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May 25, 2014

Dr. Robert Summers, Secretary
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, MD 21230

Dear Dr. Summers,

Please accept these comments by Energy Justice Network on the Zero Waste Maryland Plan. Energy Justice Network exists to build, support and network grassroots community organizations fighting dirty energy and waste industry facilities, primarily in the coal, gas and incineration sectors. We have been supporting the work of Maryland residents against incineration and landfills since 2003.

Without implying endorsement of specific parts of the plan that we do not comment on, we applaud the plan generally, for its direction and ambition. The plan's support for incineration is the one main sticking point, and others are addressed below.

First, a proper zero waste plan must follow the appropriate hierarchy. The hierarchy for municipal solid waste (MSW), in a nutshell, is as follows:

Reduce
Reuse
Source Separate:
-Clean Compostables → Aerobic Composting → Landscaping / gardening / ag uses
-Recycling → Material Recovery Facility (MRF):
-Recyclables to Highest-end, Most Local Markets Possible
-Residuals → Waste (below)
-Waste → "Dirty MRF" (a.k.a. Mechanical / Biological Treatment):
-Additional Recyclables captured and marketed
-Residuals → Anaerobic Digestion → Digestate to Landfill
-Special Collections → e-Waste, Household Hazardous Waste and other special/dangerous materials to proper recycling options

In more nuanced detail, there are two places to look:

1) The Zero Waste International Alliance's Zero Waste Hierarchy, which is based on a simpler, earlier hierarchy we developed. See: http://zwia.org/standards/zero-waste-hierarchy/
2) Energy Justice Network's zero waste hierarchy, which is nearly the same, but more detailed on the back-end landfill management aspects, as follows:

- Redesign
  - Make products durable, recycled and recyclable
  - Use materials which are more environmentally sustainable
- Reduce
  - Toxics Use Reduction
  - Reduce amounts of toxic chemicals in production
  - Replace toxic chemicals with less toxic or non-toxic alternatives
- Consumption Reduction
  - Use less
  - Buy less (reduce advertising)
  - Buy stuff with less packaging
  - Avoid disposables & non-recyclables
- Packaging Reduction
  - includes styrofoam bans and single-use paper/plastic bag bans and taxes
- Reuse/Repair
  - Thrift stores
  - Charity collections
  - Dumpster diving
  - Freecycle
  - Paint blending
  - Repair centers for bikes, computers/peripherals, furniture, appliances, etc.
- Recycle
  - source-separation, not single stream
  - seek the highest end-use and avoid "downcycling"; segregate office paper from lower paper grades and other recyclables, to keep quality high
  - buy recycled; create market for glass so that glass collected for recycling is actually recycled, not dumped in landfills
  - adopt a bottle bill / wastepicking
- Compost
  - Curbside collection of organics (weekly), which can be done while decreasing the collection of trash and recyclables to biweekly (the smelly stuff in trash is the compostable stuff, so this encourages people to compost if they don't want trash smelling).
  - Ban clean organics (not sewage sludge!) from landfills. Sewage sludge, even after being digested, does not belong on farm fields or in urban gardens.
  - Clean compost from food scraps and yard waste can be used in gardening or landscaping.
- Research
  - on a regular basis, do a waste sort and see what remains in the waste and feed that into Extended Producer Responsibility campaigns, product bans and other measures to eliminate these residual materials from the waste stream, ensuring that they're dealt with further up in this hierarchy
- "Dirty" Materials Recovery Facility (MRF) for the remainder (a.k.a. the "Mechanical" part of Mechanical/Biological Treatment)

  - pull out additional recyclable and compostable material. It's important that this not be a replacement for source separation and upstream recycling, as it will get people out of their good recycling habits and will degrade the quality of recyclables, lowering their value and ensuring less will actually be recycled.
- Anaerobic digestion (a.k.a. the "Biological" part of Mechanical/Biological Treatment)
  - The remainder, if there is enough organic material in it, should be digested in order to reduce the methane generating potential, stabilizing the waste
- Monofill (landfill in separate landfill cells at existing landfills)
- Ensure proper landfill management (don't mismanage the landfill by managing it for energy production)
  - Minimize gas production: Do not manage the waste facility as an energy facility by stimulating gas production.
    - Keep out liquids
      - Cover the active face of the landfill to keep out rainwater, using a temporary structure
      - Do not recirculate leachate
    - Cap landfills with permanent synthetic covers and install gas collection systems in months, not years.
  - Maximize gas collection:
    - Segregate organics in landfills for best gas collection
    - Maintain high suction on collection wells; do not damp down wells or rotate off the wells to stimulate methane production
  - Clean the gas prior to use
    - Filter toxins in the gas into a solid medium like a carbon filter; containerized and store on-site.
      - Do not send to carbon "regeneration" or "recycling" facilities [they simply incinerate the captured chemicals, polluting the air]
  - The purified gas can be used:
    - for heating purposes (burned in a high efficiency boiler),
    - piped into gas lines,
    - used to make alternative vehicle fuel,
    - used in fuel cells,
    - burned for electricity in a high efficiency turbine (less preferable to uses for heating), or
    - the CO2 and methane can be segregated and sold as industrial chemical feedstocks (but not for food industry use).
- Landfill gas-to-energy should not be considered renewable (That allows it to undercut clean sources like wind and solar and puts source reduction, reuse, recycling and composting at a competitive disadvantage.)

The landfill management aspects are nuanced because it's critical to ensure that greenhouse gas emissions from landfills are avoided, unlike how landfills are commonly managed today. For a full appreciation of the need for this type of landfill management, please review the materials at http://www.energyjustice.net/lfg/

Find further resources on zero waste here: http://www.energyjustice.net/zerowaste

Note that incineration has no place in a zero waste hierarchy and that it contradicts the very definition of zero waste.

Common mistakes to avoid:

- The Houston model of ending source separation, letting everyone throw everything in one bin, and sending it all to a "dirty MRF" so that recyclables are degrade, compostables won't be clean, and the mess is a good recipe for feeding incinerators they won't be able to afford.
- Assuming that clean and dirty organics can be mixed together, digested, then used for agricultural applications instead of landfilling it. Clean organics need to be aerobically composted. Dirty organic residuals, including sewage sludge, should be digested and monofilled. The digestate will not be clean enough to be suitable to be in contact with farms or people.
- Assuming that landfills are worse than incinerators and that incinerators don't just necessitate smaller, more toxic, landfills. More on this below.

