

Waste Panel Meeting #2

12.11.2020

Attendees

Chair (present):

- Martin Brand, Deputy Commissioner, New York State Department of Environmental Conservation

Members present:

- Michael Cahill, Partner, Germano & Cahill, P.C.
- Steve Changaris, Vice President, Northeast Region, National Waste and Recycling Association
- Resa Dimino, Senior Consultant, Resource Recycling Systems
- Jane Atkinson Gajwani, Director, Energy and Resource Recovery Programs, NYC Department of Environmental Protection
- Paul Gilman, Senior Vice President and Chief Sustainability Officer, Covanta
- Dereth Glance, Executive Director, Onondaga County Resource Recovery Agency
- Allen Hershkowitz, Founding Director and Chairman of the Board, Sport & Sustainability International
- Tok Michelle Oyewole, PhD., Policy and Comms Organizer, NYC Environmental Justice Alliance
- Lauren Toretta, President, CH4 Biogas
- Brigitte Vicenty, Founder, Inner City Green Team

Members not present:

- John W. Casella, Chairman, CEO, and Secretary, Casella Waste Systems
- Dan Egan, Executive Director, Feeding New York State
- Eric Goldstein, Sr. Attorney and New York City Environment Director, Natural Resources Defense Council

Key staff present:

- Sally Rowland, New York State Department of Environmental Conservation

Welcome

- Chair Martin Brand welcomes panelists and attendees to the meeting. Notes that while the session is open to the public to listen in, it is not a public meeting during which we can respond to input. Questions and comments can be sent to the panel through the chat function to be captured and folded into panel's work.
- Agenda will focus on the following:
 - **The panel workplan.** This will be presented to the Climate Action Council on December 15th. Panelists and staff working groups have been working on it. We'll review slides on this work, and tee up working document additions. We'll capture any policy recommendations.
 - **Possible panel subgroups.** Chair thanks those that have helped generate ideas. The workplan discussion will help inform what subgroups may be needed
 - **Upcoming meetings.** Climate Action Council next week, and panel and subgroup meetings.
- Chair notes that panelists should have sharepoint access, and Cadmus will be helping with notes that will also be available online.

Workplan

- Chair presents on timeline for producing recommendations, the top goals that the workplan is focused on. Slides are available on the NYSERDA CAC website.
- Goal 1 Discussion: Reduce the quantity of methane producing waste (food waste, paper, etc.) that are landfilled
 - Steve Changaris: Divert for higher and better use. Interested in interventions focusing on lower rather than top end of pyramid, and focusing on scale. We'll see a lot of anerobic digestion and processing. The build out of that capacity will take time. Sequentially, need to consider what to target- 35-50%? 3-5 years? Consider overlay with CLCPA goals, then start to think about how to reduce impacts from GHG.
 - Resa Dimino: Agree we need to think about diversion from disposal. We understand science of combustion over landfill, but recovery is best. Phasing in of policies is best in concert with funding/financing or strong incentives for developing infrastructure
 - Disposal bans on organics and recycling, clarifying recycling requirement for all sectors could move a lot of paper and fibers out of disposal and into recycling.
 - Having strong policies but giving market proper time to respond in earnest.
 - Lauren Toretta: Being in anerobic digestion business, we seek the opportunity to serve market in handling a wide variety of waste. There is overlap between anerobic and from energy side. We should consider financial incentives on energy and waste side as well. For instance, how to treat biogas as renewable on par with wind and solar from years ago from financial incentive perspective. If gas is where you place monetary emphasis, you'll get higher quality facility built, constructed and operated. There's also a flip side of energy side as a way to help incent and create quickly.
 - Dereth Glance: We operate a large system. There are NY state standards that we meet. We consider what the type of waste is coming in and whether we are ensuring we don't have emerging contaminants that may be in a cafeteria when we open up. Whole

system thinking is important. Need to think about tiers: land application could be based on the level and type of contaminants in the waste. There is a need to differentiate about the type of product (compost, biosolids directly applied, etc.).

