

# Hampden, ME Waste Processing Past, Present, & Future

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## WELCOME

- Who is the MRC?
- Our History
- Innovative Resource Recovery Partnership
- MWS Commercial Operations
- MRC's Active Role
- Benefits of MRC Associate Membership



## WHO ARE WE?

- We are a group of communities in Maine working together to manage solid waste issues
- 115 Current Members
- MRC is a Nonprofit Organization
- MRC is Managed by a Volunteer Board of Directors made up of 9 people from member communities
- Work is accomplished through an Executive Director



## **MRC HISTORY**

- MRC formed in 1991 to leverage waste volumes for all communities
- Restructured waste agreements to support PERC
- MRC partnered with PERC to plan for capital improvements, reserve fund, residuals management
- MRC re-structured agreement with PERC during electric utility de-regulation
- Favorable electricity rates ended for PERC in Feb. 2018



## **FINDING A PATH FORWARD**

- 2007 MRC starts working with PERC to plan for 2018
- 2012 MRC & PERC cannot agree on a path forward together
- 2013 MRC starts evaluating other management options that did not involve combustion of waste & recover recyclables



#### FIBERIGHT/COASTAL RESOURCES OF MAINE

- 2016 MRC purchases land in Hampden to host the new facility
- 2017 Ground is broken in Hampden to start construction on new facility
- 2019 Hampden facility starts processing waste
- 2020 Hampden facility suspends operations



## **POST-FIBERIGHT OWNERSHIP**

- 2020 Bids are solicited by bondholders to find a new partner
- 2020 Delta Thermo Energy (DTE) is selected, promising 100% recovery of investment by bondholders
- 2021 Exclusivity agreement with DTE is terminated after 8 months with no proof of financing
- 2022 MRC forces sale of the facility and earns ownership with a stalking-horse bid of \$1.5MM



### **MRC OWNERSHIP**

- 2022 MRC forms Municipal Waste Solutions, LLC (MWS)
- 2022 MRC enters into exclusive partnership discussion with Revere Capital Advisors, LLC
- 2023 Exclusivity is ended with Revere after 6 months with no proof of financing
- 2023 MRC enters into exclusivity agreement with Innovative Resource Recovery



## **Innovative Resource Recovery**

Innovative is focused on establishing environmentally sustainable solutions for the waste industry

#### Innovative Resource Recovery, LLC

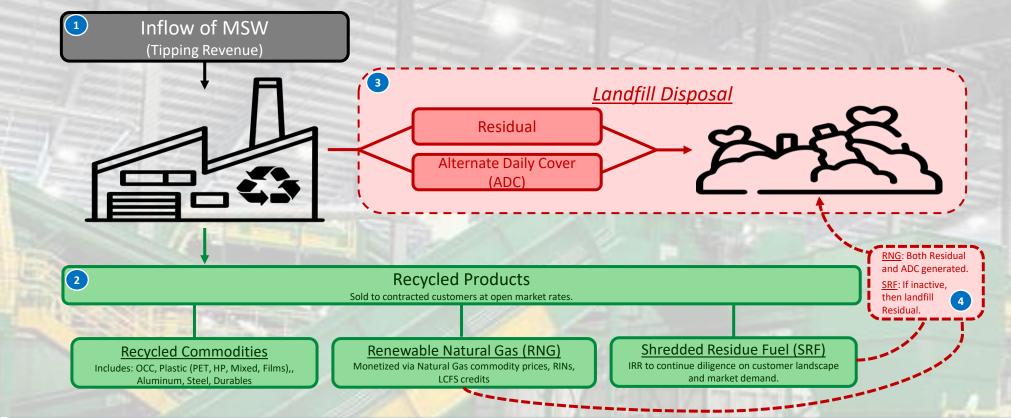
- Innovative Resource Recovery (Innovative) is leading the way in developing facilities that recover valuable resources from waste streams.
- Led by team of executives with decades of experience in waste, energy
   & finance

#### White Oak Global Advisors (WOGA)

- Founded in 2007, White Oak Global Advisors, LLC is an SEC-registered investment advisor and private credit firm that provides small and middle market businesses with creative financing solutions.
- White Oak's mission is to "finance good businesses run by strong management that have good ideas, products, and services".







