

## Catalyzing the Development of Renewable Natural Gas Projects in New York

### Rudarpa, Inc.

*In January 2021, NY Green Bank (“NYGB”) entered into an agreement with Rudarpa North Country, LLC (“RNC”), an indirect subsidiary wholly owned by Rudarpa, Inc. (“Rudarpa”), to provide a \$29.5 million construction-to-term loan (“Investment”) for the first Landfill Gas (“LFG”) to Renewable Natural Gas (“RNG”) project in Rudarpa’s to-be-built portfolio of LFG-to-RNG projects. RNC will be Rudarpa’s first project and is located in Bethlehem, NH. Rudarpa is expected to deploy at least \$29.5 million for LFG-to-RNG projects in New York State (“NYS”).*

### Transaction Description

In January 2021, NYGB entered into an agreement with RNC, indirectly wholly owned subsidiary of Rudarpa, to provide a \$29.5 MM construction-to-term loan for the first LFG-to-RNG project in Rudarpa’s to-be-built portfolio of projects. Rudarpa’s first project is located in Bethlehem, NH and Rudarpa is obligated to deploy at least \$29.5 MM into NYS projects within 36 months under the terms of this Investment.

Pursuant to the terms of the Investment, Rudarpa is incentivized to develop projects throughout NYS. These future LFG-to-RNG projects are expected to reduce up to 599,000 metric tons of greenhouse gas (“GHG”) emissions in NYS annually or up to 8,987,000 million metric tons of GHG lifetime emissions. These transactions will help to demonstrate the viability of LFG-to-RNG in NYS and draw new investors and financial institutions into the marketplace.

This Transaction Profile is provided pursuant to the updated “NY Green Bank – Metrics, Reporting & Evaluation Plan, Version 3.0” (the “**Metrics Plan**”) developed in collaboration with the NYS Department of Public Service and filed with the NYS Public Service Commission (the “**Commission**”) on June 20, 2016.<sup>1</sup> This Transaction Profile contains specific information in connection with the January 2021 Rudarpa, Inc. transaction as required by the Metrics Plan.

### Form of NYGB Investment

NYGB Product	Product Sub-Type	Committed Capital
Asset Loan & Investment	Construction-to-Term Loan	\$29.5 million

### Location(s) of Underlying Project(s)

Statewide.<sup>2</sup> Rudarpa is incentivized by this loan to develop projects throughout NYS.

### Types of Client & Counterparty Organizations that are Transaction Participants

Counterparty	Name	Participant Type
	Rudarpa, Inc.	Sponsor, O&M Provider

<sup>1</sup> Case 13-M-0412.

<sup>2</sup> Defined as projects located in four or more regions of the State.

	Name	Participant Type
Counterparty	Rudarpa North Country, LLC	Borrower

## Summary of Financing Market Objectives & Barriers Addressed

Beneficiary	Market Barrier	Financing Solution
LFG-to-RNG Developers	Securing long term financing for an asset after it is constructed can be an inefficient use of sponsor equity that limits the pace and scale of new project deployment efforts in NYS.	This transaction encourages efficient use of capital and supports project development efforts in NYS by providing debt to the project developer. NYGB's role demonstrates the availability of capital to develop LFG-to-RNG projects throughout NYS.
Natural Gas Consumers	High cost of infrastructure limits clean energy choices for consumers.	This transaction, via efficient use of capital, will lead to a cleaner natural gas grid by injecting RNG thereby displacing fossil-based natural gas.
Landfill Owners	Owners may not have the capital or expertise to operate an RNG facility; it is outside of the core competency of running a landfill.	This transaction provides capital to RNG developers and operators to enable landfills to use LFG more efficiently and curtail flaring or electricity generation. It allows landfill owners to comply with environmental regulations while maximizing energy potential and reducing GHG emissions.