- Resa Dimino: Market development approach is key. Let's think creatively about how markets can be built and developed. For instance, encourage and require use of projects that disturb certain amounts of soil, align with DOT projects as government projects can use a lot of certain types of material. Need to think broadly and creatively.
- Michael Cahill: Do we know how many permit applications are in the pipeline? We have one in Long Island.
- Sally Rowland: We don't have any other regional like the one in Long Island that are in the permitting system. But we have more proposals on farm, offsite organics. They don't need our approval in solid waste. Handled under CAFO (large farm) permit.
- Tok Michelle Oyewole: I had noted in working plan document that combustion is not a method of processing waste – it still generates GHG emissions in communities where its located, primarily black, brown, low income communities. Should not look at landfilling and combustion as “either/or” but consider other options that are not fully fleshed out and may be missed because we're hyper focused here. For instance, look at local infrastructure so we're not trucking waste to communities that are polluting.
- Chair Martin Brand refocuses discussion on goal review. Wondering whether should be landfill diversion goal or more general goal on capture more or more larger waste reduction, reuse, reduction goal. Highlights that goal #1 doesn't mean it's the top priority, just numbered for convenience. Waste reduction is another item where we can capture some of these concerns.
 - Dereth Glance: Clarifying what will be presented to the CAC? I have issues with municipal funding.
 - Chair Martin Brand: No, just to share with panel what the priority buckets are, that's what will be shared with panel. We're not at recommendation stage yet.
- Goal 2: Reduce methane leaks from landfills, anerobic digesters, and other waste facilities
 - (No discussion)
- Goal 3 Discussion: Increase waste reduction, reuse and recycling
 - Jane Atkinson Gajwani: Across municipalities, there's quite a bit of existing anerobic digestion capacity. For wastewater, a lot are designed with excess capacity. There's work that would need to be done to unlock that capacity
 - When we think of anerobic digestion for organics, need to think about our existing infrastructure as a start.
 - Dereth Glance: Success for my program involves losing ~ \$300k/yr. Important to understand how to components are interrelated.
 - Chair Martin Brand: Maybe we don't want to have anerobic digestion as a major goal and maybe have it as a strategy to implement another goal, or cross-cutting item.
 - Steve Changaris: We should consider NY State's large suburban and rural areas. Even a well-run compost site will have impacts in a neighborhood. Yes, there are elements to make it work in an urban setting. But there's types of facilities for different settings. Need a blend of all these types of facilities. Full speed on all fronts and think which can come out of the process. Every time we propose a facility, it goes through a rigorous planning process through DEC, and now we'll have to dot l's and cross t's to ensure

we've got everyone's support from environmental justice perspective. There may be a lot of difficulty on getting through a process.

