CONNECTICUT RESOURCES RECOVERY AUTHORITY

CONNECTICUT'S RECYCLING LEADER

Materials for
Governor's Modernizing Recycling Working Group

September 11, 2012

Contents

Remarks of the Connecticut Resources Recovery Authority to the Governor's Modernizing Recycling Working Group September 11, 2012

The Connecticut Resources Recovery Authority ("CRRA") is pleased to have an opportunity to provide the Governor's Modernizing Recycling Working Group with information relating to CRRA's current operations as well as the skills and resources CRRA can bring to bear to assist the Working Group in implementing the recommendations it develops. This position paper should serve as a supplement to the remarks made by CRRA before the Working Group.

CRRA'S CURRENT OPERATIONS AND ROLE IN WASTE MANAGEMENT

CRRA's has a much broader set of duties and responsibilities than private-sector operators or smaller regional authorities that provide solid-waste services. First and foremost, state statutes[1] establish CRRA as the implementer of the state Solid Waste Management Plan. Indeed, Connecticut General Statutes Sections 22a-262 and 22a-264 charge CRRA with much more responsibility than simply to run trash and recycling plants, including:

- The planning, design, construction, financing, management, ownership, operation and maintenance of various solid waste and recycling facilities;
- Carrying out the state's solid waste management plan;
- Using the private sector for implementation of the state's solid waste management plan;
- Assistance and coordination of efforts for source separation for recycling activities; and
- Development of industries, technologies and commercial enterprises for resource recovery, recycling, reuse and processing of solid waste.

The Legislature deemed that these activities were to be considered "in all respects public purposes." As such, CRRA takes its role very seriously and shares the Solid Waste Management Plan's vision of self-sufficiency and fully implementing the integrated solid-waste management hierarchy. We all have seen disasters such as the Combe Fill in New Jersey—for which some Connecticut towns were still paying decades later—and, informed by such experiences, we recognize the significant risks inherent in exporting anything that might wind up in a landfill. Towns may be gambling that a slightly lower price today won't cost their taxpayers more tomorrow. Those same towns may also be relying upon the fact that there won't be another war in the Middle East, another natural disaster that wipes out drilling rigs and refineries, or some other reason for diesel prices to skyrocket. Through the establishment and maintenance of CRRA, the state of Connecticut sought to eliminate some of the long-term risks that are inherent in the waste management business.

At the same time, CRRA also protects the interests of the state's smallest towns by ensuring they have disposal available to them. Based on DEEP figures for the year ended June 30, 2010, of the towns with the least waste—less than 2,500 tons per year—CRRA serves almost half.[2] CRRA offers those towns a vital buffer to market forces, since private-sector operators may not be interested in such small volumes in these isolated areas, or may only be interested at an inflated price.

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[1] The statutes authorizing the formation and operation of CRRA and enumerating its duties and responsibilities are included in Attachment A for the Working Group's Convenience.

[2] A listing of the municipalities, along with those towns that are currently served by CRRA, is included as Attachment B.

Indeed, even towns that do not have contracts with CRRA benefit from the mere existence of CRRA. CRRA's publicly-owned at-cost disposal acts as a governor on in-state private-sector options and costs. Towns whose contracts with other providers are expiring know the value of CRRA's presence in keeping a ceiling on contract prices. In addition, CRRA reaches tens of thousands of people each year with our recycling education programs. Education was critical to getting recycling established 20 years ago. Education and public awareness are still essential today and will be even more important as we transition to and implement the recommendations of the Working Group.

We are proud to state the simple fact of the matter: CRRA's education programs work. Our education and public-awareness efforts have led to our towns' recycling rates increasing for six straight years. Perhaps more importantly, CRRA does not limit its education efforts to waste management. For example, CRRA is currently implementing a grant from the Connecticut Energy Efficiency Fund to teach energy conservation, providing yet another benefit to the residents of Connecticut. When this Working Group decides on the new paradigm for materials management in Connecticut, CRRA and our professional educators will be ready and able to bring that message directly to our state's residents.

CRRA BRINGS UNIQUE CAPABILITIES TO WASTE AND MATERIALS MANAGEMENT

As discussed above, the public option that CRRA provides is critical to the state as it moves toward the new paradigm the Working Group is developing. CRRA has the statewide reach and publicly owned infrastructure the state will need to make this transition. Moreover, CRRA has the relationships with municipalities and markets to optimize extended producer responsibility systems by efficiently aggregating and managing them.

CRRA has other unique attributes that make it a valuable partner as Connecticut seeks to implement the Working Group's findings. For example, CRRA has substantial engineering, operational and market expertise in modern materials management. CRRA has bonding authority to finance development of new infrastructure and the capability to develop facilities within more reasonable risk-management profiles than for-profit companies. CRRA also has existing effective education, outreach and public-awareness programs to ensure the success of this new paradigm. For example, single-stream recycling would not have spread as quickly or as effectively in Connecticut as it did without these programs.

CRRA is confident that it can continue to be an agent of change and can replicate its prior successes in the new era. CRRA has a long-term focus, separate and apart from profit statements or budget cycles, that allows it to ensure that the state's needs can be met well into the future.

HOW CRRA CAN ASSIST THE WORKING GROUP IN IMPLEMENTING ITS RECOMMENDATIONS

CRRA is ideally positioned to implement the Working Group's recommendations. Because it is a public entity, CRRA does not have to worry about whether a new service or operation will be profitable on day one. CRRA has the committed waste stream, financial capability, statutory authority and the industry and engineering expertise to foster the state's evolution to the next generation of materials management.

CRRA is well positioned to implement the infrastructure improvements and operational changes this evolution will require. Our Hartford refuse-derived fuel ("RDF") plant has already been recovering

metals and electricity from the waste stream since 1988. Since 1992, at our recycling facilities we've recovered almost 2 million tons of materials that were turned into new products. Through our investments, operational improvements, attention to maintenance our engineering expertise, the Hartford trash-to-energy plant is running more efficiently than ever and our recycling facility has evolved to accept, separate and send to market more types of materials, and more volumes of those materials, than ever.

For purposes of the Working Group, engineering studies have concluded that if we continue to maintain the trash-to-energy plant it will run efficiently at least well into the next decade. This means that our plant will be the state's bridge to the new era of advanced materials recovery. Because of its expected life span and its RDF technology, the Hartford plant can be modified for advanced materials recovery, just as we recently modified our recycling facility to accept single-stream materials and a wider variety of paper, cardboard and plastics. Moreover, because CRRA is publicly owned, the materials stream can be flow-controlled to CRRA, should the state so desire.

CRRA has given a lot of thought to the types of advanced materials recovery the Working Group appears to be considering, and from our perspective, it appears that the best analogy to what is being considered would be mining valuable metals from ore. Connecticut cannot extract valuable materials from the ore if the ore is being trucked out-of-state. As with mining, advanced materials recovery cannot occur if material streams are trucked out-of-state due to small regional pricing discrepancies. While exporting may result in a short-term savings, the long-term costs can be substantial. We recognize that the Working Group is focusing its attention on the long-term solutions, and we can promise that whatever new programs the Working Group proposes, CRRA will work diligently to provide the services and infrastructure those programs require.

CHALLENGES FACING THE STATE

Connecticut has some challenges beyond the power-price crunch facing trash-to-energy operators right now. At the top of the list will be siting facilities the state will need to recover and process more and more varied materials. For Connecticut to move from a trash-and-recycling paradigm to advanced materials recovery and management, new infrastructure such as composting facilities will be required. These new facilities will create new, green jobs, tax dollars, environmental benefits and renewable power—but only if they can be built. It will take all of us to overcome the NIMBY ("not in my back yard") issues these new facilities will inevitably face.The state will need to join with CRRA in making the case for these new facilities.

As was mentioned previously, we cannot refine the valuable materials out of the ore if the ore is being landfilled in Pennsylvania. The new paradigm—whatever it may entail—will need to play on a field that is financially level with less desirable out-of-state landfill disposal. Not only will a level playing field speed the growth of our new materials-recovery economy, it will insulate our cities and towns from the unpredictability of diesel prices, transportation costs and legislative changes in other states. We believe that CRRA's knowledge of markets, existing infrastructure and ability to develop new facilities makes it ideal to spearhead the evolution from trash-or-recycling to advanced materials management, just as CRRA spearheaded the evolution from town dumps to resource recovery and recycling.

However, to do so, we must work together with the state and its 169 cities and towns to achieve this goal. We must also strike a balance between local control and the good of the entire state so that choices

made by one town based solely on short-term prices don't have unintended long-term consequences for others. Connecticut has a proud history of being a leader in innovative waste management. CRRA looks forward to partnering with the Working Group to usher in the new age of materials recovery in Connecticut and preserve our state's leadership.

