



STRATEGIC ACTION PLAN: TOXICS REDUCTION + GREEN CHEMISTRY

A Report for the Oregon Chemicals Policy Roundtable

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OREGON CHEMICALS POLICY ROUNDTABLE MISSION STATEMENT

Created by the Roundtable members in 2012 and revised in February 2013

OUR MISSION

The Oregon Chemicals Policy Roundtable works collaboratively, in coalition, and in service to Oregonians to develop and disseminate information and advance innovative policies based on sound science that create sustainable chemicals and sustainable materials management in Oregon and beyond.

OUR VALUES

The Oregon Chemicals Policy Roundtable values fairness, communication, collaboration, creativity, efficiency, effectiveness and the greater good.

HOW WE SUCCEED

The Oregon Chemicals Policy Roundtable was established in 2007 as a way to facilitate collaboration on chemicals policy between public sector agencies and nonprofit advocates in Oregon.

Existing state and federal chemicals policies are out-dated and do not protect Oregonians and the natural resources we depend on. They also fail to foster innovation and entrepreneurship in the design, manufacture, and use of safer alternatives to hazardous chemicals. Therefore, the Roundtable works collaboratively using a life cycle framework to develop, advocate for, and implement more sustainable chemicals management policies.

OUR GOALS

- Chemicals, materials, and products are safe for people and ecosystems throughout their life cycle.
- Individuals, communities, and businesses in Oregon have ample information about chemical hazards, exposure risks, and health impacts to make informed buying and use decisions about products in the marketplace.
- Chemicals management policies at the local, state, and federal level foster innovation and entrepreneurship while protecting public health and the environment.

CONTENTS

This report is intended to offer guidance to the Oregon Chemicals Policy Roundtable for the group's five-year strategic action plan to promote toxics reduction and green chemistry.

'Toxics reduction' refers to diminishing and/or eliminating the use of and exposure to chemicals of concern.

'Green Chemistry' refers to "the design of chemical products and processes that reduce or eliminate the use or generation of hazardous substances. Green chemistry approaches can be applied across the lifecycle of a chemical product, including design, manufacture, use and end of life." (*Allen and Dinno*) The Roundtable is also interested in promoting non-chemical alternatives, such as mechanical and biological substitutions.

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EXECUTIVE SUMMARY

The Oregon Chemicals Policy Roundtable formed in 2007 to work together on projects focused on toxics reduction and green chemistry. It is an informal, collaborative work group seeking to identify, develop, evaluate, and disseminate key chemicals policy research, as well as formulating recommendations for legislative and programmatic action for multiple audiences. The Roundtable operates from the desire to help Oregon further its position as a leader in state level toxics reduction and green chemistry policies, taking action and serving as a model for the member organizations and the greater community to follow.

With the recognition that Oregon is uniquely positioned to lead in the development of safer alternatives to toxic chemicals, the Roundtable commissioned the development of a five-year strategic action plan to map out the actions necessary to achieve significant change in the coming years.

The main guidance document for developing this Strategic Action Plan was the *Leadership in Sustainable Chemicals Policy: Opportunities for Oregon*, which illustrates how Oregon's existing chemicals policy and management frameworks are currently defined. The report also assesses the climate for advancing economically viable and ecologically sound chemicals policy in Oregon.

The Roundtable applied The Natural Step's backcasting method to generate three overarching goals for this Strategic Action Plan:

- ***Protect all Oregonians, with an emphasis on vulnerable populations, from priority chemicals of concern.***
- ***Increase supply and demand of technologically and economically feasible alternatives.***
- ***Provide scientific information to elected officials, policy makers, and others in a way that is usable.***

Using these goals as focal points, the Roundtable devised five strategies that best aligned with current member organizations' priorities and available resources, and the group's desired impact.

STRATEGY A: Advance policies that protect all Oregonians, with an emphasis on vulnerable populations, from priority chemicals.

Objective: To develop a clear understanding of the gaps in current chemicals policies and establish a

methodology to improve and/or better implement policies that promote chemicals policy reform.

Opportunity: develop unified language and consensus position statements regarding targeted legislation.

STRATEGY B: Enlist Oregon's local, state, and national leaders from government, business, and academia to make the economic case for green chemistry and chemicals policy.

Objective: To build an economic case for green chemistry and chemicals policy and cultivate respected voices throughout Oregon to advocate for chemicals policy improvements and investments.

Opportunity: Engage a wide diversity of Oregon leaders in support for developing the green chemistry industry in Oregon.

STRATEGY C: Generate outreach materials that link priority chemicals of concern to health impacts in order to transform trusted spokespeople in the health care community into advocates for chemicals policy reform.

Objective: Cultivate voices in the healthcare community as advocates for chemicals policy reform by linking priority chemicals with health impacts.

Opportunity: Offer a new and credible voice in support of chemicals policy reform.

STRATEGY D: Build a case for Pesticide Use Reporting Systems (PURS) through voluntary agency implementation of tracking and reporting protocols.

Objective: Pilot voluntary agency implementation of pesticide use tracking and reporting protocols. Short term opportunity: full transparency of pesticide products used on public lands.

Opportunity: For the long-term, build a case for the state Pesticide Use Reporting System (PURS).

STRATEGY E: Create, implement, and promote a single multi-organizational green purchasing plan.

Objective: Harness existing purchasing resources and generate agreements among participating Roundtable and additional agencies to use cooperative purchasing agreements or agreed-upon criteria for decided-upon product categories.

Opportunity: Oregon agencies have a resource to look to that will ensure 'green purchasing' efforts are aligned with those of other agencies.

Collectively, these five strategies, and their associated action plans, embody the Roundtable's stated goals. This Strategic Action Plan provides a tangible roadmap for the Roundtable to expand their influence and help create significant change in Oregon's chemicals policy and green chemistry leadership over the next five years, and beyond.

PART ONE: FOUNDATIONS

INTRODUCTION

The Oregon Chemicals Policy Roundtable formed in 2007 to work together on projects focused on toxics reduction and green chemistry. It is an informal, collaborative work group seeking to identify, develop, evaluate, and disseminate valuable chemicals research to multiple audiences. The group also answers policy questions, as well as develops innovative proposals for executive and legislative actions that support related activities throughout the State. Current partners include, but are not limited to: Beyond Toxics, City of Gresham, City of Portland, Metro, Multnomah County: Environmental Health and Sustainability departments, Northwest Center for Alternatives to Pesticides (NCAP), Oregon Association of Clean Water Agencies (ORACWA), Oregon Department of Environmental Quality (DEQ), Oregon Environmental Council (OEC), Oregon Health Authority (OHA), and Physicians for Social Responsibility (PSR).

Historically, the Roundtable has been a forum for representatives of government agencies and nonprofit organizations to connect with others that share similar missions regarding toxics in the environment and the hazards these present to humans and other organisms. Roundtable members shared camaraderie and resources, and learned from each other's efforts.

The Roundtable overwhelmingly wants the group to embody action, with a spotlight on policy. The group sees opportunities to support each other's protocols, and to join forces as a stronger voice for larger initiatives. Participation by member organizations in the Roundtable allows them to leverage regional cooperative efforts.

The Roundtable operates from the desire to help Oregon further its position as a state leader. Through collaborative work during the past six years, the Roundtable has identified some of the key barriers to more sustainable chemicals management in Oregon. With the recognition that Oregon is uniquely positioned to lead in the development of safer alternatives to toxic chemicals, the Roundtable commissioned the development of a five-year strategic action plan to map out the actions necessary to achieve significant change in the coming years.

Policy Based Actions

The Roundtable emphasized that partnering 'policy' with 'action' was the theme of greatest importance

for any undertaking. While the initial reaction to the concept of 'working on policy' typically leads to visions of state or federal legislative policy campaigns, the group identified a number of other vehicles that may also be pertinent for the group to explore.

