

SWANA Palooza 2-26-19

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David Biderman, panel: The new normal in recycling

Robin Wiener, ISRI, “Voice of the Recycling Industry”,

muni stream is about 1/3 of recycling industry. Demand is crucial. ISRI sets specifications. Global trade. US has excess supply.

Crisis>> more cross industry collaboration, focus on quality, more investment in equip, tech, process changes.

Bob Cappadonna, Casella.

5 million tons diverted by National Sword. US. Domestic paper capacity increasing- China and US driven.

MRF retrofits – optical sorters, disc screens, etc. Slow lines, more labor. Control quality of incoming material. Lithium ion batteries #1 problem, safety issue. Half flammable incidents due to Li batteries.

Coryn Rico, GVB

China situation not temporary. Painful but healthy transformation. System pushed over tipping point, reorganization creative change. Adapt to become a Better, more resilient system. Develop a circular economy. “Rethinking recycling: how cities can adapt to changing markets”

Stephanie Sidler, Canada Fibers (MRFs)

Ontario, ... lots of press about recycling crisis. SSR, Carts, changing materials >> contamination 25-30%

Medical waste, sharps big increase. Invest in tech, PMC support (communication, education campaigns with munis), research/innovation, domestic mkt dev, provincial, local gov't engagement.

David Biderman: what's in store for 2019-20? China plans to finish closing the door.

Robin W: Trade war adds a layer of complexity, but some material ie OCC still moving. Redefining SW import rules, may redefine "raw materials" to include processed recyclables mill ready. (rumor). US developing processing and end market capacity.

Bob C: Residential material not likely to make 0.5% standard. Contam 8-35% coming in, avg 25%. Local gov'ts understand, residents confused. MASS created universal list. Focus on what you can control.

Coryn: still demand, but higher standards by other countries. Tech investment needed. Focus on plastic 1,2,5. Office paper, occ, metals have domestic mkts.

Stephanie: paper is main concern, quality. Get organics out. Change contract language, more flexible.

US government? ARD EPA convened summit, identified 4 areas:

1. Education 2 infrastructure; 3 secondary material markets, 4 Measurement.

Workgroups in each area dialogue among stakeholders. April draft framework identifying actions both short and long term. Seeking participants. Collective action is needed.

Phil G: Industry takeover in US by China? Robin: Investment and operation by Chinese companies, but not takeover. Equipment development, coming from china. Tension. Bob C: US, Canadian companies are investing too. Thinks they will invest but not take over.

Ohio lady: munis are shutting down recycling, costs more than disposal. What can they do? Coryn: not the answer, is short term reaction. Took a long time to build recycling system. To mitigate, look at weaknesses in current system. Some return to multistream. Reeducate. Realize it is service that costs money. Incentivize the right things. PAYT.

Guy fro RI: Much material that China won't accept is coming from China. Make them take responsibility? Robin: free market, driver is protectionism. ISRI raised the issue. Is hypocrisy there.

Coryn: free market can do good, but doesn't price in negative externalities. EPR can do good, need governments to help. US hasn't done a good fjob. Canada, EU are doing.

Pizza boxes? Depends on the mill.

Stephanie: no programs have been cut. EPR: BC full, Ontario 50%, other provinces are coming along. Programs do cost money

Plastic in the Ocean (I came in late)

Microplastics eaten. Contaminants. Concern that chemicals go up food chain. Don't know much yet. Lab studies, clear negative impacts. Can't extrapolate to natural environment. Don't know where plastics are, what exposure is. Questions remain about negative impacts to wildlife and humans, not clear.

Anti litter campaigns Trash Shouldn't Splash.

Chris Sui, Closed loop partners Asia (China) – venture capital

Much lost value in ocean plastic. Linear economy is problem. Most ocean plastic from Asia. High population around rivers. China low recycling rates, 1.4 billion pop. Investing in circular economy

Major brands have zero waste goals, 100% recycled content. China rolling out zero waste cities.

Closed Loop Fund US, China, Europe, provide capital, grants, loans, private equity.

AMP Robotics: sortation at MRFs. Can distinguish brands as well as material types. Started in China after ban, driving China investment in US processing.

April Crow, Circulate Capital. Ocean plastic in South and Southeast Asia. Where will funding come from? Circulate Capital addressing, catalyze add;l funding.

Ocean plastics cost \$13B/year, commodity loss at least \$80B/year. Leaking countries: worst are India, Indonesia, Vietnam, Thailand, Philippines Stemming the Tide.

