat Certification				X	
	Green Business Partnership	X		X		X
	Tree Board collaboration				X	
	Native Plant Sale				X	
	Vote on amending bylaws to include student board member	X	X	X	X	X
	Safe Routes to School Program		X			



**CITY OF HENDERSONVILLE**  
**ENVIRONMENTAL SUSTAINABILITY BOARD**  
 City Operations Center-Assembly Room | 305 Williams St. Hendersonville, NC  
 28792



Thursday, August 15, 2024 – 3:30 PM

## MINUTES

### 1. CALL TO ORDER

Call to order by Virginia, at 3:32 pm on August 15

Grady is Time warden

All members are present

### 2. PUBLIC COMMENT

No one online

### APPROVAL OF AGENDA

### APPROVAL OF MINUTES

Gina motion and Jane 2nd to approving the minutes.

### NEW BUSINESS

Brief introduction of new board member Tanya

2. Name Sullivan Park Birding Trail in Honor of Crystal Cauley - *John Connet, City Manager (5 min)*

John C. Proposes to partner with Wild Birds Unlimited, and the Art Council of Hendersonville to provide and paint bluebird houses in memory of Crystal Cauley, with a proposed budget of \$1,000 (city to help share cost). Timeline- Spring 2025. To be on the september city council meeting for official approval. The ESB endorses this project.

3. Water and Sewer Department Updates - *Adam Steurer, P.E., Utilities Director (30 min)*

Presentation:

Discussed brief history of HWS

Utility today- 80K population served for water,20K for sewer, enterprise fund (no tax monies), \$24.3mil annual operating budget,

French Broad River Intake/pumping station - new for Fall 24

Water Treatment Expansion from 12mgd to 15mgd (addition of sand media filter) est cost is \$2.1 mil.

Water Pumping Efficiency Projects- WTP high service pump upgrade and resulted in 12% reduction in energy use at WTP

Pumping schedule improvements- fill water tanks during off peak energy use times. (IE time of use is important for cost efficiency).

Multiarea streambank restoration

WWTP Ultraviolet Disinfection Improvements

WWTP Biosolids Thermal Dryer- produces high quality biosolid, reduction in solids management costs. Will be able to use the product in land use applications. Project includes solar photovoltaic system to help off set energy use. Goal is early 2026.

4. City Council Update - *Lyndsey Simpson, Mayor Pro Tem (5 min)*

Strategic plan turned out well- going to second city council meeting in August. Will go to vote in sept or oct. coming to fruition soon!

Board appreciation collaboration meeting upcoming.

Tree board update - want the city to get an urban forester, and urban forestry plan. Want a goal to increase tree canopy cover by 4%. Oct 13th stream bank restoration walk.

ESB and Tree board- collaboration on native plants policy- suggestion of 95% native, there is an approved plants species list.

Joint meeting 1 x per year with tree board- group is on board.

5. Main St Bike Lanes - *June Shelp, Board Member (5 min)*

June- new bike lane is great and well painted. permanent dividers are coming, temp barricades are frustrating as a cyclist to work through. Better ones are coming after the apple festival. need clarification on if the bike lane will be closed during events.

6. Hydretain test bed - *Omar Zafra, Board Chair (5 min)*

compost blend bed that helps retain moisture. Suggestion to have part of the garden bed use hydretain and the other half compost to see demonstration.

Addition of two new raised beds?

7. Green Business Partnership - *Jane Edgar and Omar Zafra, Board Members (10 min)*

<https://www.scgov.net/government/sustainability/green-business-partnership>

Sarasota county has a green business partnership. Proposing a general idea of a green business partnership for our city. As of right now not for verification/inspection but as an idea to grow on its own.

Potential for forming a subcommittee.

Kasey is emailing a video link to board members to watch on their own time before the next meeting.

Lydnsey left for R&B at 445pm

8. Committee Structure - *Virginia Tegel, Board Chair (10 min)*

Virginia discussed the rules and structure of committees- publicly posted, and minutes must be taken and submitted.

Jane makes a motion for the green business partnership. Omar 2nds the motion. Unanimous vote for the committee. Virginia appoints Jane and Omar to the committee, and they accepted. Unanimous vote.

## SUBCOMMITTEE UPDATES

9. Waste Management- *Virginia Tegel, Board Chair (5 min)*

Sustainability demonstration station and repair cafe. Already have volunteers organized for 8/17.

Virginia to communicate with Amy that we will host during the farmers market in October.

