ARCHAEA ENERGY

Renewable Energy Redefined

First Quarter 2022 Earnings Presentation

May 10, 2022

Cautionary Notes

Forward-Looking Statements

This presentation contains certain statements that may include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934 (the "Exchange Act"), as amended. Statements that do not relate strictly to historical or current facts are forward-looking and usually identified by the use of words such as "anticipate," "estimate," "could," "would," "should," "will," "may," "forecast," "approximate," "expect," "project," "intend," "plan," "believe" and other similar words. Forward-looking statements may relate to expectations for future financial performance, business strategies or expectations for Archaea's business. Specifically, forward-looking statements may include statements concerning market conditions and trends, earnings, performance, strategies, prospects and other aspects of Archaea's business, including pending acquisitions. Forward looking statements are based on current expectations, estimates, projections, targets, opinions and/or beliefs of Archaea, and such statements involve known and unknown risks, uncertainties and other factors.

The risks and uncertainties that could cause those actual results to differ materially from those expressed or implied by these forward looking statements include, but are not limited to: (a) Archaea's ability to complete its acquisition of INGENCO and the timing of closing; (b) Archaea's ability to successfully integrate INGENCO and other future acquisitions; (c) the availability and timing of financings, including for the acquisition of INGENCO, capital contributions to Lightning Renewables and other future acquisitions and strategic transactions; (d) the ability to recognize the anticipated financial, strategic, and operational benefits of the business combinations and any transactions contemplated thereby, the acquisition of INGENCO, Lightning Renewables, and other future acquisitions or strategic transactions, which may be affected by, among other things, competition, the ability of Archaea to grow and manage growth profitably and retain its management and key employees; (e) the possibility that Archaea may be adversely affected by other economic, business and/or competitive factors; (f) Archaea's ability to develop and operate new projects, including the projects contemplated from the INGENCO assets and Lightning Renewables; (g) the reduction or elimination of government economic incentives to the renewable energy market; (h) delays in acquisition, financing, construction and development of new projects; (i) the length of development cycles for new projects, including the design and construction processes for Archaea's projects; (j) Archaea's ability to identify suitable locations for new projects; (k) Archaea's dependence on landfill operators; (l) existing regulations and changes to regulations and policies that affect Archaea's operations; (m) decline in public acceptance and support of renewable energy development and projects; (n) demand for renewable energy not being sustained; (o) impacts of climate change, changing weather patterns and conditions, and natural disasters; (p) the ability to secure necessary governmental and regulatory approvals; (q) Archaea's expansion into new business lines; and (r) other risks and uncertainties indicated in Archaea's Annual Report on Form 10-K for the year ended December 31, 2021, including those under "Risk Factors" therein, and other documents filed or to be filed by Archaea with the Securities and Exchange Commission.

Accordingly, forward-looking statements should not be relied upon as representing Archaea's views as of any subsequent date. Archaea does not undertake any obligation to update forward-looking statements to reflect events or circumstances after the date they were made, whether as a result of new information, future events, or otherwise, except as may be required under applicable securities laws.

2021 Pro Forma Measures

The Company has presented certain specified 2021 financial and operating results on a pro forma basis as it believes it provides more meaningful information to investors. Financial information presented on a pro forma basis gives effect to the business combinations and the financing and other transactions related thereto as if they had been completed on January 1, 2021. Pro forma information has been prepared for informational purposes only and does not purport to represent what the actual results would have been had the business combinations and related transactions occurred on January 1, 2021, nor are they necessarily indicative of future results.

Preliminary Financial Information

First quarter 2022 results as presented herein are based on preliminary unaudited information and are subject to revision. Archaea has not filed its Quarterly Report on Form 10-Q for the quarter ended March 31, 2022. As a result, all financial results described in this earnings release should be considered preliminary and are subject to change to reflect any necessary adjustments or changes that are identified prior to the time the Company files its Form 10-Q. Accordingly, undue reliance should not be placed upon these preliminary results.

Non-GAAP Measures

In addition to disclosing financial information in accordance with U.S. generally accepted accounting principles ("GAAP"), this presentation contains non-GAAP financial measures as defined in Regulation G under the Exchange Act, including but not limited to Adjusted EBITDA, a non-GAAP financial measure that we use to facilitate comparisons of operating performance across periods. Non-GAAP measures should be viewed as a supplement to and not a substitute for our U.S. GAAP measures of performance and the financial results calculated in accordance with U.S. GAAP and reconciliations from these results should be carefully evaluated.

Non-GAAP measures have limitations as an analytical tool and should not be considered in isolation or in lieu of an analysis of our results as reported under U.S. GAAP and should be evaluated only on a supplementary basis.

Schedules are provided in the appendix to this presentation that define the non-GAAP financial measures included in this presentation and reconcile these non-GAAP financial measures to the most directly comparable financial measures calculated and presented in accordance with U.S. GAAP.

Agenda

Introduction	Megan Light *Vice President, Investor Relations*
Highlights, Strategic Update, and Earnings Power	Nick Stork *Chief Executive Officer*
Commercial Update, Financial Results, and 2022 Guidance	Brian McCarthy *Chief Investment Officer and Interim Chief Financial Officer*
Q&A	

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Recent Highlights, Strategic Update, and Earnings Power

Nick Stork, ***Chief Executive Officer***

1Q 2022 and Recent Highlights

Significant operational and strategic achievements year-to-date 2022

RNG Produced and Sold	Electricity Produced and Sold	Net Loss[1]	Adjusted EBITDA[2]
1.54 Million MMBtu	166 thousand MWh	$33.2 million	$20.6 million

- **Reaffirming 2022 production and Adjusted EBITDA guidance**
- **Recently announced two landmark strategic transactions:**
  - Agreement to acquire INGENCO for $215 million in cash[3]
  - Lightning Renewables joint venture (JV) with Republic to develop 39 landfill gas (LFG) to RNG facilities across the U.S.
- **More than doubled development backlog and significantly expanded estimated long-term annual earnings power[4]**
  - Total backlog of 88 high-quality RNG development projects[5]
- **RNG market supply-demand dynamics remain strong**
  - Expect additional long-term commercial progress in the coming months to build on momentum from 20-year, fixed-price contract for up to 7.6 million MMBtu/year signed with FortisBC in January
- **Early positive results from first phases of RNG optimizations**
- **Continuing to prepare for implementation of Archaea V1 plant design in 2H 2022**
  - Expect standardized, modularized approach to dramatically reduce construction timelines and costs compared to industry averages[6]

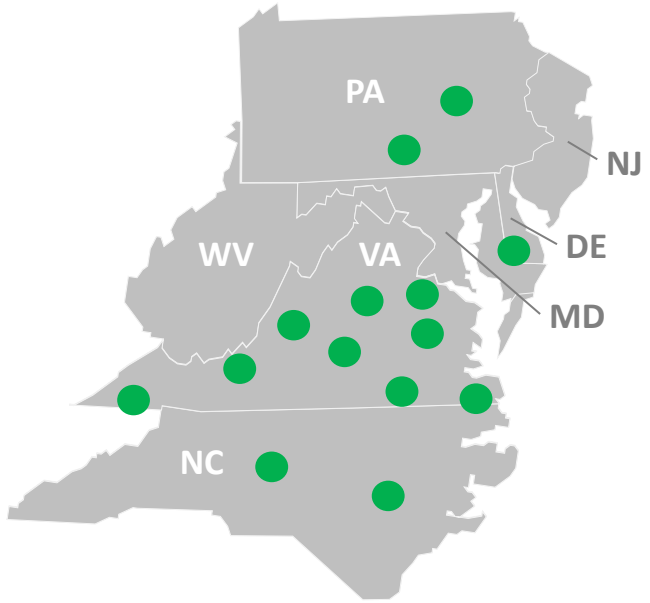
1. Net income (loss) as shown herein is before net income (loss) attributable to noncontrolling interest. For information regarding net income (loss) attributable to Class A common stock, please see the earnings release issued May 10, 2022.
2. Non-GAAP financial measure. See "Reconciliation of non-GAAP measures" slides in the appendix for additional details and a reconciliation to net income (loss), the most directly comparable U.S. GAAP financial measure.
3. Subject to customary adjustments at closing.
4. Estimated long-term annual earnings power is a non-GAAP financial measure. See "Reconciliation of Non-GAAP Measures" slide in the appendix for further details. Estimated long-term annual earnings power reflects estimated potential Adjusted EBITDA associated with our assets once all projects in our development backlog, for which gas rights agreements are currently in place or are expected to be in place after closing the INGENCO acquisition, have been completed and ramped up to full flows. See "Key Assumptions in Calculating Estimated Long-Term Annual Earnings Power" slide in the appendix for additional details. Certain assumptions regarding these estimates are inherently uncertain, and, as a result, our actual long-term earnings power may be different from this estimate, and such differences may be material. A reconciliation of estimated long-term annual earnings power to net income (loss), the closest U.S. GAAP financial measure, cannot be provided without unreasonable efforts due to the inherent difficulty in quantifying certain amounts, including share-based compensation expense, which is affected by factors including future personnel needs and the future price of our Class A common stock, and changes in fair value of derivatives, due to a variety of factors including the unpredictability of underlying price movements, which may be significant.
5. Includes projects for which gas rights agreements are currently in place or are expected to be in place after closing the INGENCO acquisition.
6. Archaea management estimate.

Archaea to Acquire NextGen Power Holdings LLC ("INGENCO")

Includes LFGTE asset portfolio with corresponding RNG development opportunities and team of experienced employees

- Acquisition price of $215 million in cash, subject to customary closing adjustments, with expected transaction close on or after July 1, 2022
- Adds 14 landfill gas to electricity (LFGTE) plants to our asset platform, including gas rights, and 70 experienced employees to our team
  - Facilities located on landfills with strong growth potential and average permitted waste acceptance of over 40 years across sites
- Expect to develop 11 RNG development projects at sites with strong growth potential and current cumulative gross flows of over 5 million MMBtu per year[1]
  - Adding to our high-quality development backlog
- Estimated multiple of approximately 6X total capital expenditures, including acquisition and RNG development capital, to estimated long-term annual earnings power[2]

INGENCO LFGTE Assets



Acquisition of INGENCO highlights our ability to acquire electricity generation assets and corresponding gas rights at scale and at attractive multiples, while creating potential future operating efficiencies and economic upside from co-locating electric plants with RNG plants to generate our own power and sell excess capacity into the grid.

1. Calculated using current landfill gas flows into sites and assuming 50% methane content on average across sites.
2. Estimated long-term annual earnings power is a non-GAAP financial measure. See "Reconciliation of Non-GAAP Measures" slide in the appendix for further details. Estimated long-term annual earnings power reflects estimated potential Adjusted EBITDA associated with our assets once specified projects in our development backlog, for which gas rights agreements are expected to be in place after closing the INGENCO acquisition, have been completed and ramped up to full flows. See "Key Assumptions in Calculating Estimated Long-Term Annual Earnings Power" slide in the appendix for additional details. Certain assumptions regarding these estimates are inherently uncertain, and, as a result, our actual long-term earnings power may be different from this estimate, and such differences may be material. A reconciliation of estimated long-term annual earnings power to net income (loss), the closest U.S. GAAP financial measure, cannot be provided without unreasonable efforts due to the inherent difficulty in quantifying certain amounts, including share-based compensation expense, which is affected by factors including future personnel needs and the future price of our Class A common stock, and changes in fair value of derivatives, due to a variety of factors including the unpredictability of underlying price movements, which may be significant.

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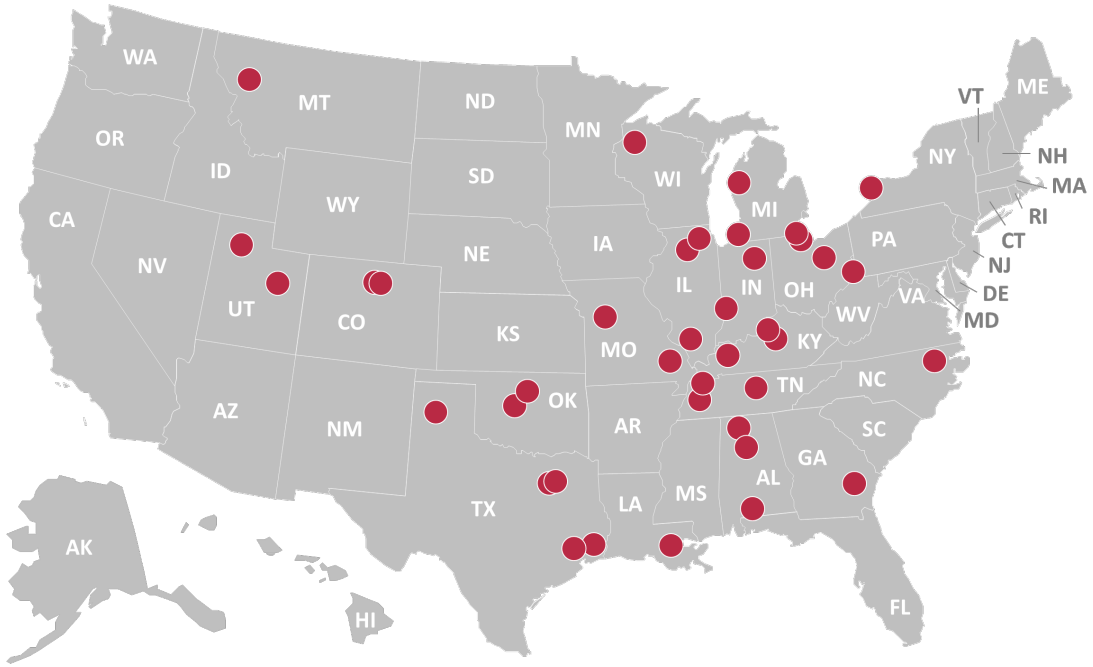
Joint Venture with Republic to Invest ~$1.1 Billion in RNG Development

Lightning Renewables is largest landfill gas to RNG development venture in the industry to date

- Archaea chosen to partner with Republic for landmark RNG development joint venture, Lightning Renewables
  - Lightning Renewables has signed a long-term master gas sale and development agreement to develop RNG facilities at 39 landfill sites owned or operated by Republic
  - Investments into Lightning Renewables are expected to total ~$1.1 billion, with approximately $780 million to be invested by Archaea
  - Archaea will hold a 60% ownership interest in Lightning Renewables and expects to receive distributions made with respect to its ownership interest
- RNG development projects located at sites with strong growth potential and current cumulative gross flows of ~13 million MMBtu per year[1]
- Archaea will develop, engineer, construct, and operate the RNG facilities, which will be located across 19 states
  - We will receive EPC fees during development and construction and O&M fees after completion for these services
  - Development and construction is expected to begin in 2022, with completion and commissioning of projects planned through 2027
- We expect potential for adding incremental projects into Lightning Renewables and potential upside through incremental initiatives including wellfield optimization, carbon intensity reduction, and low-carbon hydrogen

Lightning Renewables Development Projects



Lightning Renewables highlights our ability to win greenfield projects and make long-term, value-oriented capital investments with a meaningful expected sustainability impact for future generations

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1. Calculated using current landfill gas flows into sites and assuming 50% methane content on average across sites.

Continued Success in Expanding High-Quality RNG Development Backlog

Recent strategic transactions more than double the number of projects in backlog to 88 total projects

60 PROJECTS ADDED TO BACKLOG SINCE APRIL 2021

November 2021

Announced addition of 5 cumulative projects since April 2021

- Acquired four LFGTE assets with intention to build RNG facilities on sites over time and signed a gas rights agreement for an LFG to RNG facility

December 2021

Entered into a new joint venture, and the joint venture acquired gas rights at 2 sites to develop RNG facilities

January 2022

Signed gas rights agreements to develop RNG facilities at 2 additional sites

February 2022

Acquired an additional LFGTE asset with RNG development rights

April 2022

Announced agreement to acquire INGENCO, which includes 14 LFGTE assets, with intention to build RNG facilities on 11 of the sites over time

May 2022

Announced Lightning Renewables joint venture with Republic to develop 39 RNG facilities on landfills owned or operated by Republic across the U.S.

