



AEMETIS

OCTOBER 2021

Aemetis Inc.

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## **Forward-Looking Statements**

This presentation contains forward-looking statements, including statements regarding our assumptions, projections, expectations, targets, intentions or beliefs about future events or other statements that are not historical facts. Forward-looking statements in this presentation include, without limitation, statements relating to our five-year growth plan, future growth in revenue and net income, the market size for our products, expansion into new markets, our ability to commercialize and scale licensed patented technology, the ability to obtain sufficiently low Carbon Intensity scores to achieve below zero carbon intensity transportation fuels, the development of the Aemetis Carbon Zero 1 plant at the Riverbank site, the upgrades to the Aemetis Keyes ethanol plant, the development of our carbon capture and sequestration projects, and the ability to access the funding required to execute on project construction and operations. Words or phrases such as “anticipates,” “may,” “will,” “should,” “believes,” “estimates,” “expects,” “intends,” “plans,” “predicts,” “projects,” “showing signs,” “targets,” “will likely result,” “will continue,” “enable” or similar expressions are intended to identify forward-looking statements. These forward-looking statements are based on current assumptions and predictions and are subject to numerous risks and uncertainties. Actual results or events could differ materially from those set forth or implied by such forward-looking statements and related assumptions due to certain factors, including, without limitation, competition in the ethanol, biodiesel and other industries in which we operate, commodity market risks including those that may result from current weather conditions, financial market risks, customer adoption, counter-party risks, risks associated with changes to federal policy or regulation, and other risks detailed in our reports filed with the Securities and Exchange Commission (the “SEC”), including our Annual Report on Form 10-K for the year ended December 31, 2020, and in our subsequent filings with the SEC. We are not obligated, and do not intend, to update any of these forward-looking statements at any time unless an update is required by applicable securities laws.

## **Industry Data and Forecasts**

This document includes industry data and forecasts that we obtained from industry publications, public filings and internal Company sources. Industry publications and forecasts generally state that the information contained therein has been obtained from sources believed to be reliable, but there can be no assurance as to the accuracy or completeness of included information. We have not independently verified any of the data from third-party sources, nor have we ascertained the underlying economic assumptions relied upon therein. While we are not aware of any misstatements regarding our industry data presented in this document, our estimates involve risks and uncertainties and are subject to change based on various factors, including those discussed under the heading “Forward-Looking Statements” above. The Company does not guarantee the accuracy or completeness of such information contained in this document.

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# Introduction



# Today's Presenters



## **Eric McAfee** - Chairman of the Board and CEO

- Founder of *Aemetis* (NASDAQ: *AMTX*) and co-founder of *Alto Ingredients* (NASDAQ: *ALTO*)
- Founding shareholder of oil production company *Evolution Petroleum* (NYSE: *EPM*)
- Founded eight public companies and funded twenty-five private companies as principal investor



## **Todd Waltz** - EVP and CFO

- Joined Aemetis in 2007
- Served in senior financial management roles with Apple for 12 years
- Ernst & Young CPA

## An integrated energy transition platform

### Key Highlights

~\$610mm market cap (NASDAQ: AMTX) <sup>(1)</sup>	Delta Airlines to offtake <b>250 million gallons</b> of Sustainable Aviation Fuel over <b>10 years</b>	~\$300mm+ in assets at build cost <sup>(2)</sup>
<b>2 operating</b> biofuel plants	<b>1 planned</b> biofuel plant	<b>2 operating</b> RNG digesters & <b>15</b> more planned by year-end 2022

#### Mission

Replace high carbon intensity petroleum products with “**Below Zero**” **renewable fuels and byproducts** to reverse Climate Change caused by greenhouse gases warming our planet

#### Strategy

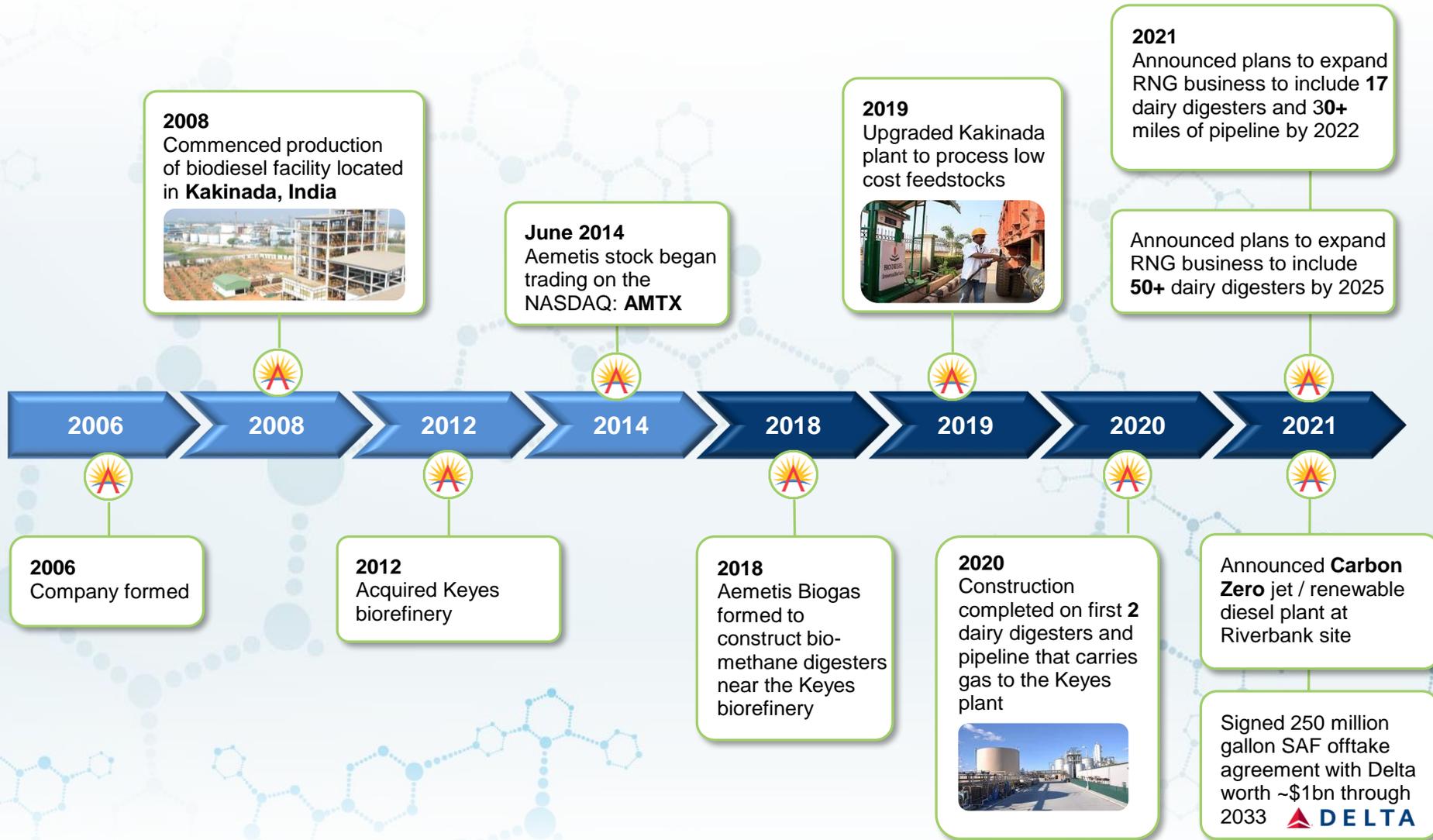
Lead the renewable fuels industry transition to **Below Zero Carbon Intensity** inputs from nonfood, low cost agricultural and forest waste sources to maximize California Low Carbon Fuel Standard (LCFS), US Renewable Fuel Standard (RFS), and IRS 45Q credit values