## OLD BUSINESS

10. Hendo Earth Fest 2050 - *June Shelp (5 min)*

Vote to continue Hendo earthfest- Virginia appoints Frank Stewart and Jane to be on the committee. Unanimous decision.

Applications and contracts have been submitted.

11. Wildlife Habitat Certification vs. Bee City - *Jill Carter, Board Member (5 min)*

12. Tree Board Update- *Lyndsey Simpson, Councilwoman (5 min)*

Provided by Lyndsey- see City Council Update

## OTHER BUSINESS

## **ADJOURNMENT**

Meeting Adjourned at 8/15.

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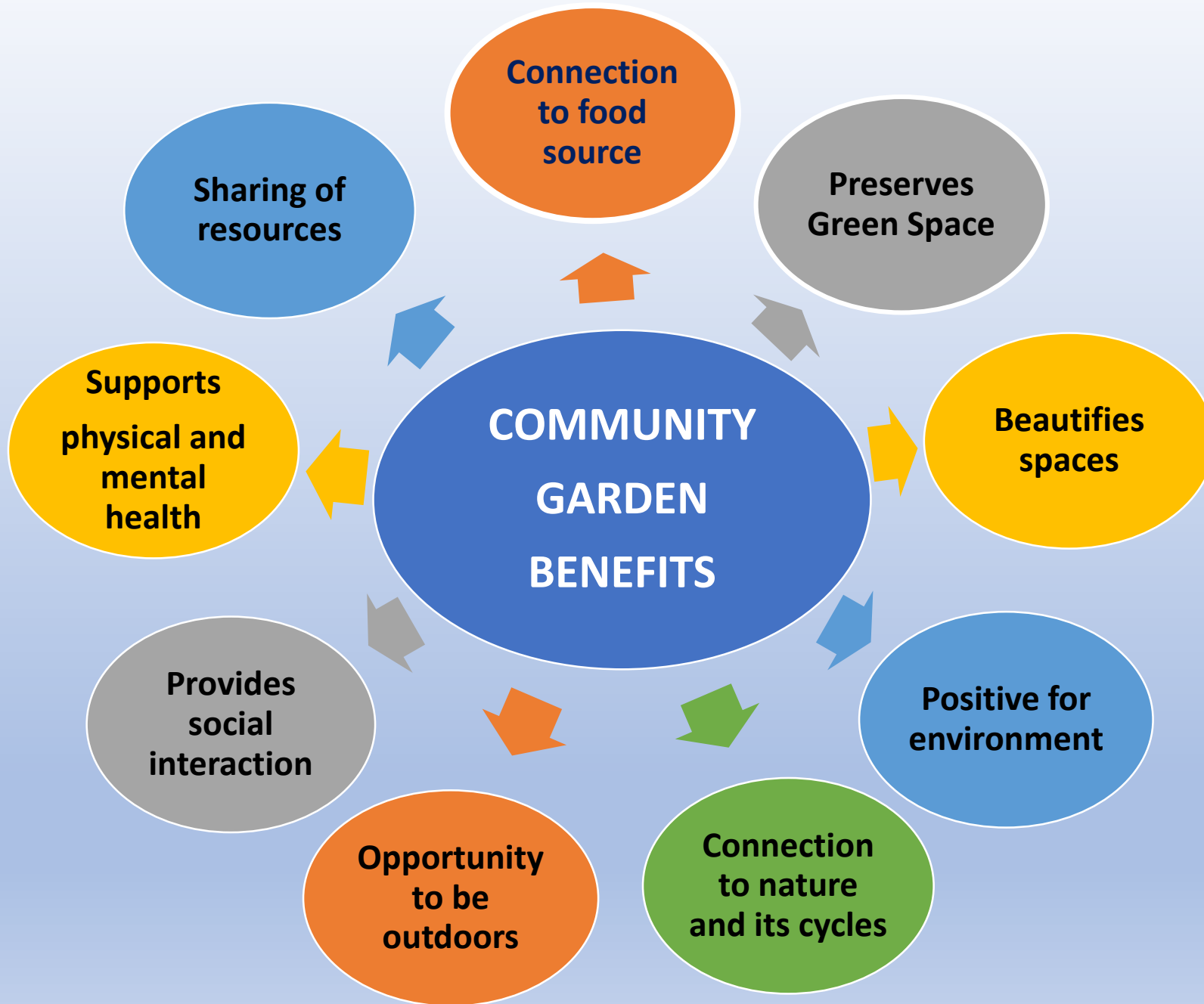
# Brooklyn Community Garden Revitalization





# What is a Community Garden?

*A community garden* is a single piece of land gardened collectively by a group of people. *Community gardens* utilize either individual or shared plots on private or public land while producing fruit, vegetables, and/or plants grown for their attractive appearance.



