

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

*Thursday, June 17th, 2021*

*Impacts & Indicators*



**Equitable climate action for a healthy and resilient Richmond**

# Agenda

- I. **Intro:** Settling in & ground rules
- II. **Review:** Revised strategies after the prioritization activity
- III. **Key concept:** impact mapping
- IV. **Activity:** Making impact maps for the prioritized strategies
- V. **Conclusion:** Wrap-up and next steps

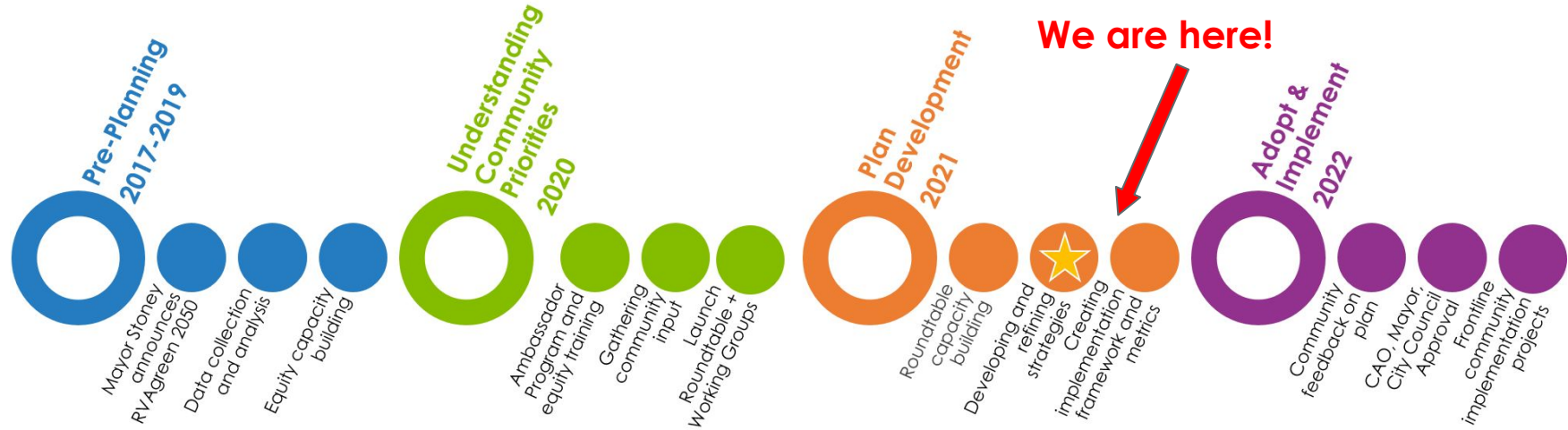
# Today's Objectives

- Identify the potential impacts of the prioritized strategies
  - ***What are we trying to impact?***
  - ***What does success look like for each strategy and what is our shared understanding of what is achievable?***

# Ground Rules / Group Expectations



# Process Overview



# Strategy Refinement Process Summer 2021



## Strategy Prioritization

During our last meeting, we discussed:

- What strategies will most help us achieve our 2030 goals?
- Are we comfortable with the number of strategies to be prioritized?

## Impacts and Indicators

Today, we will be asking the questions:

- What are the potential impacts of our strategies?
- How can those impacts inform the indicators that we use to measure success?

## Implementation and Accountability

Over the next two meetings (**July 15** & **August 5**), we will be thinking about:

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

# 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?
Prioritized Strategies	What are the strategies that will help us achieve our goals and what are the SMARTIE actions that will lead us there?
Impacts	How will our strategies impact the community and lead to a more equitable, resilient, and adaptive Richmond?
Indicators	How will we measure success?
Implementation	How are we going to implement, measure progress, and ensure accountability in this plan?



*Refined strategies*

# Strategy distribution after prioritization

		Obj 1	Obj 2	Obj 3	Obj 4
B&E	12	4	3	3	2
Community	10	6	4		
Transportation	9	4	3	2	
Environment	9	3	3	2	1
Waste	9	2	3	2	2





# Objective 1 Refined Strategies

## Objective 1: Model zero waste through municipal operations.

**A. Zero waste:** City operations will align with Executive Order 77 and demonstrate high-impact zero-waste practices in design and expansion. The city will lead by example by modeling and tracking zero waste internally through actions that align with community goals and foster behavior change among city employees.

**B. Municipal composting:** Conduct organic waste and diversion education and awareness activities and provide options for composting in all city-owned buildings, parks, schools, and facilities. Make compost and mulch available to city properties, residents, and small businesses.

# Objective 2 Refined Strategies

## Objective 2: Reduce commercial waste.

**A. Commercial composting:** Incentivize, support, and provide education for the creation of facilities and services to provide equitable access to organic waste collection and composting. Encourage and incentivize organic waste reduction activities at all commercial buildings.

**B. Recycling:** Mandate an equitable multifamily and commercial recycling program for new and existing properties with equivalent levels of service as trash collection at no additional cost to renters, including providing information on how to recycle e-waste.

**C. Public engagement:** Create a geographically and demographically representative task force to mobilize support for legislation banning plastic bags, phasing out of polystyrene containers, balloon release bans and other commercial waste reduction initiatives in alignment with Executive Order 77. Include an education campaign to inform how to reduce environmental impacts generated by consumer choices.

# Objective 3 Refined Strategies

## Objective 3: Reduce residential waste.

**A. Residential composting:** Establish an equitable city-wide food waste diversion and reduction program that makes composting accessible to all by including educational measures for onsite/backyard composting, operational measures for weekly curbside pickup, and convenient drop-off composting. Prioritize city housing projects whose residents experience the highest levels of urban heat.

**B. Waste management:** Create an accessible, large-scale education campaign for all residents about the incentives and benefits of reducing waste, eliminating litter, and the consequences of not doing so. As part of this effort, roll out a "Save-as-you-save" campaign that encourages reductions in residential trash volume.

# Objective 4 Refined Strategies

## Objective 4: Reduce industrial waste.

**A. Environmental justice:** Implement measures to identify the potential impacts of new facilities on neighboring communities and advocate for state and regional policies that reduce industrial waste from facilities in frontline communities. Incentivize waste reduction programs and manufacturing processes that minimize greenhouse gas emissions and require external and transparent industrial waste audits.

