



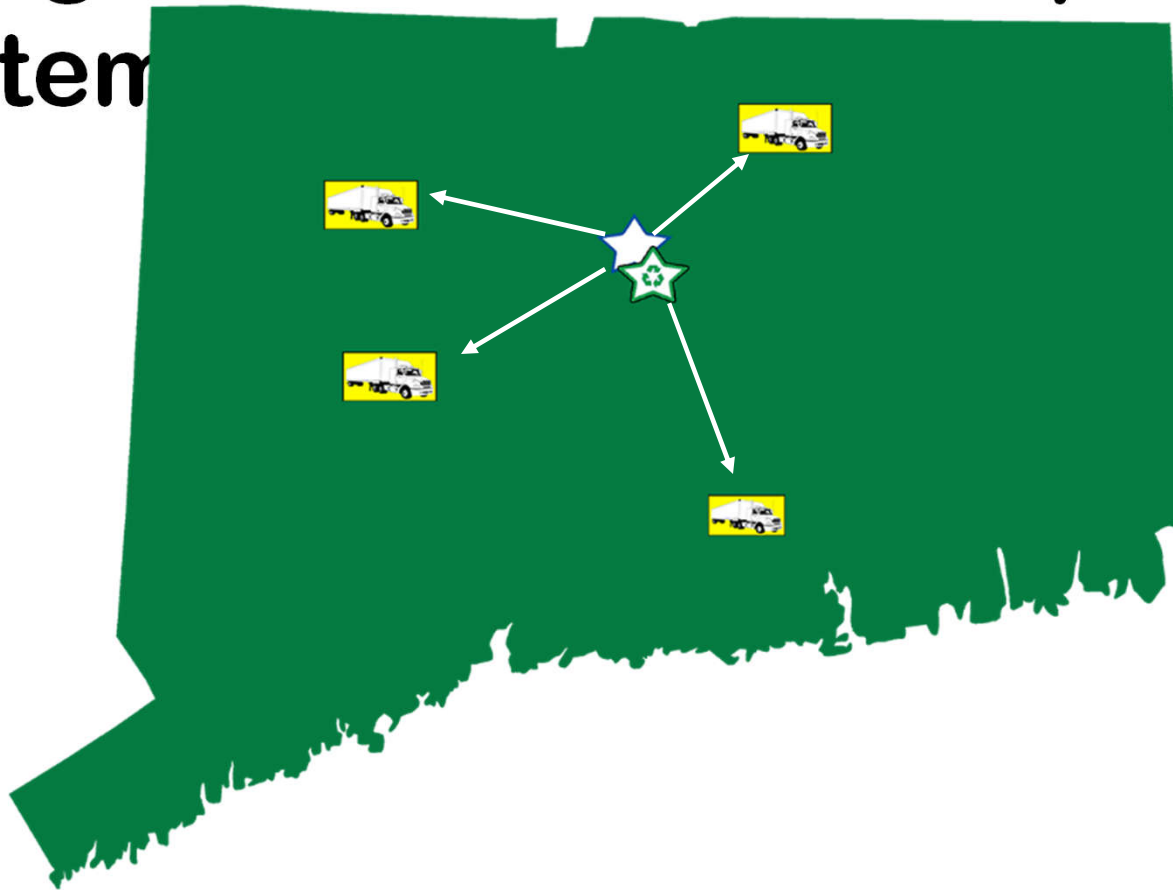
Status Report to Municipalities

April 14, 2016

- **Brief CT SOLID WASTE SYSTEM (CSWS) overview**
- **Challenges facing MIRA and the industry**
- **How MIRA is adapting to face those challenges**
- **Tip fee history and FY17 overview**
- **The MIRA advantage**
- **Outlook**

- **By its original design, MIRA, then CRRRA, Projects were intended to be:**
 - Replacement for municipal landfills.
 - Publicly owned but operated utilizing the private sector.
 - Tax exempt and not-for-profit.
 - Funded independently through tip fees and revenues, not state budget.
 - Fee limited to the Net Cost of Operation.
 - Operation in the public interest of the municipalities.

