Compostable Products Advisory Committee Meeting Summary

Meeting #6: Tuesday March 5, 2024 | 10:00 AM – 12:00 PM

Location: Zoom

Attendance

Members of the Advisory Council, Washington Department of Ecology (Ecology), Cascadia Consulting Group (Cascadia), and the public attended the meeting.

20 out of 26 Advisory Committee members attended (those who attended are marked with *):

Name	Affiliation
Alex Truelove*	BPI
Amy Clow*	WSDA
Patti Stacey*	Kittitas County
Chris Averyt	City of Spokane
Dan Corum*	City of Tacoma
Gena Jain*	City of Kirkland
Heather Trim*	Zero Waste Washington
Janet Thoman*	CMA
Jay Blazey*	Cedar Grove
Jenny Slepian	Eco Products
Kate Kurtz*	City of Seattle
Liv Johansson	WORC
Lewis Griffith*	City of Tacoma
Ryan Dicks	Pierce County

Name	Affiliation
Mark Chidester*	City of Richland
Reingard Rieger*	Tilth Alliance
Ron Jones*	City of Olympia
Samantha Louderback	Washington Hospitality Association
Samantha Winkle*	Waste Connections
Scott Deatherage*	Barr-Tech
Shannon Pinc*	NatureWorks
Alli Kingfisher*	Ecology
Wendy Weiker	Republic Services
Peter Godlewski*	Association of WA Businesses
Zonell Tateishi*	Yakima County
Rod Whittaker*	WRRA

2 Washington Department of Ecology (Ecology) members attended, but did not participate as Advisory Committee members:

- Cullen Naumoff
- Chery Sullivan

3 staff from Cascadia Consulting Group (Cascadia) attended as meeting facilitators and support:

- Maddie Seibert
- Hannah Swee
- Taylor Magee

8 members of the public attended.

Meeting goals

- Review research about organics capture rates from WA-based studies
- Continue challenge identification process
- Begin identifying criteria to generate recommendations to the legislature

Agenda

Duration	Agenda Item
10 min	Welcome, agenda, & objectives
25 min	Where we've been and where we're headed
30 min	Research presentation
45 min	Review and discuss challenges identified
5 min	Public Comment
5 min	Closing remarks and preview next steps

Where We've Been & Where We're Headed

Working Definition for Compostable Products

- Maddie presented the modified working definition for compostable products for the AC to use in assessing compostable products. Changes to the definition include removing language around labeling and adding language to include paper products. The proposed definition is:
    1. A compostable product that is sold, offered for sale, or distributed for use in Washington by a producer must:
        a. Meet ASTM standard specification D6400;
        b. Meet ASTM standard specification D6868;
        c. Be comprised of wood, which includes renewable wood, or fiber-based substrate only; or
        d. Be comprised at least 99% of paper, which includes renewable wood or fiber-based packaging materials. The remaining 1% must not contain any plastic or polymer additives or coatings.
- **Comments:**
    - Since the last AC meeting, the Organics bill has passed, and the definition that this working definition was based upon has now changed to require 98% composition of paper rather than 99%.

Research Progress Update

- **Completed research topics to date:** Hannah presented on the completed research topics to date (letters reference the research topics as they are noted in HB 1033):
    - (b) The types of compostable products, and amounts if known, sold or distributed in Washington
    - (c) Consumer confusion caused by noncompostable products that can lead to contamination issues
    - (d) Compostable standards related to the breakdown of products in facilities and home composting