- Dereth Glance: Definitely need an 'all of the above' solution. There are materials that don't work- e.g. meats, dairy etc. Important to understand what fits where best. Transportation. Also want to support low carbon waste transport and processing.
 - Chair Martin Brand: Tok's idea gets at this. Yes, geographical and environmental justice/demographic concerns.
 - Lauren Toretta: It doesn't make sense if we're composting but then pay for heat or electricity; so thinking holistically is important. Ways to use our own gas to power ourselves, provide heat, positive externalities factored into site selection.
- Goal 4: Increase use of anaerobic digestion for waste materials
 - No discussion
- Goal 5 Discussion: Manufacturer requirements on waste generation limits and reporting
 - Allen Hershkowitz: Are you referencing producer responsibility?
 - Chair Martin Brand: Yes, but maybe they could fit under broader reduce, reuse type of growth area. This will likely be subsumed by another category.
 - Allen Hershkowitz: Where is EPR goal?
 - Chair Martin Brand: Goal 3
 - Dereth Glance: Perhaps EPR is it's own goal. Shifting responsibility for material management upstream.
 - Allen Hershkowitz: Does need to be explicitly stated. Sending a price signal to producer and packager on the financial and ecological (hopefully impacts of product design. I shared an article I wrote in 1993 about EPR. Someone can market a diamond ring in a refrigerator box right now and there's no penalties. If you want to get to reduction will involve getting the price right. It's related but also a separate policy, especially on implementation and administration.
 - Lauren Toretta: I think goal 5 should be separate, or it'll lose it's effectiveness. There's a big difference between encourage and enforcement. There's strength to having it be its own goal. If we want to make something happen, we need to take a strong stance to help guide it.
 - Chair Martin Brand: Agree, product stewardship are really important for us to prioritize and highlight. Maybe it's its own goal and populate some policies under it.
 - Resa Dimino: There's a host of other policies that can build recycling and can be done in concert with EPR or on their own. Think EPR is important but not it's own. Need to build out more of the other requirements (univ recycling, what is under goal 5 could go under universal recycling).
- Goal 6: Require control of emissions and increase use of AD at Water Resource Recovery Facilities
- Chair Martin Brand steered discussion to review of ideas in draft form shared among the panel
- Allen Hershkowitz: Measurement is fundamental. How and what we measure, what we know and need to know.
 - Total profile of solid waste management in NYS; it would be hard to answer.
 - Need a workgroup on measurement.

- Regarding siting previous comments- all sorts of incentives and barriers in local and state laws that can facilitate and stymie what we're looking to develop. Some sort of review of regulatory incentives. There's a lot of incompatibility on regulations. Look at legal and regulatory structure. How affects ability to move forward is another focus.
- Chair Martin Brand: Lots of lenses to look through, a few include environmental justice communities; challenges and obstacles we identify; cross cutting panel- Land Use panel
 - On measurement- there's a lot going on and rulemaking. Maybe a subgroup to continue to refine emission priorities and sectors could be good.
 - Invites presentations from panelists
- Tok Michelle Oyewole: In addition to VMT to carry materials, it also generates GHG and air pollution where 75% of waste is generated and goes out of city. We externalize waste. 30% of waste is organic, so we focus on that within coalitions.
 - There is capacity, and people working to process food scraps locally intensively. Emphasize land at local scale, can process all the waste and organics within city limits. Estimate would need 5% of land in NYC to process all organic waste.
 - Gist of the goal added is community level job training and compost processing emphasis, not relying on export.
 - Chair Martin Brand: Is this stand-alone goal?
 - Brigitte Vicenty: Should be a standalone. My work is in community. Jobs and education and outreach are key. Would like to collaborate and create together on more comprehensive working draft on recycling and composting aspects.
 - Dereth Glance: Great goal. Gets to resilience and municipal purchasing. In NYC, scale is so large that could be uninterrupted when China stopped processing. In upstate NY, we don't have aggregation. Having local processing has huge benefits for more stable secondary market and low carbon benefit.
 - Issues with municipalities having to do lowest bid rather than most resilient thing over time.
 - Also every process has byproduct. Managing in sustainable and local way is important.
 - Allen Hershkowitz: Both distinct goal and also cross cutting. Supports everything but question as to where to apply it. Applies to other categories.
 - On local and ecological impact, ties to measurement. Every category of waste has its ecologically optimal route. We now to think about how waste (highly refined materials) to most ecologically intelligent route, including environmental justice and other issues in consideration.
 - What does local mean? Transport of waste is happening everywhere. Some of it is unjust and ecologically bad. But some of it can be economically valuable and better ecologically.
 - Concept of justice is foundational to this goal and applies everywhere.
 - Paul Gilman: Agrees with Allen. Folks don't appreciate extent to which waste travels in US. NY, especially NYC, has been on top of that and trying to find lower impact ways of moving the waste
 - Steve Changaris: As much can be done locally is fine. Question is how to reconcile that with structure of planning unit. The legislature passed law that

says this will be a regional solution. We want to do what's best for people and environment. Intuitively, small is better. However, after doing analysis, reality may be that regional is better than lots of small compost sites. Difficult equation to formulate, and more difficult as policy.