Development Backlog

10

OPTIMIZATIONS

+

78

NEW BUILDS[1]

RNG PLANTS TO BE BUILT ON ELECTRIC AND GREENFIELD SITES

88

TOTAL PROJECTS IN BACKLOG WITH GAS RIGHTS IN PLACE[1]

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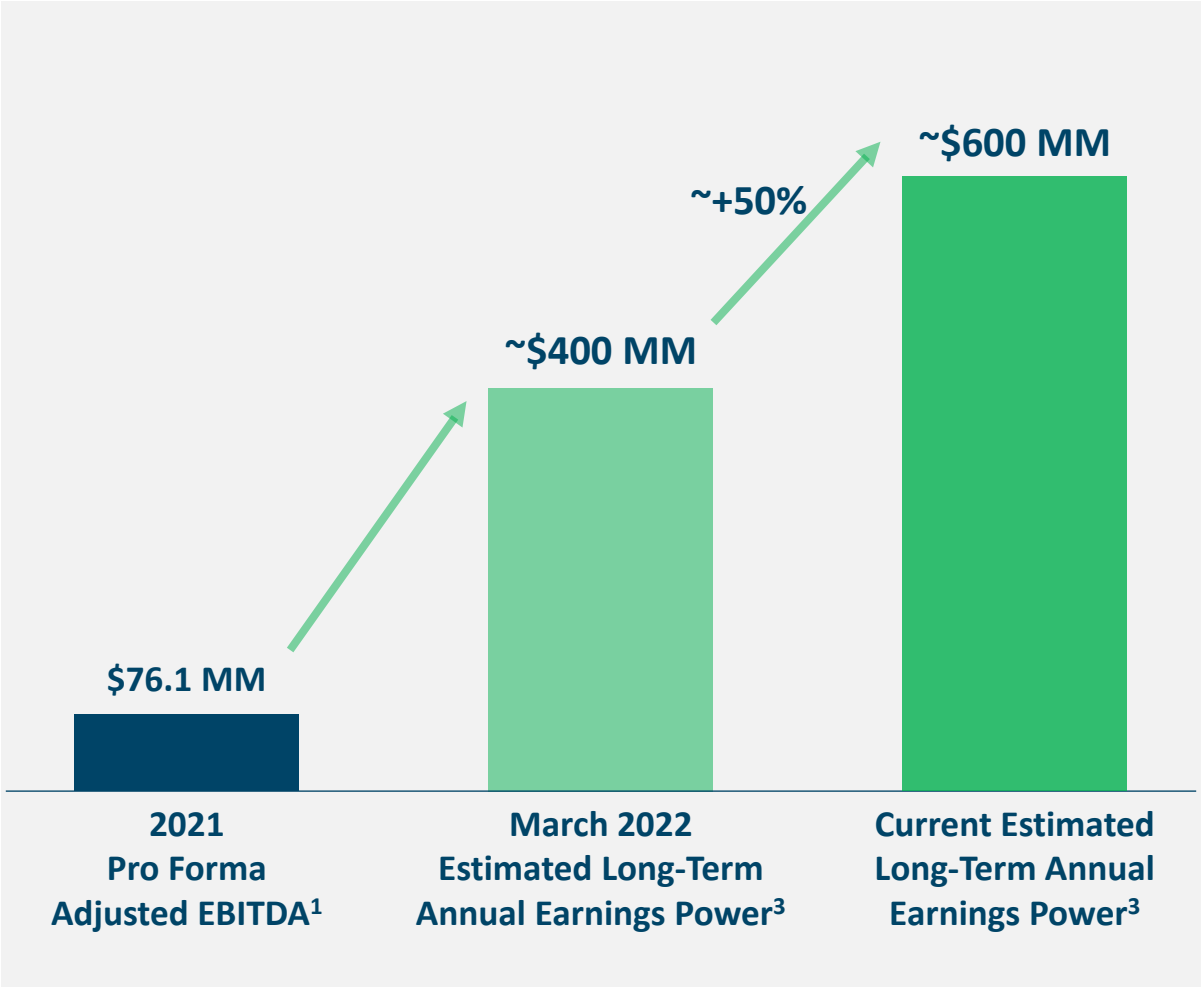
1. Includes 11 RNG development projects for which gas rights agreements are expected to be in place after closing the INGENCO acquisition.

Expanding Backlog Expected to Drive Dynamic Growth in Earnings Power

Meaningful progress on long-term strategic vision to capture as many economically attractive projects as possible



- Projects related to Lightning Renewables and INGENCO acquisition cumulatively add ~$200 million to estimated long-term annual earnings power[2]
  - Committed to securing financing for near-term incremental acquisition and development capital via capital markets and/or private financing transactions as soon as practicable, and at most favorable terms available and highest value for our stakeholders
- Current estimated long-term annual earnings power of ~$600 million after completion and ramp-up of all 88 RNG projects in development backlog
  - Estimated long-term annual RNG production sold ~50 million MMBtu
  - Estimated build multiples of projects in backlog ~4X[3]
  - Expect to achieve estimated long-term annual earnings power in ~6-8 years, dependent upon speed of scaling development capabilities
  - Earnings power assumes $1.50/gallon D3 RIN, $140/MT LCFS credit, and $3.00/MMBtu brown gas pricing for uncontracted volumes
  - Weighted average life remaining of gas rights agreements is ~32.5 years across existing RNG assets and development backlog[4]

1. Adjusted EBITDA is a non-GAAP financial measure. See "Reconciliation of Non-GAAP measures" slide in the appendix for further details and a reconciliation to Net Income (Loss), the closest U.S. GAAP financial measure. See "Cautionary Notes" slide for additional details regarding pro forma financial measures.
2. Estimated long-term annual earnings power is a non-GAAP financial measure. See "Reconciliation of Non-GAAP Measures" slide in the appendix for further details. Estimated long-term annual earnings power reflects estimated potential Adjusted EBITDA associated with our assets once specified projects in our development backlog, for which gas rights agreements are currently in place or are expected to be in place after closing the INGENCO acquisition, have been completed and ramped up to full flows. See "Key Assumptions in Calculating Estimated Long-Term Annual Earnings Power" slide in the appendix for additional details. Certain assumptions regarding these estimates are inherently uncertain, and, as a result, our actual long-term earnings power may be different from this estimate, and such differences may be material. A reconciliation of estimated long-term annual earnings power to net income (loss), the closest U.S. GAAP financial measure, cannot be provided without unreasonable efforts due to the inherent difficulty in quantifying certain amounts, including share-based compensation expense, which is affected by factors including future personnel needs and the future price of our Class A common stock, and changes in fair value of derivatives, due to a variety of factors including the unpredictability of underlying price movements, which may be significant.
3. Build multiples calculated as estimated RNG development capital divided by estimated long-term annual earnings power.
4. Includes gas rights agreements ("GRAs") for operating RNG facilities and all RNG projects in our development backlog, for which gas rights agreements are currently in place or are expected to be in place after closing the INGENCO acquisition, weighted by NPV-10 of free cash flow through GRA life. For sites with GRAs with evergreen terms, NPV assumes a GRA life of 50 years plus terminal value calculated at NPV-10 and zero growth. No possible extensions were considered in calculation. Weighted average life remaining as of March 31, 2022.

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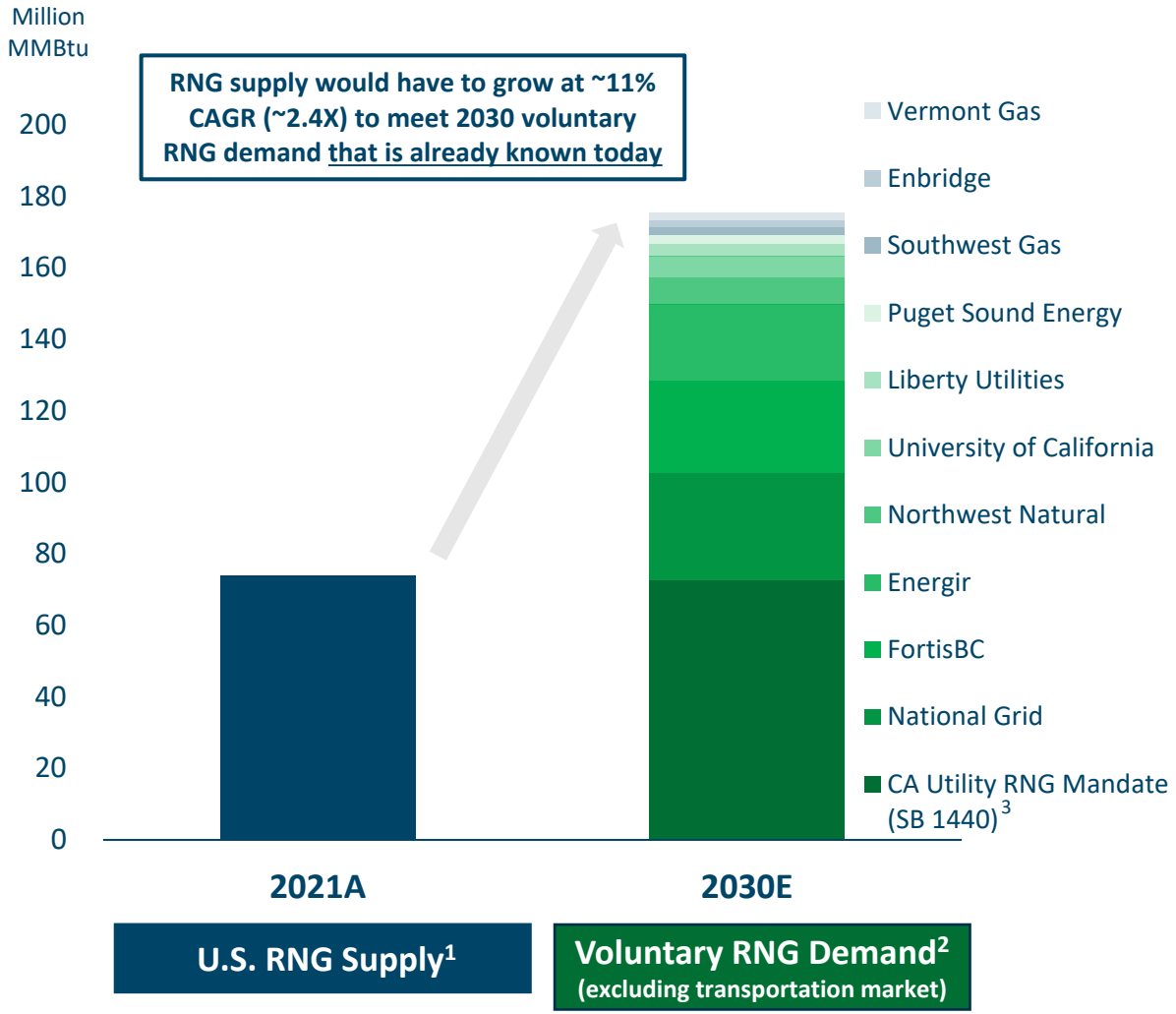
Commercial Update

Brian McCarthy, ***Chief Investment Officer and Interim Chief Financial Officer***

Constructive RNG Industry Backdrop Supports Our Long-Term Contracted Strategy

Supply-constrained market amidst growing demand pool from an increasing number of market participants



- **Two recent announcements add to need for reliable, sizable RNG production to meet utility RNG demand**
  - California Public Utilities Commission (SB 1440) now requires California gas utilities to procure ~72.8 Bcf/year of RNG by 2030[4]
  - National Grid announced new target to procure at least 30 million MMBtu/year of RNG by 2030
  - These announcements collectively add **over 100 million MMBtu/year of incremental RNG demand**, which is **~1.4X of total 2021 RNG supply**
  - Only Archaea and a few other producers can deliver substantial volumes in the short to mid-term
- Archaea continues to have productive commercial discussions with a wide range of utilities and other potential customers looking to utilize RNG as a primary method of decarbonization

Expect to make additional progress on our long-term, fixed-price contracting strategy in the coming months

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1. Source: Argonne National Laboratory Renewable Natural Gas Database.
2. Comprised of publicly-disclosed RNG purchase agreements and announced RNG goals and targets.
3. Includes future RNG purchases from California gas utilities such as SoCalGas, Pacific Gas & Electric, San Diego Gas & Electric and Southwest Gas Corp.
4. CPUC Website "CPUC Sets Biomethane Targets for Utilities" announcement, February 2022.

Financial Results and Guidance Update

Brian McCarthy, ***Chief Investment Officer and Interim Chief Financial Officer***

1Q 2022 Financial Results

	Three Months Ended March 31, 2022
RNG Produced and Sold (MMBtu)	1,540,371
Electricity Produced and Sold (MWh)	165,613
($ in thousands)	
Revenue	$ 56,900
Equity Investment Income, Net	1,429
Net Income (Loss)[1]	(33,172)
Adjusted EBITDA[2]	20,579

- First quarter 2022 production sold positively impacted by incremental production from Assai and Soares RNG facilities and PEI power facility, offset by impacts of maintenance activities at Assai and weather-related downtime and seasonality across RNG and electric facilities
- First quarter 2022 financial results positively impacted by strong market pricing of RNG, Environmental Attributes, and electricity, partially offset by increased G&A expenses related to increased headcount and other costs related to scaling for future growth
  - Items included in G&A which impact financial comparability totaled $8.3 million for the first quarter and included costs related to acquisitions and other transactions, including certain joint ventures and the secondary offering in March, and severance related to our leadership transition
  - Updated expectation for 2022 G&A is ~$55 million to enable scaling with INGENCO and Republic transactions and develop operating leverage for future growth
  - Net loss for the first quarter also included ~$19.9 million losses from changes in fair value of private warrants and other derivatives

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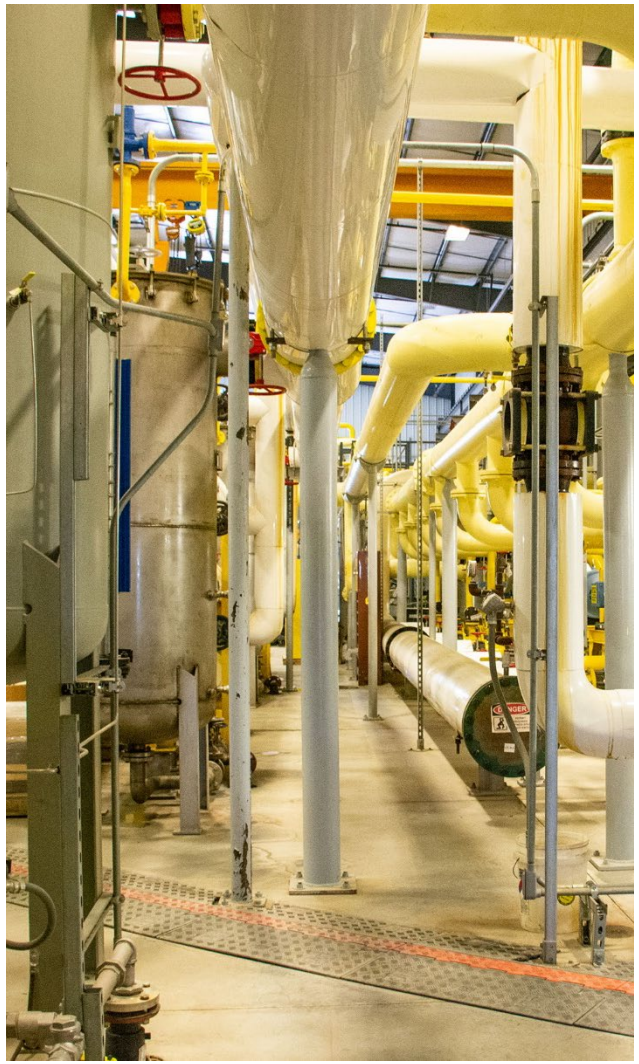
1. Net income (loss) as shown herein is before net income (loss) attributable to noncontrolling interest. For information regarding net income (loss) attributable to Class A common stock, please see the earnings press release issued May 10, 2022.
2. Non-GAAP financial measure. See "Reconciliation of Non-GAAP Measures" slide in the appendix for further details and a reconciliation to net Income (loss), the closest U.S. GAAP financial measure.