**“Throughout history,  
community gardens have  
adapted according to the  
needs of society - increasing  
to meet societal shifts  
and demand”**

Master Gardener | Henderson County

## My Background



- Certified Herbalist
- Henderson County Extension Master Gardener since 2014
- 4400 volunteer hours primarily with community gardens
- North Carolina Community Garden Partners Board member since May of 2021. Currently serving as Secretary-Treasurer.
- Bountiful Harvest Community Garden, Henderson County community garden in Jackson Park - 2014-2022.
- Started working with the 7<sup>th</sup> Avenue Garden project in March of 2022, contributing 547 hours valued by Extension at \$16,957.00
  - 2022-94 hours, 2023-318 hours, 2024-235+ hours

# BOUNTIFUL HARVEST COMMUNITY ALLOTMENT GARDEN

Item A.



# 7<sup>th</sup> Avenue Community Communal Garden



# 7<sup>th</sup> Avenue Brooklyn Community Garden challenges

Ongoing since garden inception 2011

- Groundhogs
- Invasives-Japanese knotweed, tree of heaven, porcelain berry
  - Grading
  - Flooding issues

# The Numbers...

GRANTS/FUNDS	AMOUNT
HBBC	\$24,952.00
CFHC	\$25,000.00
ESB Funds	\$4,900.00
Bee City	\$4,768.00
NCCGP	\$1,725.00
Seed Project	\$950.00
COME Donation	\$250.00
<b>TOTAL</b>	<b>\$62,545.00</b>

GARDEN COST PROJECTIONS	PROJECTED	ACTUAL	\$ DIFF PROJ/ACT
Garden Beds/Soil	\$12,645.00	\$6,775.00	\$5,870.00
ADA Pathway	\$11,004.00	\$14,225.00	-\$3,221.00
Lot Prep	\$6,120.00	\$18,315.00	-\$12,195.00
Shed	\$1,700.00	\$500.00	\$1,200.00
Fence	\$9,056.00	\$10,322.00	-\$1,266.00
Landscaping/Erosion Control	\$4,000.00	\$6,556.00	-\$2,556.00
Benches/Picnic Tables	\$8,392.00	\$0.00	\$8,392.00
Pergola	\$7,213.00	\$131.00	\$7,082.00
Permaculture Plan	\$2,000.00	\$2,050.00	-\$50.00
Signage	\$1,100.00	\$2,402.00	-\$1,302.00
Garden supplies		\$747.00	-\$747.00
Contingency	\$5,000.00	\$0.00	\$5,000.00
BHRG Fiscal Sponsor Fee	0	\$522.00	-\$522.00
<b>TOTAL</b>	<b>\$68,230.00</b>	<b>\$62,545.00</b>	<b>\$5,685.00</b>



# Ongoing...

- Continuing work on railroad embankment with erosion control and plantings while removing continuous growth of invasives
- Follow up with Habitat for Humanity for timeline for building pergola
- Plant cutting garden of zinnia's along the outside fence line for the community to enjoy starting spring 2025
- Leveling out and installing pad for the shed area
- Relocating the shed
- Continuing to monitor water flow and address as needed
- Fill current beds with compost soil
- Clearing crab grass areas and laying wood chips
- Plant trees along exterior-Red Buds, Kousa Dogwoods
- Restoring/painting donated shed and picnic tables



# Future plans ...

- Crystal's Children's Garden-Creating garden in memory of Crystal and her passion for connecting children to nature.
- Additional Garden Beds- 4 31" tall beds and 10 17" beds
- Berry House construction-16' x 32' structure for blueberries and strawberries. Connected to the children's garden. Replaces former blueberry house.
- Plan out back fence line area.

