

**RVAgreen 2050 Waste Reduction and Recovery
Working Group**

Thursday, May 27th, 2021

*Community Engagement Results &
Strategy Prioritization*



Equitable climate action for a healthy and resilient Richmond

Agenda

- I. Settling in & ground rules
- II. Community engagement results
- III. VCU Equity Assessment
- IV. Prioritization - what gets us to our 2030 goal?
- V. Wrap-up and next steps

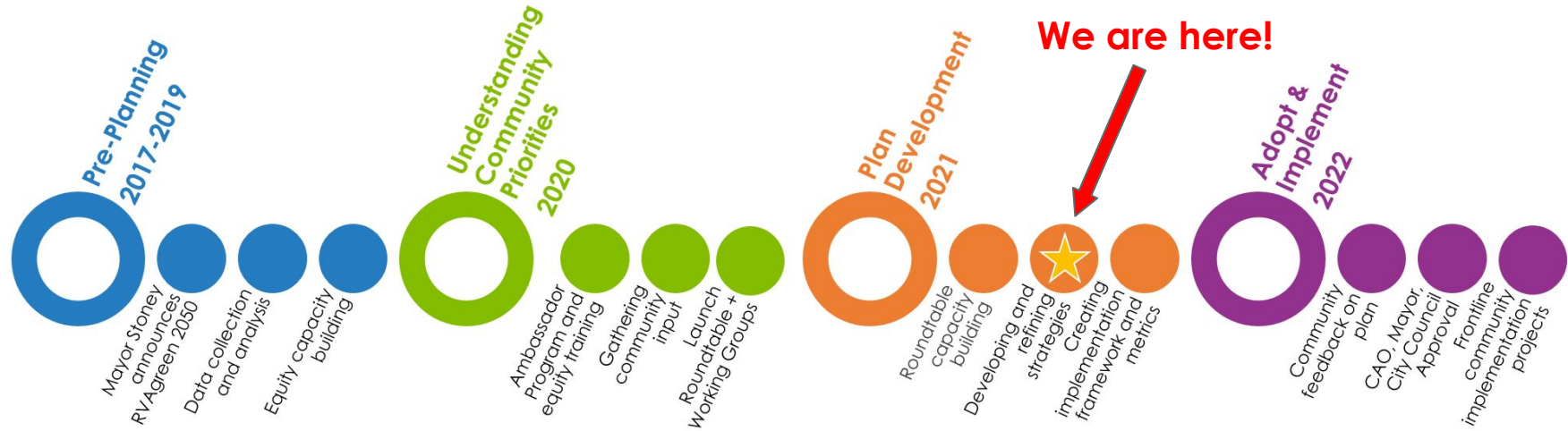
Today's Objectives

- Understand the community's feedback on our draft strategies - ***How does this feedback inform next steps?***
- Agree on a prioritization scheme for the strategies to see which ones "rise to the top" - ***Which strategies should we elevate as top priorities and how should that be decided?***

Ground Rules / Group Expectations



Process Overview



RVAgreen 2050 DRAFT Structure

Goals	What is the purpose of RVAgreen 2050?
Vision	What does the ideal future look like when RVAgreen 2050 is implemented?
Community Priorities	What cross-cutting public values do we want to center in our plan?
Pathways	What leverage points will lead us towards realizing and operationalizing the goals and community priorities?
Objectives	What are the long-term aims we want to accomplish, organized into the different pathways?
Strategies	What are the SMARTIE actions that will lead us toward our objectives?
Implementation Plans	How are we going to implement, measure progress, and ensure accountability in this plan?