Circulate capital spun off from Closed Loop Fund. Investigated opportunities with Ocean Conservancy. **Brand owners see risk to their businesses from Ocean pollution.**

Demonstrate that waste and recycling is “investible”. Not as many investment opportunities as they hoped. Immature waste collection systems in Asia. Start with philanthropic capital, develop catalytic capital. Convert waste plastic to revenue. Work with local communities, entrepreneurs in Asia.

Science>> solutions; many scientific gaps still. Where is all the plastic in the ocean? What is it doing? Identify where it is coming from local level. How to stop – physical barrier, reduce initial waste.

China 5 year plan: sustainability is a high priority, spurring investment in recycling. US industry needs to understand where China, Japan are going. Chinese industry was not prepared for change. Have excess capacity now. Opportunity to collaborate (US/China private sectors).

Japan is pushing EPR. Influence design. Taiwan is into circular economy.

April: why is attention/action coming together now? Science and data, better understanding, mainstream, boardroom topics. Not just recycling, but reduce and reuse.

Alison Leary, Newton City Council: struggling to meet recycling goals. Re Bans, piecemeal approach to bans locally. Lack of support from State, federal, private sector. How can we engage with private sector. Communities face costs, unfair. Invite brand owners as often as possible, understand their perspective, unintended consequences of policies.

Deposit return schemes result in 40% less leakage. Need financial incentive

Contamination TRP Chris Cody, Tricia Tiede, Alito, Marissa PD

Work with communities and companies. Measurement is important, they do.

Brand owners pay, seeking feedstock. Connect producers with MRFs,. Increase recovery, reduce contamination. Contamination rates >20%. TRP Anticontamination toolkit. **Keep it simple. Graphics, images, few words.**

Mailer, tag, reject, mailer, signage.

Rejection didn't result in lower setout rates in Lowell and other munis. (Norwell?). Increases capture, reduces contam, bagged recyclables significantly. **Focus on up to 6 items, otherwise overwhelming.**

Challenges to fighting contamination: Conflicting information. Misleading labelling. People don't want to be told what to do, apathy. Hierarchy of needs. Changing materials. Wishcycling. High turnover with haulers. Stupidity. Habit. Laziness. Private haulers. Staffing, funding. Resident turnover. Languages. PAYT. Need consistent messaging, saturation. Educate elected officials, operations too.

Alita Kane (Tampa FL): 5 approaches

1. Education- Direct; Social media; signage. Be systematic, creative, not boring.
2. Enforcement – some won't pay attention to education. Consistent.
3. Harmonization – coordinated regional message.
4. Tagging – direct communication, with or without noncollectino.
5. Outreach – community involvement i.e. events, presentations, media

Value chain collaboration for recyclability

Keurig Dr. Pepper Snapple Green Mountain Coffee . Coffee production is at risk due to climate change.

Keurig KCup: In 2014 goal to make 100% recyclable product by 2020. Long process. Huge investment. Involves many players – suppliers, customers, MRFs, reclaimers, equipment, stewardship orgs (CA), governments, brands/mfrs. . Good data is hard to come by.

Must withstand high heat, pressure, puncture, O2 barrier, recyclable in practice in most places: PP#5!

Multiple materials requires separation. Size too small? Tested at 12 NA facilities, avg 90% recovery potential. 31-91%. "Check Locally" to recycle empty cup. **How2Recycle label prominent on package.** In BC, did incoming audits – 61% did it right initially. After consistent, persistent outreach, up to 70%.

Closed Loop Fund- invested \$10M. TRP – local outreach. KAB PSA, APR Demand Champions.- incorporating recycled material in pallets, mugs, cups.

Acknowledged contamination issue.

What inspired this effort? Consumers wanted. Compostable didn't work.

They make pods for about 70 brands, vast majority. Planning now for US rollout, collaborating with localities on messaging. Filter can remain attached (paper or PP disk).

What about the 30% that were improperly prepared? Not a big impact. 2" screens, standard, able to screen cups. 3" screens sorted most. Demand is high. Connecting processors with end markets.

Food waste recovery

Michael Orr, Cambridge: Dense, 113K residents, high tech, universities. Went from 23 to 16.5 lbs/HH/week. 41% of trash was compostable in 2016, 16% recyclable (low). Long history of food recovery, progressive city.