- Martin: Good area of collaboration with Land Use & Local Government work group. The main goal is good for workplan, other details can be refined over time.
- Jane Atkinson Gajwani described an addition on Goal 6, to broadening the goal to “Extract the full range of resources contained in wastewater as renewable bioproducts, displacing fossil-fuel based alternatives while minimizing GHG emissions.”
 - There's a lot of wasted resources in waste water. Collaborating with Amsterdam, they're trying to have zero waste, do novel things; zero-waste, energy neutrality as goals in addition to carbon goals. Take materials that are difficult to recycle and use in other ways.
 - Paul Gilman: In past experience at EPA, had to admit we didn't know enough about Per- and polyfluoroalkyl substances (PFAS)? ; are you comfortable that we're in a different place with knowledge than when I was at EPA?
 - Jane Atkinson Gajwani: Some materials are its ubiquitous, it ends up in our waste streams. If you're near a paper mill, or area that is making it. It needs to be looked at carefully. Nothing in our NYC BP system that would give us elevated levels from what we understand. However, this needs to be studied. Tremendous benefits because there are a lot of nutrients in waste. With our biosolids program, remarkable difference in land application. Converting from landfilling program, 200k metric tons/year, small piece is from transport. If we did land application, we'd be net negative 50k tons, a huge delta. Carbon intensive process to make fertilizers. Important to get it out of waste streams.
 - Chair Martin Brand: Jane, can you look at goal statement for this sector and revising?
 - Jane Atkinson Gajwani: Yes.
- Michael Cahill on Goal 7 on solid waste management on solid waste and funding, and exportation: Increase energy revenue for all landfill gas, waste to energy, and anaerobic digestion technologies.
 - Things need coordinated with energy side of Council on best way to incentivize what we need to get built.
 - With waste energy, we have potential to improve capacities and performance of facilities. They're 30 years old. Will require more capital to update. Could stand to improve to more updated technology.
 - If you look at costs to improve and revenue, that's what you go back to public with.
 - Need energy incentives to get project up and going.
 - Lots of unanswered questions for anaerobic digestion for food waste; will take time to get right combination (energy revenue, feedstock, other factors)
 - If taking food waste out of waste stream, will need anaerobic digestion. Need to talk with energy folks.

- Landfills, complicated. Lots of sources of revenue- PPA with utility, energy credits and carbon credits you can sell on some markets.
- Landfills have 2 entities looking for revenue. The two don't have interests that are totally aligned. Need to align common incentives between them.
- Michael Cahill on Goal 8: Reduce GHG leakage by diminishing waste export to other states.
 - Need to keep NY waste in state. We're already exporting 27%, and in 3-4 years will be adding a million tons.
 - Lot of times when it goes, it goes, and can't order it back. Looking at ancient structures. Within 10 years, will start to see big investment to keep them going right. Need to keep our disposal prices competitive.
 - Distances many parts of state will have to send waste to will become greater because NYC has locked in capacity at closer destinations.
 - E.g. Leaves Brookhaven tonnage to go further; 20% methane and rest has hydrogen sulfide and odor problem.
 - Whether Brookhaven elects to build an Ash field?
 - Don't want to pick fights with other states
 - Key to both is to get incentives for capacity in NY and find right sites
 - Working with Transportation and Energy panel is essential to getting to answers
 - Allen Hershkowitz: Financing- goal is to reduce GHG emissions. New technologies are tools but not end goal.
 - So where does financing maximize GHG reduction? That's the frame we need to apply.
 - For example, a carbon tax, relating financing and fees to GHG impacts needs to be focus.
 - Dereth Glance: Agree being focused on the goal is the key rather than the means.
 - 27% goes out of NY state now
 - Large percent to one place.
 - Resa Dimino: This is a delicate balance because where investment dollars go is where materials go. Need to be careful to not overinvest.
 - Lauren Toretta: Flip side, investing in things that will take us there. Agree with Allen- it is our goal to reduce emissions. Adds that that requires using technologies and there's best in class tools available. Without closely linking technology and fuel standards, directly linking to emissions containing GHG.
 - Important distinction as having public partnership engaged would be great.
 - Lots of levers to play with to tie technologies to moving the needle on emissions.
 - Steve Changaris: Agree with a lot that has been said. We are transitioning from one system to a new system. We have to maintain what we're currently doing and optimize that, while we also transition. Limited resource pie is part of the issue. If we had all the resources, we can do it all today.
 - Sensitive to Resa's comment, we need more resources to effectively manage. That said, we're already in a system with waste underway. Need to do work with reducing emissions, environmental and racial justice, and financial maximization. Lots to prioritize and they all have to be considered.