  - (f) Estimates of the percentage of compostable products used in Washington that are disposed of at organic materials management facilities
  - (i) Any work product from other contemporaneous stakeholder advisory committees currently discussing similar topics in other jurisdictions or nationwide
  - Additions recommended by the committee: GHG emissions related to composting compostable products and toxic chemical contamination (e.g., PFAS)
- **Upcoming research topics:** Hannah shared upcoming research topics, noting that the final research presentations will take place in April and May (letters reference the research topics as they are noted in HB 1033):
  - (e) The status of acceptance of compostable products by organic materials management facilities in Washington, including consideration of organic certifications
  - (g) Financial incentives for organic materials management facilities accepting compostable products
  - (h) Current laws related to compostable products and the enforcement of these laws
  - (j) Policy options addressing contamination of organic waste streams and to increase the use of reusable and refillable items
- **Research takeaways across topics:** Hannah presented high-level takeaways based on the research memos presented to the Committee to date, including:
  - **By weight, compostable products are a small portion (less than 2%) of material collected in the curbside residential organics stream in Washington state**. However, weight may not accurately reflect the impact of the presence of compostable products in the organics stream.
  - **While data is unavailable to answer whether compostable products increase food waste diversion, we do know there is potential to increase the capture of food waste into the organics stream**. Data from the WA Department of Ecology 2020-2021 statewide waste characterization study showed that nearly 20% of residential garbage consisted of food waste.
  - **Compostable bags make up most of the compostable products sold or distributed in Washington state** currently registered through the Department of Ecology. PLA is the most common material type of products registered.
  - **While BPI & CMA certify compostable products using ASTM standards D6400 and D6868 for industrial compostability, commercial compost facilities note that not all certified products fully breakdown within their processing cycle**. We anticipate that the organic materials management facility interviews will help answer why this may be (i.e., compostable packaging look-alikes, varying processing times, specific products that don't breakdown, etc.).
  - **The main drivers causing confusion around compostable products is conflicting and unclear product labeling and inconsistency in organics programs across and within jurisdictions**. Preventing contamination through education and enforcement before collection takes place is more effective than contamination removal during the composting process (i.e., increasing labeling requirements, sector specific education programs, jurisdictional cooperation & cohesive policies).
  - **Results from a LCA of compostable packaging and other foodservice ware conducted by Oregon DEQ in 2017 showed that in most comparisons, the production and use of**

compostable materials (and composting them) resulted in higher environmental impacts than that of either non-compostable materials, or compostable materials treated via recycling, landfilling, or incineration

- **Comments:**
  - The Oregon DEQ study and LCA did not fully consider the emissions of diverting food waste. BPI published a response to the study; the study and its information are not quite up to date.
    - Hannah replied that the BPI response was included in the research, but that we will review once again.
  - There is some data that demonstrates food waste diversion is increased with compostable products; don't agree that there's no data corresponding to compostables and food diversion.
    - Thanks; this is a key consideration within the Committee's work. We will review.
  - There have been presentations that demonstrate products breaking down, and they were presented at the US Composting Conference.
    - Hannah noted that the takeaway on the breakdown of compostable products breakdown was based on literature and reports from composters in Oregon, and that we'll be diving into this topic in the April meeting with results from the facility interviews. She added that she'll make a note to include the newer report findings from the conference.
  - Nature Works and Zero Waste Washington have studies regarding food waste diversion facilitated by compostable products.
  - CMA would be happy to send over some comments and data related to the disintegration of products.

Research Presentation and Discussion: Capture Rates

Research Presentation

- **Overview:** Hannah presented the March research memo, which focused on compostable product capture rates. The compostable material capture rate is the **percentage of compostable material properly separated into the organics stream compared to the total amount of compostable material generated**. It is calculated by dividing the weight of a specific compostable material or set of materials collected in the organics stream by the weight of all those materials across waste streams (including garbage, recycling, and organics). In the simplest terms, it describes how good people are at putting the right material in the right collection container. The data was compiled from preliminary King County and Seattle data sources.
- **Considerations and limitations:** The research memo includes considerations and limitations of the data, which can be summarized as:
  - **The memo looks at residential data and therefore represents only a partial estimate of compostable product disposal and recovery.** A majority of compostable products are used and disposed in the commercial sector waste stream.
  - Residential curbside organics collection programs vary between Seattle and other jurisdictions in King County**.** Seattle has banned residents and businesses from putting yard waste in the garbage since 1989 and has banned food scraps and compostable

paper in the garbage since 2015. Organics collection service is also mandatory in Seattle, and it is optional in other King County jurisdictions. Seattle residents are permitted to dispose of food waste, yard waste, and approved compostable products, however not all jurisdictions have the same approved product lists.

