



The power of packaging in balance™

September 29, 2017

Task Force to Study Methods for Reducing Consumer Packaging that Generates Solid Waste
Chairman Victor Bell and Chairman Will Flower
c/o Robin Bumpen, Committee Clerk
Legislative Office Building, Room 3200
Hartford, CT 06106
Via email: robin.bumpen@cga.ct.gov; will@wintersbros.com; vbelle@enviro-pac.com

Re: **AMERIPEN Final Recommendations to the Task Force to Study Methods for Reducing Consumer Packaging that Generates Solid Waste**

Dear Chairman Bell and Chairman Flower:

On behalf of our members, AMERIPEN would like to take this opportunity to submit final comments to the Task Force to Study Methods for Reducing Consumer Packaging that Generates Solid Waste (“Task Force”) for their consideration of methods to reducing consumer packaging in the Connecticut solid waste stream.

When we analyze the original goals the Task Force set out, we see that the Task Force is primarily interested in three key themes:

1. Identifying recovery goals and the best means to achieve them.
2. Identifying ways to sustainably finance an increase in recovery in order to create a robust recycling system and increase diversion.
3. Optimizing packaging to reduce environmental impacts.

In noting these themes, we want to draw attention to the fact that each of these objectives has a different end goal and achieving success will not come from implementing one program or system but rather from a toolbox approach that recognizes the multi-faceted nature of the objectives, the waste stream and the stakeholders engaged. This message of a toolbox approach has been reinforced throughout the various testimonies proposed before the Committee, including assertions by both Joachim Quoden of EXPRA in his testimony on August 30th and in the Recycling Partnership’s 2016 State of Curbside Recycling Report, submitted to the Task Force on July 19th.

The following comments will discuss several themes and approaches that have been presented to the Taskforce and will conclude with specific recommendations that AMERIPEN would like to offer for the Taskforce to consider as elements of a final report.

Practice & Policy Recommendations

AMERIPEN continues to believe that the following approaches have proven to be the most utilized and effective tools applied by most high performing municipalities, and we strongly recommend that the Taskforce include recommendations for these solutions, first, in order to achieve highly effective recycling in Connecticut and achieve progress toward a more circular economy.

1. Universal Access to Recycling

Recycling rates are often discussed as if all consumers have equal access to recycling, but that is not the case. Access to convenient programs has a significant impact on the rate of recycling. A landmark study led by the Sustainable Packaging Coalition recognized that consumers will not recycle if it is 'inconvenient' to do so. When curbside recycling was provided automatically to all residents, the rates of recovery were much higher. If residents had to opt-in for service (i.e. private or public subscription) or drive to a drop-off facility they were less likely to recycle.¹

Connecticut's own Report by the *Modernizing Recycling Working Group* notes that only 50 percent of Connecticut households are served by municipal, or municipally contracted services. Thirty percent of households are served by private subscription services. The report also notes, for many areas, depots are the primary means of collection.² This suggests there is significant opportunity to improve access for almost 50 percent of Connecticut households.

In calling on the Task Force to recognize access to recycling as a valuable strategy we recognize cash-strapped municipalities may be discouraged by the need for potential investment. Again, we refer to the report by the *Modernizing Recycling Working Group* which notes that collection and transfer costs "**are higher than they need to be.**" The *Working Group* notes that streamlining services would reduce overlapping operators on routes, increasing efficiencies and reducing costs.

AMERIPEN would support strengthening efforts to encourage CT municipalities to increase access to and automate enrollment for curbside recovery services.

2. Cart Based Systems

Studies on the best practices of municipalities with the highest recycling rates point to the efficacy of cart based recycling as a primary tool to achieve higher volume of materials collected. Of the highest performing cities identified in the Recycling Partnerships Curbside Report, 83 percent of them used rolling carts to collect recyclables resulting in an average 100lbs/hh/year **above the average weight collected from bins.**³ "Deploying carts can grow curbside collection by as much as 60 percent."⁴ Carts provide enhanced access and increase in capacity for collection which reduces the 'inconvenience' to the consumer. Making recycling similar to trash pick-up further enhances convenience, thus incentivizing participation.