Examples of policy types:

- Local, State, Federal Legislation
- Executive Orders
- Internal Policy at participating agency that impacts internal operations
 - purchasing policy
 - Executive Order at the agency level
- Internal policy that impacts external operations
 - contracting preferences
 - permits/fees
- Business and Corporate Policies and best practices (e.g., OEC's Eco Healthy Child Care®)
- Agency rule making and agency guiding policy documents

Examples of policy based actions:

- Defending against policy rollbacks or lack of full implementation
- Supporting funding for policy and program implementation in agency budgets
- Improving or updating existing policy through legislative action or updates to rule making or policy guidance documents.
- Improving the coordination of policies between state and local agencies.

In summary, the Roundtable members decided that efforts should track, create, and support policies that improve chemicals management at the local, state, and federal levels.

PROCESS

Between April and July 2013, the Roundtable dedicated five meetings to a discovery process for the Strategic Action Plan. Together, the group developed three overarching goals to define its purpose:

Protect the most vulnerable populations in Oregon from priority chemicals of concern.

Increase supply and demand of technologically and economically feasible alternatives.

Provide scientific information to elected officials, policy makers, and others in a way that is usable.

Using The Natural Step

The Natural Step's understanding of a sustainable society is defined by the four basic sustainability principles, or *system conditions*, that address the fundamentals of environmental limits and human interactions with them. Together, these system conditions describe success –the vision– of a sustainable future. Using the system conditions as an unvarying reference, it is possible to understand current realities and begin to identify actions that lead towards achieving ultimate goals.

THE FOUR SYSTEM CONDITIONS

In a sustainable society, nature is not subject to systematically increasing:

- 1 ...concentrations of substances extracted from the earth's crust,
- 2 ...concentrations of substances produced by society,
- 3 ...degradation by physical means.
- 4 And, in that society, people are not subject to conditions that systemically undermine their capacity to meet their needs.

Backcasting is the concept of beginning with the endgame in mind. The Natural Step's *ABCD Method* is a practical process that applies backcasting to move efficiently, effectively, and economically from theory to action. The ABCD Method served as the underlying organizational tool for the Roundtable to map the Strategic Action Plan:

- A AWARENESS AND DEFINING SUCCESS**
Establish a shared understanding of global sustainability challenges and how they are relevant to your success.
- B BASELINE CURRENT STATE**
Analyze at a high level the social and environmental impacts based on an inventory of assets that you can build from. Understand stakeholder relationships with respect to how they can help and hinder your initiative.
- C CREATIVE SOLUTIONS**
Devise long-term strategic goals to guide your organization toward sustainability.
- D DECIDE ON PRIORITIES**
Brainstorm potential solutions to bring you closer to your vision; Prioritize first steps and quick-wins; and Develop a strategic plan to capture short-, medium-, and long-term measures toward success.

Adapted from: www.naturalstep.org

The strategic planning process also built on the previous work of the Roundtable and partner organizations by drawing from *Leadership in Sustainable Chemicals Policy: Opportunities for Oregon*. The report included four primary recommendations for action to improve chemicals policies in Oregon:

- R1. Strengthen coordination and development of shared goals among agencies.
- R2. Prioritize the most hazardous chemicals, the most vulnerable people, and the most sensitive and most toxic environments.
- R3. Provide incentives for identifying and developing safer alternatives to the most highly toxic chemicals.
- R4. Promote education and workforce development to lay the foundation for long-term innovation. Expand interdisciplinary approaches to education, internships and workforce development.

In the report, the four recommendations were further itemized into twenty specific sub-actions. The Roundtable members ranked each sub-action as part of the strategic action planning process to reflect how closely it aligned with their organizations' priorities (See Appendix C). The results of the sub-action rankings were then used as part of a brainstorming session to generate objectives to focus activities for the next five years. The Natural Step's framework guided these discussions.

GENERAL RECOMMENDATIONS

Given the feedback from Roundtable members, as well as an assessment of resources and organizational priorities, the following are general recommendations for the group to implement:

- Tally funded initiatives and activities of member agencies and organizations. Clearly outline where the Roundtable work supports those initiatives. Members can use this as outreach to garner support for involvement and contributions from participating agencies.
- Develop a Roundtable budget. Include tracking staff time contributed by member organizations as in-kind donations. Work with members to identify possible sources of grant funding. Convene grants sub-committee tasked with applying for group-approved grants.
- Set clear expectations by providing clarity on roles and responsibilities for each participant.

In addition to the existing Memorandum of Understanding between Roundtable member organizations, get written statements from each entity to document contributions. Use these commitments to bolster additional support from existing and new member organizations.

- Nominate individuals to join the Roundtable who have the authority to make decisions and allocate at least some resources on behalf of their organization.
- Consider expanding Roundtable membership beyond public agencies and nonprofit organizations to include entities such as business and labor.
- Create consensus statements with talking points for each project or process that the Roundtable decides to undertake. These consensus statements should be distributed among the staff of all the member organizations.
- Initiate formal, ongoing internship opportunities to assist with technical tasks and create a mentorship model for cultivating future leaders in the community. Roundtable members are passionate, and therefore have many commitments both in their formal capacity and extracurricular activities. Graduate students and young professionals are eager to get involved and are looking for ways to contribute. Several Roundtable member organizations have internship programs in place that may offer frameworks for organizing volunteers.
- Create detailed work plans with measurable objectives as milestones. When starting to map the time frame for a new strategy, add a buffer (up to 25%) to the initial estimate. Re-evaluate these work plans regularly, such as every six months.
- Establish online systems to encourage participation from those outside the Portland Metro area. Take meeting notes in a program that is visible to remote participants in real time (e.g., Google Drive documents). Use video conferencing with a good microphone to optimize sound quality. Assign one person to be responsible for setup, and alternate the roles of moderator and note taker. Allocate a set time during each meeting for members to report on progress and keep the entire group involved with activities.

Reference Documents

While the main guidance document for developing the Strategic Action Plan was the *Leadership in Sustainable Chemicals Policy: Opportunities for Oregon*, three additional reference documents provided insight. The complete documents are accessible via the adjacent URL links.

Leadership in Sustainable Chemicals Policy: Opportunities for Oregon

Authorship: Allen, Jennifer H. and Dinno, Alexis
Portland State University

Year Published: June 2011

URL This report illustrates how Oregon's current chemical policy and management frameworks are defined. It also assesses the climate for advancing economically viable and environmentally sound chemicals policy in Oregon.

Toxics Reduction Strategy: Descriptions of Actions

Authorship: Masterson, Kevin
Oregon Department of Environmental Quality (DEQ)

Year Published: November 2012

URL A series of agency-wide strategies to reduce toxic substances in Oregon, this document prioritizes recommended potential toxics reduction actions that were developed in conjunction with public workshops and stakeholder meetings.

Advancing Green Chemistry in Oregon

Authorship: Oregon Green Chemistry Advisory Group

Year Published: July 2010

URL Oregon Environmental Council convened the Oregon Green Chemistry Advisory Group, bringing together leaders from academia, industry and agencies to examine green chemistry opportunities in Oregon. This report includes a series of recommendations to help advance green chemistry in Oregon for the State to maintain its place as a leader in fostering more sustainable businesses.

Executive Order No. 12-05: Fostering Environmentally-Friendly Purchasing and Product Design

Authorship: Office of the Governor, State of Oregon

Year Published: April 2012

URL Developed through a multi-year collaborative process, this document includes provisions for building awareness about the benefits of green chemistry and spurring innovation to reduce harmful toxics among companies and universities throughout the State.

PART TWO: STRATEGIES

This section outlines the five areas of action the Roundtable determined were best aligned with the group’s desired impact, available resources, and current member organizations’ priorities. Collectively, these five strategies move the Roundtable toward significant advancements in chemicals policy and green chemistry innovation in Oregon, and contribute to achieving the group’s overarching goals. (See Appendix D for a record of other actions identified during the discovery process.)