- **Below are key points and takeaways:**
    - **Data does not represent the entire state.** The communities used to model capture rates are more familiar with and accept compostable products as well as have mandates that require food service businesses to use compostable products.
    - **While capture rates help answer research topic F identified for the Advisory Committee, they are only part of the story** and do not reflect the impact of non-compostable products in the organics stream and resulting contamination issues (i.e., compostable product lookalikes).
    - **Food waste capture rates in King County (16%) and Seattle (36%) highlight the potential to increase food waste diversion**. This is notable as capturing more food waste is a primary justification for allowing or requiring the use of compostable products.
    - **Capture rates for compostable plastic bags are the highest among compostable products for both King County (91%) and Seattle (81%).**
    - **In Seattle, capture rates for single-use compostable plastic food service products (64%) are significantly higher than single-use food service compostable paper (2%).**
    - **In King County, 42% of single-use food service compostable paper is captured in the residential organics collection stream**, while other PLA compostable products capture rates are significantly lower (except for compostable plastic bags). PLA compostable products and packaging are not officially accepted in King County's residential organics collection stream.
- **Comments:**
    - Can additional detail about the methodology be shared?
        - Hannah replied that they analyzed available tonnage and waste management data from King County and Seattle. They used SPUs 2021 waste characterization to model and estimate capture rates from organic materials. They had initially set out to use data from the most recent statewide study, however the most recent garage study was conducted during the COVID-19 pandemic which they believed skewed data.
    - Member of the public (in chat): Can you please send the methodology for the 16% fw capture rate after this meeting via email?

MURAL Discussion

Introduction: The Committee transitioned to MURAL for a full group discussion, where they used the following discussion questions to guide their conversations surrounding the capture rate research:

1. What does this research tell us about what is working to achieve the states goals?
2. What does it tell us about what is not working?
3. Where do we see opportunities or barriers to improve compostable products management in WA state?

Summary of responses in MURAL and verbal discussion:

1. What does this research tell us about what is working to achieve "the state's goal of managing organic materials, including food waste, in an environmentally sustainable way that increases food waste diversion and ensure that finished compost is clean and marketable?"
    - Compostable products are an important part of food waste diversion but need to ensure contamination is addressed.
    - The data does not show is the end market compost is clean and marketable
        - Is this data available?
        - Does food waste/contamination impact marketability?
    - Plastic bag capture rate data suggests there is a possible pathway for compostable products if similar considerations and polices are required.
    - Mandatory compost collection and education seem to increase diversion.
2. What does it tell us about what is not working to achieve the state's goal?
    - Lack of statewide access to infrastructure and collection.
    - Jurisdictional inconsistency, within King County and throughout state.
    - Need more assurance for compost end markets
    - Need to look at processing facility capacity to handle compostable products
    - Lack of data, specifically from commercial sources which are likely high sources of compostable products
3. Where do we see opportunities and barriers to improve compostable products management in Washington state?
    - Compostable products are an important way to divert food waste. This data shows that there's a role for food waste and compostable products.
    - Seeing what the contamination rate is and the resale of the compost at these facilities, how is that impacted by increased food waste capture and how are those things factored into the resale of compost? Do food waste and contamination impact marketability?
    - Developing a consistent standard to reduce consumer confusion, hopefully reducing bad behavior
    - Enforcing labeling laws to reduce consumer confusion
    - Easy to understand education messages
    - LCA comparison of reusable compared to compostable
    - Open communication throughout supply chain
    - We can't fully get behavior change without consistent messaging across the state and making it easy for the consumers. The AC is tasked with finding a solution beyond education.
    - One way to make it easier might mean making it basic. Commit to consistency and revisiting the products that we allow or don't allow.

Review and Discuss Challenges Identified

- **Challenge identification process so far:** The nine original challenges identified were further narrowed to five, using the discussion from the February AC meeting. Maddie noted that the

identified themes are meant as an organizational tool to guide future recommendations and are not set in stone.

- **The five challenges identified are:**
    1. Contamination at compost bins leads to contamination at facilities.
    2. Concerns over facility capacity to accept compostable products and food waste.
    3. Capture rates of food waste and compostable products are low.
    4. Concerns over enforcement of labeling and/or use of products.
    5. Lack of consistency across facilities in what they accept and their compost processing conditions.
- **Comments/ questions regarding the identified challenges:**
    - Confusion about how the five themes were bucketed; there should be more detail/clarity in the themes presented.
    - Challenge #4 suggests that current labeling laws/rules are good enough and just need enforcement, however here is currently no prohibition on non-compostable products and their labeling. Propose taking out "enforcement of" to call out labeling and lookalikes directly.
    - There is an issue with enforcement and contamination however that's not the point of this meeting. A flow chart organized from consumer to end market could be helpful for these themes as we begin to create solutions.
    - Agreement with everything being said. There are three levels of contamination: non-compostable items being thrown into compost bins, lookalikes causing contamination, and compostable products that don't break down in some facilities. We need to define this more thoroughly and determine how we can simplify the process for the user.
    - New suggested theme: Compost markets faces trouble if contamination is high or not applicable to organic agriculture.

