

# Recycling Development Center Advisory Board Meeting

## January 9, 2020 Notes



This first meeting of the Advisory Board for the Washington Recycling Development Center (Center) was held on the Highline College campus in Des Moines, Washington. Staff from the Department of Ecology and Commerce hosted the event. All advisory board members or their alternate were present. Additional interested parties attended or joined remotely (webinar). Board members:

Name	Organization	Name	Organization
Corinne Drennan	Pacific NW National Laboratory	Allen Langdon	Return-it
Karl Englund	Washington State University	Scott Morgan	Evergreen State College
Kyla Fisher	AMERIPEN	Mindy Rostami	Waste Management
Ruby Irving *	Klickitat County Solid Waste *	Derek Ruckman	Recology
Margo Gillaspay	Skagit County Public Works	Tim Shestek	American Chemistry Council
Nina Goodrich	Sustainable Packaging Coalition	Jay Simmons	North Pacific Paper Company
Sego Jackson	Seattle Public Utilities	Heather Trim	Zero Waste Washington

\* alternate for Deb Geiger, Spokane County Solid Waste

The day started with opening remarks from Laurie Davies, Ecology's Solid Waste Management program manager, and Brian Young, Commerce's Clean Technology sector lead. Each attendee offered brief introductions.

### Brainstorm, Prioritization, and Break-out Session

All attendees participated in a brainstorming exercise generating a list of ideas for the Center. The brainstorm ideas were sorted into categories: Big Picture, Center Principles, Other Ideas (not for the Center), Collaborate with Others, How to do this Work, Research and Development and Technology, Financing and Markets, and Policy. Table 1 lists the categories and ideas, including ideas that did not fall on the Center.

Attendees then identified their priority ideas (through a dot exercise) in categories that fell within the work of the Center. Table 1 shows the number of 'dots' for each idea in parenthesis. Four categories with priority ideas (highlighted in Table 1 in red font) were selected for the afternoon break-out session discussion. Those areas were: How the Center will do work; Policy options; Research, development and technology; and Financing and markets.

### Break-out Session Highlights

The following summarizes information captured during the break-out discussion in these four categories. Table 2 provides a list of the comments recorded during this session.

- **How the Center will do the work:** First define our goal, why, outcomes, and measures of success, create a detailed map of the overarching process and individual processes and relationships (statewide characterization study), including infrastructure; identify barriers and menu of solutions (EPA clearing house). Work strategically along the west coast (partners: business, local governments, EPA, British Columbia, industry associations, states, haulers, solid waste associations, tribes, unions, ports, shipping

companies, and the public). What has already been done in other states, use WA criteria to evaluate opportunities. Look into political support (governor, legislature, elected officials).

- **Policy Options:** First answer key questions/establish goals: why are we doing Center work, what are the measures of success, what are the desired outcomes. Create a menu of potential policies that will help achieve the Center's mission – do a policy analysis, what is already in place (internationally) look at costs and effectiveness, integrated policies, connect to climate. Identify and work with partners: regional, national, international, experts in technology and policy that understand our region. *“So That”*
- **Research, Development and Technology:** Figure out what is the Center's role (let research institutions do the R&D, be a facilitator), create a road map for R&D, identify partners (industry, research institutions, waste management industry, manufacturers, WSU, UW, PNPL, Assoc of Plastic Recyclers, international, institutes, industrial, universities, large industries, financing sources). Identify clear problem statements and performance indicators: What are we solving for WA? Suggestions included eco-industrial space, regulation relief, tax incentives, grants, facilitate partnerships, do data analysis (waste stream characterization, proven v unproven technology), look internationally, look at other states (NC and MI), how does it blend with the existing system, what are the impacts, are the end-products desirable/needed, what are the impacts (environmental, toxic, cost/benefit).
- **Financing and Markets:** identify what is available to grow in WA in the short term, identify what additional resources are needed, how can we invest in existing infrastructure, what money do we have and how to best allocate and where to best allocate, what policies can help with roadblocks, who are the players, what are the incentives, how do we finance. What do we need, how do we get it, what are the blockages.

### Advisory board discussion

The board met briefly to discuss issues and logistics including: chair, co-chair, meeting frequency and location, and charter. There was insufficient time to resolve these issues. The board agreed to review and comment on the draft charter by January 31<sup>st</sup>, the draft was provided by Ecology. Ecology will survey all board members to get input on chair/co-chair, meeting frequency and location. Resolution of the charter and board organization will be on the schedule for the next meeting. The next board meeting will be scheduled after the end of Washington's legislative session. Ecology will work with the board members to identify the date, location, and agenda for the next meeting. All board meetings will be open to interested parties.