### Segment Summary

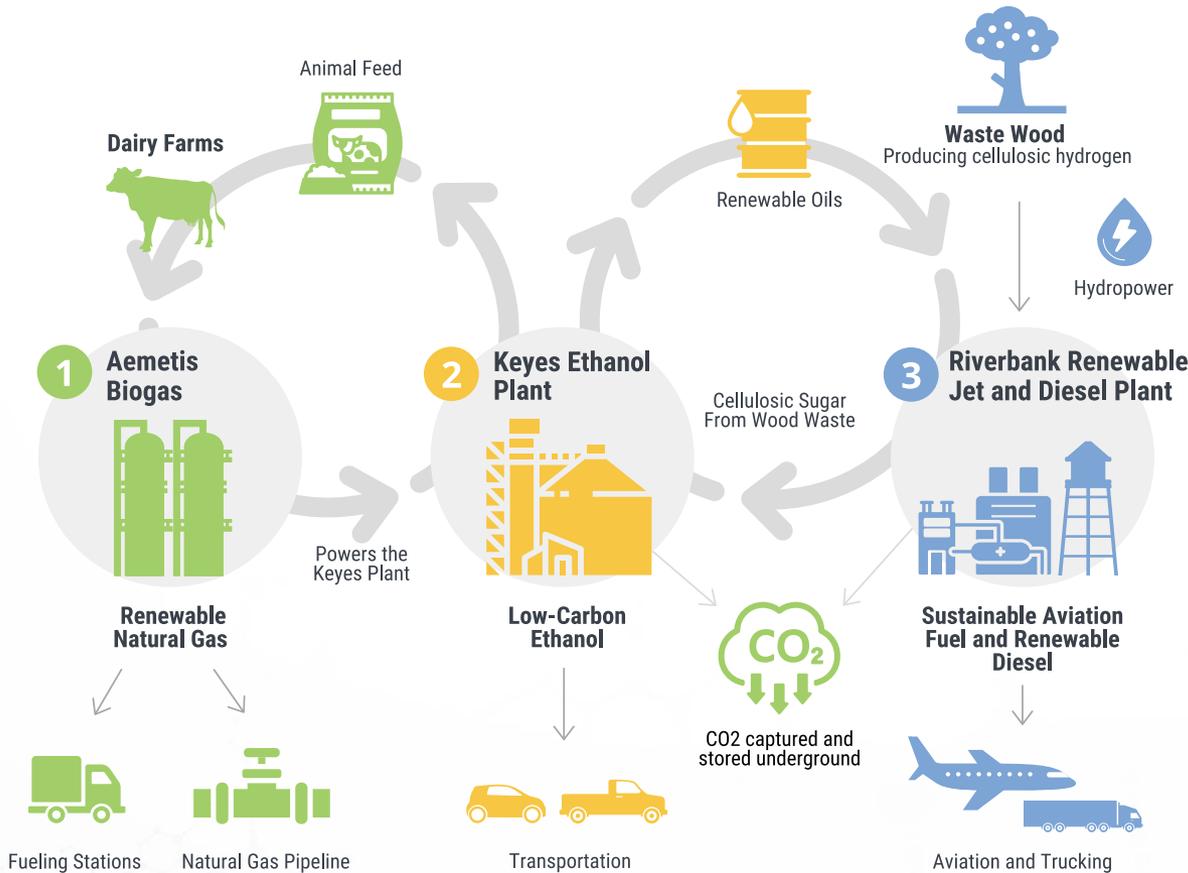
 Dairy RNG	 Renewable Jet / Diesel	 California Ethanol	 India Biodiesel	 Carbon Capture
<ul style="list-style-type: none"> <li>Operates biomethane digesters at dairy farms connected by pipeline to a gas cleanup and compression facility at existing ethanol plant to produce -426 CI RNG</li> </ul>	<ul style="list-style-type: none"> <li>Construction underway on a renewable Jet / Diesel refinery with an initial production capacity of 45 mgy</li> <li>Plans to expand production capacity to 90 mgy by 2025</li> </ul>	<ul style="list-style-type: none"> <li>Located in Keyes, CA with a capacity of 65 mgy of low carbon fuel, ~2mm pounds / day of animal feed to ~120,000 dairy cows at ~80 dairies in the Central Valley, CA</li> </ul>	<ul style="list-style-type: none"> <li>Own and operate an integrated fuels and chemical production facility in Kakinada, India with nameplate capacity of ~50 mgy</li> <li>Plans to expand capacity to 100 mgy by 2024</li> </ul>	<ul style="list-style-type: none"> <li>Capture, dehydrate, compress and sequester CO<sub>2</sub> from Aemetis and third-party suppliers</li> </ul>

(1) As of October 20, 2021.  
 (2) As of Q2 2021.

# Aemetis Evolution



**Integrated value chain supports growth while minimizing technology and execution risk**



## Aemetis Leverages Existing Plants, Infrastructure, and Relationships to Expand its Low-Carbon Biofuel Business

- 1 Aemetis Biogas**  
 Dairy cows consume the animal feed from the Aemetis plant, producing manure, which naturally creates methane. Aemetis dairy digesters capture this methane and pipe the gas to the Aemetis plant for further clean-up and conversion into renewable natural gas. By avoiding the release of methane into the atmosphere, this carbon negative gas is used as transportation fuel, further reducing the consumption of petroleum..
- 2 Keyes Ethanol Plant**  
 The Keyes facility produces about 65 million gallons a year of ethanol, animal feed, and distillers corn oil. The animal feed produced here feeds local dairy cows.
- 3 Riverbank Renewable Jet & Diesel Facility**  
 Renewable oils and orchard wood waste, is used as a feedstock for the production of renewable jet and diesel fuel using zero carbon hydroelectric power.