ATTACHMENT A — SELECTED STATUTES

Sec. 22a-262. (Formerly Sec. 19-524u). Purposes of authority. (a) The purposes of the authority shall be:

(1) The planning, design, construction, financing, management, ownership, operation and maintenance of solid waste disposal, volume reduction, recycling, intermediate processing and resources recovery facilities and all related solid waste reception, storage, transportation and waste-handling and general support facilities considered by the authority to be necessary, desirable, convenient or appropriate in carrying out the provisions of the state solid waste management plan and in establishing, managing and operating solid waste disposal and resources recovery systems and their component waste-processing facilities and equipment;

(2) The provision of solid waste management services to municipalities, regions and persons within the state by receiving solid wastes at authority facilities, pursuant to contracts between the authority and such municipalities, regions and persons; the recovery of resources and resource values from such solid wastes; and the production from such services and resources recovery operations of revenues sufficient to provide for the support of the authority and its operations on a self-sustaining basis, with due allowance for the redistribution of any surplus revenues to reduce the costs of authority services to the users thereof provided such surplus revenues shall include any net revenue from activities undertaken pursuant to subdivisions (18) and (19) of subsection (a) of section 22a-266 and subdivision (8) of section 22a-267;

(3) The utilization, through contractual arrangements, of private industry for implementation of some or all of the requirements of the state solid waste management plan and for such other activities as may be considered necessary, desirable or convenient by the authority;

(4) Assistance with and coordination of efforts directed toward source separation for recycling purposes; and

(5) Assistance in the development of industries, technologies and commercial enterprises within the state of Connecticut based upon resources recovery, recycling, reuse and treatment or processing of solid waste.

(b) These purposes shall be considered to be operating responsibilities of the authority, in accordance with the state solid waste management plan, and are to be considered in all respects public purposes. It is the intention of this chapter that the authority shall be granted all powers necessary to fulfill these purposes and to carry out its assigned responsibilities and that the provisions of this chapter, itself, are to be construed liberally in furtherance of this intention.

(P.A. 73-459, S. 6, 26; P.A. 90-179, S. 2, 9; P.A. 98-184, S. 1, 4.)

History: Sec. 19-524u transferred to Sec. 22a-262 in 1983; P.A. 90-179 amended Subdiv. (1) to include recycling and intermediate processing facilities as facilities which may be provided for by the authority; P.A. 98-184 divided existing section into Subsecs. (a) and (b), amended Subsec. (a)(2) to require that surplus revenues include net revenue from activities undertaken pursuant to Secs. 22a-266(a)(18), (a)(19) and 22a-267(8), and amended Subsec. (a)(5) by inserting "technologies" and "and treatment or processing of solid waste", effective June 4, 1998.

Cited. 193 C. 506. Cited. 218 C. 821. Cited. 225 C. 731.

Sec. 22a-264. (Formerly Sec. 19-524w). Activities and operations. The activities of the authority in providing or contracting to provide solid waste management services to the state, regions, municipalities and persons, in implementing the state resources recovery system and in planning, designing, financing, constructing, managing or operating solid waste facilities, including their location, size and capabilities, shall be in conformity with applicable statutes and regulations and with the state solid waste management plan as promulgated by the Commissioner of Environmental Protection. The authority shall have power to assist in the preparation, revision, extension or amendment of the state solid waste management plan, and the Department of Environmental Protection is hereby authorized to utilize, by contract or other agreement, the capabilities of the authority for the carrying out of such planning functions. The authority shall have power to revise and update, as may be necessary to carry out the purposes of this chapter, that portion of the state solid waste management plan defined as the "solid waste management system". To effect such revision and updating, the authority shall prepare an annual plan of operations which shall be reviewed by the Commissioner of Environmental Protection for consistency with the state solid waste management plan. Upon approval by the Commissioner of Environmental Protection and by a two-thirds vote of the authority's full board of directors, the annual plan of operations shall be promulgated. Any activities of the authority carried out to assist in the development of industry and commerce based upon the availability of recovered resources for recycling and reuse shall be coordinated to the extent practicable with plans and activities of the Connecticut Development Authority with due consideration given to the secondary materials industries operating within the state of Connecticut.

(P.A. 73-459, S. 8, 26; P.A. 74-338, S. 70, 94; P.A. 83-112.)

History: P.A. 74-338 replaced Connecticut development commission with Connecticut development authority; Sec. 19-524w transferred to Sec. 22a-264 in 1983; P.A. 83-112 authorized the commissioner of environmental protection to review the plan of operation, and required commissioner's approval as well as that of authority's board of directors for promulgation of plan.

ATTACHMENT B — SMALLEST GENERATORS OF MSW (DEEP 2010 STATISTICS)

Towns served by CRRA are in **boldface**

	Municipality	FY 2010 Tons MSW
1.	Union	246.79
2.	**Canaan**	**443.77**
3.	**Cornwall**	**522.69**
4.	Eastford	601.58
5.	Voluntown	608.23
6.	Warren	666.64
7.	Hartland	697.60
8.	Andover	698.02
9.	**Colebrook**	**743.01**
10.	**Roxbury**	**782.54**
11.	**Norfolk**	**797.95**
12.	Bridgewater	817.11
13.	**Lyme**	**851.36**
14.	Chaplin	884.18
15.	Sterling	895.35
16.	Morris	990.73
17.	**Sprague**	**1176.27**
18.	**Chester**	**1206.47**
19.	Kent	1263.16
20.	Pomfret	1269.17
21.	**Goshen**	**1405.98**
22.	Sherman	1308.08
23.	**Preston**	**1437.05**
24.	Salem	1449.01
25.	**Bethlehem**	**1734.28**
26.	**Bethany**	**1750.46**
27.	Ashford	1849.74
28.	Woodstock	1886.83
29.	Willington	1962.90
30.	**Bolton**	**2130.42**
31.	**Barkhamsted**	**2149.04**
32.	**Middlefield**	**2163.78**
33.	**Harwinton**	**2242.99**
34.	Washington	2308.66
35.	**Middlebury**	**2448.05**

The Connecticut Resources Recovery Authority

Renewable Energy Provider,
Responsible Environmental Manager
and Innovator for the Future

About CRRA

The Connecticut Resources Recovery Authority is a quasi-public agency established by the state in 1973 to implement the state Solid Waste Management Plan and modernize Connecticut's solid waste disposal system. CRRA enabled the state to replace a patchwork of "town dumps," which were starting to cause environmental problems, by spearheading the development of a system of trash-to-energy plants and a comprehensive recycling program.

Provider of Renewable Energy

The Connecticut Resources Recovery Authority (CRRA) created one of our state's first sources of renewable energy at a time when the term barely earned a footnote. There are still fossil fuels to be found and developed, but their effect on the environment is problematic. Moreover, the cost of oil and gasoline has skyrocketed. The need is growing for low-cost renewable energy, making CRRA even more valuable to the people of Connecticut.

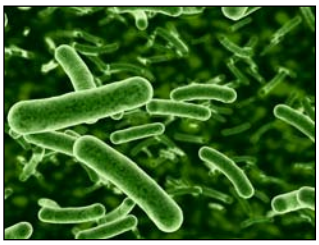
Instead of landfilling Connecticut's garbage, CRRA processes it, converting it to renewable electricity to help power homes and businesses.

While some states are still using landfills or loading their garbage onto truck trailers or rail cars, Connecticut has been on the cutting edge of trash-to-energy solutions for almost 40 years. It's how we dispose of Connecticut's garbage in an environmentally conscious manner. If CRRA were to no longer exist there would be hundreds of trucks a day loaded with garbage travelling Connecticut's highways to less-environmentally friendly landfills in other states. In fact, according to the Columbia University Earth Engineering Center, Connecticut leads the nation in sustainable solid-waste management thanks to its conversion to trash-to-energy, a conversion led by CRRA.

Connecticut has been on the cutting edge of trash-to-energy solutions for almost 40 years.

Connecticut leads the nation in sustainable solid-waste management thanks to its conversion to trash-to-energy, a conversion led by CRRA.

Source: Columbia University Earth Engineering Center



Bacteria will be enlisted to help compost food waste at our planned organics disposal facility, reducing garbage by as much as 15 percent. The result will be clean, renewable energy and the creation of fertile topsoil that can be used in gardens and on farms to grow flowers, other plants and vegetables.

The closed Hartford landfill will soon feature on of Connecticut's largest solar-panel arrays, strengthening CRRA's goal of providing renewable power to the state's residents.

The world continues to grow and change and CRRA is no exception. Today, our Hartford trash-to-energy plant is one of Connecticut's most prolific generators of renewable energy, located right where the demand for energy is among the greatest. But we aren't stopping there.

Soon we will also be harnessing the power of the sun to generate renewable energy at the closed Hartford landfill, where we plan to install one of the largest arrays of solar panels in Connecticut. And we are continuing our leadership in protecting the environment by seeking to develop a regional food-waste composting facility. With this facility, we'll take food waste out of the trash – reducing by as much as 15 percent what we currently throw away – and use it to generate energy. CRRA always strives to be both a good environmental steward and a good neighbor.

Innovations That Save Money and Protect the Environment

But CRRA is more than a provider of renewable energy. We are also innovative environmental managers who dispose of close to half of Connecticut's trash, protect our state's groundwater and capture landfill gas before it can escape into the atmosphere. CRRA is also Connecticut's recycling leader, promoting single-stream recycling so residents and businesses no longer have to separate their cans and bottles from their newspapers and cardboard.

