Meeting Summary-02/20/2024

The group discussed the EPR (Extended Producer Responsibility) Needs Assessment and explored ways to enhance plastic recycling processes to boost efficiency in Colorado. Concerns were raised about the financial sustainability of EPR initiatives, highlighting the lack of adequate infrastructure as a major hurdle. Specific challenges and strategies for reducing plastic waste in Colorado were discussed. The need for local infrastructure development was underscored, with an agreement on the potential for expansion in Colorado to facilitate this growth. The significance of regionalization, especially on the west slope, was pointed out as a crucial factor for success. Insights from EPR meetings revealed industry objections to the collection and baling of food packaging bags, indicating a broader issue with recycling certain types of plastic packaging. These included the high costs associated with upgrading facilities for the collection of flexible plastic films and the absence of clear end markets for these materials.

The group stressed the necessity for cooperation among various stakeholders to overcome these challenges. It was acknowledged that collaboration is essential for fostering a circular economy in post-consumer plastic recycling.

The conversation also touched upon the importance of simplifying the recycling process to boost both efficiency and sustainability. The involvement of municipalities in recycling efforts was deemed critical, along with the empowerment of residents and businesses through the provision of information and resources.

Streamlining plastic recycling processes.

Adam:

- Explained that most plastics, including PVC, polycarbonate, and nylon, sink in water, while offensive flow plastics like foam-filled ABS float, and that cross-contamination between similar plastics is not a significant issue.
- Plan to streamline processes by blending industrial and consumer-grade materials to create products with specific densities and properties.
- Aim to develop compounds for use in products made at their facility, using a combination of internal materials and external feedstocks.
- Express concerns about the infrastructure and cost modeling for EPR in Colorado, citing volatility in the industry and potential overwhelm of processing capacity.
- Emphasize the importance of recycling plastics before cleaning them, as it reduces the need for excess processing capabilities.

Plastic waste processing infrastructure in Colorado.

- Suggested expanding processing infrastructure across Colorado's four regions to handle plastic waste more efficiently.
- Pepsi and Coke are using preforms in their bottling process, with some companies buying them from manufacturers and others producing their own.

• Investment in infrastructure and businesses to process waste materials in states like Colorado may be necessary due to a shortage of processing facilities.

Local plastic recycling and collaboration.

Adam:

- Emphasized the importance of local investment and partnerships to build out recycling infrastructure, citing the need for both private and state funding to create a sustainable system.
- Discussed the challenge of securing volume commitments for a new plastics facility, noting that Colorado plastic should not be sent out of state for processing.
- Discussed potential ways to incentivize local companies to keep their waste local, such as collaborating on processing and consolidation to reduce costs.
- Close working relationships and sharing capabilities can help streamline efficiencies and cut transactional costs in the waste management industry.

Packaging ownership and recycling system funding.

- Question on the packaging producers' role in the recycling system, including who owns the material and how it is sold to markets.
- Adam explains that the current system has the collector owning the material, but EPR (Extended Producer Responsibility) aims to provide oversight and funding for better systems through an additional charge on packaging.

Recycling and circularity in the plastics industry.

- Pros must determine how to keep circular economy improvements in the US to avoid material being drawn outside the country.
- Collaboration between waste management companies and manufacturers to collect and process post-consumer plastic for use in packaging.
- Adam discussed the company's goal to produce 50 truckloads of quality PCR resin per month, with the aim of stabilizing volatility and making profits.
- The importance of using locally manufactured products, such as laundry and soy milk jugs, to create a circular scenario for packaging.

Recycling and environmental impact of plastic products.

- A deposit system was suggested to encourage companies to take back their materials, similar to post-World War II era standards.
- Suggested that a small fraction of a cent added to product cost would be insignificant to consumers but could fund recycling programs.
- Plastics are prominent on the material list, with flexible plastic packaging a concern for collection and end markets.

Plastic film recycling in Colorado.

- Flexible packaging collected in single stream may raise concerns for recycling facilities.
- Brian believes industry objections to collecting plastic bags led to their inclusion in curbside recycling.

Recycling and plastic waste management in Colorado.

- Discussed items on the secondary list for recycling, such as toothpaste containers, and reassessing the validity of certain materials in commercial settings.
- Simplify recycling processes to increase efficiency and reduce confusion.
- Discussed the challenges of recycling nursery pots and other materials due to low value and lack of proper technology.
- Improve data collection and simplifying the recycling process to make it more efficient and open the door to assessing other materials.
- Recycling education and empowering municipalities.

Potential Future Discussion/work:

- Discuss ways to streamline efficiencies and consolidate materials to limit costs through close collaboration between companies.
- The best way to collect plastics in the mountains and get it delivered to processing facilities in a cost effective, consolidated way.
- Meet with Republic, Waste Management, Eco-Cycle to work more closely on supplying their materials to local processing facilities.
- Feasibility of deposit program in Colorado
- Upgrading Denver area MRFs to capture plastic films
- Simplify and prioritize recycling streams to reduce confusion
- Recycling data collection and reporting
- Consider eco-modulation fees to discourage non-recyclable packaging
- Explore state investment to support recycling additional plastic streams
- Empower municipalities and provide them recycling coordinators and education

Food Grade Plastic Feedstocks Resources

- Use of recycled plastics in food packaging (Chemistry Considerations): Guidance for Industry - <u>download (fda.gov)</u>
- Food grade recyclate as a challenge of the circular economy | Blog | Sesotec