Strategy Refinement Process Summer 2021



June 17

July 15 &
August 5

Community engagement
and feedback

Prioritization

Indicators and
impacts

Implementation and
accountability

- 10-, 30-minute surveys
- Direct response to draft vision, objectives, and strategies

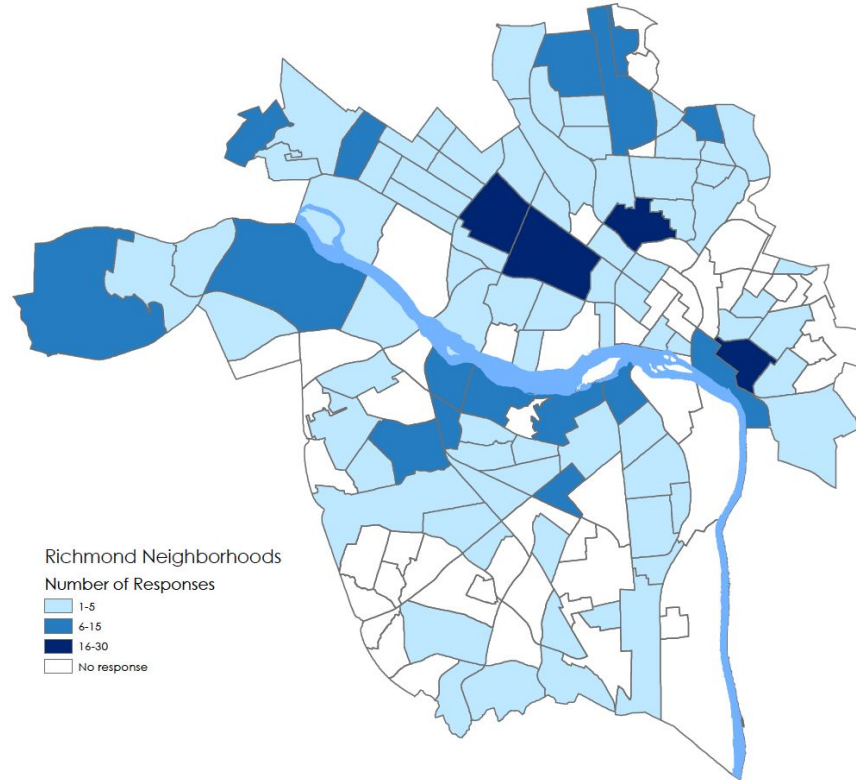
- What values do we want reflected in our plan (via selection of objectives & strategies)?
- What strategies will most help us achieve our 2030 goals?

- What is our shared understanding of what is achievable and what success looks like for each strategy?
- What are the indicators that we will use to measure the success of our objectives?

- How will we equitably implement the plan?
- How will we ensure accountability and transparency in implementation?

Community engagement results

Overview of Engagement



Survey Feedback

-  **1. Green Spaces & Trees:** Partner with the community to increase outdoor space and natural resources access, and reduce impacts of extreme heat
-  **2. Planning & Operations:** Maintain existing and create new public outdoor space
-  **3. Urban Agriculture:** Increase access to healthy foods
-  **4. Air Quality:** Identify air pollution sources and opportunities for reduction
-  **5. Complete Streets:** Improve and increase pedestrian infrastructure
-  **6. Composting:** Create organic waste diversion programs city-wide (i.e. food waste and yard debris)
-  **7. Environmental Justice:** Eliminate the impacts of illegal dumping and industrial pollution on neighboring communities
-  **8. Connectivity:** Increase pedestrian infrastructure that connects people to jobs, schools, business, etc.
-  **9. Resilience Planning:** Prioritize historically disenfranchised communities in planning for climate impacts
-  **10. Engagement:** Increase resident engagement and access to outdoor space
-  **11. Public Transit:** Expand the bike share program and increase GRTC access, frequency, reliability, and convenience
-  **12. Community Solar:** Increase incentives and remove barriers to community solar
-  **13. Government Operations:** Integrate climate action and resilience in all city plans and processes

How did the Waste strategies rank?



 Strategy Bucket	Ranking
Composting	85
Environmental Justice	85
Circular Economy	81
Recycling	81
Waste Water	81
Zero Waste	81
Building Codes	79
Consumption	79
Waste Audits	79
Carbon Capture	78
Municipal Operations	78
Resilient Infrastructure	78
Education & Awareness	74
Pay-As-You-Throw	69

Draft Strategies- Public Engagement



Waste Reduction & Recovery

Waste Reduction & Recovery Objective 1: Model zero waste through municipal operations.