Capital Structure and Liquidity



Liquidity $269.8 million as of March 31, 2022

- Cash and cash equivalents $30.8 million
- Restricted cash $8.9 million
- Available borrowing capacity under revolving credit facility $230.1 million ($19.9 million letters of credit outstanding)

1Q Cash Used in Investing Activities $66.5 million

- Spent $61.4 million on development activities related to construction and optimization across RNG plants and projects in development
- Spent $7.0 million primarily related to acquisition of gas rights assets
- Contributed $4.0 million and received return of investment of $4.1 million related to our equity method investments

Secondary Offering of Class A Common Stock March 2022

- Supported underwritten public offering in which Aria Renewable Energy Systems LLC sold ~14.9 million shares of our Class A common stock at a price to the public of $17.75 per share
- Transaction resulted in no proceeds to the Company, a decrease of 14.9 million outstanding Class B common shares, and a corresponding increase of 14.9 million outstanding Class A common shares

2022 Full Year Financial and Operating Guidance

2022 Full Year Guidance

RNG Production Sold *(million MMBtu)*	**11.1**	**–**	**11.7**
Electricity Production Sold *(thousand MWh)*	**850**	**–**	**950**
Adjusted EBITDA[1] *($ millions)*	**$125**	**–**	**$145**

2022 Modeling Assumptions

RNG Volume Contracting[2]	
Assumed contract volumes *(million MMBtu)*	~5.5
Expected % contracted volumes	~50%
Open RNG Volumes	
Expected volumes *(million MMBtu)*	~4.7 – 5.3
Assumed RIN price *($/gallon)*[3]	$2.00 – $2.50
G&A Expense *($ millions)*	$55

2022 Development Plan

FY 2022 Development Plan	
# of Optimization Projects	10
# of New Build Projects	10
Related 2022 Capital Expenditures *($ millions)*	~$130

Estimated Long-Term Earnings Power After 2022 Project Completions[4]	
Existing asset base (incl. Assai) plus expected 2022 completions *($ millions)*	~$200

Note: The Company is in the process of optimizing the pace and timing of its long-term project development backlog as a result of recent additions to its backlog related to Lightning Renewables and the acquisition of INGENCO. The Company also expects incremental near-term capital expenditures as a result of these transactions, including both acquisition and development capital, and as a result, prior guidance provided regarding 2022 capital expenditures should no longer be relied upon. The Company expects to provide guidance for 2022 expected capital expenditures at a later date.

1. A reconciliation of expected full year 2022 Adjusted EBITDA to net income (loss), the closest U.S. GAAP financial measure, cannot be provided without unreasonable efforts due to the inherent difficulty in quantifying certain amounts, including share-based compensation expense, which is affected by factors including future personnel needs, and changes in fair value of warrant derivatives, due to a variety of factors including the unpredictability of underlying price movements, which may be significant.
2. Volumes expected to be sold under existing long-term, fixed-price contracts.
3. Equivalent to price of ~$23.45 – $29.32 per MMBtu based on conversion factor of 11.727 RINs per MMBtu of RNG.
4. Estimated long-term annual earnings power is a non-GAAP financial measure. See "Reconciliation of Non-GAAP Measures" slide in the appendix for further details. Estimated long-term annual earnings power reflects estimated potential Adjusted EBITDA associated with our assets once specified projects in our development backlog with expected completion dates in 2022, for which gas rights agreements are currently in place, have been completed and ramped up to full flows. See "Key Assumptions in Calculating Estimated Long-Term Annual Earnings Power" slide in the appendix for additional details. Certain assumptions regarding these estimates are inherently uncertain, and, as a result, our actual long-term earnings power may be different from this estimate, and such differences may be material. A reconciliation of estimated long-term annual earnings power to net income (loss), the closest U.S. GAAP financial measure, cannot be provided without unreasonable efforts due to the inherent difficulty in quantifying certain amounts, including share-based compensation expense, which is affected by factors including future personnel needs and the future price of our Class A common stock, and changes in fair value of derivatives, due to a variety of factors including the unpredictability of underlying price movements, which may be significant.

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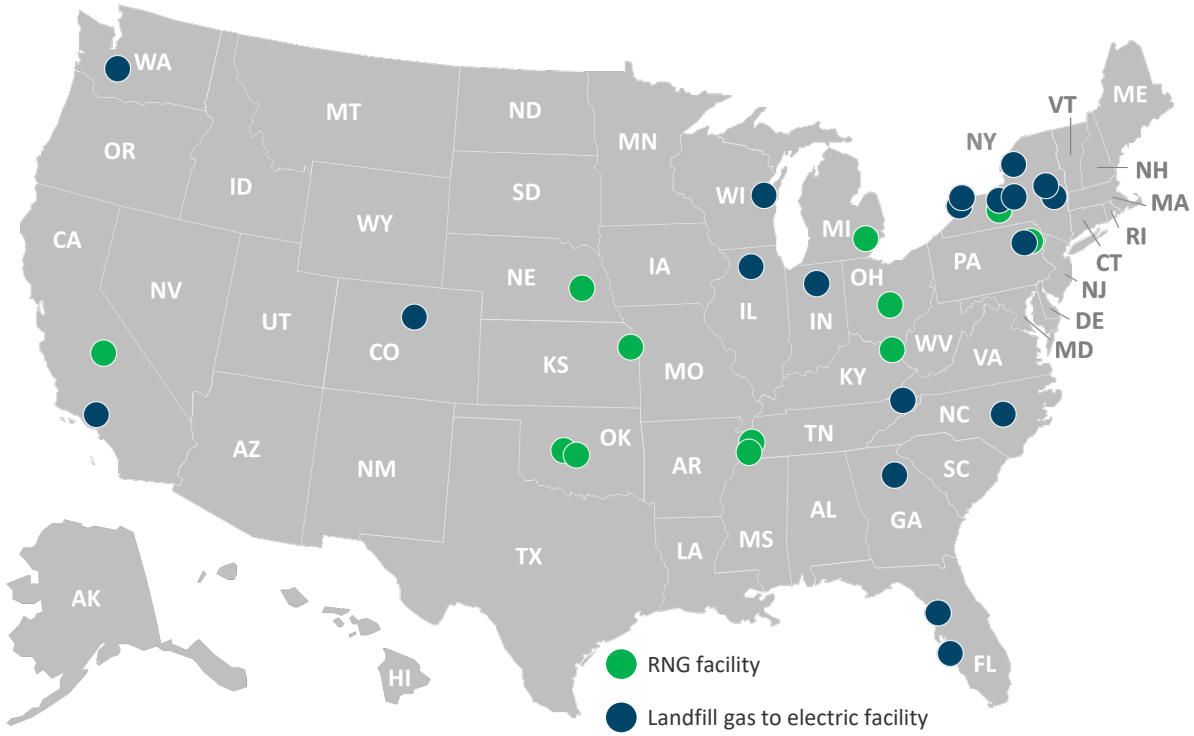
Company Overview

Archaea at a Glance

One of the largest and fastest-growing renewable natural gas ("RNG") producers in the U.S.

- Pure-play RNG company focused on the end-to-end development of RNG facilities to transform waste emissions into low carbon fuel, with a primary focus on landfill gas (LFG) as feedstock
- Industry-leading RNG platform, with 12 RNG facilities and 19 landfill gas to electric facilities (LFGTE), and an additional 14 LFGTE facilities to be added after closing the acquisition of INGENCO[1]
- Extensive, high-quality project backlog of 88 projects including optimizations of existing RNG assets and new build projects[2]
- Technology-driven approach paired with gas processing expertise advances operational excellence, faster project timelines, and lower development costs
- Differentiated commercial strategy focused on long-term commercial partnerships that provide a multi-decade decarbonization solution to displace fossil fuels
  - Robust cash flows supported by long-term, fixed-price offtake agreements with creditworthy counterparties



31 RNG and landfill gas to electric (LFGTE) facilities across the U.S.

14 additional LFGTE facilities to be added to portfolio after closing the acquisition of INGENCO

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Note: Facilities are owned through Archaea wholly-owned entities or joint ventures. Facilities include 12 facilities that produce pipeline-quality RNG and 19 LFG to renewable electricity production facilities, including one non-operated facility and one facility that is currently not operational. Cumulative completions and additions shown since business combinations were announced in April 2021 and exclude facilities associated with the pending acquisition of INGENCO.

1. Closing expected during third quarter 2022.
2. Includes projects with existing gas rights agreements in place and 11 RNG development projects for which gas rights agreements are expected to be in place after closing the INGENCO acquisition.

Archaea by the Numbers

Strong performance today with a sizable backlog of high-quality development projects

$76.1 million

2021 Pro Forma[1]
Adjusted EBITDA[2]

~$600 million

Estimated Long-Term
Annual Earnings Power[3]

70% of Volumes

Target RNG Contracted Under
Long-Term, Fixed-Price Contracts

5.72 million MMBtu

2021 Pro Forma
RNG Produced and Sold

~50 million MMBtu

Estimated Long-Term
Annual RNG Production[4]

~4.0x

Estimated Build Multiple[3,5]
for Project Backlog

1. See "Cautionary Notes" slide for additional details regarding pro forma financial measures.
2. Non-GAAP financial measure. See "Reconciliation of Non-GAAP Measures" slide in the appendix for further details and a reconciliation to net income (loss), the closest U.S. GAAP financial measure.
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4. Estimated long-term annual RNG production reflects potential RNG production once all projects in development backlog, for which gas rights agreements are currently in place or are expected to be in place after closing the INGENCO acquisition, have been completed and ramped up to full flows.
5. Estimated RNG development capital expenditure to estimated long-term Adjusted EBITDA multiple for all projects in development backlog, for which gas rights agreements are currently in place or are expected to be in place after closing the INGENCO acquisition.

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Archaea Environmental and Social Impact

LFG-to-RNG facilities produce considerable social and economic benefits while avoiding adverse environmental effects

Repurpose waste emissions into reliable fuel

LFG-to-RNG production facilities capture naturally occurring waste emissions and repurpose them into valuable, low carbon fuel that displaces the use of non-renewable resources to produce the same amount of energy.

Improve local air quality

Capturing landfill emissions prevents both malodorous and hazardous air pollutants from being emitted into nearby communities, resulting in improved overall wellbeing for residents.

Health & safety benefits

When LFG is converted into RNG, various non-methane organic compounds are removed during gas treatment and upgrading processes, which reduces possible health risks from these compounds.

Regional & nationwide economic benefits

RNG facilities support neighboring industries (construction, engineering, equipment vendors, utilities) while typically employing local talent to run day-to-day operations.

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Source: EPA Landfill Methane Outreach Program ("LMOP").

Archaea Investment Thesis

Archaea Presents an Unrivaled Renewable Energy Investment Opportunity

Competitive advantages de-risk story and put Archaea in a strong position for successful execution and growth

- Unmatched expertise and experience developing world-class RNG facilities
- Differentiated commercial strategy delivers sustainable, predictable cash flows
- Standardized approach to project development reduces cycle times and costs
- High-quality development backlog creates clear trajectory for Adjusted EBITDA growth
- Focus on lower cost, more predictable, longer-lived landfill gas feedstock
- Proven ability to capture economically attractive development opportunities
- Strong financial position and stable cash flows support capital development plans
- Landfill gas to energy operations support a more sustainable, circular economy
- Complementary business initiatives drive decarbonization and upside to earnings power

ARCHAEA ENERGY

Unmatched Expertise and Experience Developing World-Class RNG Facilities

Team of biogas, landfill, energy, and public-company experts

- **Founder experience in landfill ownership** gives unique insight into partners' needs
  - Reliability and emphasis on long-term partnerships enables landfill owners to focus on core operations while receiving benefits of RNG
- Unique **in-house gas processing team** including pioneers from the RNG space who understand gas separation at the molecular level
  - Helped design, build, and develop key gas processing systems utilized in almost 100 RNG plants in operation today
  - Internally developed upgraded versions of existing technologies
  - Design plants to handle a wide array of gas conditions and to achieve higher uptime and methane recovery
- **Entrepreneurial management team** pushing the boundaries to create long-term shareholder value
  - Strong, collective expertise in project development, engineering, operations, finance, and public company management from across energy sectors

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Differentiated Commercial Strategy Delivers Sustainable, Predictable Cash Flows

Focus on selling majority of RNG production under long-term, fixed-price contracts with creditworthy counterparties

Archaea Target RNG Volume Allocation

70%	**Long-term, fixed-price contracts with creditworthy counterparties** ***No price risk, long-dated, stable cash flows***
30%	**Short-Term Markets** ***"Highest and best use" approach***

- **Long-term, fixed-price RNG contracts spanning 10 to 20 years or more** solidify enduring commercial pathway for RNG volumes
- Target contracting 70% of expected RNG volumes to ensure **double-digit cash-on-cash returns** even in downside case of contracted volumes only
- Most existing long-term contracts have **inflation protection mechanisms**
- Partnering with creditworthy counterparties **limits credit risk**
- Apply **"highest and best use" approach** to uncontracted volumes – currently sell into short-term transportation markets, qualifying for Renewable Fuel Standard (D3 RIN) and LCFS programs
- Limited RIN and LCFS exposure **de-risks corporate cash flow profile** and **reduces reliance on environmental attribute markets to deliver shareholder value**

Archaea Partners with Large, Creditworthy Counterparties

FORTIS BC™ · NW Natural® · bp · energir · The University of California

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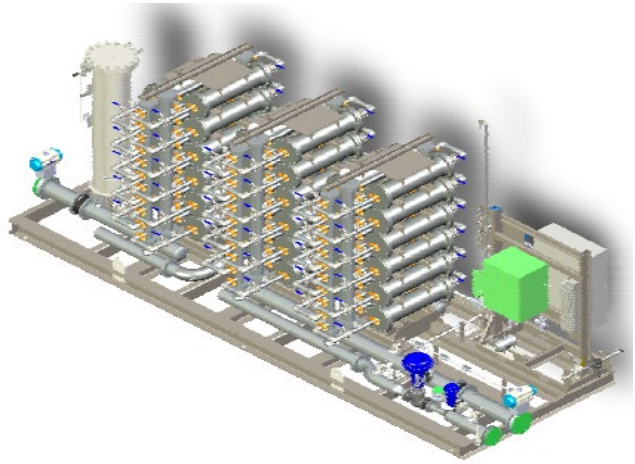
Note: Select current counterparties shown above.

Standardized Approach to Project Development Reduces Cycle Times and Costs

Proactive supply chain management reduces inflation risk and facilitates rapid project development

Implementing Archaea V1 design to redefine RNG project development

- Archaea V1 RNG plant is a **standardized, modularized approach** to project design, with four plant sizes ranging from 2,000-9,600 scfm[1] of capacity
- Expected to **lower project development capital costs ~40%** compared to industry averages[2]
- **Able to process a wide range of gas conditions** – built for high-highs and low-lows in non-methane components
- Expect increased uptime and methane recovery, driving increased RNG production and returns, and decreased operating costs per MMBtu
- Expected to **reduce project development timeline** to 18 months[2]



De-risking supply chain timelines and costs

- **Front-loading supply chain** by preordering major equipment and key components for a significant number of projects to reduce procurement risk, manage lead times, and support fast-paced project development plans
- **Warehousing, reducing costs with in-house fabrication,** and permitting in advance when possible
- **Reducing single supplier risk** through diversification in supply of key components

Archaea warehouse and fabrication facilities

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1. Scfm = standard cubic feet per minute.
2. Archaea management estimate.

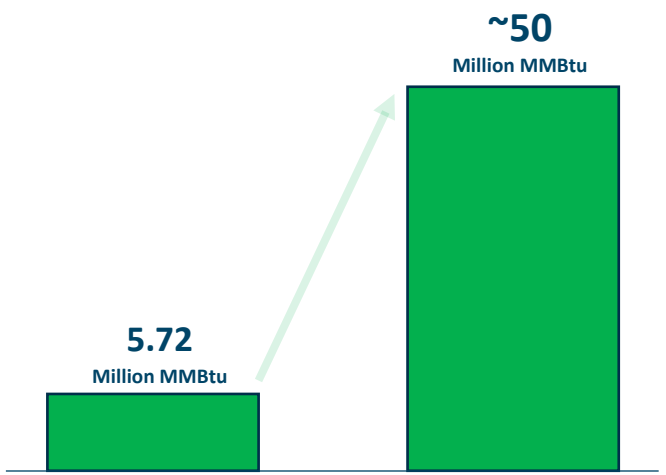
High-Quality Development Backlog Creates Clear Trajectory for Adjusted EBITDA Growth

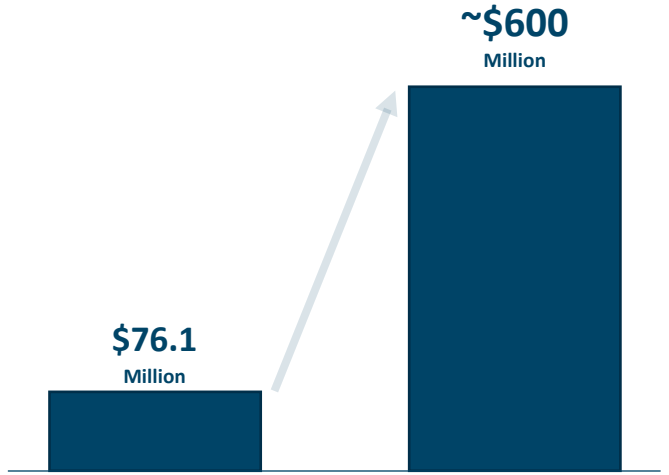
Strong base operations paired with large backlog positions Archaea to become and remain the largest U.S. RNG producer

High-Quality Project Backlog

10
Optimizations of existing RNG facilities

78
New builds
(New RNG plants on electric and greenfield sites)





- Unparalleled scale with 31 RNG and electric facilities today, accompanied by deep backlog of 88 development opportunities[5] secured by long-term gas rights agreements, underpinning long-term estimated annual RNG production of ~50 million MMBtu
- Backlog consists of opportunities to increase returns on existing assets by optimizing existing RNG sites to increase uptime and efficiency and opportunities to build new RNG plants on existing electric sites and on greenfield development sites
- Development projects have attractive estimated build multiples of ~4.0X[6]
- Developing projects at a pace that is unrivaled in the industry, with 10 optimization projects and 10 new build projects in 2022 development plan

Note: Adjusted EBITDA is a non-GAAP financial measure. See "Reconciliation of Non-GAAP Measures" slide in the appendix for further details. Growth factor calculated as estimated long-term Adjusted EBITDA divided by 2021 pro forma Adjusted EBITDA.