# Current Capitalization and Price Performance

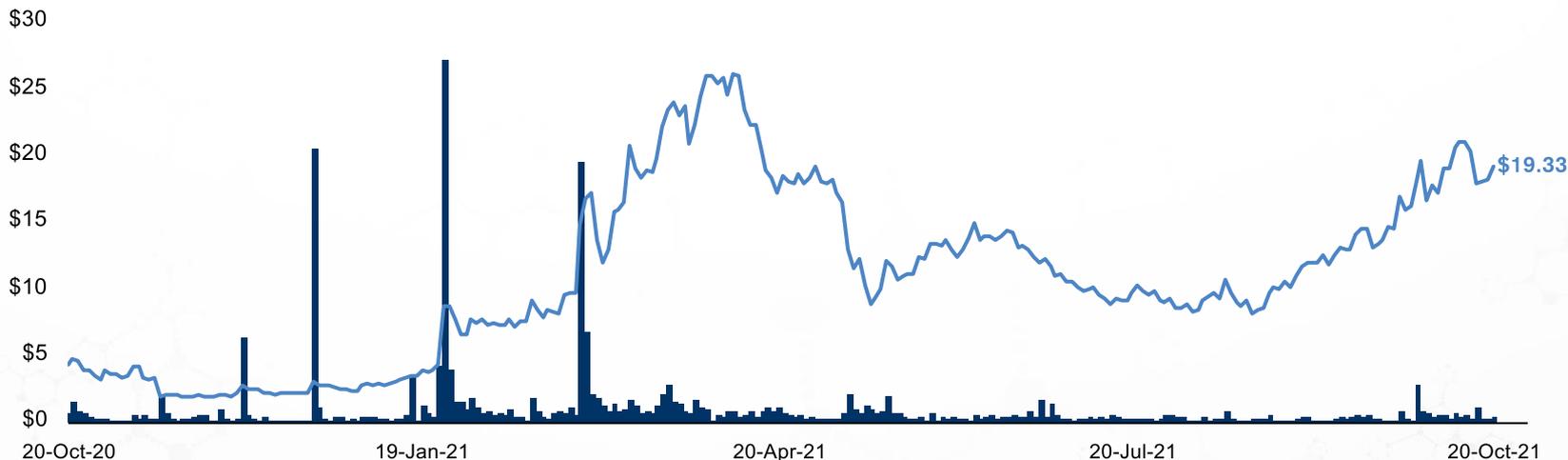


## Company may look to opportunistically refinance existing debt and fund new projects

(\$ in millions)

	As reported 6/30/21
Cash and cash equivalents	\$7
Revolving Credit Facility	
Third Eye Capital non-revolving revolving notes	\$57
Third Eye Capital acquisition notes	19
Third Eye Capital revenue participation notes	12
Third Eye Capital revolving portion of revolving notes	18
Third Eye Capital redemptive event	8
<b>Total secured debt</b>	<b>\$113</b>
Subordinated debt (Lies, Orsak and Cilion)	20
EB-5 promissory note	42
Term loans on capital expenditures	6
Reserves for other liabilities	18
<b>Total unsecured debt</b>	<b>\$86</b>
<b>Total debt</b>	<b>\$199</b>
Third Eye Preferred Unit Purchase Agreement (optional redemption)	90
<b>Market value of equity (as of October 20, 2021)</b>	<b>613</b>
<b>Total capitalization</b>	<b>\$902</b>

## AMTX Price Performance



Source: FactSet and company filings as of 10/20/2021.

# Market Backdrop

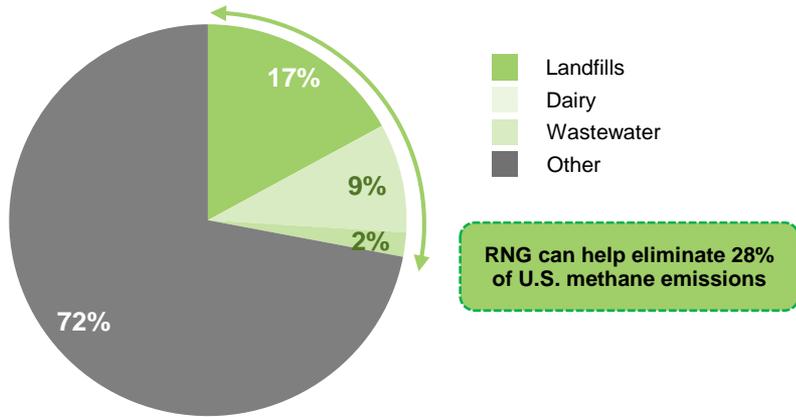


# RNG is a Net-Zero Fuel Available Now



RNG is an attractive energy source: it has an immediate and positive impact on climate change

## U.S. Methane Emissions



### Sustainable

RNG has a low to negative carbon intensity and helps to address the problem of methane emissions by capturing emissions that would previously be emitted



### Perpetual & abundant feedstock

RNG is produced from renewable feedstocks which allows for production and consumption to be sustained indefinitely with no intermittent issues like other renewable energy sources



### Existing infrastructure in place

RNG is a pipeline quality gas that fits existing natural gas infrastructure, making for a seamless transition



### Global demand

There is a growing, global commitment to achieve net zero emissions by 2050 from governments, businesses and investors

## Regulatory Framework Supporting RNG

### Renewable Fuel Standard (RFS)

- Congressionally mandated in 2005, RFS requires the incorporation of renewable content into transportation fuels
- Production and dispensing of renewable fuels creates RIN credits – the “currency” of the RFS program
- Aemetis produces cellulosic biofuels, which qualify for D3 RINS – the most valuable RIN

### Low Carbon Fuel Standard (LCFS)

- California’s LCFS is a market-based program intended to reduce the CI score of transportation fuel
- Fuels that exhibit lower CI than targets established by CARB generate lucrative LCFS credits
- RNG from dairy facilities like those owned by Aemetis produce the highest carbon credits by volume given the ultra-low CI score of Aemetis RNG

