

# COVANTA

Powering Today. Protecting Tomorrow.

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**A sustainable waste management solution for the State of Connecticut.  
A transformative development opportunity for the City of Hartford.**

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Phase II Response to CT-DEEP RFP  
for the redevelopment of the Connecticut Solid  
Waste System Project

Proposal Submitted by: Covanta Energy, LLC 445 South Street Morristown, NJ 07960 July 31, 2017



July 28, 2017

Connecticut Department of Energy and Environmental  
Protection  
Attn: Ms. Peggy Diaz  
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Hartford, CT 06106-5127

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**Re: Request for Proposals for the Redevelopment of the Connecticut Solid Waste System  
Project – Phase II**

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Dear Ms. Diaz:

Covanta Energy, LLC (“Covanta”), is pleased to present its response to Connecticut Department of Energy and Environmental Protection’s (“CT-DEEP”) Request for Proposals for the Redevelopment of the Connecticut Solid Waste System Project – Phase II. As the world’s largest operator of solid waste infrastructure projects that convert municipal solid waste (“MSW”) to energy, Covanta has been providing project development, operations and maintenance services to meet the solid waste management needs of public clients in since 1985.

With the new information provided in Phase II, Covanta modified its technical approach to provide a more competitive proposal that provides predictable pricing to the member towns, helps the State achieve its diversion goal before 2024, and presents the City of Hartford with an opportunity to develop its waterfront. More importantly, Covanta’s proposed approach relies on a pragmatic solution to divert organics from MSW to catalyze the development of additional facilities in the State to process source separated organics.

Please contact me if you need any additional information on our proposal. We look forward to hearing from you regarding next steps on the project.

Sincerely yours,



Richmond Young

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## Section 1. Certification

See Appendix A for an executed letter by an Authorized Representative of Covanta certifying that:

- a) Covanta has reviewed this RFP and any Amendments thereto and has investigated and informed itself with respect to all matters pertinent to this RFP and its Proposal;
- b) The Proposal is submitted in compliance with all applicable federal, state and local laws and regulations, including antitrust and anti-corruption laws;
- c) Covanta certifies that the information in the Proposal being submitted is correct and true; and
- d) Covanta is bidding independently and has no knowledge of the substance of any proposal being submitted by another party in response to this RFP other than what DEEP posts on its Resource Rediscovery RFP website.

## Section 2. Executive Summary

### A progressive solution to managing waste for the long-term

CT-DEEP OBJECTIVE	COVANTA PROPOSAL
<b>1. DIVERSION</b> Achieve state's goal of 60% diversion from landfill and combustion by year 2024	<ul style="list-style-type: none"> <li>✓ Curbside SSO collections from households is projected to divert 20% or more of MSW currently disposed in energy-from-waste (EfW) plants</li> </ul>
<b>2. PRICING</b> Provide stable and competitive pricing for municipalities	<ul style="list-style-type: none"> <li>✓ Price certainty for municipalities, with provision for market-based adjustments over a 30-year period.</li> <li>✓ Price not dependent on expected future value from commodity sales</li> </ul>
<b>3. TOWN SERVICE</b> Uninterrupted services to the towns under contract	<ul style="list-style-type: none"> <li>✓ Ready to assume MIRA's by July 1, 2019 without interruptions in service</li> <li>✓ Covanta currently under contract with 30 towns in the State</li> </ul>
<b>4. EMPLOYMENT</b> Enhance communities by providing quality jobs and purchasing local goods & services	<ul style="list-style-type: none"> <li>✓ Opportunity to develop over 100 acres of river front property in the City of Hartford for higher value use</li> <li>✓ Utilizes Connecticut-based vendors and service providers</li> </ul>
<b>5. TRANSFER STATIONS</b> Maintain services at CSWSP transfer stations	<ul style="list-style-type: none"> <li>✓ Covanta to maintain CSWSP transfer stations and integrate them into its operations in the State</li> <li>✓ Covanta's operates over 20 transfer stations in the US</li> </ul>
<b>6. CURRENT PRACTICES</b> Continued source segregation and collection of designated recyclables	<ul style="list-style-type: none"> <li>✓ Maintain separate collection of curbside collected recyclables</li> <li>✓ Promote segregation at source through collection of curbside SSO</li> </ul>
<b>7. RECOVERY TECHNOLOGIES</b> Solutions to sort post-recyclable MSW to recover recyclables and organics	<ul style="list-style-type: none"> <li>✓ Proven sorting and processing technologies that recover recyclables and organics from MSW</li> <li>✓ Covanta is an experienced developer of mixed-MSW projects</li> </ul>
<b>8. FINANCING</b> Demonstrated ability to privately finance the project	<ul style="list-style-type: none"> <li>✓ Covanta can fund from internal resources</li> <li>✓ Proven experience in closing over \$5 billion in solid waste projects</li> </ul>
<b>9. EXISTING SITES</b> Make use of existing sites within the CSWSP	<ul style="list-style-type: none"> <li>✓ Hartford MRF and CSWS transfer stations will continue to be used</li> <li>✓ Shut down RRF so City of Hartford can develop valuable waterfront property</li> </ul>

In Phase II of the Request for Proposal for the redevelopment of the Connecticut Solid Waste System Project (CSWSP), Covanta re-evaluated its Phase I submission to The Connecticut Department of Energy and Environmental Protection (CT-DEEP). As a result, we devised a **new technical approach** that provides:

- a cost-effective, low-risk, scalable commercial solution;
- the ability for the State to achieve its diversion goals prior to 2024;
- momentum to stimulate development of new anaerobic digestion (AD) and composting facilities;
- tactics to further advance efforts to promote diversion; and
- means to facilitate the revitalization of the City of Hartford.

