



COVANTA

Powering Today. Protecting Tomorrow.

The Future of Sustainable Waste Management: Challenging the Status Quo

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Covanta Overview



Waste Disposal

- 45 EfW facilities
- Process ~20 million tons of waste annually



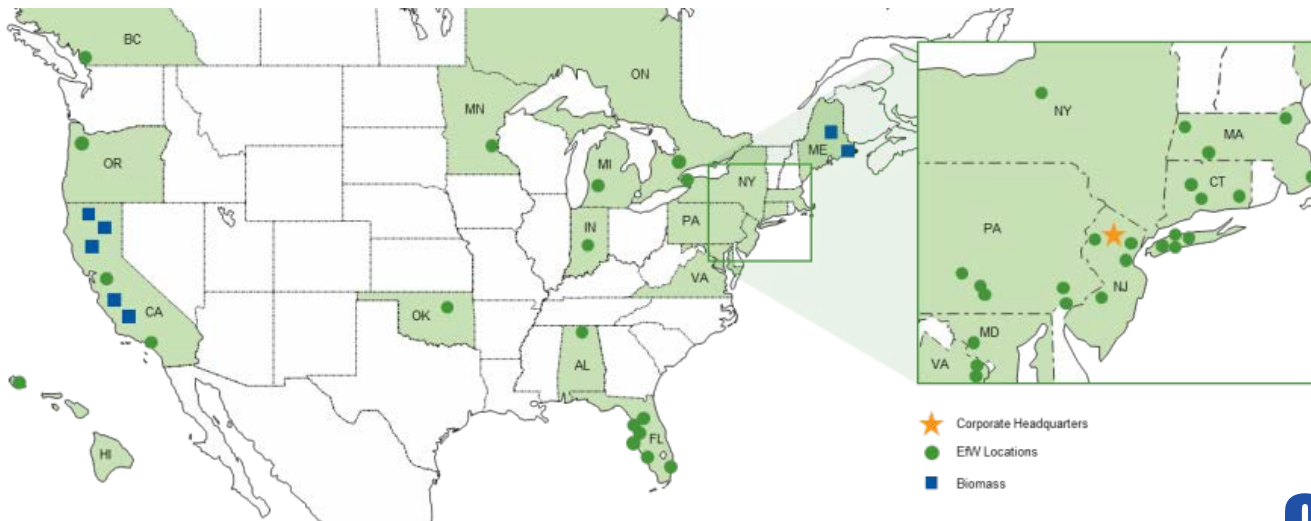
Energy Generation

- >1,500 MW base load electricity capacity
- Renewable energy for one million homes



Metals Recycling

- Recycle ~500k tons of ferrous and non-ferrous metal annually
- Five Golden Gate Bridges and over one billion aluminum beverage cans



Evolution of Covanta - 1980s – 2008



CVA
Listed
NYSE



2009 – 2014 – Contract Transitions and Continuation of Long-Term Partnerships

Onondaga County, New York

*“Over the past 20 years, waste-to-energy has proven it is a safe and effective technology that turns trash into electricity,” said Mark Donnelly, OCRRA executive director. “It saves natural resources and funds our community’s award-winning recycling programs, which is why **OCRRA is pleased to announce a contract extension with Covanta, our long-time partner in sustainable waste solutions.**”*



Marion County, Oregon

*“The new contract provides for the continuation of reliable waste disposal and **extends a successful partnership between Covanta and Marion County that began in the mid-1980s,**” remarked Commissioner Sam Brentano, Marion County. “The Energy-from-Waste facility coupled with innovative recycling programs has enabled Marion County to be a leader in solid waste management.”*



Boston, Massachusetts

*“Covanta has been a very good and reliable partner,” said Michael Dennehy, interim commissioner, Public Works. “Their generous support over the years for programs such as Boston Shines and the **consistent dependable disposal options Covanta provides the City of Boston** have had a positive impact on the cleanliness of Boston neighborhoods.”*

2015 and beyond – What is next for Covanta?



