



Renewable Natural Gas Project

Department of Public Service



Introduction

- Capture and sell Renewable Natural Gas from the Hoffman Rd. Landfill and Waste Water Treatment Plant utilizing existing pipeline
- Different approach from previous project:
 - Northwest Natural Renewables (“NWNR”) to invest necessary capital, at their own risk, to build the RNG plant and improve landfill gas collection
 - Project will be owned and operated by NWNR
 - City to receive royalties based on biogas delivery, not commodity/market prices (low risk)
- Three agreements (Biogas Rights, O&M, Lease)



Why NWNR & Tetra Tech

- NWNR and its affiliates have over \$5 billion in assets and been in business for over 165 years
- NWNR has invested ~\$50 million in two landfill gas-to-RNG projects in Ohio
- NWNR has decades of project development and landfill gas experience
 - We also receive support from Tetra Tech, who has a local presence and substantial experience with the City



Project Overview:

- Renewable Natural Gas (“RNG”) will be produced from two existing sources of biogas: (i) the Hoffman Road Landfill; and (ii) the anaerobic digesters at the Bay View WWTP
- Landfill gas will be moved thru an existing, City-owned, pipeline from the landfill to the WWTP
- NWNR will construct a facility to produce renewable natural gas (“RNG”) from the combined biogas, which will be pressurized and injected into a nearby Columbia Gas pipeline
- The project site will be leased by NWNR by the City



Project Overview

- **No capital expenditure is required by, or expected from, the City of Toledo for the project.**
 - NWNR will invest all of the necessary capital
- **NWNR will fund the operating and construction costs of the Landfill Gas Collection System, which means the City doesn't need to pay for those improvements**
 - The City will retain ownership, and continue to bear the operating costs of the Control System, allowing the City to control and manage air permit obligations
- **The City is not required to deliver any minimum quantity of gas**
 - Low volumes, or a failure to meet biogas quality standards, will reduce royalties to the City, but not result in penalties
- **NWNR intends to sell a majority of the RNG under a long-term, fixed price agreement, eliminating exposure to volatile commodity markets**
- **NWNR's on-going diligence efforts continue to mitigate risk**

Proposal Details

NWNR's Proposal:

- **\$1,000,000 payment to City upon execution of gas rights**
- **\$500,000 payment to City once project reaches commercial operations (COD)**
- **Biogas payments**
 - \$2.50/MMBtu up to 300,000 MMBtu in any calendar year
 - \$6.00/MMBtu for deliveries in excess of 300,000 MMBtu in any calendar year

Additional benefits NWNR agreed to provide in April 2024, after discussions with the City

- NWNR intends to invest ~\$2,000,000 into the Landfill Gas Collection System during the initial years of the project
- NWNR is planning to invest ~\$200,000/year on continuous improvements in the GCCS to expand the system (e.g., new landfill gas wells)
- NWNR is forecasting to cover the ~\$125,000/year in operation and maintenance costs of the LFG Collection System, relieving the City of that financial responsibility
- NWNR will pay an additional royalty to the City based on the amount of credits actually claimed by NWNR

Expanded Economic Proposal

\$000s, unless otherwise noted

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036-46	Total
Biogas Volume ¹ (MMBtu)	-	-	60,595	324,449	323,928	324,270	356,504	357,780	357,083	357,344	357,589	3,925,309	6,744,850

Year	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036-46	Total
Closing Payments & Biogas Royalty	\$1,000	-	\$651	\$897	\$894	\$896	\$1,089	\$1,097	\$1,092	\$1,094	\$1,096	\$12,002	\$21,807
GCS & Wellfield Investment ²	\$1,000	\$1,000	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$2,200	\$6,000
Wellfield O&M	-	-	\$125	\$125	\$125	\$125	\$125	\$125	\$125	\$125	\$125	\$1,375	\$2,500
ITC / Additional Royalty ³	-	-	-	-	\$2,316	-	-	-	-	-	-	-	\$2,316
Total Benefits to the City	\$2,000	\$1,000	\$976	\$1,222	\$3,535	\$1,221	\$1,414	\$1,422	\$1,417	\$1,419	\$1,421	\$15,577	\$32,623

1. Based on the Q3 '24 update, NWNR & Tetra Tech believe that LFG volumes can be increased by ~10% due to increased investment in the wellfield. This is expected to bring the 300,000 MMBtu/yr threshold forward to 2028.
2. Note that these benefits are not cash payments to the City but instead represent costs that NWNR will bear. NWNR's proposed wellfield O&M may differ from the City's current spending.
3. The ITC value represents NWNR's estimate. The final value may fluctuate depending on future guidance from the U.S. Treasury regarding credit eligibility, as well as changes in equipment cost estimates.

RNG Project Benefits



Long term partner with substantial, utility grade, financial support



Commitment to safety, environmental stewardship and the energy transition



Payments to City based on biogas delivery, not project performance



Stable payments to City due to long-term, fixed-priced, offtake strategy



Using proven technologies and cost-effective solutions



Experienced development team



Trusted development partner in Tetra Tech



Thank you.

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