Added 2 schools/year starting in 2009, all do now. Dropoff recycling with Whole Foods. Small companies collected privately for several years. 600 HH pilot in 2014, 5200 in 2016. 2018 city wide, \$1M from City council, DEP grants. 25K HH carts, kitchen bins, bags, marketing, consultant, rear packer truck. Amore animal resistant than trash. Food, paper, no plastic compostable (except liners).

Outreach on bus stops, public trash receptacles, packer truck, news (Globe), PBS newshour.

Goes to AD, WWTP, some controversy. Preprocessed at WM. Reliable outlet. Produces electricity, heating, biosolids capture. Costs \$60/ton. Disposal is \$99/ton (!). 7-8% dip in disposed tonnage!

Commercial food waste ban helped. Spurred investment in facilities, including WM/STS in Charlestown.

Tips for Aspiring Writers, Barry Shanoff, SWANA counsel

Number 1: audience. They can stop reading any time- make your point early, then expound.

Topic: Why now? Who should care? Know when topic was last covered. Advance discussion.

Purpose: project report? Analysis of alternatives? Opinion – need authority. 80% info, supporting facts, 20% opinion.

Authority: why should people care what I say? Does personal interest affect credibility? Twist on expectations: "Environmentalists support nuclear power". No personal gain from outcome of decision, more credible. Perception.

Content: edit, revise. Let it all pour out in first draft, come back later to reorganize, edit, trim.

LTE: get to the point. Raise opponent argument, answer it in advance. Refute opponent's strongest position. Keep it short. 200 words.

Short, clear, strong sentences, Fewest words. Avoid clichés. "tool in the toolbox" "outside the box"

Do lead sentence after written. Title, opening lines last. . Pose questions.

Ask good writers for advice, emulate. Find a writing group of peers.

Awareness, research, critical thinking and reading, attention to detail, style, stamina, motivation.

He can review our writing. Pick a topic, send up to 750 words to bss@shanlaw.net

MSW Management Mag editor: knows a good story, how to tell. Use freelance writers, long articles.

Practice, there will always be someone better. Write often. Grammar, spelling, punctuation. Is there more to tell? Challenge yourself to do better.

Cole Rosengren Waste Dive. Don't procrastinate, get something down, then revise. Read as much as possible. Waste Dive looks for fewer, more in depth stories lately. Find primary sources. Show up. Stick with what you know. Avoid going down rabbit hole. Looking for material.

Mallory Shapansky Waste360 editor: Tell a story. Draw in audience. Read. They are looking for writers. Go on tours, research. Don't fear asking questions of MSW experts. Get it right.

Follow AP style. Use active voice, not passive. If good grammar sounds clunky, find another way to put it. Let it sit and go back. Use plain English. Keep sentences short. Spice up with quotes and song lyrics.

Plainenglish.gov – tips on writing in plain English. Wordhippo.com – thesaurus

Shrinking capacity, rising costs in New England

Ecomaine Kevin: Mobro Garbage 7 months at sea spurred recycling.

Some communities ending recycling programs, short sighted.

New paper definitions. Different mix than 10-20 years ago, less newsprint. Maine mills OOB 10 years ago, went to China. US mills being retrofitted for recycled pulp, including Rumford ME. Stockpiled paper now moving, negative value. Ecomaine is losing money now. Have rainy day fund. Still no charge for recycling to member munis. Taking commercial material (source separated), cushioned blow.

Waste hierarchy, focus on higher rungs. Maintain/increase PR at this time. Contamination/wishcycling.

Facility improvements. Adapt to packaging shifts. OCC peak with new soft pkg?

Food AD on farm. WTE upgrades annually. \$70/ton, plus energy sales, metal recovery. Expenses \$75/ton. Mining ashfill for nonferrous metal. Facility in PA is testing the recycling of flexible packaging.

Phil Goddard, Bourne ISWMF: Babson Marketing degree.

Mobro inspired to start recycling in Bourne, where he was on RC.

will only have 2 LFs by mid 2020s in Mass. 44% of waste to WTE. Material Mgmt study: more export to OH, other states. Unpredictable costs. More source separation better. MSW, C&D, soils (!), residuals, med waste, bulky, storm debris- Mass, can't handle all. Daily limits.

Stewardship in all SNE state master plans More risks, costs for disruptions. Look at new tech. Rail haul increasing.