Topic	Strategy	Potential GHG Reduction Impact	Potential Climate Resilience Impact	Potential Community Priorities Impact
Municipal Operations	Zero Waste: City operation will demonstrate high-impact zero waste practices in its design and expansion. The city will lead by example, aligning with the community's broader goals to educate and prepare the next generation.			
	Consumption: Implement a climate neutral and waste-free city procurement policy that removes single-use plastics and minimizes upstream emissions in all municipal purchase agreements. Incentivize local, small, and minority-owned businesses to meet purchasing expectations and provide sufficient staff resources for policy enforcement.			
Municipal Composting	Composting: Conduct food waste and diversion education and awareness activities and provide options for composting in all city-owned buildings, parks, and facilities. Make compost and mulch available to city properties, residents, and small businesses.			
Water Waste	Litter: Install "band-along" traps to capture trash, litter, and other debris from the stormwater system, starting with segments that are most impacted by foreign debris and litter.			

Strategy Feedback - External Responses

Obj.	Strategy Bucket	Strategy	Comment/Question	Response or Action Step(s)
Objective 1: Model zero waste through municipal operations.	EDUCATION & AWARENESS	Community Partnerships - Think Globally, Act Locally - Create regional and intersectional partnerships across Richmond's neighborhoods, government agencies and community sectors to promote and educate about a holistic and unified waste reduction and recovery framework.	engage with your local garden groups to educate on the importance of native plants	This concept is addressed in Parks and Public Spaces (Environment Obj. #4 under Carbon Sequestration strategy bucket).
	MUNICIPAL COMPOSTING	Composting - Conduct food waste and diversion education and awareness activities and provide options for composting in all city-owned buildings, parks, and facilities. Make compost and mulch available to city properties, residents, and small businesses.	Utilize green roofs as a means to reduce urban heat island effect, create more green spaces, and use compost to produce food for local schools, especially those with lower income students who often cannot afford fresh produce.	This concept is addressed in Green Roofs (Buildings and Energy Obj. #1 under Municipal Energy Efficiency strategy bucket).
	MUNICIPAL COMPOSTING	Composting - Conduct food waste and diversion education and awareness activities and provide options for composting in all city-owned buildings, parks, and facilities. Make compost and mulch available to city properties, residents, and small businesses.	Investigate city-wide composting program, similar to the recycling program to further reduce household waste.	This concept is addressed in Composting Measures (Waste Obj. #3 under Composting strategy bucket).
	MUNICIPAL COMPOSTING	Composting - Conduct food waste and diversion education and awareness activities and provide options for composting in all city-owned buildings, parks, and facilities. Make compost and mulch available to city properties, residents, and small businesses.	Build upon the success of composting at City-sponsored annual events by engaging similar processes at more frequent events such as weekly farmer's markets. Expand business access to composting services.	To be considered during further plan development.
	MUNICIPAL COMPOSTING	Composting - Conduct food waste and diversion education and awareness activities and provide options for composting in all city-owned buildings, parks, and facilities. Make compost and mulch available to city properties, residents, and small businesses.	Great resource for urban gardening initiatives!	Thanks for the comment!
	MUNICIPAL COMPOSTING	Composting - Conduct food waste and diversion education and awareness activities and provide options for composting in all city-owned buildings, parks, and facilities. Make compost and mulch available to city properties, residents, and small businesses.	Were pay-at-you-throw programs considered? Would some sort of system where residents are charged based on volume or weight of trash work in Richmond?	This concept is addressed in Pay-As-You-Throw (Waste Obj. #3 under Consumption strategy bucket).
	MUNICIPAL OPERATIONS	Zero Waste - City operation will demonstrate high-impact zero waste practices in its design and expansion. The city will lead by example, aligning with the community's broader goals to educate and prepare the next generation.	As a region start sending metro Richmond's trash to waste-to-energy facilities. For example partner with Covanta to create a plant in the Richmond region.	Interesting idea! We will consider it during further plan development.
	MUNICIPAL OPERATIONS	Zero Waste - City operation will demonstrate high-impact zero waste practices in its design and expansion. The city will lead by example, aligning with the community's broader goals to educate and prepare the next generation.	Incentives for restaurants and other businesses to purchase their supplies (ingredients, frozen foods, vending snacks, containers, utensils, etc.) from companies that only use eco-friendly packaging.	To be considered during further plan development.
	WATER WASTE	Litter - Install "band-along" traps to capture trash, litter, and other debris from the stormwater system, starting with segments that are most impacted by foreign debris and litter.	The concern here is the resources regularly and after rain events. Bandalong require maintenance on very irregular schedules. The maintenance often requires trash removal from the water way through the use of buckets or bags- and is 100% hand work. Regular cleanouts will require dedicated sourced labor, with the ability to navigate waters in waders and boots for these operations. I don't see volunteers handling these activities therefore maintenance resources are a big concern.	To be considered during further plan development.
	WATER WASTE	Litter - Install "band-along" traps to capture trash, litter, and other debris from the stormwater system, starting with segments that are most impacted by foreign debris and litter.	"band-alongs" are very resource intensive and they send the wrong message. The message should be don't litter, don't use throw away plastic bottles, etc. Instead, this says, go ahead and we will clean up after you.	To be considered during further plan development.

