S.113 Single Use Plastic Bags, Plastic Straws, and Expanded Polystyrene Food Containers

The Administration's position is neutral on this bill.

Today I will provide background information regarding single use bags and changes to the recycling markets, along with options that some states and counties have or are considering to implement.

Single Use Bags

Why are there Plastic Bag Bans?

- Many countries/counties/cities were originally concerned due to visible marine litter along coastlines. It has since emerged as more than that, in trying to address potential ecosystem impacts, increases in the amount of plastic waste generated, and resource conservation issues.
- Resources: In general, single use bags take more resources per use compared to durable reusable bags that are used repeatedly (key is used repeatedly). There have been several Life Cycle Analyses (LCA), where they considered various potential environmental impacts during the cycle, starting with material extraction/production and end-of-life. Important to note that LCA assumes proper end-of-life management and not impacts when plastics are released into the environment.
- Plastics bags vs. Paper Bags (other considerations beyond LCA)
 - o contributes to visible litter, doesn't degrade easily
 - o obstructs natural environment, drainage systems
 - o poses risks to wildlife, especially aquatic, and potential risks to food chain
 - o causes problems to solid waste facilities:
 - litter at landfills
 - issues are Materials Recover Facilities (780 staff-hours/yr cleaning film off machinery in 2017)
- Waste: plastic bags takes up small but measurable amount of landfill capacity (less than 1% of VT waste disposed by weight)

Who:

- At least 65 countries throughout the world and more than 375 US counties or municipalities have enacted legislation/ordinances to ban or charge fees for disposable bags.
- California and recently New York have passed statewide plastic bag ban programs. In Hawaii, all 5 counties have adopted programs, essentially covering the state.

What:

Voluntary vs. Mandatory programs

Voluntary programs have not demonstrated to be effective elsewhere:

- The challenges for voluntary programs are lack of convenience to recycling and not much incentive if plastic bags are "free".
- Studies indicate that programs where customer get "credit" for bringing reusable bag are not as
 effective as customer having to pay for plastic bag.
- o EPA study indicated that only ~5% of plastic bags are recycled nationally

- California: lack of success of multiple voluntary programs led to ~130 cites/counties adopted mandatory programs that eventually led to a statewide ban
- Mandatory Programs have demonstrated more success in reducing the number of bags used, less litter. Examples of reduction in other impacts:
 - o San Jose, CA: 10 cents per bag fee, litter in storm drains (which can cause clogging of drains) decreased 89%.
 - o Montgomery Co, MD (min. 5 cent fee) ~55% reduction in plastic bags in overall litter.
- Mandatory Options: Bans, Fees and Hybrid Programs
 - o Bans:

Generally does not allow retailer to provide a single use bag to customer, some specify material, thickness of reusable bag

- both single use plastic and paper bags
- only ban single use plastic bags
- o Fees:

Retailer can provide a disposable bag to customer, for a fee. Some only allow paper (recyclable) bags at a fee. Some allow retailers to keep a portion of fee.

- both single use plastic and paper bags
- only single use plastic bags
- Hybrid: (most common model, more than 150 cities and counties in US, includes CA)
 Ban plastic bags and charge fee for single use paper bags
 Allows retailer to provide a paper bag at a lower cost than a durable bag to customers who forget to

Allows retailer to provide a paper bag at a lower cost than a durable bag to customers who forget to bring a durable bag.

- Fees range from 5 cents to 25 cents, with majority requiring a 10-cent fee per paper bag.
- CA has 10 cent fee for paper bags
- NY counties can decide whether to have a 5-cent fee on paper bags

Exemptions: most programs exempt bags used for produce, prescriptions/medications, small hardware items, etc.

Recyclables and other single use items/packaging

- Recycling markets have drastically changed when China implemented importation restrictions early 2018, resulting with significant increase in the amount of recyclables on the US markets, which negatively impacted on the value of recyclables.
- Market changes have resulted with increase cost to recycle typical blue bin items in VT and throughout the US.
- Nationally, it is recognized that we need to manage recyclables so that they can be used as inputs to manufacturing new items, which will make recyclables more valuable.
- European countries have adopted the "Circular Economy", with at goal to design products and packaging to reduce waste, make recyclables valuable, and create less expensive inputs for manufacturing.
- o In Vermont and across the country, there is a need to invest in recycling infrastructure, however, it is challenging at a time when the recyclables generate less revenues.

- There are also changes occurring with packaging, with more material being used that is hard to recycle. There is an increase in the amount of single use items as well.
- The changes in packaging and challenges with the recycling markets has prompted some states to consider different options, such as Extended Producer Responsibility for packaging and printed materials (WA, CT, IN).