- **MIDCONN, now CSWS was designed as a Hub-and-spoke system**



- **System hub**
 - **PBF/EGF produces renewable electricity**
 - Redeveloped a historic 1920's-era power plant in 1980s.
 - Since then, the Plant has made renewable energy from waste instead of energy from coal or oil.
 - **WPF processes waste into RDF**
 - Extracts scrap metals
 - Utilized existing infrastructure at PBF
 - **Recycling facility**
 - Separates single-stream recyclables, then processes and ships commodities to manufacturers

- **System spokes**

- **Transfer stations**

- Active stations in Essex, Torrington and Watertown
 - Also currently-inactive station in Ellington

- **Symbiotic & socialized cost**

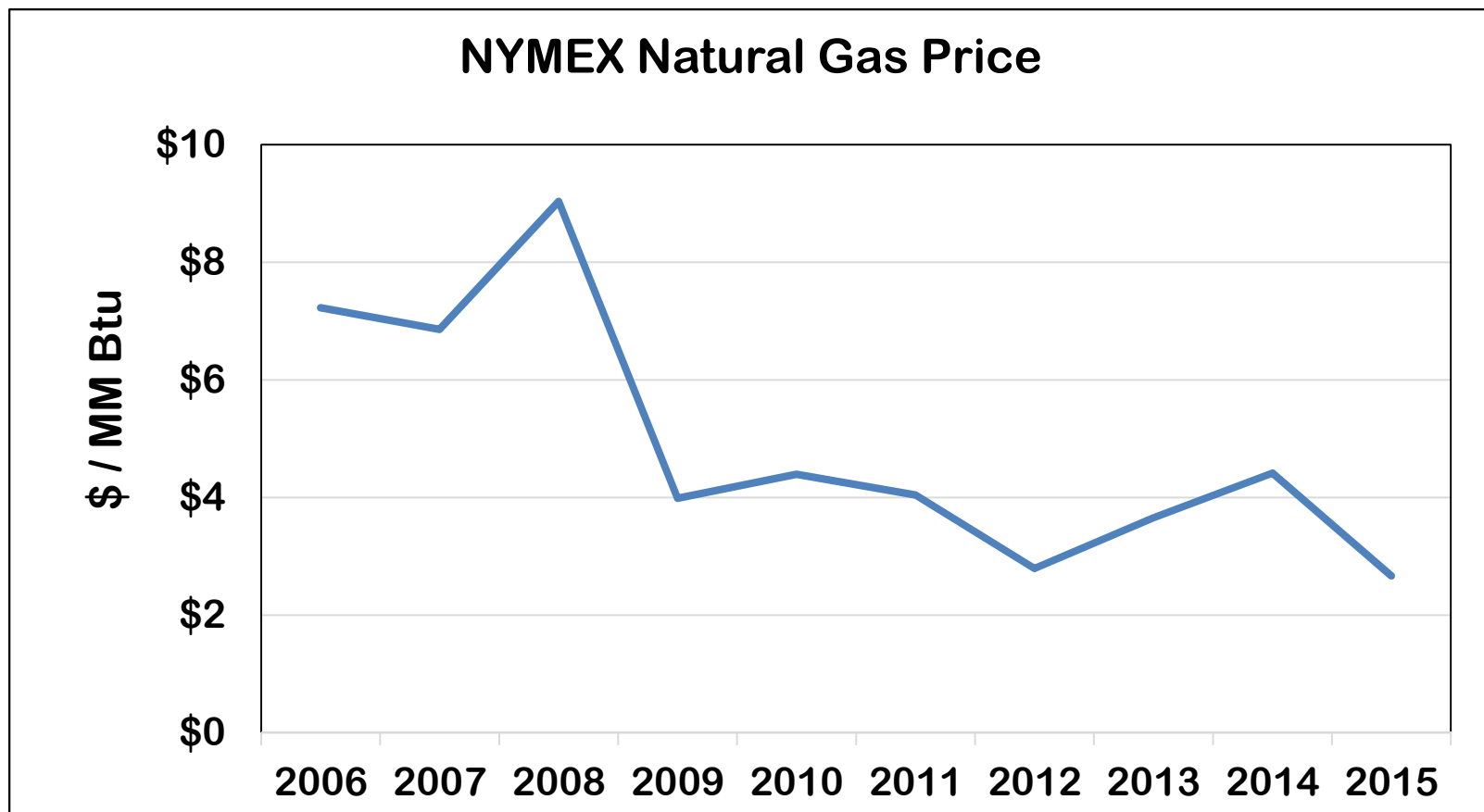
- Convenient points of entry for towns and haulers outside greater Hartford region.
 - Transfer stations provide tonnage needed to support the system which is not available exclusively inside greater Hartford region.
 - All municipalities get same tip fee as their peers that signed the same Tiered agreement.