Risks, challenges: Recycling markets, quality changing. **Reliance on private sector for capacity.** Financing, siting challenging. Political football. Disruptions: fires, natural disasters, bankruptcies, equipment failure, market, transport changes.

Way forward: new conversion tech, Eco-parks/industry collocation, EPR, source redux, educ, QC. China crisis raised awareness even with generators, consumers.

Considerations: export? Backup plans. Climate change impacts. People from many walks of life need to help solve problem.

John Fischer, MassDEP:

SWMP, capacity: waste reduction goal: reduce to 4.5M tpy by 2020. At 5.72 TPY. Not on track.

40% of trash is waste banned material. Focus on compliance. OCC big.

Focus on market development, in state: glass, packaged food, mattresses, better processing.

Reducing contam. Reuse/waste redux – pkg, ofc furniture, repair, sharing economy.

Capacity study: WTE: 3.25M TPY, 66% of MSW, 44% of all waste in MA.

10 LFs, most closing imminent. 1.26M TPY now. 54 TS, C&D facilities.

8 MRFs, full, 690K TPY, 629K recycled. 8.5% of total SW in MA. Need more processing capacity.

17 C&D processing facilities, 1.34 TPY, permitted for double that. 250K TPY recycled.

197 compost, 20-30 take food. 8 AD facilities, have excess capacity (at 36%). 111K tpy received, 353K tons more capacity.

Textile capacity underutilized.

Impact **of plastic bag bans on paper or plastic bags?** Kevin: some decrease but still have issues with **plastic bags in equipment.** Didn't address paper bags, whether they have fees. More people bringing reusable bags.

Communication for behavior change

Toronto- use humor “Get that garbage outa here” Jack Armstrong (sports announcer) worked well. People want to know why not. Long-term, multi prong approach. Clever, unique. KISS, keep repeating.

Repeat campaigns multiple times, enhance each time. Stagger tactics. Multiple media types. Edutainment. Evaluate impact of each strategy before repeating. Professional market research, design.

Ecomaine: Roscoe cartoon character. People tour facility, B ball team mascot presentation. TOL Days

China ban impact on paper recycling

AFPA Mark Pitts 2013 Green Fence; enforce 2006, 10 China policies. Smuggling, illegal imports. 2018 Mixed paper ban, 0.5% contam, permit restrictions, tariffs.

Partnered with MIT 4 years, model paper recovery scenarios. Complex system. LCA in different scenarios. Recovery, grades, env impacts. What fiber grades would be most impacted by China ban? What domestic mfrs could take up slack? How big gap? Complicated fiber flow chart.

2016- 54M tons paper recovered US, 22M tons exported, 14.5M to china. Of China 14.5M tons, 54% OCC, ONP 27%, mixed 16%. 2.4M TPY mixed paper; 30% of mixed paper absorbed in US – container-board, tissue. 1.6MTPY “homeless”, gap. If all paper grades banned, would leave gap of 9M tpy (?).

Jan 2018: only largest fiber cos in China could get import licenses. August: tariffs of 25% on recovered fiber. 10% on recycled pulp. Oct 2017-2018 drop in China imports for all RCP 60%. OCC, high grade paper not much change. Most decrease ONP, Mix.

Exports to other Asian countries from US doubled from 2017-2018. 18% to non Asia countries.

Value plunged : OCC \$180 high, \$80 now in less than 6 months.

Outlook: US recycled paper consumption up 2.2%/684K TPY. New capacity growth- pkg, tissue. AI processing being developed. ARD EPA initiative to improve system education.

Paper grade mix has changed drastically in 10 years. OCC 49% to 62%, mixed 24% to 15%, total paper slightly lower. Post consumer (residential) is about 20% of total paper. Recovered fibere markets are dynamic, resilient.

When value is zero, there is incentive to use it. SSR paper is hard to use. DS better, some shifting.

EPR Challenges, Summit

Allen Langdon, Encorp Pacific (BC Prod Stewardship)

July 2004 BC enacted Environmental Mgmt Act (frameworks). Regulation 3 months later. Phased in materials – waste, tires, batteries, HHW, paint, etc.

Packaging- **Encorp does residential, ICI beverage containers**. 76% recovery rate, goal 80s. Definition: ready to serve sealed drink except milk, ...

Recycle BC, packaging and paper (residential curbside) 75% recovery rate goal (achieved?)