## Technologies Involved

Technology	Measures
Renewable Energy	LFG-to-RNG Technology

## Metrics & Evaluation Plan

### Planned Energy & Environmental Metrics

NYGB's minimum investment criteria specifically require that "transactions will have the potential for energy savings and/or clean energy generation that will contribute to GHG emission reductions in support of New York's energy policies."<sup>3</sup> In addition, the Metrics Plan requires NYGB to report on the following energy and environmental measures, which are applicable to this transaction:<sup>4</sup>

- Estimated gross lifetime and annual RNG produced (MMBtu); and
- Estimated gross lifetime and annual GHG emission reductions (metric tons).

The estimated lifetime and annual energy and environmental impacts of the Investment, facilitated by NYGB's financial participation in this transaction, are as follows:

Energy/Environmental Impact	Lifetime Low Estimate	Lifetime High Estimate	Annual Low Estimate	Annual High Estimate
RNG produced (MMBtu)	9,510,900	17,088,343	634,060	1,139,223
GHG emission reductions (metric tons)	494,565	888,591	32,971	59,239

<sup>3</sup> Case 13-M-0412, "Order Establishing New York Green Bank and Providing Initial Capitalization" issued and effective December 19, 2013 of the Commission, Ordering Clause 6 at pages 24 - 25.

<sup>4</sup> See Metrics Plan, Section 2.0, pages 2 - 6.

## Planned Market Characterization Baseline & Market Transformation Potential

The Metrics Plan requires that market evaluation occur when a critical mass of NYGB financing and investment arrangements have been put in place. Market evaluation activities commenced in 2018 on sectors that NYGB has supported since inception, consistent with the requirement for such assessments approximately three to five years following initial NYGB capital deployments.<sup>5</sup> NYSERDA collected baseline data for the solar sector in 2019 and will update the data to include indicators specific to this transaction. NYSERDA will use baseline data collected for indicators as a comparison point against which to assess market progress in the later studies. Progress indicators are defined below for the short, medium and long terms.

NYGB expects that program and/or future market evaluation will demonstrate progress across short-term indicators; including:

- Size (i.e., generation capacity and expected dollar value) and location of projects financed by the Investment; and
- Aggregate expected energy generation for projects financed by the Investment.

NYGB expects that program tracking and/or future market evaluation will demonstrate progress across medium- and long-term indicators, including:

- Increased general understanding of environmental benefits of LFG-to-RNG projects by financial community;
- Increased awareness and use of loan performance data by financing entities;
- Increased awareness and use of project/technology performance data by financing entities;
- Decreased costs of future LFG-to-RNG projects; and
- Presence and number of new lending participants.

## Proposed Timeframe and Method of Outcome/Impact Evaluation (by NYSERDA)

NYSERDA will evaluate the impact this transaction has had on sustainable infrastructure finance markets and the energy/environmental benefits delivered by this transaction.

**Market evaluation** will address the short, medium and long-term indicators identified above. Methods will include analysis of program data along with interviews and surveys of market participants (e.g. financial community) to track information including but not limited to: project scale information and influence of NYGB's participation on financial markets. As noted, NYSERDA collected baseline data on key indicators in its first phase evaluation during 2018 - 2019. Follow-up studies will assess progress against baseline levels for other market segments as those evolve. The specific timing of these efforts may be revised based on experience or other factors as NYGB's investment portfolio further develops and evolves.

**Impact evaluation** will assess the projects funded under the Investment that will have raised construction financing and will have been completed, commissioned, and placed in service.

As with all NYGB investments, Rudarpa projects that receive an incentive or funding from other entities (e.g., utility, other NYSERDA programs, etc.) will, in accordance with the Metrics Plan, be tracked to minimize any double-counting activity on a consolidated basis. As set out in the Metrics Plan, evaluation sampling approaches will also be used as a mechanism to estimate overlap and minimize double counting. Attempts will be made to coordinate market and impact evaluation activities for projects that receive support from multiple sources to maximize the efficiency of data collection and avoid participant survey fatigue.

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<sup>5</sup> See Metrics Plan, Section 3.3 at page 7.