MURAL Discussion: Criteria for Solutions

- **Criteria for solutions:** Maddie shared possible key considerations for the challenges:
    - Cost
    - Feasibility
    - Equity
    - Impact
    - Co-benefits
- **Discussion questions:** AC members were divided into two breakout rooms to further discuss the suggested criteria for solutions. They used the following questions to guide their discussion:
    - What key considerations should this committee keep in mind when developing recommendations for the legislature? Is anything missing from this list?
    - How would you define each of these criteria?
    - Which criteria are most important, if any?

What key considerations should this committee keep in mind when developing recommendations for the legislature? Is anything missing from this list?

- Focus should remain on food waste, rather than capturing compostable products for composting. What will capture *more* food waste?

- Life cycle impacts: what are the GHG benefits to increased food waste diversion? What are the costs?
- End market compost quality
- Cost: rate-payers, governments, facilities, etc.
- Environmental considerations/ benefits or disbenefits: GHG, water quality, microplastics, etc.
- Feasibility of implementation
- State pest quarantine impacts
- Equity considerations.
- Unintended consequences associated with recommendations
- Effectiveness: will it solve the problem?

How would you define each of these criteria?

Cost:

- Cost impacts to rate-payers
- Costs to facilities
- Investment needed
- Costs for administrations and enforcement
- Cost of business as usual
- Cost of compostable products compared to single use products
- Upstream versus downstream costs
- Weighing various solid waste/recycling/ organics collection funding models: is the service embedded, what is the cost to residents/consumers, how are these models supported?

Feasibility

- Can the policy be effectively implemented/enforced? Will it be implemented differently across the state?
- Feasibility tied to cost- if policy is too costly, unlikely to be implemented
- Do we have capacity? How Is that supported?
- Consumer education and outreach resources needed

Equity

- Impacts to facilities, especially smaller ones
- Disadvantaged counties and communities: funding/ staffing to implement legislation
- Equitable access or cost for rural customers
- What are the economic impacts of mandates?
- How can communities without compost gain access?
- Do all residents have access to serve at affordable rates?

Impacts

- Environmental benefit
- Better markets for compost due to cleaner feedstocks
- Increased food waste diversion

Co-benefits

- Way to recycle materials that are not traditionally recycled
- Motivation to reduce single-use plastics
- Could lead to develop of reuse/refill markets

Which criteria are most important? Why?

- **Mural responses:**
  - Environmental benefits
  - Cost on all levels
  - Equity: affordability of these services
  - Feasibility
  - Co-benefits
- **Poll:** As a pulse check to understand the general understanding across the room, Committee members were asked to answer a Zoom poll and rank the Criteria for Solutions from 1-5, with 1 being the most important and 5 being the least. For the poll, environmental considerations were included in the "Impacts" category. Below is the ranking of criteria from the poll.
    1. Impacts
    2. Feasibility
    3. Cost
    4. Equity
    5. Co-benefits