Encorp Pacific- non profit corp. **UBC, ewaste, appliances** . Has 5 members (trade orgs). 170 depots (independently owned), 93% of volume; retailers (grocers, liquor stores) 7%. Transportation, processing, public awareness, outdoor/special events support

Governance: 9 Board: 7 industry, 2 unrelated (audit, governance) – fiduciary responsibility

Advisory Cmte – gov't, NGOs, citizens, depots, small brands – feedback on management

File new plan every 5 years. Minimum 75% recovery, convenience, awareness, process. Annual reports to Ministry of Env.

\$4.5M budget for consumer awareness – research, outreach, media, events

Mostly aluminum plastic. Glass. Boxes, bag in box, pouch small, dtm.

Aluminum to KY. Pet to BC/Alberta. Glass most to Seattle wine bottler. Aseptic/gable: SKorea tissue.

Creates a reverse supply chain. All containers to one facility within one year. Circular economy – producers influence creation and end of life.

Impacts on munis: **producers require control of system**. Can be managed with collaboration from ind. and local govts. **Provide munis with range of choices and timelines**. A. run program, be paid; B. turn over to BC entirely; C. opt out, go on own, pay.

Requirements; need outcomes-based legislation; industry targets, flexibility ; strong governance – balance industry rep with independent director. Oversight: third party audits.

Scott Cassel, PSI

Founded in 2000. Addressed/ing paint, mattresses, Rx, sharps, paint, ... solar panels

Challenges: many different stakeholders in all categories. Lack of awareness, infrastructure, funding, industry opposition to legislation. Disruptor effect.

Linear economy problem. EPR more circular. Paint example, 31M gallons collected. Industry stepped up, came to table to make agreement. 1775 collection sites, mostly retail (77%). EU requires EPR as centerpiece of circular economy. Other countries starting to join.

IPRA: Internatl Paint Recy Assn – 12 mfrs in NA overcome market barriers to selling recycled paint, including Recolor. Recycledpaint.org.

Key elements: legislation, producers, stewardship org, retailers, perf goals/conv stds, govt oversight.

Over 110 epr laws in US. CA, VT, ME leaders. (Sharps in one state) Impacts: sust financing, educ, infrastructure, more recovery, jobs, efficiency, ...

Packaging: system is stagnant, fragmented, underfunded, difficult markets.

The Future of Packaging, by Tom Szaky (SC wrote chapter on EPR)

Phil Goddard, Bourne ISwMF, MR, SWANA SNE, MassPSC

Boston just released ZW Plan, contract up in July.

Bourne Mattress recycling program, paint recycling grants.

Mass Strategy: MR info. Pragmatic solns that can be implemented. Systems approach.

MassPSC: Acknowledged Lynne P, me (so did Scott) Paint, ewaste, pkg, mattresses. ACA, ISPA. Rampinig up efforts, may be momentum now

Mass.: Mattress study commission last session, baby step, still didn't pass. State House demo raised awareness. Bottle Bill difficult to update, on hold. Rx takeback part of a larger bill. Paint got close, failed in HW&M; opponents call "tax". Challenges: limited funds, no staff, politics, DEP not actively supporting.

Opportunities: china restrictions-awareness. Munis feeling impacts. Consumers want to help. Surrounding states have programs. MMA passed resolution to support EPR.

Strategy: focus on a winnable bill: mattress recycling council; summit; grow MAPSC; SWMP comments; Partners: NEWMOA, NERC, MMA, PSI, SWANA SNE, EBCNE; learn from industry associations, other PSCs; promote others' bills- paint, pkg, ewaste; build on DEP grant program success for paint and mattresses.

(get SSRC, FCSWMD, GNBRRMD, MassTOSS on board?)

Q&A: BC contamination rate very low, much better than Ontario. 5% avg. 55% DS, 4% contam. Spot checks at curb, 3 strikes no collection greatly improved compliance. Consistent throughout province. LF bans on covered materials.

EU guy: voluntary system in US – would citizens be willing to be involved, if we can communicate to them what happens to their stuff at end of life? Willing to change behavior? Coalition of the willing. Regulation produces level playing field.

Can the existing infrastructure be maintained with a packaging EPR system? BC system used existing infrastructure, repurposed some facilities. Some new infrastructure created. Invested in new equipment. Rearranged.