Challenges & Tip Fee Impacts

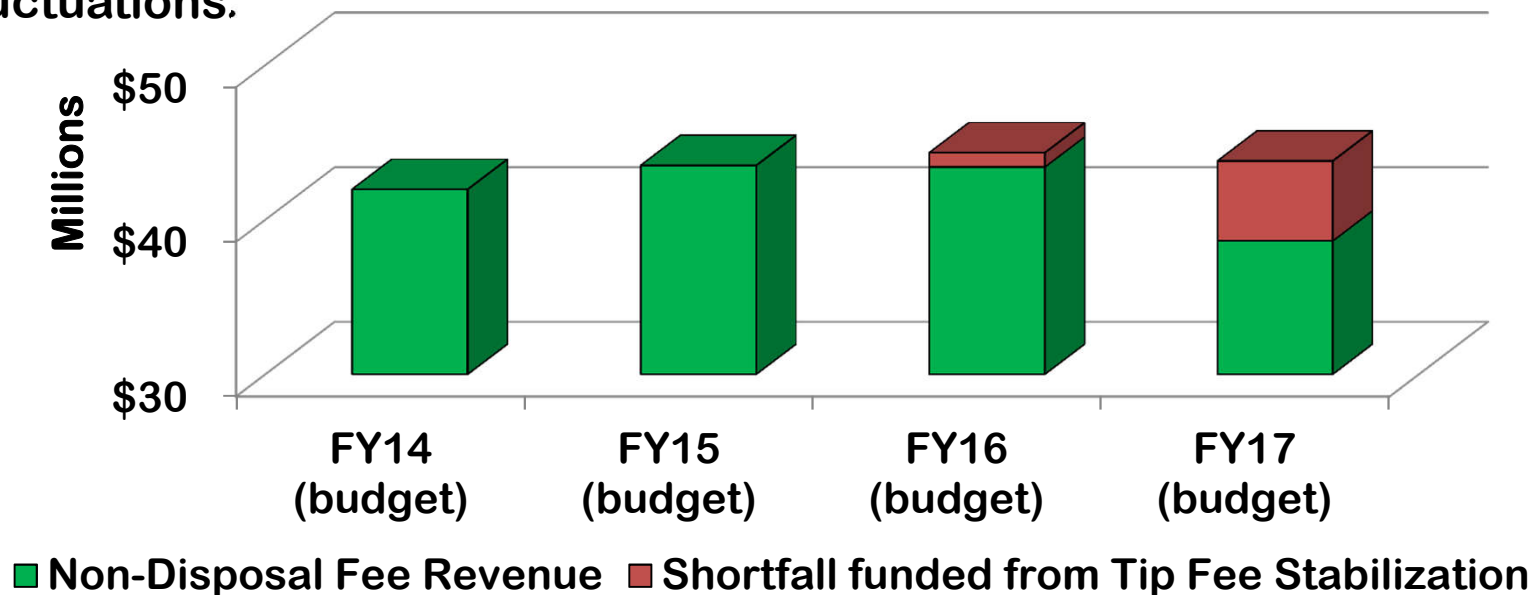
- **Two Critical Challenges:**
 - 1: Revenue
 - 2: Aging of the Facility
- **The System Depends on Two Revenue Streams:**
 - Electric Energy sales and,
 - Trash/Waste Tipping fees
- **Energy Prices are at unprecedented low levels!**
 - Mid CT project energy sales price (FY2013): \$85/MWH
 - CSWS Energy Sales Price (FY2017): \$43.40/MWH
 - Annual Revenue reduction due to price drop: \$17.2 million or \$23/ton

- Wholesale electricity price negatively impacted by declining natural gas price.