STRATEGY A: Advance policies which prioritize chemicals of concern impacting the most vulnerable populations.

Objectives

- Clear understanding of the gaps in current chemicals policies
- Established methodology to improve and/or better implement policies that promote chemicals policy reform
- Unified language for Roundtable member organizations with respect to policy themes
- Consensus on legislation to promote over the next five years

Measures of Success

- Completed reference index
- Acknowledgement of the limitations of current state of legislation
- Stronger implementation of existing policies at the local, regional and state level
- More deliberate support of new policies

Lead Organizations	DEQ, Metro
Support Organizations	All Roundtable members Portland State University’s Institute for Sustainable Solutions, Other Related University Departments
References	<p>URL Chemicals Policy and Science Initiative’s State Chemicals Policy Database hosted by the Interstate Chemicals Clearinghouse (IC2)</p> <p>URL <i>Toxics Policy Reform For Washington State</i> by the Washington Toxics Reduction Strategies Workgroup</p> <p>URL The Green Product Design Network</p>
Useful Resources	<ul style="list-style-type: none"> • External volunteers: interns or other member organization staff time

- Grant funding

Time Frame	0.5 YEARS: Indexing 2-5 YEARS: Implementation
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The initial part of this process – collecting data – is both critical and easily achievable; the necessary information is publicly available. Yet, there is no compilation of basic and comparable content that is curated to benefit the state of Oregon at all levels for policymaking. Once this catalog is in-hand, the Roundtable can use it to highlight successful efforts and spotlight precedence. The group can then also advocate for the improvement, harmonization, rationalization, implementation, or even the retirement of particular policies.

Implementation Guidelines

ACTION A1: Recruit volunteers.

As noted in the General Recommendations (See Page 6), it is proposed that the Roundtable explore the potential for volunteers other than individual members to assume some of the responsibilities outlined in the Strategic Action Plan. Ideally, the internship placements would become an ongoing opportunity with an established process. Graduate students and/or young professionals would be ideal candidates to work under the advisement of a Roundtable member to assist with the Actions noted below.

ACTION A2: Index existing policies.

Task A2a. Compile a list of failed, passed, and pending policies that address chemicals of concern. This can be policy at any level, both within the State of Oregon and beyond. Policy considerations should not be limited to legislation and regulations. For example, policies may exist that foster innovation and incentives, or involve strategic partnerships with industry on a voluntary basis. In addition to the Roundtable’s own historic documents, another starting point to cull information is the State Chemicals Policy Database, hosted by the IC2. At a minimum, include the policy name, regulating body, status, date of adoption and sunset date (if applicable), other adopters, category of influence and key themes, requirements (consider carrot vs. stick), and URL location of complete text.

Task A2b. Explain how the policy can benefit vulnerable populations in particular, and indicate if specific populations are already targeted.

Task A2c. Evaluate the effectiveness of the legislation: What are the strengths? Is it being implemented? Is it being enforced? Is it being replicated in other states or by other businesses?

For the purposes of this Strategic Action Plan, a 'vulnerable population' is any group at increased risk for adverse health-related outcomes. Contributors to risk can be age, gender, disability, genetics, access to resources, access to decision-making, disproportionate burden of environmental hazards, among other factors. For example, children are considered a vulnerable population because they have unique patterns of environmental exposure and developmentally determined susceptibilities that increase their risk of disease following exposure to a variety of toxic compounds.

Task A2d. Note the anticipated ease for updating the content of the policy, and provide basic guidelines for making the identified changes.

Task A2e. Determine the gaps (e.g., data, safety, technology, and funding). Determine the role of the Roundtable for addressing any/all of these gaps.

ACTION A3. Translate the data.

Task A3a. Review the content and gaps identified either in a single policy or across multiple platforms.

Task A3b. Create a consensus 'policy statement' for each policy theme that explains the group's intentions moving forward.

Task A3c. Assemble the data in a way that it can benefit society. Policy advancement is a broader call to action, and there are numerous ways to proceed. Interns may also be effective here, helping to map out the general work plans to address the issues. For example, the group could circulate a guiding document or briefings that pinpoint current limitations, the potential for progress, and offer suggestions tied to the Roundtable work plans to allow others to contribute to the cause. Toxics Policy Reform For Washington State, published earlier this year by the Washington Toxics Reduction Strategies Workgroup for the Governor's Office, may serve as an initial template in the way that it pairs problem statements with proposed solutions.

STRATEGY B: Enlist Oregon's local, state, and national leaders from government, business, and academia to make the economic case for green chemistry.

Objectives

- Identify, engage and cultivate respected voices throughout Oregon to advocate for chemicals policy improvements and investments
- Develop the economic case for green chemistry and chemicals policy that will draw business, policy and academic leaders to support needed changes and investments

Measures of Success

- Completed economic focused foundation piece
- Participation of Business Oregon and additional business groups as members of or liaisons to the Roundtable
- Diversity of Oregon leaders providing influence and support for developing an Oregon green chemistry industry
- Business and community leaders as active spokespeople with whom the Roundtable are in regular contact
- Adoption of innovative chemicals policies that position Oregon at the forefront of the green chemistry revolution

Lead Organizations	All: developing list of candidates and foundation document Engagement: • OEC for business; • Recruit/work with Business Oregon for government; • Recruit Oregon BEST for academics
Support Organizations	All Roundtable Members BizNGO; Green Chemistry + Commerce Council (GC3); Oregon BEST; Oregon Business Alliance; Sustainable Business Oregon; Voice for Oregon Sustainability + Innovation (VOIS), Oregon Sustainability Board, Business Oregon
References	URL American Sustainable Business Council URL BizNGO Working Group URL Green Chemistry & Commerce Council (GC3) URL Oregon BEST Sustainable Built Environment Research Consortium
Useful Resources	• Design and printing costs for economic foundation piece • Funding to cover GC3 participation and/or travel to BizNGO annual meetings
Time Frame	0.5 YEAR: Relationship mapping 1-2 YEARS: Candidate engagement EVERY 0.5 YEARS AFTER YEAR 1: Reassessment

As concerns about the negative impacts resulting from ineffective chemicals policies are more widely known and addressed, the next challenge will be to overcome the misinformed perspective that chemicals policy reform and green chemistry are bad for business.

Both Strategy B and Strategy C are about inspiring credible spokespeople to be the voice for chemicals policy change. While Strategy B makes the economic case for green chemistry to engage policy makers, business leaders, and academics, Strategy C develops support from health professionals for policy changes. Strategy A Actions will yield a springboard for the Roundtable to ensure a common message for the following outreach and engagement tasks.

Implementation Guidelines

Action B1: Determine relationships and influence.

It is important to identify people that will be the most influential for a particular market, and sympathetic to the cause. The Roundtable members should generate a list of key individuals to engage. This exercise could be done collectively, independently, or both, and should build on the Stakeholder Matrix (See Appendix A).

Task B1a: Attend and invite candidates to chemicals policy and green chemistry events. Not only should the Roundtable plan to have a member in attendance at each happening, but also use invitations to these events as a way to further nourish prioritized relationships.

- Connect with higher education and the business industry through the Business Oregon-led team working on the Executive Order to provide education and incentives for Green Chemistry.

Consider attending these events, at a minimum:

- **URL** Oregon BEST hosts an annual symposium, Oregon BEST FEST, that brings together business, academics, industry, and non-profits. This could be an important venue for developing relationships in the defined target categories.
- **URL** Annual GC3 conference (typically held in late April or May)
- **URL** BizNGO working group annual meeting (typically held in December)

Task B1b: Characterize the credentials of successful candidates and appropriate demographics for outreach. Include individuals from the local, state, and national level in government, industry, and academia.