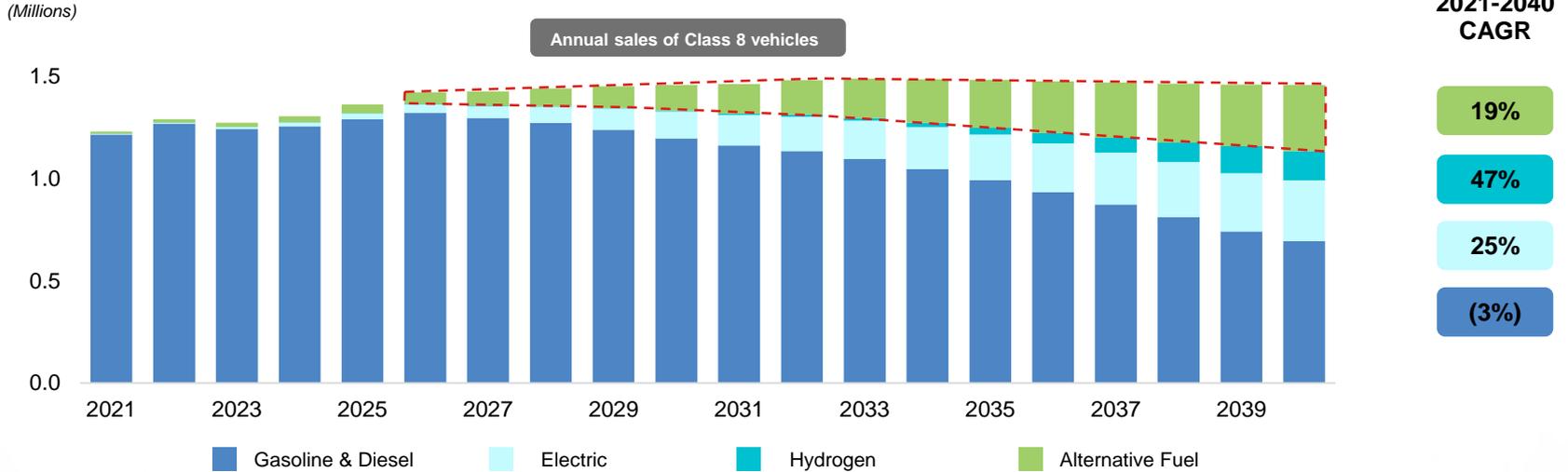
Source: United States Environmental Protection Agency (EPA).

# Strong Demand Drivers for RNG



Transportation, utility and energy platforms are going low-carbon: RNG is a solution

## RNG Will Power Growth in Alternative Fuel Heavy-Duty Vehicles



## Support for RNG Across Utility & Energy Platforms



New sustainable solutions for freight transportation and working on testing a number of new vehicle types including electric, CNG and others



Partnering with dairy farms in Maine to produce RNG and supplement state's residential load



Use of RNG is a critical part of UPS's strategy to increase alternative fuel consumption to be 40% of total ground fuel purchases by 2025



Hypertruck is the only electric Class 8 vehicle that can achieve a net-negative greenhouse gas emissions footprint using RNG



Working to increase the amount of RNG in their systems to help customers reduce carbon emissions



SoCalGas and SDG&E to offer voluntary RNG Tariff scheme to residential and commercial customers

Source: Bloomberg New Energy Finance and publically announced available news and press releases.

# Renewable Diesel is a Low-Carbon Alternative

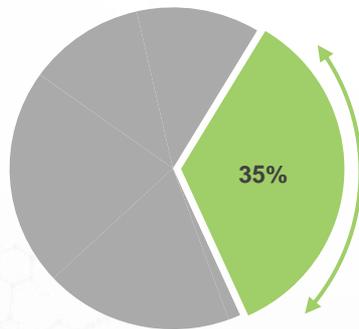


## Renewable diesel is key to decarbonizing the global liquid fuel pool



	2030 GHG Emissions Reduction Target	Net-Zero GHG Emissions Target	Primary Transportation Fuel Policy Mechanism	2030 Liquid Fuels Goal
California	40%	Net-zero by 2045	Low Carbon Fuel Standard (LCFS)	Reduce the carbon intensity of transportation fuels by at least 20%
Canada	30%	Net-zero by 2050	Clean Fuel Standard (CFS) – enforcement expected 2022	Reduce the carbon intensity of transportation fuels by 10-12%
EU	40%	Net-zero by 2050	Renewable Energy Directive II (RED II)	Replace 14% of transport fuels with biofuels
Other Policies in Place	<ul style="list-style-type: none"> <li>Washington state announced a low-carbon fuel standard that will be implemented from 2023</li> <li>Oregon is matching California's GHG reduction target and has an LCFS policy in place</li> <li>British Columbia and Ontario have existing low-carbon fuels policies</li> <li>Sweden is implementing a 21% GHG reduction mandate for diesel by 2020 and aims for 50% of transport fuels to be biofuels by 2030</li> <li>Finland aims for 30% of transport fuels to be biofuels by 2030</li> </ul>			
Potential Policies	<ul style="list-style-type: none"> <li>New York introduced legislation that would require net-zero emissions by 2050 with the possibility of LCFS legislation</li> <li>Certain Midwest states and Colorado are exploring similar renewables mandates</li> </ul>			

### 2021 YTD LCFS Credit by Fuel Type



Renewable diesel is helping to accelerate decarbonizing California's fuel pool

### Major U.S. Refiners are Investing in Renewable Diesel

	Asset location	Capacity (MGY)	Start-up date
	Dickinson, ND	184	2021
	Rodeo, CA	120	2021
	Artesia, NM	200	2022
	Port Arthur, TX	470	2024

Sources: CARB, company press releases and public press releases.

# Sustainable Aviation Fuel (SAF) Overview



SAF is available today as a drop-in blendstock solution to low-carbon air travel



## Investment in SAF is Gaining Significant Traction From Public and Private Capital



STONEPEAK



Aemetis signed a 250 million gallon SAF offtake agreement with Delta Airlines worth ~\$1bn through 2033

Established a strategic alliance with **Axens North America** to develop and produce sustainable ethanol-to-jet projects in the U.S.

Signed a \$600mm equity commitment MOU to **Northwest Advanced Bio-Fuels** to advance their SAF project in Washington State

In September 2021 pledged to produce 2 million tons of SAF by 2025 – the largest and most aggressive target set by oil majors to date

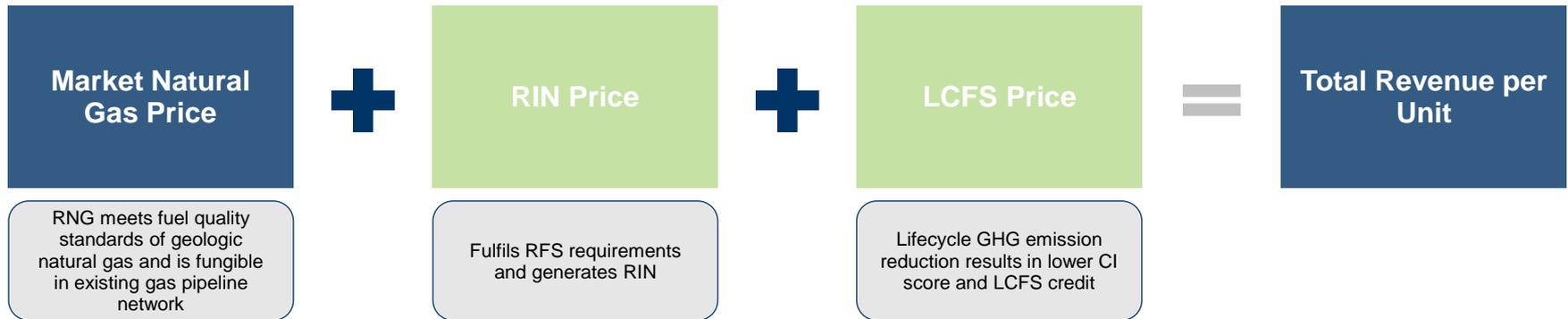
Signed an agreement with **Southwest Airlines** to supply ~3 millions gallons per year of blended SAF

Signed an agreement with **FedEx** to supply the carrier with 3 million gallons per year of SAF

Sources: Company press releases.