Durham York Energy Centre

Waste should never be wasted – Huge opportunity for the economy and the environment

| | Business as Usual* | | Sustainability Scenario |
|-----------|--------------------|---|-------------------------|
| Recycling | 28.9% | ➔ | 65% |
| EfW | 7.6% | | 25% |
| Landfill | 63.5% | | 10% |

- Economic Benefits**

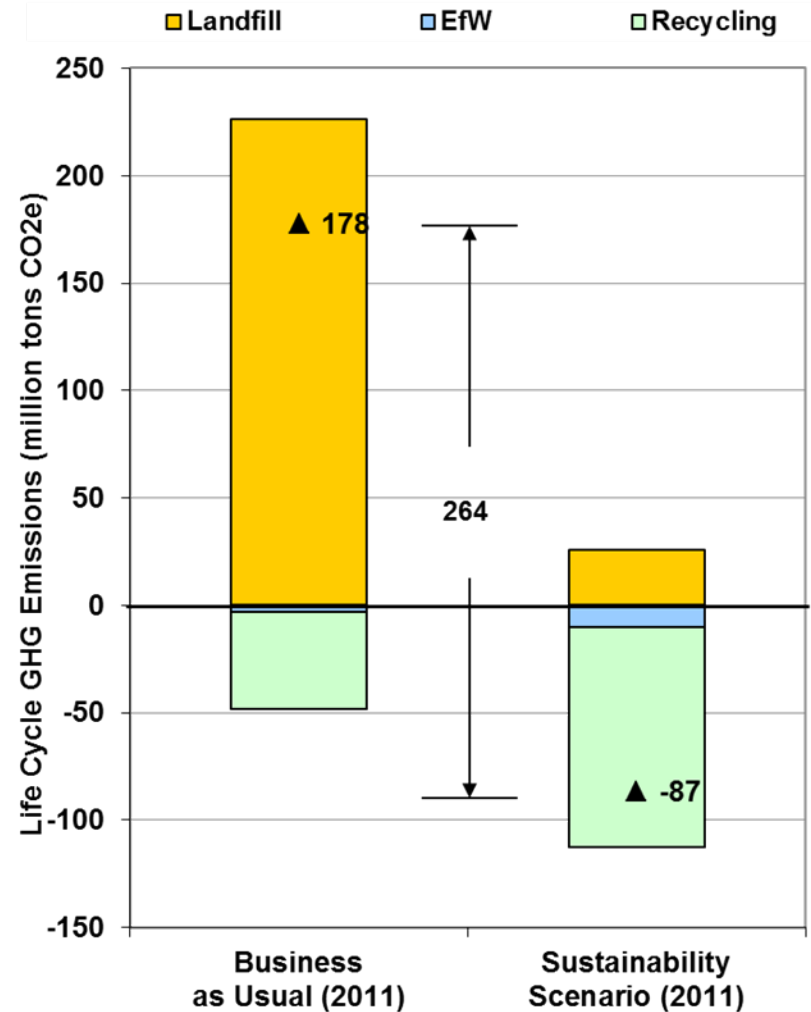
\$130B in direct economic activity
350,000 new permanent jobs

- GHG Savings**

264 million tons CO₂e
≈ closing 63 coal-fired power plants

- Energy Savings**

2.2 Quadrillion BTU primary energy
≈14% of our imported oil (2013)



* Source: Columbia University, 2014

Sustainability

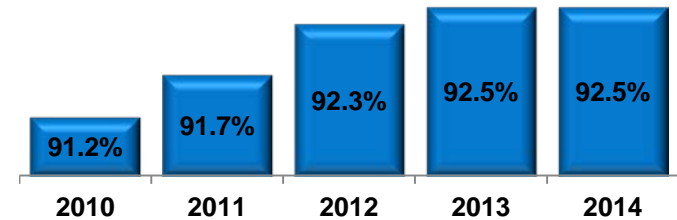
• Clean World Initiative

- Industry leading performance
 - Safety
 - Reliability
 - Efficiency
- Environmental stewardship
 - Sustainable waste management
 - Air quality
 - Water conservation
- Investing in technology
- Being a good neighbor