Our approach is threefold:

1. Shut down the Mid-Conn Resource Recovery Facility (RRF);
2. Roll-out comprehensive source-separated organics (SSO) program to residents; and
3. Leverage existing disposal and recycling facilities within the State.

It's a long-term solution that meets CT-DEEP's requirements to process 700,000 tons per year (TPY) of municipal solid waste (MSW) and 100,000 TPY recyclables – in short, a more efficient approach that provides reliable capacity and price certainty, and limits risk to the State of Connecticut and the customers and communities we will serve.

## Four key factors

Given Covanta's unparalleled experience working with CT-DEEP, our existing infrastructure within the State, our in-house expertise, and our proven ability to execute complex long-term contracts, we're confident that we will deliver on our proposal to meet all the goals of the CSWSP. Here are the four factors that reshaped our technical approach:

### FACTOR ONE: Phase II RFP Update

The 30-year waste supply assumption is no longer valid, and the selected contractor must now assume the risk of waste volumes for the life of the contract. In addition, the selected contractor must provide a solution that is privately financed.

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### COVANTA'S MODIFIED TECHNICAL APPROACH: MINIMIZE TIP FEES

The multi-million dollar investment to modernize the RRF would require significantly higher tip fees. The lack of any waste guarantee would have made private financing very expensive – resulting in increased tip fees and rendering Covanta's original proposal uncompetitive. Instead, we forged a solution in which the level of investment required mirrors the certainty within the waste contracts we can negotiate.

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### FACTOR TWO: The Mayor of Hartford's Objectives

As part of the RFP Phase II, Covanta met with Mayor Bronin to better understand how he would evaluate the proposals. The Mayor indicated that he would be looking at the proposals based on how much of the existing footprint of the RRF is reduced, how the aesthetics of the city will improve, whether the City of Hartford's environmental picture would improve, and the overall benefits that would accrue to the City.



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### COVANTA'S MODIFIED TECHNICAL APPROACH: SHUTDOWN RRF

By shutting down the RRF, the City can reclaim the site for development and improve the look of the waterfront – creating opportunities for new business in the City and expand its tax base. Shutting down the RRF would immediately lead to a significant reduction in truck traffic, resulting in lower emissions from vehicles. The curbside SSO program rollout would begin with the City so it can immediately cut waste management costs and demonstrate its leadership as the first community to embrace large-scale diversion of residential sourced organics.

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**FACTOR THREE: 2016 Comprehensive Materials Management Strategy (CMMS)**  
According to the CMMS, “Organics provide the largest opportunity to increase Connecticut waste diversion” and the “top growth priorities for organics are to strengthen and expand both the collection system (from residential and commercial generators) and to expand processing capacity at new and existing compost facilities, and at new anaerobic digestion (AD) facilities.”

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**COVANTA'S MODIFIED TECHNICAL APPROACH: COMPREHENSIVE SSO TO DIVERT ORGANICS**

The State will not see a step change in its diversion rates unless it targets organics – now over 40% of the MSW disposed. Covanta will help the State achieve its diversion goals by subsidizing the cost of implementing comprehensive SSO programs for residential generators. This will increase the volume of organics collected, and stimulate the development of new AD and composting facilities.

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**FACTOR FOUR: Trends in New England Waste Market**

In the past four years, six waste disposal facilities with a capacity of over 1,000,000 TPY were closed. In 2018, three more facilities (Chicopee, Southbridge, and Taunton) with a combined capacity of 900,000 TPY are expected to close. With no new capacity under development, this means higher tip fees in New England.

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**COVANTA'S MODIFIED TECHNICAL APPROACH: PREDICTABLE PRICES OVER THE LONG-TERM**

Predictable long-term pricing is needed to protect generators from tightening disposal markets in Connecticut. Covanta proposes not only a predictable long-term pricing scheme, but also a mechanism to ensure towns are paying a fair price over the term of the contract.

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**Meeting the State's diversion goals faster**

Covanta is committed to helping CT-DEEP achieve its diversion goals for Connecticut. Our technical approach will, in fact, enable DEEP to reach those goals earlier than 2024.

The reasons – first, we can assume operations under the contract as early as July 1, 2019. This is because the technical approach is not dependent on any major permitting requirements. Unlike organics recovered from MSW, AD and composting facilities that are already permitted can immediately accept SSO, with no changes required on their permits. Second, Covanta's proposed commercial arrangement provides the necessary low-cost funding to support the roll-out of a comprehensive SSO program to residential generators. Finally, Covanta has ample internal resources to fund the proposed technical approach – which eliminates the need for a lengthy private finance undertaking.

**Promoting organics diversion throughout the State**

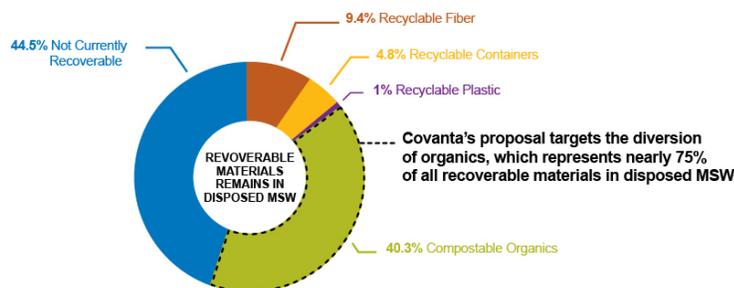
Covanta's proposal to recover curbside SSO will increase the availability of organics feedstock, resulting in new development of AD and composting facilities throughout the State. With Covanta as its partner, the State will benefit from any discoveries resulting from Covanta's ongoing efforts to seek more sustainable ways to manage waste using these and other advanced conversion technologies.