Task B1c: Using the guiding questions below, develop a list of candidates from each of the key areas identified in Task B1b. For this task, seek nominations from cohorts within the Roundtable organizations and others in the community.

- Why should they be involved?
- What type of influence do they have?

- What is their motivation?
- What is their potential level of interest?
- How does their interest align with the policy gaps and priorities identified in Strategy A?
- What is the best way for the Roundtable to engage them (personal meetings, seminars, etc)?
- Who in the Roundtable has relationships with them (or their staff)?

Action B2: Pair candidates with Roundtable members

Task B2a: Establish a clear and common set of guidelines to prioritize candidates, and assign each candidate to a Roundtable member counterpart.

Task B2b: Note that fostering relationships with Business Oregon and Oregon BEST will add new perspectives for the group. These organizations may also recruit candidates based on their existing connections.

Task B2c: Develop materials and talking points for engagement and outreach.

Action B3: Compose an economic-focused foundation piece.

Task B3a: Write an economic case for green chemistry innovation as a key motivator for non-traditional allies. Draw from existing resources to create the document, such as:

- American Sustainable Business Council (ASBC)
- Green Chemistry & Commerce Council (GC3)
- The BizNGO Working Group

Task B3b: Modify the economic focused foundation piece so that it is relatable to each audience (policy makers, businesses, and academics) while retaining the same key messages.

Task B3c: Use the foundation documents when media opportunities arise, such as event promotion or for timely Op-Eds in relevant media outlets (e.g., Sustainable Business Oregon).

Action B4: Engage candidates.

Task B4a: Invite Business Oregon and Oregon BEST to participate in the Roundtable. It is recommended that Business Oregon be approached to help build government relationships, and that Oregon BEST serve as the liaison for academia. The Roundtable should develop a simple promotional package before approaching either organization, which includes the economic focused foundation piece generated above, and also highlights the benefits of participation in the Roundtable. Clearly articulate why each organization should be involved and how it would help advance their mission.

Task B4b: Establish a time frame for outreach. Also determine a reporting and tracking mechanism to address common roadblocks and to share successes throughout the process.

Task B4c: Contact candidates. Outreach to each individual should be spearheaded by one Roundtable member, with assistance from additional members as needed.

Task B4d: Re-evaluate the candidates and messaging at regular intervals to track progress. Update the target list with each election cycle or major policy achievement.

STRATEGY C: Generate outreach materials that link priority chemicals of concern to health impacts in order to transform trusted spokespeople in the health care community into advocates for chemicals policy reform.

Objectives

- Educate and recruit health professionals to make the health case for necessary chemicals policy improvements

Measures of Success

- Creation of Health Professionals Advisory Group
- Development of culturally competent and science-based outreach materials
- Collection and distribution of support statements from health professionals
- Health professionals throughout Oregon become advocates for chemicals policies that safeguard human health
- Adoption of innovative chemicals policies that prioritize protection for the most vulnerable Oregonians

Lead Organizations	OHA, Multnomah County
Support Organizations	OEC, PSR Other County Public Health Departments, Northwest Pediatric Environmental Health Specialty Unit (PEHSU) at the University of Washington
References	<p>URL In Harm’s Way Training Programs for Health Professionals</p> <p>URL Collaborative on Health and the Environment: Practice Prevention Columns and Fact Sheets</p> <p>URL Collaborative on Health and the Environment: Diseases and Disorders</p> <p>URL Health Care Without Harm</p>

Useful Resources	<ul style="list-style-type: none"> • Design team time • Printing costs
Time Frame	<p>1 YEAR: Organize and convene Health Professional Advisory Group</p> <p>2 YEARS: Generate materials</p> <p>ONGOING: Cultivate trusted spokespeople</p>

With the mounting scientific evidence of the health impacts from exposures to chemicals of concern, it is increasingly important to continue to publicize the situation at hand. The healthcare community is a trusted voice and can be a powerful ally in promoting improved policies for chemicals management. In the absence of policy change, health care professionals can provide credible information to the public that may reduce exposures to harmful chemicals.

Implementation Guidelines

Action C1: Convene a Health Professionals Advisory Group

Task C1a: Define 'health care community' and the types of professionals that should be represented in the Advisory Group. Similar to the task for Strategy B, the Roundtable should ask:

- Who is the intended audience? Look beyond traditional health care workers (physicians and nurses) and also consider community health workers, alternative medicine practitioners, public health professionals or other types of health care community members.
- Who would be most receptive to the message?
- How effective can the specific health professional be in helping to achieve the goals?

The roster of potential Advisory Group members does not need to include well-known individuals, but instead should be professionals that have a passion for environmental health issues. Students -including medical, nursing and public health graduate students- may be a valued resource for participation in the Advisory Group. In addition, a particular emphasis should be put on reaching out to health care professionals who provide care for vulnerable populations and for remote communities.

Task C1b: Establish a clear and common set of guidelines to prioritize candidates, and assign each candidate to a Roundtable member counterpart.

Task C1c: Develop initial agendas for the Health Professionals Advisory Group, focusing first on determining the types of outreach materials that are necessary. While the work of drafting the materials should fall to the Roundtable (or a subset of

members), the Advisory Group should be asked to help determine:

- What are the informational needs relating to chemicals exposures and health?
- What is the current state of knowledge within their professional communities?
- Will this information be used to educate colleagues or patients - or both?
- What is the best form to deliver the information (fact sheets, 'wallet guides', webinars, seminars, checklists)?
- How can this information be provided in a manner that considers vulnerable populations and is culturally competent?

Task C1d: Determine the most effective way to keep the Health Advisory Group engaged. Although the Advisory Group does not need to be a long standing entity, the Roundtable may want in to remain intact for future collaboration opportunities and ongoing feedback from the health care community. The Roundtable should create this Group, but coordinating members do not need to maintain it indefinitely. The purpose of the Advisory Group should be defined early on with specific time frames for everyone's commitments. Is it a monthly meeting? Is this an ongoing forum with an assigned moderator or a short term series of gatherings? The purpose may evolve over time, but the Roundtable should define the intent at the onset and re-evaluate if and when needed.

Task C1e: Rely on Advisory Group expertise to inform additional resources. While the primary focus of the Advisory Group is to bring expertise to the development of outreach materials, it may also offer:

- "case study" examples that highlight the personal toll that exposures to chemicals of concern can have on people.
- additional professional connections including recommendations for specific professional organizations that could become involved with the Roundtable (Oregon Medical Association, Oregon Nurses Association, Oregon Public Health Association, Northwest Pediatric Environmental Health Specialty Unit (PEHSU) at the University of Washington)
- leaders in their professional communities who could deliver the health message to the general public and policy makers

Action C2: Generate Outreach Materials

Task C2a: Develop outreach materials based on input from Health Professional Advisory Group. In addition to the expertise available in the Advisory

Group, there are other existing resources that could help inform the development of the materials:

- In Harm's Way Training Programs for Health Professionals
- Collaborative on Health and the Environment: Practice Prevention Columns and Fact Sheets, Diseases and Disorders
- Health Care Without Harm
- Northwest Pediatric Environmental Health Specialty Unit (PEHSU) at the University of Washington

Task C2b: Devise a distribution method for the outreach materials.

Task C2c: Create an evaluation plan that includes elements for measuring success, such as: number of people reached; demographics of outreach material distribution; and feedback on value of the information. Work with the Advisory Group to determine additional appropriate measures for evaluation.

The draft development of outreach materials, as well as the design of the distribution method and evaluation plan are all excellent projects for graduate student interns.

Action C3: Teach health professionals to champion the message.

Task C3a: As indicated above, the Advisory Group should help name leaders in the health care community whose opinions are broadly valued and who will be willing to become involved with this effort. Engaging recognized leaders may be beneficial when reaching out to policy makers, but it worth noting that selected individuals do not necessarily need to be the most visible within their community to be effective spokespeople. Their training and expertise alone are often sufficient credentials for decision makers and the public.