**B. Construction and disposal standards:** Develop and update construction standards and protocols to require environmentally-friendly and equitable processes, including required permit siting and staging for recycling and composting, requirements for demolition material recycling reporting, and incentives for companies that earn zero-waste certification.

# *Strategy Impact mapping*

# Purpose of Impact Mapping

**What?** A framework for describing and measuring the wider impacts of urban climate action

**Why?** Strategies produce multiple benefits which can become powerful tools for more & better designed climate actions and are critical to reducing barriers to action.

The **distribution** of an impact - whether it is equitable - is at the core of this approach.

## For Example...

If the net growth in jobs was focused on a part of the population where employment is already high, such as high-skilled workers, but detracts from those in areas of high unemployment, this could be inequitable and possibly damaging.

### PATHWAYS STEPS

ACTION



OUTPUTS



OUTCOMES

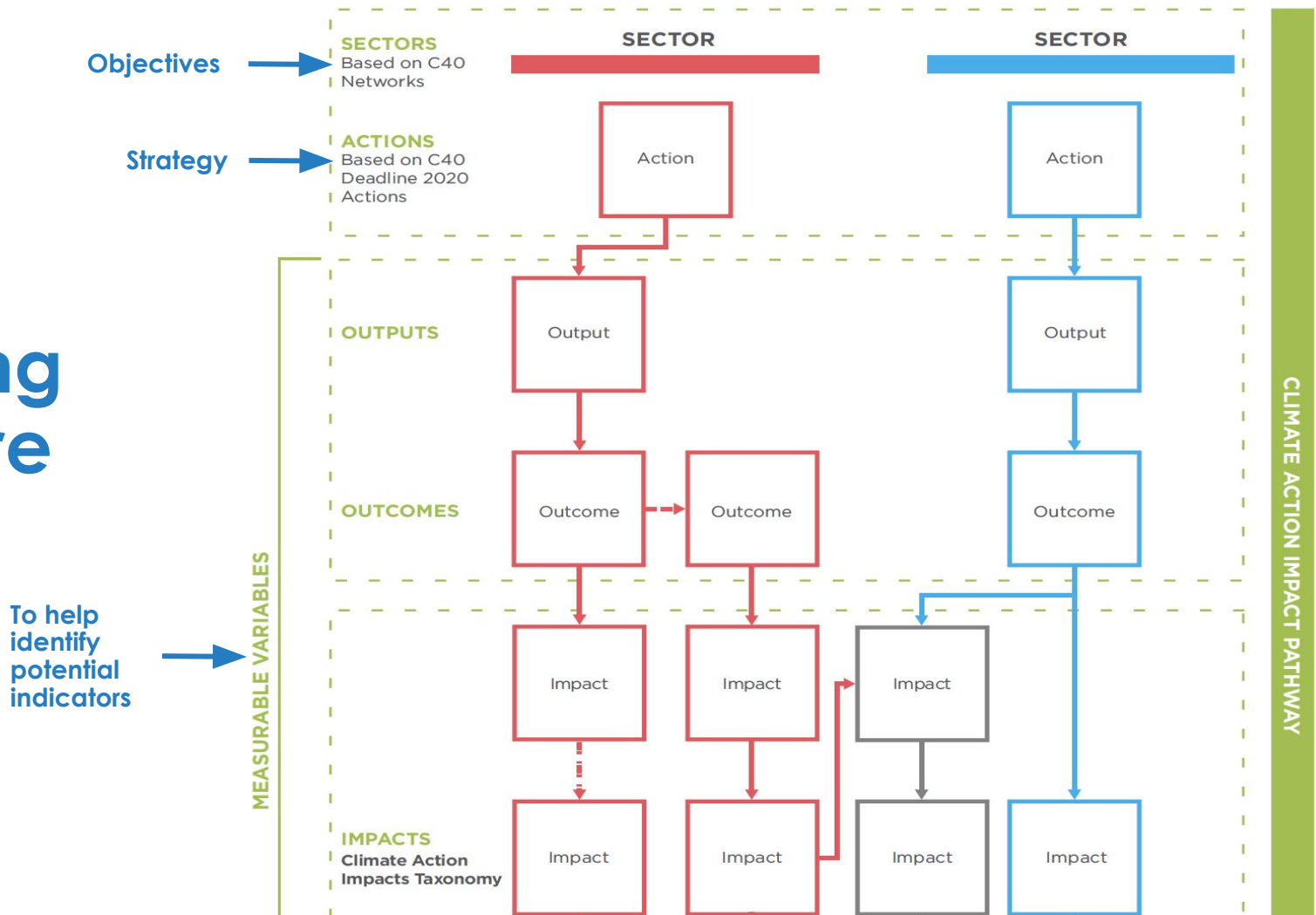


IMPACTS

(costs and benefits)

“This is the evidence that urban stakeholders need to guide and make the case for climate action.”

# Mapping Structure



# Structure of impact maps

<b>Sector</b>	The area of the action/strategy; these are analogous to the objectives that fall under each Pathway.
<b>Strategies</b>	Any policy, program, or investment initiated with the intention to provide some contribution to equitable climate mitigation or adaptation.
<b>Output(s)</b>	What a strategy produces, such as a provided service, facility, infrastructure, or a financial tool.
<b>Outcomes</b>	The change generated by the output; it is necessary for the intended impact to occur.
<b>Impacts</b>	The medium- or long-term effect of the outcome (e.g., reduced traffic congestion, reduced energy bills, reduced ground level ozone).