Additionally, towns that implement the curbside SSO program for residents can help influence small commercial generators to participate in the program – creating the impetus for expanded involvement in the State’s diversion efforts.

FIVE PRINCIPLES: A CLOSER LOOK AT COVANTA’S TECHNICAL APPROACH		
1	COMMITMENT TO THE ENVIRONMENT	Covanta is committed to helping CT-DEEP achieve its goal of 60% diversion from landfill and EfW before 2024.
2	ABILITY TO ASSUME THE ROLE OF MIRA	Covanta can begin to perform under contract as early as July 1, 2019 and assume MIRA’s responsibilities to member towns and commercial haulers.
3	REVITALIZATION OF THE CITY OF HARTFORD	The City of Hartford will regain valuable riverfront property for development. In addition, the City will benefit from reduced emissions due to reduced truck traffic.
4	ABILITY TO LEVERAGE EXISTING INFRASTRUCTURE	Covanta will utilize existing infrastructure – using a combination of assets owned by MIRA, Covanta, and third parties – ensuring uninterrupted service to customers.
5	NO FINANCING CONTINGENCY	Covanta’s proposal can be funded with internal resources, and is not dependent on the State, CT-DEEP, MIRA, or other financial institutions.

### PRINCIPLE #1. COMMITMENT TO THE ENVIRONMENT

In reshaping its technical approach, Covanta sought out possible solutions that were cost-effective, commercially viable, and, most important, would help CT-DEEP push the state towards its 60% diversion goal before 2024.



Source: 2015 Connecticut Waste Characterization Study

When looking at the data from the most recent waste characterization study, we saw that the solution lies in diverting compostable organics – which represent over 40% of all MSW disposed and 75% of recoverable materials in disposed MSW.

More than anything, diverting organics provides both the State and towns the greatest opportunity to increase diversion rates while also saving on waste management costs. This should not come as a surprise, as CT-DEEP has been targeting policy efforts that encourage large generators to divert food waste from landfill and EfW.

With a primary focus on organics diversion, Covanta set out to modify its technical proposal as follows:

- A. **Shut down Mid-Conn Resource Recovery Facility**  
Covanta will shut down the RRF so the site can be redeveloped for other, more valuable, commercial or industrial uses. Operation of the power block facility (PBF) and waste processing facility (WPF) would cease as early as July 1, 2019.
- B. **Convert the Hartford Materials Recovery Facility (MRF) into a Transfer Station**  
To serve existing direct haul customers in Hartford, Covanta will turn the MRF into a transfer station. Curbside recyclables from MIRA's customers will be redirected to third-party, privately-owned MRFs in the State for processing – whereby Covanta has already secured letters of intent (LOI). Based on Covanta's discussions in the market, there is in excess of 100,000 TPY of MRF capacity available today.

Covanta proposes that the MRF can shut down as early as July 1, 2019, and be ready to be reopened as a MSW transfer station by March 2020. While the MRF is being permitted and converted into a transfer station, Covanta will utilize the tipping floor of the WPF as a temporary transfer station – which is permissible under the RRF's existing solid waste permit. The temporary use of the WPF will not require any changes to the infrastructure.

- C. **Maintain and Optimize Existing Waste Flows**  
Based on our study of the ability for Connecticut to handle current and future capacity levels of MSW and organics, Covanta is confident we will be able to maintain, and even optimize, existing waste flow in the State.

Our proposal ensures that MIRA customers who currently deliver MSW and recyclables to the MIRA transfer stations can continue to do so. The MIRA municipalities within close proximity to Covanta's facilities in Bristol or Preston will be able to take advantage of, and haul directly to them – reducing transportation costs. There's no need for the extra cost of transporting solid waste to transfer stations that are, in fact, further away.

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Durham and Middlefield, which generate over 6,000 tons per year of MSW, could go direct to Covanta's Bristol facility to tip its waste instead of going to the Hartford transfer station and paying the additional cost to transfer the waste to a disposal site. The distance to Bristol as opposed to Hartford is roughly the same, at just under 25 miles.

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D. Fund a Source-Separated Organics (SSO) program

Covanta proposes that it fund and finance a source-separated organics (SSO) curbside pickup program – up to \$75 for every eligible resident in each Connecticut municipality that commits to the program. In exchange for subsidizing the program, Covanta will require municipalities to enter into the commercial agreement we have proposed in this RFP – for both MSW and SSO disposal.

The SSO implementation will involve distributing wheeled carts and kitchen receptacles for SSO collection to every resident, funding the promotion of the programs through publicity and public education, working with designated haulers, and providing assistance to towns as needed.

SSO allows AD and composting facilities to process a cleaner feedstock, alleviating contamination issues while simultaneously enabling communities to opt into a more desirable and proven methodology for diverting waste through segregation at source. SSO is notably less expensive than recovering organics from MSW as SSO avoids the additional capital required to invest in sorting equipment. As with other similar high disposal cost markets, tip fees for SSO in Connecticut would be less compared to MSW – helping encourage individual towns and residents to realize the benefits of SSO.