1. See "Cautionary Notes" slide for additional details regarding pro forma financial measures.
2. Estimated long-term annual RNG production reflects potential RNG production once all projects in development backlog, for which gas rights agreements are currently in place or are expected to be in place after closing the INGENCO acquisition, have been completed and ramped up to full flows.
3. Non-GAAP financial measure. See "Reconciliation of Non-GAAP Measures" slide in the appendix for further details and a reconciliation to Net Income (Loss), the closest U.S. GAAP financial measure.
4. Estimated long-term annual earnings power is a non-GAAP financial measure. See "Reconciliation of Non-GAAP Measures" slide in the appendix for further details. Estimated long-term annual earnings power reflects estimated potential Adjusted EBITDA associated with our assets once all projects in our development backlog, for which gas rights agreements are currently in place or are expected to be in place after closing the INGENCO acquisition, have been completed and ramped up to full flows. See "Key Assumptions in Calculating Estimated Long-Term Annual Earnings Power" slide in the appendix for additional details. Certain assumptions regarding these estimates are inherently uncertain, and, as a result, our actual long-term earnings power may be different from this estimate, and such differences may be material. A reconciliation of estimated long-term annual earnings power to net income (loss), the closest U.S. GAAP financial measure, cannot be provided without unreasonable efforts due to the inherent difficulty in quantifying certain amounts, including share-based compensation expense, which is affected by factors including future personnel needs and the future price of our Class A common stock, and changes in fair value of derivatives, due to a variety of factors including the unpredictability of underlying price movements, which may be significant.
5. Includes 11 new build RNG development projects related to INGENCO assets, for which gas rights agreements are expected to be in place after closing the INGENCO acquisition.
6. Estimated RNG development capital expenditure to estimated long-term Adjusted EBITDA multiple.

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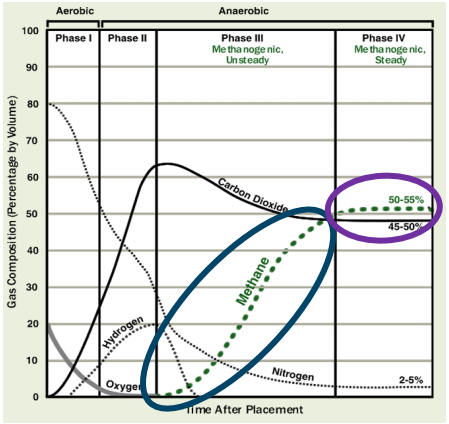
Focus on Lower Cost, More Predictable, Longer-Lived Landfill Gas Feedstock

Multi-decade agreements with landfill owners give Archaea exclusive rights to landfill gas at project sites

Landfill gas is a long-lived asset with a predictable decline curve

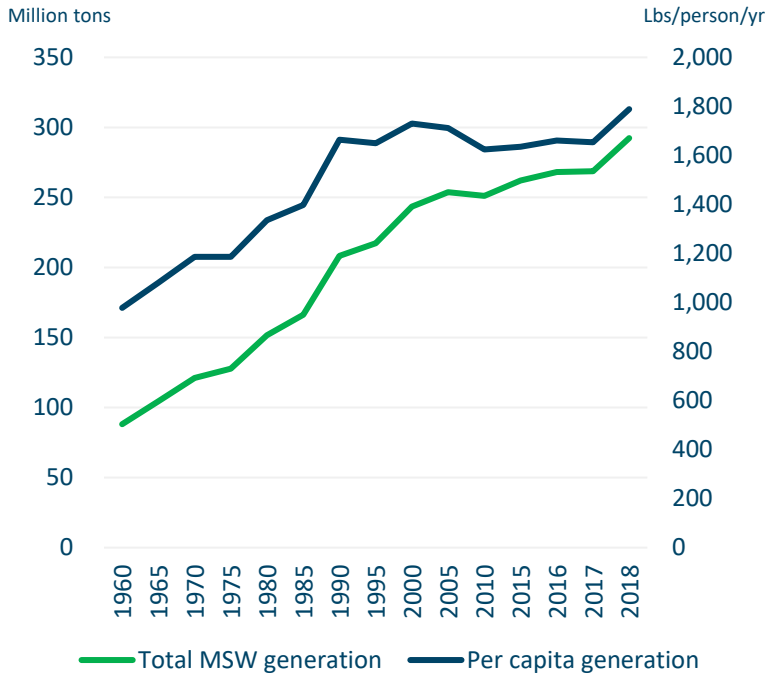
- Landfills produce predictable gas flows that consist of ~50% methane, with increasing production through landfill closure and relatively constant production rates and composition
- Landfills frequently accept waste over a 20-to-30-year timeline or longer, allowing for offset of shallow decline rates and extending asset life to 30 to 50 years



Steady increase in methane output for 5 to 15 years → **Volumes flatten then follow single-digit decline**

Growth in municipal solid waste creates large-scale, perpetual energy source

- Municipal solid waste (MSW) continues to grow on both a per capita and absolute basis, positioning it to be a substantial and multi-decade source of alternative energy



Long-term agreements with landfill owners grant Archaea exclusive gas rights

- Archaea enters into agreements which grant the rights to utilize landfill gas and to construct and operate facilities at landfill sites to produce RNG
- Payments under these agreements are typically in the form of royalties based on production volumes, and may also include upfront or advance royalty payments

~32.5 years

WEIGHTED AVERAGE LIFE REMAINING OF GAS RIGHTS AGREEMENTS[1]

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Source: EPA LMOP.

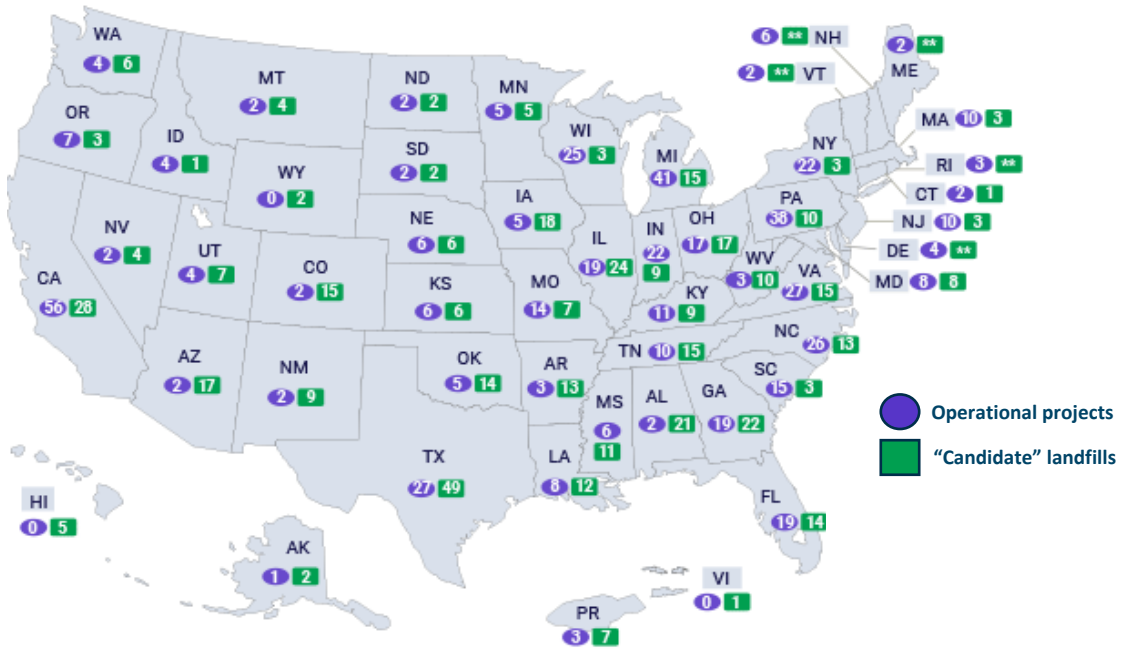
1. Includes gas rights agreements ("GRAs") for operating RNG facilities and all RNG projects in our development backlog, for which gas rights agreements are currently in place or are expected to be in place after closing the INGENCO acquisition, weighted by NPV-10 of free cash flow through GRA life. For sites with GRAs with evergreen terms, NPV assumes a GRA life of 50 years plus terminal value calculated at NPV-10 and zero growth. No possible extensions were considered in calculation. Weighted average life remaining as of March 31, 2022.

Proven Ability to Capture Economically Attractive Development Opportunities

Successfully added 60 projects to high-quality backlog since April 2021, and well-positioned to continue growing backlog

- EPA (LMOP) estimates ~500 landfills in U.S. are good candidates for project development
- With Archaea V1 plant design, Archaea expects additional low-flow site opportunities to be unlocked, resulting in a **total development opportunity of approximately 1,000 landfills**[1]
- Business development team **working to capture as much of opportunity set as possible** within investment return parameters, including:
  - Landfills owned by major waste companies, independent owners, and municipalities
  - Greenfield development opportunities and acquisition of electric assets with RNG development rights
- Target investment return parameters include **minimum double-digit cash on cash return in contracted-only downside case**
- **60 projects added to backlog**[2] since April 2021 by signing additional gas rights agreements, entering into joint ventures which have obtained gas rights agreements, and acquiring landfill gas to electric assets

LMOP operational projects and identified "candidate" landfills



541 Operational Projects

474 "Candidate" Landfills

Source: EPA LMOP.
Note: LMOP defines a "candidate" landfill as one that is accepting waste or has been closed for five years or less, has at least one million tons of waste, and does not have an operational, under-construction, or planned landfill gas to energy project; candidate landfills can also be designated based on actual interest by the site.

1. Archaea management estimate.
2. Includes 11 new build RNG development projects related to INGENCO assets, for which gas rights agreements are expected to be in place after closing the INGENCO acquisition.

Strong Financial Position and Stable Cash Flows Support Capital Development Plans

Long-term commercial contracts underpin cash flows and provide room to finance growth

Highly Resilient Cash Flow Profile

- Target 70% of RNG volumes committed under long-term, fixed-price agreements
- Creditworthy, diverse offtake counterparties including utilities, municipalities, and corporations
- Focused on growing high-margin RNG production base
- Supports a range of low-cost financing alternatives and ensures financial flexibility

10%

TARGETED MINIMUM CASH-ON-CASH RETURN IN CONTRACTED-ONLY DOWNSIDE CASE[1]

Strong Balance Sheet and Liquidity Position

- $269.8 million of liquidity at the corporate level as of March 31, 2022: $30.8 million cash + $8.9 million restricted cash + $230.1 million revolver capacity
- Allows self-funding of a significant portion of expected 2022 development capital expenditures in conjunction with expected cash flows from operations

$269.8 million

TOTAL LIQUIDITY AS OF MARCH 31, 2022

Potential for Flexible and Diverse Funding Sources

- $349.2 million long-term debt[2] outstanding as of March 31, 2022
- Business model and stable cash flows can support additional leverage
- Exploring capital markets and private financing transactions to fund INGENCO acquisition and certain additional capital related to incremental development projects from INGENCO and Lightning Renewables, and potentially to fund a portion of base development plan, to provide capital for additional acquisitions or development projects, or for general corporate purposes

~8.1 years

AVERAGE DEBT TERM TO MATURITY

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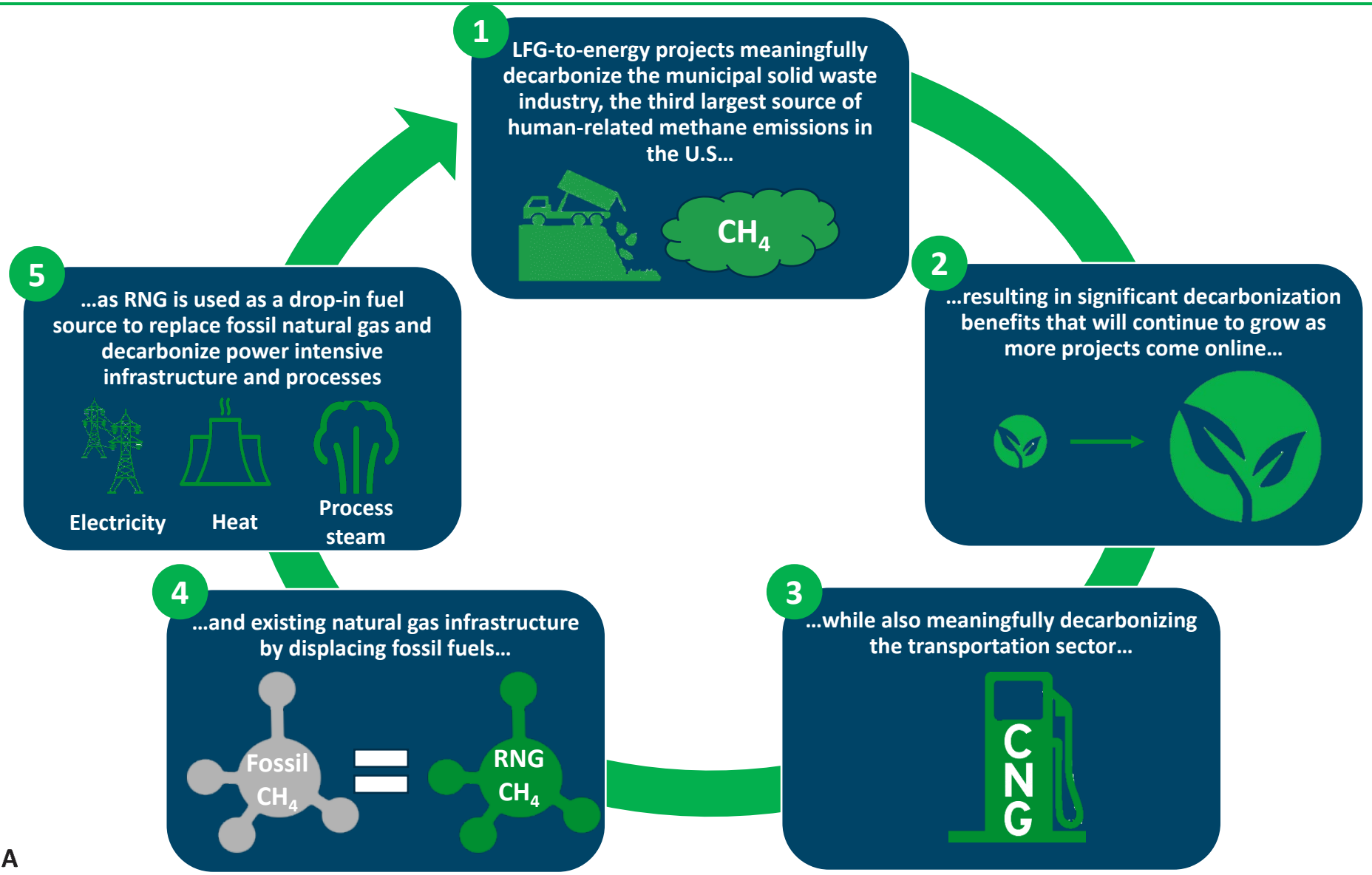
1. Based on 10-to-20-year economic models using conservative management assumptions based on fixed-price contract revenue alone.
2. Excludes ~$8.8 million of unamortized debt issuance costs.