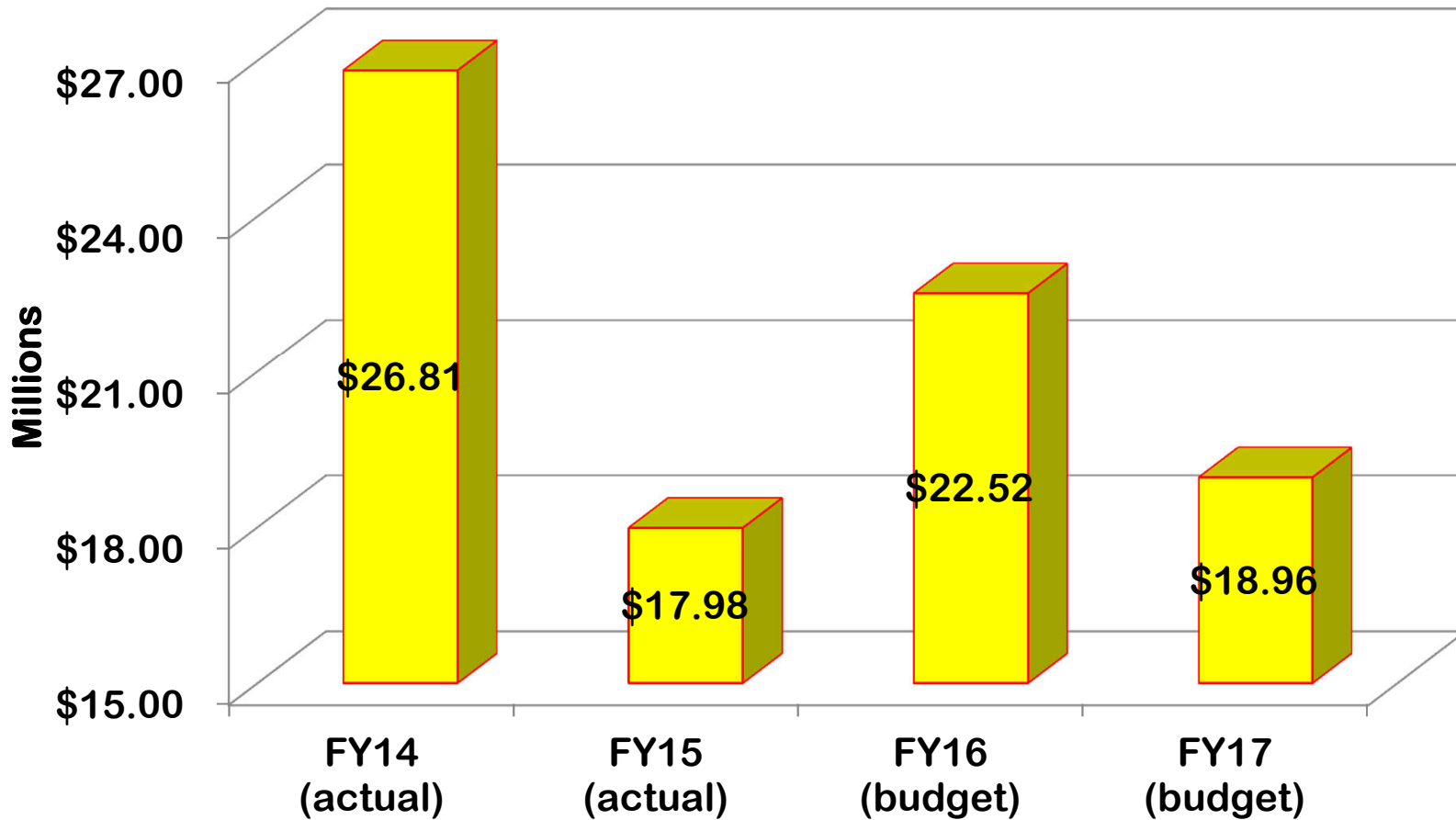
As per MSA's

- $(\text{Cost of Operation}) - (\text{Non-Disposal Fee Revenue}) = \text{Net cost of operation}$
- $(\text{Net Cost of Operation}) / (\text{Tons of waste}) = \text{Base Tip Fee}$
- When net cost of operation increases, increased use of Tip Fee Stabilization Fund (cash reserves) is needed to mitigate tip fee fluctuations.