Equally important, as more organics are collected, less MSW will need to be collected, thereby further decreasing the need to increase disposal capacity within the State.

To start, Covanta will roll out the SSO program in the Hartford area. As more municipalities commit to the program, Covanta will be able to predict volumes and better match SSO feedstock to the development and expansion of AD and composting facilities as needed.

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As an alternative, Covanta can provide a solution that employs mixed-MSW MRFs to recover organics, plastics, and metals. This alternative relies on processing and sorting technologies in lieu of a curbside SSO program. It should be noted, however, that none of the existing AD and composting facilities in the state would be able to accept the recovered organics without modifying their permits.

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E. Phased Roll-Out to Minimize Cost of Service

Covanta’s proposal will be implemented in two phases.

**PHASE ONE:** Covanta will have the capacity to manage 470,000 TPY of MSW. This assumes a combined 220,000 TPY of MSW will be received at the three transfer stations (Essex, Torrington, Watertown), and 250,000 TPY of MSW will be received at the Hartford transfer station. Covanta will have capacity to manage 100,000 TPY of recyclables.

Covanta anticipates that not all commercial haulers will agree to our proposal due to the higher, market based, tip fees compared to MIRA's currently subsidized rates. At Covanta's proposed tip fees, major haulers can export MSW for disposal on their own to capture more margin. As we understand, all the major haulers are already adding (or have already added) rail export capabilities at their transfer stations. Nevertheless, Covanta stands ready to serve commercial haulers at market rates during Phase 1 as over 400,000 TPY of combined excess capacity remains in the three transfer stations.

PHASE TWO: As additional waste volumes are secured under long-term contracts and a corresponding long-term power purchase agreement is secured, Covanta would initiate the development and permitting process to expand the capacity of its Bristol EfW facility. Since 2009, Covanta has sought to expand the Bristol facility but waste supply and energy pricing constraints have challenged the business case. The tightening waste market in New England and the recently enacted legislation supporting Class II Renewable Energy Credits<sup>1</sup> are positive factors for the Bristol expansion. In conjunction with the Bristol expansion, Covanta would also expand its diversion service offering, depending on whichever option is selected.

## PRINCIPLE #2. ABILITY TO STEP IN AND ASSUME THE ROLE OF MIRA

Covanta can begin to perform under contract as early as July 1, 2019, assuming all of MIRA's responsibilities to member towns and commercial haulers.

Covanta has assumed the July 1, 2019 start date to mirror MIRA's fiscal year, subject to coming to a mutual agreement with CT-DEEP, MIRA, and individual municipalities. See Section 5 for a project schedule that indicates specifically how Covanta would proceed if selected.

### FROM MIRA'S BOARD OF DIRECTOR'S REPORT (period ending October 30, 2015)

In October the CSWS continued to curtail waste deliveries due to poor plant performance... the plant functioned at full capacity with three boilers and two turbines for only 4 out of 31 days. Boiler 12 was off line for 11 straight days due to a broken ID fan shaft and this occurred during the Boiler 13 scheduled outage contributing to a 1 boiler / 1 turbine operation for this entire period.

The benefit of having Covanta begin by July 2019 is that it removes any risks associated with continuing to operate the RRF. The plant is over 60 years old, and has not been able to benefit from more robust ongoing capital investments to maintain its performance due to persistently low power prices. As a result, the RRF is at risk to an increasing number of unplanned downtime events as it continues to operate without the multi-million dollar

capital investment required to modernize the facility. This causes a domino effect of disruptions to the New England waste market. Covanta has seen this first-hand as we try to accommodate bypassed waste volumes from MIRA's member towns as much as possible during the RRF's unplanned outages. In addition, shutting the RRF as early as possible will help ensure no additional MIRA funds are diverted towards repairing an aging facility. Instead of investing in short-term solutions, MIRA's resources would be better utilized for de-commissioning the RRF and cleaning up the property to facilitate development along Hartford's waterfront.

<sup>1</sup> Section 2.5 of Public Act 17-144: Changes to the Class II Renewable Portfolio Standards

Covanta’s local, regional, and corporate infrastructure enables it to facilitate an orderly transition of services from MIRA without any disruptions to the member towns. Covanta employs approximately 70 employees in the State, backed by the New England regional management team and over 400 employees at headquarters – professionals in a range of disciplines, including engineering, operations, maintenance, procurement, environmental compliance, community relations, health and safety, asset management, human resources, management information systems, accounting, finance, and legal. Covanta is experienced in not only on-boarding large, complex service contracts, but has also a verifiable track record in securing contracts from multiple municipalities.

**PROVEN ABILITY TO SECURE LARGE, COMPLEX CONTRACTS**

Covanta Contract	Description
Bristol	<ul style="list-style-type: none"> <li>14 member towns</li> <li>Renewed original member towns from 1988 for another 20 year term</li> </ul>
Southeast Connecticut Resource Recovery Association	<ul style="list-style-type: none"> <li>12 member towns</li> <li>Renewed original member towns from 1990 for another 4 year term</li> </ul>
City of Boston	<ul style="list-style-type: none"> <li>Manage 140,000 TPY of MSW for disposal through two Covanta transfer stations</li> <li>Renewed original contract from 2000 for another 5 year term in 2014</li> </ul>
New York City	<ul style="list-style-type: none"> <li>Secured 20-year contract in 2013 to manage up to 800,000 TPY of MSW for NYC</li> <li>Transportation &amp; disposal of MSW in intermodal containers via marine transfer stations</li> </ul>

**COVANTA CONNECTICUT BY THE NUMBERS**

30	Municipalities under contract today
30+	Years of working experience in the State
3	# of facilities in operation
70	# of employees
550,000 TPY	Volume of waste managed today

In fact, Covanta has been providing waste management services to the State of Connecticut for 29 years. As a result, the Covanta team is already in place locally and regionally to provide a seamless transition in implementing its proposed technical approach. We understand the challenges, and how to

meet them. We are experienced in working with CT-DEEP on permitting and policy formulation, as well as education and advocacy efforts. At the same time, we are supported by Covanta’s extensive corporate resources, helping ensure we can provide the State with the best value proposition.

