

22 October 2019

*Electronic Delivery*

Members, Committee to Study Recycling  
Streams and Solid Waste Management in  
New Hampshire  
General Court,  
State of New Hampshire

***In re: Suggestions to the Recycling Streams and Solid Waste Management Study Committee to  
bolster recycling in New Hampshire.***

Dear Members,

On behalf of the members of the Plastics Division of the American Chemistry Council (ACC), thank you for this opportunity to comment on steps New Hampshire may consider to bolster recycling.

Summary

Consider public policy that encourages:

- Investment in recycling technology; and
- Residential and commercial recycling, including steps to increase awareness and engagement, proper recycling practices, and recycled content demand.

Background

**Plastics.** Chemistry and plastics are an important and growing part of our state and national economy. Plastic materials manufacturers directly employ approximately 57,600 people in the US. These employees earned on average \$93,600 which is more than 44 percent higher than the average wage for all industries. Including product manufacturing, the plastics industry employs nearly 1 million people nationwide. Here in New Hampshire the industry accounts for 782 direct and 686 related jobs.

Plastics also provide important *benefits* to society. For example, plastics reduce the weight of our cars reducing fuel use and greenhouse gas (GHG) emissions. Plastics also help keep our food fresh and clean reducing food waste. For example, 1.5 grams of plastic extends the freshness of cucumbers for 14 days, compared to 3 days without, and packaging for grapes reduces waste by 20 percent. Reducing food waste is important because US Environmental Protection Agency (EPA) estimates that more food reaches landfills and incinerators than any other single material in our everyday trash, constituting 22 percent of discarded municipal solid waste<sup>1</sup>.

Additionally, producing our food uses 10 times more energy than producing the packaging to protect it. A reputable study looking at the environmental costs of plastics across 18 sectors of our economy found alternatives would increase environmental impacts by nearly 4 times<sup>2</sup>.

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<sup>1</sup> (AMERIPEN, 2018)

<sup>2</sup> (Lord, 2016)



**Market disruption.** As the Chinese economy grew, China's industrial consumption for scrap materials, like plastics, increased 50 and 70 percent over the last decade. In fact, by 2017 Chinese buyers were importing almost a third of US scrap and similar volumes from Europe. However, over the past several years, China began to enact policies that banned Chinese buyers from importing scrap plastics and other materials.

The most recent policy, known as China Sword, requires such low contamination rate that it is effectively a ban on recycling imports to China of mixed paper and plastics.

This fundamental market shift has created a need to develop domestic demand for these valuable resources. While temporarily disruptive, current conditions do create an opportunity for lawmakers to examine public policies and programs to ensure natural resources are fully optimized and efficiency is promoted. It is also a time to craft policies that lessen the environmental footprint of products over its entire lifecycle.

**Circular economy.** In May 2018, the Plastics Division announced its goals that crystalize US plastics resin producers' commitment to the circular economy:

- 100 percent of plastics packaging is re-used, recycled or recovered by 2040; and
- 100 percent of plastics packaging is recyclable or recoverable by 2030.

ACC supports the pursuit of a more *circular economy*, one that prioritizes resource conservation and efficiency, design innovations that enable longer product lifespans, and reuse, recycling and recovery technologies that allow us to capture the greatest value from materials that have traditionally been discarded.

**Industry efforts to control litter, recycling, reduce waste, conserve resources.** The industry continues to be a champion of litter education and prevention, waste minimization and recycling programs nationwide and are appreciative of the opportunity to participate in New Hampshire.

ACC and its members have a long history of investing in and supporting recycling. Through its Flexible Film Recycling Group (FFRG), ACC began the Wrap Recycling Action Program (WRAP) a partnership with US EPA, the Sustainable Packaging Coalition and several states. This initiative aims to increase opportunities for residents and businesses to recycle flexible plastic film including consumer and commercial product wrap; bags for groceries, produce and bread; and other common items like food storage bags and shipping pillows. Recycled film can be used to manufacture products such as durable outdoor lumber for decks and fences, and new packaging materials.