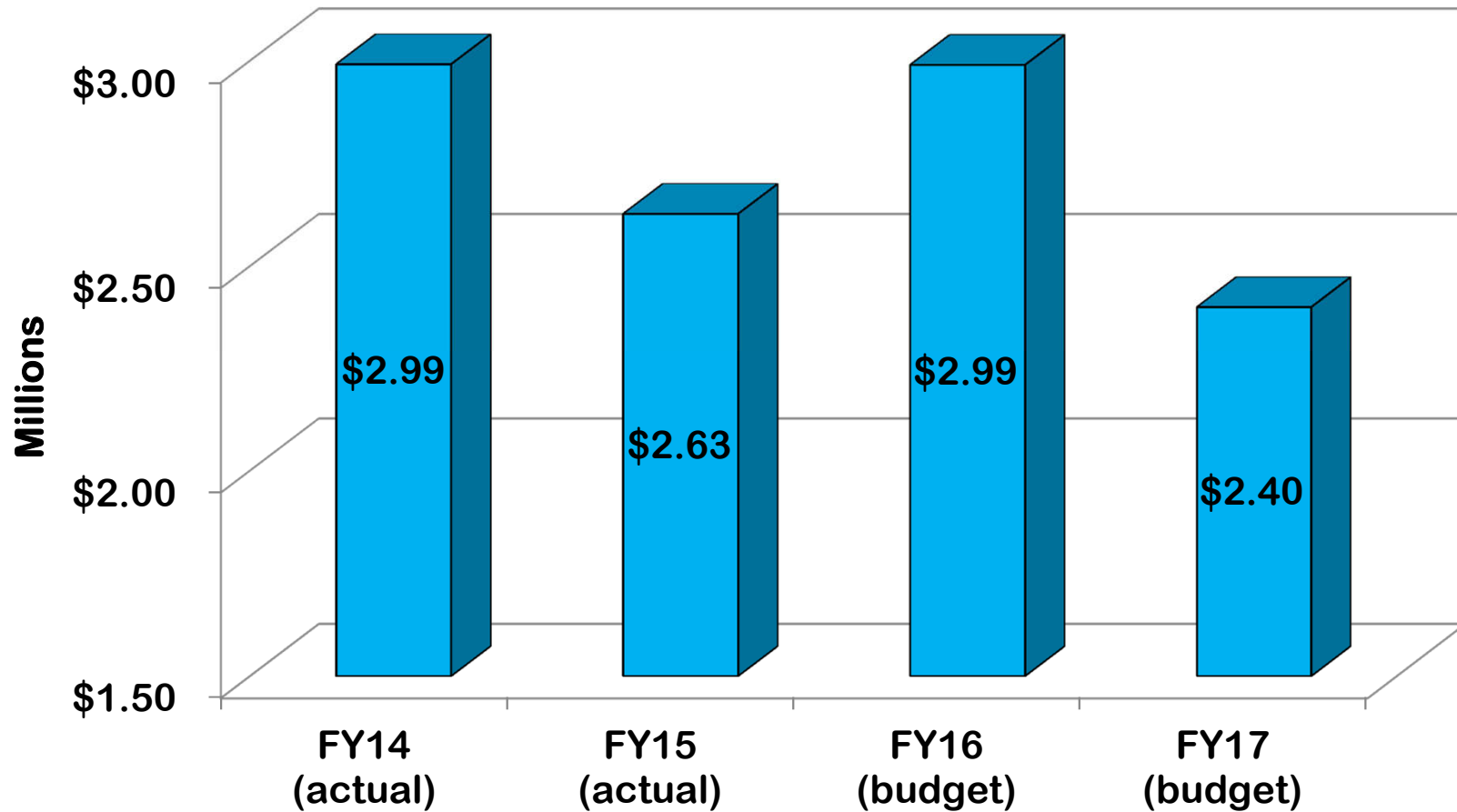


- **Cheap energy impacts revenues**
 - Trash to Energy is CT 's most significant source of renewable Energy BUT
 - Trash to energy *does not enjoy class 1 Renewable Energy Credits* enjoyed by Solar, fuel cell, wind, hydro etc.
- **Downward pressure on recycling markets**
 - Cheap energy makes virgin materials more price competitive with recycled commodities
- **MIRA's Facilities are nearing end of their economic useful life:**
 - Trends toward increasing maintenance costs and declining performance.

- **Energy revenue**



- **Recyclables and metals sales**



- Indexed recycling commodity value/ton

	Average Value/ton 2010-2014	Current Value/ton (Feb 2016)	Approximate percentage of outbound commodity tons from CSWS recycling facility
Cardboard (OCC)	\$126	\$85	15%
Paper (#8 News)	\$83	\$60	50%

- From Yellow Sheet Price Index (NY Market, High Side) - Price index reflects expected price paid by mills for truckload quantities of baled commodity.