In addition, Covanta’s proposal only requires one permit modification (other than the Bristol EfW expansion) – which is to convert the Hartford MRF into a transfer station. Based on our experience, this modification is relatively low risk as the activities, inputs, and outputs are all very familiar to both Covanta and CT-DEEP. The collected SSO from households can be readily accepted by all permitted AD and composting facilities in the State.

**PRINCIPLE #3. THE REVITALIZATION OF THE CITY OF HARTFORD**

The Mid-Conn RRF was built 60 years ago. Modernizing it will require a multi-million dollar capital investment that cannot be supported by the current market conditions without significantly raising waste disposal costs for member towns.

During the meeting between Covanta and the City of Hartford, Mayor Bronin stressed that his #1 desire is to take back the Mid-Conn RRF site, as this is the last remaining riverfront property that can be developed.

Shutting down operations at the RRF serves as an important first step for the City of Hartford to recapture a large riverfront property that could be developed for higher-value use, similar to what is currently underway in Downtown North. The City will benefit from several similar development projects to convert power plants into mixed-use properties in the US and around the world – the most prominent of which is the Tate Modern in London. In its

first year since opening in year 2000, the Tate Modern has become the third most-visited tourist attraction in Britain and the anchor attraction on South Bank, drawing attention and people to a previously undiscovered and undeveloped area. The Tate Modern conversion has inspired other projects now completed or underway in the US including: Wharf at Rivertown (Pennsylvania) South Boston Edison Power Plant, Bailey Power Plant (North Carolina), Glenwood Power Plant (Yonkers), and Potomac River Green (Virginia).



Shutting down the RRF will present both the City and the State with a larger opportunity to redevelop over 110 acres in the South Meadows area. Adjacent to the Mid-Conn RRF site is the Hartford Regional Market – the largest perishable food distribution facility between New York and Boston. A revitalization plan has been developed for the market and the State is currently seeking funding to proceed<sup>2</sup>. Combining the redevelopment of both the Hartford Regional Market and the RRF could attract a larger pool of developers to the area and expand the possibilities on what could be developed.

#### PRINCIPLE #4. OUR ABILITY TO LEVERAGE EXISTING INFRASTRUCTURE

The Covanta technical approach is designed to take full advantage of the State’s existing infrastructure. It will leverage a combination of assets owned by MIRA, Covanta, and third parties, helping to ensure service levels are maintained at the highest level.

Covanta analyzed the ability of the State to handle current and projected growth in volumes of MSW, recyclables, and organics (see Section 3 for details). Our analysis indicates that shutting

<sup>2</sup> <http://www.ct.gov/doag/cwp/view.asp?a=1370&Q=545290> (retrieved July 22, 2017)

down the RRF will not materially disrupt the market as there is up to 4x of available capacity to manage the projected MSW generated by year 2024. In fact, closing down the RRF would stimulate development of new facilities in-state that treat organics and/or utilize advanced conversion technologies.

A significant advantage for Covanta is our ongoing relationships with commercial haulers in the State. We work with these companies every day, and will draw on these long-standing relationships to facilitate the transition as the haulers are familiar with how Covanta operates.

Furthermore, there would likely be some overlap of services between Covanta’s existing customers and those under contract with MIRA. The overlaps provide Covanta with opportunities to optimize existing waste flows to minimize vehicle emissions and truck traffic.

**PRINCIPLE #5. NO FINANCING CONTINGENCY**

Covanta has long-standing experience raising capital to finance solid waste projects around the world, having successfully financed more than \$5 billion of construction and long-term operation of solid waste infrastructure over its 30+ year history.

Covanta’s proposal will be funded entirely from internal resources. As a result, Covanta does not require the State, CT-DEEP, or MIRA to be at risk in delivering its proposal. In addition, the towns under contract would benefit from Covanta’s purchasing scale, helping ensure the lowest possible cost for Covanta to perform its obligations under the term of the service agreement.

**Management Approach**

Covanta’s team is structured to deliver a seamless transition of services for the CSWS.

Covanta has assembled a team with proven experience in the State that will help deliver on its proposal. As an experienced operator in the State, Covanta has the local and regional management structure to facilitate the transition of services. In addition, the project will benefit Covanta’s corporate resources to ensure the best value for money is provided to towns and commercial customers.