Strategy Feedback - Internal Process

Objective #	Strategy Bucket	Strategy	Feedback Type	Comment	Milestone/Indicator/Target	Financing	Community Support	New Strategy	Existing Strategy	Revise Strategy	Innovative Concept	Action Item	Response
1	EDUCATION & AWARENESS	Model Zero Waste Internally - Track and visibly promote large-scale climate neutrality efforts and implement strategies that incentivize behavior change among city employees, such as elimination of desk-side trash bins, removal of single-use plastics and Styrofoam, and regular waste minimization and sustainability trainings.	NONE	NONE									
1	EDUCATION & AWARENESS	Institutional Best Practices - Seek cost-effective best practices among institutional partners and identify opportunities for collaborations in order to minimize waste.	NONE	NONE									
1	EDUCATION & AWARENESS	Community Partnerships - Think Globally, Act Locally - Create regional and intersectional partnerships across Richmond's neighborhoods, government agencies and community sectors to promote and educate about a holistic and unified waste reduction and recovery framework.	Suggestion	engage with your local garden groups to educate on the importance of native plants				✓	✓			Add "local" to the strategy language	See Environment
1	EDUCATION & AWARENESS	Model Zero Waste Externally - Develop an aggressive public education and awareness campaign that focuses on high-traffic municipal properties (e.g., bus stops, parks) to encourage and promote effective waste reduction and recovery.	NONE	NONE									
1	MUNICIPAL COMPOSTING	Composting - Conduct food waste and diversion education and awareness activities and provide options for composting in all city-owned buildings, parks, and facilities. Make compost and mulch available to city properties, residents, and small businesses.	Suggestion	Utilize green roofs as a means to reduce urban heat island effect, create more green spaces, and use compost to produce food for local schools, especially those with lower income students who often cannot afford fresh produce.				✓					See Buildings and Energy
1	MUNICIPAL COMPOSTING	Composting - Conduct food waste and diversion education and awareness activities and provide options for composting in all city-owned buildings, parks, and facilities. Make compost and mulch available to city properties, residents, and small businesses.	Suggestion	Investigate city-wide composting program, similar to the recycling program to further reduce household waste.				✓	✓			Consider language for a city-run composting program (similar to CVWMA)	See Waste
1	MUNICIPAL COMPOSTING	Composting - Conduct food waste and diversion education and awareness activities and provide options for composting in all city-owned buildings, parks, and facilities. Make compost and mulch available to city properties, residents, and small businesses.	Suggestion	Build upon the success of composting at City-sponsored annual events by engaging similar processes at more frequent events such as weekly farmer's markets. Expand business access to composting services.	✓							# business accessing composting services	
1	MUNICIPAL COMPOSTING	Composting - Conduct food waste and diversion education and awareness activities and provide options for composting in all city-owned buildings, parks, and facilities. Make compost and mulch available to city properties, residents, and small businesses.	Suggestion	Great resource for urban gardening initiatives!		✓							
1	MUNICIPAL COMPOSTING	Composting - Conduct food waste and diversion education and awareness activities and provide options for composting in all city-owned buildings, parks, and facilities. Make compost and mulch available to city properties, residents, and small businesses.	Question	Were pay-at-you-throw programs considered? Would some sort of system where residents are charged based on volume or weight of trash work in Richmond?				✓					See Waste
1	MUNICIPAL OPERATIONS	Zero Waste - City operation will demonstrate high-impact zero waste practices in its design and expansion. The city will lead by example, aligning with the community's broader goals to educate and prepare the next generation.	Suggestion	As a region start sending metro Richmond's trash to waste-to-energy facilities. For example partner with Covanta to create a plant in the Richmond region.						✓		Investigate waste-to-energy facilities	
1	MUNICIPAL OPERATIONS	Zero Waste - City operation will demonstrate high-impact zero waste practices in its design and expansion. The city will lead by example, aligning with the community's broader goals to educate and prepare the next generation.	Suggestion	Incentives for restaurants and other businesses to purchase their supplies (ingredients, frozen foods, vending snacks, containers, utensils, etc.) from companies that only use eco-friendly packaging.		✓							