Has EPR pushed redesign of products/packaging? Yes, for beverages. Pouches, bag in box companies challenging to work with. Charge them more? Avoid punishing companies. Pouches to energy pellets for cement kilns. May be recyclable next year. **Stewardship orgs Created platform for innovation.**

EPR Summit

~60 people incl. Susan C, Justine F, Rob Beaudoin, Steve Changaris, Kathi Mirza, Mike Orr, Waneta T, Terri G, Janet D, Laura Thompson, Heidi (ACA), Alison L, Amanda Nicholson (PSI), Cole Rosengren, Kirstie Pecci, Brooke N, Nancy (Medfield); plastic bag puck people Vicki and David New (Obaggo)

David Biderman, SWANA - intro

Gretchen Carey, Republic: want to see it done right. Need smart legislation.

Phil Goddard, Bourne: Intro MR, MassPSC. Tough to pass EPR in Mass. China issue is opportunity. Mattresses, paint two top issues. (see yesterday's notes),

Scott Cassel, PSI Life cycle based. (see yesterday notes)

Challenges of passing paint EPR in MA: cross border sales. But many retailers want it. No evidence cross border will happen, didn't happen in VT, ME.

Mattresses: CT, RI, CA, discussions in OR. Ensure that all collected mattresses are managed by stewardship program. Measurable perf goals (collection, recycling, illegal dumping, etc)

Packaging: 13 years, thwarted by opposition in US. Stagnant recycling rates, fragmented, costs at least \$30M in CT. Need education on epr, elements of well designed programs.. 2 MA bills (one gov't, one industry run).

EWaste: PSI worked on 18 years, working on re-writes now. 24 different laws, all with different performance. Industry wants eco fee, federal proposal. Need correct targets, incentives.

Rx: stakeholder meeting 2008, water quality driver, in DC. Fed law was target, would have been illegal to collect without law enforcement personnel. Changed law 2012(?). DEA rule 2014. 2015 Alameda Cy wins court case. MA passed first state law, within bigger bill. Good, not perfect.

Sharps: worked on for 11 years, states want Rx laws first, starting back up. Being disposed with Rx.

Q: why not EU ewaste model in US? SC: govts stronger in EU. US lobbyists have more power.

Q: Li Ion batteries? Growing threat to waste industry, fires. SC: has worked w battery industry, 4 associations. Lack of political will. Need EPR law, SWANA will help. Airline industry also has concerns.

Q: financial impact for mfrs? Range of costs, now externalized, gov't, taxpayers. Laws level playing field. If materials are incorporated in new products, lower costs. Costs internalized, unless eco fee.

Allen Langdon, Encorp Pacific (BC pkg stewardship for UBCs)

(See yesterday's notes) UBC is deposit system . Packaging collection system captures some, transmits to UBC system. Privately owned redemption depots collect all glass, whether deposit or not. Also accept ewaste at depots, shared infrastructure, non gov't.

Beer industry does own aluminum cans, refillable glass (on the decline). 85% of beer in aluminum.

\$4M for outreach, lots of TV, digital media.

72% PET, Aluminum, 17% glass (units).

Lid on cart>> double contamination. **More actual recovery from DS than SS.**

Producer led system incents better packaging. Workable partnership with munis, who became the service providers. Munis that opted out regretted it, took a long time to get back in (?)

Most similar to Belgium in EU, single handler. Other EU countries have several management orgs. Complicated.

UBCs all go back to depots, not to curb. Depots are staffed, to avoid illegal dumping.

Challenge: cost of audits for smaller programs.

Return-It Express: Drop and Go: consumer registers online, bag of containers with bar code, deposit credited online. (in process).

Stand alone outlets for urban areas to address traffic, lines, smaller, Express system. 650 SF. Conventional depot id 4K SF. Signage: "Return-It. It's worth it." Multiple materials, poste -size signs with what is accepted, standardized (i.e. ewaste, paint, UBCs, batteries, textiles...)

Plastic: signed Global Commitment to capture plastic. At 70% recovery now, goal 75%. Eliminating single use plastic bags at depots, replacing with big nylon bags.

Outreach: sports events, Canucks, baseball, Whitecaps Soccer, e-sports.

Streetscapes (public space recycling), Return-It Man; Return-It school programs; Ocean Ambassadors (kids, marine plastics), Bidders (homeless cart program for collection)

Return-it.ca

Heidi Sanborn, Nat'l Stewardship Action Council, CA PSC, wow holy shit she is awesome

Time is now to develop policies to get beyond recycling crisis. CA has most PS legislation of all states. NSAC can lobby. Focused on not letting bad bills pass, keep its good name. Attain circular economy. Board from TX, CO, CA, seeking more in east.