Chapter 1

- Page 16 states that the Department expects one WTE facility to be built between 2015 and 2020. That is an unreasonable expectation. Even with permits granted, it's unlikely that the proposals in Frederick County or Baltimore will come to fruition. It's also inaccurate to call a facility WTE ("waste-to-energy") as that is an unscientific public relations term for incinerators, which are actually facilities that turn waste into toxic ash and toxic air emissions, while wasting most of the embodied energy in the materials burned. See http://www.energyjustice.net/incineration/waste-to-energy for details.
- Maryland "waste diversion" numbers are cooked. Maryland counts many things as diversion which are inappropriate to be counting, including:
    - tire burning in cement kilns
    - waste dumped in landfills as alternative daily cover
    - "recycling" trash and biomass incinerator ash into cement or other uses (including dumping in landfills as alternative daily cover)
    - "recycling" of animal carcasses
    - pyrolyzing scrap bark into charcoal (which is then burned)
    - chicken manure composting (such waste was never landfilled or incinerated in the first place)
    - composted non-source-separated MSW that is marketed
    - recycling education programs (which are not actual recycling, but is counted as real recycling percentage points)
- Disposal fee needed – a per-ton surcharge on waste brought to landfills or incinerators would incentivize source reduction, recycling and composting. Many states have this, as the draft plan points out. Maryland legislators should grant the authority for this, if possible.
- Incomplete data – due to the collection of a disposal fee in Pennsylvania, the state has great data specifying every ton of waste, by type, month-by-month, which enters each disposal facility. That data tracks which county the waste came from, and which state it came from, if from out-of-state. Maryland should do the same.
- "Reducing Reliance on Landfills" needs to read "Reducing Reliance on Landfills AND INCINERATORS." Incinerators are more important to avoid than landfills, as they're the most expensive and polluting way to manage waste or to make energy, and they cost so much that they suck up the funding needed to do zero waste properly. They demand fixed amounts of waste, creating a demand for wastefulness. They don't avoid landfills, but result in smaller, more toxic, landfills. All references in the plan that discuss avoiding landfills must be changed to emphasize the need to eliminate the use of incineration as a

higher priority. Find plenty of resources available on this matter, and documentation of the above statements, at http://www.energyjustice.net/incineration/

- Yes, landfills are hard to site or expand, which is why a proper zero waste plan that avoids incineration will be needed to reduce waste to landfills and revision now landfills are operated. It's also important to reduce reliance on exporting waste to landfills and incinerators in Pennsylvania and Virginia. Maryland relies too heavily on dumping on its neighbors.
- Keep waste management in the public sector. Maryland's landfills are nearly all public. Pennsylvania is the largest importer of waste. Virginia is #2. Maryland will be a dumping ground for much out-of-state waste if landfills are privatized. At Pennsylvania landfills, it was found that the percentage of out-of-state wate received was ten times higher at private landfills than public ones. Most of the state's landfills and incinerators are privately owned. Maryland is blessed to have most in the public sector and it's important that this continue to avoid losing control of waste flow. Bringing more waste hauling into the public sector will further help assure control, so that counties don't need to worry about waste going out of state if fees are applied to their landfills.
- Page 20 states a goal of 100% diversion from landfills by 2040. This will be impossible. There will always be some residual. The "zero waste to landfill" notion is the hijacking of the zero waste definition by those who prefer to define incineration as zero waste to landfill, even though incineration makes landfill most dangerous through leaching of toxins from incinerator ash. A short-term goal of 100% diversion from incineration would make the most sense, with a longer-term goal of 90% reduction of waste going to landfills with 100% of the waste going to landfills having to be digested first to eliminate the methane-generating potential so that we don't have stinky, gassy landfills.
- Page 21 mentioned economic growth in the discussion of increased waste generation. The plan needs to take an honest look at the peaking of resources – not just the peaking of oil, coal, gas and uranium which underpin the energy economy upon which material production relies, but the peaking of the production of materials that become waste, as well. Economic growth is not our future. Our future is one of economic contraction and reduced consumption. Plans like this need to see the blessing in that, recognize this reality, and plan accordingly.

Chapter 2

- Thank you for properly referencing the only peer-reviewed international definition of zero waste. We highly encourage that this remain in the plan as a guiding principle.
- EPA's hierarchy is decades old and is NOT a good example of zero waste. It incorrectly describes waste incineration as energy recovery and includes it in the hierarchy, putting it above disposal (landfilling) as if it's not disposal and as if it's better than landfilling. EPA knows that this is outdated and is planning to rework it. Please do not use it as a guide.
- Page 24 mentions that Washington, DC's goal of 80% diversion includes waste-to-energy. Please note that DC is not of one mind, and that the Sustainable DC plan's stakeholders specified that this is to be met without incineration, though some city officials twisted it. The city knows that they cannot afford incineration economically or politically and while they give lip service to it, they know that they must move in a better direction. City policy in the coming year will be steered away from incineration. Also, please stop calling it waste-to-energy, which is inaccurate, but also confusing, since the term can include anaerobic digestion (the one technology under that umbrella term that is not actually incineration).

- The fact that other jurisdictions are misguided and count things like landfill cover as diversion, even though waste is still being dumped in landfills, should not justify Maryland making the same mistake.
- "Anaerobic digestion is considered recycling if the digestate is returned to the market (e.g. as a soil amendment or as an input to a composting process)" – This is appropriate only for clean compostables, not for mixed waste residuals. As explained below in the zero waste hierarchy that we recommend, this should not take place, as clean organics should be aerobically composted, while dirty mixed waste residual organics should be anaerobically digested with the subsequent digestate disposed of in a landfill, as it's unsuitable for agricultural applications.

Chapter 3

- How can zero waste goals be met if the plan is just to reduce per capita waste generation from 6.1 pounds per person, per day in 2012 to five pounds per person, per day in 2040?

Objective 1: Increase Source Reduction and Reuse

Initiative 1.4: Ensure that Extended Producer Responsibility systems are designed to encourage source reduction.

Ensure that EPR programs put the fiscal responsibilities on the manufacturers / retailers, but not the physical responsibility for handling the materials if there are better options for keeping the materials in-state to benefit smaller businesses, non-profits and recyclers while keeping the jobs and economic benefits in-state. Learn from the experience in Vancouver, British Columbia on how not to do this. The Institute for Local Self-Reliance is a good resource on how to do this properly and keep the jobs and value in-state.

Initiative 1.7: Organize waste exchanges.

Include the use of Freecycle, thrift stores, and the informal sector (waste pickers, dumpster divers, etc.). Support the informal sector by discouraging the locking of dumpsters. Encourage local reuse and repair centers such as Recycle North in Burlington, VT, so that these are located in each neighborhood/community. Tool sharing resources will also reduce waste, so that neighbors can borrow lawn mowers or tools from a neighborhood resource center if they don't need to have their own.

Initiative 1.8: Research methods of encouraging sustainable product design.

Be careful to avoid greenwashing. Much of the certification and labeling around green products is misleading and overstates environmental attributes. Involve non-profits like Energy Justice Network and Green America to help develop criteria to properly evaluate claims.

Objective 2: Increase Recycling Access and Participation

Initiative 2.3: Quantify the level of business recycling

Make business recycling mandatory.

Initiative 2.4: Address away-from-home and event recycling

Keep recycling and disposal bins uniform in color, shapes, design and labeling. Do not permit corporate-sponsors bins such as those from Coca-Cola that are simply slick marketing opportunities intended to increase consumption.

Objective 3: Increase Diversion of Organics

Initiative 3.6: Encourage anaerobic digestion

For source-separated clean organic material, aerobic composting is preferred over anaerobic digestion. It's cheaper, lower-tech, and has a better energy balance if residual heat is used, rather than focusing on the use of methane from digestion. This should be rewritten to encourage aerobic composting over digestion, though both are acceptable.

Initiative 3.8: Decrease disposal of sewage sludge.