Public Comment

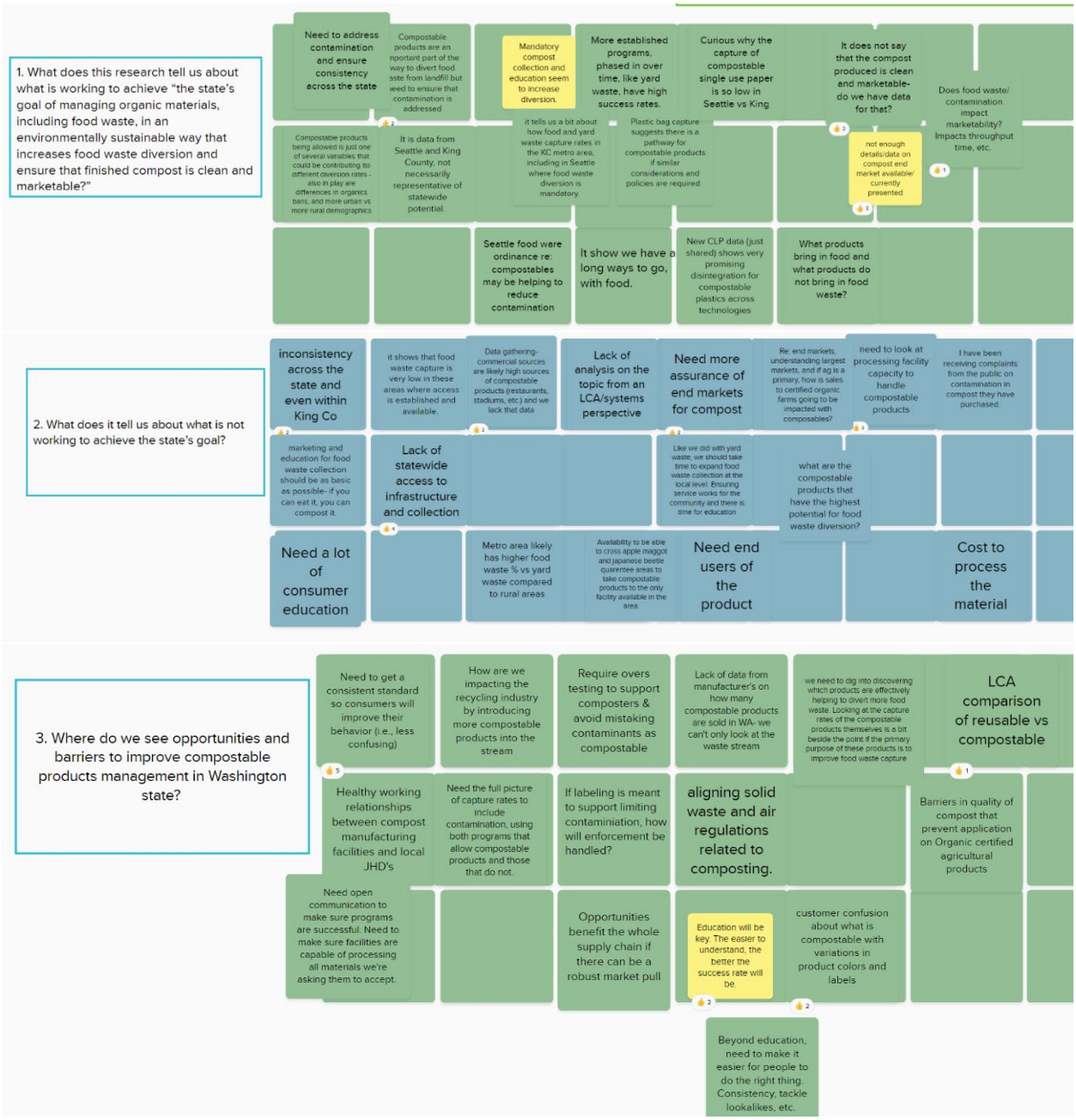
- No public comments

Next Steps

The April AC meeting will take place on April 2nd from 10:00am-12:00pm.

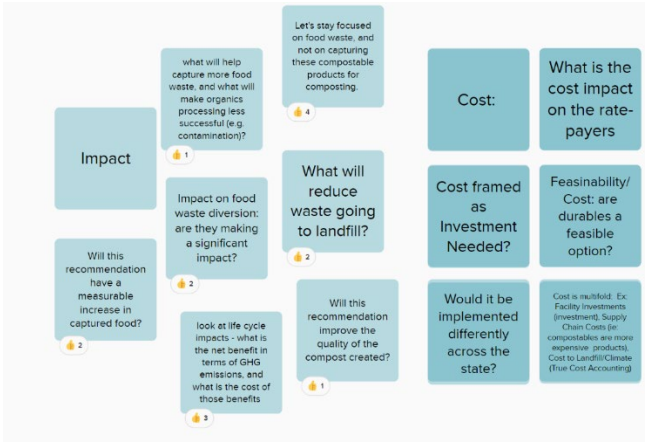
Appendices

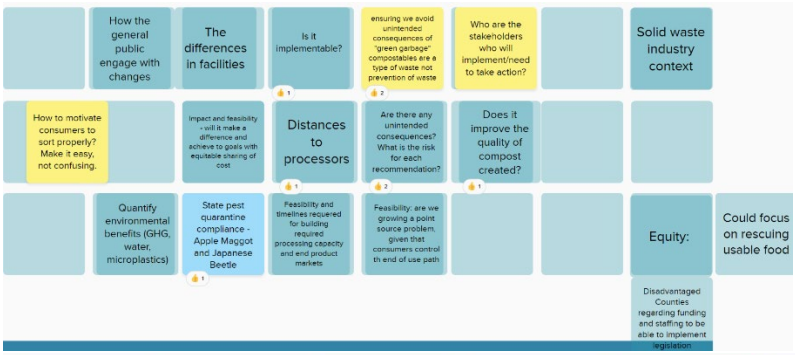
MURAL Discussion: Research discussion (Full Group)