VCU Equity Assessment

Example recommendations:

- *Diversify Working Groups*, incorporate youth engagement, and attend existing community meetings to retain newly established frontline community partnerships
- Enhance the Working Groups with their own *dedicated [equity] facilitators and trainers* to expand capacity building beyond the Roundtable members
- Consider *quantifying co-benefits* in order to focus on the strategies that will have the greatest impact
- Define and publish a series of *equity-related indicators* to center the plan's implementation around continued equity

An Equity-focused Assessment of
the City of Richmond's RVAgreen 2050
Planning Process

May 2021

Report Prepared By:

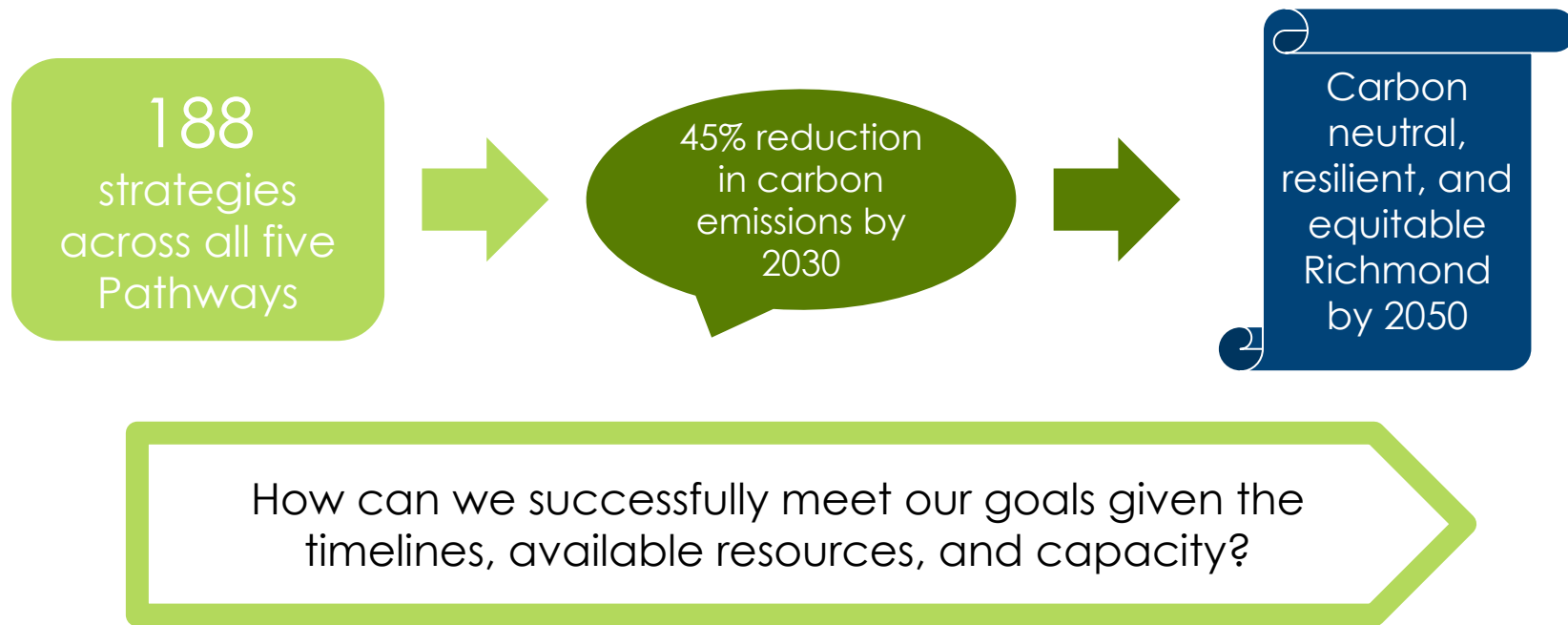
URSP 637: Sustainable Community Development