This is backwards. Sewage sludge is too toxic and pathogenic to be safely used in agricultural applications. People would be horrified to learn that their food is grown in this toxic sludge. Renaming it "biosolids" or temporarily killing some pathogens by making it "Class A" does not make it safe. Sewage sludge ought to be digested and monofilled in lined landfills. Sludge reduction technologies may help reduce sludge volumes, and upstream programs to detoxify products will help reduce toxins going down the drain and into sewage sludge. See http://www.ejnet.org/sludge/ and other online resources for more information, and contact us for more information on alternatives, as we have a report due out later this year that spells this out in more detail.

Objective 4: Address Specific Target Materials

General: To avoid generation of construction and demolition debris, Maryland should mandate deconstruction for any buildings to be dismantled.

Initiative 4.2: Adopt a disposal ban on electronics

Require that all e-waste recycling be e-Stewards certified. The R2 standard is not adequately protective and permits prison labor. Prison labor, third-world dumping and incineration need to be expressly prohibited in e-waste recycling programs.

Initiative 4.3: Establish EPR programs for mattresses and other difficult-to-manage materials.

Support small-scale, women- and minority-owned union businesses in mattress recycling and other hard-to-manage materials. Only materials that can best be re-used directly by the manufacturer, such as photocopying and printing equipment, should be fed back to manufacturers. For things like mattresses, support what St. Vincent de Paul has been doing. See: http://www.svdp.us/what-we-do/recycling-and-manufacturing/

Initiative 4.4: Adopt a carryout bag reduction and recycling law.

Outright ban plastic bags. If Rwanda and many other nations (and San Francisco) can do it, Maryland can. See http://www.byobags.com.au/About.mvc/PlasticBagBansAroundTheWorld

Initiative 4.6: Study potential solutions for pharmaceuticals

Pharmaceutical collections do not end up recycling the pharmaceuticals, but universally end up incinerating them, which transfers a water pollution problem into a toxic air and water pollution problem. There are many halogenated compounds in pharmaceuticals. When burned, these produce acid gases and dioxins/furans. It's imperative that non-burn alternatives are found for unused and expired pharmaceuticals. Please make the exploration of non-burn alternatives a priority for this program. This should involve source reduction strategies, reuse opportunities (even if that means delivering unused drugs that are still useful to those in other countries not bound by the same regulations, with limited liability for manufacturers), and genuine recycling technologies where the pharmaceuticals can be refined down to their component chemicals, purified and put back into new product.

Initiative 4.7: Consider other disposal bans.

Materials banned from disposal must also be banned from incineration, not just landfills. This is particularly important for the "banned" items that are often burned. Tires are often burned in incinerators and cement kilns, including the trash incinerator in Harford, the proposed incinerators in Frederick and Baltimore, and the cement kilns in Hagerstown and Union Bridge. This is highly toxic and dangerous and must be banned. See http://www.energyjustice.net/tires/ and http://www.energyjustice.net/cementkilns/. Wood is often burned in "biomass" incinerators, including in the proposed incinerator in Baltimore. Such biomass burning is second only to trash incineration on greenhouse gas emissions and cost – both of which are worse than coal. See http://www.energyjustice.net/biomass/ and http://www.energyjustice.net/egrid/ Paint should not be allowed to be burned, either. Used paint can be mixed together and reused for municipal projects or can be made available in material exchanges. The section also mentions "animal carcasses from medical research or destruction of diseased animals." These also need to be banned from incineration. Of course, source reduction (ending animal experimentation by Johns Hopkins University and government labs) should be a higher priority. Until that goal is reached, animal carcasses and other pathological wastes should be handled with acid hydrolysis tissue digestion technology to avoid the need for incineration. See: http://www.biosafelifesciences.com Mercury dental amalgam is the largest contributor of mercury to sewage sludge and simply ought to be banned from use (not just disposal). See http://www.toxicteeth.org.

Initiative 4.8: Consider product bans for non-recyclable materials.

Polystyrene is important to ban. Washington, DC is poised to do this. However, PVC is even more toxic and should also be a high priority to phase out. See http://www.ejnet.org/plastics/pvc/ for resources on this.

Objective 5: Incentivize Technology Innovation and Develop Markets

Background:

"Several new technologies for diverting and managing waste are becoming more popular and commercialized in the U.S., including anaerobic digestion and gasification."

Gasification, a type of incineration, has never been done commercial scale for municipal solid waste in the U.S. and has been a miserable failure at processing any heterogeneous feedstock. The nation's leading pro-incinerator consultants, Gershman, Brickner and Bratton, consistently present at industry conferences with a chart showing that pyrolysis and gasification are high risk investments due to "previous failures at scale, uncertain commercial potential, no operating experience with large-scale operations" (pyrolysis) and "limited operating experience at only small scale; subject to scale-up issues" (gasification). See slide 43 in their presentation at WasteCon 2012 for a copy: http://www.gbbinc.com/speaker/GershmanWASTECON2012.pdf Waste Management Inc., the world's largest waste corporation, has recently backed away from its investments in many of these experimental incineration technologies. See: "Big Waste Hauler Rethinks Startups," Wall Street Journal, Jan. 3, 2014. http://online.wsj.com/news/articles/SB10001424052702303640604579297003682735612 It's also not popular at all. As a type of incineration, it is one of the least popular technologies in the world, having generated community opposition all over the country and world. Gasification vendors consistently lie and say that they have no smokestack, can't produce dioxin emissions, can operate commercially, can be economically viable, are not incinerators, etc. All of these lies have been exposed and no plan for a commercial-scale trash gasification facility has come to fruition. See the resources at http://www.energyjustice.net/incineration/ for details. At the bottom of the page, find the U.S. EPA and European Union's definitions showing that gasification is indeed defined and regulated as incineration.

Maryland should NOT create further economic incentives for these incinerators. Conventional trash incinerators are the most expensive way to manage waste (more expensive than landfills) and are the most expensive of any electricity generating technology to build or operate/maintain. See slides 24-26 in http://www.energyjustice.net/files/incineration/incineration.pdf for documentation.

Initiative 5.2: Support waste diversion research.

Research facilities should be integrated into the waste management system so that regular waste sorts are conducted for the waste that remains for digestion/landfilling and this research – in partnership with academic institutions – should be coupled with efforts to analyze the failures to reduce, reuse, recycle or compost those materials. That research should then be used to figure out how to keep those materials from hitting this stage, whether by banning products, requiring their redesign, producer take-back or other means to stop the corporate externalizing of liability for used products onto the public. Please read Dr. Paul Connett's book, the Zero Waste Solution, for more on this: http://www.chelseagreen.com/bookstore/item/the_zero_waste_solution:paperback

Objective 6: Recover Energy from Waste

Background: This section is DEAD WRONG. Incineration cannot be a bridge to zero waste and is not needed as one. There is not a landfill space crisis in Maryland. Using the numbers from the draft plant on MRA waste handled at Maryland's MSW landfills and incinerators, there isn't a need to expand a single landfill for many years.

No MSW Landfill Expansions Needed Until:	**No Exports after 2014**		**Same Export Levels**	
	Incinerators Continue	**No Incinerators after 2014**	**Incinerators Continue**	**No Incinerators after 2014**
Business as Usual	2033	2028	2058	2039
Zero Waste Goals met	2086	2037	Distant future *	2068

* By 2039, exports plus amount incinerated exceed annual waste generation. If incinerators kept functioning that long and aren't regulated out of existence, the incinerators would start importing waste to meet capacity and landfills would fill up gradually with ash.