- FY 16 Variance through Dec 31, 2015**

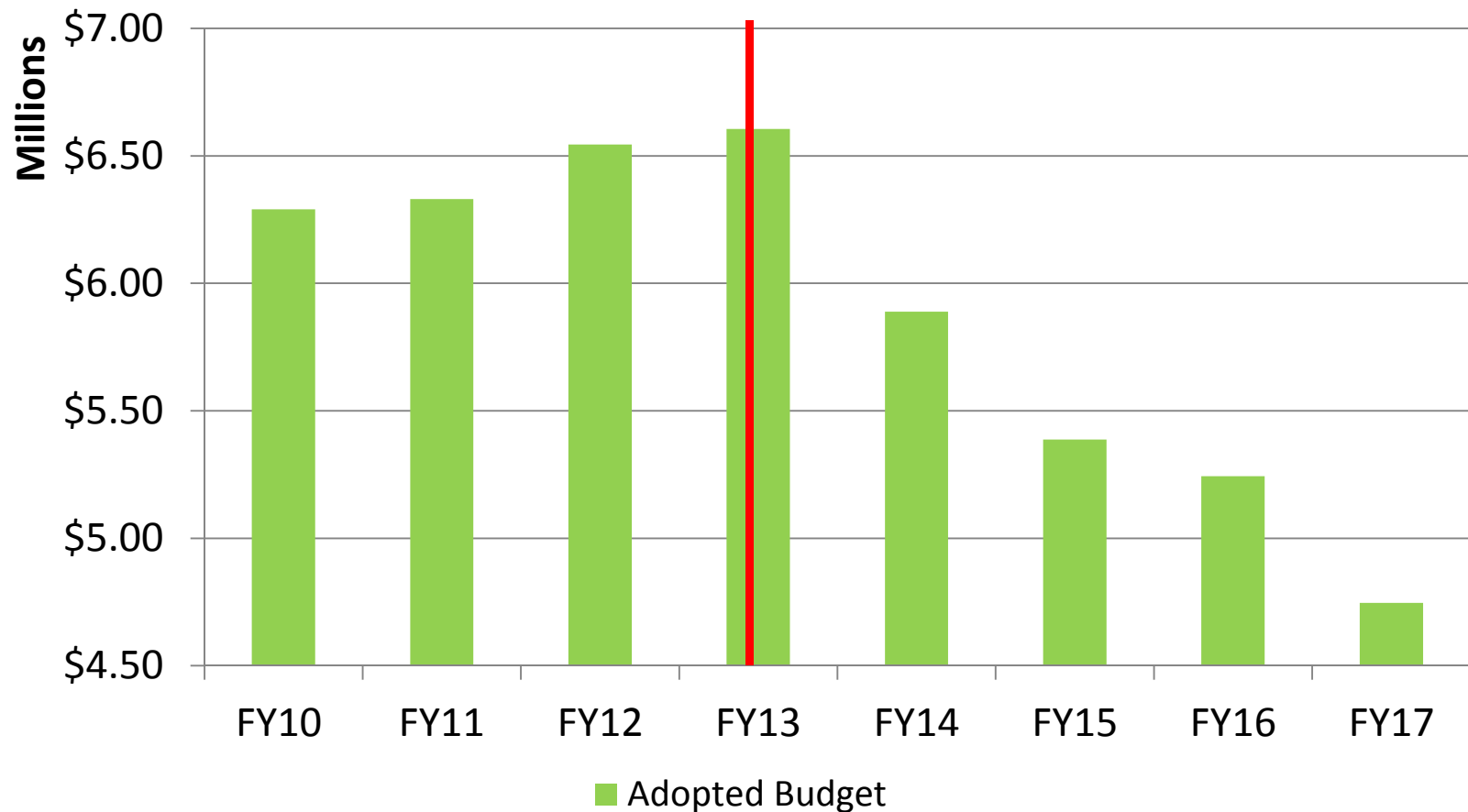
	YTD Budget	YTD Actuals	Variance
Electricity Sales Revenue	\$9,348,497	\$6,561,461	-30%
Recycling Sales Revenue	\$630,217	\$ 530,586	-16%
Metal Sales Revenue	\$877,612	\$300,476	-66%
Interruptible Contract & Spot Revenue	\$3,558,645	\$1,735,757	-51%



Adapting to Face the Challenges

- Reduction in Admin and other expenses. (office move to Rocky Hill)
- From Jan 1, 2015 to June 30, 2016, sold ½ of electrical production from PBF at favorable fixed rate to reduce downside market risk.
- Use of tip-fee stabilization fund to mitigate tip-fee fluctuations. (Additional MIRA ‘other’ revenue available in FY2018)
- Reduce recycling rebate until sales revenue supports reinstatement of rebate.
- Increase in capital and maintenance spending at the PBF to manage legacy issues and reduce down time.
- **NOTE: MIRA will need to continue accessing ‘other’ revenue to subsidize operating revenue to maintain acceptable tipping fees**

- Administrative costs: HR expenditures**
(total Authority)