Task C3b: Use existing venues to educate and recruit motivated health professionals, such as the Annual NW Environmental Health Conference. The Roundtable should consider setting up a space at the conference for health professionals to be trained as advocates, as well as to exhibit case studies and distribute resources.

Task C3c: Garner supportive position statements from health professional groups. A number of health professional groups in Oregon have already issued position statements in support of TSCA reform (e.g., Oregon Medical Association, Oregon Nurses Association, and Oregon Public Health Association). Though the position statements were signed several

years ago, these could be easily updated and enhanced to produce an improved support platform for these respected associations. The Roundtable should also develop position statement templates for other organizations to adopt and 'sign-on' letters for them to use to support state and local policies.

STRATEGY D: Build a case for Pesticide Use Reporting Systems (PURS) through voluntary agency implementation of tracking and reporting protocols.

Objectives

- Demonstrate the benefits and feasibility of monitoring, tracking and reporting pesticide use
- Promote transparency of and access to information about pesticide use on public property

Measures of Success

- Public agencies consistently track and record pesticide use, and are able to report on trends and specific patterns per the biennial reporting requirements in HB 3364, Integrated Pest Management (IPM) for State Agencies
- The public is able to request a report of participating agencies detailing pesticide use on any public property managed by that agency

Lead Organizations	NCAP, Beyond Toxics, Multnomah County, Metro, City of Portland
Support Organizations	All Roundtable government agencies OSU, Integrated Plant Protection Center, Eden Pest Control
References	URL Oregon PURS legislation URL HB 3364, IPM for State Agencies URL SB 637, IPM for Schools
Useful Resources	URL Western Regional IPM Grant URL EPA School IPM Grants
Time Frame	2 YEARS: Pilot

Tracking, evaluating, and reporting pesticide use patterns are key components of responsible pest management. Public agencies have a responsibility to track pesticide use on public property for purposes of transparency and as a means of answering public inquiries about chemicals use in public spaces. An opportunity exists for the Roundtable to bolster the impact of state-level Integrated Pest Management policies for schools and state operations by bringing together pest management contractors serving government agencies, schools pest management staff, and in-

A Brief History of PURS

Pesticide Use Reporting Systems (PURS) is a means of tracking and recording pesticide applications, as well as monitor quantities and types of products used. Oregon PURS legislation was first passed in 1999 but has not been funded since 2008. PURS was amended in 1999 to clarify that no pesticide user is required to report pesticide use information into PURS when PURS is not available. In addition, the 2009 amendment also changed the reporting component to allow for information to be publicly available at the watershed level as opposed to the original (and less specific) water basin level. The online component was partially implemented in 2002 but did not collect a complete year of reports due to funding issues. Calendar years 2007 and 2008 were the only full years of reporting. Due to state budget constraints, PURS is not currently available, and pesticide users cannot file reports of pesticide use into PURS. Reports previously filed into PURS are not available publicly or to the pesticide users who filed those reports.

house facilities staff to establish and align pesticide use tracking and reporting protocols.

This Strategy is complex because of the multitude of parties involved, and keeping it as simple as possible will make it feasible. The result will be a dual benefit of supporting existing legislation while also building a foundation on which to base future discussions towards the re-implementation of statewide PURS.

Implementation Guidelines

Action D1: Coordinate with existing Integrated Pest Management efforts in Oregon to align protocol and mechanisms for tracking and reporting pesticide use.

Under Oregon HB 3364, IPM for State Agencies, Oregon State University (OSU) Integrated Plant Protection Center (IPPC) is tasked with convening an IPM Interagency Coordinating Council, as well as organizing pesticide use tracking and reporting. Any efforts to coordinate IPM personnel or efforts should include the IPPC. For optimal transparency, agencies should consider requiring reporting individual applications with address, target pest, product, and quantity used.

Task D1a: Partner with OSU IPPC staff to convene a workgroup of agency and school representatives and pest control contractors to identify and align protocols for tracking and reporting pesticide use. At a minimum, engage the following partners:

- Oregon Department of Transportation for their existing pesticide tracking and reporting system.
- Oregon Department of Agriculture, tasked under SB 3364 (IPM for State Agencies) with authority and responsibility for hosting and managing

reported pesticide use data.

- Oregon Department of Forestry, for their process of developing a pesticide use tracking system.
- Other agencies that are conducting in-house pesticide applications in order to coordinate with their leadership to assign staff liaisons.
- Pest control providers, such as Eden Pest Control, because they are required to track location-specific pesticide use for each of their accounts. Providers have well-developed protocols, databases, and reporting mechanisms.

Task D1b: Coordinate with Oregon schools, as they currently track pesticide use under the requirements of the 2009 School IPM Bill, SB 637. Although SB 637 does require monitoring and record-keeping of each pesticide application at each school where a product is applied, it does not require reporting to a central database. Tapping into these efforts will help identify likely stakeholders for a pilot, as well as inform development of a standard tracking protocol.

The Roundtable should address questions such as:

- What are the current tracking methods being used? Can one or more be used as a foundation for pesticide use tracking among participating agencies? (Consider resources like Oregon Department of Agriculture PURS database, City and County of San Francisco, Santa Clara County in California, City of Boulder Colorado, City of New York, State of California, as well as database being used by the pest control service provider.)
- What level of tracking is needed?
- What are the barriers to tracking, if any?
- What level of transparency is desired or appropriate?
- How can this process facilitate a public records request?
- Is it important for pesticide use reports to comply with a standardized format?
- How can a protocol be designed to support eventual re-implementation of statewide PURS?

Action D2. Incorporate pesticide use reporting requirements into existing and future pest management contracts.

Task D2a: Determine agreed-upon contract requirements and specific language. Contract language may specify the level of reporting detail, and may also require contractors to track and supply information on non-chemical pest management activities.

Task D2b: Secure agreements from agencies holding pest management contracts to incorporate

the agreed-upon requirements for pesticide use reporting.

STRATEGY E: Create, implement, and promote a single multi-organizational green purchasing plan.

Objectives

- Generate participation in existing cooperative purchasing agreements focused on toxics reduction
- Align toxics reduction criteria for use by participating agencies in procurement of goods and services

Measures of Success

- A resource list is available for agencies to identify existing green purchasing opportunities to join or utilize
- Roundtable agencies have enrolled purchasing staff in incorporating ‘green purchasing opportunities’ into their operations and have successfully implemented a handful of efforts
- Local and state agencies outside of the Roundtable have begun using the identified green cooperative purchasing agreements or incorporated approved green criteria into their contracts

Lead Organizations	OEC, Healthy Purchasing Initiative
Support Organizations	All Roundtable government agencies, especially Healthy Purchasing Initiative collaborators (Multnomah County and City of Portland), DEQ Oregon Department of Administrative Services (DAS)
References	<p>URL National Association of State Procurement Officials (NASPO)</p> <p>URL Oregon and Washington joint contract for Janitorial Supplies and Equipment</p> <p>URL U.S. Communities Going Green Program</p> <p>URL Educational and Institutional Cooperative Purchasing (E&I) Sustainability Program</p> <p>URL US EPA’s List of Eco-Labeling Programs and Rating Tools</p> <p>URL Ecolabel Index</p> <p>See additional references on Page 17.</p>
Useful Resources	<ul style="list-style-type: none"> • Metro funding

Time Frame	1 YEAR: Index Opportunities 2 YEARS: Create Agreements, Internal Pilot 5 YEARS: Increase adoption
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Until there is full chemicals policy reform, state and local agencies have the opportunity and capacity to impact the purchase and use of products with toxic chemicals through their internal purchasing choices. Green purchasing resources are abundant:

- local agencies have environmentally preferable purchasing policies;
- the State of Oregon, Metro, Multnomah County, the Port of Portland, the Cities of Portland, Eugene, and others have ‘greened’ several commodities contracts;
- collaboratives are forming in the Pacific Northwest region to identify needs, share resources, and capitalize on a unified voice.