The draft plan assumes that the amount exported remains constant (43%). With this assumption, if the plan's recycling goals are met, Maryland's existing landfills have enough space to last until 2068 without a single expansion – even if all three of Maryland's incinerators are closed at the end of 2014! If Maryland stopped dumping on its neighboring states AND met its recycling goals AND closed its incinerators by the end of 2014, existing landfills would still last until 2037 without a single expansion.

Going without landfill expansions is a luxury not enjoyed by the less affluent neighboring states that Maryland dumps on. With most of Pennsylvania and Virginia's landfills in the private sector, landfill expansions are routine, as are the waste imports that have long enabled Maryland to avoid responsibility for its waste for so many years.

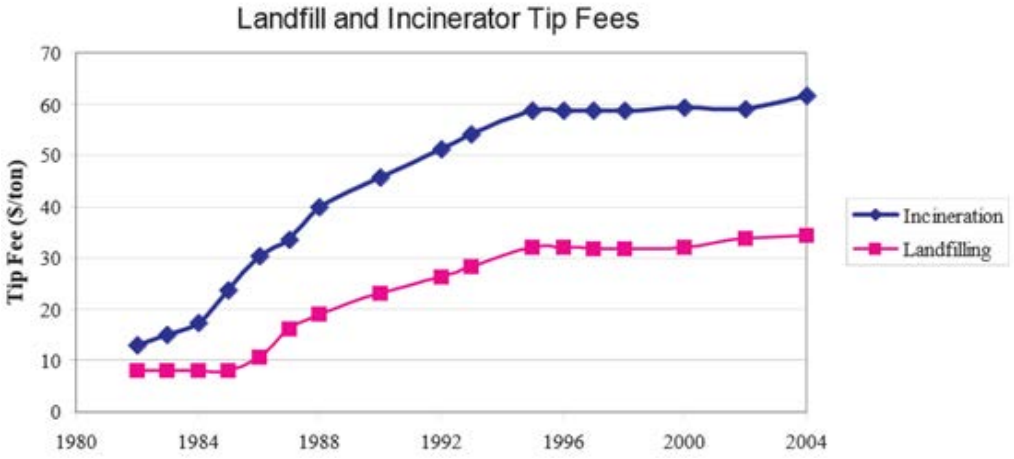
Most communities living near operating landfills, if given the following options, would likely go for the third option if permitted to make an educated choice:

- Expand the landfill to keep taking waste as usual
- Minimally expand the landfill as needed to take toxic incinerator ash
- Minimally expand the landfill as needed to take digested residuals from a zero waste program

"14 out of 22 existing MSW landfills are projected to reach capacity before 2040, some within the next several years. A disposal method will be needed to bridge the gap between the limits of existing capacity and attainment of zero waste in 2040 and beyond."

It's fine to allow some of these landfills to close or to minimally expand to take only digested residuals. **There is enough statewide capacity to last until 2068 if exports are kept constant, or to 2037 if exports are abruptly ended on New Years Day (unlikely). Framing this as a manufactured crisis only serves the wrong-headed agenda to build new incinerators, but is not necessary at all.** Waste is typically hauled many states away, sometimes even far across the country. Moving waste a few counties away, at the most, is not the end of the world.

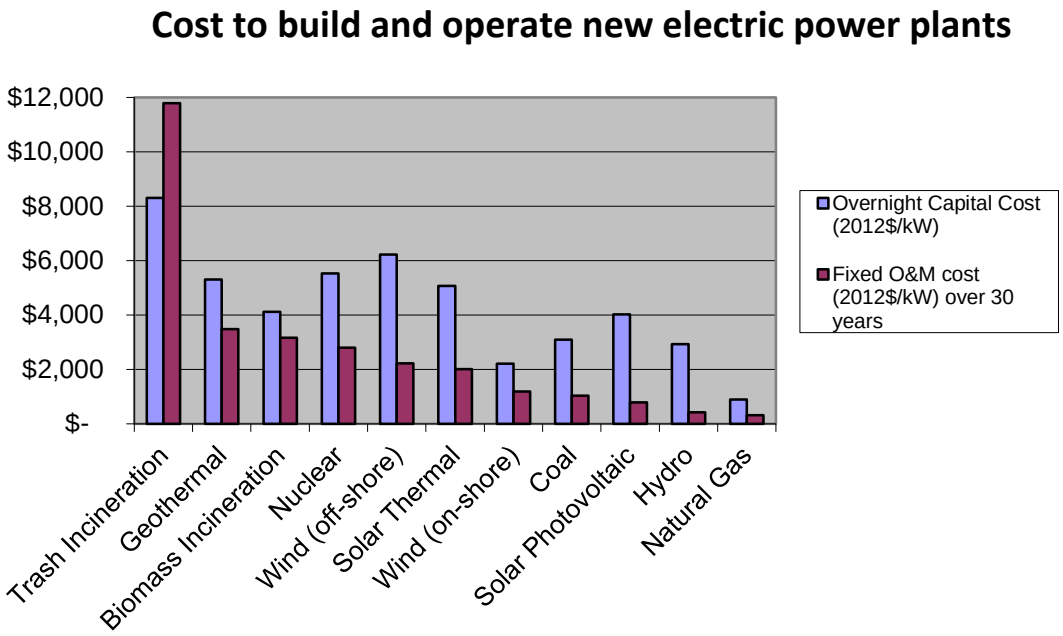
Actually meeting the recycling goals is far more important than keeping incinerators open. Building new incinerators sucks away the money you need to meet recycling goals. Incinerators are the most expensive way to manage waste or to make electricity.



Source: National Solid Waste Management Association 2005 Tip Fee Survey, p4.
http://www.environmentalistseveryday.org/teyuhata/docs/Tipping-Fee-Bulletin-2005.pdf

The incinerator industry's trade association president, Ted Michaels, President of the Energy Recovery Council, confirmed this in his testimony before a Washington, DC City Council Hearing on March 18,

2013. Video of the hearing before the Committee on Transportation and the Environment is here: http://dc.granicus.com/MediaPlayer.php?view_id=29&clip_id=1662 See 1:44 where he states: *"Waste-to-energy is an additional capital cost. That is not in dispute, compared to a landfill... compared to a landfill, which is a less capital-intense structure -- it is more expensive. If you had a landfill next to a waste-to-energy facility, then almost in every case, you would think the landfill is going to be cheaper."*



Source: "Updated Capital Cost Estimates for Utility Scale Electricity Generating Plants," Energy Information Administration, April 2013, p.6, Table 1. http://www.eia.gov/forecasts/capitalcost/; Full report here: http://www.eia.gov/forecasts/capitalcost/pdf/updated_capcost.pdf

The above figures are on the conventional incinerators like those Maryland currently uses and has proposed in Frederick and Baltimore. Newer and experimental types of incinerators such as gasification – *if* they could work on a commercial scale – are even more expensive. Building the most expensive facilities possible takes away the resources needed to do a proper zero waste plan.