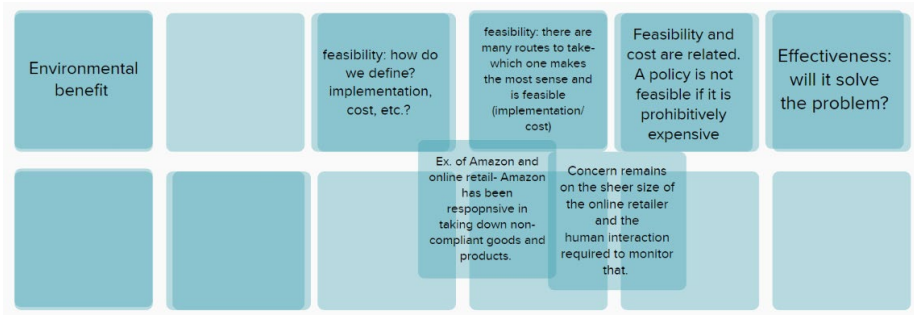


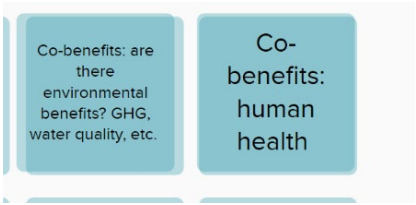
MURAL Discussion: Solutions Criteria

1. What key considerations should this committee keep in mind when developing recommendations for the legislature? Is anything missing from this list?