# Types of impacts

## The 3 Pillars of Sustainability

Social

Economic

Environmental

**Racial Equity & Environmental Justice:** Potential to promote racial equity and support historically disenfranchised communities

**Government Accountability:** Potential to promote government accountability and transparency

**Community Wealth:** Potential to build community wealth and Increase jobs and education access

**Housing & Buildings:** Potential to expand affordable housing and reduce housing cost burden

**Neighborhoods:** Potential to support beautiful and safe neighborhoods

**Health:** Potential to promote physical and mental health and well-being

**Engagement & Communications:** Potential to support equitable engagement and communication

THEME	IMPACT GROUP	IMPACT	SDG #	SPECIFIC GROUP	DESCRIPTION
ECONOMIC IMPACTS	Environmental quality	Biodiversity	14, 15, 11	Biodiversity protection	Protection of ecosystems and species.
				Ecosystem services	Value of services offered by ecosystems, and impact on these ecosystems and services.
				Biological diversity	""Biological diversity" means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems." (Convention on Biological Diversity, Article 2). This impact relates to changes to biological diversity and urban green surface.
				Species population	(Changes to) the size of a species population.
		Climate Change	7, 11, 13	Greenhouse gas emission	Volume of greenhouse gases, which drive global warming, emitted from man-made sources
		Air quality	3, 11, 15	Indoor air pollution	Air pollution in buildings and households.
				Outdoor air pollution	Air pollution in cities.
				Olfactory pollution	"Pollution produced by gaseous emissions in the atmosphere that, even in very small amounts, may cause injuries or a condition of general unease or sickness to persons living in the vicinity." (European Environment Information and Observation Network)
		Noise	No related SDG	Indoor noise	Noise in buildings.
				Outdoor noise	Noise due to traffic and other urban activities.
		Soil quality	3, 11, 12, 15	Soil pollution	Contamination of the soil due to the presence of pollutants such as heavy metals and chemicals (herbicides, industrial wastes, and others).
				Soil degradation	"Change in the soil health status resulting in a diminished capacity of the ecosystem to provide goods and services for its beneficiaries." (Food and Agricultural Administration)
				Soil texture	Size and type of soil particles composing the land, and its impact in land subsidence and stability.

# Example Waste impact map

**C. Public engagement:** Create a **geographically and demographically representative task force** to mobilize **support for legislation** banning plastic bags, phasing out of polystyrene containers, balloon release bans and other commercial waste reduction initiatives in alignment with Executive Order 77. Include an **education campaign** to inform how to reduce environmental impacts generated by consumer choices.

## Strategy

## Output(s)

## Outcomes

## Impacts

Public  
Engagement:  
Commercial  
waste task force

Legislation  
advocacy

Waste reduction  
education  
campaign

Formal citizen  
engagement  
platform

New legislation  
introduced and  
passed in the  
General  
Assembly

Education  
materials,  
infographics,  
presentations,  
etc.

Increased  
community buy-in  
and support

Reduced  
plastic,  
polystyrene, etc.  
waste

Reduced  
packaging  
waste

More  
sustainable  
consumer  
purchasing  
habits

Increased use of  
alternative  
materials

Less litter

More  
purchasing from  
local / small  
businesses

Increased social trust

Higher business costs

Reduced landfill  
waste

More \$ for alternative  
programs

Cleaner ecosystems  
(e.g. river)

Cleaner / more  
beautiful  
neighborhoods

Economic growth

Objective 2

*Activity*

# Activity

Develop maps of outputs, outcomes, and impacts for each strategy using the Urban Climate Action Impacts Framework structure

Breakout room discussion - 30 minutes per strategy-briefly identify outputs and outcomes and concentrate on impacts

1. For the strategy, consider scale and scope, as well as business as usual scenario, i.e. what would it look like if the strategy were not implemented to provide context
2. What are the **outputs** of this strategy? *What are direct, tangible results of the strategy?*
3. What are the **outcomes** of this strategy? What is the change generated by the output?
4. What are the potential **impacts** that could result from this strategy? *Remember to integrate equity considerations. Who are key stakeholders? What are their priorities and concerns? How is the strategy potentially impacting them-positively or negatively?*
5. Which impacts are **most significant**?

# Activity Groups

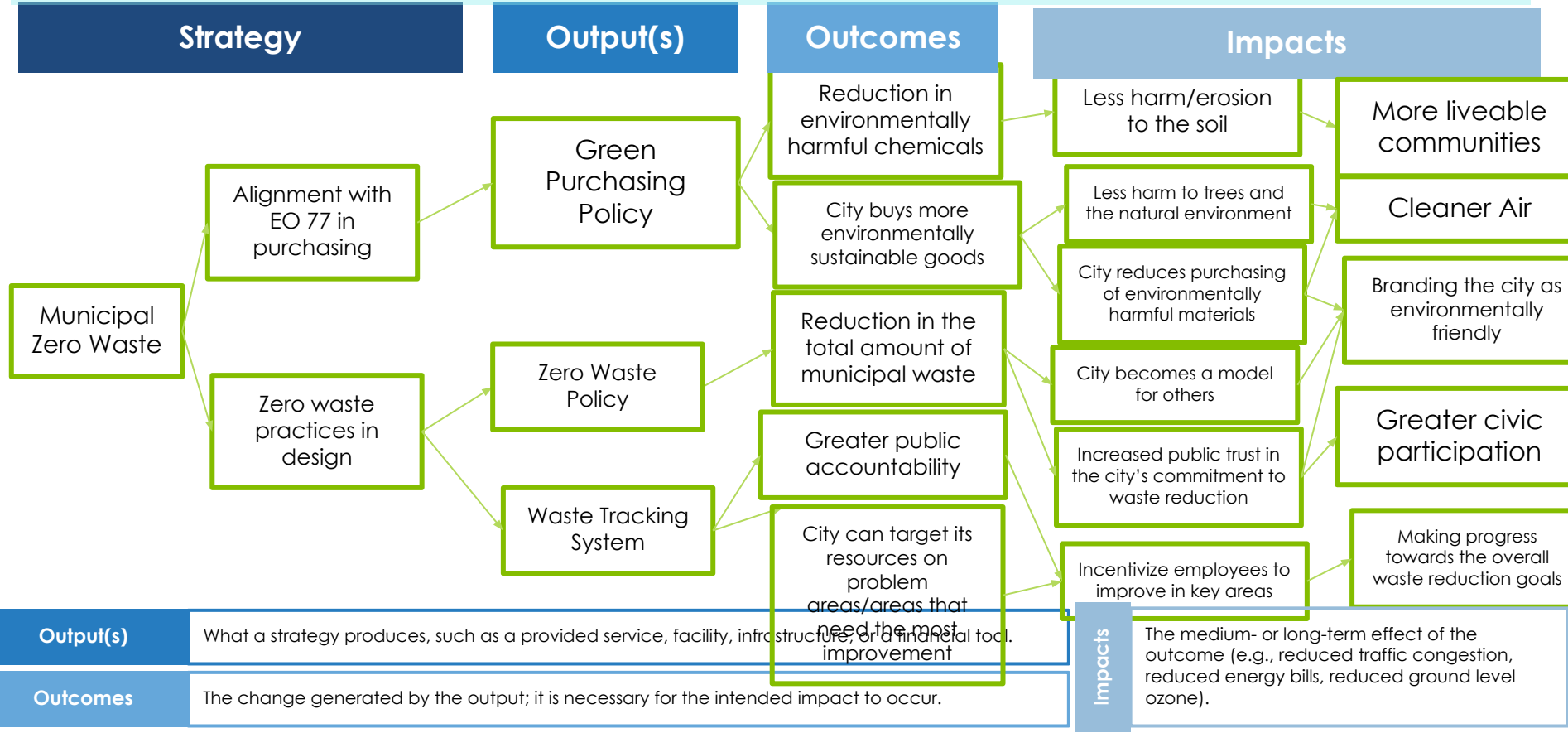
Alex	Wendy	David	Dawn
Objective 1 - Municipal Waste	Objective 2 - Commercial Waste	Objective 3 - Residential Waste	Objective 4 - Industrial Waste
Sign-Up <ul style="list-style-type: none"><li>• Katrina</li><li>• Maeve</li></ul>	Sign-Up <ul style="list-style-type: none"><li>• Jason</li><li>• Tom</li><li>• Sharon</li></ul>	Sign-Up <ul style="list-style-type: none"><li>• Jeannie</li><li>• Torrence</li><li>• Priscilla</li></ul>	Sign-Up <ul style="list-style-type: none"><li>• Elle</li><li>• Tyla</li></ul>