It also competes with zero waste efforts, for three reasons:

- Because they're more expensive than landfills, they require contracts that lock in waste supply, often with "put or pay" clauses that penalize jurisdictions if they don't maintain high levels of waste production. These clauses require that the jurisdiction pay a set amount even if the full amount of waste isn't sent to the incinerator, allowing the incinerator operator to fill that capacity elsewhere and get paid twice for the same capacity, while the county has to pay for waste disposal it's not using – taking away the savings that could go into improving source reduction, reuse, recycling and composting.
- Incinerators need to burn high-btu materials like tires, paper and plastics – all of which are materials that should be recycled. They compete with recycling for these materials.
- Incinerators need to fill their capacity to operate economically, and thus demand certain volumes of waste over their decades-long lifetimes. Throughout Europe, nations relying heavily on incineration are finding that they have to import waste to feed their incinerators and that their overcapacity is now a problem.

Incineration cannot be a transition or "bridge" to something other than incineration. There is no such thing as a "transition" strategy when there is adequate landfill space within the timeframe of the zero

waste plan. Economic resources are better spent directly on the zero waste strategy which is far cheaper than investing in capital-intensive incinerators that require 30-year pay-back periods. Also, by investing in incinerators, it strengthens the constituency that will lobby for their continued use and against the zero waste measures that compete with their business model. Incinerators are an investment dead-end that make it harder to achieve zero waste. A true transition or bridge is something that actually gets you closer to your goal. Incinerators take you further away from zero waste. See http://www.energyjustice.net/solutions/transition.html for the arguments against "transition" fuels.

"Disposal technologies that reduce GHG emissions, particularly those that produce clean energy from waste, should be given preference in accordance with the materials management hierarchy"

Yes, it's important to reduce GHG emissions, which is why residuals ought to be digested before landfilling. Anaerobic digestion of residuals is the only way to "produce clean energy from waste" – as landfill gas production and any other sort of "waste-to-energy" (sic) is actually far worse for the climate, and for community health.

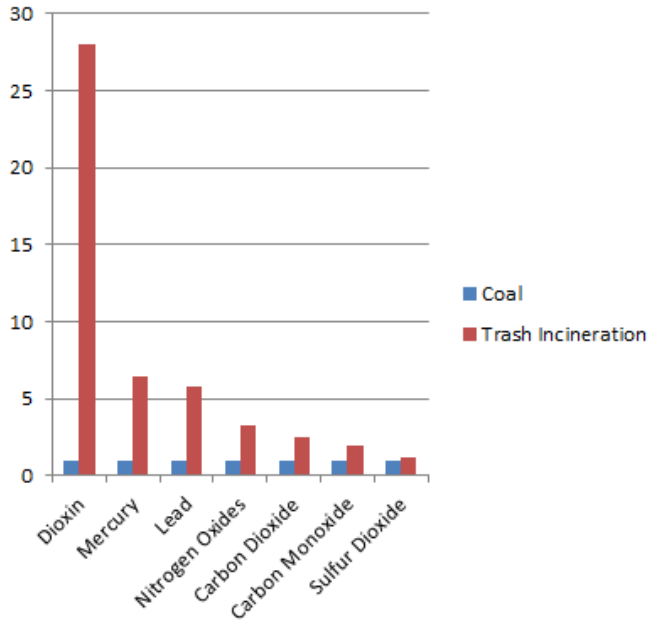
"Source reduction, recycling, and composting are virtually always environmentally preferable to disposal in landfills or by incineration."

Remove the word "virtually." They are always preferable, so long as recycling isn't contorted to mean inappropriate and toxic recycling, like the "beneficial use" of sewage sludge on farm fields or tires for fuel. Also, please add "reuse" after reduction and before recycling.

"When the choosing between waste-to-energy (WTE) and land-filling, WTE is often the preferred option."

Dead wrong again. WTE is an inaccurate PR term, but incineration, which is what is meant here, is always more polluting than the alternatives. **To make the same amount of energy as a coal power plant, trash incinerators release 28 times as much dioxin than coal, 2.5 times as much carbon dioxide (CO2), twice as much carbon monoxide, three times as much nitrogen oxides (NOx), 6-14 times as much mercury, nearly six times as much lead and 70% more sulfur dioxides.** See documentation here: http://www.energyjustice.net/incineration/worsethancoal and here: http://www.energyjustice.net/egrid

Ratios of pollution levels emitted per unit of energy produced by U.S. coal power plants and trash incinerators



"Use of WTE in lieu of land-filling can yield GHG and energy benefits."

The one environmental measure where incinerators are better than *conventional* landfills is in long-term greenhouse gas emissions, because methane from landfills is much more potent. However, short-term emissions are extreme in that nearly all of the carbon in waste is emitted immediately (most as CO2) from incinerator smokestacks. This is not a reason to favor incineration over landfilling, as residuals can be digested prior to landfilling, removing the methane generating potential and avoiding gassy, stinky landfills, while also recovering some energy in the process.

The supposed energy benefits from incineration are marginal. There is a lot of embedded energy in materials. Energy spent extracting and producing materials is not all physically present in those materials. For example, energy spent logging a tree, shipping it to a paper mill and running the mill mostly went out of tailpipes and smokestacks and cannot be recovered by burning the paper. However, that energy expenditure can be avoided by recycling that paper, saving 3-5 times more energy than an incinerator can produce by burning the same paper. See: Morris, Jeffrey, and Canzoneri, Diana, "Recycling Versus Incineration: An Energy Conservation Analysis," Sound Resource Management Group (SRMG) Seattle, Washington, September, 1992. http://www.sciencedirect.com/science/article/pii/0304389495001166 The values used are available in a chart titled "Recycling Versus Incineration: An Energy Conservation Analysis" on p. 32 of the "Waste Incineration: A Dying Technology" report by the Global Alliance for Incinerator Alternatives (GAIA): http://www.no-burn.org/article.php?id=276

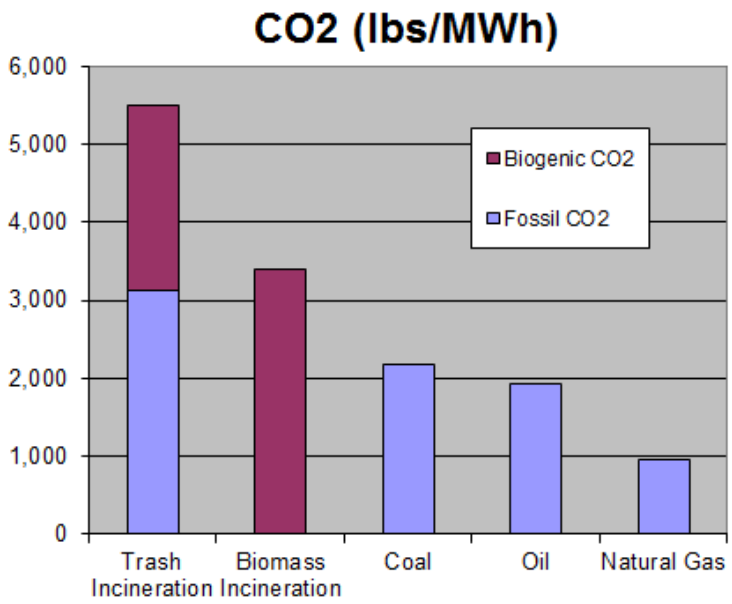
"Methane, which composes approximately half of the gas generated in a landfill, is far more damaging (per ton emitted) from a climate change perspective than carbon dioxide, especially in the short term. WTE facilities produce almost no methane and, for many materials, generate lower greenhouse gas emissions than land-filling."