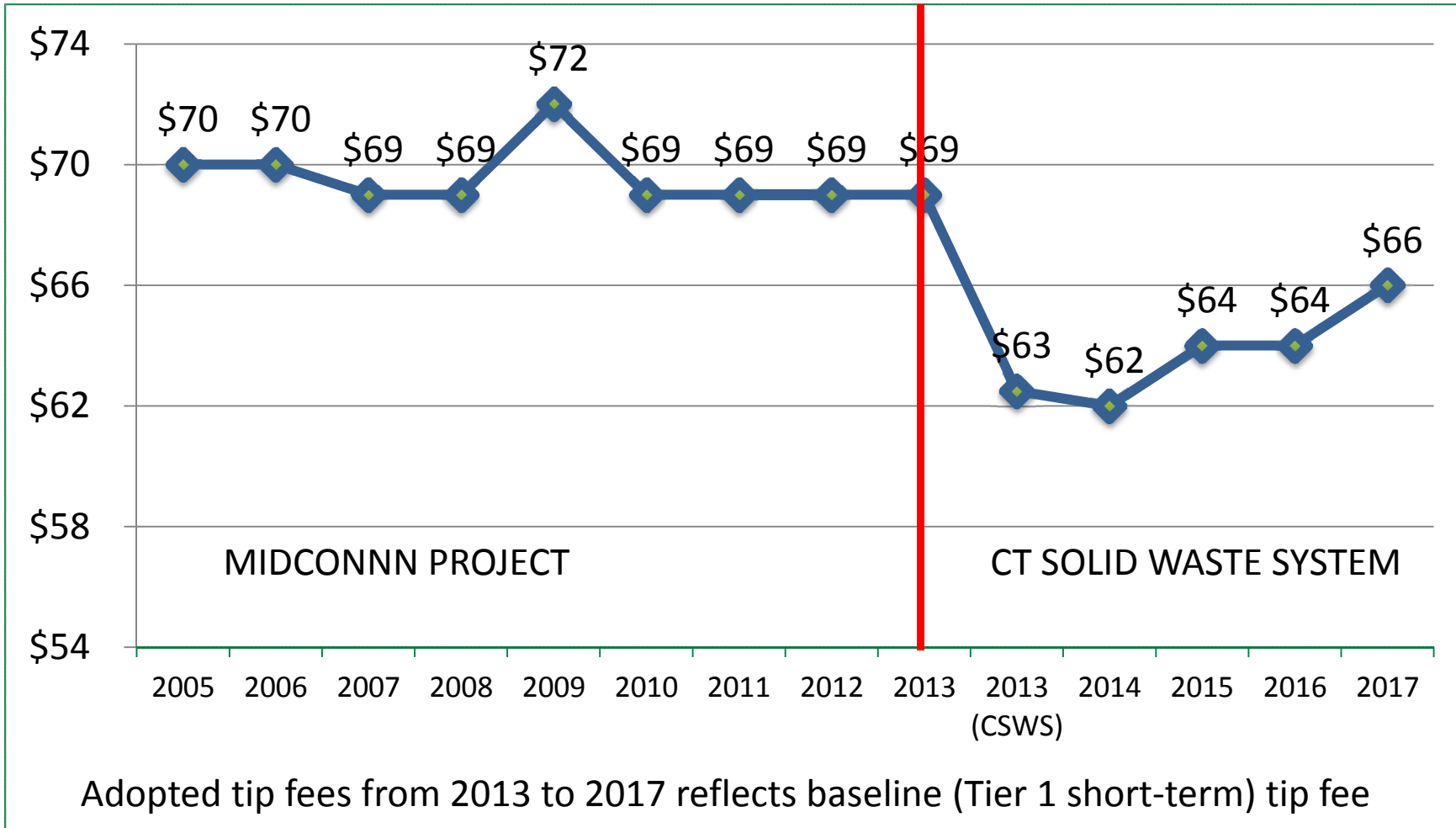


- **FY 17 budget goals:**
 - Offset the continuing decline in revenues
 - Maintain critical maintenance spending as per Strategic Plan
 - Ensure adequate resources available to tip fee stabilization fund (Subsidy)
- **Solution: \$2/ton increase**
 - FY 17 fee still \$5 less than FY 2011 tip fee
 - Use of tip fee stabilization fund to mitigate further fluctuation in tip fee

- **FY 17 Disposal Fee**
 - Tier 1 Long-term: \$64 / ton
 - Tier 1 Short-term: \$66 / ton
 - Tier 2: \$68 / ton
 - Tier 3: \$64 / ton
 - Tier 4: \$67 / ton



FY 17 Overview & Tip Fees





The MIRA Advantage

- **Uniform municipal pricing options.**
 - No discrimination based on size or geography
- **Base Tip fee equivalent to cost of service (as subsidized by Tip Fee Stabilization Fund).**
- **Firm long term Commitment to accept waste.**
- **\$0 minimum recycling tip fee.**
- **Publicly owned**
 - Significant municipal presence on MIRA's Board of Directors.
 - CSWS operates on behalf of municipalities not shareholders.

- **Need for capital improvements at PBF and WPF**
- **Changes in composition of waste**
- **New state strategy**
 - **Draft Comprehensive Materials Management Strategy released by DEEP.**

- **DEEP Resource Rediscovery RFP**
 - What is the right technology?
 - As per PA14-94, DEEP soliciting proposals for alternatives to current CSWS.
 - DEEP (with MIRA input) to select finalists.
 - MIRA to negotiate with DEEP-selected finalist to re-develop the South Meadows Site.