*Go into breakout  
rooms!*

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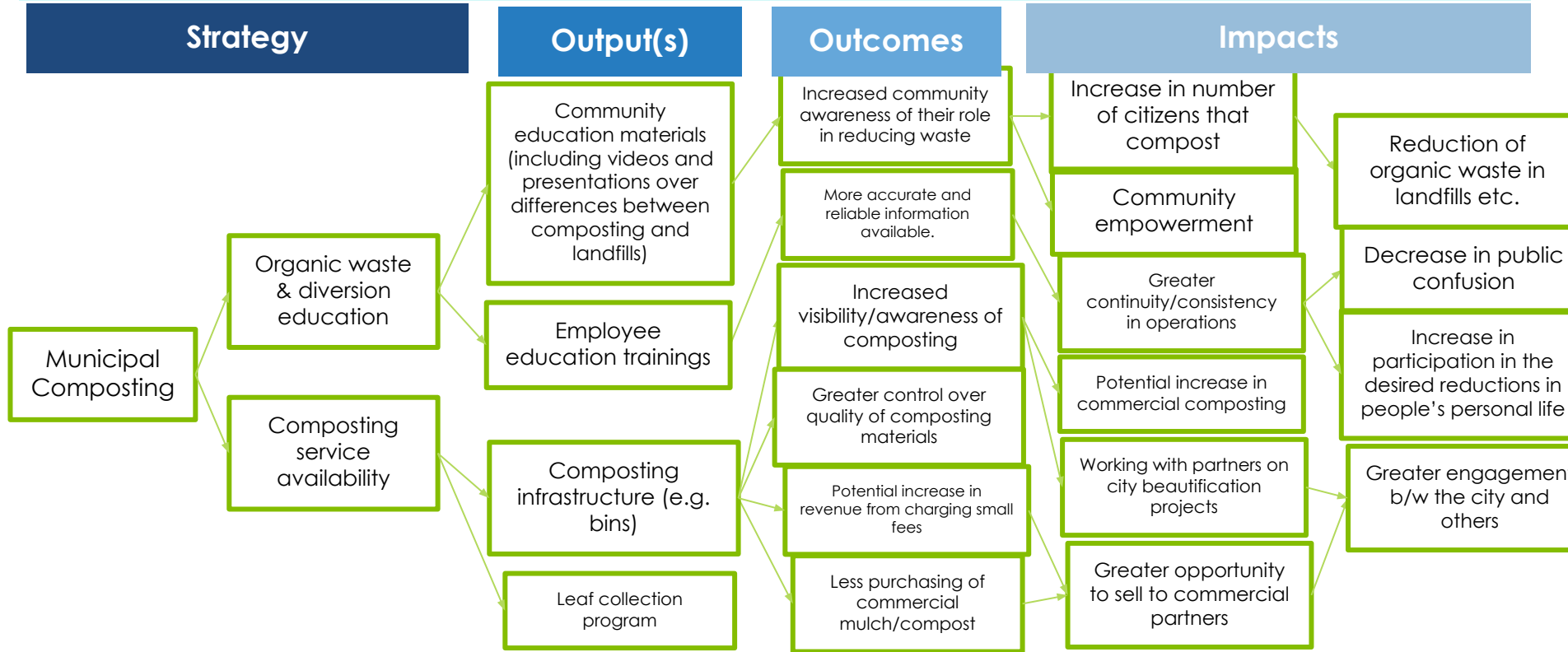
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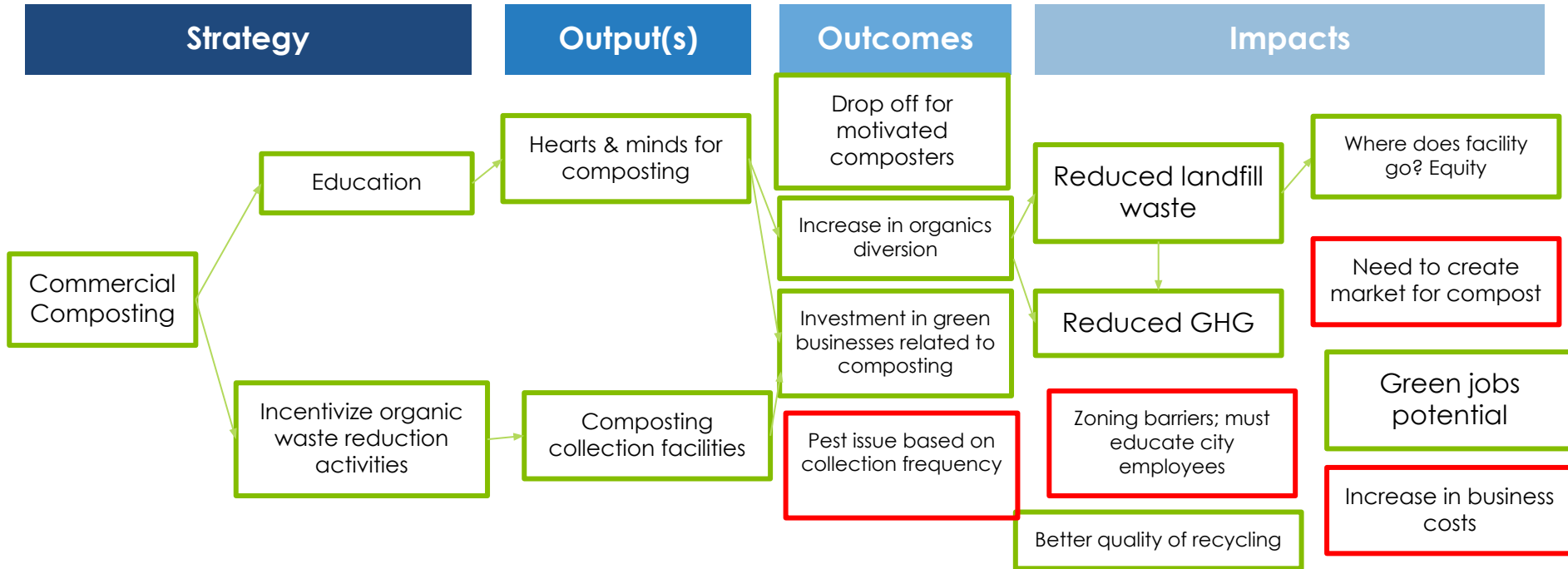
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### Outcomes

