

MIRA Request
for
30-year, \$330M
Redevelopment Project

The Issue:

- MIRA (Materials Innovation and Recycling Authority) has requested the support of its' member communities for a 30-year, \$330M redevelopment deal, including:
 - Upgrading the Waste to Energy (WTE) Facility
 - Upgrading the Recycling Facility
 - Future food source recycling

- This would result is a tip fee for MSW (Municipal Solid Waste) of \$145/ton and no cost for recycling.

- MIRA is seeking a non-binding statement of interest by February 28th and a firm commitment by June 2020

Background

In the 1980s, MIRA (formerly CRRA), working with a over 70 municipalities, built the Mid-Connecticut Project Trash to Energy Plant. Currently, MIRA is supporting 51 municipalities.

After 35+ years in operation, this facility is beyond its useful life.

- Plant is outdated and subject to significant equipment failures.
 - Last summer, both turbines were out and the facility could not process MSW and had to ship material out of state.
 - This cost MIRA millions and greatly reduced their cash reserves.
- The facility is responsible for nearly 1/3 of Connecticut's Solid Waste capacity

South Meadows Waste To Energy Facility



www.energyjustice.net/ct/hartford

Tip Fees

- In 2017, Simsbury entered a 10-year contract with MIRA for MSW and recycling
- Current tip fee is \$83/ton and no cost for recyclables
- Anticipated tip fee for FY21 is \$87.85/ton - \$101/ton
- MIRA charges the same tip fee for all communities, regardless of use of transfer stations. Simsbury is effectively supplementing the cost for these communities.
- MIRA believes the tip fee for the redeveloped plant needs to be in the range of \$95/ton to be viable in today's market
- The current tip fee is being supplemented by ~\$19/ton due to MIRA's operation of large, on-demand/peak generation of electricity; non-renewable permit for the generators expires in 2023

Recycling

- The recycling market is volatile!
- In 2012, CCSWA bids for recycling disposal had facilities PAYING up to \$27.50 for mixed recyclables.
- Now many municipalities (not with MIRA) are paying to recycle.
- Much of the change was due to international changes: specifically, China choosing to stop taking recyclables and the US didn't have capacity to receive the mixed recyclables.
- This may all change in the next few years... certainly in the next 30-years.
- MIRA fundamentally believes it will always take mixed recyclables from its municipal customers at no cost... this artificially inflates the MSW tip fee.



Connecticut's MSW/Recycling

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- CTDEEP... Comprehensive Materials Management Strategy (CMMS):
 - Waste to Energy preferred method over landfills
 - Self sufficient – not reliant on other states
 - No surplus capacity to be developed
 - Minimize transportation cost and impact
 - Prioritize environmental justice
- Recycling is no longer profitable and has become an expensive liability
- Electricity at MIRA priced on the open market and is a fraction of price it once was



Redevelopment of the WTE & Recycling Facilities

- In 2018, CTDEEP, with the support of the Legislature, conducted an RFP process for the redevelopment and long-term maintenance of the WTE and Recycling Facilities in South Meadows
- Three firms responded and SACYR-Rooney (SSRT) was selected as the redevelopment firm
- Following the RFP process, SSRT conducted a deep dive into the condition of the facilities and the local markets
- SSRT has been forced to change the original proposal to now propose a 30-year fixed tipping fee of \$145/ton for MSW and no cost for recycling.
- SSRT's original proposal included a tip fee below \$100/ton

What is Included in the Plan

\$330,000,000 all in cost

- Comprehensive renovation, update and overhaul of the existing WTE plant :
 - Plant will still use RDF (Refuse Derived Fuel). RDF requires MSW to be processed before it is burned.
 - Other WTE facilities are capable of burning MSW directly using MBF (Mass Burn Facility) technology.
- Update and modernize the recycling facility
- Future mechanical/biological waste system to further advance the State's solid waste, i.e. food waste
- \$4m PILOT to Hartford
- Assured reliability and 85% capacity for 30 years

Why is the Tip Fee So High?

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CSWS Redevelopment Presentation to Municipalities

Why such a high tipping fee?

- \$330 million capital for repair/renovation (~\$20/ton msw)
- Operations and performance risk is with the contractor.
- Price includes transfer and transportation (~\$12/ton msw).
- Price includes \$0/ton single stream recycling (~\$4/ton msw).
- Price includes \$4 mm host fee (~\$7/ton msw).
- RDF technology is more costly than Mass Burn technology.
- No publicly owned ash residue landfill (~\$10/ton msw).
- Power prices are projected to remain historically low for the 30 year term.

Is the Project Viable at \$145/ton?