L. Douglas Wilder School of Government and Public Affairs




















Virginia Commonwealth University




























Prioritization

Why do we need to prioritize?



Quantifying Impacts of Strategies

IMPACT		
Potential Greenhouse Gas (GHG) Reduction Impact		
	High Relatively high GHG reduction potential if fully implemented (estimate)	
	Medium Relatively moderate GHG reduction potential if fully implemented (estimate)	
	Low Relatively low GHG reduction potential if fully implemented (estimate)	
Potential Climate Resilience Impact		
	Extreme Heat Potential to reduce impacts from extreme heat and heat waves	 High (direct)  Medium (indirect)  Low
	Severe Weather Potential to reduce impacts from storms / heavy precipitation	 High (direct)  Medium (indirect)  Low
	Flooding Potential to reduce impacts from river, localized, or sea level rise-related flooding	 High (direct)  Medium (indirect)  Low
	Community Potential to increase resilience of the Richmond community	 High (direct)  Medium (indirect)  Low

EQUITY		
Potential Community Priorities Impact		
	Racial Equity & Environmental Justice Potential to promote racial equity and support historically disenfranchised communities	 High (direct)  Medium (indirect)  Low
	Government Accountability Potential to promote government accountability and transparency	 High (direct)  Medium (indirect)  Low
	Community Wealth Potential to build community wealth and increase jobs and education access	 High (direct)  Medium (indirect)  Low
	Housing & Buildings Potential to expand affordable housing and reduce housing cost burden	 High (direct)  Medium (indirect)  Low
	Neighborhoods Potential to support beautiful and safe neighborhoods	 High (direct)  Medium (indirect)  Low
	Health Potential to promote physical and mental health and well-being	 High (direct)  Medium (indirect)  Low
	Engagement & Communications Potential to support equitable engagement and communication	 High (direct)  Medium (indirect)  Low

How are we prioritizing strategies?

IMPACT SCORE

GHG	The amount of GHG emissions reductions	x8
Resilience	Improved resilience to climate change impacts	x4
Feasibility	Barriers and amounts of financial and political capital required	x4
Cost-Effectiveness	The cost of implementation vs. the rate of return	x4
Community Support	Priority rankings from the 30 min survey	x4
Economic Development	The number of jobs created and sustained	x2
6 Criteria		26 Total

EQUITY SCORE

Racial Equity/Env. Justice	x6
Health and Wellbeing	x5
Gov. Accountability	x3
Community Wealth	x3
Housing and Buildings	x3
Neighborhoods	x3
Engagement and Communications	x3
7 Criteria	26 Total