# Unit Economics of RNG

## RNG Illustrative Unit Economics



## Illustrative Revenue per MMBtu<sup>(1)</sup>



(1) Assumes D3 RIN price of \$2.92 and LCFS credit price of \$215 / MT. A detailed description of LCFS and RIN credit calculations is found in the appendix.

# Investment Thesis



1 Highly Experienced Management Team

2 Diversified Approach to Low-Carbon Fuels

3 Low Execution Risk With Proven Technology

4 Durable Counterparty Relationships De-Risk Business Plan

5 High Visibility to Expansion

6 Favorable Regulatory Tailwinds Support Cash Flow Visibility

# 1 Highly Experienced Management Team



**Eric McAfee** - Chairman of the Board and CEO

- Founder of *Aemetis* (NASDAQ: AMTX) and co-founder of *Alto Ingredients* (NASDAQ: ALTO)
- Founding shareholder of oil production company *Evolution Petroleum* (NYSE: EPM)
- Founded eight public companies and funded twenty-five private companies as principal investor



**Todd Waltz** - EVP and CFO

- Joined Aemetis in 2007
- Served in senior financial management roles with Apple for 12 years
- Ernst & Young CPA



**Andy Foster** - EVP and President, Aemetis Advanced Fuels

- Joined Aemetis in 2006
- Senior executive at three Silicon Valley tech companies
- Served in the George H.W. Bush White House (1989-1992) as Associate Director of the Office of Political Affairs
- Deputy Chief of Staff for Illinois Governor Edgar for five years



**Sanjeev Gupta** - EVP and President, Aemetis International

- Joined Aemetis in 2007
- Previously head of petrochemical trading company with \$250 million of annual revenue and offices on several continents



**Lydia Beebe** – Former 38 years at Chevron, including Senior Chevron Corporate Officer for 20 years

**John Block** – Former U.S. Secretary of Agriculture from 1981-86 under President Reagan

**Fran Barton** - Former CFO of five high tech companies with revenues more than \$1 billion

**Naomi Boness, PhD** – Head of Stanford Univ Natural Gas Initiative; former Chevron project planning and strategy

**Timothy Simon, Esq.** – Former California Public Utilities Commissioner (CPUC)

## 2 Diversified Approach to Low-Carbon Fuels

	<b>Dairy RNG</b> 	<b>Renewable Diesel / Jet</b> 	<b>California Ethanol</b> 	<b>India Biodiesel</b> 
<b>Business Description</b>	<ul style="list-style-type: none"> <li>Operates dairy farm biomethane digesters connected to cleanup / compression facility at existing ethanol plant</li> </ul>	<ul style="list-style-type: none"> <li>Building renewable diesel / jet refinery in Riverbank, CA to use cellulosic hydrogen and hydro-electricity</li> </ul>	<ul style="list-style-type: none"> <li>Owns and operates 65 mgy ethanol plant in Keyes, CA</li> </ul>	<ul style="list-style-type: none"> <li>Owns and operates an integrated fuels and chemical production facility in Kakinada, India with nameplate capacity of ~50 mgy</li> </ul>
<b>Current Operational Assets</b>	2 dairy digesters, 4 mile pipeline, biogas boiler ("Phase I")	NA	65 mgy ethanol plant in Keyes, CA	3 refining units (biodiesel, glycerine, edible oil)
<b>Future / Expansion Assets</b>	<p><b>Phase II:</b> 15 additional dairy digesters, 30 mile pipeline, gas cleanup, utility, RNG station</p> <p><b>Phase III:</b> 35 additional dairy digesters, pipeline, gas cleanup, utility pipeline injection</p>	<p>45 mgy cellulosic hydrogen renewable diesel / jet refinery in Riverbank, CA ("Carbon Zero") anticipated 2024</p> <p>Plans to expand the facility to a capacity of 90 mgy by 2025</p>	<p>Solar array with battery storage</p> <p>Mechanical Vapor Recompression</p> <p>ZEBREX Mitsubishi ceramic dehydration</p>	Plans to double capacity of the asset by 2024
<b>Carbon Capture Planned</b>	Yes	Yes	Yes	No
<b>2022E-2023E Capex</b>	\$106mm	\$376mm <sup>(1)</sup>	\$37mm	\$18mm

Note: Based off Aemetis 2021 Business Plan, subject to change.  
 (1) Capex projections includes spend associated with planned RD / jet asset expansion.

# 3 Low Execution Risk With Proven Technology

## Dairy RNG

## RD / SAF

## California Ethanol

- Primary Feedstock**  

- Byproducts**  

- Technology Type**  

- Technology Partners**  

- Worldwide Adoption**  

- Supplemental Revenue**  


- Dairy biogas

- Almond orchard waste (producing renewable cellulosic hydrogen)
- Renewable Oils

- Renewable Starches

- CO<sub>2</sub>

- CO<sub>2</sub>
- Renewable Naptha

- CO<sub>2</sub>
- Wet Distiller's Grain
- Renewable Oil
- Condensed Distillers Solubles

Anaerobic biodigester with **lagoon and skid** mounted cleanup connected to pipeline

**Vegan® technology** hydrotreats oil and biomass to produce SAF jet and renewable diesel

Mitsubishi **ZEBREX** membrane dehydration, fermentation & distillation, oil separation, solar & hydro electricity



Hartman has engineered more biodigesters than any other firm in California

Axens technology is licensed at more than 3,000 industrial units worldwide

Globally recognized, leading bio-based sustainable solutions technology companies

CO<sub>2</sub> monetized through AMTX carbon-capture business

CO<sub>2</sub> monetized through AMTX carbon-capture business  
Renewable naptha sold to refiners

CO<sub>2</sub> monetized through AMTX carbon-capture business  
Other byproducts are sold into animal feed market