Spectrum of EPR/PS. Industries fight EPR. Refillable propane cylinders

OECD : EPR provides incentives to incorporate enviro considerations in design. Internalization of cost, not a visible fee. Follow the money.

2008 Hg thermostats. "If it isn't in the bill, it won't happen". Make sure agencies overseeing are funded. Need regulations, enforcement, competent agency.

2010 Carpet legislation. Industry screwed up bill. No visible fee before program start. **Don't give visible fee money to industry without strict oversight.** Law: can pay fines from fee, BAD!. Never use "continuous improvement" as a goal. Need hard dates with hefty fines. Don't let industry run board control fee money, need local govts, independent board members.

Successes: 3x national recycling rate BUT only 7% higher than at the start.

Paint: contracts need deadline for execution, limit indemnification, no risky investments w/ fee money, or use to sue the State. (Paint Care did in CA, challenged regs). Problems fixed, successful program.

Mattresses 2013: overall happy, 165 dropoff sites, visible fees. **Visible fees don't drive green design.** Wasn't in bill. Illegal dumping will persist if retailers not mandated to take back. Don't separate stewardship plan from budget. Reimbursing counties for cost of collecting abandoned mattresses.

Medicine: true EPR **(Alameda Cy)2012, Sharps 2015.** Focused on health and safety. Now 70 RX, **25 sharps collections paid by Pharma.**

Not all NGOs are the same- **must be 501c3** for public benefit. NOT c4 or c6, to enable transparency.

Lots of court fights. Industry goal : Privatize profits, socialize costs.

13 local ordinances, different rules to drive industry to ask state for harmonization.

Now over 300 bins in CA. "Don't rush to flush" **SB212.** **She was vilified, called a liar, have to be tough and brave.** Eli Lilly requested a statewide ordinance. Had to do study to quantify problem. Took 8 years to get a good law, unanimously passed bipartisan. PS org must be 501c3, strict timelines, clear convenience stds, "no flushing or trashing" promo, \$50K /day fines. Make trashing Rx illegal. Didn't pre-empt local bills. Animal meds excluded, but probably get into system.

Carpet: fees improperly used, carpets trashed. Interface (industry rep) stepped up to close loopholes. Set recycling rates and dates, no fees for fines, education for installers. Led to green jobs, actual recycling. 15% recovery rate, 5x rest of the country. **4% of waste stream.** Will drive jobs locally.

1 lb propane cylinders: redesigned to be refillable. **Re-Fuel.**

Hard parts already done, learn from their mistakes.

Nsaction.us

Marie Clark ISPA, Mattress Recycling Council (501c3)

Came from Paint Assn, new to mattresses. 15M/year in US. Law requirements: industry dev/adm program to recycle. Visible fee opportunity to interact with customer.

Recycling is labor intensive. CT, RI, CA. 500K units in CT. Launched 2015. CA 2015, 4M mattresses so far. Drop-offs, events. 11 facilities, growing. RI 2016, 250K units.

Education/outreach – retailers (MRC), consumers (“Byebye Mattress”), POS, online, billboards, posters, radio. Collection site grants, mkt dev grants for recovered materials.

Bills in OR, ME (study), MA, CA (improve existing). NE regional approach, consistency >> econ of scale, cross border issues

Mattressrecyclingcouncil.org.

Panel: Waneta T moderator, VP of MR, PSC officer, Newton SW mgr

Is EPR a viable option in US?

HS Yes, matter of will. Take back our democracy. Be politically active, support candidates, communicate with officials.

MC: deal with products separately. AL: works in BC, start with pilots for various materials. SC: State by state, prioritize materials. **Pharmaceutical ind won't come to table**. Can't do everything at once.

WT: US producers mostly opposed to EPR. Does voluntary work?

SC: Voluntary works for some items, if profitable. **Neg value products can't be done both voluntarily and effectively**, but is a stepping stone. Vol low rate of return, batteries about 18%.

AL: **deposits work**. TRP/CLFund voluntary has upper threshold of effectiveness, then reg needed. Levels playing field. Vol problem is nonparticipating companies.

HS: Vol doesn't work, transitional. MC: industry wants a level playing field. Engage other industries, collaborate, don't give up, new leaders may be more open. SC: industries want “market based” not regulation. Nothing is truly free market in US. **Need regulation to make competition fair.**

WT: shared responsibility vs full producer resp?