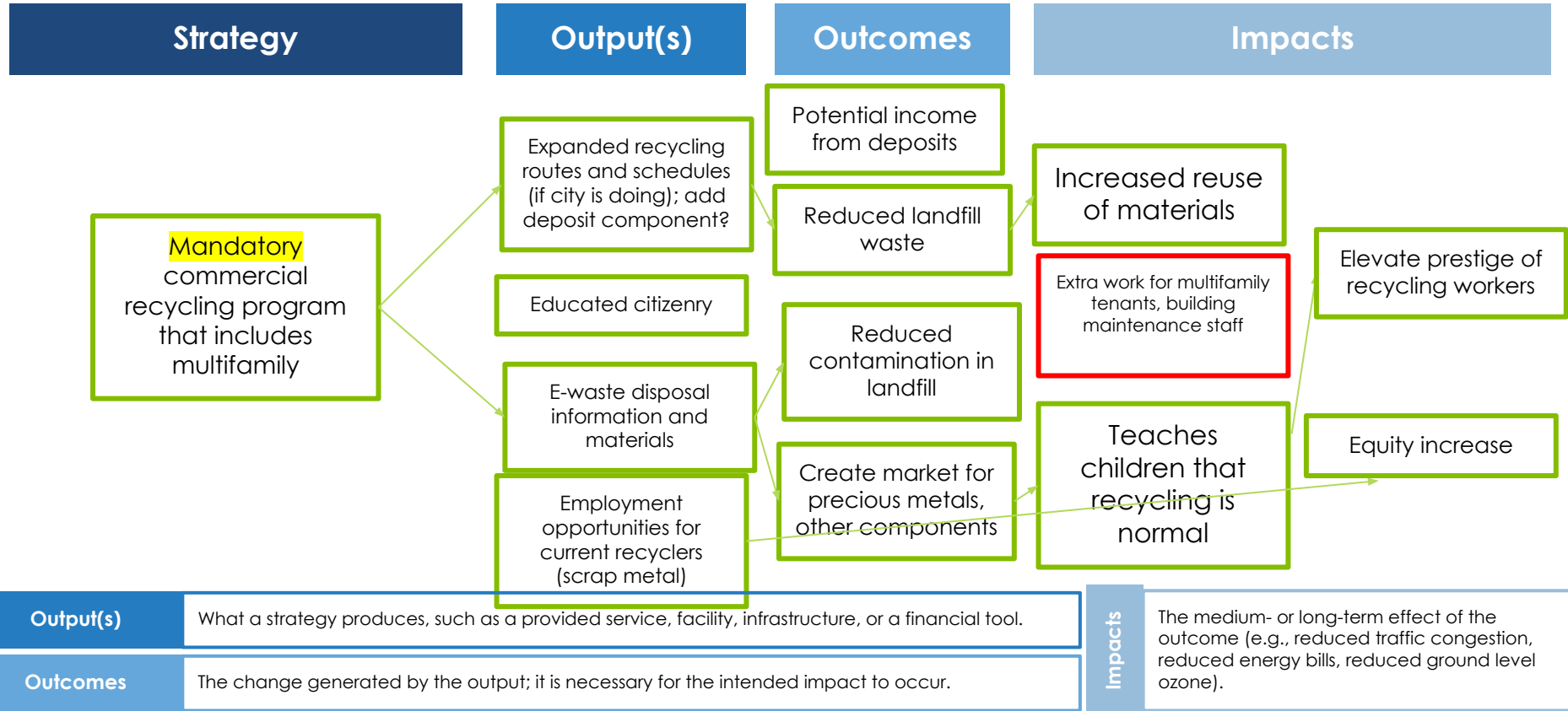
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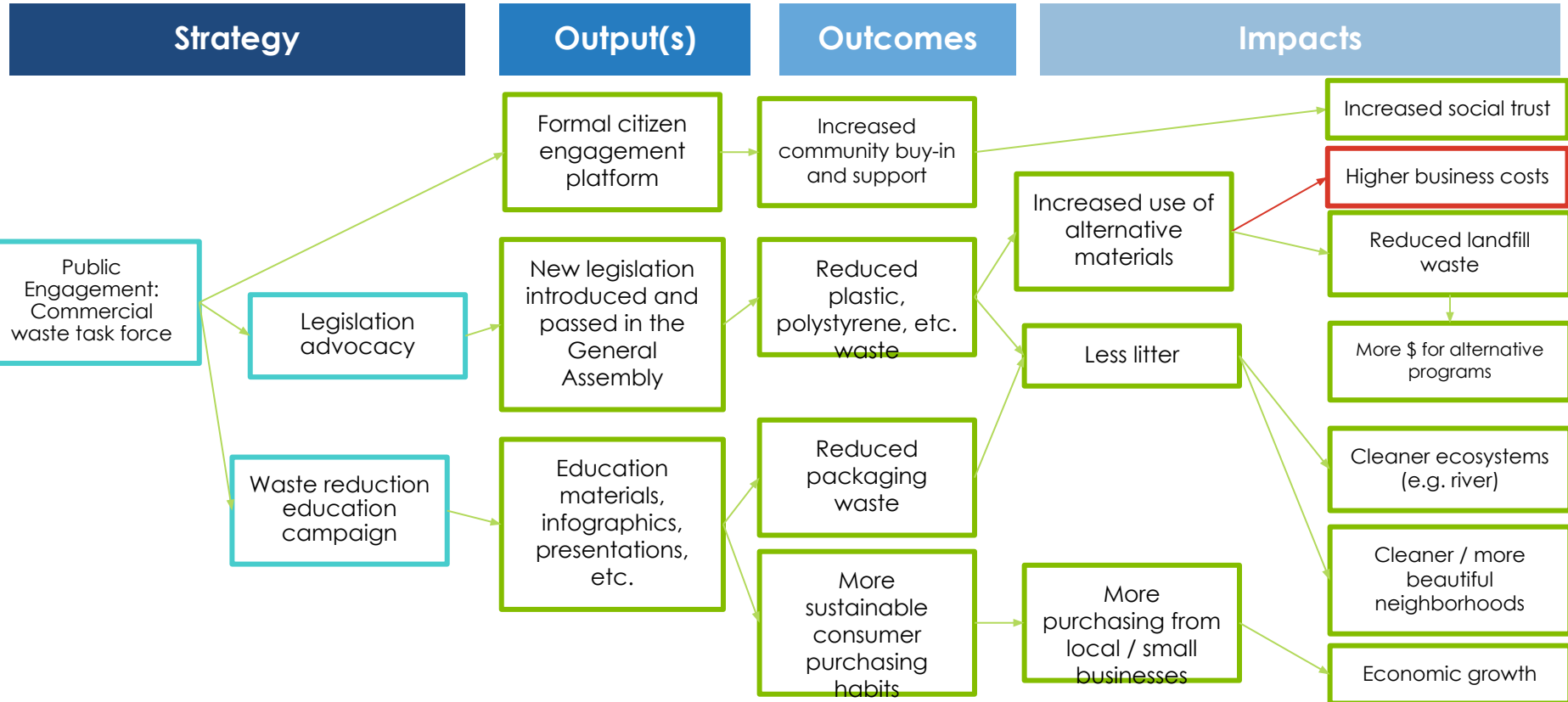
