



June 14, 2021

Governor Janet T. Mills
1 State House Station
Augusta, ME 04333

Dear Governor Mills -

We are members of the Materials Management Research Group¹ at the University of Maine's Senator George J. Mitchell Center for Sustainability Solutions². Our group draws on interdisciplinary academic expertise, as well as long-term stakeholder engagement with more than 200 partners across the state to identify sustainable materials management solutions in the state of Maine. Through our work with materials managers, local officials, and industry leaders we have developed a deep understanding of both the challenges and potential solutions for materials management in Maine.

We are writing to express our support for LD1541 which would establish Extended Producer Responsibility for product packaging. Existing, peer-reviewed research suggests that well designed programs can serve as effective tools to hold producers responsible for the costs of end-of-life management^{3,4}. By asking producers to take responsibility for these costs, EPR can provide essential funding for recycling programs and free up tax-payer funded municipal budgets for important local priorities like roads, emergency services, and education. EPR programs can also incentivize producers to redesign packaging, particularly with eco-modulated fee structures like the legislation proposed in Maine⁵.

We are also writing to express skepticism about a report that has recently circulated which claims that EPR legislation could increase costs for consumers of packaged goods by 4-6%.

Where we agree with this report:

- It is accurate that some portion of end of life management costs may be passed through to consumers in the form of higher product prices.

Where we are skeptical about this report:

- The author writes, "*For the purposes of simplicity, our modeling assumes that increased costs will be passed onto consumers*" but this assumption, that all costs will be passed on to consumers, is not well supported by the empirical data⁶. The author fails to acknowledge research which

¹ <https://umaine.edu/mitchellcenter/materials-management/research-team/>

² <https://umaine.edu/mitchellcenter/>

³ Gupt, Y. and S. Sahay (2015) Review of extended producer responsibility: A case study approach. *Waste Management Research* 33(7):595-611.

⁴ Lifset, R., Atasu, A. and Tojo, N. (2013), Extended Producer Responsibility. *Journal of Industrial Ecology* 17: 162-166.

⁵ Cai, Y. and Choi, T. (2021) Extended Producer Responsibility: A Systematic Review and Innovative Proposals for Improving Sustainability. *IEEE Transactions on Engineering Management* 68(1):272-288.

⁶ Gallego, B. & M. Lenzen (2005) A consistent input-output formulation of shared producer and consumer responsibility, *Economic Systems Research*, 17(4): 365-391

demonstrates that some firms have responded to EPR by redesigning packaging⁷ as a means to reduce waste management costs. Further, peer reviewed studies that have tracked price increases related to EPR indicate numbers much lower than those suggested in this report⁸.

- We note that the author does not mention peer reviewed studies which model EPR co-benefits including value added, jobs, and reduced emissions⁹ relative to other waste management options.
- The costs of EPR programs have increased in recent years but the cost of recycling programs have increased everywhere, not just in EPR programs. This is due, in part, to the use of packaging materials that are difficult or impossible to recycle. Eco-modulated EPR programs like that proposed in Maine are designed to incentivize producers to stop using packaging materials that are hard or impossible to recycle.
- The author advocates for other potential solutions, specifically chemical recycling, a process heavily favored by the petroleum and plastics industries. However, this “end of pipe” solution does little to address the problem of unsustainable packaging design and is highly controversial.
- Finally, as researchers we note that this report includes no references and inadequate transparency about its assumptions and data sets utilized. The study has a single author and is not peer reviewed.

Maine has a long history of leadership in materials management, with the bottle bill and early product stewardship programs. If our ultimate goal, as stated in the Maine Solid Waste Management Hierarchy, is to *reduce* waste to relieve pressure on landfills, resources, water pollution, and future generations— then EPR makes good sense. It also makes good financial sense for the state of Maine. As citizens and taxpayers we have been bearing the costs of unsustainable packaging, drawing funds away from other important priorities including community health, emergency services, or education.

Sincerely,

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The views expressed here represent the authors' opinions based on their expertise and do not speak on behalf of the University of Maine.

Cc: Thomas Abello, Legislative Director, Office of the Governor
Jeremy Kennedy, Chief of Staff, Office of the Governor
Melanie Lozrim, Commissioner, Maine Department of Environmental Protection
Rep. Ralph Tucker, Co-Chair, Joint Standing Committee on Environment and Natural Resources
Sen. Stacy Brenner, Co-Chair, Joint Standing Committee on Environment and Natural Resources

⁷ Tojo, N. (2004) Extended producer responsibility as a driver for design change – Utopia or reality? Doctoral dissertation, International Institute for Industrial Environmental Economics, Lund University, Lund Sweden.

⁸ Favot, M. and Marini, A. (2013), A Statistical Analysis of Prices of Electrical and Electronic Equipment after the Introduction of the WEEE Directive. *Journal of Industrial Ecology*, 17: 827-834

⁹ Rodrigues, J.F.D., Lorena, A., Costa, I., Ribeiro, P. and Ferrão, P. (2016), An Input-Output Model of Extended Producer Responsibility. *Journal of Industrial Ecology*, 20: 1273-1283.