# 4 Durable Counterparty Relationships De-Risk Business Plan



## Dairy RNG

- Aemetis has spent years building strong relationships with local dairy farms
  - Company currently supplies animal feed to **120,000 dairy cows at ~80 dairies** in California's Central Valley
- The Dairy RNG 5-year program is premised on **only 65%** of Aemetis' dairy relationships participating
- Dairies sign **20-year leases with 10-year option**
  - Aemetis believes local dairy farmers will **prefer what they already know** – giving us the advantage

## Low-Carbon Ethanol & Renewable Jet / Diesel

- Aemetis has partnered with trusted EPC, technology, and offtake providers to deliver on its potential for low carbon biofuels

**Engineering & Service**

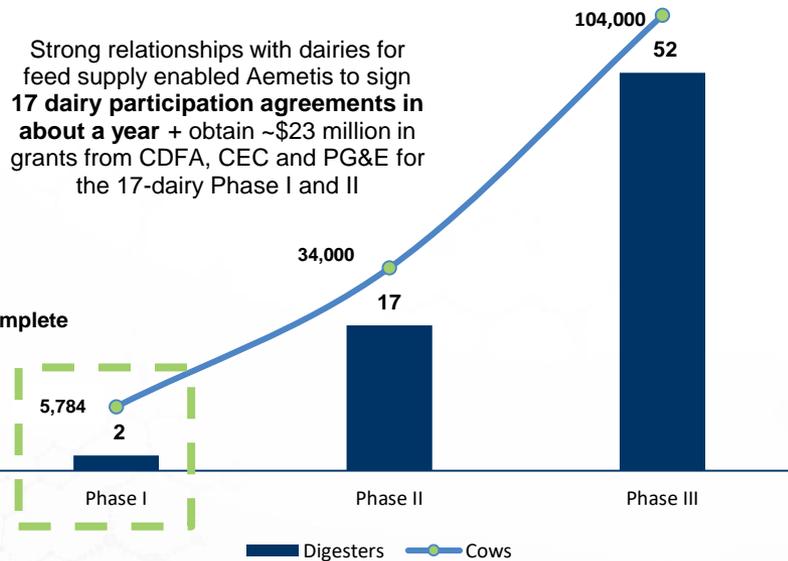
 Process Engineer	 Engaged to provide front-end engineering, design, and project management services	 Owners Engineer
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**Technology**

 License, catalyst, and equipment for renewable hydroprocessing	 Exclusive rights for advanced waste wood gasification technology	 Syngas fermentation technology
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**Purchase & Offtake**

 10 year, \$1 billion, 250mm gallon sustainable aviation fuel offtake agreement	 \$250mm low-carbon biofuels offtake agreement	 \$2 billion animal feed supplier
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Note: Based off Aemetis 2021 Business Plan, subject to change. Counterparties indented to be represented rather than comprehensive.

# 5 High Visibility to Expansion

	2020	2021	2022	2023	2024	2025
 <b>RNG Digesters Added</b>	2	2	13	10	12	13
 <b>Total RNG Digesters</b>	2	4	17	27	39	52
 <b>Miles of Pipeline Added</b>	4	8	24	5	6	7
 <b>MMBtu / Year<sup>(1)</sup></b>	55,539	111,077	472,078	749,772	1,083,003	1,444,005
 <b>Jet / Diesel Fuel (mgy)</b>					45.2	90.4
 <b>India Biodiesel (mgy)</b>	50.0	50.0	50.0	50.0	100.0	100.0

(\$ in millions)

- Renewable Diesel / Jet capex
- California ethanol capex
- Biogas capex
- India biodiesel capex



Note: Based off Aemetis 2021 Business Plan, subject to change.  
 (1) Represents run-rate capacity at end of each period.

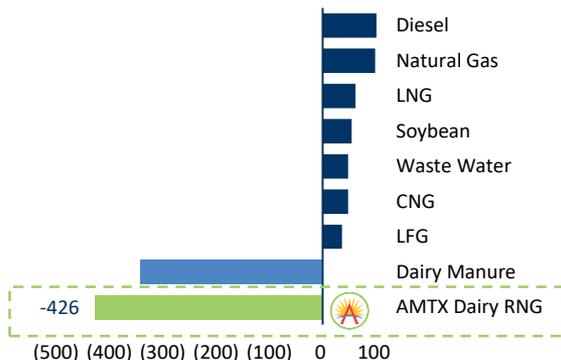
# 6 Favorable Regulatory Tailwinds Support Cash Flow Visibility



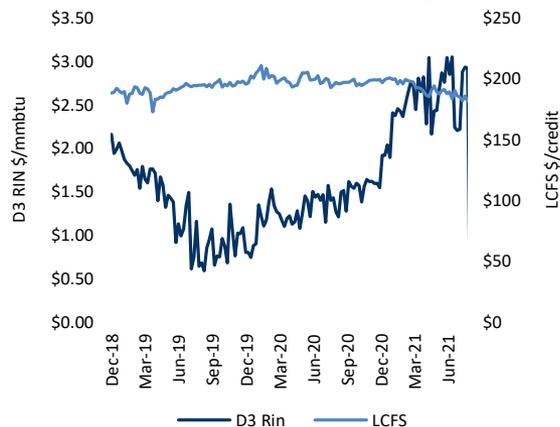
## Key Highlights

- Federal and state programs allow for Aemetis' renewable fuel to be sold at a premium to conventional products
  - The RFS program requires refiners or producers of gas or diesel to blend a renewable fuel or acquire a credit ("RIN") to satisfy its Renewable Volume Obligation ("RVO")
  - Under the LCFS Program, credits (based on CI score) are created by renewable fuel producers and used by oil refineries to offset obligation incurred by the production of non-renewable fuel
  - The Blender's Tax Credit provides qualified producers a \$1.00 per gallon tax credit when biodiesel or renewable diesel is blended with petroleum diesel for use in trade or business
- Recently proposed federal legislation would additionally provide for:
  - Direct payment option under 45Q for reimbursement of carbon capture facilities
  - Under the Sustainable Aviation Fuel Tax Credit, producers would qualify for \$1.25 – \$1.50 for each gallon of SAF that achieves at least a 50% life cycle GHG emission reduction compared with petroleum-based jet fuel

## Average CI Pathway Values



## Historical RIN/LCFS Pricing



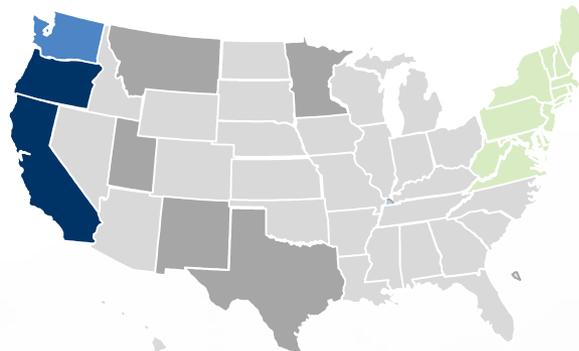
## Policies and regulations supporting RNG

### Washington

Passed legislation to develop a carbon pricing scheme that has been partially upheld by the state supreme court to only apply to direct emitters. The actual details are still being decided.