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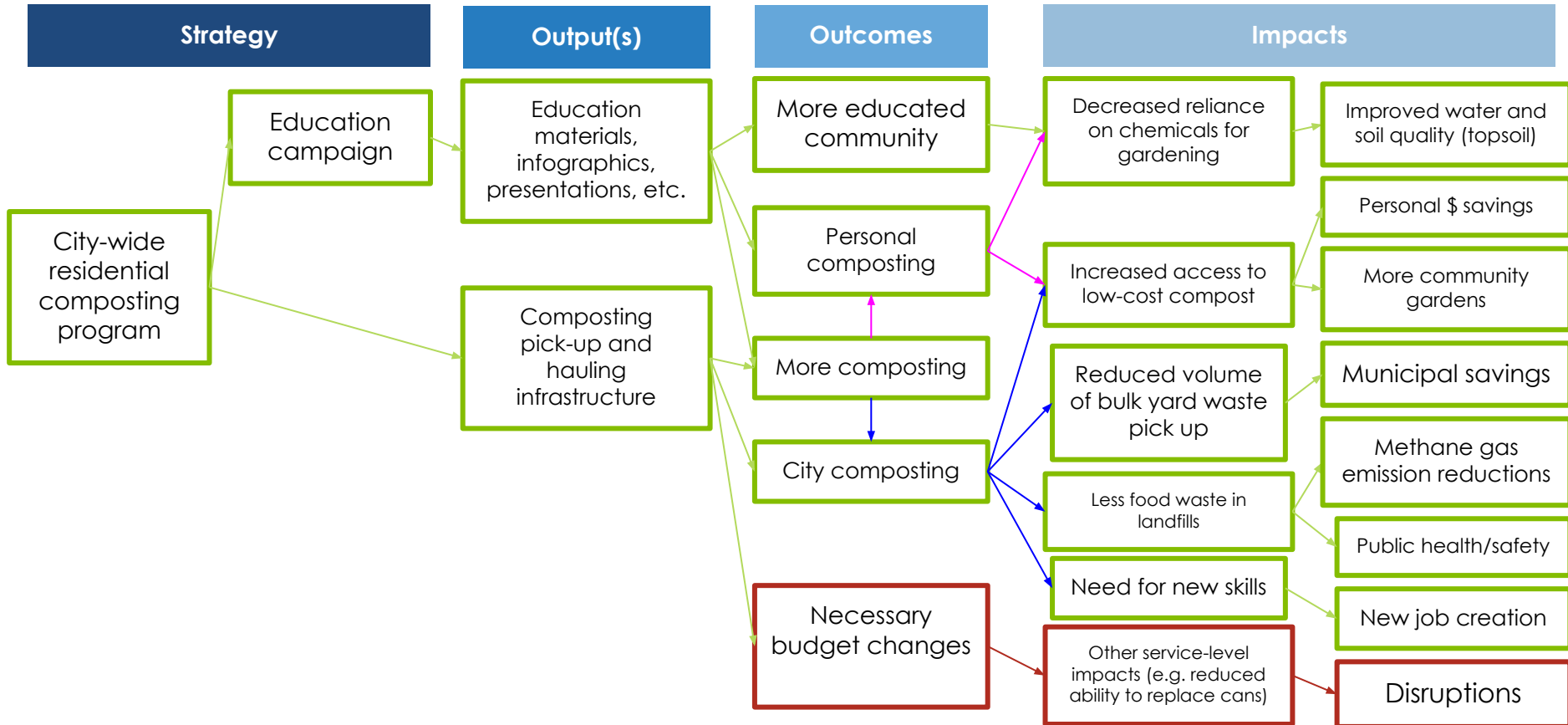
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