*ACC also has sponsored several projects in the Northeast including Save the Bay Narragansett Clean Up Day and litter reduction program; Green Up Day in Vermont; and Northeast Recycling Council (NERC) conferences.*

Our membership increasingly embraces sustainability and recognizes consumers' desire to recycle, and we welcome additional opportunities to pursue recycling and recovery initiatives. In recent years, ACC has ramped up engagement and leadership in national and international programs with these goals. For example, ACC participates in the following:

- Co-Leader of Operation Clean Sweep, which helps makers, shippers and users of plastic pellets to contain and prevent them from entering the ocean and waterways
- Founding partner of The Recycling Partnership, a national recycling nonprofit dedicated to improving curbside recycling

- Founding partner and sponsor of Keep America Beautiful “I Want to Be Recycled” campaign to increase consumer awareness and participation in recycling
- Supporter of Closed Loop Ocean, designed to fund waste infrastructure solutions in Southeast Asia
- Member of Ocean Conservancy’s Trash Free Seas Alliance with the goal of advancing scientific rigor on marine debris, exploring solutions and increasing public understanding

In addition to these domestic efforts, ACC helped launch the Alliance to End Plastic Waste. This new non-profit organization is committing \$1.5 billion over five years to end plastic waste and will focus on providing solutions to the largest sources of plastic in our ocean. Initially that work will be largely focused on so-called “high leakage” countries -- where waste collection and management has not kept pace with growing populations and growing economies. A study in Science Magazine estimates that almost 60 percent of plastic waste going into our oceans comes from just five countries, primarily in Southeast Asia. The United States accounts for less than 1 percent<sup>3</sup>.

### Public Policy Consideration

Below are recommendations to help bolster New Hampshire’s recycling system. Some of these suggestions may require direct public policy items others may be best implemented by creating incentives or creating guidelines.

**Economic development.** Reframe recycled items as valuable feedstock that create jobs. Work with commerce and economic development departments to develop markets for feedstock. Consider the South Carolina Commerce Department approach<sup>4</sup>.

**Recycling center.** Washington State created a “recycling center”<sup>5</sup>. The center facilitates research, but also contracts with the third parties to provide direct “market-maker” activities and directly support the private and public sector. It also has a special focus developing markets. This seems similar to the Northeast Resource Recovery Association in New Hampshire. However, it may be worth reviewing the new Washington State center to see if there are areas to amplify the Association’s work<sup>6</sup>. Also consider partnering with organizations like The Recycling Partnership to bolster local recycling programs<sup>7</sup>.

**Return to retailer programs**<sup>8</sup>. Consider partnering with ACC to implement a return to retail program like WRAP<sup>9</sup>. This program encourages residents to return film to participating retailers.

In Connecticut, WRAP is helping the state meet its 2024 goal of diverting 60 percent of material from landfilling. A public education and consumer outreach program in Greater Hartford resulted in a 11 percent increase in bags brought to store collection and 7 percent of other plastic films (e.g. bread bags, dry cleaning bags, etc.) Contamination of items collected decreased by 23 percent and public awareness about what to take back to retailers grew. There was a 10 percent increase in the number retail customers that reported that they “always” or “most of the time” take film back to retail collection to be recycled.

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<sup>3</sup> (Jambeck 2015)

<sup>4</sup> (South Carolina Department of Commerce, 2019)

<sup>5</sup> (66th Legislature, 2019)

<sup>6</sup> (Ahn, Coleman, Ricchiuto, & Walton, 2019)

<sup>7</sup> (The Recycling Partnership, 2019)

<sup>8</sup> (PLASTICS Industry Association, 2019)

<sup>9</sup> (Flexible Film Recycling Group, 2019)

**Recycling technology investment.** Consider if the state could eliminate barriers or create incentive investment in recycling technology. This might include:

- *Infrastructure investment.* Work with industry, state and local government sources, etc. on directly funding infrastructure. Would likely need to complete a needs assessment or feasibility study to determine what would be needed.
- *Foam grant.* Consider seeking a grant from the<sup>10</sup>e Foam Recycling Coalition (FRC). Launched in 2014, FRC was created to support increased recycling of foodservice packaging made from foam polystyrene. In order to meet this objective, the FRC shares general information on foam recycling, provides technical resources and offers funding assistance to programs ready to start or strengthen post-consumer foam recycling.
- *Demonstration projects.* Based on studies or belief where recycling infrastructure could be improved, find demonstration projects or proof of concepts to support. For example, ACC is a sponsor of a Secondary Sorting Pilot project in the Pacific Northwest<sup>11</sup>.