EPA drastically underestimates methane's global warming potential. It's actually 86 to 105 times worse than CO2 over a 20-year time frame, but EPA still uses outdated science and looks at it over a 100-year time frame, assuming it's only 25 times worse than CO2. See the science referenced in the chart here: http://www.energyjustice.net/naturalgas Again, this does not justify incineration, but necessitates that we keep organics out of landfills and digest residuals before landfilling.

"WTE facilities can also reduce GHG emissions through generation of electricity that displaces higher carbon fossil fuel-fired generation."

Incinerators do not displace fossil fuel generation. They generate such paltry amounts of energy compared to fossil fuels that they don't really compete in that realm. However, they DO compete against emissions-free wind power because they compete within Tier I of Maryland's Renewable Portfolio Standard. Maryland is the only state to put trash incineration in competition with wind in such a law, making the state the laughing stock within the environmental world. Trash incineration and landfill gas burning must be removed from the RPS to avoid the perverse incentives that stand in the way of both clean energy and zero waste.

Incinerators do not reduce GHG emissions. They emit 2.5 times more CO2 per megawatthour than coal power plants do. If our only choices for energy were coal and trash incineration, coal would be far cleaner by every measure – and that's even considering that trash incinerators are newer and have more pollution controls than coal power plants do.



Source: EPA eGRID v.9 Database (2010 data for U.S. electric generators). Analysis by Energy Justice Network. Charts and data tables documented at http://www.energyjustice.net/egrid

It's important to understand that the "biogenic" portion is not to be ignored. Even if ignoring it, trash incineration is 55% worse than coal for the climate, but that CO2 emitted is real and felt by the atmosphere. Numerous scientific studies have debunked biomass "carbon neutrality" claims that the industry relies on, and have shown that, even if new and additional tree growth is made to happen, it takes decades to bring CO2 levels down to that of coal, and centuries for "carbon neutrality" to be reached, if ever. We don't have that long to address global warming, and biomass technologies cannot objectively meet the requirement to avoid, reduce, or sequester greenhouse gases within a meaningful time frame. The science on this in recent years is summarized here: http://www.energyjustice.net/biomass/climate and the studies debunking biomass carbon neutrality are also compiled here: http://www.energyjustice.net/content/biomass-library-scientific-reports#climate

It's not just science that has turned around in its understanding of CO2 from biomass. The courts and EPA are now recognizing this reality. In July 2013, the U.S. Court of Appeals struck down EPA's exemption for biogenic CO2 sources. *Center for Biological Diversity v. EPA*, 722 F.3d 401 (D.C. Cir. 2013). http://www.cadc.uscourts.gov/internet/opinions.nsf/F523FF1F29C06ECA85257BA6005397B5/$file/11-1101-1446222.pdf The court agreed with the science that "the atmosphere makes no distinction between carbon dioxide emitted by biogenic and fossil-fuel sources."

EPA's new carbon pollution standards for new power plants also count biogenic CO2 emissions. U.S. Environmental Protection Agency, "Standards of Performance for Greenhouse Gas Emissions From New Stationary Sources: Electric Utility Generating Units," proposed Jan. 8, 2014. http://www2.epa.gov/carbon-pollution-standards Page 85 states: "The proposed CO2 emission standards do not apply a different accounting method for biogenic CO2 emissions for the purpose of determining compliance with the standards." See: http://www2.epa.gov/sites/production/files/2013-09/documents/20130920proposal.pdf

"Consistent with the materials management hierarchy, WTE should always be coupled with a recycling program in which generators have removed as many recyclables as possible from the waste prior to disposal."

Incineration is not consistent with recycling, no matter the couple biased and unscientific comparisons that have been made, trying to correlate incinerator communities with high recycling rates. Communities with even higher recycling rates don't have incinerators, and the ones that do seem to correlate are often the product of being a more urban area (the national study by Berenyi, cited in footnote 78, does not control for urbanity and should be removed from the plan for lack of credibility) and is also a product of community environmental advocates having fought for more recycling in the face of incinerator threats.

Incinerators still compete with recycling because they need the paper and plastics to burn effectively. No incinerator can run solely on waste where "as many recyclables as possible" have been removed.

"…interest has increased in other WTE technologies, including gasification."

Interest has increased only among gullible public officials and the fly-by-night new LLCs with no history of successfully operating commercial-scale MSW gasification facilities. Local governments that have taken the time to research gasification have largely rejected it.

The nation's leading pro-incinerator consultants, Gershman, Brickner and Bratton, consistently present at industry conferences with a chart showing that pyrolysis and gasification are high risk investments due to "previous failures at scale, uncertain commercial potential, no operating experience with large-scale operations" (pyrolysis) and "limited operating experience at only small scale; subject to scale-up issues" (gasification). See slide 43 in their presentation at WasteCon 2012 for a copy: http://www.gbbinc.com/speaker/GershmanWASTECON2012.pdf

Waste Management Inc., the world's largest waste corporation, has recently backed away from its investments in many of these experimental incineration technologies. "Big Waste Hauler Rethinks Startups," Wall Street Journal, Jan. 3, 2014. http://online.wsj.com/news/articles/SB10001424052702303640604579297003682735612

Not a single commercial-scale facility is operating in the U.S. Failures in the U.S., Europe and Japan are described in presentations by GreenAction, and in the Energy Justice Network powerpoint on incineration available at http://www.energyjustice.net/incineration

Even the pro-incinerator head of DC's Department of Public Works, William O. Howland, Jr., dismissed plasma gasification when a vendor approached the city, stating in an email to the mayor's office:

> The technology the vendor is proposing - plasma gasification and combined cycle WTE - has not been successfully modeled either in the United States or abroad. In the US, there is a plant on the drawing board in Florida which has been significantly downsized since its inception and is still not operational. Further, the project has run into problems getting a turbine manufacturer to accept the risk and provide a warranty because the derived fuel is not sufficiently clean of metals and other particulate matter. Japan has several gasification facilities that vary in size and are run intermittently. Further, these facilities rely on a more homogenous feedstock than MSW. A mixed product like MSW will create additional challenges to keep a facility up and running on a constant basis.

Source: November 13, 2009 email from DC DPW to Mayor's office, revealed in FOIA request available at: http://www.energyjustice.net/files/dc/Correspondence-Mayor.pdf, p.40.

This experience described is still typical for this industry that has tried to get this working for many years and has been a miserable failure. The only thing that works is their PR efforts convincing public officials that they're a viable alternative.

"The State's goal is to reduce landfill disposal of waste over time, eventually eliminating land-filling entirely."

This is an unrealistic goal. As pointed out above, there will always be some residual. The "zero waste to landfill" notion is the hijacking of the zero waste definition by those who prefer to define incineration as zero waste to landfill, even though incineration makes landfill most dangerous through leaching of toxins from incinerator ash. A short-term goal of 100% diversion from incineration would make the most sense, with a longer-term goal of 90% reduction of waste going to landfills with 100% of the waste going to landfills having to be digested first to eliminate the methane-generating potential so that we don't have stinky, gassy landfills.