- **New energy-conversion technology (PBF/EGF)?**
 - Anaerobic digestion
 - Gasification
 - Production of other fuels
- **Changes in extraction of materials (WPF)?**
 - Organics
 - Multi-material separation
- **Right-sizing infrastructure to evolving waste stream?**

- **MDC LITIGATION: \$65 Million claim for unbilled costs brought in Sept 2009**
 - **MIRA prevailed overwhelmingly in recent Arbitration Panel decision.**
 - **MDC continues to litigate**
 - **Legal costs over \$2 million**
 - **Hope to conclude this litigation by years end**

- **MIRA website:**
 - www.ctmira.org
- **MIRA headquarters phone:**
 - (860) 757-7700
- **DEEP Resource Rediscovery RFP**
 - www.ct.gov/deep/ResourceRediscovery



MIRA Board of Directors



The Honorable Donald S. Stein
Chairman, MIRA's Board of Directors
First Selectman, Town of Barkhamsted



Marilyn Cruz-Aponte
Public Works Director,
City of Hartford

Richard J. Barlow
Vice Chairman, MIRA's Board of
Directors



The Honorable Ralph F. Eno Jr.
First Selectman, Town of Lyme



Scott Shanley
Chair, MIRA's Finance Committee
General Manager,
Town of Manchester



Andrew J. Nunn
Former Chief Administrative Officer,
City of Bridgeport



John E. Adams
Former First Selectman, Granby
Chair, MIRA's Policy and Procurement
Committee



Dr. Robert Painter
Former Hartford City Council



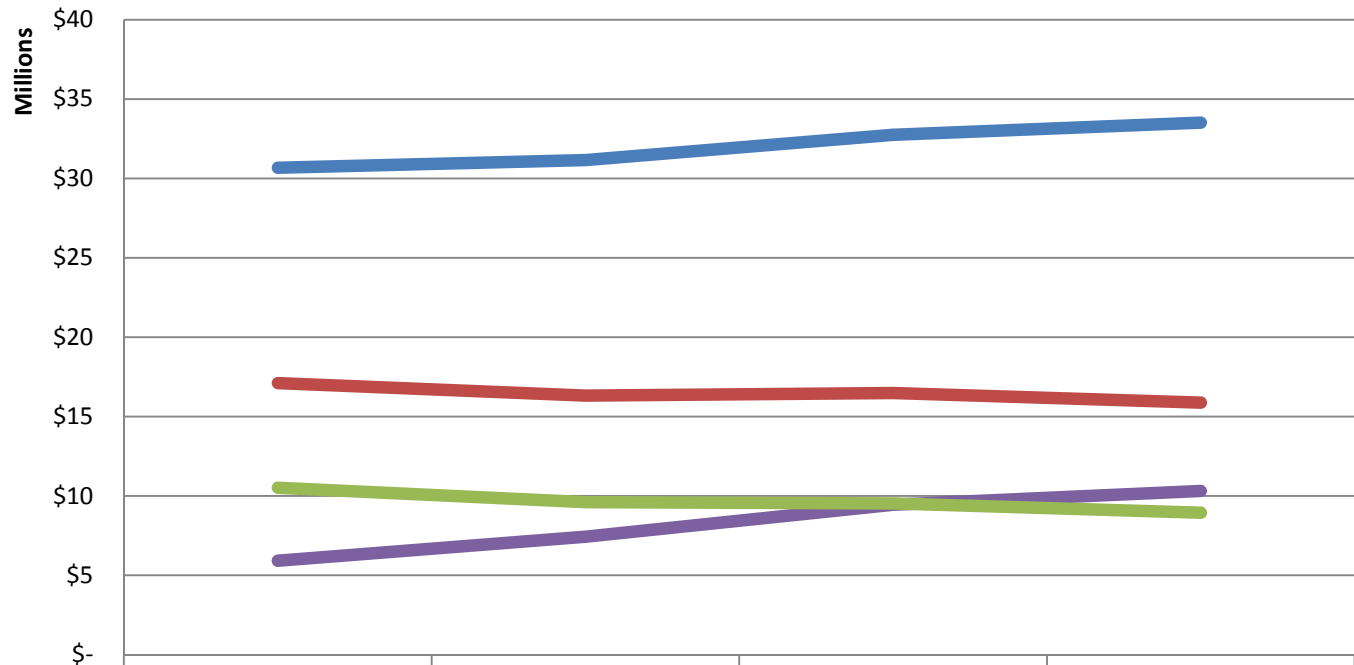
The Honorable James M. Hayden
Chair, MIRA's Organizational Synergy
and Human Resources Committee
First Selectman, Town of East Granby

Rep Patricia Widliz
Former Representative



Adapting to Face the Challenges

- CSWS Expenditure Classifications (adopted budget)**



	FY14	FY15	FY16	FY17
Trash to Energy Facility	\$30,662,000	\$31,153,100	\$32,745,500	\$33,514,696
Other Expenditures	\$17,110,800	\$16,313,400	\$16,474,290	\$15,865,737
Capital Contributions	\$5,909,000	\$7,425,000	\$9,452,004	\$10,320,705
Indirect Expenses	\$10,520,200	\$9,608,500	\$9,530,596	\$8,934,956