



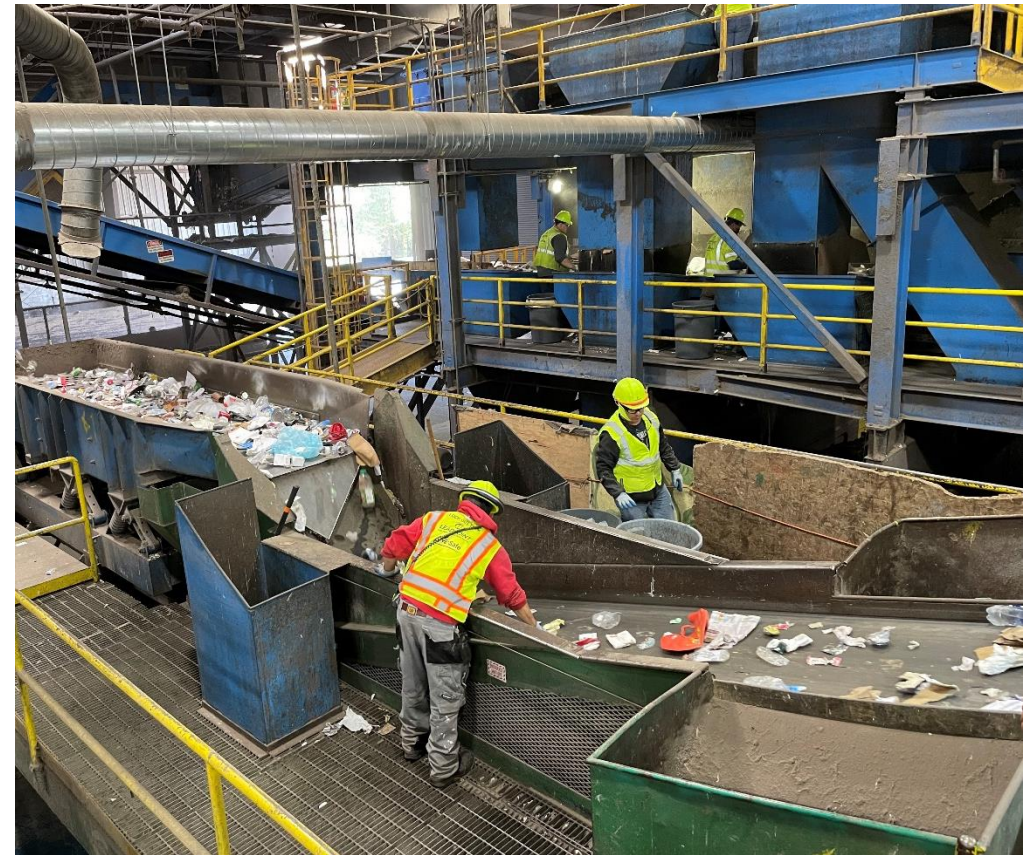
Oregon's Plastic Pollution and Recycling Modernization Act – 4 Big Ideas

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Northeast Recycling Council – Tuesday October 7*



Big Idea Number One: Use EPR to improve (not just fund) recycling

- Oregon's Recycling Steering Committee and DEQ conducted a thorough assessment of recycling
- The RMA:
 - Maintains what works well
 - Mandates fixes where fixes are needed
 - Requires the PRO to pay for those fixes (and then some)



Big Idea Number Two: Responsible End Markets



Photos: Megan Ponder

Responsible end markets

- Joint obligation on MRFs and the PRO
- Standards:
 - Compliant
 - Transparent
 - Environmentally sound
 - Adequate yield
- Mechanisms for reporting, assessments, audits and corrective actions



Big Idea Number Three: Real eco-modulation



Conahan for Oregon Business The Wastrel

The Significance of Environmental Attributes as Indicators of the Life Cycle Environmental Impacts of Packaging and Food Service Ware

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ABSTRACT: The environmental impacts of packaging and food service waste (FSW) are increasingly the subject of government policy, public discourse, and industry commitments. While some consideration is given to reducing the impacts of packaging across its entire life cycle, most of the focus is on packaging waste or feedstock substitution. Efforts typically focus on specific packaging characteristics, or material attributes, commonly perceived to be environmentally preferable. This article summarizes an extensive meta-review of existing published literature that was performed to determine whether the material attributes recyclability, recycled content, compostability, and biobased, commonly considered to be environmentally beneficial, correlate with lower net environmental impacts across the full life cycle of the packaging and FSW. Seventy-one unique life cycle assessment (LCA) studies that quantify the environmental impacts throughout the entire life cycle of packaging and FSW were analyzed. These studies included over 5000 comparisons for 13 impact categories commonly analyzed in LCA studies. The results from the meta-review identified a number of instances where material attributes do not correlate with environmental benefits for packaging and FSW. Rather, other characteristics such as material choice or mass of the packaging/FSW products can have higher influence in determining life cycle impacts.



1. INTRODUCTION

In the past few decades, there has been an increased awareness of the need to use materials more sustainably, both by government agencies¹ and the public at large.² The reduction of environmental impacts from packaging/FSW has been a focus for sustainable material strategies. Packaging is often a target for environmental policies and corporate sustainability programs because it is generally disposed after a single use and because of the large quantities of packaging entering the municipal solid waste (MSW) stream each year.³ In 2015 Americans generated 78 million tons of packaging waste, comprising 30% of total MSW generation by weight.⁴

When creating policies to reduce the environmental impacts of packaging, both public and private efforts tend to focus on a particular characteristic of the package, such as designing recyclable packaging or using renewable materials in their construction. These characteristics, or material attributes, are often expected to convey reduced environmental impacts relative to other options without that same attribute. Material attributes are used as a shorthand to indicate environmental benefits due to their relative ease to incorporate as design criteria for products and packaging, as part of government sustainability guidelines, and their simplicity to communicate through marketing to consumers.⁸ However, little research has been conducted to verify whether these assumptions hold true. Do

material attributes accurately predict lower impacts across the entire packaging life cycle?

To evaluate the ability of packaging and FSW material attributes to predict better overall environmental outcomes, we performed a meta-analysis of nearly two decades of packaging and sustainability literature.⁶ Our findings stress the importance of basing sustainable material management policies and business decisions on life cycle assessment rather than on material attributes. This is not to say every decision requires a detailed life cycle assessment, rather that the findings across materials, packaging/FSW types, applications, and impact categories vary, and therefore a more nuanced approach is required. Our findings provide some generalized insights to guide decisions related to specific combinations of materials and packaging/FSW types. We hope this study leads to further discussion among the sustainable materials management community and

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Assessment and disclosure of impacts

- Standards for assessing and disclosing life-cycle impacts (OAR 340-090-0900 through -0940).
- Mandatory disclosure for 25 largest producers (OAR 340-090-0910(2))
- Financial incentives for assessment and disclosure (OAR 340-090-0910(3))
 - Additional incentives for impact reduction



Big Idea Number Four: Not just recycling

- Project MIRROR (“Materials Impact Reduction & Reuse – Oregon”)
 - Waste prevention, reuse
 - Other impact reduction
- Capped at 10% of three-year average of PRO budget or \$15 million/year (adjusted for inflation)



Moving Forward – “Upstream Product Stewardship”

An opportunity to:

- Reset the relationship between government, industry
- Realize deeper environmental, community, social and economic benefits



Thank you

Join me to learn more
about the RMA at
RecyclingAct.Oregon.gov

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