### Assignments

Ecology committed to the following assignments:

- Summarize and share notes from the meeting (this document).
- Type up the break-out session feedback (see Table 2).
- Share the list of attendees (provided as Table 3 to this document).
- Survey the board members to (in progress):
  - Get comments on the draft charter by January 31.
  - Identify nominees for board chair and vice chair.
  - Set the date for the next board meeting.
  - Consider additional board membership: independent hauler, member of the public.

### For more information:

- Kara Steward, 360-407-7643 or [kara.steward@ecy.wa.gov](mailto:kara.steward@ecy.wa.gov)
- Board [website](#)

**Table 1 - Brainstorm ideas and dot-exercise.**

<b>Table 1 - List of brainstorm: Categories, Ideas and dot exercise</b>
<b>Big Picture for the Advisory Board</b>
Advocate the mission of the Center
Focus to facilitate
Future planning
Have a local recycler on the advisory board (1 dot)
Need independent hauler representation (3 dots)
Action over words (2 dots)
Catalyze action
Evaluation framework
Facts vs. fiction (1 dot)
Campaign on alternative feedstocks
<b>Center Principles</b>
No toxics
No unintended consequences
Rural communities
<b>Other Ideas (not for the Center)</b>
Improve material quality
Reduce contamination and establish targets
Restore consumer confidence
Lead and educate
Training and education
Clear educational messages
Education (statewide and regional)
Education on short-term vs. long-term impacts
<b>How the Center will do the work</b>
<b>Identify barriers and menus of solutions (8 dots)</b>
Prohibiting environmental laws inventory
Inventory of all end markets
<b>Identify needs - Prioritize gaps (7 dots)</b>
Science based input for legislation
Contracts and supply chain research (2 dots)
<b>Cataloging existing infrastructure and gaps (5 dots)</b>
Recyclables prioritization (2 dots)
<b>Leverage existing program synergies (5 dots)</b>
<b>Knowledge repository - National and statewide best practices (14 dots)</b>
<b>List of global recycling possibilities (not in WA) (3 dots)</b>
<b>Work with west coast (BC, OR, CA, ID) (13 dots)</b>
Regional council - Develop regional partnerships (3 dots)
Facilitate collaboration (2 dots)

<b>Table 1 - List of brainstorm: Categories, Ideas and dot exercise</b>
<b>Financing and Markets</b>
Create a virtual marketplace (4 dots)
Local jobs (1 dot)
Market growth development (1 dot)
Regional end market development (4 dots)
Public and private financing (5 dots)
Create value for industrial feedstocks (3 dots)
Research on financing mechanisms (1 dot)
Incentive aggregation
Economics of processing (6 dots)
Economic drivers for materials selection (1 dot)
Recycling economics (1 dot)
Investment management (issue of risk aversion) (5 dots)
Funding for private sector market testing and product development (13 dots)
Recycling not free (2 dots)
Subsidy funding (1 dot)
Develop targeted marketing (2 dots)
<b>Research and Development, Technology</b>
Link design with end of life (5 dots)
Innovation ecosystem
Create a recycling hub (4 dots)
Plastics processing technology (8 dots)
Processing technology, robotics, optical sorting (6 dots)
Align problems with R&D (3 dots)
Research drug-bottle EPR (extended producer responsibility)
Help Ardagh be compliant (all facilities) (1 dot)
Pilot demonstration technologies (4 dots)
Willingness to pay for triple bottom line
Existing accelerators incubators (1 dot)
R&D incubation accelerating (2 dots)
Startup accelerator program (like Arizona)
Eco industrial parks areas (8 dots)
Explore new technologies (1 dot)
Chemical recycling (7 dots)
Waste prevention business assistance (refillable, reusable) (5 dots)
Complete lifecycle analysis of products and processes (5 dots)
Toxics R&D (4 dots)
Phenomenology study (4 dots)
Recycle vs. new
<b>Policy Options</b>
Policy options
Producer responsibility packaging/EPR (15 dots)

<b>Table 1 - List of brainstorm: Categories, Ideas and dot exercise</b>
Deposit program - Container and deposits (4 dots)
Mandatory collections (1 dot)
Common material list (3 dots); Recycling (separate?) glass, metals, plastics 1+2, cardboard, paper (1 dot); Statewide unified program (3 dots); all 3 post-its (7 dots)
Develop state-approach policy
Standardize packaging materials (1 dot)
Durable reuse deposits (1 dot)
Re-usables (5 dots)
Recycled content/Recycle content targets (CA) (3 dots)
Less bans, more recycling (2 dots)
Phase out landfilling of untreated waste (3 dots)
Stop material elimination from programs