In fact, we have been honored by the Connecticut Quality Improvement Award Partnership for our unique blend of single-stream recycling and public education that has led to an almost 20-percent increase in recycling rates among towns served by our Mid-Connecticut system. This increase resulted in these towns' saving their taxpayers millions of dollars in trash-disposal fees.

Introducing single-stream recycling is just one way CRRA has modernized Connecticut's solid-waste system, which was why the General Assembly and Gov. Thomas J. Meskill created CRRA in 1973. They agreed it was time to close Connecticut's old "town dumps" in favor of an integrated waste-management system that uses garbage to fuel electricity-generation plants. An added benefit has been the stabilization and even reduction of costs for Connecticut's municipalities.

Protecting Connecticut's residents from the health hazards associated with piled-up or backed-up garbage is one of the primary missions of CRRA. Since our largest trash-to-energy plants began operation in 1988, there has never been an interruption in service.

50%

CRRA is an innovative environmental manager disposing of close to half of Connecticut's municipal solid waste while being a leader in single-stream recycling.

CRRA's emphasis on recycling has saved member towns millions of dollars in trash disposal fees.

New Board and Management Lead to Success

The CRRA board and management have worked hard to overcome a lot of obstacles they inherited from their predecessors, and they've gone the extra mile to re-build some burned-down bridges. The Town of Lyme has been with CRRA since 1984, and in 2011 we decided to re-sign with CRRA because they've been able to reduce their costs and because of the flexible contract options they offered us.

Ralph F. Eno Jr.
First Selectman
Town of Lyme

CRRA's Mid-Connecticut Project did have some financial difficulties resulting from the Enron bankruptcy of 2001. But that led to the creation of an entirely new Board of Directors and senior management team, and CRRA soon recovered from the financial challenges while continuing to operate our trash-to-energy system at a reasonable cost for our municipal customers and protect Connecticut's environment. And unlike other service providers, who are free to charge whatever the market will bear, as a quasi-public agency CRRA must provide its services at cost.

The pragmatic approach of CRRA's Board of Directors and management team has ensured that we will only take on new ventures, like installing solar panels at the closed Hartford landfill or our planned organics composting facility, that survive intensive due diligence. While CRRA safely and efficiently disposes of our customers' waste, we want to make sure we don't waste our municipal customers' money. We remain resolute in pursuing our mission of working for and in the best interests of the state and its cities and towns by developing, continuously improving and implementing solutions for solid-waste disposal and recycling that are environmentally *and* economically sound, especially in these difficult economic times. We are responsive to the needs of the state, its cities and towns and the people of Connecticut.

These are some of the faces of CRRA. They, like everyone else at CRRA, are dedicated to protecting our environment. After all, they live here, too.

Strictest of the Strict Environmental Standards

Continual monitoring of the gas collection system at closed landfills helps protect area residents and the environment from undue health hazards.

Our dedication to environmental management can be seen at our trash-to-energy plant in Hartford, which is the cleanest solid-fuel power plant in the state. Its emissions are 90 percent cleaner than the strictest of the strict environmental standards, the Maximum Available Control Technology (MACT) standards set by the U.S. Environmental Protection Agency (EPA). CRRA will continue to adapt and find ways to utilize new technologies and best practices to ensure materials management will be conducted in a sustainable and ecologically friendly manner.

Thanks to our strict emissions controls, along with our engineering and operational expertise, CRRA has helped reduce dioxin, mercury, particulate matter and other substances in our air. More importantly, EPA has determined that every ton of trash that's turned into electricity reduces greenhouse gases by the equivalent of one ton of CO_2 emissions. Trash buried in a landfill generates methane, a much more dangerous greenhouse gas. Trash-to-energy also reduces greenhouse gases because it generates electricity that otherwise would have come from fossil fuels like oil and coal.

CRRA's trash-to-energy plant in Hartford is one of the cleanest power plants in the state. Its emissions are 90 percent cleaner than the Maximum Available Control Technology (MACT) standards set by the U.S. Environmental Protection Agency.

Powering More than 46,000 Homes

CRRA works to help their customers. When we raised concerns about it taking too long for our trucks to enter their trash-to-energy plant, CRRA revamped the way they run the process. Now our trucks average just 9.01 minutes at the plant. CRRA heard our concern and addressed it.

Michael R. Paine Sr.
President
Paine's Incorporated

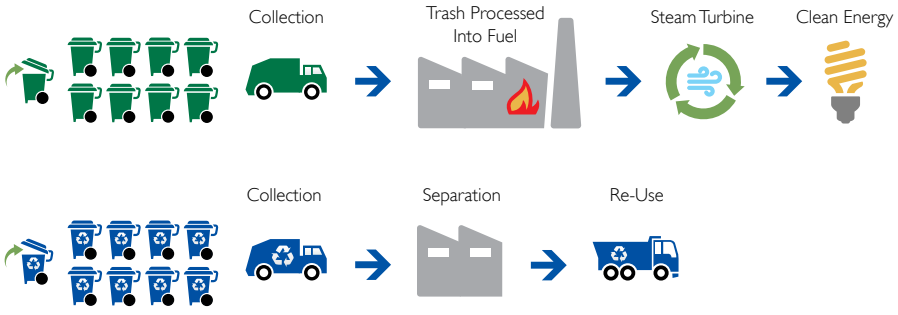
The Mid-Connecticut plant in Hartford is the center of our trash-to-energy system.

CRRA's trash-to-energy plants convert a million tons of trash to electricity each year, producing enough energy to power more than 46,000 homes – or a city approaching the size of Waterbury. Our electric generation is up about 8 percent year-over-year because we've made investments in the plant that are leading to greater efficiency and less downtime.

Our investments in plant efficiency are paying off: In the spring of 2012 our Hartford facility was processing waste more efficiently than ever. We intend to continue making the necessary investments so CRRA can continue to innovate for Connecticut's future.

And the operation of the Hartford plant became more efficient in 2012 when the NAES Corp. took over as plant operator. We chose NAES, which operates many power plants and trash-to-energy plants nationwide, as the most qualified plant operator following a comprehensive, fair and open bidding process. CRRA will be able to reduce the cost of operating the plant by $9 million per year, or 23 percent, which will also help control costs for our municipal customers.

How the Trash-to-Energy and Recycling Processes Work



CRRA: Connecticut's Recycling Leader

CRRA's introduction and expansion of single-stream recycling has succeeded in increasing recycling rates. Single-stream was a non-starter until we invested millions into our recycling processing center, and now we have proven it is clearly the most effective way to boost residential recycling. Single-stream makes recycling much easier, which has encouraged people to recycle a lot more of their garbage instead of just tossing it in the trash. This trend can be easily seen as most Connecticut communities have replaced the old 14-gallon curbside blue recycling boxes with wheeled, lidded barrels ranging up to 96 gallons in size. Since we introduced single-stream recycling, recycling rates in our towns have increased dramatically. Recycling not only helps the environment, it also helps municipalities by reducing the amount of garbage for which they pay to dispose.

Just as a few examples, between 2007 and 2011:

- Portland increased its recycling by a whopping 458 percent, saving more than $34,000 in disposal costs;
- Hartford's recycling more than doubled, increasing by 101 percent, saving close to $162,000 in disposal costs;
- Granby's recycling jumped by 60 percent, saving almost $41,000 in disposal costs;
- East Hampton rose by 49 percent, saving more than $23,000 in disposal costs; and,
- Manchester's and East Granby's recycling grew by an impressive 35 percent, saving trash-disposal costs totaling of close to $84,000 and more than $7,500 respectively.

In all, just these six towns saved over $350,000 in trash-disposal costs by recycling, since CRRA charges nothing to dispose of recyclables and, in FY 2012, $69 to dispose of a ton of trash. Now we're looking for even more and better ways for Connecticut residents and businesses to recycle.

Single-stream recycling is easier, eliminating sorting, has greater capacity and has improved recycling rates in participating towns.

In this economy our city is trying to stretch every dollar as far as we can. CRRA's single-stream recycling enabled us to switch to fully automated trash collection. CRRA worked with us when we launched our new trash and recycling collection system. Our recycling shot up 30 percent from its historical average, and we've also saved over $350,000 in collection and disposal costs.

Jerry Rollett, P.E.
Director of Public Works
City of Torrington

126,000
Tons Recycled

In 2011 CRRA recycled 126,000 tons of trash saving $6.3 million in disposal fees for Connecticut towns.

The CRRA Trash Museum Educates

The CRRA Trash Museum is a great field trip for young children. At the Trash Museum they learn many meaningful ways that they can actively participate in to take care of their environment.

They learn what and how to recycle, ways they reuse everyday items before throwing them in the trash and ultimately reducing the amount of waste we all make! The CRRA Trash Museum is a fun hands-on learning center. What kid doesn't love to watch a large truck dump recycling items into a huge pile, all the while standing on a bench made from recycled plastic bottles!

Annemarieke Hamilton
Grade 1 Teacher
Hebron Avenue School
Glastonbury

The CRRA Trash Museum located in Hartford.