The Roundtable has an opportunity to meld these efforts and further their strength.

Larger agencies can take the lead on aligning criteria and generating cooperative purchasing agreements. Smaller agencies and organizations can contribute to the alignment effort and benefit by using them for purchasing, too. Together, as part of the larger movement, Roundtable organizations can help protect worker and public health by procuring and using less toxic products.

A ‘cooperative purchasing agreement’ is a contract generated by one agency that is available to other agencies, institutions, and nonprofit organizations for their collective use.

Implementation Guidelines

Action E1: Promote the use of known rigorous cooperative purchasing agreements

Task E1a: Increase the uptake of the new Oregon/Washington joint Janitorial Supplies Contract by working with purchasing departments towards adoption.

Action E2: Index green purchasing opportunities

Task E2a: Generate a list of existing cooperative purchasing agreements containing criteria for toxic reduction. The list should note the following:

- to whom the contract is available
- any restrictions on its implementation
- toxics reduction criteria (or other indicator of toxics reduction)
- use of third-party certifications versus industry-sponsored certifications

- use of red-lists and which ones
- other noted prohibited chemicals
- consideration of upstream exposure and impacts
- treatment of performance criteria

Task E2b: Indicate existing criteria that should be inserted into new contracts where cooperative purchasing agreements are not yet available.

Task E2c: Determine opportunities to create the next round of green purchasing plans.

Action E3: Pilot the new green purchasing plans

Task E3a: The Roundtable agencies should conduct Opportunity Assessments: What contracts are coming up for renewal in the next 24 months? Where does this present opportunities for integration with existing cooperative purchasing agreements or existing green criteria?

Task E3b: Secure agreements from the Roundtable members and other agency representatives to implement the new cooperative purchasing plans when the current contracts expire, and to insert the crafted toxics reduction criteria where cooperative purchasing agreements are not already in place. Consider translating the new plans into cooperative purchasing agreements and broadly promoting their uptake by others.

Task E3c: Agencies should consider requiring Health Product Declarations (HPD), GreenScreen, or other disclosure formats for products, especially where no cooperative purchasing agreements or existing criteria are yet available.

Action E4: Host an annual Green Purchasing Summit.

The Roundtable should convene agencies, organizations, and others engaged in Green Purchasing to share activities, identify overlap, and agree upon areas for collaboration. The agenda may include a review of successes to-date, areas for improvement, upcoming opportunities, and increasing the number of participating agencies.

Examples of potential stakeholders include:

- Staff involved with purchasing for Roundtable organizations
- OEC - Healthy Purchasing Initiative
- Responsible Purchasing Network
- Sustainable Purchasing Leadership Council
- Port of Portland (gray water treatment toxics reduction purchasing plan)
- City of Eugene
- Other Cities and Counties with interest in ‘green purchasing’

- Special Districts Association of Oregon and their member districts
- Government Procurement for Climate Protection Workgroup hosted by EPA Region X
- Portland State Contracting and Procurement Services
- University of Oregon Purchasing and Contracting Services
- Oregon State Purchasing Department
- School Districts
- Retailers or manufacturers acting as leaders in the field of green purchasing that can offer perspective on topics such as private sector engagement. Manufacturers that participated in the Health Product Declaration Collaborative's 2012 Pilot are promising candidates.

The Roundtable may also choose to review other existing initiatives to help inform the process:

- Government Procurement for Climate Protection Workgroup. This group hosts monthly meetings. Its main focus is greenhouse gas reduction. Its secondary filter is toxics reduction.
- [URL](#) Healthy Purchasing Initiative, led by OEC, a group dedicated to adopting similar policies and harmonizing transparency and human health considerations into purchasing decisions.
- [URL](#) Sustainable Purchasing Leadership Council, a group dedicated to standardizing the practice of sustainable procurement to drive social, environmental, and economic sustainability by focusing on areas of high spending and impact.
- [URL](#) Responsible Purchasing Network, providing procurement tools and resources to their network of purchasers.
- [URL](#) EPA's WARM model, determining greenhouse gas emissions impact of products.
- [URL](#) Health Product Declaration, a standardized format for conveying details about product content and associated health information.
- [URL](#) GreenScreen, a method for comparative Chemical Hazard Assessment that can be used for identifying chemicals of high concern and safer alternatives.

STRATEGY TIMELINE

Below is one possible schedule for implementation of the Actions associated with each Strategy. Note that some Actions have been placed later on the timeline because they can benefit from the outcomes of other Strategies.

Strategy Actions	YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4

STRATEGY A: Advance policies which prioritize chemicals of concern impacting the most vulnerable populations.

A1: Recruit volunteers																				
A2: Index existing policies																				
A3: Translate the data																				

STRATEGY B: Enlist Oregon's local, state, and national leaders from government, business, and academia to make the economic case for green chemistry.

B1: Determine relationships and influence																				
B2: Pair candidates with Roundtable members																				
B3: Compose an economic-focused foundation piece																				
B4: Engage candidates																				

STRATEGY C: Generate outreach materials that link priority chemicals of concern to health impacts in order to transform trusted spokespersons in the health care community into advocates for chemicals policy reform.to advocate for chemicals policy reform.

C1: Convene a Health Professionals Advisory Group																				
C2: Generate outreach materials																				
C3: Teach health professionals to champion the message																				

STRATEGY D: Build a case for Pesticide Use Reporting Systems (PURS) through voluntary agency implementation of tracking and reporting protocols.

D1: Coordinate with existing IPM efforts in Oregon																				
D2: Incorporate reporting requirements into contracts																				

STRATEGY E: Create, implement, and promote a single multi-organizational green purchasing plan.

E1: Promote the use of cooperative purchasing agreements																				
E2: Index green purchasing opportunities																				
E3: Pilot the new green purchasing plans																				
E4: Host an annual Green Purchasing Summit																				

APPENDIX A: STAKEHOLDER MATRIX

STAKEHOLDER TYPE CLASSIFICATION

- 1 Current Roundtable Member: New | Active | Former
- 2 Strategic Action Plan Reviewer
- 3 Strategic Action Plan Implementation Partner
- 4 Potential Future Roundtable Member

ORGANIZATIONAL ATTRIBUTE

- TEC Technical expertise: P=pesticides | G=general | E=environmental justice/equity
- POL Policy strategy + support: S=strategy | U=support
- FIN financial support: F=funds | S=staff time | C=collateral/printing
- LOG logistics support
- GRA grant writing
- RES research support: R=research | A=analytics
- ADV advocacy/lobbying
- EDU education + outreach
- PAR partnerships with other organizations