WORLD-CLASS TEAM WITH A STRONG WORKING HISTORY IN CONNECTICUT				
   				
<b>ROLE</b>	Lead project developer	Primary off-take point for SSO collected in Central Connecticut	Equipment supplier and systems integrator for organics separation from MSW	Technology supplier for organics separation from MSW
<b>INDUSTRY EXPERIENCE</b>	Manages 20+ million tons of MSW/year	Owner and operator of AD facility in Southington	Installed over 2,400 recycling systems in North America	Developer of Bridgeport AD facility
<b>OPERATIONS</b>	Operates 2 <u>EFW</u> facilities and 1 transfer station in the state	Part of the Supreme Group, headquartered in Southington, CT	Headquartered in Stamford, CT	Potential off-take point for SSO
<b>CONNECTICUT EXPERIENCE</b>	Doing business in Connecticut for 30+ years	Doing business in the State for 35+ years	Doing business in the State for 30+ years	First in the State to be permitted to process SSO into renewable energy

As the prime contractor, Covanta will be responsible for all aspects of the program’s execution, contract performance, guarantees, and delivery of services. Equally important are the experience of Covanta’s partners, **Anaergia, Van Dyk, and Quantum**. Each will bring to CT-DEEP years of experienced working in the State.

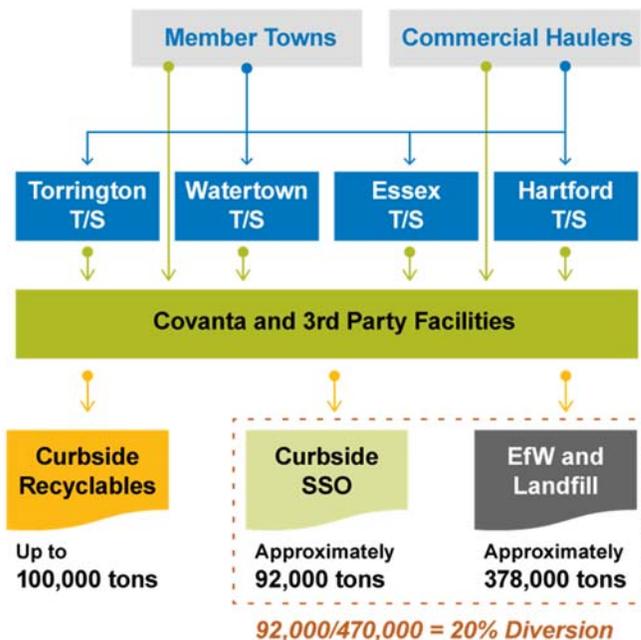
Covanta will assume operating responsibility of the transfer stations and MRF, while operating responsibility of the AD and composting facilities will be retained by their respective third-party owners. In addition, we will be working with several haulers in the State, all of whom have existing relationships and contracts with us, to provide transportation for the materials.

Quantum will serve as the primary off-taker of organics, providing organics capacity in its Southington facility, and additional capacity for other Covanta projects currently under development in Connecticut.

Should CT-DEEP opt for the mixed-MSW MRF alternative to recover organics from MSW, Covanta has partnered with Anaergia and Van Dyk to provide the technology and equipment for the extraction of organic materials from MSW. Anaergia and Van Dyk each draw from their global experience in processing mixed MSW to maximize the recovery of organics (see Appendix C for details of their reference projects).

## MEETING DIVERSION GOALS

### Simplified PFD: MSW, SSO, and Curbside Recyclables



This chart illustrates how the materials will be managed and the estimated diversion rates during Phase 1 – which assumes 470,000 tons of MSW and 100,000 tons of recyclables per year.

Covanta estimates 20% or more of materials will be diverted compared to the status quo. The 20% diversion assumes only all towns under contract accept the Covanta proposal and agree to implement a comprehensive residential SSO program. Our analysis is predicated on a 75% participation rate and 80% capture rate among residents of participating towns<sup>3</sup>.

<sup>3</sup> 75% of all participating residents actually put out wheeled carts for SSO to be collected, and 80% of all organic waste generated is placed in the wheeled carts to be collected. See Section 3 for further details.

Covanta anticipates that the actual diversion rates may come higher than our estimates as:

- i. Towns that implement comprehensive residential SSO collections would prompt small commercial generators to follow – especially if they are served by the same hauler that collects residential MSW and SSO.
- ii. Covanta’s proposed MSW tip fees will further incentivize the towns to divert material out of MSW – potentially increasing the volume of materials collected in curbside recycling programs. As this may create an incentive for households to “game” the system by placing more MSW into the SSO and/or recycling bins, Covanta will institute procedures that would allow facilities to check SSO and recycling loads for compliance and help DEEP enforce penalties as necessary.

## FEEDSTOCK ACQUISITION AND MARKETING STRATEGY

### Feedstock Acquisition

Covanta’s facilities process approximately 20 million tons of MSW annually, at a company-wide average availability of 92% -- demonstrating Covanta’s ability to keep its plants full. In the State, Covanta manages around 550,000 TPY of MSW.

Feedstock acquisition is a core competency of Covanta as our facilities depend on strong long-term relationships with both municipal and commercial customers. In the State, Covanta’s facilities are supported by local, regional, and corporate sourcing teams. Covanta will leverage its experience and employ a two-pronged strategy to acquire and enhance the waste contracts for the CSWSP.

### CASE STUDY: BRISTOL MUNICIPALITIES

In January 2013, Covanta signed a new 20-year agreement with 14 municipalities in the Bristol, Connecticut area. The agreement was signed more than a year before the existing agreement, signed in 1988, expired. The new agreement provides municipalities with stable, predictable rates over the life of the contract. In addition, the agreement includes bundled services for proper management of bulky waste, recycling, e-waste recycling, and management of organics.