### Oregon

The Clean Fuels Program is very similar to the California LCFS program, with CI scores and credits/deficits generated. In March 2020, an executive order to take further action to reduce emissions was enacted. Updated requirements expected to begin in 2022



- LCFS-type program implemented
- LCFS-type program passed
- RGGI carbon cap-and-trade
- Legislation proposed recently

### RGGI Members: CT, DE, MA, MD, ME, NH, NJ, NY, PA<sup>(1)</sup>, RI, VA, VT

The Regional Greenhouse Gas Initiative was established in 2005 and operates as a regional cap-and-trade program for power plants. Power plants over 25MW are required to comply with the cap and purchase offsets. Avoided agricultural methane through RNG production and landfill methane capture are qualifying offsets that provide carbon allowances based on avoided emissions.

Source: American Gas Foundation, EPA, California Air Resources Board, Center for Climate and Energy Solutions, Wall Street Research.  
 (1) PA currently undergoing rulemaking process to join RGGI.

# Segments Overview

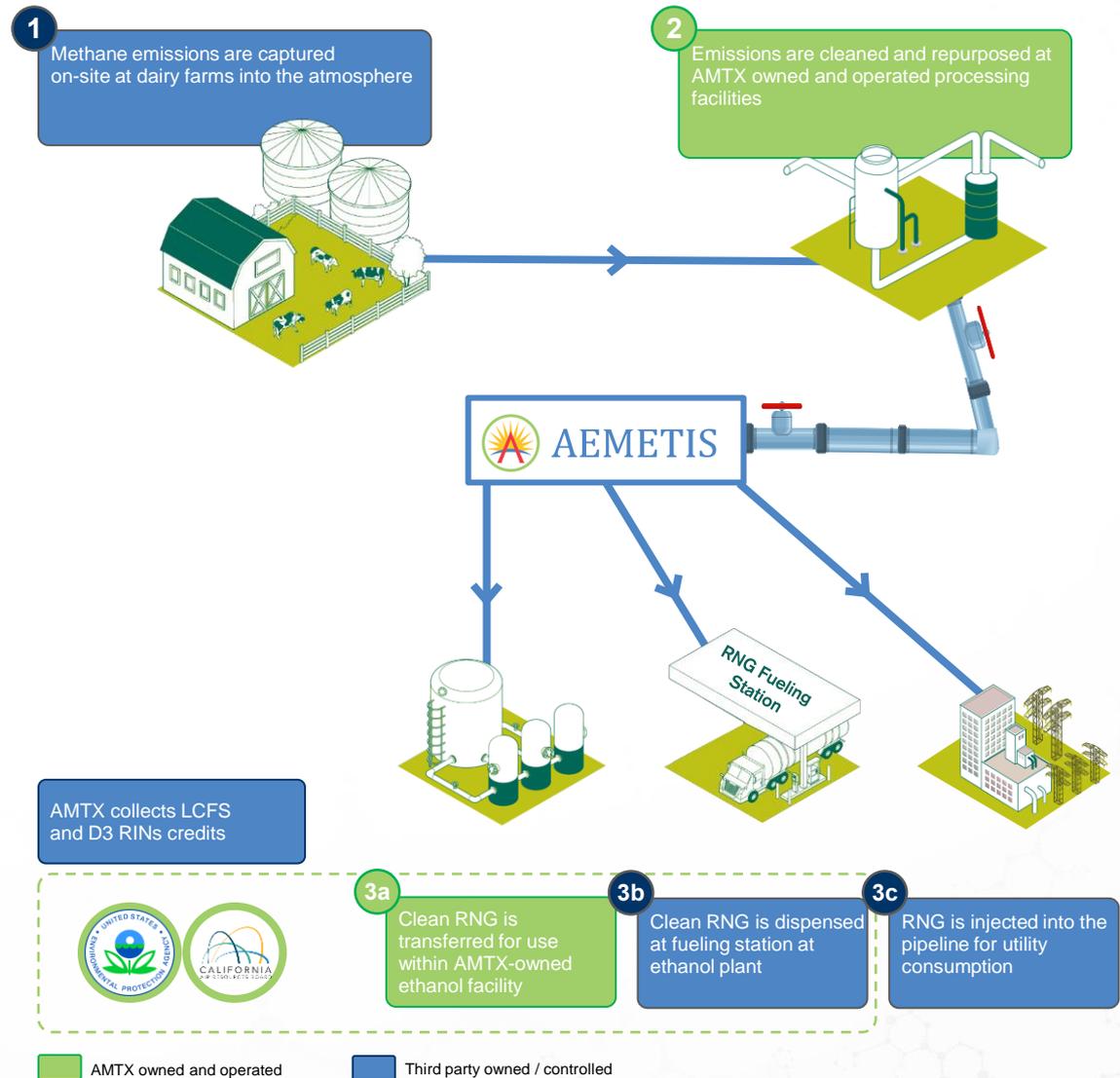


# Dairy Renewable Natural Gas



## Overview

- Construction of biomethane digesters at nearby dairy farm locations
- Digesters are connected by pipeline to gas cleanup and compression facility at existing AMTX ethanol plant
- Biogas is scrubbed and compressed into renewable natural gas (RNG) and offers a low carbon-intensity (CI) alternative transportation fuel
- Strong demand exists for low CI RNG through placement into one of several end markets
  - Inject into PG&E gas pipeline adjacent to Keyes plant
  - Use in ethanol plant to lower carbon intensity and produce Low Carbon Fuel Standard (LCFS) credits
  - Sell directly to local truck fleets including those serving the Keyes plant and local dairies
- Attractive 35 year supply agreements with local dairy farms where AMTX leases land but owns the digesters and H<sub>2</sub>S cleanup units
  - Dairy owners are paid based on the manure supplied