Strategy Prioritization Matrix

Pathway	Objective	Strategy Bucket	Greenlink Policy Action Row	Strategy	x1	x8	x4	x4	x2	x4	WEIGHTED COMBINED FACT SCORE	% IMPACT SCORE	Racial Equity / Environmental Justice	x5	x3	x3	x3	x3	x3	WEIGHTED COMBINED FACT SCORE	% EQUITY SCORE	WEIGHTED COMBINED FACT SCORE	% COMBINED SCORE
Transportation	Objective 2	Public Transit	63	Bus Service - Improve public transit frequency, reliability, access, convenience, user experience, and local and regional connectivity. Prioritize underserved communities by connecting high-density housing to shopping and jobs.	1	5	3	4	2	4	32	95%	3	1	1	5	3	3	1	62	94%	154	100%
B&E	Objective 3	Residential Solar	50	Solar Installations: Provide financial assistance and education for clean energy upgrades and retrofits to make homes and small businesses healthy, safe, and affordable, focusing on frontline communities reducing disproportionately high energy burden in these neighborhoods.	1.5	5	4	4	2	3	34	97%	3	1	3	1	5	1	1	56	86%	150	99%
Environment	Objective 3	Engagement	3	Neighborhood Prioritization - Use community input and data (such as the Climate Equity Index, RVA311, RVAH20, and other sources) to identify and prioritize neighborhoods for extreme precipitation and flooding resilience projects including assessing existing stormwater infrastructure, green alleyways, stream restoration, and depaving.	3	1	5	3	1	4	70	62%	3	3	5	1	1	3	5	78	100%	148	99%
B&E	Objective 2	Residential Energy Efficiency	7	Energy Efficiency Assistance: Aid households that have the highest energy burden with energy efficiency upgrades through community-based programs, advocacy, partnerships, and Residential PACE (Property Assessed Clean Energy).	1.5	5	3	4	3	4	36	99%	3	1	1	1	5	1	1	50	73%	146	97%
Transportation	Objective 2	Public Transit	62	Bus Stops - Improve and maintain priority transit stops in low-income and low car ownership areas with amenities for enhanced safety, accessibility, convenience, and resilience.	2	5	3	4	2	4	36	99%	3	1	1	1	1	5	1	50	73%	146	97%
Waste	Objective 4	Environmental Justice		Site Plan Review - As part of site plan review, implement measures to identify the potential impacts of new industrial facilities on neighboring communities, identify potential risks of locating hazardous materials in flood-prone areas, and incentivize waste reduction programs and manufacturing processes that minimize greenhouse gas emissions and other environmental impacts.	2	3	5	4	2	5	92	95%	3	3	1	1	1	3	1	54	84%	146	97%
Community	Objective 1	Funding	38	Climate Impact Grant - Provide a grant program through the creation of a climate impact fund to help target communities recover from extreme weather events, weatherization of homes, and appliance ownership and provide grant opportunities for local nonprofits to work on climate action and resilience projects in target neighborhoods	2	3	2	4	4	4	80	82%	3	3	3	1	3	3	1	66	96%	146	97%
Environment	Objective 2	Planning & Operations	5	Urban Heat Islands - Develop an urban heat island readiness and reduction plan with a focus on vulnerable populations and ecosystems. Include tactics such as mandating benches and shade structures at all bus stops and establishing "rubber-stamped" shade structure designs that businesses can build and install in the public right-of-way.	3	1	4	3	2	5	72	67%	3	3	1	1	3	5	3	72	99%	144	96%
B&E	Objective 3	Community Solar	52	Ground-Mounted Solar: Incentivize opportunities for local ground-mounted solar and community solar farms on parking lots, non-buildable, or previously disturbed land, with access to community solar for energy-burdened communities.	2	5	4	3	3	4	38	100%	3	1	1	1	3	1	1	44	58%	142	95%
Environment	Objective 1	Urban Agriculture		Community Gardening - Develop - and make visible and accessible - an urban agriculture program that partners with food justice community organizations and includes an apprenticeship training program. Identify changes needed in the community garden ordinances for sales and increased funding for staffing, maintenance, and materials needed. Incentivize owners of multifamily dwellings to remove barriers to individuals growing their own food and allow universal access to community gardening and composting.	1.5	3	4	4	3	5	88	91%	1	3	1	3	1	3	3	54	84%	142	95%