- Tok Michelle Oyewole: In support of anaerobic digestion on a local scale, particularly as it relates to ongoing municipal processes (i.e. WWT). Want to make sure we're investing in the right kind of things. What other renewable energy options are available? We need to think about things like offshore wind, energy efficiency, and solar. We should consider these technologies before exploring ones that will still have tailpipe emissions (i.e. biogas). To do this, we need to be coordinating with the power generation panel.
 - We should also be looking at composting. Composting when applied to soils is helpful in sequestering carbon. We should streamline the compost process, which needs to be done at a local level.
- Martin Brand: What is the thought on how we tee up goal 7 and goal 8? Goal 8 is maybe a sub-goal of leak detection (goal 2). Goal 7 looks like it can stand on it's own.
 - Mike Cahill will work on Goal 7 and see if it can stand on it's own. He will tease out the key points to be considered.
 - Goal 8, we'll see if we can find it a home. It is cross cutting, but maybe it will maybe go under goal number 1.
 - There's some many cross-cutting things. We can't view these goals as silo'd, but it will help give us a framework to focus.
- Martin Brand: Thanks to all for feedback on the goals, this gives the staff group quite a bit to work on. The staff group will try to capture larger broad-brush policy areas.

Subgroups

- The chair introduces the idea of subgroups to dig in further on specific issues and discusses with the group the best approach.
- Martin Brand: On subgroups. Who can co-chair subgroups?
 - Allen Hershkowitz: can co-chair.
 - Paul Gilman: can also co-chair.
 - Martin Brand: We Don't want to have too many workgroups, because it gets too cumbersome. Waste reduction area seems like it would be good.
 - Resa Dimino: We could do one workgroup per goal. Or one around organics diversion. Then one on materials diversion. Each one could contain a bunch of sub-topics. What's easiest from a staff level to manage?
 - Martin Brand: Let's guard against 6 or 7, it will be too much.
 - Allen Hershkowitz: Scott Castle could be invited to give a presentation on EPR. He is on every EPR initiative around the world. If you don't know Scott Castle, you should. We really shouldn't begin that work without hearing from him first.
 - Martin Brand: We can bring SMEs as we go along. We can do that in these AP meetings, so we're not just talking to each other. That would help us move forward. Advisory Panel members should send in suggestions to Molly, Sally, and Marin.
 - Dereth Glance: Resa was onto something. Breaking them subgroups into organics, materials, and energy alignment, you'll get those cross-cutting issues. Maybe some cross between organics and energy.
 - There is also some exciting stuff with robotics and optics that they don't have the investment to do yet.