"The remaining in-State disposal is shifted over time toward gasification and other WTE, reflecting a shift in preference toward GHG emissions-reducing methods of disposal."

Eliminate this language as well, based on the fallacies outlined above.

Figure 13: Disposition of Waste, 2015 - 2040

The figure shows that the total amount of waste is not much reduced by 2040. It seems to be reduced by only about 17%. Even with population growth, one would expect that with economic contraction and peaking of resources that a serious effort at source reduction and reuse could knock the total down more than 17% in that time.

Initiative 6.1: Assess and compare environmental impacts of disposal technologies.

MDE is reviewing the available literature and local experiences? I haven't yet been interviewed. How hard is MDE looking for information critical of "waste-to-energy" technologies, or is MDE mainly seeking out one side of the story? As you can see in these comments, we have a lot of information that would help MDE have a more rounded understanding of these technologies. I look forward to a call.

Initiative 6.2: Encourage anaerobic digestion.

As spelled out in the zero waste hierarchy outlined at the start of these comments, it's critical to distinguish between clean source-separated organics and post-recycling processed residuals that contain organics. The former should be aerobically composted and can be used in agricultural applications if clean enough. The latter should be anaerobically digested, then landfilled, as it will be too contaminated to use in applications that come in contact with food or the public.

Please make sure that the zero waste plan reflect the appropriate role for anaerobic digestion and the appropriate disposition of the digestate.

Reduce
Reuse
Source Separate:

- Clean Compostables → **Aerobic Composting** → Landscaping / gardening / ag uses
- -Recycling → Material Recovery Facility (MRF):
  - -Recyclables to Highest-end, Most Local Markets Possible
  - -Residuals → Waste (below)
- -Waste → "Dirty MRF" (a.k.a. Mechanical / Biological Treatment):
  - -Additional Recyclables captured and marketed
  - -Residuals → **Anaerobic Digestion** → Digestate to Landfill
- -Special Collections → e-Waste, Household Hazardous Waste and other special/dangerous materials to proper recycling options

Initiative 6.3: Support gasification and other clean energy technologies.

This should be nixed entirely. It justifies supporting gasification based on the false premise that gasification "*can process MSW with fewer air emissions than traditional WTE*."

There is not a wealth of research on trash gasification emissions because there are no commercially operating plants in the U.S. However, the data that exists does not support a generalization that their emissions are lower than traditional incinerators.

In one set of tests done on a trash pyrolysis plant in southern California, the South Coast Air Quality Management District found that the pyrolysis plant had emissions of dioxins/furans, particulate matter and VOCs that were higher than the two traditional incinerators in the area, and that the NOx emissions were comparable. This and the following excerpt (and its footnotes) are available in the 2009 report titled *An Industry Blowing Smoke: 10 Reasons Why Gasification, Pyrolysis & Plasma Incineration are Not "Green Solutions."* See: http://www.no-burn.org/downloads/BlowingSmokeReport.pdf and for related reports and documentation on the problems with gasification, pyrolysis and plasma arc incinerators, see the powerpoint at the top of the page, as well as the section of links on Incinerators-in-Disguise at http://www.energyjustice.net/incineration

> Gasification, pyrolysis and plasma incineration companies often claim that their technologies do not have toxic consequences for communities and the environment. However, studies show that, when compared to conventional mass burn incinerators, staged incinerators emit comparable levels of toxic emissions. For example, the European Commission's *Integrated Pollution Prevention and Control Reference Document on the Best Available Technologies for Waste Incineration* found that "...emission levels for releases to air from the combustion stage of such [gasification and pyrolysis] installations are the same as those established for incineration installations**.**"[55] Similarly a 2008 Tellus Institute report commissioned by the Massachusetts Department of Environmental Protection found that, "Pyrolysis produces low levels of air emissions containing particulate matter, volatile organic compounds, heavy metals, dioxins, sulfur dioxide, hydrochloric acid, mercury, and furans. (The types of emissions produced are similar to those from conventional incinerators.)"[56] Moreover, environmental regulatory agencies anticipate the same categories of releases from these types of incinerators.
>
> Studies show that dioxins are created in plasma,[57] pyrolysis[58,59] and gasification[60] incinerators. The 2009 study *Comparison between emissions from the pyrolysis and combustion of different wastes* that appeared in the Journal of Applied and Analytical

Pyrolysis, found that pyrolysis incineration can lead to an increase in total toxicity including dioxin and furan formation. The study says, "The formation of PCDD/Fs [dioxin and furans] is important in both combustion and pyrolysis processes. In pyrolysis, there can be a significant increase of congeners and/or an increase of the total toxicity due to the redistribution of the chlorine atoms to the most toxic congeners."[61]

Similarly, a 1997 study published in the journal Chemosphere that examined a commercial scale German municipal waste gasification system operating under pyrolysis conditions, found that dioxins and furans were indeed formed in the process, with particularly high levels in liquid residues.[62] And a 2001 study published in Chemosphere examined the formation of dioxins and furans under pyrolysis conditions and concluded that even at oxygen concentrations lower than 2 percent, considerable amounts of highly toxic polychlorinated dioxins and furans were formed.[63]

In the *Whitepaper on the Use of Plasma Arc Technology to Treat Municipal Solid Waste*, the Florida Department of Environmental Protection (in the U.S.) states its concerns about the pollutants that can be formed by plasma incineration. It says:
There is considerable uncertainty about the quality of the 'syngas' to be produced by this technology when processing MSW. While the high temperatures can destroy organics, some undesirable compounds, like dioxins and furans, can reform at temperature ranges between 450 and 850 degrees F if chlorine is present.[64]

Likewise, data from the California South Coast Air Quality Management District found that the pilot pyrolysis plant in Romoland, CA emitted significantly greater concentrations of dioxins, NOx, volatile organic compounds and particulate matter (PM10) than the two aging mass burn incinerators in the Los Angeles area.[65]

Some companies claim that they will process waste to create a gas or fuel that can be combusted off-site to power vehicles or other industries. Currently, the author knows of no commercial facility in the world that is successfully producing a liquid fuel from municipal solid waste gasification, pyrolysis or plasma processing. However, if a fuel were to be produced from such a facility the health risks could be even greater than facilities where combustion occurs on site. This is because combustion of gases and/or fuels containing toxins such as dioxin and heavy metals could occur in off-site industries and vehicles that may be even less stringently monitored and regulated than incinerators.

Thomas Cahill, an air pollution expert and retired UC Davis physics professor cautioned in a 2008 Sacramento Bee newspaper article about a proposed plasma arc incinerator for Sacramento, CA, that the environmental concerns extend beyond what comes out of the plant stack to the safety of the gas produced for sale. Cahill says in the article, "When that gas is sold to be burned, say at a power plant, it could emit ultrafine particles of nickel, lead and other toxic metals that can lodge deep in the lungs, enter the bloodstream and raise the risk of a heart attack…If you were near a power plant that burned this, you would be in serious trouble."[67]

Emissions estimates of gasification vs. conventional incineration based on EPA models show nearly double the levels of dioxin/furan emissions, the same levels of mercury, similar levels of lead and SO2, and higher levels of NOx. See: http://www.bredl.org/pdf/gasification-massburn.pdf

Initiative 6.4: Utilize WTE for managing solid waste, after maximum removal of recyclables.