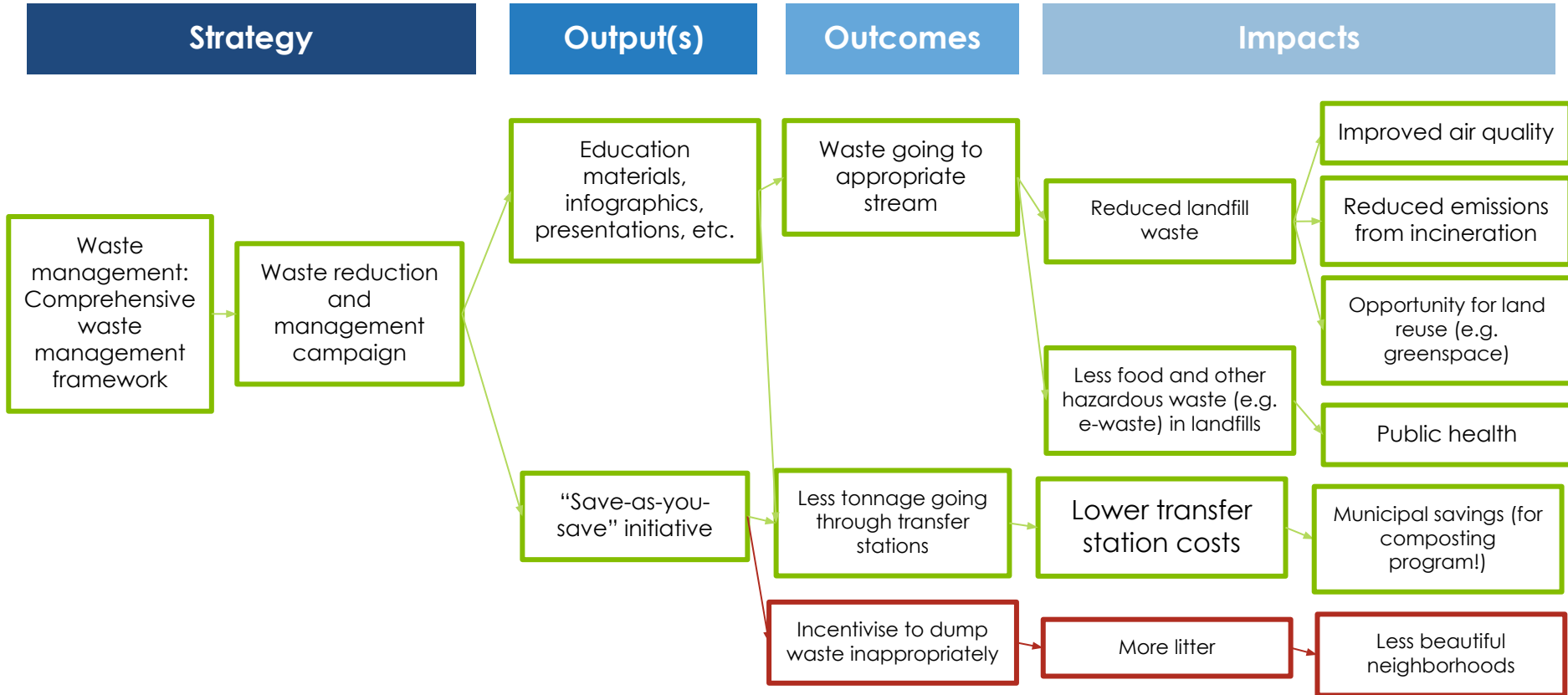
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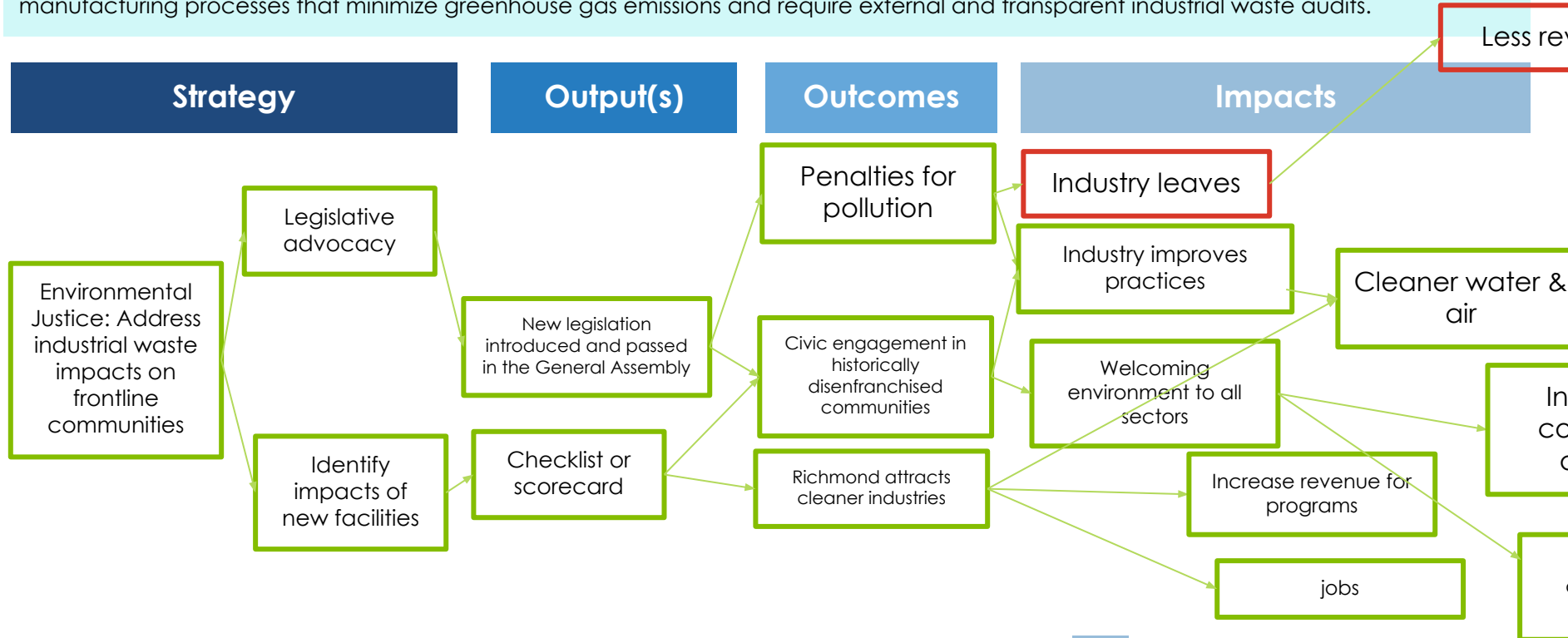