Landfill Gas to Energy Operations Support a More Sustainable, Circular Economy

RNG provides numerous environmental benefits by transforming naturally occurring waste into clean energy



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Complementary Business Initiatives Drive Decarbonization and Upside to Earnings Power

Carbon capture and sequestration, low-carbon hydrogen, and on-site solar offer environmental and economic benefits

~30 CI point reduction

FOR TYPICAL RNG-TO-ENERGY PROJECT IMPLEMENTING CARBON SEQUESTRATION

Low CI H_2

USING RNG AND RENEWABLE ELECTRICITY FROM CO-LOCATED LANDFILL FOR STEAM METHANE REFORMATION

Negative CI H_2

IF CO-LOCATED WITH CARBON CAPTURE CAPABILITIES AND CLASS VI WELL

~15 CI point reduction

FOR TYPICAL RNG PROJECT UTILIZING SOLAR POWER[1]

CO_2 Carbon sequestration

- Best-in-class team of geologists and landmen working to identify top-tier geology and collaborate with EPA on Class VI well permitting process
- 45Q tax credits and LCFS uplift from lower CI score support project economics

H_2 Green hydrogen

- RNG-to-hydrogen approach offers low-carbon H_2 at leading levelized costs, carbon intensities, and production efficiency
- Targeting low flow and closed landfill sites to turn into highly economic low-carbon H_2 production centers

On-site solar

- LCFS uplift from lower CI score supports project economics
- Solar also provides an opportunity to mitigate potential impacts of volatility in electricity prices by controlling source of electricity

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Note: CI = carbon intensity
1. Impact is dependent upon carbon emissions from electricity displaced.

Commercial

Recent Commercial Wins Highlight Archaea's Unique Capabilities

Able to tailor long-term, fixed-price agreements to meet customers' needs

	NW Natural	FORTIS BC™
Delivery term	21 years	20 years
Start date & volume ramp up period	Start: 2022 Ramp up to full volumes in 2025	Start: 2022 Ramp up to full volumes in 2025
Contract quantity[1]	1 million MMBtu / year	Up to 7.6 million MMBtu / year (8 million gigajoules / year)
Product	Environmental Attributes	RNG + Environmental Attributes
Key contract elements	✓ First contract with U.S. utility ✓ First commercial arrangement separating Environmental Attributes from RNG ✓ Portfolio volumes	✓ Largest RNG contract signed to date ✓ Expands existing partnership with FortisBC ✓ Portfolio volumes

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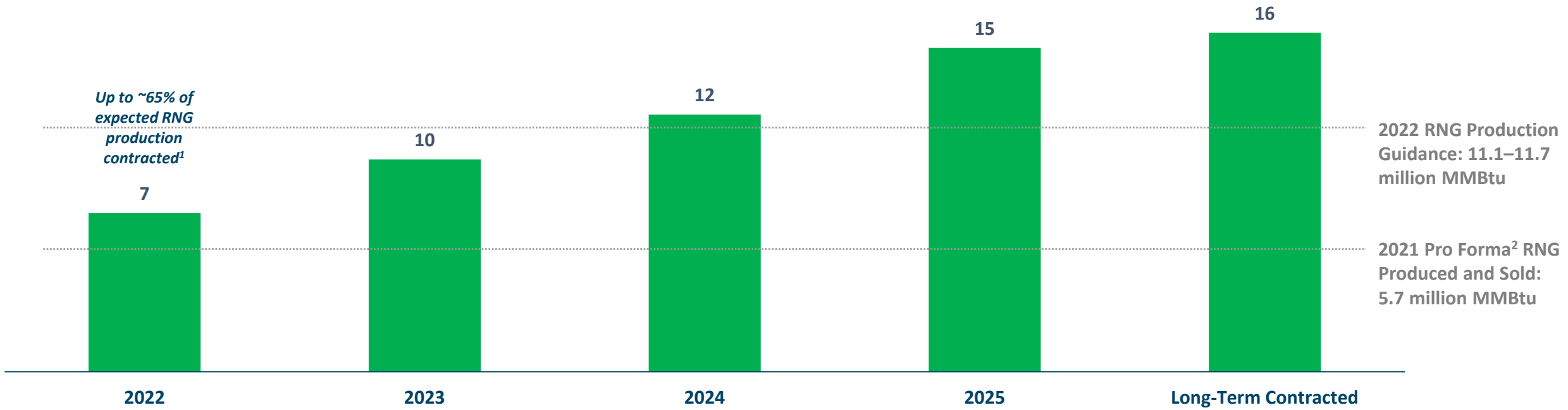
1. Full volumes after ramp up period.

Existing Long-Term Contracts Secure Pricing for Significant Future RNG Volumes

Recently announced contracts with NW Natural and FortisBC added meaningfully to long-term contracted base

Maximum Contracted RNG Volumes Under Archaea's Existing Long-Term, Fixed-Price Contracts

(Million MMBtu)



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Note: Long-term estimated % contracted is calculated utilizing maximum volumes under existing long-term, fixed-price contracts and estimated long-term annual RNG production, which reflects potential RNG production once all projects in development backlog, for which gas rights agreements are currently in place or are expected to be in place after closing the INGENCO acquisition, have been completed and ramped up to full flows.

1. Based on midpoint guidance of 11.4 million MMBtu. Volumes expected to be sold in 2022 under existing long-term contracts total approximately 5.5 million MMBtu, or ~50% of expected 2022 RNG production.
2. See "Cautionary Notes" slide for additional details regarding pro forma financial measures.

Significant Long-Term Cash Flow Underpinned by Strong Counterparty Credit Ratings

$5.2 billion

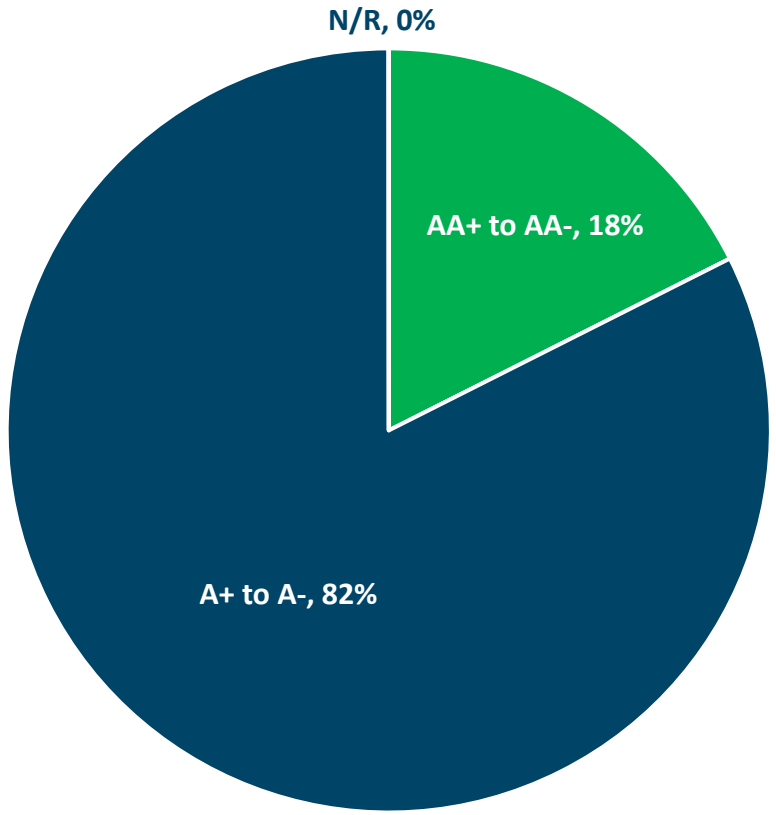
CUMULATIVE FIXED-PRICE VALUE
OVER REMAINING LIFE OF CONTRACTS[1]

100%

INVESTMENT GRADE COUNTERPARTIES[2]

18.4 years

WEIGHTED AVERAGE CONTRACT TERM[3]



Average counterparty S&P credit rating[4]: "A"

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Note: Ratings based on S&P ratings scale; select counterparty ratings have been converted from Moody's to S&P.
1. Based on maximum annual volumes under existing long-term, fixed-price contracts starting January 1, 2022, through the remaining life of the contracts.
2. One counterparty does not have a credit rating, related to a contract constituting <1% of total cumulative fixed-price value.
3. Remaining contract term as of April 30, 2022.
4. Chart shown as % of cumulative fixed-price value over life of contracts; average credit rating shown volume-weighted; credit rating shown as of April 30, 2022.

Long-Term Contracting Market Driven by Decarbonization Initiatives

Voluntary goals and regulatory mandates for decarbonization spur demand for RNG

Select Archaea Partner Mandates

FORTIS BC™
15% RNG by 2030

NW Natural
20% RNG by 2030

THE UNIVERSITY OF CALIFORNIA 1868
40% RNG by 2025

energir
5% RNG by 2025

Additional Market Participants

VGS
20% RNG by 2030

ENGIE
10% RNG by 2030

SoCalGas
20% RNG by 2030

Gazifère
Une société ENBRIDGE
30% RNG by 2030

nationalgrid
30% RNG by 2040

Actively buying RNG

Dominion Energy
PG&E
Piedmont Natural Gas
Summit Utilities
UGI Energy to do more
PNG PACIFIC NORTHERN GAS
Xcel Energy
1865 THE UNIVERSITY OF MAINE

Recent Regulatory Directives

CALIFORNIA
Public Utilities Commission

SB 1440 requires CA gas utilities to procure 12% of 2020 natural gas demand with RNG by 2030, equivalent to ~72.8 Bcf / year[1]

Oregon Public Utility Commission

Passed SB 98, which sets voluntary targets for Oregon utilities up to 30% RNG by 2050

Québec

Requires the proportion of RNG distributed in the gas system be 5% by 2025

BRITISH COLUMBIA

Recently increased the amount of RNG utilities can acquire and supply from 5% to 15%

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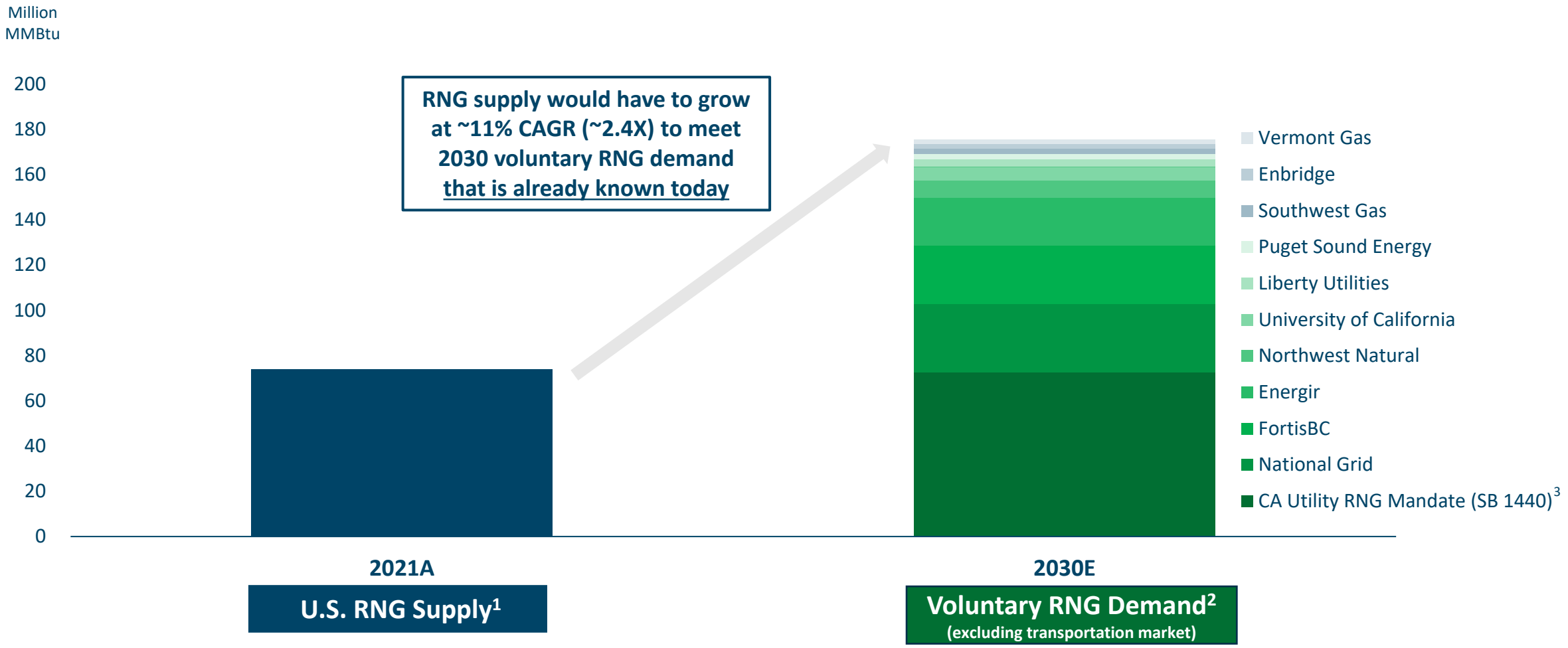
Sources: Comprised of publicly-disclosed RNG goals and targets.
1. CPUC Website "CPUC Sets Biomethane Targets for Utilities" announcement, February 2022.

Stated RNG Goals and Targets Will Require Dynamic RNG Supply Growth

Full universe of possible customers and demand expected to be much larger than potential RNG supply



Structural supply / demand imbalance expected to sustain pricing of long-term contracts over time

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1. Source: Argonne National Laboratory Renewable Natural Gas Database.
2. Comprised of publicly-disclosed RNG purchase agreements and announced RNG goals and targets.
3. Includes future RNG purchases from California gas utilities such as SoCalGas, Pacific Gas & Electric, San Diego Gas & Electric and Southwest Gas Corp.

Regulatory and Corporate Support Continues for RNG as a Transportation Fuel

Backdrop supports continued demand for RNG as a primary clean transportation fuel option

Expected Expansion in LCFS Programs

Active LCFS programs

- ✓ California
- ✓ Oregon
- ✓ British Columbia

Approved LCFS programs

- ❑ Washington

Proposed Legislation / In-Development for LCFS (or similar)

- ○ Canada (Federal)
- ○ Colorado
- ○ Illinois
- ○ Iowa
- ○ New Mexico
- ○ New York
- ○ Nevada
- ○ Massachusetts
- ○ Minnesota

Corporate Announcements

Ordered >800 CNG trucks for its European Amazon Freight Partners in 2022, bringing its European CNG fleet to more than 1,000 vehicles by the end of 2022. *(Nov 2021 announcement)*

Committed to purchasing 250 million gallon equivalents of RNG over the next seven years, making the company the largest consumer of RNG in the transportation industry. *(Jan 2021 announcement)*

Announced JV with Mercuria to own and operate 60 CNG stations across the U.S., complementing its previously announced plan to open more than 30 Chevron-branded CNG stations by 2025. *(Sept 2021 announcement)*

Powering 55% of its 19,000+ fleet of vehicles with RNG *(2021 Sustainability Report)*

Renewed agreement for six stations that will power ~1,400 transit buses with 137 million gallons over contract term *(April 2022 announcement)*

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RNG Development

Assai RNG Facility Successfully Completed Late December 2021

Highest capacity operational RNG facility in the United States

Record breaking development timeline	▪ Constructed, commissioned, and completed in <2 years, materially faster than average industry timeline
Unparalleled scale	▪ Inlet capacity of 22,500 scfm makes Assai the highest capacity operational RNG facility in the United States
Accretive returns profile	▪ Multiple of ~3X[1] and estimated long-term annual Adjusted EBITDA ~$40 mm[2] from Assai RNG facility
Strong initial operating performance	▪ Achieving over 99% uptime and above target methane recovery since early March, utilizing full flows from the Keystone landfill; began utilizing Alliance flows as of early May
Underpinned by fixed-price contracts	▪ Long-term, fixed-price contracts with Énergir, FortisBC, and University of California
Recent landfill expansion to increase LFG volumes	▪ In June 2021, Keystone was awarded an expansion by the Pennsylvania Department of Environmental Protection