"Due to its greenhouse gas emissions and energy production benefits relative to landfilling, WTE should be preferred to landfilling as a disposal method."

Incineration is worse than landfilling on every other point… on cost, jobs produced, air pollution, and even water pollution (take an honest look at leaching from incinerator ash). The minimal energy production from combustion compared to digestion of residuals is not worth the environmental or economic cost. Rather than compare GHGs to conventional landfilling, compare to digesting residuals before landfilling, and incineration will not even look good on that point. This is a weak argument to justify the unjustifiable. This "initiative" must be eliminated.

Objective 7: Collaborate and Lead by Example

Initiative 7.1: Increase environmentally preferable procurement and management of electronics

E-Stewards certification for electronic waste should be required, not just R2. R2 is an industry-developed standard intended to be weaker. For example, it does not prohibit the use of prison labor, which has been a serious problem for toxic exposure to prison workers that even the Department of Justice made an issue of.

Initiative 7.3: Seek opportunities for regional collaboration.

Avoid regionalizing things that are best done locally.

Ensure that EPR programs put the fiscal responsibilities on the manufacturers / retailers, but not the physical responsibility for handling the materials if there are better options for keeping the materials in-state to benefit smaller businesses, non-profits and recyclers while keeping the jobs and economic benefits in-state. Learn from the experience in Vancouver, British Columbia on how not to do this. The Institute for Local Self-Reliance is a good resource on how to do this properly and keep the jobs and value in-state.

Initiative 7.5: Increase procurement of recycled products.

Learn from the system that Rutgers University has, under the leadership of Kevin Lyons, author of Buying for the Future: http://www.amazon.com/Buying-For-The-Future-Environmental/dp/0745313418

Objective 8: Conduct Education and Outreach

Initiative 8.1: Seek sustainable funding for outreach and *Initiative 8.2 Provide funding to local government for outreach activities:*

Impose a $5 fee on every ton of trash taken to landfills and incinerators to fund local government outreach programs. Pennsylvania, Ohio and West Virginia charge $7.25 to $9/ton. See chart on last page at http://www.pennfuture.org/UserFiles/Tipping%20Fee%20Fact%20Sheet.pdf. Tax soda at the same rate as alcoholic beverages. Pass a bottle bill. Tax CO2 emissions from power plants and incinerators. Close corporate tax loopholes. End corporate welfare. Invest in public transit and make it fare-free, which will get more people out of cars, reducing air pollution and consequent health care costs as well as wastes related to automobiles. Make some of the recycling infrastructure state-run, so that the state can capture the profits and plow them back into solutions.

Initiative 8.4: Conduct outreach at schools.

Get zero waste public education into elementary schools. Kids like tangible ways to learn. Have them learn where materials come from and where they go, and what communities are impacted in the process. Have them sort through (carefully selected, clean) "trash" to identify which materials are really recyclable and compostable and have them think about where they come from. Use the "Story of Stuff" video and curriculum in middle and high schools: http://storyofstuff.org/resources/high-school-curriculum-buy-use-toss/ and http://storyofstuff.org/movies/story-of-stuff/

Students will being good recycling and composting habits back home to their families.

Get communities gardens going in schools, so that the composting can be done on school sites and students can learn to grow food that can be used in school cafeterias, off-setting costs and providing healthier food.

Appendix A

Montgomery County should be watched for what it actually counts as recycling. County officials have (very irresponsibly) advised that treated construction/demolition wood waste be disposed of at their incinerator, which is highly toxic, resulting in releases of lead, arsenic, chromium VI and dioxins – as a result of chlorinated wood treatment chemicals and copper in CCA-treated wood. Copper is the most potent catalyst for dioxin formation. This treated wood should never be burned. Copious documentation on C&D waste burning hazards available upon request.

The EPR example from British Columbia is a bad one, as it's been very contentious, putting big business in charge while harming small recyclers. Consult the Institute for Local Self-Reliance (www.ilsr.org) for details on how this can be done better.

The Belgium example incorrectly calls incineration ("waste-to-energy") recovery, when it's actually disposal and destruction, and is not in line with the zero waste definition. Please eliminate this from the example if the example is to be kept.

Edmonton is another bad example. Their proposed trash-to-ethanol plant is not an appropriate way to do zero waste. If organics were really pulled out to the proper extent, they could not run this trash-to-ethanol plant. The plan shouldn't plug controversial and unproven technologies. Most of these sorts of proposed facilities fail. There's a reason for that. Ditto for the gasification aspect.

Appendix B

The fee in Pennsylvania has been more than $2/ton for a long time. It's currently at least $7.25/ton. The $2/ton Recycling Fee still exists. 53 P.S. § 4000.701(a). A $4/ton fee was added in 2002 to fund environmental programs. 27 Pa.C.S. § 6301(a). A 25¢/ton fee was added which now also goes to the same fund. 27 Pa.C.S. § 6112(b). There is also a state-mandated host fee to go to the local government, which must be at least $1/ton. 53 P.S. § 4000.1301.

Some other states in the region also charge more serious amounts. West Virginia charges $8.75/ton. Ohio charges up to $9/ton. See last page of:
http://www.pennfuture.org/UserFiles/Tipping%20Fee%20Fact%20Sheet.pdf

Performance-Based Payments: South Carolina Biomass Energy Production Incentive

This example should be removed, as biomass energy production is 50% worse for the climate than coal and is not carbon neutral, as the industry claims. See http://www.energyjustice.net/egrid/ and http://www.energyjustice.net/biomass/climate as well as the rest of the climate-related comments under Objective 6 above.

Despite our critical differences on combustion technologies, we're excited to see this plan and to support the direction most of it is going. It's clear that much consideration and research went into it, and we hope to see the O'Malley/Brown Administration take it to the next level by addressing the above concerns and working with the grassroots leaders in the field to implement this in the best way possible.

Our colleagues in Frederick and Carroll Counties, and in Baltimore City are busily trying to stop plans for large new waste incinerators in their areas. Despite state permits having been issued for them, it's clear that they both face financial hurdles and are unlikely to come to fruition.

Let us remind you that the proposed Energy Answers incinerator in Baltimore would be the nation's largest, burning 4,000 tons/day of trash, tires, shredded cars and wood waste within a mile of Benjamin Franklin High School, polluting a diverse working class community with up to half a ton of toxic lead each year, not to mention other toxic pollutants. This is in one of the nation's most polluted zip codes. Enough is enough.

The other proposed incinerator would be built by Wheelabrator in Frederick County, burning 1,500 tons/day of trash, tires and sewage sludge. It has been fought for nearly a decade, and Carroll County recently pulled out of the deal out of fiscal conservatism, paying $1 million to do so. With no county willing to step into their place and provide the needed money and waste, this project is looking doomed.

Considering the time, expense, political opposition, pollution and environmental injustice involved with incineration, this plan ought to be revised to follow the lead of the grassroots advocates in Maryland who want true zero waste, not incineration dressed up in a "zero waste" policy.

It's politically and economically unrealistic to expect new incinerators to overcome community opposition and be financed and built, when no other incinerators have been financed and put online yet in the last 17 years in the U.S.

Thank you for considering our comments and please do not hesitate to contact me for further details or documentation.

Sincerely,

Mike Ewall, Esq.
Founder & Director, Energy Justice Network