MIRA believes the tip fee needs to be in the range of \$95/ton and is looking at three options to reduce pricing or to make it viable:

- Have the State issue General Obligation Bonds for the project
- Establish a Power Purchase Agreement where Eversource and UI would be required to purchase the power generated from the WTE facility for \$0.11/kWh (Current power generation from the facility is selling for \$0.03 to \$0.04/kWh)
 - An alternative to this would be to allow municipalities to enter into a PPA with MIRA using virtual net metering
- Creation of Renewable Energy Credits (RECs, similar to solar and wind RECs)

Absent a new revenue stream:

- Enacting a law and/or regulation restricting or taxing the export of MSW out of State – This would not lower the tip fee, but would eliminate out of state competition, thereby making tip fees in the range of \$145/ton viable

Other Options...

What if, this redevelopment proposal fails to receive support from municipalities:

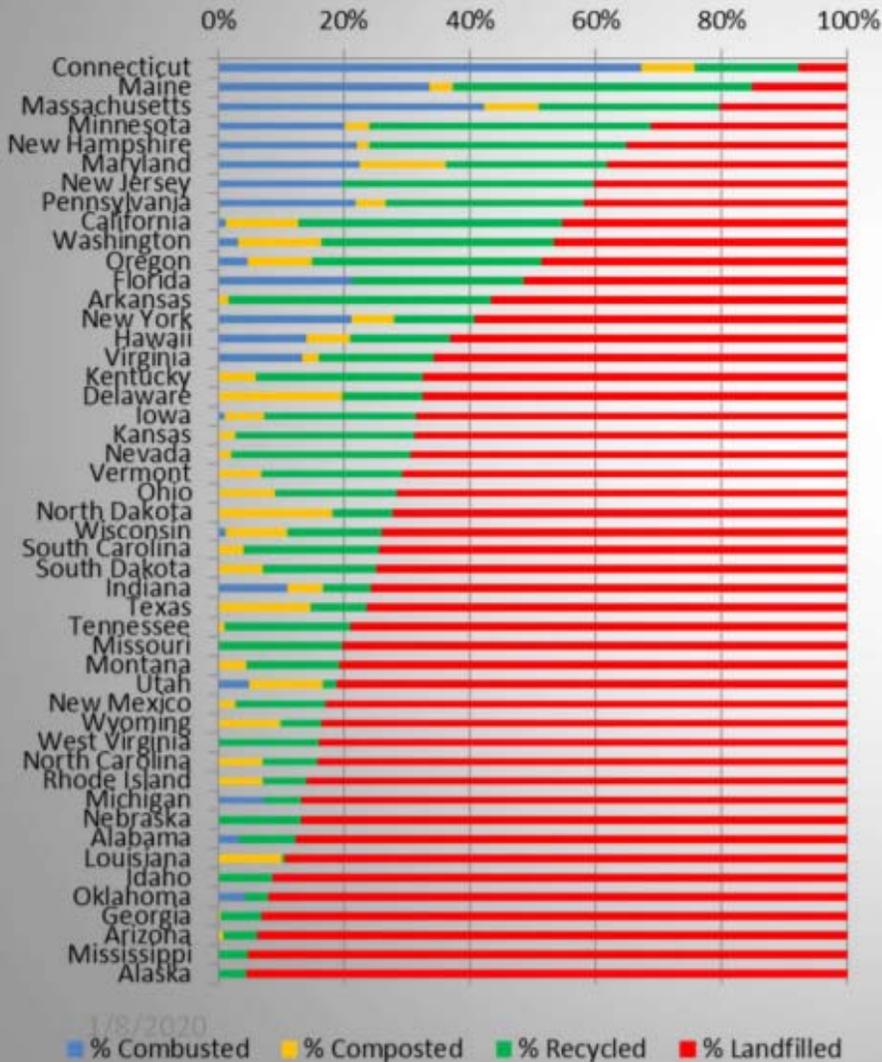
- MIRA can go out with a new RFP
 - A. New redevelopment proposal for the WTE and recycling facilities
 - B. Large scale transfer station – ship MSW out of state
 - C. Some combination of A & B

- Communities can go onto the open market
 - Limited capacity
 - Future risk

Questions...

Moving forward, if you have additional questions please send all questions to Tom Roy and we will have responses at the February 24th BOS Meeting.

Columbia University
Earth Institute 2011



- Connecticut is the western hemisphere leader in Sustainable Solid Waste Management

MIRA Facility Condition Report

MIRA facilities:

- **Waste to Energy Facility:**
 - 720,000 tons/year nominal capacity.
 - major capital renovation required
 - Reliability/capacity constrained, poor availability
 - **Recycling Processing MRF:**
 - 75,000 tons/year, major capital renovation required.
 - **Jet Peaking Facility: (present source of supplemental revenue).**
 - 160 MW: non renewable permit expires in 2023 (minimal salvage value).
 - **Transfer stations: Watertown, Essex, Torrington, Ellington (standby).**
 - Modest capital reinvestment required.
- **The Waste to Energy Facility is suffering poor availability and capacity utilization due to deferred maintenance and insufficient capital renewal and replacement.**
- Facility operation is not sustainable.**