# Projected add-on costs...

<b>Crystal's Children's Garden</b>			
Item	Cost	# items	Total Proj. Cost
Children's Beds	\$120.00	6	\$720.00
Special needs beds	\$250.00	2	\$500.00
Walkway Ext.	\$2,400.00	1	\$2,400.00
Archway	\$450.00	1	\$450.00
Palette fencing w/mural			\$250.00
Signage		multiple	\$500.00
Kinetic sculpture	\$250.00	1	\$250.00
Wind Chimes	\$50.00	2	\$100.00
Rain gauge	\$50.00	1	\$50.00
Garden themed little library		1	\$250.00
Watering cans	\$10.00	4	\$40.00
Birdhouses	\$50.00	2	\$100.00
Small storage bench/shed	\$250.00	1	\$250.00
<b>Total</b>			<b>\$5,860.00</b>

<b>Additional Garden Beds</b>			
Bed type	Cost	# beds	Total Proj. Cost
17" beds	\$220.00	10	\$2,200.00
31" beds	\$300.00	5	\$1,500.00
<b>Total</b>		<b>15</b>	<b>\$3,700.00</b>

<b>Berry House</b>			
Enclosed 16' x 32'	\$30 per lf	64 lf	\$1,920.00

**DREAM IT  
PLAN IT  
BUILD IT  
THEY WILL COME**

*"Gardens are the first sign of commitment to a community. When people plant, they are saying 'Let's stay here'. And by their connection to the land, they are connected to one another."  
- Anne Raver*



***Brooklyn Community Garden***  
***“Nurturing self-reliance and building community  
across generations”***

Tae will now discuss community engagement, future partners and programming.

Thanks for your time and support!



City of  
Hendersonville  
Exploratory Green  
Partnership  
Initiative

September 16<sup>th</sup> 2024



# General Thoughts for Purpose

The intention of the Green Partnership Initiative is to invite businesses to share their efforts and sustainability practices and demonstrate how those practices reflect the City of Hendersonville Strategic Sustainability plan.

The Sustainability Plan focuses on five key areas to reduce environmental impact and strengthen our community:

# Five Focus Areas

- 1. Energy:** Initiatives to improve energy efficiency and increase the use of renewable energy sources.
  - 2. Transportation:** Efforts to promote sustainable transportation options and reduce emissions from vehicles.
  - 3. Waste Management:** Strategies to minimize waste generation and enhance recycling and composting programs.
  - 4. Land Management:** Policies to protect natural resources, maintain green spaces, and promote sustainable land use.
  - 5. Water:** Measures to conserve water, improve water quality, and manage stormwater effectively<sup>123</sup>.
- These focus areas aim to reduce the city's greenhouse gas emissions by 30% by 2035

# Walmart Key aspects of Sustainability Actions and Goals

## 1. Climate and Emissions Reduction:

- **Zero emissions by 2040:** Harvesting enough wind, solar, and other energy sources to power their facilities and vehicles (including long-haul trucks) with low-impact refrigerants and electrified equipment.
- **Avoiding gigatons of greenhouse gas emissions:** Working with suppliers to reduce emissions.

# Walmart Key aspects of Sustainability Actions and Goals

## 2. Nature Conservation:

- **Preserving natural habitat:** Supporting efforts to preserve at least one acre of natural habitat for every acre of land they develop in the U.S.
- **Regenerative agriculture:** Promoting sustainable farming practices.
- **Forest protection and restoration:** Ensuring responsible forest management.
- **Sustainable fisheries management:** Supporting practices that protect marine ecosystems.

## 3. Waste Reduction:

- Walmart is eliminating waste along the product chain.

# Walmart

**Goal: Achieve zero emissions across global operations by 2040:**

Sub-goal: Reduce absolute global scopes 1 & 2 GreenHouse Gas emissions 35% by 2025 and 65% by 2030 from 2015 base year 1 (approved as science-based and classified as 1.5°C-aligned, Science Based Targets initiative (SBTi))

Sub-goal: Power 50% of our global operations with renewable sources of energy by 2025 and 100% by 2035

# Walmart

**Goal: Reduce or avoid one billion metric tons (MT) of CO<sub>2</sub>e emissions in the global value chain by 2030 (Project Gigaton) <sup>7,8</sup>**

<b>Reduced or avoided CO<sub>2</sub>e emissions reported by suppliers cumulatively since CY2017</b>	>416 million MT	>574 million MT	>750 million MT
<b>Reduced or avoided emissions reported by suppliers in reporting year</b>	>186 million MT	>158 million MT	>175 million MT
<b>Number of suppliers reporting</b>	>1,500	>2,500	>3,000