Almost half a million people, from schoolchildren to adults, from every town in Connecticut, from every state in the union and countries around the world, have enjoyed and learned from their tours of the Trash Museum. The consistent message – recycling benefits everyone and helps us conserve energy and protect the environment – has been presented in lectures, video, sculptures and even a garbage fashion show. Trash Museum visitors have learned about the value of open space, energy conservation, and the preservation of natural resources. The 6,500 square-foot exhibit space on Murphy Road in Hartford's South Meadows is a frequent destination for school trips, but also attracts groups of adults like the ladies of Trumbull Chapter of the Red Hat Society. For all visitors, it's a fascinating trip into the world of waste, recycling and environmental protection.

Continuous Quest for Improvement

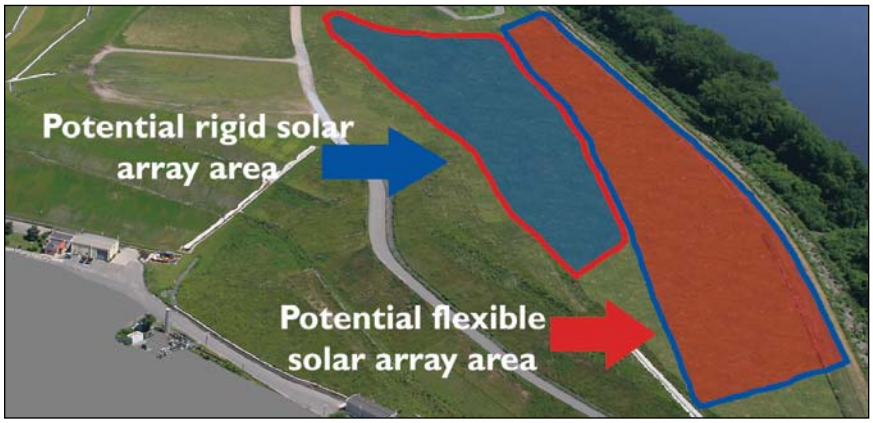


Illustration showing the areas for possible rigid or flexible solar arrays at the closed Hartford Landfill.

We're also continuing to search for new ways to optimize our resources. To that end, we are expecting to use the Hartford landfill, which we closed in 2008, as a large solar-energy generator.

CRRA, in partnership with the City of Hartford, is planning to install acres of solar-collector panels. We may install the familiar rigid solar panels atop part of the synthetic cap that we're installing over the landfill. Or, we may use a special photovoltaic material built right into the cap, so the cap itself would generate solar energy. With either technology, the Hartford landfill will produce clean, renewable power.

CRRA is a lean, innovative agency – not a stereotypical governmental bureaucracy. We are constantly working toward the next technology and the next improvement so we can accomplish our mission of reducing the state's waste stream and providing a renewable energy source, all in an environmentally conscious manner. We've been successful at finding and implementing these solutions for the benefit of the people of Connecticut.

CRRA is the future of Connecticut's environment. Because we spearheaded the development of our state's trash-to-energy system, scores of town dumps have closed, making Connecticut the national leader in the environmentally conscious disposal of trash. We produce enough renewable energy to power a large Connecticut city. And CRRA is the Connecticut leader in the promotion of recycling.

Soon we will add a second phase of power generation by using the closed Hartford landfill to harness solar power. And we will dispose of more trash in an environmentally safe manner through what will likely be the largest, most ambitious composting operation in Connecticut..

We look forward to continuing to serve Connecticut and its municipalities.

Rigid solar array

A flexible solar array uses special photovoltaic material built right into the cap. So the landfill itself would become a solar-power collector.

Dedicated to Environmental Management

CRRA is truly dedicated to the environmental management of Connecticut, from converting trash to electricity as a source of renewable power, to reducing the waste stream through recycling and composting. Working cooperatively with our municipal and private-sector partners, we demonstrate the strength of this commitment every day and every year.

These are some of the faces of CRRA. They, like everyone at CRRA, are dedicated to protecting our environment. After all, they all live here too.

CONNECTICUT RESOURCES RECOVERY AUTHORITY

CONNECTICUT'S RECYCLING LEADER

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FOR IMMEDIATE RELEASE
August 27, 2012

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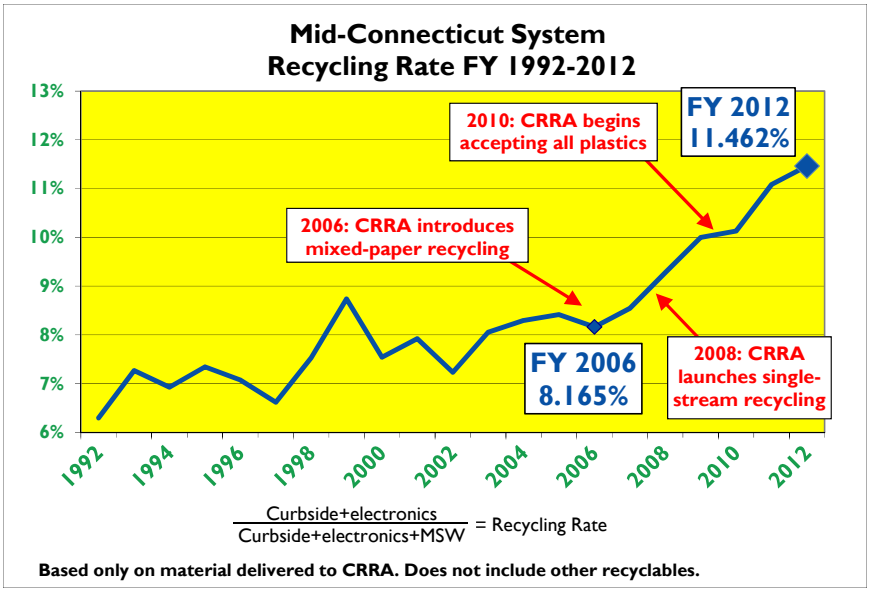
Recycling Rate Increases Again for 64 CRRA Municipalities

Towns Recycle 91,779 Tons, Save $6.3 Million in Trash Disposal Fees in Fiscal Year 2012

HARTFORD, Conn. – While recycling has stagnated statewide for several years, the 64 cities and towns that recycle through the Connecticut Resources Recovery Authority's Mid-Connecticut Project just recorded their sixth consecutive yearly increase in their recycling rate.



The recycling rate in the 64 Mid-Connecticut Project cities and towns has taken off since 2006.

For the fiscal year running from July 1, 2011, through June 30, 2012, Mid-Connecticut Project recycling towns delivered 91,779 tons of paper, cardboard, cans, bottles and electronics to CRRA. Because towns pay nothing to deliver recyclables, but $69 per ton in fiscal year 2012 to deliver trash, they avoided $6.3 million in trash disposal fees just by recycling.

Since 2006, when those towns recycled 76,525 tons, the 2012 total represents an increase of more than 18 percent. And with trash from Mid-Connecticut recycling towns dropping from 860,752 tons in fiscal 2006 to 708,934 tons in 2012, their recycling rate (as shown in the chart at left) has jumped more than 31 percent.

According to the most recent figures from the state Department of Energy & Environmental Protection, Connecticut's overall recycling rate has been stagnant since the late 1990s. And according to the U.S. Environmental Protection Agency, the tonnage of newspapers, magazines, glass and plastic bottles and jars, steel and aluminum cans and other common household recyclables generated in the United States dropped by more than 8 percent between 2000 and 2010.

Editors and news directors: data for all 64 Mid-Connecticut Project recycling cities and towns follows.

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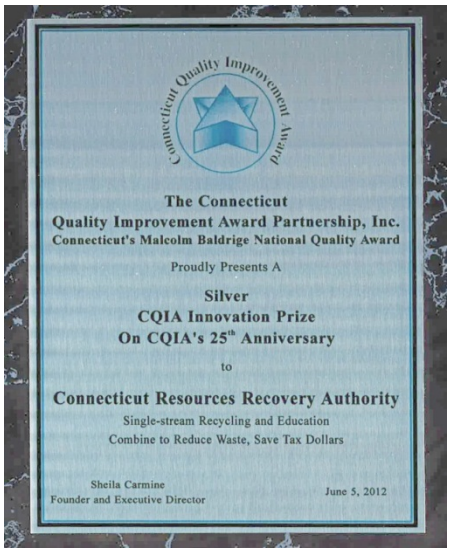
"The fact that we've been able to increase our towns' recycling rate for the sixth year in a row is great news, especially since it helped our towns avoid millions of dollars in trash disposal fees," said Thomas D. Kirk, CRRA president. "But if we're going to meet the state Solid Waste Management Plan's ambitious goals for recycling, we need to do more. That's why we're working to develop a food-waste composting facility, which will help our state take the next big jump toward meeting its goals."

Among the year's top performers:

- Watertown increased its tonnage by more than 29 percent, from 1,278 tons in fiscal 2011 to 1,651.95 in fiscal 2012, and its recycling rate from 8.9 percent to 12.3 percent.
- Cornwall had the system's best recycling rate at 26.36 percent.
- For the fifth straight year, Sharon and Salisbury, who combine their recyclables, led the towns by recycling 274.22 pounds per person.

These recycling rates are a comparison of recyclables delivered to CRRA with trash delivered to CRRA. They do not include tires, lead-acid batteries, waste oil, scrap metal and other materials that must be required by state law but are not commonly collected at curbside.