- An unfiltered stream of MSW is tipped on the facility floor, mostly comprising of unopened black trash bags. From there, the MRF processes and filters the waste, through several complex sorting techniques, into 13 distinct outflow streams that are then either sold as a recycled product or disposed at a landfill.
- Recycled Products: i) Recycled Commodities: Homogenous streams, such as plastic or cardboard (OCC), are baled and sold to local/regional customers for further processing. ii) RNG: Two MRF outflow streams, dense with wet paper and food waste, are sent through the anaerobic digestion systems to generate biogas that is sold to the grid, iii) SRF: Films (plastic bags) and shredder plastic materials are sent through a shredding process to create a fuel residue that is sold to incinerators.
- Landfill Disposal: Outflow MRF streams that are contaminated and cannot be further processed or sold are disposed at landfills as a Residual. However, ~25% of the total landfill disposal meets ADC characterization and can be tipped at a lower price since used for landfill topping/capping.
- Additional Landfill Disposal: Residual streams generated from the anaerobic digestion process that is sent to the landfill. Deal Team continues to diligence the SRF market/tech to identify regional demand. If the SRF process is inactive, which is applicable in the Stress Case, the respective stream diverted to landfill.



#### **Municipal Waste Solutions – Technical Progress to Date**

- Continued engineering & development activities focused on MRF modifications and expanded anaerobic digestions system capacity
- Processed waste during July trial run focused on:
  - Validate MRF equipment efficacy for repairs & upgrades
  - Capture samples of OFMSW and paper (to be digested)
  - Samples currently being tested to confirm treatment
     & biomethane potential to inform design
- Ongoing outreach to equipment vendors and technology partners to further advance detailed engineering of plant re-start





#### **Municipal Waste Solutions – Commercial Progress to Date**

- Continue to advance commercial & regulatory discussions around several key elements of the facility
  - Maintain an active dialogue with the Maine DEP and the Town of Hampden to ensure we are in a position to restart operations when construction is complete and that our plans are in accordance with all local and state regulations
  - Coordinating with local gas utility to ensure our systems can safely and reliably inject RNG to the local distribution grid
  - Working with industry consultants and potential RNG sales counterparties, to ensure we optimize the value of the environmental attributes of our RNG
  - Confirming potential incentives and other benefits that the project may qualify for under the Inflation Reduction Act



#### **Municipal Waste Solutions – Path Forward**

- Optimize plant's existing infrastructure and equipment within design to process mixed waste, retrofitting the back end to support the production of renewable natural gas and other products.
- Engineering will continue throughout 2023, with construction expected to commence in 2024, and achieving commercial operations in 2025.
- When operational at full permitted capacity, the plant has the ability to process ~180,000 tons/year of mixed waste and will divert over 50% of that material from landfill
- Innovative continues to seek technologies and operational strategies that will help Maine communities economically increase the % of waste that can be diverted from landfill



## **MRC's Active Role**

- 10% MRC ownership
- MWS Facility
   Management Role
- Long term waste
   Management Fee





## **Benefits of MRC Associate Membership**

 Representation of members in legislative and regulatory activities and in contractual matters to settle potential disputes and claims related to solid waste activities

 MSW disposal contract with no annual minimum delivery guarantee or risk of shortfall penalties

 Access to future regional and cooperative services such as local outlets for managing tires, bulky waste, commodities, and other non-MSW solid waste that is not acceptable waste or requires special handling

 Annual tracking and reporting of all MSW and recycling data provided to our members for compliance in reporting to regulatory authorities

Community outreach and educational material





## **Questions & Answers**

#### **Upcoming Annual Meeting**

December 6, 2023
Annual Meeting
Orono, ME

#### **Questions?**

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