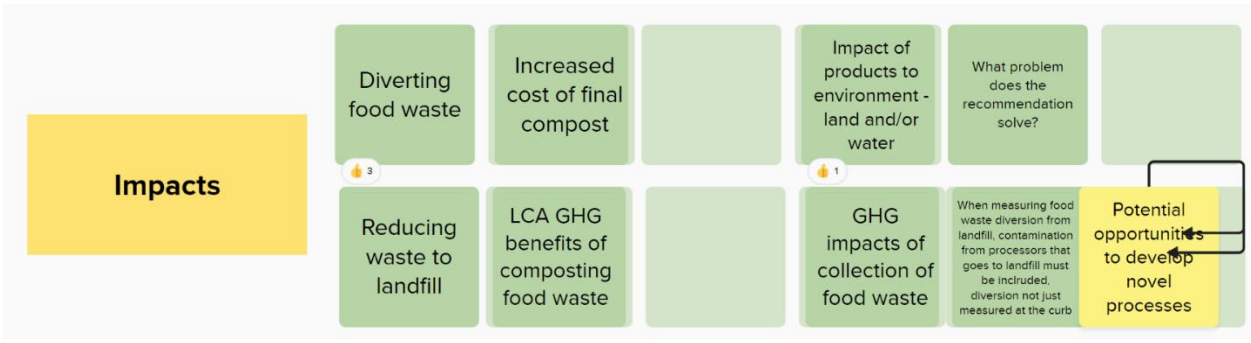


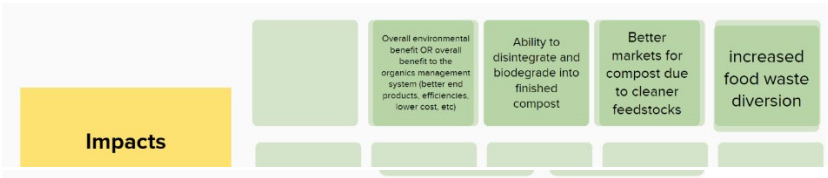


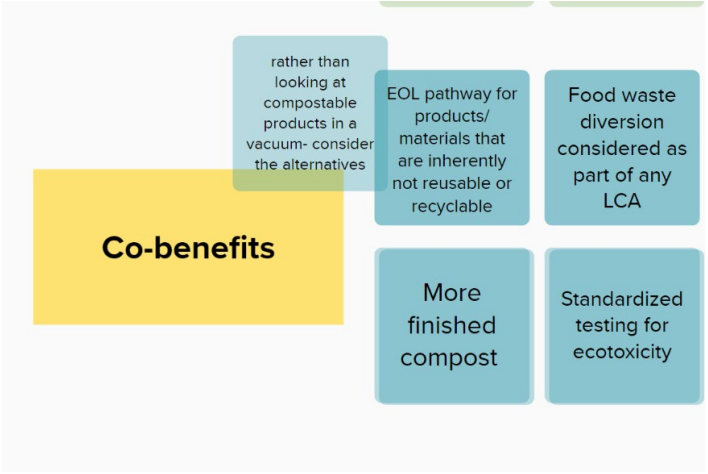


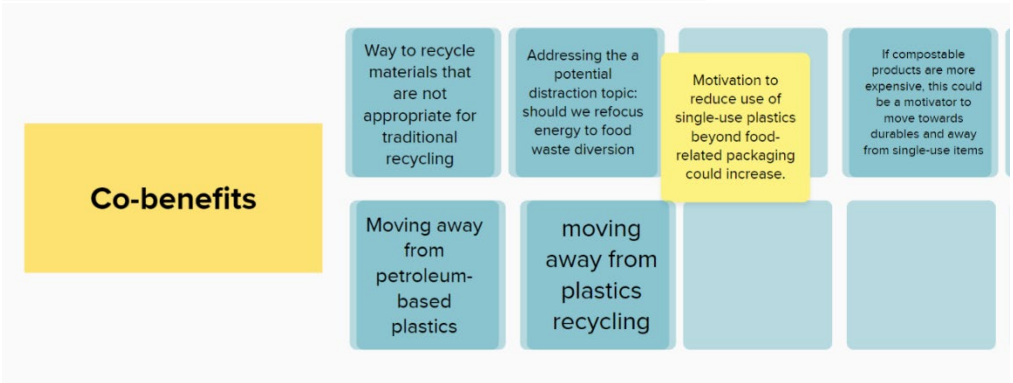
2. How would you define each of these criteria?


Equity
Could focus on rescuing usable food
Impacts to facilities, esp. smaller ones
engeging with community members that are not familiar with compostables yet are being asked to know what to do with them
Increases cost of collection of composting/ recycling/disposal - who doe increased costs impact?
From doing outreach with residents of urban underserved communities, a common frustration I hear is that they don't have the opportunity to do the right thing (e.g. landlord doesn't provide compost collection). Regulations and enforcement (for the landlord) would be helpful there.
Disadvantaged Counties regarding funding and staffing to be able to implement legislation
Be aware of economic impacts of mandates
inequitable access or costs for rural customers