Covanta’s two-pronged feedstock acquisition strategy

	TOWNS	COMMERCIAL HAULERS
CONTRACTING STRATEGY		
FOCUS		
PIPELINE		

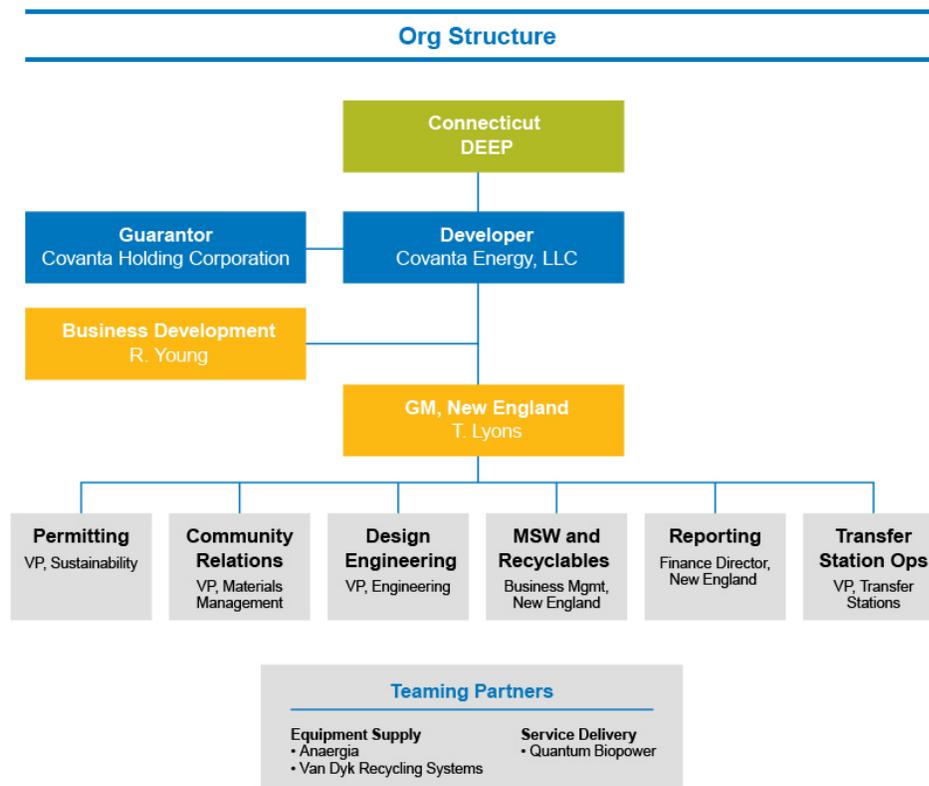
**Product Marketing**

Covanta has initiated discussions and secured letters of intent (LOI) with third-party facilities in connection with our proposal on the CSWSP. Upon request, Covanta can furnish copies of executed LOIs to demonstrate our ability to execute our proposed technical approach. All told, Covanta has LOIs in place to be able to manage the capacity needs during Phase 1, with additional capacity available should more commercial haulers sign on.

For disposal of SSO, Covanta has spoken to operators of AD and composting facilities in the State, as well as all developers of AD and composting facilities that are active in the state. All operators and developers have indicated that they are ready to accept curbside collected SSO from residents today if the material were available as no permit modifications will be required – which is not the case for organics recovered from MSW.

See Appendix F for a summary of the locations for SSO in the state, and all locations have expressed a willingness to partner with Covanta to implement the curbside SSO program in order to secure volumes over a long-term.