CRRA received this 2012 CQIA Innovation Prize for its innovative pairing of recycling technology and public education.

In recent years CRRA has launched several initiative designed to increase recycling in Mid-Connecticut communities:

- In 2005 CRRA expanded its menu of acceptable items to include junk mail, magazines, computer printer paper and other types of mixed paper.
- In 2008, CRRA introduced to Connecticut single-stream recycling, the next generation of recycling, while adding oversized jars and bottles, aerosol cans and more types of cardboard to its list of acceptable items.
- In 2009, CRRA supported the introduction of single-stream recycling with a public awareness campaign that featured radio advertisements, printed materials and press interviews, along with the sustainability education programs it offers at the CRRA Trash Museum. The effectiveness of CRRA's unique combination of education and single-stream technology earned a 2012 CQIA Innovation Prize from the Connecticut Quality Improvement Award Partnership.
- In 2010, CRRA began accepting plastics #3 through #7 from Mid-Connecticut Project cities and towns.

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Residents of those towns also produced these environmental benefits just by recycling:

- They saved as much energy as more than 9,300 households use in a year, or as much as would be saved by taking 13,869 cars off the road for a year.
- They prevented the emitting of 190,428 tons of carbon dioxide, a greenhouse gas linked to climate change, or as much as almost 35,000 cars emit in one year.
- They obviated the mining of 3,345 tons of limestone, 3,432 tons of iron ore, 1,922 tons of coal, 3,431 tons of soda ash and 1,339 tons of feldspar.
- They saved more than 1 million trees.

The Connecticut Resources Recovery Authority is a quasi-public agency whose mission is to work for – and in – the best interests of the municipalities of the state of Connecticut. CRRA's board of directors and management team develop and implement environmentally sound solutions and best practices for solid waste disposal and recycling management on behalf of municipalities. CRRA serves 93 Connecticut cities and towns. CRRA also runs award-winning sustainability education programs through the CRRA Trash Museum in Hartford. For more information about CRRA and its activities, visit http://www.crra.org. Computer users can also discuss CRRA on its blog, http://crra-blog.blogspot.com and follow CRRA on Twitter at @CRRA.

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Editors and news directors: data for all 64 Mid-Connecticut Project recycling cities and towns follows.

CRRA Mid-Connecticut System Trash and Recycling
July 1, 2011-June 30, 2012

FY 2012 Mid-Connecticut System Recycling

Town	Population (2010 U.S. Census)	Recyclables delivered (tons)	Electronics recycled through CRRA	Total recycling system-wide (tons)	Trash delivered from recycling towns (tons)	Total recycling towns' waste stream (tons)	% Recycled	Per capita recycling (pounds)	Increase (decrease) in recycling tons	Increase (decrease) in recycling %	Trash disposal fees saved	Town
Avon	18,098	2,166.22			11,025.96	13,192.18	16.42%	239.39	-6.50%	-8.00%	$149,469.18	**Avon**
Beacon Falls	6,049	287.24			2,463.00	2,750.24	10.44%	94.97	-10.36%	4.55%	$19,819.56	**Beacon Falls**
Bethlehem	3,607	374.08			1,644.08	2,018.16	18.54%	207.42	9.87%	**10.19%**	$25,811.52	**Bethlehem**
Bloomfield	20,486	1,826.18			15,702.43	17,528.61	10.42%	178.29	7.34%	1.31%	$126,006.42	**Bloomfield**
Bolton	4,980	600.88			2,026.13	2,627.01	**22.87%**	241.32	-2.77%	-3.31%	$41,460.72	**Bolton**
Canton	10,292	1,024.63			4,737.26	5,761.89	17.78%	199.11	-0.61%	2.62%	$70,699.47	**Canton**
Chester	3,994	334.22			1,495.30	1,829.52	18.27%	167.36	**11.29%**	-4.57%	$23,061.18	**Chester**
Clinton	13,260	870.98			6,731.07	7,602.05	11.46%	131.37	3.41%	**11.81%**	$60,097.62	**Clinton**
Colebrook	1,485	185.46			650.09	835.55	**22.20%**	249.78	6.34%	5.45%	$12,796.74	**Colebrook**
Cornwall	1,420	144.29			403.02	547.31	**26.36%**	203.23	-16.61%	-7.81%	$9,956.01	**Cornwall**
Coventry	12,345	1,411.29			4,578.75	5,990.04	**23.56%**	228.64	1.57%	-5.75%	$97,379.01	**Coventry**
Cromwell	14,005	896.88			8,655.96	9,552.84	9.39%	128.08	-8.90%	-5.91%	$61,884.72	**Cromwell**
Deep River	4,629	313.15			3,139.84	3,452.99	9.07%	135.30	-8.10%	-2.89%	$21,607.35	**Deep River**
East Granby	5,148	508.54			3,208.37	3,716.91	13.68%	197.57	-0.48%	4.79%	$35,089.26	**East Granby**
East Hampton	12,959	979.24			6,987.65	7,966.89	12.29%	151.13	-9.17%	-11.29%	$67,567.56	**East Hampton**
East Hartford	51,252	3,407.44			28,702.22	32,109.66	10.61%	132.97	2.45%	0.28%	$235,113.36	**East Hartford**
East Windsor	11,162	956.20			4,536.51	5,492.71	17.41%	171.33	-0.10%	-0.64%	$65,977.80	**East Windsor**
Ellington	15,602	1,425.98			5,452.17	6,878.15	**20.73%**	182.79	-0.93%	-4.98%	$98,392.62	**Ellington**
Enfield	44,654	3,631.39			25,576.84	29,208.23	12.43%	162.65	7.40%	9.11%	$250,565.91	**Enfield**
Essex	6,683	747.83			3,472.53	4,220.36	17.72%	223.80	8.18%	-2.48%	$51,600.27	**Essex**
Farmington	25,340	2,290.91			16,822.05	19,112.96	11.99%	180.81	**10.48%**	9.55%	$158,072.79	**Farmington**
Glastonbury	34,427	3,671.00			20,734.70	24,405.70	15.04%	213.26	-1.76%	-4.09%	$253,299.00	**Glastonbury**
Goshen	2,976	309.52			1,362.62	1,672.14	18.51%	208.01	2.87%	5.36%	$21,356.88	**Goshen**
Granby	11,282	1,535.58			5,589.80	7,125.38	**21.55%**	272.22	-3.64%	-7.83%	$105,955.02	**Granby**
Guilford	22,375	1,651.90			14,787.73	16,439.63	10.05%	147.66	-1.86%	-6.11%	$113,981.10	**Guilford**
Haddam	8,346	466.01			3,331.60	3,797.61	12.27%	111.67	-8.93%	-9.29%	$32,154.69	**Haddam**
Hartford	124,775	4,867.45			91,548.80	96,416.25	5.05%	78.02	2.65%	6.15%	$335,854.05	**Hartford**
Harwinton	5,642	615.47			2,107.93	2,723.40	**22.60%**	218.17	**12.40%**	**15.87%**	$42,467.43	**Harwinton**
Hebron	9,686	850.20			3,383.20	4,233.40	**20.08%**	175.55	-1.71%	-1.30%	$58,663.80	**Hebron**
Killingworth	6,525	577.58			2,350.83	2,928.41	19.72%	177.04	-2.28%	6.23%	$39,853.02	**Killingworth**
Litchfield	8,466	700.84	Tonnage figures not available town-by-town		5,410.98	6,111.82	11.47%	165.57	0.83%	4.16%	$48,357.96	**Litchfield**
Madison	18,269	1,371.29			8,432.83	9,804.12	13.99%	150.12	5.66%	0.70%	$94,619.01	**Madison**
Manchester	58,241	5,064.15			35,900.81	40,964.96	12.36%	173.90	-1.34%	0.34%	$349,426.35	**Manchester**
Marlborough	6,404	635.10			2,217.12	2,852.22	**22.27%**	198.34	**19.09%**	**27.45%**	$43,821.90	**Marlborough**
Middlebury	7,575	848.39			2,825.28	3,673.67	**23.09%**	224.00	-4.02%	-10.26%	$58,538.91	**Middlebury**
Naugatuck	31,862	1,828.80			15,277.35	17,106.15	10.69%	114.80	**10.00%**	7.56%	$126,187.20	**Naugatuck**
Newington	30,562	2,809.49			21,190.65	24,000.14	11.71%	183.86	-3.26%	-3.98%	$193,854.81	**Newington**
Norfolk	1,709	167.34			704.13	871.47	19.20%	195.83	-5.18%	5.42%	$11,546.46	**Norfolk**
North Branford	14,407	658.50			7,490.45	8,148.95	8.08%	91.41	-20.45%	-16.08%	$45,436.50	**North Branford**
North Canaan	3,315	204.82			2,413.41	2,618.23	7.82%	123.57	-14.86%	-11.47%	$14,132.58	**North Canaan**
Old Saybrook	10,242	984.71			9,931.34	10,916.05	9.02%	192.29	-19.74%	-16.72%	$67,944.99	**Old Saybrook**
Oxford	12,683	728.78			4,511.27	5,240.05	13.91%	114.92	-12.69%	4.12%	$50,285.82	**Oxford**
Portland	9,508	607.74			3,938.32	4,546.06	13.37%	127.84	-4.59%	-6.40%	$41,934.06	**Portland**
Rocky Hill	19,709	1,541.48			11,203.47	12,744.95	12.09%	156.42	7.38%	3.55%	$106,362.12	**Rocky Hill**
Roxbury	2,262	208.73			789.42	998.15	**20.91%**	184.55	3.30%	2.97%	$14,402.37	**Roxbury**
RRDD#1 (1)	21,234	2,015.88			12,534.38	14,550.26	13.85%	189.87	-2.68%	-2.20%	$139,095.72	**RRDD#1 (1)**
Sharon/Salisbury (2)	7,015	961.81			3,336.67	4,298.48	**22.38%**	274.22	-6.06%	-3.86%	$66,364.89	**Sharon/Salisbury (2)**
Simsbury	23,511	2,725.44			14,926.47	17,651.91	15.44%	231.84	-3.87%	-3.52%	$188,055.36	**Simsbury**
South Windsor	25,709	2,780.77			16,125.18	18,905.95	14.71%	216.33	-0.05%	-3.02%	$191,873.13	**South Windsor**
Southbury	19,904	1,609.44			9,860.68	11,470.12	14.03%	161.72	-0.23%	5.40%	$111,051.36	**Southbury**
Suffield	15,735	1,430.90			6,852.56	8,283.46	17.27%	181.87	-1.53%	-4.28%	$98,732.10	**Suffield**
Thomaston	7,887	498.31			3,816.66	4,314.97	11.55%	126.36	-2.33%	7.21%	$34,383.39	**Thomaston**
Torrington	36,383	2,998.14			25,564.94	28,563.08	10.50%	164.81	0.46%	0.61%	$206,871.66	**Torrington**
Vernon	29,179	2,569.62			14,633.70	17,203.32	14.94%	176.13	2.20%	0.76%	$177,303.78	**Vernon**
Waterbury	110,366	2,890.66			80,872.05	83,762.71	3.45%	52.38	-2.08%	-0.51%	$199,455.54	**Waterbury**
Watertown	22,514	1,651.95			11,813.71	13,465.66	12.27%	146.75	**29.18%**	**38.42%**	$113,984.55	**Watertown**
West Hartford	63,268	7,195.37			38,638.68	45,834.05	15.70%	227.46	-0.54%	-2.65%	$496,480.53	**West Hartford**
Westbrook	6,938	373.42			4,365.65	4,739.07	7.88%	107.64	5.47%	-7.65%	$25,765.98	**Westbrook**
Wethersfield	26,668	2,819.27			16,433.90	19,253.17	14.64%	211.43	0.28%	-0.80%	$194,529.63	**Wethersfield**
Windsor Locks	12,498	1,095.12			8,930.66	10,025.78	10.92%	175.25	-0.08%	0.35%	$75,563.28	**Windsor Locks**
Woodbury	9,975	811.52			4,782.41	5,593.93	14.51%	162.71	-0.95%	2.00%	$55,994.88	**Woodbury**
TOTALS	**1,225,503**	**91,715.52**	**63.12**	**91,778.64**	**708,933.57**	**782,914.94**	**11.72%**	**149.68**	0.14%	0.37%	**$6,328,370.88**	**TOTALS**
Town	Population (2010 U.S. Census)	Recyclables delivered (tons)	Electronics recycled system-wide	Total recycling system-wide (tons)	Trash delivered from recycling towns (tons)	Total recycling towns' waste stream (tons)	% Recycled	Per capita recycling (pounds)	Increase (decrease) in recycling tons	Increase (decrease) in recycling %	Trash disposal fees saved	Town