## Table 2 - Break-Out Session Comments.

<b>Table 2 –Break-Out session comments</b>
<b>FINANCING AND MARKETS</b>
Discrete tasks to start
Functional and accurate list of what is available to locate or grow in this state – short-term
Understanding what additional resources are needed
What is needed to attract the people who finance
Existing infrastructure and how to best invest in this, strengthen infrastructure
Long term direction or plan to help direct capital
Understanding job creation opportunity
Money we have: how to best allocate, where to best allocate
Existing external structure that could be applicable
Existing external finance structure and how they may apply
Policy and legal structure of state needs review to understand where there are roadblocks (structural)
Incentives
Expertise need to build internally
Clear priorities for implementation
Fact vs fiction
We need a plastics recovery facility
Who are the players, what are the incentives, how do we finance
What do we need, how to get it, what are blockages
<b>POLICY OPTIONS</b>
In statute authority
Need these policies to help to bigger Center work
EPR could include construction and demolition and RC
Markets, clean materials
Partners

<b>Table 2 –Break-Out session comments</b>
How to incentivize business to use recycled materials
Common material list: WSRA and WRRRA: too narrow
EPR can be broader, tool to get common list and consistency and help create markets (driver)
Norway system – 97% recycling rate
ID who is doing what on top options for both EPR and bottle deposit
Summarize work already being done on top options
Center to connect how these policies advance goal of Center
“So that” tool to meet center goals
Who – if ECY has staff, great or contract
Partners: King Co, ODEQ, ECY plastic study
Off all work being done, integrate and ID gaps for Center
Reusables: how integrated into bottle bill/EPR
Pilot – operational barriers, pilot to get past them
Obstacles – policies identify needed changes
Go bigger, beyond reusable bottles
Approach from single-use – Vancouver disposable cup share reporting incentives
Also gets at sustainable consumption
Design of EPR – how to include?
Part of “so that” reasons for EPR
ECY w/Commerce – create summary of policies
“So that” share with others to see if then start drafting policy
Recycled content: include in EPR, govt regulation to use, good leverage point for other, west coast or EMF
PCC/WRAP - can we use this model for Center purposes?
How can we make this a climate issue?
Create a menu of potential policies that will help achieve the mission
After key questions, why are we doing Center work, Measures of success, Desired outcomes. Need this before policies in one meeting
Partners include advisory board members and others with policy experience, Victor Bell, Michelle Carville, CA, The Recycling Partnership, economist
Do policy research concurrent with research & development
Need goals first and establish criteria
Then come up with full policy list
Include why have they not been implemented yet
Look at cost and effectiveness
Partners – look for regional, national, international, experts in technology, policy that understand our region
Policies to incentivize not just require
Needs to be open to integrated policy development – like plastics and food waste to prevent unintended consequences. Needs to be part of policy assessment
<b>HOW TO DO THE CENTER WORK</b>
Empower and facilitate everyone’s ability to make it work
Devine our why, outcomes, and measures of success – in year 1
Look at EPAs clearinghouse, borrow their tools
Identify barriers and a menu of solutions
Identify strategic coordination opportunities within the west coast

<b>Table 2 –Break-Out session comments</b>
Business, local governments, EPA, BC, industry associations, states, haulers, solid waste associations (ISWA), tribes, unions
Create and develop relationships with partners, and nontraditional partners
Find regional solutions with in WA
Assess what has already been done
Create a detailed map of the overarching process and individual processes and relationships, including infrastructure – do this year 1
Look at international best practices, national and regional – do this in year 1
Identify gaps
Energy supply is a limiting factor depending on geographic location
Water is another limiting factor
Need regional education and experience, local, national and international
Coordinate efforts
Work with manufacturing headquarters
Identify assets
Conduct a statewide waste characterization study, gather data, assess
Develop a clearinghouse – year 1
Public outreach and involvement
Prioritize impactful actions
Local haulers and MRFs
Academics
Recycling development in other states
Manufacturers and brands
Businesses – Assoc of WA Business, chambers – size, flavor, scale
What criteria to use when evaluating existing
Identify our goal
How to distribute the work
How to use the political angle (governor, legislature, elected officials) need political support
Work virtually
Ports
Shipping companies – amazon, google
Rural solutions, don't marginalize
Need incentives
<b>RESEARCH, DEVELOPMENT AND TECHNOLOGY</b>
Partners: Assoc of Plastics Recyclers, international, institutes, industrial, universities, large industries, financing sources
Look for eco-industrial space
Offer relief for regulations
Offer tax incentives
Offer grants
Center to be the hub to coordinate
Center facilitates R&D – brings partners together
Do a pilot within 1-2 year time frame
Do the research – get answers to questions about – research and compile data
Waste stream characterization