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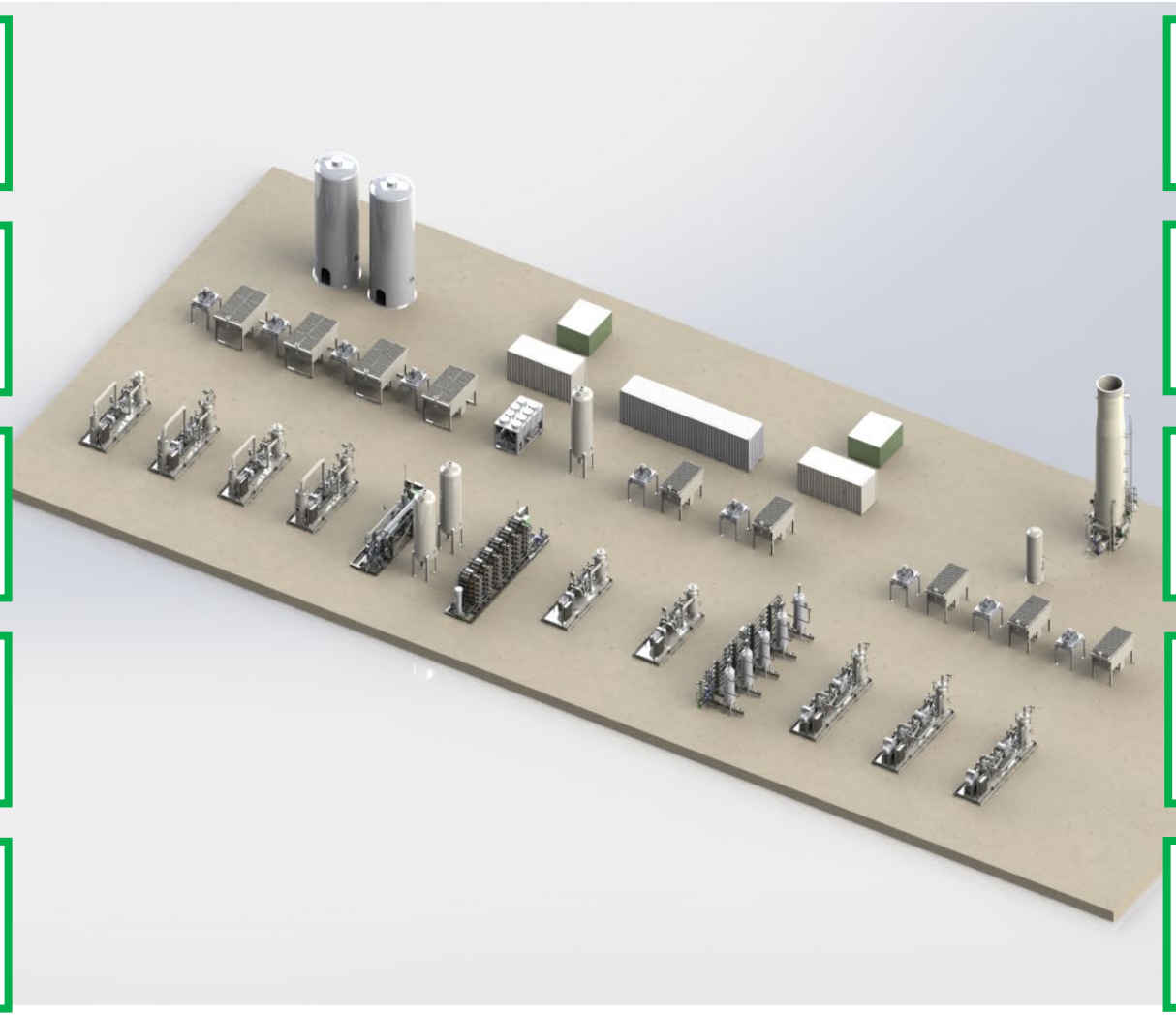
Note: Multiple above compares acquisition and development capital expenditures to estimated long-term annual Adjusted EBITDA. Adjusted EBITDA is a non-GAAP financial measure. See "Reconciliation of Non-GAAP measures" slide in the appendix for further details.

1. Includes development capital expenditures and cost to acquire PEI Power assets and estimated Adjusted EBITDA contribution related to PEI Power assets.
2. Estimated long-term annual Adjusted EBITDA at full production assuming fixed-price volumes under existing long-term contracts in place and $1.50/gallon D3 RIN pricing on uncontracted volumes. Certain assumptions regarding these estimates are inherently uncertain, and, as a result, our actual long-term earnings power may be different from this estimate, and such differences may be material. A reconciliation of estimated long-term Adjusted EBITDA to Net Income (Loss), the closest U.S. GAAP financial measure, cannot be provided without unreasonable efforts due to the inherent difficulty in quantifying certain amounts.

Archaea V1 Expected to Revolutionize Construction Costs and Timelines

All of Archaea's 2022 new build projects will implement V1 plant design

- Four standard plant sizes from 2,000-9,600 scfm of capacity
- Built on skids and with interchangeable subcomponents
- 2021 focus on system design and advance procurement of key components
- Significant advance orders for key components reduces near-term supply chain and inflation risks
- 2022 focus on implementation, V1 to be used in all new builds



- First implementation expected 2H 2022
- End goal of "off the shelf" rapid project deployment
- Expect project development and construction timelines reduced to 18 months[1]
- Expect to reduce capital costs by ~40% compared to industry averages[1]
- Expect better handling of wide array of inlet gas conditions and increased RNG production

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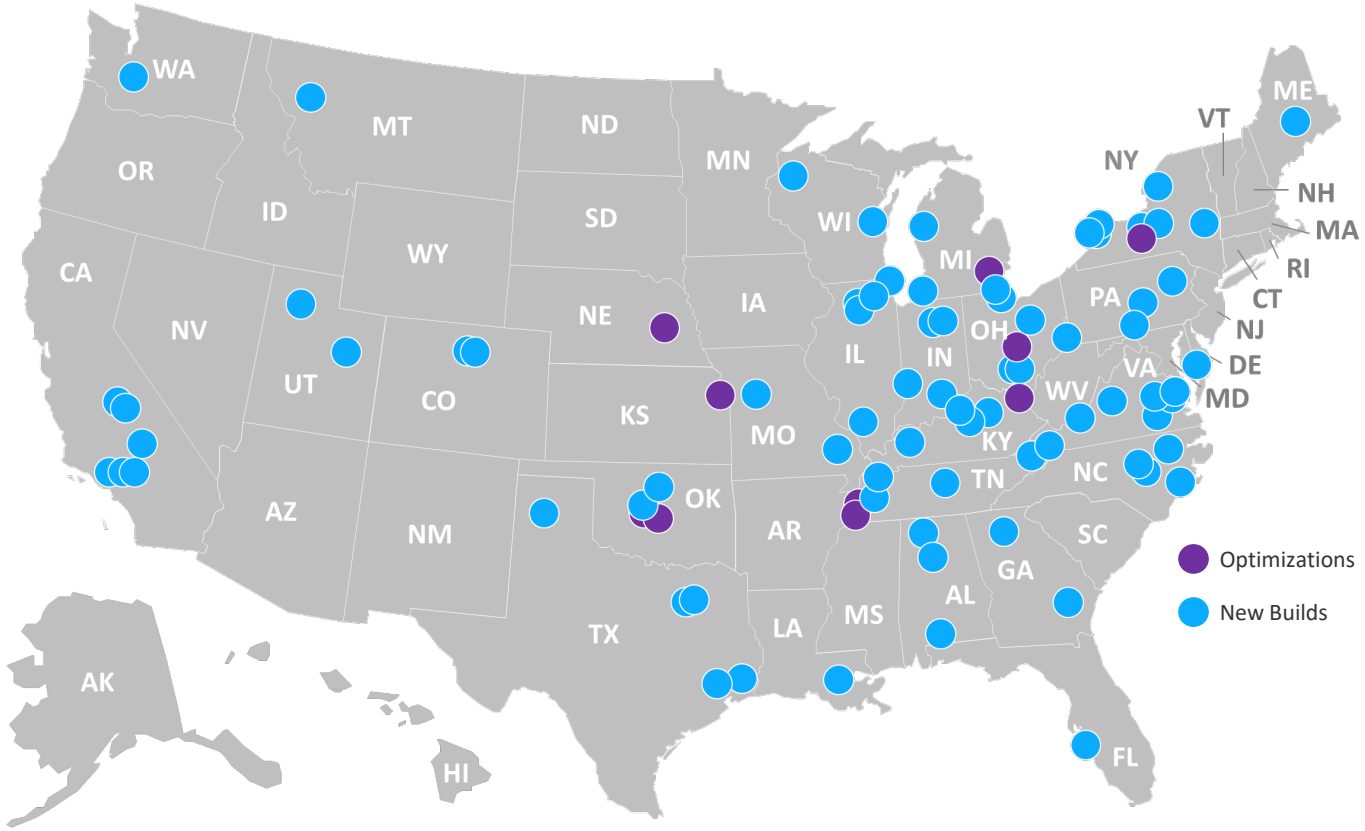
1. Archaea management estimate.

Archaea's Robust Project Development Backlog

88 total development projects in backlog today with long-term gas rights agreements in place[1]



10 **Optimizations of existing RNG facilities**

78 **New RNG facility builds** **(Electric and greenfield sites)**

~4.0X **Expected build multiples[2]**

1. Includes 11 new build RNG development projects related to INGENCO assets, for which gas rights agreements are expected to be in place after closing the INGENCO acquisition
2. Build multiple compares estimated development capital expenditures to estimated long-term annual earnings power. Estimated long-term annual earnings power reflects estimated potential Adjusted EBITDA associated with our assets once projects have been completed and ramped up to full flows. See "Key Assumptions in Calculating Estimated Long-Term Annual Earnings Power" slide in the appendix for additional details. Certain assumptions regarding these estimates are inherently uncertain, and, as a result, our actual long-term earnings power may be different from this estimate, and such differences may be material. Estimated long-term annual earnings power is a non-GAAP financial measure. See "Reconciliation of Non-GAAP measures" slide in the appendix for further details. A reconciliation of estimated long-term annual earnings power to net income (loss), the closest U.S. GAAP financial measure, cannot be provided without unreasonable efforts due to the inherent difficulty in quantifying certain amounts, including share-based compensation expense, which is affected by factors including future personnel needs and the future price of our Class A common stock, and changes in fair value of derivatives, due to a variety of factors including the unpredictability of underlying price movements, which may be significant.

ARCHAEA ENERGY

Optimizing Existing RNG Facilities Increases Production, Cash Flows, and Returns

Focus on increasing uptime, methane recovery, and gas flows into plants

Increase uptime by:

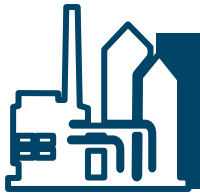
- Increasing tolerance of equipment to handle wide array of inlet gas conditions
- Operating facilities more efficiently

Increase methane recovery by:

- Improving gas processing capabilities
- Fine-tuning equipment and processes

Increase gas flows into facility by:

- Improving landfill wellfield collection efficiency
- Upsizing plant capacity to accept additional flows



Illustrative impact of optimization on 3,000 scfm LFG to RNG facility[1]

+5% UPTIME (~90% TO 95%) AND
+10% METHANE RECOVERY (~80% TO 90%)

=

~100,000 INCREMENTAL MMBTU OF RNG PER YEAR

+

~$1 MILLION OF INCREMENTAL ADJUSTED EBITDA

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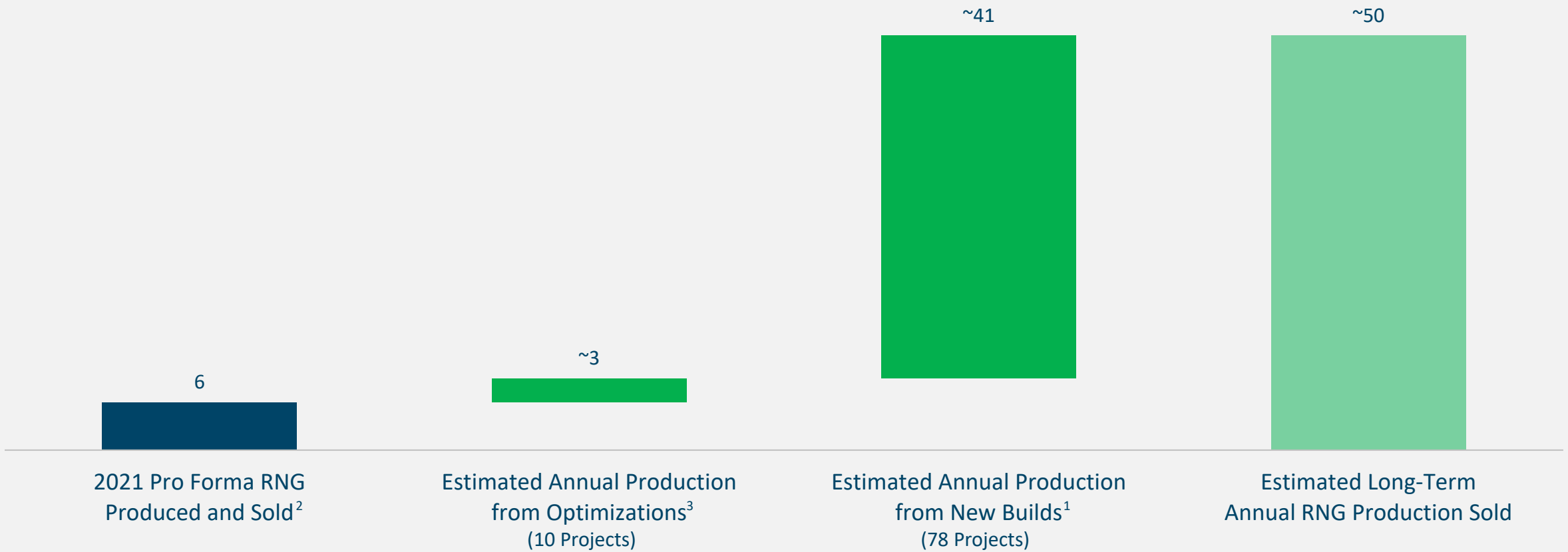
Note: Illustrative example with uptime and methane recovery increase to Archaea target levels, assumes LFG is comprised of 50% methane. Illustrative incremental Adjusted EBITDA shown above assumes 70% of volumes are sold under long-term, fixed-price contracts at current contract prices and remaining volumes are sold at a $1.50/gallon D3 RIN price.

Project Development Backlog Supports Estimated 9X Production Growth

88 total development projects in backlog with long-term gas rights agreements in place[1]

Estimated RNG Production (million MMBtu)



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Note: RNG volumes include production from our wholly-owned facilities, our proportionate share of production from our equity method investments, and EMRNG. Estimated long-term annual RNG production reflects potential RNG production once all projects in development backlog, for which gas rights agreements are currently in place or are expected to be in place after closing the INGENCO acquisition, have been completed and ramped up to full flows.

1. Includes 11 new build RNG development projects related to INGENCO assets, for which gas rights agreements are expected to be in place after closing the INGENCO acquisition.
2. See "Cautionary Notes" slide for additional details regarding pro forma financial measures.
3. Represents the estimated long-term incremental annual production from existing RNG projects after optimization. "Pre-optimization" production from existing RNG projects is included in 2021 Pro Forma RNG Produced and Sold.

RNG Overview

What is RNG?

Renewable natural gas is produced from naturally occurring biogas and can be interchanged with fossil natural gas

- Biogas is produced when organic matter decomposes in anaerobic conditions
  - Biogas is produced from various biomass sources through a biochemical process, such as anaerobic digestion, or through thermochemical means, such as gasification
- Renewable natural gas (RNG) is biogas that has been processed to purity standards to become fully interchangeable with fossil natural gas
  - Conditioning, or upgrading, biogas into RNG involves removing water, carbon dioxide, hydrogen sulfide, nitrogen, oxygen, and other trace elements to produce a pipeline-quality gas that can be used in existing natural gas infrastructure
    - Enables Archaea to physically deliver to strategic customers from coast-to-coast and to markets that place the greatest value on the environmental benefits of our low-emission fuel
  - Like fossil natural gas, RNG can be used as a transportation fuel in the form of compressed natural gas (CNG) or liquefied natural gas (LNG)
    - RNG may qualify as a Cellulosic Biofuel (D3) or Advanced Biofuel (D5) under the Renewable Fuel Standard
  - RNG can also be used as a replacement for fossil natural gas to generate on-site electricity and heat

Source: EPA.