(1)—RRDD #1 includes Barkhamsted, New Hartford and Winchester

(2)—Salisbury and Sharon manage their trash and recyclables jointly

CONNECTICUT RESOURCES RECOVERY AUTHORITY
CONNECTICUT'S RECYCLING LEADER

FOR IMMEDIATE RELEASE
June 18, 2012

Media inquiries only: Paul Nonnenmacher
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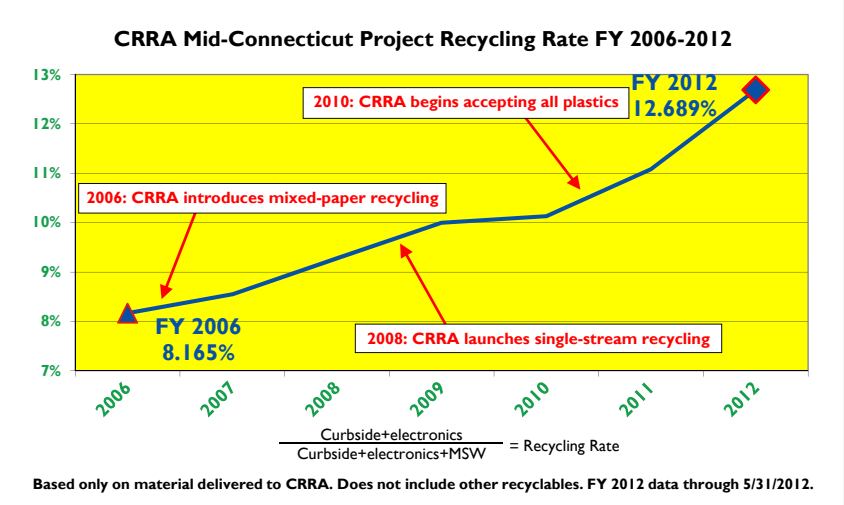
Recycling's New Math: Technology + Education = Success; Formula Earns CQIA Innovation Prize for CRRA

Supporting Single-Stream with Public Awareness Produces 20-Percent Increase While State's Overall Recycling Rate Remains Flat

The Connecticut Resources Recovery Authority leadership in recycling has been reaffirmed with a CQIA Innovation Prize.

At the Connecticut Quality Improvement Award Partnership's 25th Annual Conference, CRRA was honored for its unique combination of single-stream recycling technology and public education that led to an increase of nearly 20 percent in the recycling rates of the 64 cities and towns served by CRRA's Mid-Connecticut Project (with a total population of about 1.2 million) between fiscal years 2007 and 2011. Fiscal 2012 does not end until June 30, but through May 31 those towns had increased their recycling rate (the ratio of recyclables to trash delivered from those towns to CRRA) for the sixth straight year.



Recycling in CRRA's Mid-Connecticut Project towns took off after CRRA expanded its recycling program and increased its public-awareness efforts.

Not only did this combination dramatically increase recycling in participating towns—at a time when the statewide recycling rate was stagnating—it has also saved participating towns $824,864 in trash-disposal fees.

The Connecticut Quality Improvement Award is America's first state-level award using the Malcolm Baldrige National Quality and Innovation Award Criteria for Performance Excellence in an effort to advance innovative programs that improve quality performance and marketplace competitiveness. The award is named for a former Connecticut CEO who led the U.S. Commerce Department during President Ronald Reagan's administration and served as CRRA's first chairman, from CRRA's creation in 1973 until 1975.

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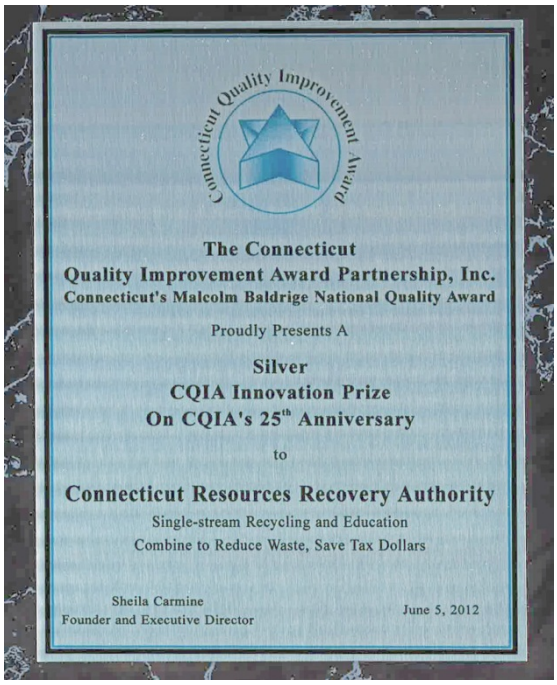
"At CRRA, we are always looking ahead, so we wanted to make sure our education and public-awareness efforts have evolved along with the evolution of our recycling technology," said CRRA President Thomas D. Kirk. "We're proud that our efforts have been recognized with this award, and especially delighted the award bears the name of someone so important in our history."



The 2012 CQIA Innovation Prize presented to CRRA for its innovative pairing of recycling technology and public education.