Industry leading performance

- World class safety programs
- High boiler availability



- In-house maintenance



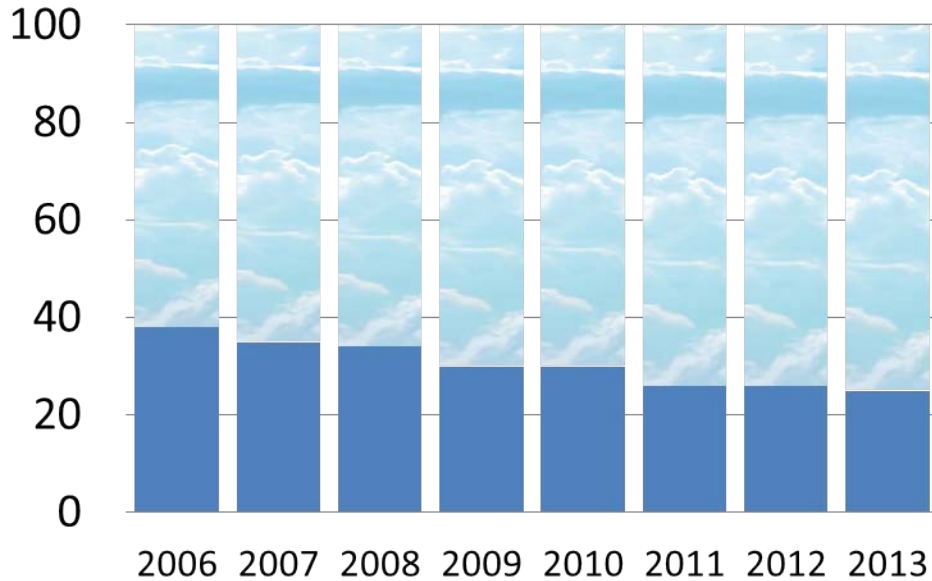
- Increasing efficiency

Since 2010

- ✓ 24 projects implemented
- ⚡ Over **30,000 MWh** saved per year
- 🏠 Enough electricity to supply **2,600** homes for a year
- 🚗 Saving **22,800** tons of GHGs (as CO₂), equivalent to pulling **4,350** cars off the road
- 💡 **7** more projects currently under development

Environmental Stewardship

Emissions Reductions



■ Covanta EfW Facility Emissions as a percentage of Federal Permit Limits

Water Conservation

Projects to reduce in-house demand and to use grey water instead of potable water



Investing in technology

- **Low NOx technology**

- Received Clean Air Excellence Award from the U.S. EPA



- **Enhanced metal recovery**

- Recycle 500,000 tons of metal annually
 - Enough ferrous to build five Golden Gate Bridges
 - Enough non-ferrous to produce one billion aluminum beverage cans



Being a good neighbor

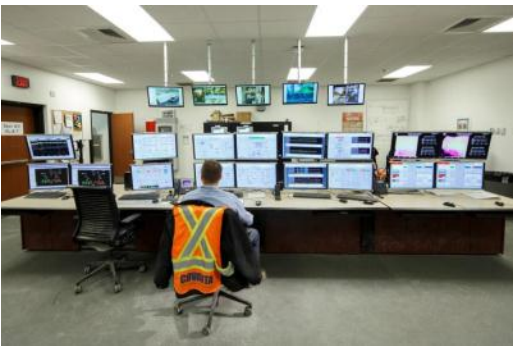


New York City Agreement

- 20-year waste transport and disposal contract
- CVA manages waste transportation logistics and disposal
- CVA investment for barges, railcars, containers and intermodal equipment



Durham York Energy Centre



- 140,000 tonne-per-year Energy-from-Waste Facility in Durham Region of Ontario, Canada
- Serves the Regional Municipalities of Durham and York
- Generates 17.5 megawatts of renewable energy—enough to power over 10,000 homes
- Latest technology - DYEC will be the cleanest and most efficient EfW facility in North America