¹ SPC. (2016) "[2015-2016 Centralized Study on Availability of Recycling](#)"

² [Report of the Modernizing Recycling Working Group](#) (2012)

³ The Recycling Partnership (2016) "[The State of Curbside Recycling Report](#)"

⁴ AMERIPEN (2013). "[AMERIPEN Analysis of Strategies and Financial Platforms to Increase the Recovery of Used Packaging](#)"

Both the Recycling Partnership and the Closed Loop Fund provide funding to municipalities interested in growing their recycling rates by using carts. The funding for these programs has been financed by members of the packaging and waste industry who recognize the value in increasing collection through these systems.

AMERIPEN would encourage DEEP to promote the use of carts and encourage communities to request cart-based service in residential single family collection contracts.

3. Implementing Statewide Pay-As-You-Throw, Unit-Based Pricing or “SMART”

A number of studies have pointed to the significant impact unit-based-pricing has on increasing recovery.⁵ Unit based pricing—also referred to as pay as you throw (PAYT), or ‘SMART’ within Connecticut, incentivizes recycling over disposal by charging residents an increased fee for additional quantities of trash and unlimited recycling, as part of a base fee. While success rates appear to vary between municipalities, with rates reported between 20-60 percent increases in material diverted, AMERIPEN notes the national average is estimated at a 17 percent increase in diversion.

We recognize DEEP has long been a proponent of the PAYT tool with their ‘SMART’ program. It was also called out as a key strategy to support recovery in the *Modernizing Recycling Working Group’s* Report. While Connecticut recommends PAYT they stop short of legislating it. AMERIPEN notes that in many of the top performing states across the country, some form of unit-based-pricing is legislated.

AMERIPEN would support a statewide mandate of PAYT service for single-family residents. The mandate could be enacted if recycling drops below a targeted threshold. We recommend it would also specify the use of best practices, including a pricing differential that incentivizes a reduction in the amount of waste disposed, and the option of a smaller collection cart.

When we evaluate performance across America, a number of studies have reinforced the value of these three tools applied together as a strategy to increase access to, and participation in recycling. AMERIPEN further notes CT’s own data indicates that larger cities within the State are lagging in recycling. This trend reinforces that efforts to focus on increasing participation and access may be necessary to help DEEP reach its stated goal to increase the diversion of packaging materials by an additional 25 percent.

Regarding financing, these three tools together may do more to drive increases in efficiency and streamline costs across the system than direct injections of funding can⁶. Additionally, as noted

⁵ European Commission (2012). [“Use of Economic Instruments and Waste Management Performance.”](#)
Skumatz, Lisa A., Ph.D. and David J. Freeman (2006) [“Pay as you Throw \(PAYT\) in the U.S.: 2006 Update and Analyses”](#)
www.payasyouthrow.org

⁶ The State’s own [“Report of the Modernizing Recycling Working Group”](#) (2012) suggests costs could be reduced through system optimization. The recycling Partnership’s [The State of Curbside Recycling Report](#) implies that increased access in addition to other efficiencies such as hub and spoke MRFs and harmonization of recycling data could reduce costs and increase volumes.

previously, industry has created several accessible funding mechanisms in order to facilitate this transition.

Setting, Evaluating and Achieving Recovery Goals

In seeking to address packaging waste, we understand the State's ultimate goal is to increase recovery rates and achieve the 60% recycling and diversion goal. However, we caution that setting a goal to increase packaging recovery - by measuring tonnage alone - overlooks the light-weighting shift we're seeing across America. The packaging industry has made significant strides in reducing the amount of material used over the past decade, but since we measure recycling by tonnage these efforts are hidden and the raw data suggests that we are failing to recycle. Recycling one ton of PET bottles today requires 35,000 more bottles than it did a decade prior⁷. A ten year study of recycled material in one US city noted a 37 percent increase in materials when measured by cubic yards, but only an eight percent increase in cumulative tonnage⁸. When we evaluate packaging recovery through a weight-based percentage goal, it can look as if recycling is decreasing when the reality is we're becoming more successful at source reduction and in many cases, increasing our recovery rates!

Recycling is often cited as an environmental activity—an action we can take to reduce greenhouse gases, yet in setting goals based on weight-based percentages we inadvertently discourage the emphasis on environmental outcomes and instead incentivize increased volume and recovery of heavier materials. Weight-based goals overlook the role of source reduction, material selection and environmental outcomes from manufacturing, and reprocessing.

Finally, Connecticut's own *Working Group to Modernize Recycling* identifies the most effective means to achieve state recycling goals will come from improving practices around the management of "compostable materials, construction and demolition debris, and organics". The *Working Group* does not list packaging as a high priority strategy.