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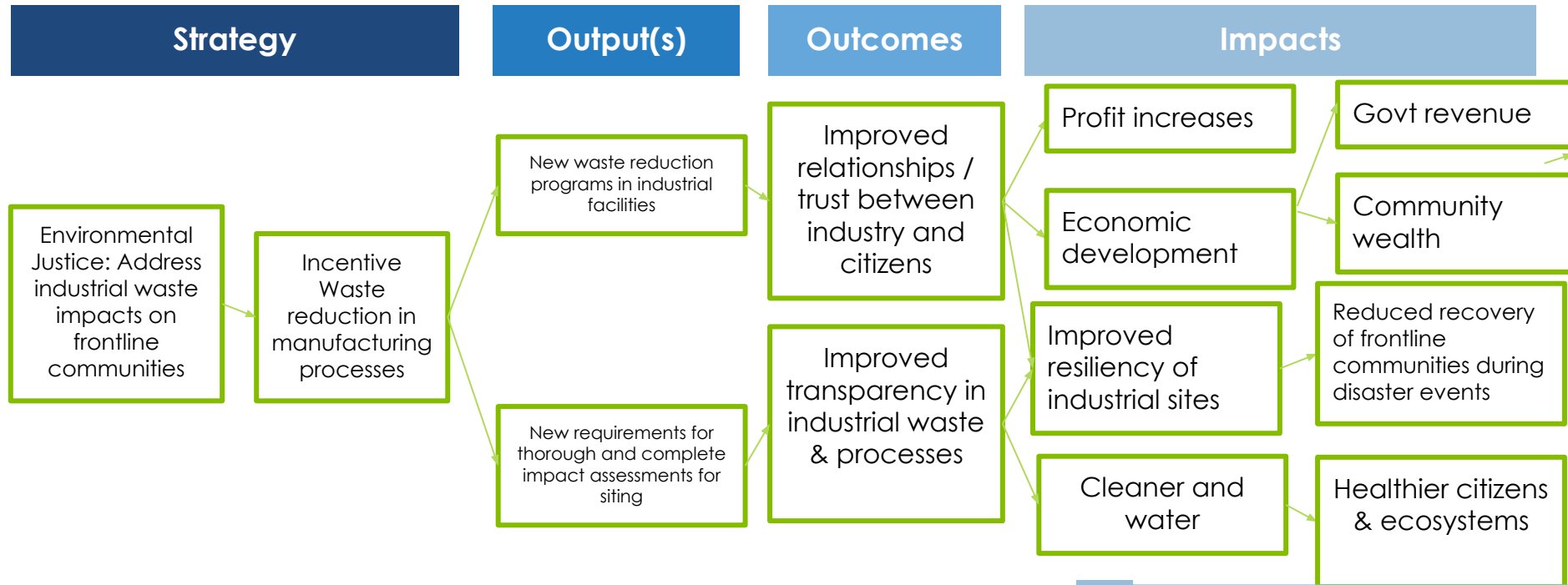
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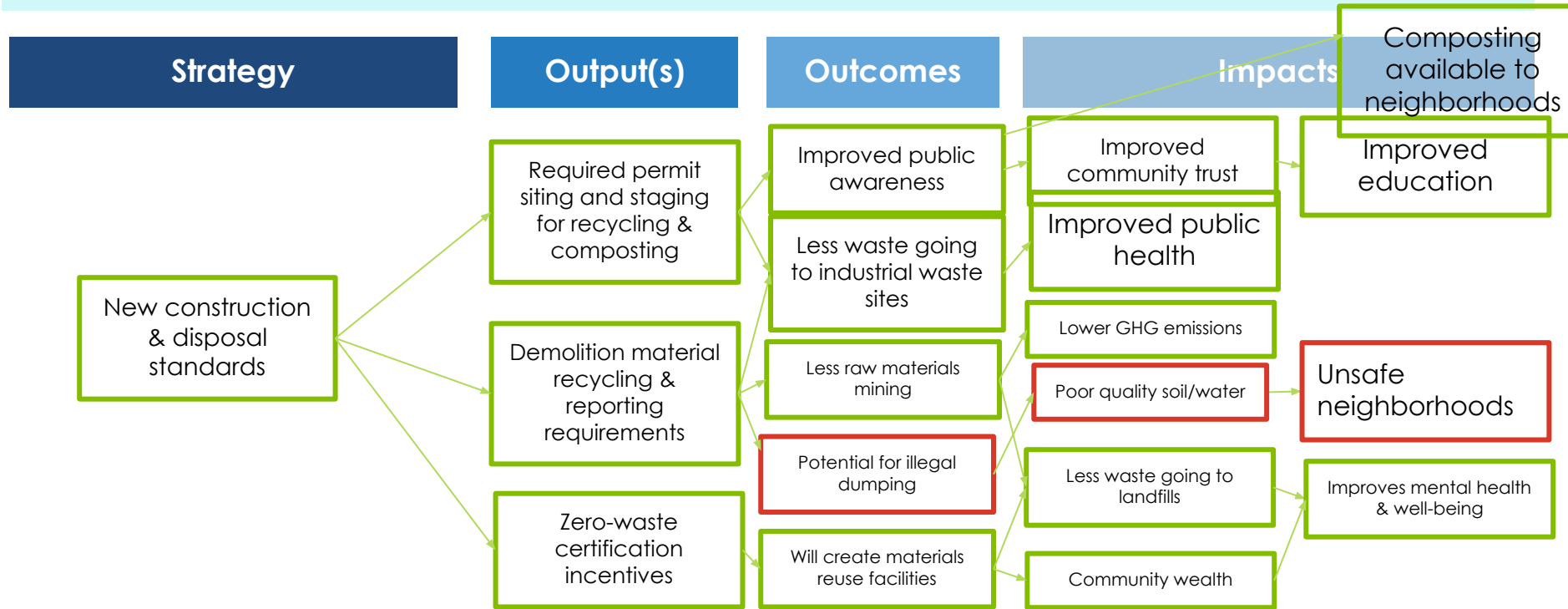
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*Exit breakout rooms!*

# Wrap-up and next steps

- Next meeting: July 15th @ 9am, “RVAgreen2050 Implementation and Accountability”
- NOW:
  - General reflections?
  - Fill out feedback survey
  - Share updates, upcoming events, and resources in the chat

THANK YOU!

# Example