<b>Table 2 –Break-Out session comments</b>
Technology
Regional, international differences, national , OR, BC, WA
Proven versus non-proven technology
Identify gaps
Map the data
Identify performance indicators
Look at work underway in North Carolina, MI Env't Great Lakes & Energy, Circular matters (Betsy Dorn)
Example of chemical recycling
How does it blend in with the existing system
What are the impacts
Do the toxics research (toxics in products get into the recyclables)
Identify clear problem statements – do this first
Take a commodity (like plastics) – what are the challenges - who is doing what – how to resolve issues – is the end market desirable or needed – what are the environmental negatives, what is the cost/benefit.
Do R&D on waste prevention – look upstream, not just at the waste end
Answer: Why does WA do R&D (it's very expensive)
Take proven R&D and move it forward
Why does the Center invest in R&D?
What are we solving for WA
Focus on applied research
Look at existing R&D (international)
Ask industry, research institutions, waste management industry, manufacturers
Who invests and why
What is the Center's role – figure this out first
Create a road map for R&D
Do situational analysis
Identify partners (look at WSU, UW, PNNL)
Circular economy vs Performance economy
Are we a Me-Too state or an Innovation hub
Catch up to international best practices

### Table 3 - List of Attendees

<b>Table 3 – List of Attendees</b>	
<b>Attended in-person</b>	<b>Joined the webinar</b>
<b>BOARD Members</b>	Anna Boiko-Weyrauch, KUOW
Allen Langdon, Return-it	Arthur Laster
Corinne Drennan, Pacific NW National Laboratory	Brad Lovaas, Washington Refuse and Recycling Association
Derek Ruckman, Recology	Carolyn Bowie
Heather Trim, Zero Waste Washington	Dave Bader, Environmental Health Services
Jay Simmons, North Pacific Paper Company	Emily Coleman, King County
Karl Englund, Washington State University	Erik Makinson, Resource Synergy
Kyla Fisher, Ameripen	Hannah Scholes, Waste Management
Margo Gillaspay, Skagit County Public Works	



<b>Table 3 – List of Attendees</b>	
<b>Attended in-person</b>	<b>Joined the webinar</b>
Mindy Rostami, Waste Management Nina Goodrich, Sustainable Packaging Coalition Ruby Irving, Klickitat County Solid Waste Scott Morgan, The Evergreen College Sego Jackson, Seattle Public Utilities Tim Shestek, American Chemistry Council  <b>Interested Parties</b> Andy Smith, King County Bob Zak, Green Rockets Brian Davis, Newcycle Cindy Hartzler, Styro Recycle David Stitzhal, Full Circle Environmental Domenic Calabro, EPA Hanna Hemingson, DIG Recycle Jeremy Wilson, resident Lucy Pierce, Evergreen State College Marilyn Lauderdale, Styro Recycle Michelle Ross, resident Neil Beaver, Recology Philipp Schmidt-Pathmann, Zero Landfill Initiative Sue Sander, Zero Landfill Initiative Preston Horne-Brine, Fluvion Enterprises Preston Peck, City of Tacoma Rodney Wendt, Washington Economic Development Finance Authority (WEDFA) Ryan Metzger, Ridwell Wendy Weiker, Republic Services	Jeanne Walter, Walla Walla Jeff Epstein, Carton Recovery Jennifer Hayden, Whatcom County Kaila Anderson, Port Townsend Paper Company Kall Marshall Katey Potter, Stericycle Kristin Aldred Cheek, Product Stewardship Institute Laura Kelly Lauren Aguilar, Serlin Haley Lindsay Chapman, Spokane County Mark Ingman, San Juan County McKenna Morrigan, Cascadia Consulting Mike Nahirny, Volusia Mike Waggoner, Corumat Pete Moe, hHe Exchange, Orcas Island Rachel Novak, The Sailing Siren Raffi Rodrigo Randy Clark, Lynden Door Rick Vahl, Waste Connections Rod Whittaker, Washington Refuse and Recycling Association Sarah Bergquist, WSU Sharon Conroy, Green Solutions Stephanie Schwenger, Bellevue Steve Skinner, Lewis County Suzanne Tresko, Spokane County Solid Waste Tomas Lucas Troy Lautenbach, Lautenbach Recycling
<b>State agency attendance</b>	
<b>Present in-person</b>	<b>Attended webinar</b>
Laurie Davies, Ecology Beth Gill, Ecology Janine Bogar, Ecology Kara Steward, Ecology Katherine Walton, Ecology Stacey Callaway, Ecology Brian Young, Commerce Peter Moulton, Commerce Radi Simeonova, Commerce	Alli Kingfisher, Ecology Christine Haun, Ecology Diana Wadley, Ecology Heather Church, Ecology Shannon Jones, Ecology Steven Gimpel, Ecology Ann LaRue, UTC Jason Lewis, UTC