AMERIPEN would support a shift in re-framing recovery goals to include an evaluation of environmental impacts. We believe this approach may be more effective in informing effective strategies for Connecticut DEEP's⁹ next steps. Research from Dr. Tim Townsend at the University of Florida offers valuable insight into how a shift in focus can provide new and valuable perspective regarding recycling rates and opportunities.¹⁰

Sustainable Material Management as the Toolbox to Support the "Tools"

When we look at the Task Force's objectives, we recognize a desire to reduce the environmental impact of packaging through the reduction and re-use of material. This is a goal we all support. As AMERIPEN has listed a number of tools proven effective to support this outcome, we would also like to emphasize the value in approaching the end-of-life management of packaging from a holistic lens. One approach

⁷ Waste Management Media Room "[Recycle More? Or...Recycle Better?](#)" April 11, 2016

⁸ Data from Waste Management

⁹ The following resources offer insight into how different states, academics and international cities are approaching a shift in defining goals from outcome towards impact.

[Eunomia Carbon Tool for UK Municipalities](#)

Dr. Tim Townsend "[Florida Solid Waste Management: State of the State](#)" presentation to RFT Oregon Senate Bill 263

¹⁰ Dr. Tim Townsend "[Florida Solid Waste Management: State of the State](#)" presentation to RFT

adopted by Oregon and others is sustainable materials management (SMM). Rather than identify “winners and losers,” SMM encourages consideration of the interplay and purpose of materials to understand where the best opportunities to mitigate environmental impacts may lie.

When we apply an SMM lens to Connecticut’s waste stream, we note that food waste is the largest contributor to Connecticut disposal facilities—making up an estimated 22 percent¹¹ of materials. While strategies exist to manage food waste upon disposal, and these are identified as a top priority by the State’s *Modernizing Recycling Working Group*, we note that prevention of waste in the first place results in the greatest environmental outcome. Composting and anaerobic digestion results in a **six to sevenfold increase in greenhouse gas emissions** over preventing food waste in the first place.¹² Packaging has been identified as one of the top three strategies to *prevent* food waste. Viewed from this perspective, strategies to tackle packaging in isolation of its role in product protection and food waste prevention may be short sighted and result in increased environmental impacts. Applying SMM provides this holistic view of waste generation, shows the role materials and products play across the lifecycle, and evaluates where we can target constrained resources in order to enact the greatest outcome.

Financing Sustainable Recycling Systems

Instead of addressing the stated goals of the Task Force or recognizing their multi-faceted nature, the Committee discussion has mostly focused on the adoption of a single policy change: extended producer responsibility (EPR) for packaging. While the concept of EPR requires producers to take financial and management responsibility for products at their end of life, there has been no study to date to prove the policy’s efficacy in driving efficiency through the system. Nor is there comprehensive data to assess the impact of EPR in reducing costs to the State. In fact, some reports suggest that EPR increases costs due to additional administrative duties¹³. EPR systems are highly variable across the globe, and contractual obligations, in some cases, have made it difficult to provide full transparency into costs and revenues. As a result, despite a number of attempts to draw comparisons, there is significant agreement that there are simply too many variables across EPR systems to draw meaningful comparisons and insights into efficacy and cost. In some cases, EPR programs, like the electronics take-back programs, are witnessing an increase in fees and unanticipated costs, partly as a result of fluctuations in commodity pricing and global trade restrictions. Other initiatives, such as Ontario’s Blue Box Program, are noting that the increased desire to recover more material is resulting in increased costs, yet resulting in limited impact on overall recovery and environmental outcomes.¹⁴

Drawing conclusions based on EPR in other regions is further complicated by demographic and lifestyle nuances. Household size, geographic difference, population density and consumption patterns all impact how we buy, consume and dispose of materials. Curbside collection for example, is less prevalent

¹¹ Connecticut, Department of Energy and Environmental Protection (2015) “[2015 Statewide Waste Characterization Study.](#)”

¹² Oregon DEQ (2017) “[Oregon DEQ Strategic Plan for Preventing the Wasting of Food](#)”
NRDC (2017) “[Wasted: How America is Losing up to 40 Percent of its Food from Farm to Fork to Landfill](#)”

¹³ SAIC (2012) “[Evaluation of Extended Producer Responsibility for Consumer Packaging.](#)”
United States, Resource Conservation Committee, Choices for Conservation: Final Report to the President and Congress, 113-120, (EPA 1980).