Recycling is one of the essential services CRRA provides to 74 cities and towns. CRRA has provided this service at no cost to encourage maximum recycling since introducing recycling in 1991. But in recent years CRRA has taken significant steps that have caused a sea change in both citizen participation rates and tons recycled:

- In 2008, after a successful $3.5 million retrofit of its Hartford facility with state-of-the-art equipment and implementation planning with municipal leaders and private haulers, CRRA introduced to Connecticut single-stream recycling, the next generation of recycling.
- In 2009, CRRA supported the introduction of single-stream recycling with a public awareness campaign that featured radio advertisements, printed materials, pages of information on CRRA's website and press interviews.
- In 2010, CRRA began accepting plastics #3 through #7 from Mid-Connecticut Project cities and towns.
- Its award-winning education programs attracted more than 218,000 participants in fiscal years 2008 through 2011.
- In July 2011, CRRA brought single-stream recycling to 10 southwestern Connecticut towns, and through May 31 their recycling tonnages had jumped 23 percent year-over-year.

These recycling figures do not include electronics (recycled through CRRA, manufacturers or retailers) and do not include other forms of recycling, such as deposit container redemption, composting of grass clippings, yard waste and food, and recycling of other commodities including scrap metal, waste oil and lead-acid batteries. After taking all these other materials into consideration, the Connecticut Department of Energy & Environmental Protection estimates that Connecticut recycles about 30 percent of its solid waste.

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The Connecticut Resources Recovery Authority is a quasi-public agency whose mission is to work for – and in – the best interests of the municipalities of the state of Connecticut. CRRA's board of directors and management team develop and implement environmentally sound solutions and best practices for solid waste disposal and recycling management on behalf of municipalities. CRRA serves 94 Connecticut cities and towns. CRRA also runs award-winning sustainability education programs through the CRRA Trash Museum in Hartford. For more information about CRRA and its activities, visit http://www.crra.org. Computer users can also discuss CRRA on its blog, http://crra-blog.blogspot.com.

For the past 25 years, the Connecticut Quality Improvement Award (CQIA) has been the State's annual quality awards, recognizing Connecticut manufacturing and service companies that excel in managing quality improvement for business success and growth. Beginning in 1995, health care, education, government and other not-for-profit organizations became eligible to apply along with manufacturing and service companies.

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CONNECTICUT RESOURCES RECOVERY AUTHORITY
CONNECTICUT'S RECYCLING LEADER

FOR IMMEDIATE RELEASE
August 13, 2012

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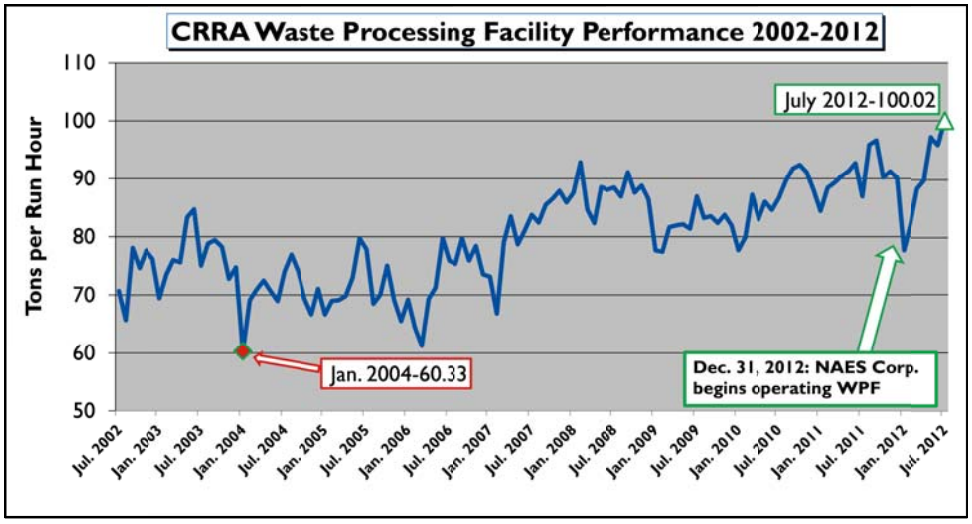
CRRA Trash-to-Energy Plant Sets Performance Record

Plant Operator, NAES Corp., Reaches Efficiency Heights Just Seven Months on the Job

HARTFORD, Conn. – The Connecticut Resources Recovery Authority trash-to-energy plant had its most efficient month since it became fully operational in October 1988.

The waste processing facility (WPF), which turns trash from 68 cities and towns into fuel used to generate electricity, processed 100.02 tons per run hour in July, its most efficient month ever.

This achievement occurred just seven months after NAES Corp. began operating the WPF. In December 2010 CRRA awarded NAES a contract to operate the plant, and on Dec. 31, 2011, NAES took over the WPF. On June 1, 2012, NAES assumed operations of the power-generating side of the trash-to-energy facility.



Efficiency of the CRRA trash-to-energy plant, as measured by tons of trash turned into fuel per run hour at its waste processing facility, has never been higher.

"This efficiency record proves what we've been saying for years—that with the proper investments in the plant, the right operating contractor and CRRA management, this facility can efficiently dispose of Connecticut's waste in an environmentally sound and effective manner," said Thomas D. Kirk, CRRA president. "This is a testament to the vision of our Board of Directors, the skill and creativity of our engineering team and the NAES employees, many of whom have worked at the plant for decades under the previous contractors."

Connecticut has six trash-to-energy plants, but unlike the others the Hartford facility uses refuse-derived fuel technology. The WPF screens and shreds trash, turning it into fuel, which is then combusted in the power block facility (PBF) to make steam, and that steam spins turbines in the energy-generating facility (EGF) that make enough electricity to power about 45,000 homes.

Thanks to trash-to-energy Connecticut, unlike most states, puts almost no trash into landfills. "This facility is a vital part of our state's solid-waste and energy infrastructure, and we're proud to say it is capable of continuing to play this critical role well into the future," Kirk said.

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The Connecticut Resources Recovery Authority is a quasi-public agency whose mission is to work for – and in – the best interests of the municipalities of the state of Connecticut. CRRA's board of directors and management team develop and implement environmentally sound solutions and best practices for solid waste disposal and recycling management on behalf of municipalities. CRRA serves 94 Connecticut cities and towns. CRRA also runs award-winning sustainability education programs through the CRRA Trash Museum in Hartford. For more information about CRRA and its activities, visit http://www.crra.org. Computer users can also discuss CRRA on its blog, http://crra-blog.blogspot.com.

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CONNECTICUT RESOURCES RECOVERY AUTHORITY
CONNECTICUT'S RECYCLING LEADER

BACKGROUNDER

September 10, 2012

Media inquiries: Paul Nonnenmacher
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What Makes CRRA Connecticut's Recycling Leader?

CRRA has been providing cities and towns with recycling services since 1990.
Since then, CRRA has recycled more than 2.5 million tons of cans, bottles, paper, cardboard and other recyclables. Recycling these materials rather than disposing of them as trash

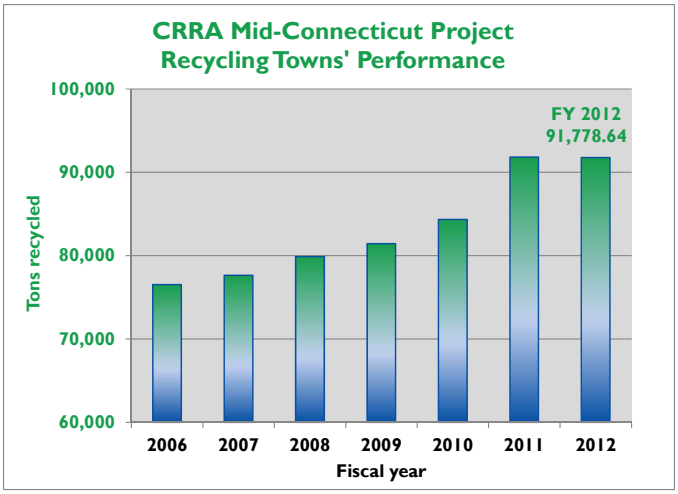
- prevented the creation of more than 1.5 million tons of greenhouse gases – we would have required more than 90 million tree seedlings to grow for 10 years to remove the same amount of greenhouse gases from the atmosphere; and
- saved more than 23 million million BTUs of energy – equivalent of 186 million gallons of gasoline or enough energy to power more than 225,000 average homes for a full year

(Information from Northeast Recycling Council's Environmental Benefits Calculator)

CRRA brought electronics recycling to Connecticut in 1999.
Since then, more than 54,000 families have recycled more than 6.5 million pounds of electronics, keeping lead, mercury, zinc, cadmium and other substances from polluting our environment.

CRRA has steadily expanded its menu of recyclables:

- 2006 – added junk mail, magazines, computer paper, catalogs and other types of mixed paper
- 2007 – added boxboard, aerosol cans and oversized glass, plastic and metal jars and cans
- 2010 – added all plastic food and beverage containers – numbers 1 through 7



CRRA introduced single-stream recycling to the state, starting with 64 towns, in 2008 and added more in 2011.
As a result of these advancements, Mid-Connecticut Project towns have increased their recycling tonnage by more than 18 percent (see chart above right) while the state's overall recycling rate has been stagnant for more than a decade.

CRRA began teaching people to recycle in 1993 and its innovative education programs are still effective today.
Since the CRRA Trash Museum opened in Hartford almost 20 years ago, more than 780,000 people have participated in its programs. In June 2012, CRRA received a CQIA Innovation Prize from the Connecticut Quality Improvement Partnership (see plaque at left) for its unique combination of processing technology, public education and recycling success.