STAKEHOLDER TYPE				SECTOR	ORGANIZATION	NAME	ORGANIZATIONAL ATTRIBUTE								EMAIL	PHONE	
1	2	3	4				TEC	POL	FIN	LOG	RES	GRA	ADV	EDU			PAR
				GOV	Association of Oregon Counties	Emily Ackland										eackland@aocweb.org	503-585-8351
A				NGO	Beyond Toxics	Lisa Arkin	P,E									larkin@beyondtoxics.org	541-465-8860
				NGO	BizNGO	Mark Rossi										mark@cleanproduction.org	781-391-6743 x101
				NGO	Blue Green Alliance	Charlotte Brody										cbrody@bluegreenalliance.org	434-286-4010
				NGO	Center for Earth Leadership	Dick + Jeanne Roy										jeanne@earthleaders.org	503-227-2315
N				GOV	City of Albany + Oregon Association of Clean Water Agengies	Mark Yeager										mark.yeager@cityofalbany.net	541-917-7658
N				GOV	City of Gresham	Keri Handaly	P				R					keri.handaly@greshamoregon.gov	503-618-2657
A				GOV	City of Portland	Brett Hulstrom	G	S,U	S,C		R					brett.hulstrom@portlandoregon.gov	503-823-7807
F				GOV	City of Portland, Mayor's Office	Gail Shibley										gail.shibley@portlandoregon.gov	503-823-4120
				NGO	Clean Production Action	Lauren Heine										lauren@lheinegroup.com	360.220.2069
				COM	Columbia Forest Products												
				NGO	Environment Oregon	Sarah Higginbotham										sarah@environmentoregon.org	503-231-1986 x318
					Environmental Defense Fund												
				GOV	EPA Columbia River Toxics Reduction Group	Mary Lou Soccia										soccia.marylou@epamail.epa.gov	
					ESCO												
				NGO	Hacienda Community Development Corporation												
					Housing and Urban Development Healthy Homes Program												
				LAB	Labor Unions (general)												
				GOV	League of Oregon Cities												
				UNI	Lewis and Clark Law School, Environmental and Natural Resources												
				UNI	Lewis and Clark, Department of Environmental Studies												
A				GOV	Metro	Lisa Heigh	G	S,U	F,S,C							lisa.heigh@oregonmetro.gov	503-797-1611
A				GOV	Metro	Scott Klag										scott.klag@oregonmetro.gov	503-797-1665
				GOV	Multnomah County, Early Childhood Services												
N				GOV	Multnomah County, Environmental Health	Kari Lyons-Eubanks	E	S,U	S		R					lyonsk@multco.us	503-988-3663 x25860

STAKEHOLDER TYPE				SECTOR	ORGANIZATION	NAME	ORGANIZATIONAL ATTRIBUTE								EMAIL	PHONE	
1	2	3	4				TEC	POL	FIN	LOG	GRA	RES	ADV	EDU			PAR
N				GOV	Oregon Health Authority	Curtis Cude	G,E	U	F,S		A					curtis.g.cude@state.or.us	971-673-0975
N				GOV	Oregon Health Authority	David Farrer										david.g.farrer@state.or.us	971-673-0971
				GOV	Oregon Health Authority, Women, Infants + Children Program												
					Oregon Innovation Council												
				NGO	Oregon League of Conservation Voters (OLCV)	Doug Moore										dmoore@olcv.org	503-224-4011 x211
				UNI	OHSU, Center for Research on Occupational + Environmental Toxicology												
				UNI	OHSU, Department of Public Health + Preventative Medicine	William Lambert										lambertw@ohsu.edu	503-494-9488
				UNI	OHSU, Department of Public Health + Preventative Medicine	Ken Rosenberg										rosenberkd@yahoo.com	971-673-0237
				GOV	Oregon Occupational Health + Safety Division	Michael Wood											503-378-3272
				GOV	Oregon Office of Equity + Inclusion	Tricia Tillman										tricia.tillman@state.or.us	971-673-1240 x31240
				NGO	Oregon Public Health Association	Josie Henderson										jhenderson@oregonpublichealth.org	503-803-1550
				GOV	Oregon State Bar, Sustainable Future Section												
				UNI	Oregon State University, School of Public Health												
				UNI	Oregon State University, Purchasing Department												
				GOV	Oregon Sustainability Board + Department of Administrative Services	Keith Johnston										keith.johnston@state.or.us	
N				NGO	Physicians for Social Responsibility	Margie Kircher										marmitch@comcast.net	503-223-8595
A				NGO	Physicians for Social Responsibility	Susan Katz	G				R					susanfkatz@gmail.com	503-435-9169
				UNI	Portland State University, Scholl of Community Health												
				UNI	Portland State University, Institute for Sustainable Solutions	Jennifer Allen										jhallen@pdx.edu	503-725-8546
				UNI	Portland State University, Contracting + Procurement Services												
				GOV	State of Oregon, Office of the Governor	Richard Whitman										richard.m.whitman@state.or.us	
				GOV	State of Oregon, Office of the Governor	Gabriela Goldfarb										gabriela.goldfarb@state.or.us	
				COM	Staples, Inc.	Roger McFadden										roger.mcfadden@staples.com	303-862-0421
				UNI	University of Oregon, Department of Chemistry	Julie Haack										jhaack@uoregon.edu	541-346-4604
				UNI	University of Oregon, Department of Chemistry	Jim Hutchison										hutch@uoregon.edu	541-346-4228
				UNI	University of Oregon, Contracting and Procurment Services												
				UNI	University of Portland, Department of Environmental Studies	Steven Kolmes										kolmes@up.edu	
				GOV	Washington Department of Ecology	Alex Stone										alst461@ecy.wa.gov	360-407-6758
				GOV	Washington Department of Ecology, Green Chemistry	Ken Zarker										kzar461@ecy.wa.gov	

APPENDIX B: MEMBER ENGAGEMENT AND RESOURCE UTILIZATION

Roundtable members are engaged, but member assets and organizational resources are underutilized. With better coordination, increased intention, and strong mutual commitments, the Roundtable could have more dedicated staff time, funding, research, grant-writing assistance, and other resources to help achieve the group's goals. This table logs the challenges regarding resource allocation mentioned during interviews with individual Roundtable members, together with key strengths of the member organizations.

Organization	Challenges	Strengths
Beyond Toxics	<ul style="list-style-type: none"> Located outside Portland, so in-person meeting attendance is not possible; difficult to follow/participate in meeting conversations via conference speaker phone. 	<ul style="list-style-type: none"> Technical expertise in pesticides + environmental justice Grant writing Partnerships
City of Gresham	<ul style="list-style-type: none"> None reported. 	<ul style="list-style-type: none"> Technical expertise in pesticides Grant writing Research
City of Portland	<ul style="list-style-type: none"> Funding/support for staff time and other resources is tenuous and could change with shifting priorities, so Roundtable activities must align with agency priorities. Need to have clearly documented goals and action plan. Member representatives lack authority - if activities have broader implications or would require the City to take a stand, need approval from director or city council. 	<ul style="list-style-type: none"> Policy support + strategy Logistics Printing Research
DEQ	<ul style="list-style-type: none"> Funding/support for staff time and other resources is tenuous and could change with shifting priorities, so Roundtable activities must align with agency priorities. Member representatives lack authority - if activities have broader implications or would require DEQ to take a stand, need approval from agency leadership or Governor's Office (or the legislature). Can only support legislation that is backed by the Governor. 	<ul style="list-style-type: none"> Funding Logistics Research Analytics Grant writing Partnerships
Metro	<ul style="list-style-type: none"> A need to understand the level of commitment, including resource support, from other members because without clearly documented goals and action plan, it is more difficult to plan for and support collaborative efforts or individual member efforts. Need to have clearly documented goals and action plan. 	<ul style="list-style-type: none"> Funding Collateral (e.g. printing) Logistics Grant writing Partnerships
MultCo - Env Health	<ul style="list-style-type: none"> Time frame is critical; can't work on tight deadlines or quick turn-arounds. Members need approval from County leadership before moving forward with policy initiatives. 	<ul style="list-style-type: none"> Policy development + implementation Research Grant writing Community engagement
MultCo - Sustainability	<ul style="list-style-type: none"> None reported. 	<ul style="list-style-type: none"> Research
NCAP	<ul style="list-style-type: none"> Recently completed an internal 3-year plan that has clear goals - can add focus areas, but involvement with the Roundtable needs to align with NCAP's mission. 	<ul style="list-style-type: none"> Technical expertise in pesticides Funding Grant writing Research

continued next page

Organization	Challenges	Strengths
OEC	<ul style="list-style-type: none"> • Not fully funded for Environmental Health Work. • Limited resources to take on new tasks with the Roundtable. 	<ul style="list-style-type: none"> • Technical expertise in toxics + green chemistry • Staff time • Logistics • Research • Grant writing
OHA	<ul style="list-style-type: none"> • Not funded for “this type of work”. Activities must meet with Agency priorities to warrant participation. • Can help apply for grants when they are for at least \$150K and can support staff time contributions from OHA. • Member representatives lack authority - if activities have broader implications or would require OHA to take a stand, need approval from agency leadership or Governor’s office (or the legislature). • Can only support legislation that is back by the Governor 	<ul style="list-style-type: none"> • Funding • Grant writing • Analytics • Partnerships
ORACWA	<ul style="list-style-type: none"> • Member representatives lack authority - need to get Board or Director approval for dedicated staff work, grant writing, etc. • Small organization with many interests vying for their attention. • In-kind services and funding from member agencies will vary agency to agency. 	<ul style="list-style-type: none"> • Policy support + strategy • Partnerships
PSR	<ul style="list-style-type: none"> • Not funded for Environmental Health Work. • Small organization, mostly volunteer-based. 	<ul style="list-style-type: none"> • Research • Grant writing • Partnerships