¹⁴ Ontario’s Blue Box program has seen a 78% increase in costs as they’ve attempted to reach a 70% recycling rate. Much of this has been attributed to costs in collecting and processing material that ultimately ends up in landfill. Lakhan, Calvin (2014). “[Diversion But at What Cost? The Economic Challenges of Recycling in Ontario](#)”

in Europe where walkable cities and multi-family homes are more predominate. Rather than draw insights from other regions, a number of studies¹⁵ have been undertaken to evaluate what works best to increase recycling across America. The findings show: “[t]he “most successful programs are seen when local governments are engaged in the recycling program and have triggered an ‘action’ to incentivize recycling.”¹⁶ Incentives can be behavioral changes, such as increasing inconvenience, but also financial.

Optimizing Packaging to Reduce Environmental Impacts

The Task Force has expressed significant interest in exploring ways to reduce the use of packaging and promote re-use and recycled content. This emphasis on source reduction through design and reuse is recognized as the preferred practice on the waste management hierarchy. Yet we note that when it comes to packaging there is a fine line between product protection and source reduction in order to ensure necessary outcomes. We refer to this balance as *packaging optimization*—using the least amount of materials and resources to drive the best outcome.

While many advocates of EPR argue the creation of financial penalties on industry will incent eco-design, no study to date has proven this and direct experience of our manufacturer members contradicts this. Data from Europe notes that the amount of packaging by weight per person continues to increase¹⁷, suggesting that the implementation of EPR schemes and other mandates for packaging optimization have little impact. Even the EXPRA testimony before the Task Force notes that packaging optimization is likely to result from the influence of many more factors than simply the implementation of EPR alone.

The U.S. packaging industry has invested significantly in packaging optimization in hopes of reducing material and resource demand while still providing its primary purpose of product protection. This success is documented in the U.S. EPA Facts and Figures data, where it was noted that the per-capita volume of packaging continues to decrease in the U.S. while still retaining necessary product protections. This shift has resulted in overall environmental benefits. A study conducted by the Grocery Manufacturers (GMA)¹⁸ of 23 major U.S.-based consumer goods companies noted over 180 packaging improvement initiatives with approximately 80 percent of those initiatives focused on source reduction. In total, these projects were estimated to result in the avoidance of 1.54 billion pounds of packaging, representing an estimated 800 million pounds of plastic and over 500 million pounds of paper. Furthermore, approximately 50 percent of those projects reported efforts to increase recycled inputs in their packaging.

Furthermore, U.S.-based business have been quick to embrace the How2Recycle Label created by the Sustainable Packaging Coalition as a means to provide clarifying information to consumers on recycling. The How2Recycle Label not only reduces consumer confusion over what is and isn’t accepted in curbside programs but it also serves to reduce contamination rates and increase the value of recycled material streams—all of which help reduce recycling system costs.

¹⁵ AMERIPEN, (2013) [100 Cities](#)

SPC, (2016) “[2015-16 Centralized Study on Availability of Recycling.](#)”

The Recycling Partnership, (2016) “[State of Curbside Recycling Report.](#)”

¹⁶ The Recycling Partnership (2016) “[The State of Curbside Recycling Report](#)”

¹⁷ Eurostat “[Packaging Waste Statistics](#)”

¹⁸ Grocery Manufacturers Association’s Annual Report: <http://www.gmaonline.org/file-manager/2016%20Environmental%20Success%20Stories.pdf>

Clearly the US packaging industry is already incentivized to recognize the economic and environmental value in optimizing packaging and reusing materials.

Conclusion

We thank the Task Force for the opportunity to share our thoughts and conclude by asking you to consider that the goals set before you extend beyond a simple solution. A holistic approach which considers how goals impact outcomes and where unintended consequences may arise is needed. Based upon the testimony presented before the Task Force and data generated on the State of the US recovery system, we would encourage the Task Force to consider the following:

1. Explore the role participation, consumer incentives, and access play in increasing recovery and reducing overall system costs. This can be achieved by applying strategies to promote:
 - a. **Universal Access to Recycling**
 - b. **Use of Cart-Based Services**
 - c. **Application of Statewide PAYT requirements**
2. Consider a lifecycle approach (SMM) to managing wastes. This can be done by identifying high target materials per the State waste characterization studies, by identifying the inadvertent consequences that can occur by only looking at end-of-life and by realigning goals to consider impacts rather than outcomes.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Lee Anderson". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Lee Anderson
President – AMERIPEN