## PROJECT MANAGEMENT PLAN

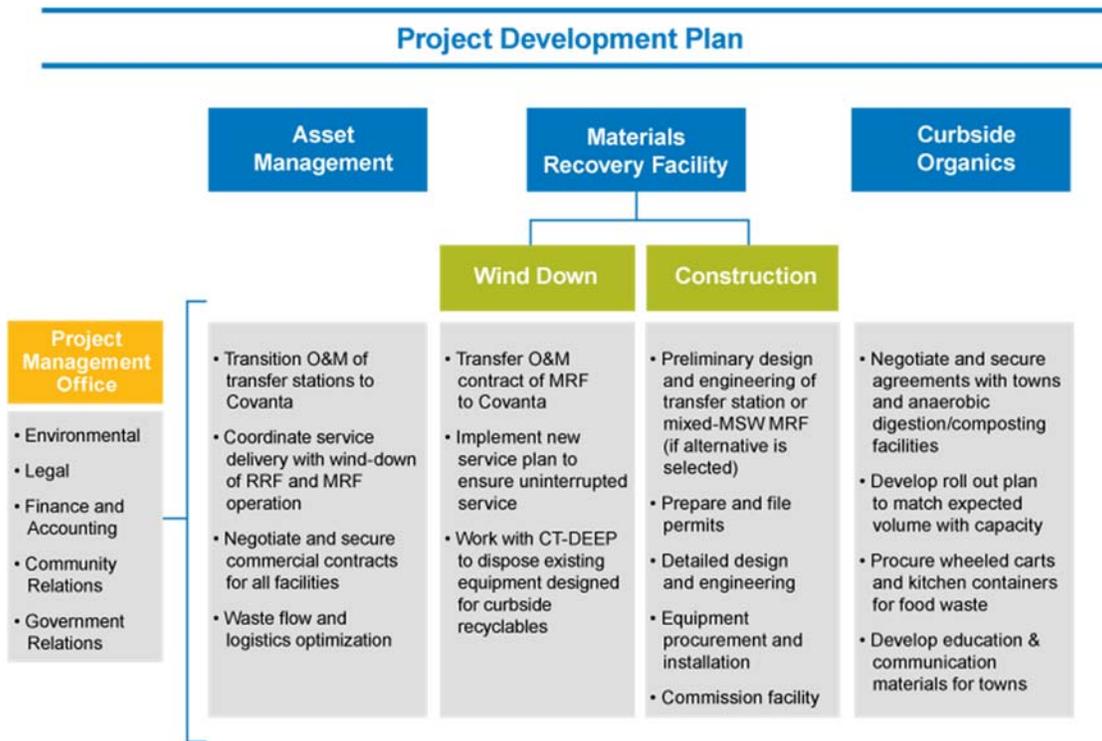


To achieve an extraordinary level of performance requires the best technology, the best processes, and – above all – the best people. From our front-line operators to our senior management, we employ many of the industry’s top experts in logistics, sourcing, environmental engineering, process control, and facility maintenance. Their skill, talent and experience have enabled Covanta to consistently lead the industry in technological

innovations, operational performance, safety and environmental compliance. Below is the organizational structure that will deliver the Project to the CT-DEEP.

During the development period, Richmond Young, Covanta’s Director of Business Development, will be the single point of contact for the project. He will work closely with Tom Lyons, the Vice President and General Manager of Covanta’s New England region, who will be responsible for the performance and delivery of the service contract after the transition period. One regional Facility Manager will oversee the operations of the MRF and transfer stations, and will be the primary of contact for all matters relating to plant operations, client service, regulatory compliance, and community relations.

Richmond will integrate and coordinate other critical project-related efforts, such as operations, government relations, and community relations. Having Richmond as the single point of contact will ensure clear lines of communication and efficient project development. There will be three distinct work streams once Covanta executes the contract. Below is a high level overview of each of the Project work streams, and the major components within.



There are interdependencies between the various components within each work stream. To ensure each is working in concert, Covanta will establish a centralized Project Management Office (PMO) to coordinate and control activities. For example, the PMO will oversee the application for permit modification on the MRF conversion to account for any changes required in operating parameters when the facility is used as a transfer station. Detailed budgets, critical path schedules, and routine reporting will be administered by the PMO, including production of any contract deliverables as well as attendance at progress review meetings with CT-DEEP.

## COMMUNITY AND ENVIRONMENTAL IMPACT

Covanta strives to maintain a long-term relationship with the host communities we work with. On the community level, we aspire to have open and honest relationships that consider both community and facility issues. Covanta will provide a variety of programs to facilitate a positive community relationship. Our position as a sustainable waste and renewable energy provider in host communities is taken seriously. We regularly work with local communities to enrich and expand the sustainable programs offered to citizens.

Covanta sponsors programs in many of its communities to ensure that potentially dangerous/hazardous materials are properly disposed at their end of life. Examples include: mercury-bearing products, expired drugs/ pharmaceuticals, compact fluorescent light bulbs, etc.

The major environmental benefits from Covanta's proposal include:

- **Organics recycling**  
We estimate approximately 137,700 TPY of SSO will be recycled at full implementation of curb-side collection programs.
- **Recovery of metal from MSW**  
Approximately 17,600 – 22,400 TPY of metals will be collected annually depending on the option selected. The inclusion of landfilling results in some loss of recyclable metal.
- **Significant decrease in particulate matter, oxides of nitrogen (NOx), and GHG (expressed as carbon dioxide equivalent emissions, CO<sub>2</sub>e) emissions**  
Shutdown of the RRF and the resultant net reduction in NOx emissions is significant in that Hartford County is designated as a moderate nonattainment area for the National Ambient Air Quality Standard for ozone and ambient NOx contributes ozone formation.
- **Significant decrease in volume of traffic and associated vehicle emissions in Hartford**  
By avoiding the need to consolidate all materials in Hartford, Covanta's proposal will remove vehicles associated with transporting more than 50% of the volume that currently utilize the City's roadways.
- **Riverfront Development Opportunity**  
Closure of the RRF allows the City of Hartford to expand its useable waterfront along the Connecticut River.

## SOCIAL RESPONSIBILITY

Covanta believes it has a responsibility to give back to the community. Below are some of the community organizations, events, and groups that our Connecticut facilities have supported via volunteering, donations, and sponsorships:

- Bristol Food Pantries
- Pequannic Riverbed Cleanup
- Mystic Aquarium
- Boys and Girls Club of Connecticut
- Plainville Annual Car and Plane Show
- Wolcott HS annual scholarship
- Town of Sharon annual celebration
- Bristol Chamber of Commerce
- Adopt A Highway
- Mercury Takeback Events
- Pharmaceutical Takeback Events

- **Elimination of once-through cooling impacts on Connecticut River**  
Closure of the RRF eliminates the use of approximately 70 MGD of once-through cooling water from the Connecticut River, thereby eliminating the thermal load to the Connecticut River and all existing impacts to river organisms (e.g. fish larvae impingement).
- **Utilization of existing infrastructure**  
Approximately 2/3 of the 700,000 TPY of MSW will be managed at existing waste management facilities for which existing infrastructure is already in place; all “Phase I” tons can be managed by existing facilities.
- **Generation of baseload renewable energy**  
Covanta estimates overall net generation of 286,000 – 333,000 MWh of renewable electricity per year.

## PROPOSED COMMERCIAL ARRANGEMENT