APPENDIX C: RANKED SUB-ACTIONS FROM LEADERSHIP IN SUSTAINABLE CHEMICALS POLICY

The four primary recommendations from *Leadership in Sustainable Chemicals Policy: Opportunities for Oregon* were further itemized into twenty specific sub-actions by Allen and Dinno in the report. The Roundtable members ranked each sub-action to reflect how closely it aligned with their organizations' priorities, and the results are listed here.

FOUR PRIMARY RECOMMENDATIONS

- R1. Strengthen coordination and development of shared goals among agencies.
- R2. Prioritize the most hazardous chemicals, the most vulnerable people, and the most sensitive and most toxic environments.
- R3. Provide incentives for identifying and developing safer alternatives to the most highly toxic chemicals.
- R4. Promote education and workforce development to lay the foundation for long-term innovation. Expand interdisciplinary approaches to education, internships and workforce development.

Sub-action Rankings

- 01 Expand public awareness of chemicals of concern | R2
- 02 Focus on chemical priorities | R2
- 03 Foster dialogue between state agencies, their commissions and boards, universities, NGOs, industries and the public | R1
- 04 Coordinate policy outcomes between agencies | R1
- 05 Labeling of products for disclosure | R2
- 06 Promote enhanced capacity for "rapid chemical assessment, prioritization + decision-making based on inherent toxicity, uses, functions, and potential exposures through manufacturing, use, and disposal" so that the Governor's Green Chemistry Executive Order can translate into meaningful actions and better outcomes | R1
- 07 Work with existing authorities to provide more incentives toward the adoption of alternatives | R1
- 08 Engage eco-certification programs to align with OR's priority chemicals of concern | R2
- 09 Biomonitoring | R2
- 10 Foster development of safer alternatives for Oregon's leading industries | R3
- 11 Develop a coordinated information system | R2
- 12 Collaborate with other states on the development of safer alternatives | R3
- 13 Create a mechanism to coordinate demand and supply of safer alternatives | R3
- 14 Support small businesses | R3
- 15 Invest in green chemistry research and development | R3
- 16 Develop an internship program that brings students from different Oregon universities and different disciplines together to work with businesses that are developing safer alternatives | R4
- 17 Develop green chemistry educational programs for all ages | R4
- 18 Incorporate green chemistry curricula into a broad set of disciplines including business, planning, community health + other areas | R4
- 19 Develop education and training programs tailored small businesses to enhance competitiveness in green chemistry and alternatives | R4
- 20 Mobilize capital resources | R3

APPENDIX D. RECORD OF OTHER IDENTIFIED STRATEGIES

Over the course of the discovery process, the Roundtable brainstormed a number of possible strategies to include in the Strategic Action Plan. All of the original proposals are noted below in the order they were originally conceived. Highlighted items have been incorporated into one of the five strategies that were further developed in the Plan.

Strategies inspired by the goal: Protect all Oregonians, with an emphasis on vulnerable populations, from priority chemicals of concern.

- Align housing code and health code, targeting public housing, clinics, and other facilities catering to vulnerable populations.
- Change standard of practice for baseline test subjects to be a pregnant woman or an infant child instead of a 200-pound healthy male.
- Create a framework to implement a state-level ban on chemicals slated for eventual federal ban.
- Develop criteria and implementation guidelines for product screening to decrease accessibility of and exposure to priority chemicals. (e.g., behind counter)
- Facilitate a workgroup to make biomonitoring more accessible, along with suggested actions based on test results.
- Generate a case study highlighting how short-term views cost taxpayers and vulnerable communities more in the long run.
- **Generate materials for the health care community linking priority chemicals and health impacts, with recommended actions for detection and prevention. (Strategy C)**
- **Improve the implementation rate of one under utilized regulation/policy that has potential to greatly impact a particular vulnerable population. (Strategy A)**
- **Index and promote existing policies that prioritize chemicals of concern that impact the most vulnerable populations. (Strategy A)**
- Institute tax incentives for agricultural enterprises demonstrating a range of ecological approaches.
- Literature review and report in layperson language on epidemiology studies linking priority chemicals to health conditions and high-risk populations.
- Promote collection and analysis of pesticide use data in Oregon via re-institution and improvement of PURS (pesticide use reporting system).
- Provide information in layperson language about avoiding chemicals of concern to community groups for their broad dissemination via social media outlets.
- **Raise awareness about an existing regulation/policy that could be better enforced or implemented with the support of public participation. (Strategy A)**
- Support DEQ + OHA to work with retailers and industry to reduce use of focus list chemicals by developing outreach to agencies' existing relationships and customer base.
- Support development of local and/or state-level incentives for toxics reduction at facilities.
- Support existing projects and state-level policies that promote biomonitoring.

Strategies inspired by the goal: Increase supply and demand of technologically and economically feasible alternatives.

- Add chemicals to existing lists as additional points of concern
- **Align specifications by developing cross-agency agreements regarding purchasing criteria (Strategy E)**
- Create/support a central sharing warehouse for alternatives assessment info.
- **Defend, support, promote existing toxics reduction legislation (Strategy A)**
- **Develop & promote model specs/cooperative purchasing agreements (Strategy E)**
- Develop on-line resource for product assessment using Material Safety Data Sheets, etc.

- Develop voluntary action plans for two (?) industries
- Generate wide-spread agency participation in 'green' cooperative purchasing agreements (Strategy E)
- Harmonize data evaluation system/protocol between agencies
- Identify and promote existing Life Cycle Analysis tools for true cost accounting
- Research approaches to voluntary labeling and disclosure; promote top choice for Oregon

Strategies inspired by the goal: Provide scientific information to elected officials, policy makers, and others in a way that is usable.

- Build a case for eventual state PURS funding through implementation at the local level and private entities. Use existing PURS information to inform and build the basis for a campaign. (Strategy D)
- Connect with higher education and the business industry through the Business Oregon-led team working on the Executive Order to provide education and incentives for Green Chemistry. (Strategy B)
- Coordinate a chemicals right to know campaign. (Strategy C)
- Create media piece to communicate economic benefits of green chemistry to policy makers. (Strategy B)
- Engage industry and state leaders as spokespeople and a basis for case studies to electeds promoting economic and other benefits of green chemistry. (Strategy B)
- Foster collaboration between pest management industry and other pesticide users to demonstrate utility and ease of pesticide use reporting. (Strategy D)
- Foster more funding for and participation in the Pesticide Stewardship Program. (Strategy D)
- Index the driving paradigms and trigger points among policy makers (e.g. water, IPM, constituent views) and devise language foundation document for target audiences. (Strategy C)
- Survey Oregonians and embed constituent responses/stories in communication with elected officials.
- Use (recently) passed state chemicals policy laws to illustrate both the problem and possible solutions for policy makers and other key audiences. (Strategy A)
- Engage Oregon's federal congressional delegation on TSCA reform and green chemistry R&D funding