# Walmart

<p>Annual greenhouse gas (GHG) emissions (million metric tons carbon dioxide equivalent - MMT CO<sub>2</sub>e) <sup>2</sup></p>	<p>CY2020 Total: 15.86 Scope 1: 7.25 Scope 2 (market-based): 8.61</p>	<p>CY2021 Total: 14.17 Scope 1: 7.38 Scope 2 (market-based): 6.79</p>	<p>CY2022 Total: 14.62 Scope 1: 7.88 Scope 2 (market-based): 6.74</p>
<p>Percent change in annual scopes 1 &amp; 2, compared to 2015 baseline <sup>3</sup></p>	<p>CY2020 20.3% decrease</p>	<p>CY2021 24.4% decrease</p>	<p>CY2022 21.2% decrease</p>
<p>Percent change in scopes 1 &amp; 2 annual emissions (vs. previous year) <sup>3</sup></p>	<p>CY2020 7.6% decrease</p>	<p>CY2021 5.1% decrease</p>	<p>CY2022 4.1% increase</p>
<p>Carbon intensity (scopes 1 &amp; 2) (MT CO<sub>2</sub>e per \$M revenue) <sup>2, 4</sup></p>	<p>CY2020 28.37</p>	<p>CY2021 24.74</p>	<p>CY2022 23.92</p>
<p>Percent change in carbon intensity, per revenue (vs. previous year) <sup>2, 4</sup></p>	<p>CY2020 13.6% decrease</p>	<p>CY2021 12.8% decrease</p>	<p>CY2022 3.3% decrease</p>

# Kimberly Clarke - Sustainability initiatives and goals 2030

**Social Impact:** They aim to improve the well-being of 1 billion people in underserved communities through programs like Toilets Change Lives, No Baby Unhugged, and the Kotex® She Can initiative<sup>1</sup>.

**Plastics Footprint:** They plan to reduce their plastics footprint by 50% from the 2019 baseline<sup>2</sup>.

**Footprint:** They aim to cut their reliance on natural forest fiber by 50% from the 2011 baseline by 2025<sup>2</sup>.



# Kimberly Clarke - Sustainability initiatives and goals 2030

**Carbon Footprint:** They are working to reduce their absolute greenhouse gas emissions (Scope 1 and Scope 2) by 50% from the 2015 baseline<sup>2</sup>

**Water Footprint:** They aim to reduce the water footprint of their mills in water-stressed areas by 50% from the 2015 baseline<sup>2</sup>

Kimberly Clarke reduce plastic footprint 50%/2030 from 2019 baseline

**Reduction and Material Efficiency:** They aim to minimize the use of plastics through better design and material efficiency<sup>1</sup>.

**Renewable, Recycled, or Biodegradable**

**Substitutes:** They are increasing the use of renewable, recycled, or biodegradable materials in their products and packaging<sup>1</sup>.

**Reusable Products:** Introducing more reusable

Kimberly Clarke reduce plastic footprint 50%/2030 from 2019 baseline

**Recycling and Recovery:** They are working to recover and recycle plastic manufacturing waste and post-consumer waste<sup>1</sup>.

**Circular Systems:** Supporting the development of circular systems and solutions to ensure that materials can be reused or recycled effectively<sup>1</sup>.

Additionally, they aim to have 20% average recycled content across their plastic packaging by 2025 and ensure that 100% of their packaging is compatible with either biological or technical circularity systems by 2025<sup>1</sup>

# Selee

- SELEE's CS-X filters represent a significant leap in filtration technology for aluminum cast houses. By eliminating phosphate, these filters set a new standard in terms of environmental responsibility.

- 1. Innovative Design:** The CS-X filters are engineered to provide superior filtration without the drawbacks of phosphate materials.
2. Phosphate pollutes lakes, rivers and the ocean in a process known as eutrophication. This leads to algal blooms which contaminate supplies of drinking water and create oxygen-starved dead zones, which can kill fish and other aquatic species. It destroys soils basically the very things we depend on

- **SELEE Corporation Announces \$7 Million Investment in**

# Mast General Store Sustainability and Community Stewardship

- 1. Community Land Trusts:** All Mast General Stores are located in land trust communities. These nonprofit, community-based organizations ensure community stewardship of the town's land<sup>1</sup>.
- 2. Historic Preservation:** The stores often occupy historic buildings, which they renovate and maintain, preserving the architectural heritage of the communities they serve<sup>2</sup>.
- 3. Local Products:** They offer a variety of locally produced goods, supporting local economies and reducing the carbon footprint associated with long-distance shipping<sup>3</sup>.

**4,** Locally Mast General pays their employees an

Comments

Jane

Edgar