Ranking Methodology

1	Sort by IMPACT score, informed by equity	×		<ul style="list-style-type: none">• Looked like a traditional climate action plan• Resilience is not prioritized• Equity is not centered
2	Sort by EQUITY score, informed by impact	×		<ul style="list-style-type: none">• Looked like a resilience plan• Mitigation is not prioritized
3	Top IMPACT and EQUITY only	×		<ul style="list-style-type: none">• Too limiting; number of strategies would make it difficult to achieve our 2030 goals
4	Sort by combined IMPACT + EQUITY scores	✓		<ul style="list-style-type: none">• “Not too hot, not too cold, just right”• Isolate strategies in the top 75th percentile based on combined scores



Top 75th Percentile Strategies by Objective

	Total	Obj 1	Obj 2	Obj 3	Obj 4
B&E	14	4	5	4	1
Community	13	11	2		
Transportation	5	2	3	0	
Environment	11	2	4	3	2
Waste	4	0	1	1	2



Example Waste Strategies

Top 3

Obj. 4	146 (97%)	Site Plan Review - As part of site plan review, implement measures to identify the potential impacts of new industrial facilities on neighboring communities, identify potential risks of locating hazardous materials in flood-prone areas, and incentivize waste reduction programs and manufacturing processes that minimize greenhouse gas emissions and other environmental impacts.
Obj. 4	126 (81%)	Community Advocacy - Advocate for state and regional policies aimed at reducing industrial waste, particularly from facilities located in or adjacent to frontline communities and/or in floodplains and flood-prone areas.
Obj. 2	122 (78%)	Commercial Recycling - Mandate an equitable multi-family and commercial recycling program for new and existing properties with equivalent levels of service as trash collection at no additional cost to renters.

Bottom 3

Obj. 1	76 (3%)	Model Zero Waste Internally - Track and visibly promote large-scale climate neutrality efforts and implement strategies that incentivize behavior change among city employees, such as elimination of desk-side trash bins, removal of single-use plastics and Styrofoam, and regular waste minimization and sustainability trainings.
Obj. 1	76 (3%)	Community Partnerships - Think Globally, Act Locally - Create regional and intersectional partnerships across Richmond's neighborhoods, government agencies and community sectors to promote and educate about a holistic and unified waste reduction and recovery framework.
Obj. 1	76 (3%)	Institutional Best Practices - Seek cost-effective best practices among institutional partners and identify opportunities for collaborations in order to minimize waste.

Activity

Discuss the strategies based on the IMPACT+EQUITY combined score

Breakout room discussion (15 min. per objective):

1. Do the strategies that “made the cut” seem appropriate to you?
 - Keep in mind our first goal is to reduce carbon emissions by 45% by 2030.
 - Use stars & x’s to show support or recommend the ↑ or ↓ prioritization of a strategy
2. Are we comfortable with the # of strategies to be prioritized?
3. Can we all fully commit to ensuring the success of these strategies?
4. Does it make sense to include this strategy within the timeline of the 2030 goal?

Link to activity

https://docs.google.com/spreadsheets/d/1w5k6ELZYlhXjZjPLkbQROtlavmSr0_bawrocu9fJSaU/edit#gid=0

- Breakout Room #1 (Dawn) : Start with Objective 1
- Breakout Room #2 (Wendy) : Start with Objective 2
- Breakout Room #3 (David) : Start with Objective 3

We will rotate every 15 minutes & stay with our groups and facilitator the whole time!

*Go into breakout
rooms!*

Exit breakout rooms!

Wrap-up and next steps

- Next meeting: June 17 @ 9am, “RVAgreen2050 Indicators & Impacts”
- NOW:
 - General reflections?
 - Fill out feedback survey
 - Share updates, upcoming events, and resources in the chat

THANK YOU!