AL: shared next step from voluntary. Not known by customers, no recognition, no growth or change in system or adaptation to change. Need size and scale for impact. Full EPR enables producers to control costs.

HS: always some sharing of responsibility- consumers, munis, haulers, producers – partnership is needed. All need representation on boards. Need collaboration. Shared cost disaster, hard to unwind.

AL: Disagrees: conflict of interest if haulers other beneficiaries are onboard. Need independents (legal, financial) to ensure org is well managed. Would create challenges.

MC: folks with financial interest in CA Board is difficult. Shared for mattresses is working (customer, producer)

SC: PRO governance in EU also ID conflict of interest. Advisory council should inform decisions, but not make decisions. Define shared vs full? Many stakeholders have roles even in “full”, but on financial side, eco fee vs internalized ... ratio of cost informs balance of interest. Local governments can have interests met with proper wording.

AL: objectives of producers and govts are both customer satisfaction and efficiency. Minimized changes for munis. Change has to be carefully managed On governance, industry reps must make decisions in best interest of org, not their company (really?). Independents- no industry background or agenda.

HS: MN - visible fee, trust, broad stakeholders on board. No state borrowing or industry loss. Investigating model.

WT: no easy straightforward answers, esp in MA. What can we do to move EPR forward in MA?

HS: ID bottleneck, key people, leaders’ influencers, provide input into who runs agency.

MC: keep at it. Get local gov’t at table. Takes time. AL: need to engage industry. They need to make changes to meet their own recycled content goals. Have been great to work with in BC.

SC: make it about jobs and econ dev, i.e. Recolor Paint. Show benefits to Mass. Businesses, economy.

Heidi McCauliffe from PaintCare : Identify opponents, what are their issues, bring facts to legislators. (hah) ID retailers who want to work with them. There were a lot of other issues, paint bill just one. Demonstrate retailer support.

Q&A: CT River Watershed, most common items are UBCs, coffee cups, tires. Low priority? SC: CT DEEP, VT interested in working on. Depends on gov’t pain, priorities. Industry opposes EPR, wants fees.

AL: in BC, \$2 fee, reverse dist system. TDF, seeking higher uses. No brainer.

HS: CA has tire program, \$4 fee at POS, another \$1.50 when tires are changed, rubberized asphalt. Roads darker, quieter, works well. Create market pull even without epr.

Q: indemnity/liability? HS: very complex, negotiate before bill passes, can take a long time. SC: OR, CA first states, growing pains. Think through the contracting for local gov't, retailers. Standard contracts now. **Alison Leary:** we need a workshop about this for muni officials. User fees not the whole answer, i.e. MBTA. Start with local hauler contracts? They pick up recycling. HS: retailers don't like user fees. **Mandate participation by hauler if law passes, pass benefits to muni.** (paint, packaging). AL: take the bull by the horns. Solid EPR program, comprehensive SC: worked with MMA, has full support. Convened 40 munis in CT to explain packaging EPR. Need education, coalition building.

Fee vs. internalization: transparency if fee; some states prohibit. Fee must be allocated to directly benefit fee payer. AL: both systems work, depends on product. Pkging should be internalized, very small, paid per kg by producer.

HS: fee "public education", but clerks don't know, say it's a tax.

SC: political calculus based on state, industry. Gov'ts generally prefer cost internalization.

Tom Mackie, EBC: indemnification, contracts very important. Acknowledged Brooke, me as being more knowledgeable on EPR (!) EPR not hot at EBC yet,

ID problems, stakeholders, range of solutions, costs, benefit, unintended consequences.

Shouldn't be driven by waste mgmt concerns, public doesn't care. About sustainability, economics. Don't react to latest problem. Build on current infrastructure. All about who gets the money, who controls it.

Mass. Has a long way to go. State (DEP) not empowered to investigate EPR. Legislators afraid of solid waste issues. UBB expansion defeated by industry. Need holistic view toward legislature. They have a lot on plate.

No more LFs in Mass 2027. Casella bid \$115/ton on recycling contract. Food waste ban not being enforced, AD businesses struggling to feed. SWAC crafting SWMP, source redux includes EPR. Plastic bag bans.

PG: Everyone IS talking about solid waste. EPR is a paradigm shift, opportunity is now. Comment on SWMP, empower DEP, Gov to support. MassPSC to develop