- Resa Dimino: Her company does a lot of Materials Recovery Facility (MRF) design. They can give a presentation on state of the art of sorting technology for the AP.
- Martin Brand: For subgroups, let's do some lumping here.
 - Materials management side of things should be its own subgroup. This is a broader subgroup, and can focus on waste reduction.
 - There should be a separate group on landfills, which will focus more on organics. This will include organics diversion and methane reduction.
 - The third one should be measurement.
 - Fourth would be Water Resource Recovery. This is a place where we need a lot of additional research. The finance piece is something they can work on after they hear from the other APs, because those are really cross-cutting.
 - That will give four, they can see how it works, and if it doesn't, they can always change.
- Allen Hershkowitz: Staff should set up a SharePoint folder for each of the subgroups. Once these folders are created, AP members should populate those folders with info about what we know, what we don't, and the different protocols that exist.
 - The work of the subgroups will be descriptive rather than prescriptive. They will describe what we know and what we don't know, and what's being done. Then the committee will come up with decisions about what needs to be revised.
- Martin Brand: Let's decide who will work on which subgroup.
 - Landfills/organics:
 - John Casella and Lauren Toretta
 - Materials management/EPR/Waste stewardship:
 - Resa Dimino and Steve Changaris
 - Tok Michelle Oyewole and Bridgett Vicenty (for the local aspects of that)
 - Allen Hershkowitz wants to sit in.
 - Water resource recovery
 - Martin Brand: Jane comes to mind. The panel might be gaining another wastewater person, who could be on this subgroup.
 - Martin Brand: Anyone can sit in on any of these groups, the people named are just those who will be coordinating.
 - These subgroups will also include staff folks to help out with coordination. Start with Molly Trembley and they'll help with logistics.
 - Try to meet in the near future. If these groups could find a way to have a few convos between now and end of year, that would help progress.
- Tok Michelle Oyewole: Will the AP be able to see and approve a second version of the goals?
 - Martin Brand: Yes. Staff will take a crack at reshuffling/renaming and then will share with the AP where they landed. They will need to share this at CAC meeting on 12/15 at 2pm. Still will get this set up as soon as they can and will ask people to take a hard look on Monday. If there are last minute tweaks, they can do that.
 - Committed staff team to tight timeframe, but confident they will pull through

Upcoming Meetings and Meeting Close

- The chair presents on upcoming meetings for the Advisory Panel's awareness. See slide 16 for upcoming meetings (see slides deck on the NYSERDA CAC website).
- Steve: Is there going to be a pathway established for communication between Waste and Transportation?
 - Martin Brand: Yes. There will be opportunity for cross panel collaboration.
 - There are many cross-cutting issues across multiple panels. Will flesh them out as we go forward.
- Martin Brand: On Future panel meetings - is it possible to have another panel meeting between now and end of year or should we have the subpanels work and come back?
 - Resa Dimino: Let the sub groups work and come back in the first couple of weeks of January. Each subgroup should come up with a straw proposal between now and then.
 - Martin Brand: Sounds good. Subgroups can work on list of policies.
 - Lauren Toretta: Can you flesh out expectation for early January? What depth should the straw proposal be?
 - Martin Brand: Just keep fleshing out the ideas that have already been covered. At some point they'll home in, but in terms of recommendations in January, they don't need to be super specific. If you have ideas, capture them, but the recommendations will evolve in terms of complexity, as we move forward. Identify the larger issues/needs, back it up with research and data. Then put in the metrics/measurements you need. Then we'll focus on economics, EJ, obstacles, and challenges. We don't need to be too prescriptive yet.
- Martin Brand: On the Climate Justice Working Group panel – the Waste AP will need a liaison on that panel at some point to inform this group. Volunteers? Can decide after Dec 16 if you want.
 - Bridgette: Will think about it.
 - Martin: Everyone can join on the Dec 16 Climate Justice Working Group meeting, since it is so important.
- Martin Brand: Thanks everyone for listening in and providing input. We'll integrate good ideas where we can.
 - Mike Cahill: Can you clarify my homework assignment?
 - Martin Brand: More clearly articulate Goal 0. Provide a sentence or two to articulate the goal and convey its priority.
- Tok Michelle Oyewole: Chiming in on Climate Justice Working Group – She will also consider being on the working group.
 - Thanks to everyone. She is looking forward to thinking creatively and not limiting ourselves.
 - She is also having consistent issues with the SharePoint. Make sure there are alternative means of accessing important docs.
- Martin Brand: They'll email important stuff directly, in addition to using SharePoint
- Martin Brand: Thanks everyone, that's a wrap!