Pinellas County Resource Recovery Center



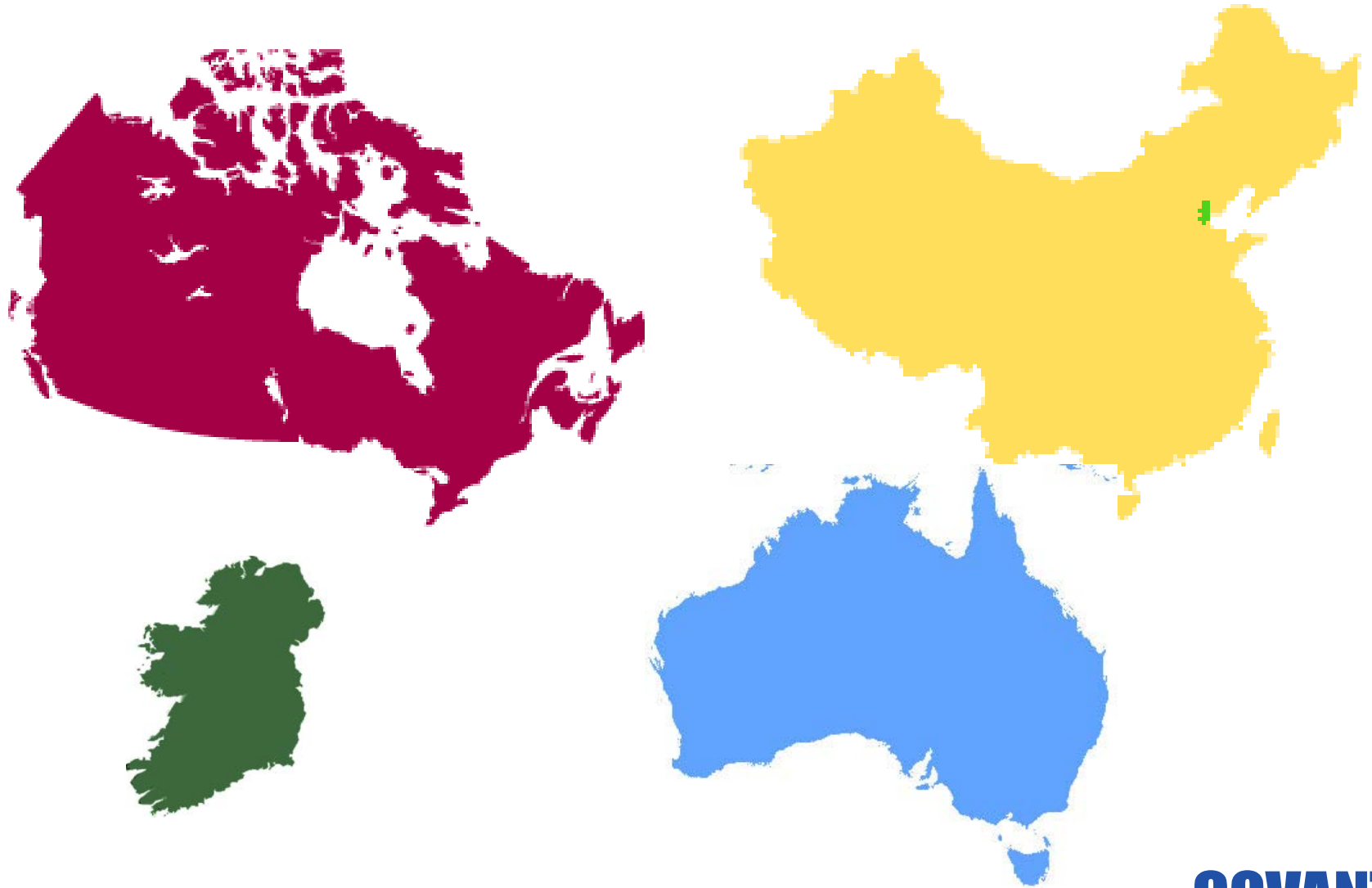
- Selected to operate the facility for a 10-year term after a competitive procurement process
- We bring unique experience as the Martin GmbH technology licensee for North America
- 30-year track record designing, constructing, operating and maintaining EfW facilities using this technology

Dublin Project Overview

- Treat up to 600,000 tonnes of solid waste annually
- Renewable energy and potential for district heating
- Greenhouse gas reduction
- Economic boost