**Recognition.** Recognize public and private purchase of recycled content through programs sponsored by state and local governments and other nonprofit organizations. EPA assists organizations developing programs based on EPA's existing programs and guidelines.

**Procurement.** Consider adopting guidelines<sup>12</sup> to encourage public and private procurement of sustainable products and products with recycled content.

**Waste audits and policy.** State sponsorship of waste audits to better understand and publish the state's waste stream. Studies and ensuing policy should be both material neutral and consider the full environmental impact of items to avoid regrettable substitutions. Washington State recently created the Recycling Center within the Ecology Department to improve markets and better educate residents.

**Industry engagement.** Continue industry engagement and engagement with other parts of the value chain. Consider hosting regular meetings and publishing discussion drafts for public comments.

**Uniform recycling guidelines.** Urge the adoption of uniform recycling guidelines in order to maximize communications, education, and economies of scale for recyclers. This could also be a platform to encourage best practices such as appropriate moisture reduction or making deposits that recycling bin size appropriate.

Again, thank you for this opportunity to provide this information to the committees. If you have any questions or if I may be of further service, please feel free to contact me at 202-249-6614 or [Adam\\_Peer@AmericanChemistry.com](mailto:Adam_Peer@AmericanChemistry.com).

Best regards,



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<sup>10</sup> See video at (Materials Recovery for the Future, 2019)

<sup>11</sup> (American Chemistry Council, 2019)

<sup>12</sup> (US Environmental Protection Agency, 2019)

## Works Cited

- 66th Legislature. (2019, April 29). AN ACT Relating to sustainable recycling. Olympia, Washington: State of Washington. Retrieved from <http://lawfilesext.leg.wa.gov/biennium/2019-20/Pdf/Bills/Session%20Laws/House/1543-S2.sl.pdf>
- Ahn, S., Coleman, E., Ricchiuto, K., & Walton, K. (2019). *Recycling Development Center*. University of Washington, Evans School of Public Policy. Olympia: Washington State Department of Ecology. Retrieved October 22, 2019, from <https://ecology.wa.gov/DOE/files/3e/3e036fc2-2e55-4e4a-ba87-673654c28019.pdf>
- American Chemistry Council. (2019, October 22). *Secondary Sorting Pilot*. Retrieved from Plastic Packaging Facts: <https://www.plasticpackagingfacts.org/plastic-sustainability/secondary-sorting/>
- AMERIPEN. (2018). *Quantifying the Value of Packaging as a Strategy to Prevent Food Waste in America*. Washington, DC. Retrieved from <https://www.ameripen.org/page/foodwastereport>
- Flexible Film Recycling Group. (2019, October 22). *Wrap Recycling Action Program*. Retrieved from Plastic Film Recycling: <https://www.plasticfilmrecycling.org/recycling-bags-and-wraps/wrap-consumer-content/>
- Lord, R. (2016). *Plastics and Sustainability: A Valuation of Environmental Benefits, Costs and Opportunities for Continuous Improvement*. Washington, DC. Retrieved from <https://plastics.americanchemistry.com/Plastics-and-Sustainability.pdf>
- Materials Recovery for the Future. (2019, October 22). Retrieved from Video: <https://www.materialsrecoveryforthefuture.com/>
- PLASTICS Industry Association. (2019, October 22). *New End Market Opportunities (NEMO)*. Retrieved from Film Project: <https://www.plasticsindustry.org/supply-chain/recycling-sustainability/new-end-market-opportunities-nemo/new-end-market-opportunities>
- South Carolina Department of Commerce. (2019, October 22). *Recycling*. Retrieved from Southern Environmental Solutions of the Carolinas launching operations in Chesterfield County: <https://www.sccommerce.com/industry/recycling>
- The Recycling Partnership. (2019, October 22). Retrieved from <https://recyclingpartnership.org/>
- US Environmental Protection Agency. (2019, October 20). *Sustainable Materials Management*. Retrieved October 20, 2019, from <https://www.epa.gov/smm>