Primary Sources of RNG

RNG can be developed from landfills, livestock/agriculture sources, organic waste, and wastewater treatment facilities

Source	Process	% of current U.S. RNG supply
Landfills 	In municipal solid waste landfills, landfill gas (LFG) is generated by anaerobic decomposition of organic waste. LFG can be captured, converted, and used as a source of various forms of energy, including production of RNG. Due to certain federal and state regulatory requirements, many landfills already have LFG collection infrastructure in place to capture and destroy the LFG generated. As of March 2022, there were approximately 540 operational LFG-to-energy projects in the United States.	**72%**
Livestock / Agriculture 	At large livestock farms, manure from dairy, beef, swine, or poultry is collected and delivered to an anaerobic digester to stabilize and optimize methane production. The resulting biogas can be processed into RNG. As of September 2021, there were approximately 320 anaerobic digester systems operating at commercial livestock farms in the United States. Some manure-based digesters co-digest other waste materials with manure, including upstream (pre-consumer) food wastes. Biogas can also be produced from lignocellulosic material such as crop residues, woody biomass, and dedicated energy crops via thermochemical conversions, co-digestion, and dry fermentation.	**20%**
Organic Waste 	Other sources of biogas include organic waste from industrial, institutional, and commercial entities, such as food manufacturing and wholesalers, supermarkets, restaurants, hospitals, and educational facilities.	**5%**
Wastewater 	Many wastewater treatment facilities use either on-site or off-site anaerobic digestors to treat sewage sludge removed in the treatment process. Anaerobic digestion of this sludge typically generates biogas with a high methane content and extremely low nitrogen and oxygen contents, making it an attractive candidate for RNG projects. According to EPA estimates, this biogas potential is about 1 cubic foot of digester gas per 100 gallons of wastewater. There are more than 16,000 wastewater treatment facilities in the United States, but only approximately 1,300 have anaerobic digesters.	**3%**

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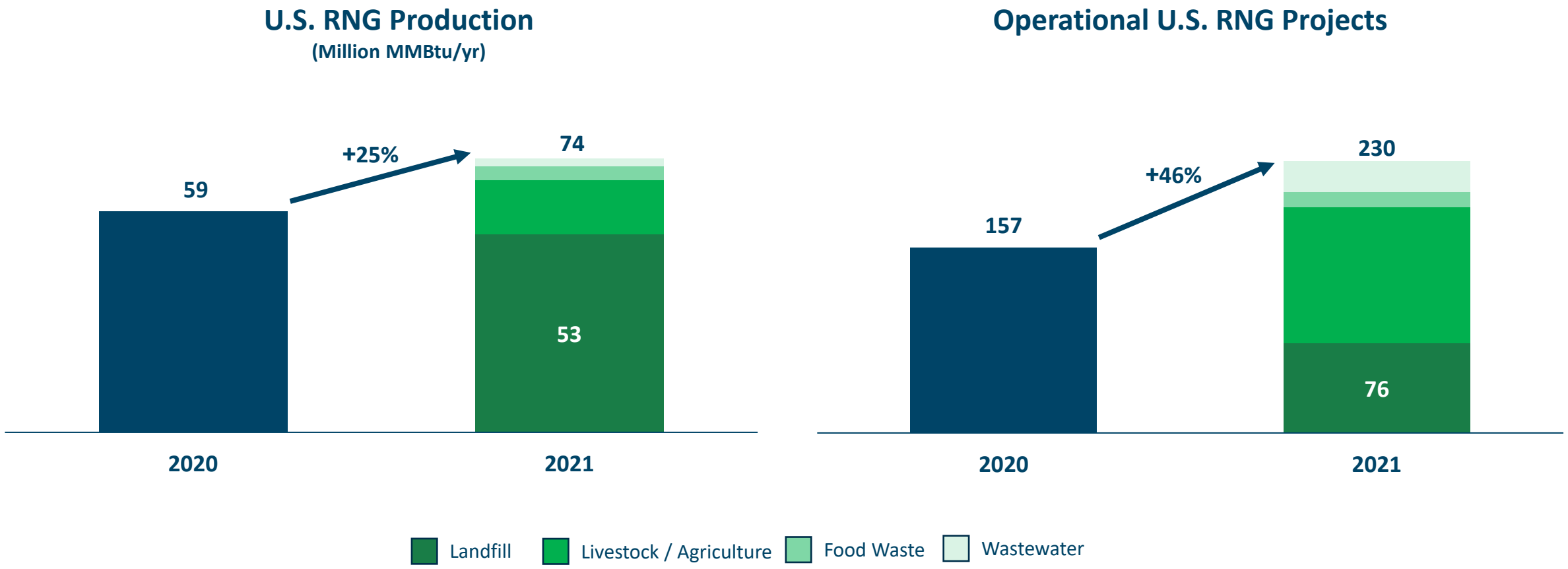
Sources: EPA LMOP, AgStar.
Note: AgStar Digestor Database is typically updated on a biannual basis and EPA LMOP is typically updated on a quarterly basis.

Landfill Gas is the Primary Source of U.S. RNG

Significantly higher volumes of gas produced per landfill site than per livestock/agricultural site



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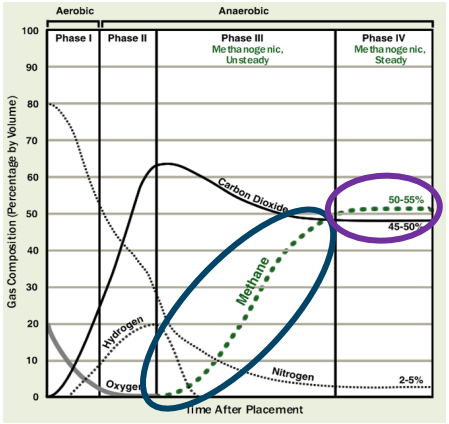
Source: Argonne National Laboratory Renewable Natural Gas Database, accessed April 30, 2022.

Landfill Gas is an Economic, Predictable, Long-Lived Feedstock

Archaea secures exclusive rights to landfill gas at project sites via multi-decade agreements with landfill owners

Landfill gas is a long-lived asset with a predictable decline curve

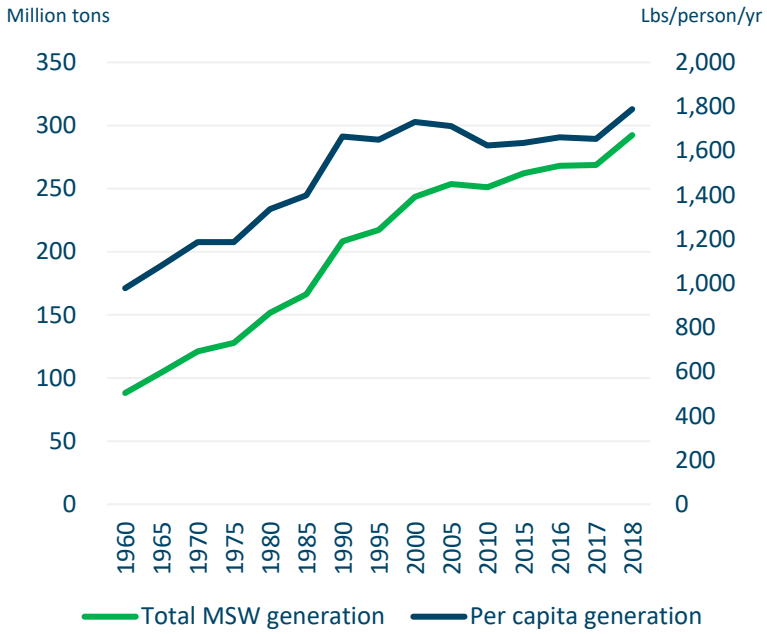
- Landfills produce predictable gas flows that consist of ~50% methane, with increasing production through landfill closure and relatively constant production rates and composition
- Landfills frequently accept waste over a 20-to-30-year timeline or longer, allowing for offset of shallow decline rates and extending asset life to 30 to 50 years



Steady increase in methane output for 5 to 15 years → **Volumes flatten then follow single-digit decline**

Growth in municipal solid waste creates large-scale, perpetual energy source

- Municipal solid waste (MSW) continues to grow on both a per capita and absolute basis, positioning it to be a substantial and multi-decade source of alternative energy



Long-term agreements with landfill owners grant Archaea exclusive gas rights

- Archaea enters into agreements which grant the rights to utilize landfill gas and to construct and operate facilities at landfill sites to produce RNG
- Payments under these agreements are typically in the form of royalties based on production volumes, and may also include upfront or advance royalty payments

Proximity to pipelines reduces transportation costs for landfill RNG

- RNG is chemically identical to fossil natural gas and can be transported in existing natural gas infrastructure
- Landfills located proximally to pipeline infrastructure reduce transportation cost and improve project economics compared to other biogas sources (i.e., livestock/agriculture)

Landfills provide the lowest cost, most predictable, and longest-term feedstock of any renewable fuel

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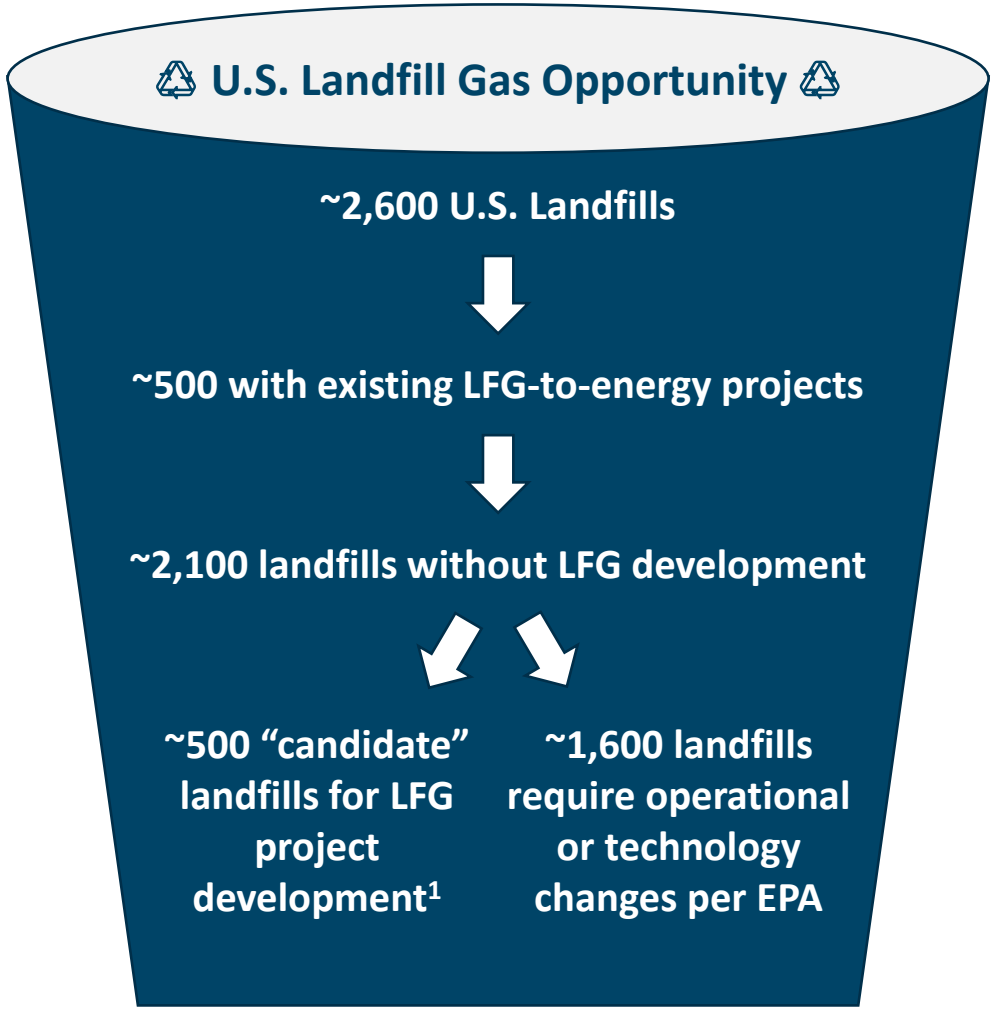
Source: EPA LMOP.

Significant Landfill-to-RNG Development Opportunity in the U.S.

At least several hundred landfills are candidates for RNG project development

- According to the EPA Landfill Methane Outreach Program (LMOP):
  - Of ~2,600 municipal solid waste (MSW) landfills in the U.S., ~20% have existing LFG-to-energy projects on site, including electricity, RNG, and direct use
  - Of ~2,100 landfills without current LFG energy projects, ~22% possess the basic characteristics identified by LMOP to support LFG project development, equating to ~500 candidate landfills or ~200 BCF / year of additional RNG supply
- Companies with technological capabilities of developing LFG projects at smaller-scale landfills can likely develop a subset of smaller projects, further growing RNG supply
  - Archaea expects the V1 plant design to unlock the economic potential of several hundred additional "low-flow" landfills
  - Archaea estimates this could add another ~500 sites for a total landfill opportunity set of ~1,000 sites[2]



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Source: Argonne National Laboratory Renewable Natural Gas Database, accessed March 3, 2022.

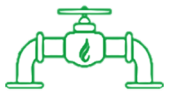
1. LMOP defines a "candidate" landfill as one that is accepting waste or has been closed for five years or less, has at least one million tons of waste, and does not have an operational, under-construction, or planned landfill gas to energy project; candidate landfills can also be designated based on actual interest by the site.
2. Archaea management estimate.

Primary End Markets of RNG

Growing voluntary demand for RNG adds to traditional demand within transportation market

Voluntary Market

RNG sold via long-term, fixed-price agreements



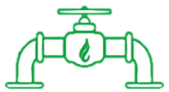
Pipeline-quality RNG transported to customer

Gas used for chemical and/or thermal properties in customers' existing infrastructure

Environmental attributes used to reduce customers' environmental footprints

Transportation Market

RNG typically sold via third party marketer



Pipeline-quality RNG transported to customer

Gas utilized as transportation fuel (typically CNG or LNG)

RINs and/or LCFS credits are generated and can be monetized

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Environmental Attributes Overview: Renewable Identification Numbers

Overview & Program Mechanics

Overview

- The Renewable Fuel Standards Program ("RFS") was authorized under the Energy Policy Act of 2005 and expanded through the Energy Independence and Security Act of 2007 and requires the use of specific volumes of biofuel in the United States
- The RFS program is aimed at:
  - Increasing energy security (reduce U.S. dependence on foreign oil by establishing new domestic green fuel related industries)
  - Improving the environment (enhance air quality and reduce GHG emissions, thereby positively affecting climate change)

Credit Generation

- Under the RFS, transportation fuel sold in the United States must contain certain minimum volumes of renewable fuel
- To enforce compliance with the RFS, the EPA uses RINs to track the production, use, and trading of biodiesel and other renewable fuels
- A RIN is created when an EPA-registered renewable fuel producer produces renewable fuel; these 38-digit RINs are each specifically associated with a gallon of renewable fuel
- Each year, the EPA establishes by regulation the amount of RINs the industry as a whole must obtain and retire, and publishes annual percentage standards based on the Energy Information Administration's projection of U.S. gasoline and diesel demand
- As a result, RIN prices have been historically volatile due to the EPA's setting of the annual volume target

Renewable Fuel Category Summary & Cellulosic RINs (D3)

- The type of RIN a renewable fuel producer can generate is included in its approved pathway as a "D-code" and each fuel type has a distinct D-code; each type of renewable fuel also has an equivalence value ("EV"), which represents a given biofuel's energy content relative to ethanol
  - The EV determines how many RINs a renewable fuel producer can generate with each gallon of renewable fuel produced
- RINs are used by obligated parties to satisfy the four RFS obligation categories: Cellulosic, Advanced, Renewable Biofuels, and BBD
  - The four standards are nested within each other, meaning that "cellulosic biofuel" and "biomass-based diesel" may be used to satisfy the Advanced Biofuel standard, and all advanced biofuel can be used to satisfy the total renewable fuel standard
- High demand exists for cellulosic biofuels and D3 RINs due to supply constraints; Archaea's LFG-to-RNG projects generate D3 RINs
  - The most restrictive standards apply to cellulosic biofuel as a limited number of fuels qualify to meet the corresponding standards
  - Cellulosic biofuels have the greatest GHG reduction (60%) and lowest volume requirement, making this fuel category the highest priced RIN

Environmental Attributes Overview: Low Carbon Fuel Standard (LCFS)

Overview & Program Mechanics

Overview	▪ In 2009, the California Air Resources Board (“CARB”) adopted LCFS legislation to reduce the CI of transportation fuel used in California by at least 20% by 2030 from a 2010 baseline ▪ Enjoys widespread bipartisan support in the State; other states evaluating similar programs ▪ CARB formalized a cap in LCFS credit prices at $200 (with annual CPI adjustments) in 2016
Credit Generation	▪ LCFS credits can be generated by three types of entities: – Fuel Pathway Holders: by providing low carbon fuels used in CA transportation – Project Operators: that reduce GHG emissions in the petroleum supply chain – Zero Emission Vehicle Infrastructure
CI Score Calculation	▪ The CI score is dependent upon a full lifecycle analysis (“LCA”) and evaluates GHG emissions associated with producing, transporting, and consuming the fuel ▪ All transportation fuels need a CI score to participate in LCFS ▪ Lower CI fuels generate more LCFS credits than higher CI fuels – For example, a CI score of 50 generates 0.0299 LCFS credits per MMBtu
Verification	▪ The Alternative Fuels Portal (“AFP”) and the LCFS Credit Banking Transfer System (“LRT-CBTS”) were created to track and monitor LCFS credits ▪ LCFS includes a Verification Program to ensure accuracy of GHG data and reporting in order to provide confidence to LCFS stakeholders and market participants – Third party CI verifiers must apply to CARB for accreditation