Beyond the United States

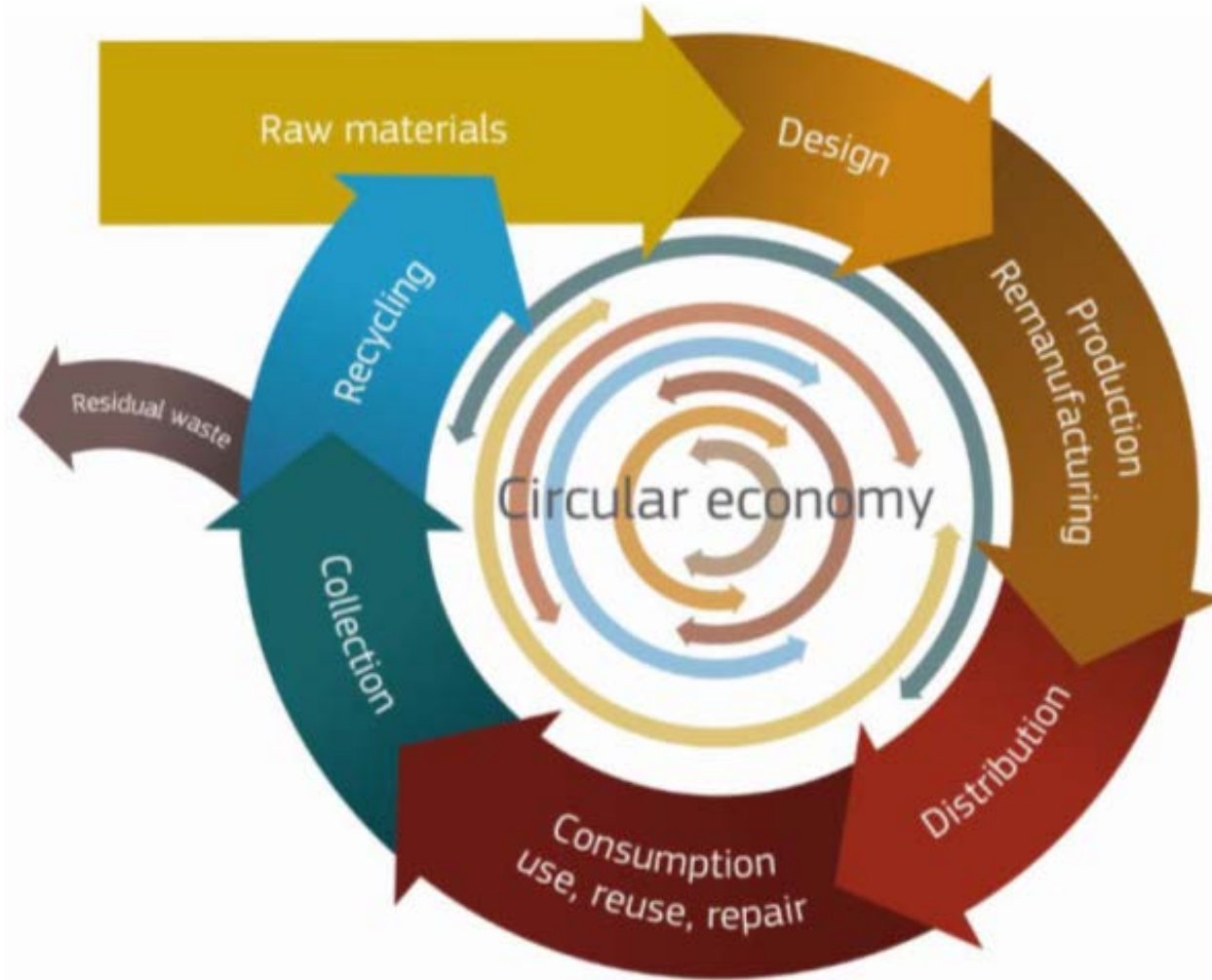




- **Covanta Operations in China**

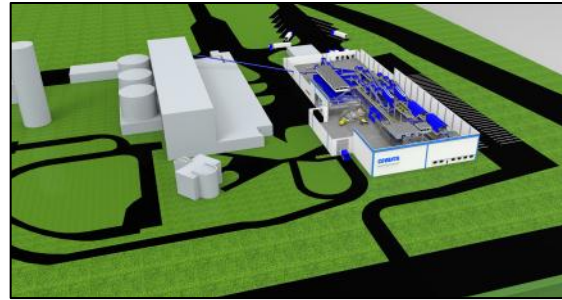
- Chengdu – 1,800 TPD
- Tongxing – 1,200 TPD
- Taixing – 350 TPD

The Circular Economy - Europe's Plan for Zero Waste



Moving up the Waste Hierarchy

- Advanced Recycling Center
- Metals Recycling
- Ash Reuse
- Electronic Waste Recycling
- Other Services and Solutions
 - Treatment, Storage and Disposal
 - Equipment & Transfer



How do we grow as an industry?

Policies

- Europe
 - EU Landfill Directive
 - Landfill Taxes
- China
 - Target 30% Energy-from-Waste by 2030
 - Preferential feed-in electricity tariff
- Kyoto
 - Recognizes Energy-from-Waste as an eligible offset in CDM protocol
- United States
 - No meaningful federal sustainable waste, energy or climate policies

Subsidies?

“0”

Looking Ahead





COVANTA

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Thank You