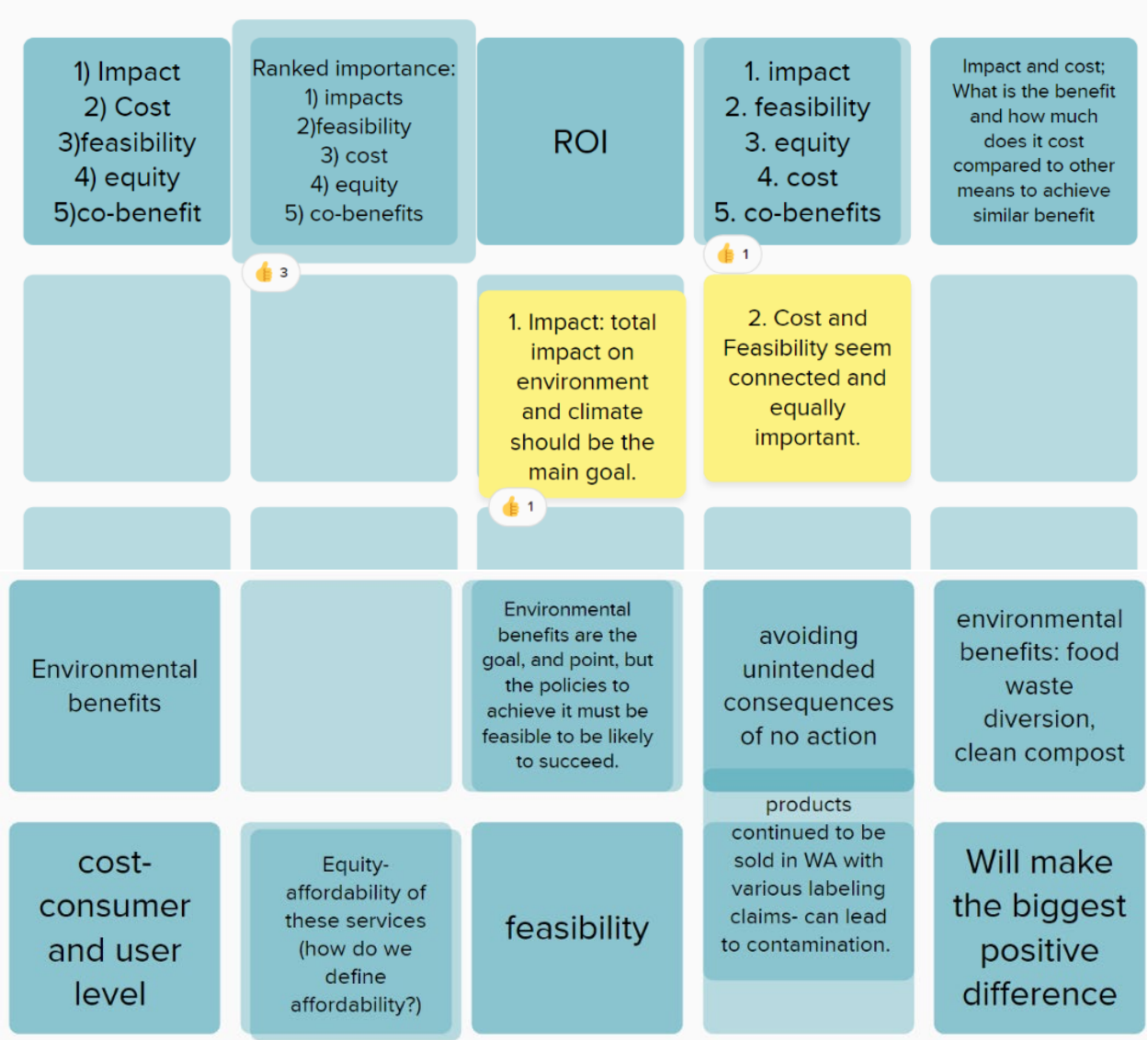

Impacts
Diverting food waste
Increased cost of final compost
Impact of products to environment - land and/or water
What problem does the recommendation solve?
Reducing waste to landfill
LCA GHG benefits of composting food waste
GHG impacts of collection of food waste
When measuring food waste diversion from landfill, contamination from processors that goes to landfill must be incluuded, diversion not just measured at the curb
Potential opportunities to develop novel processes


Impacts
Overall environmental benefit OR overall benefit to the organics management system (better end products, efficiencies, lower cost, etc)
Ability to disintegrate and biodegrade into finished compost
Better markets for compost due to cleaner feedstocks
increased food waste diversion


Co-benefits
rather than looking at compostable products in a vacuum- consider the alternatives
EOL pathway for products/ materials that are inherently not reusable or recyclable
Food waste diversion considered as part of any LCA
More finished compost
Standardized testing for ecotoxicity


Co-benefits
Way to recycle materials that are not appropriate for traditional recycling
Addressing the a potential distraction topic: should we refocus energy to food waste diversion
Motivation to reduce use of single-use plastics beyond food-related packaging could increase.
If compostable products are more expensive, this could be a motivator to move towards durables and away from single-use items
Moving away from petroleum-based plastics
moving away from plastics recycling

3. Which criteria are most important? Why?



Zoom Poll

Criteria Ranking

Poll | 1 question | 19 of 26 (73%) participated

1. Please rank the criteria from 1-5, 1 being highest priority and 5 being lowest priority.

NOTE: This is NOT a formal vote and is instead an exercise to gauge AC member's priorities as we begin to consider recommendations. (Rank Order) *

19/19 (100%) answered

A. Cost 19/19 100%

B. Feasibility 19/19 100%

C. Equity 19/19 100%

D. Impacts 19/19 100%

E. Co-benefits 19/19 100%

1 2 3 4 5