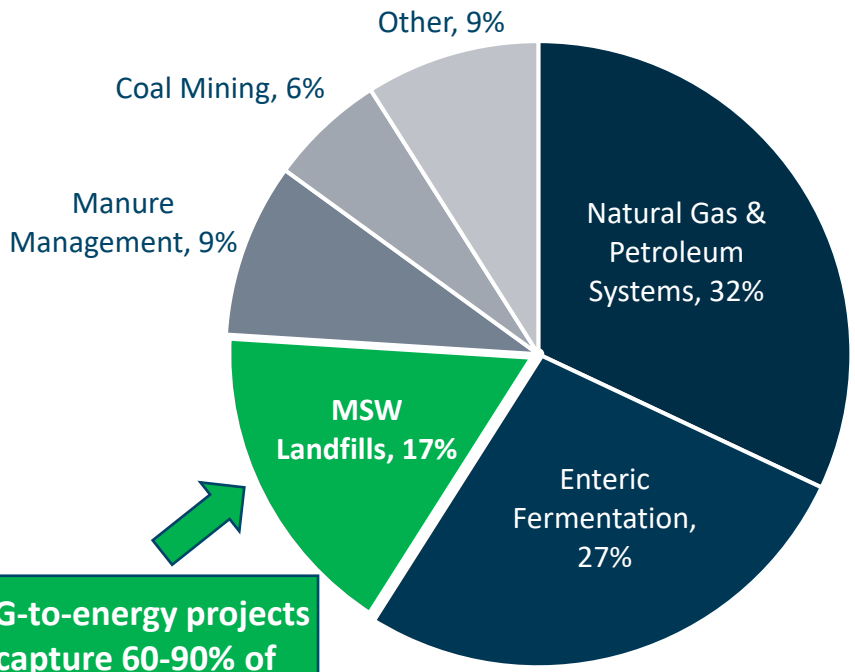
Environmental Benefits

Archaea's Production Supports a More Sustainable, Circular Economy

RNG provides numerous environmental benefits by transforming naturally occurring waste into clean energy

LFG-to-energy projects meaningfully decarbonize the municipal solid waste industry, the third largest source of human-related methane emissions in the U.S…

U.S. CO2 emissions, by source[1]



LFG-to-energy projects capture 60-90% of landfill methane

…resulting in significant decarbonization benefits that will continue to grow as more projects come online…

~540 LFG-to-energy projects in the U.S. today have avoided >104 million metric tons[2] of CO_2

which is the equivalent to the

Greenhouse gas emissions from → **~22.5 million passenger vehicles driven for one year**

CO_2 emissions from → **~11.7 billion gallons of gasoline consumed**

Greenhouse gas emissions avoided by → **~28,321 wind turbines running for a year**

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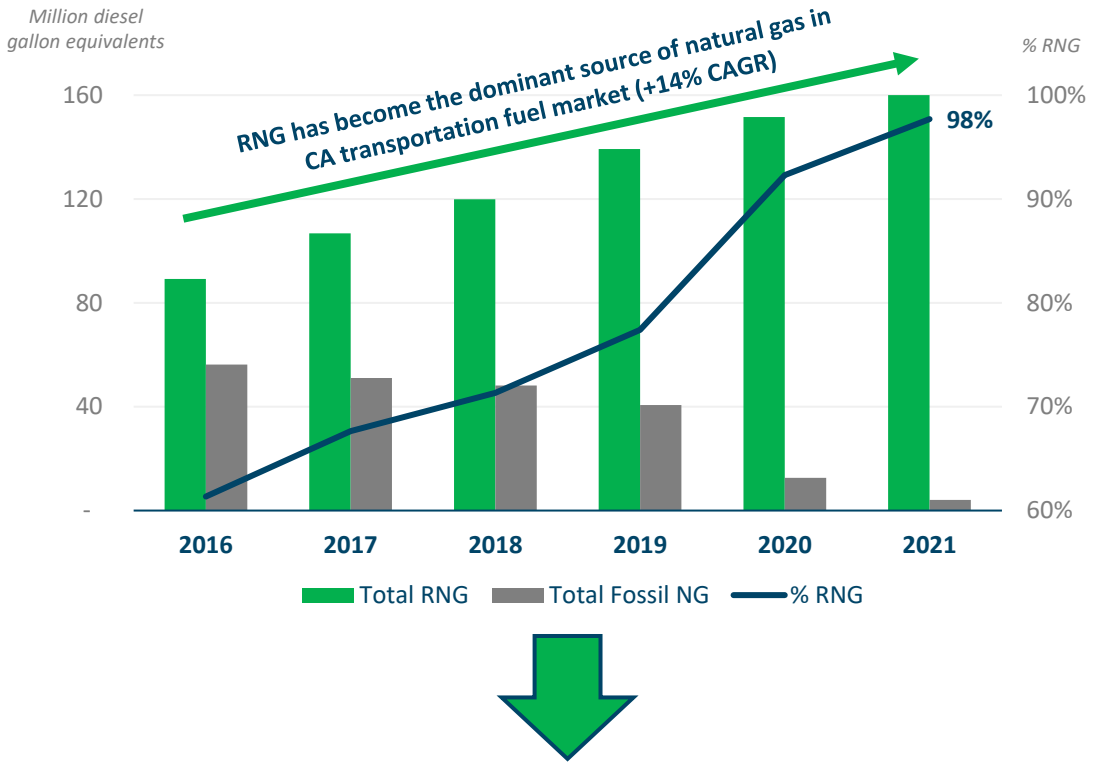
1. Source: EPA Overview of Greenhouse Gases, figures based on CO2 emissions reported in 2020.
2. Source: EPA Greenhouse Gas Equivalencies Calculator, LMOP website as of April 2022.

Archaea's Production Supports a More Sustainable, Circular Economy

RNG provides numerous environmental benefits by transforming naturally occurring waste into clean energy

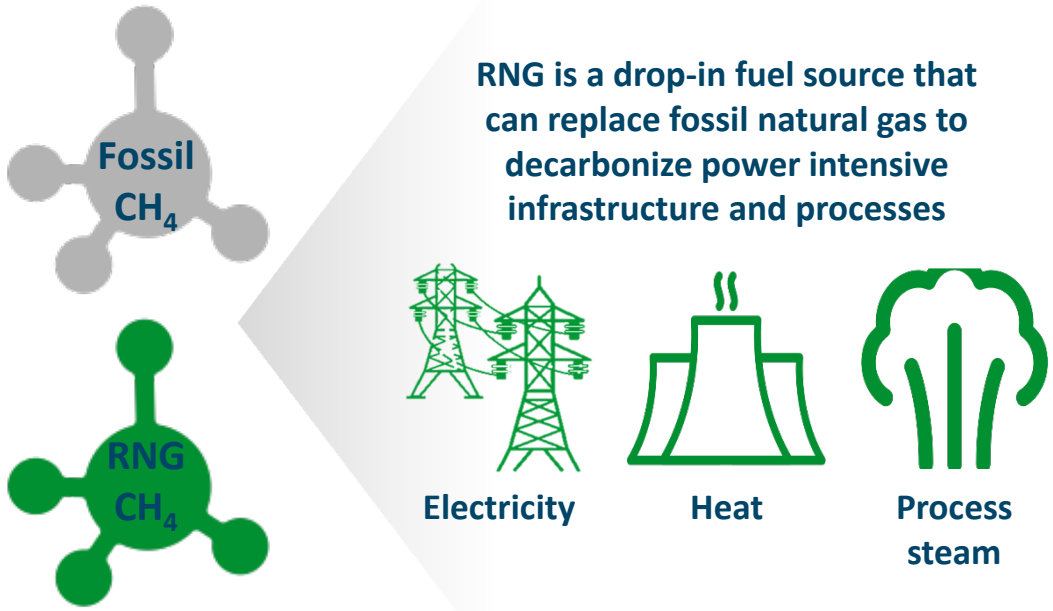
…while also meaningfully decarbonizing the transportation sector…



Dramatic increase in RNG utilization in California transportation fuels resulted in **~1.8 million metric tons of CO2 reduced** in 2021

…and existing natural gas infrastructure by displacing fossil fuels.

- Utilities, corporations, universities, and municipalities pursuing regulatory or voluntary carbon reduction goals can incorporate low-carbon, chemically-identical RNG into their existing natural gas infrastructure to displace fossil fuels and lower their carbon footprints
- This decarbonization solution requires no capital investment and is more economic than certain alternative decarbonization options (i.e., full electrification)



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Sources: California Air Resources Board, NGV America, RNG Coalition.

Appendix

Key Assumptions in Calculating Estimated Long-Term Annual Earnings Power

- Reflects estimated potential annual Adjusted EBITDA associated with our assets assuming all 88 projects in our development backlog, for which gas rights agreements are currently in place or are expected to be in place after closing the INGENCO acquisition, have been completed and ramped up to full flows
- Assumes cash flows from existing long-term, fixed-price offtake contracts (see slide 33 for additional details regarding volumes contracted) and assumes $1.50/gallon D3 RIN, $140/MT LCFS credit, and $3.00/MMBtu brown gas pricing for uncontracted volumes
- Operating costs reflect management expectations based on experience operating existing assets and with adjustments for plant size, location, and royalty provisions under gas rights agreements
- Does not include any impact from carbon capture and sequestration, carbon intensity reduction initiatives, or high probability opportunities in our RNG development pipeline
- Assumes electric power facilities remain in operation following construction of RNG plants on electric sites, with natural gas fuel cost of $3.00/MMBtu

Reconciliation of Non-GAAP Measures

In addition to disclosing financial statements in accordance with U.S. GAAP, this presentation contains non-GAAP financial measures. Adjusted EBITDA is a non-GAAP financial measure that we use to facilitate comparisons of operating performance across periods. Non-GAAP measures should be viewed as a supplement to and not a substitute for our U.S. GAAP measures of performance and the financial results calculated in accordance with U.S. GAAP and reconciliations from these results should be carefully evaluated.

Non-GAAP measures have limitations as an analytical tool and should not be considered in isolation or in lieu of an analysis of our results as reported under U.S. GAAP and should be evaluated only on a supplementary basis.

Adjusted EBITDA

Adjusted EBITDA is commonly used as a supplemental financial measure by Archaea's management and external users of its consolidated financial statements to assess the financial performance of its assets without regard to financing methods, capital structures, or historical cost basis. Adjusted EBITDA is not intended to represent cash flows from operations or net income (loss) as defined by U.S. GAAP and is not necessarily comparable to similarly titled measures reported by other companies.

Archaea believes Adjusted EBITDA provides relevant and useful information to management, investors, and other users of its financial information in evaluating the effectiveness of its operating performance in a manner that is consistent with management's evaluation of financial and operating performance.

Adjusted EBITDA is calculated by taking net income (loss), before taxes, interest expense, and depreciation, amortization and accretion, and adjusting for the effects of certain non-cash items, other non-operating income or expense items, and other items not otherwise predictive or indicative of ongoing operating performance, including gains and losses on disposal of assets, impairment charges, debt forbearance costs, net derivative activity, non-cash share-based compensation expense, and acquisition and other transaction costs, and severance costs. Archaea believes the exclusion of these items enables investors and other users of its financial information to assess its sequential and year-over-year performance and operating trends on a more comparable basis and is consistent with management's own evaluation of performance.

Adjusted EBITDA also includes adjustments for equity method investment basis difference amortization and the depreciation and amortization expense and income tax expense included in the Company's equity earnings from its equity method investments. These adjustments should not be understood to imply that Archaea has control over the related operations and resulting revenues and expenses of its equity method investments. Archaea does not control its equity method investments; therefore, it does not control the earnings or cash flows of such equity method investments. The use of Adjusted EBITDA, including adjustments related to equity method investments, as an analytical tool should be limited accordingly.

A reconciliation of expected full year 2022 Adjusted EBITDA to net income (loss), the closest U.S. GAAP financial measure, cannot be provided without unreasonable efforts due to the inherent difficulty in quantifying certain amounts, including share-based compensation expense, which is affected by factors including future personnel needs, and changes in fair value of warrant derivatives, due to a variety of factors including the unpredictability of underlying price movements, which may be significant.

Estimated Long-Term Annual Earnings Power

Estimated long-term annual earnings power is a non-GAAP financial measure. See "Reconciliation of Non-GAAP Measures" slide in the appendix for further details. Estimated long-term annual earnings power reflects estimated potential Adjusted EBITDA associated with our assets once all projects in our development backlog, or a specified subset of projects in our development backlog, for which gas rights agreements are currently in place or are expected to be in place after closing the INGENCO acquisition, have been completed and ramped up to full flows. See "Key Assumptions in Calculating Estimated Long-Term Annual Earnings Power" slide in the appendix for additional details. Certain assumptions regarding these estimates are inherently uncertain, and, as a result, our actual long-term earnings power may be different from this estimate, and such differences may be material. A reconciliation of estimated long-term annual earnings power to net income (loss), the closest U.S. GAAP financial measure, cannot be provided without unreasonable efforts due to the inherent difficulty in quantifying certain amounts, including share-based compensation expense, which is affected by factors including future personnel needs and the future price of our Class A common stock, and changes in fair value of derivatives, due to a variety of factors including the unpredictability of underlying price movements, which may be significant.

Reconciliation of Non-GAAP Measures

Adjusted EBITDA

The following table reconciles Adjusted EBITDA to net loss for the three months ended March 31, 2022:

(in thousands)	Three Months Ended March 31, 2022
Net Loss	$ (33,172)
Adjustments:	
Interest expense	2,653
Depreciation, amortization and accretion	12,490
EBITDA	$ (18,029)
Net derivative activity	19,915
Amortization of intangibles and below-market contracts	(1,103)
Amortization of equity method investments basis difference	2,571
Depreciation and amortization adjustments for equity method investments	1,594
Income tax expense for equity method investments	1,543
Share-based compensation	5,753
Acquisition and other transaction costs[1] and severance costs	8,335
Adjusted EBITDA	$ 20,579

(1) Other transaction costs include expenses related to certain joint ventures and the Ares secondary offering.

The following table reconciles pro forma Adjusted EBITDA to pro forma net loss for the twelve months ended December 31, 2021:

(in thousands)	Pro Forma Twelve Months Ended December 31, 2021
Pro Forma Net Loss	$ (77,449)
Adjustments:	
Interest expense	23,149
Depreciation, amortization and accretion	44,832
EBITDA	(9,468)
Net derivative activity	110,162
Amortization of intangibles and below-market contracts	(5,071)
Amortization of equity method investments basis difference	10,518
Depreciation and amortization adjustments for equity method investments	5,906
Share-based compensation	5,071
Gain on disposal of assets	(1,347)
Gain on extinguishment of debt	(61,411)
Acquisition transaction costs	22,669
Actuarial gain on postretirement plan	(917)
Pro Forma Adjusted EBITDA	$ 76,112

Archaea Asset Overview

RNG Production Facilities

Site	Location
Assai	Dunmore, PA
Boyd County Landfill	Ashland, KY
Butler	David City, NE
Canton (JV)	Canton, MI
KC LFG	Johnson County, KS
North Shelby (JV)	Millington, TN
Oklahoma City	Oklahoma City, OK
SE Oklahoma City (JV)	Oklahoma City, OK
Seneca Gas	Waterloo, NY
South Shelby (JV)	Memphis, TN
Soares (Dairy, JV)	Madera, CA
SWACO	Grove City, OH

Electricity Production Facilities

Site	Location
Athens-Clarke	Winterville, GA
Colonie	Cohoes, NY
County Line	Argos, IN
DANC	Rodman, NY
Emerald	Graham, WA
Erie	Erie, CO
Fulton	Johnstown, NY
Hernando County	Brooksville, FL
Hickory Meadows (JV)	Hilbert, WI
Johnston	Smithfield, NC
Model City	Youngstown, NY
Modern	Youngstown, NY
Ontario	Stanley, NY
PEI Power	Archbald, PA
Rochelle	Rochelle, IL
Sarasota	Nokomis, FL
Seneca Power	Waterloo, NY
Sunshine Canyon (JV, non-operated)	Sylmar, CA
TRG	Church Hill, TN

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Note: As of April 30, 2022. Facilities are owned through Archaea wholly-owned entities or joint ventures. Excludes electricity production facilities associated with pending acquisition of INGENCO, which is expected to close during the third quarter of 2022.

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