That's leadership. That's why CRRA is Connecticut's Recycling Leader.

—30—

CONNECTICUT RESOURCES RECOVERY AUTHORITY
CONNECTICUT'S RECYCLING LEADER

BACKGROUNDER
February 22, 2012

Media inquiries only: Paul Nonnenmacher
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The Facts about Renewable Energy from Trash and Why It Deserves Connecticut's Support

Connecticut has six trash-to-energy plants. Each year, they process more than two million tons of municipal solid waste – that's over 90 percent of the state's post-recycled trash.

They turn that trash into enough electricity to power almost 300,000 homes.

Trash-to-energy plants are equipped with emissions controls that are superior to other waste combustion and coal-fired power plants. Trash-to-energy plants are subject to Maximum Available Control Technology (MACT)-based standards, which are much stricter than the health-based standards they replaced.

Testing shows that emissions from CRRA's Hartford trash-to-energy plant for dioxin, mercury and particulate matter are 90 percent cleaner than those strict MACT standards.

An analysis using U.S. Environmental Protection Agency models determined that trash-to-energy also avoids 36 million tons of greenhouse gas emissions each year. Each ton of trash turned into electricity avoids nearly one ton of CO_2-equivalent emissions through avoided methane emissions from landfills and avoided CO_2 emissions from fossil-fuel combustion and metal recycling.

The U.S. EPA praised the outstanding performance of the nation's trash-to-energy facilities by stating that "these plants produce 2,800 megawatts of electricity with less environmental impact than almost any other source of electricity."

In fact, trash-to-energy offers an additional environmental benefit – preservation of precious landfill space. Trash-to-energy reduces by about 90 percent the volume of waste that must go into a landfill.

Trash-to-energy is helping Connecticut achieve an important distinction: When the Windsor-Bloomfield landfill closes, as expected in the middle of this decade, Connecticut will be the first state in the nation with no active trash landfills.

The State of Maryland has just classified trash-to-energy as a source of Class 1 renewable power. Connecticut's Renewable Portfolio Standard mandates that 8 percent of all electricity sold in our state come from Class 1 renewable sources, but because Connecticut produces so little Class 1 renewable power our state must import it at a premium price.

H.B. 5118 would designate trash-to-energy plants as Class 1 renewable sources. Not only would this legislation improve the state's ability to meet its own Renewable Portfolio Standard, but the additional electric revenue would defray the cost of garbage disposal, an extra benefit for cities, towns and residents.

Connecticut is working to reduce the amount of trash it generates. But until there is no more trash, there will still be a need for trash-to-energy plants. For the foreseeable future, trash will be a renewable, locally-produced fuel source.

Trash-to-energy makes sense for Connecticut. H.B. 5118 would recognize its benefits.

THE CRRA

TRASH MUSEUM

REDUCE. REUSE. RECYCLE.
RECOVER. RETHINK.

211 Murphy Road • Hartford, Connecticut

CONNECTICUT RESOURCES RECOVERY AUTHORITY

LET'S TALK TRASH

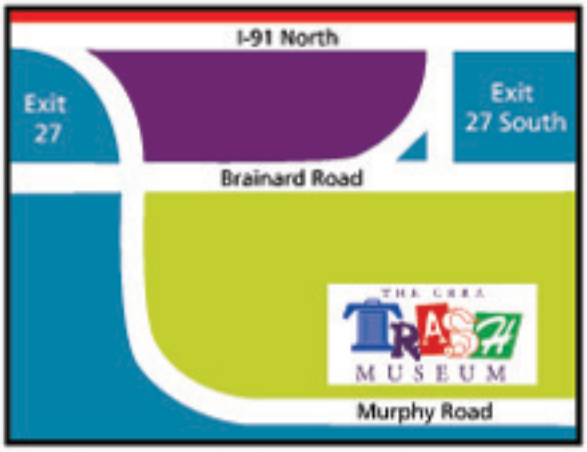
You're invited to tour the CRRA Trash Museum, where hands-on exhibits will give you the chance to learn about integrated solid waste management and how you can help. The CRRA Trash Museum includes 6,500 square feet of educational exhibits that show Connecticut residents how important their contributions are to the successful management of our state's solid waste.

Your tour of the CRRA Trash Museum begins at the Temple of Trash, which describes the problems caused by old-fashioned methods of disposal such as raw garbage dumps. You'll then learn about solutions including source reduction, recycling, energy recovery and modern engineered landfills. Games help reinforce important information and examples of recycling and energy conservation at home and office.

From our skybox viewing area, watch our state-of-the-art recycling processing center, where we sort bottles, cans, paper and cardboard so they can be made into new products.

REDUCE. REUSE. RECYCLE.
RECOVER. RETHINK.

Like the CRRA TRASH MUSEUM on facebook



DIRECTIONS TO THE CRRA TRASH MUSEUM

211 Murphy Road • Hartford, CT 06114
In Hartford's South Meadows

South Meadows MARKETPLACE

General: From either north or south, take I-91 to Exit 27, Brainard Road / Airport Road.

If traveling SOUTH on I-91 to Exit 27 Airport Road: At the end of the ramp turn left onto Airport Road and proceed up over the hill. The road will split – bear right. Proceed to traffic light. Turn left onto Murphy Road. Travel approximately 1/4 mile. The CRRA Trash Museum will be on your left.

If traveling NORTH on I-91, go straight at the light at the end of the exit ramp onto Murphy Road. Travel approximately 1/4 mile. The CRRA Trash Museum will be on your left.

HOURS:

July-August – Tuesday through Friday, 10 a.m.-4 p.m.
September through June – Wednesday through Friday, noon-4 p.m.
Scheduled tours by appointment. Please call 860-757-7765.

Admission: $4 per person, free for children under age 2.
Handicapped accessible.

TRASH TRIVIA

- The average American throws away 3.5 pounds of trash a day.
- We throw away 2.5 million plastic bottles every hour.
- The average American uses 650 pounds of paper a year.
- In America, 1,500 aluminum cans are recycled every second.

CONNECTICUT RESOURCES RECOVERY AUTHORITY
CONNECTICUT'S RECYCLING LEADER

www.crra.org

For your convenience, the Trash Museum now accepts CREDIT and DEBIT cards!

MasterCard VISA DISCOVER

Meet the

Board of Directors

CONNECTICUT RESOURCES RECOVERY AUTHORITY

CONNECTICUT'S RECYCLING LEADER

CHAIRMAN OF THE BOARD

The Honorable Donald S. Stein

First Selectman, Town of Barkhamsted

Appointed to CRRA Board in 2011; Appointed Chairman in 2012

Telephone: 860-379-8285

Email: dstein@barkhamsted.us

CHAIR, FINANCE COMMITTEE

Timothy C. Griswold

Appointed to CRRA Board in 2002

Telephone: 860-757-7700

E-mail: timothygriswold@yahoo.com

CHAIR, POLICIES & PROCUREMENT COMMITTEE

David B. Damer

Appointed to CRRA Board in 2008

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E-mail: thedamers@comcast.net

CHAIR, HUMAN RESOURCES & ORGANIZATIONAL SYNERGIES COMMITTEE

The Honorable Ryan J. Bingham

Mayor, City of Torrington

Appointed to CRRA Board in 2012

Telephone: 860-489-2228

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Meet the

Board of Directors

CONNECTICUT RESOURCES RECOVERY AUTHORITY

CONNECTICUT'S RECYCLING LEADER

DIRECTOR

The Honorable Scott Slifka

Mayor, Town of West Hartford

Appointed to CRRA Board in 2011

Telephone: 860-561-7442

E-mail: scott.slifka@yahoo.com

No Photograph Available

DIRECTOR

Andrew J. Nunn

Chief Administrative Officer, City of Bridgeport

Appointed to CRRA Board in 2012

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DIRECTOR

The Honorable Pedro E. Segarra

Mayor, City of Hartford

Appointed to CRRA Board in 2012

Telephone: 860-543-8500

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DIRECTOR

The Honorable John E. Adams

First Selectman, Town of Granby

Appointed to CRRA Board in 2012

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DIRECTOR

Joel Freedman

Appointed to CRRA Board in 2012

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Meet the

Board of Directors

CONNECTICUT RESOURCES RECOVERY AUTHORITY

CONNECTICUT'S RECYCLING LEADER

AD HOC MEMBER, SOUTHWEST DIVISION

Stephen J. Edwards

Director of Public Works, Town of Westport

Appointed to CRRA Board in 2006

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AD HOC MEMBER, SOUTHWEST DIVISION

Mark Tillinger

Appointed to CRRA Board in 2010

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E-mail: marktillinger@mac.com

AD HOC MEMBER, MID-CONNECTICUT PROJECT

The Honorable Steven N. Wawruck Jr.

First Selectman, Town of Windsor Locks

Appointed to CRRA Board in 2010

Telephone: 860-292-8696

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AD HOC MEMBER, MID-CONNECTICUT PROJECT

Dr. Robert Painter

Appointed to CRRA Board in 2010

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E-mail: painterbob4250@yahoo.com