# Renewable Diesel / Jet Fuel

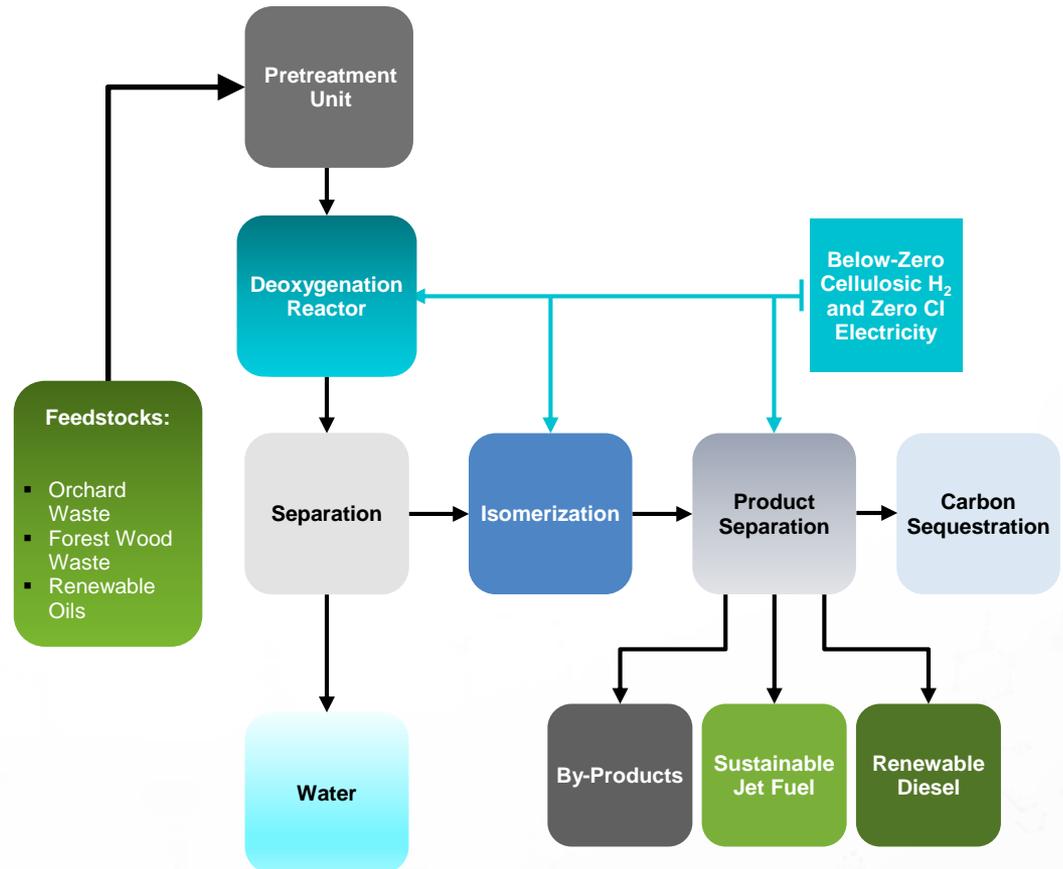


As a chemically identical replacement for traditional petroleum diesel, RD is poised for growth beyond its current production

## Overview

- The 'Carbon Zero' biorefinery will be located at the former Army Ammunition Plant on a 125-acre site in Riverbank, CA
- Plant will process waste wood from almond orchards to produce cellulosic hydrogen
  - At -80 carbon intensity, cellulosic hydrogen is a significant advantaged feedstock relative to petroleum natural gas hydrogen fuel
  - Secured 20 year agreements with local orchards to supply plant with 130,000 tons of wood waste per year at a fixed rate of ~\$20 per ton
- Trucks transporting waste wood to the asset will be fueled with RNG supplied by Aemetis' RNG project
- Engineering is currently underway with operations expected to begin in late 2024 and expected capacity of ~45 million gallons per year of renewable jet and diesel fuel
  - Expansion of the plant is planned to continue through 2025, bringing plant capacity to 90 million gallons per year
- Recently executed 10-year, 250mm gallon SAF offtake agreement with Delta worth ~\$1bn through 2033

## Advanced Technology Creates RD and SAF While Lowering CI



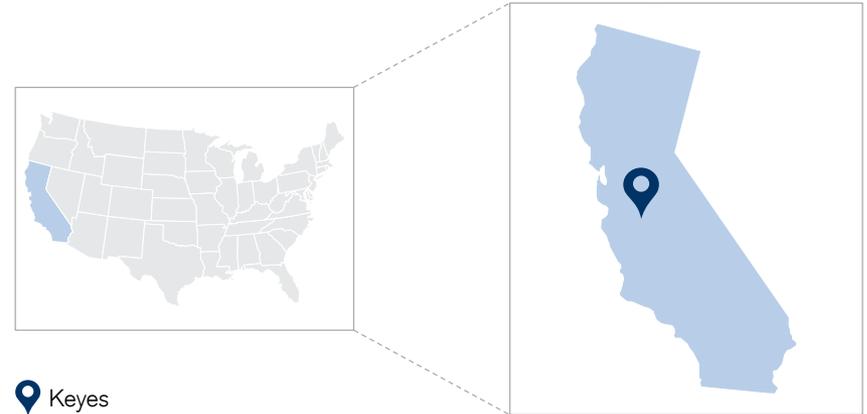
# California Ethanol Plant



## Overview

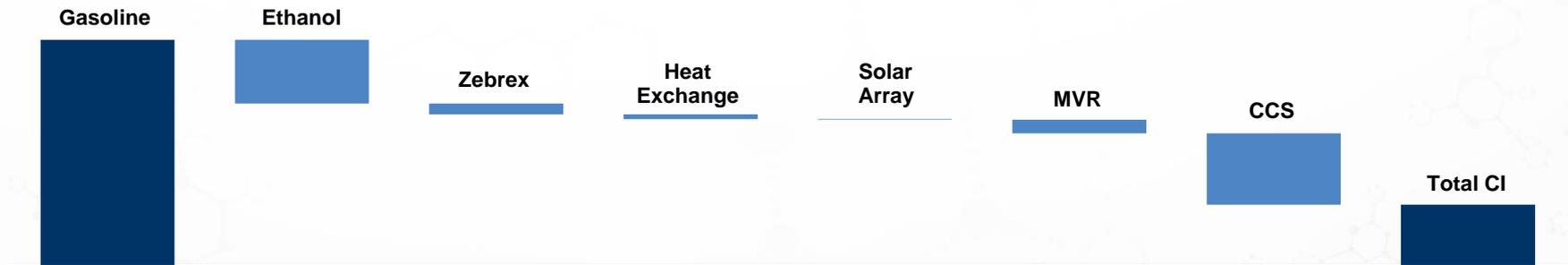
- Aemetis owns and operates a 65 million gallon per year (MGY) ethanol plant in Keyes, CA
  - Along with ethanol, the Keyes plant produces high-grade alcohol, CO<sub>2</sub>, wet distillers grains (“WDG”), distillers corn oil (“DCO”) and condensed distillers solubles (“CDS”)
  - CO<sub>2</sub> produced from the Keyes plant is sold for liquification and delivery into local markets, already generating 45Q reuse credits
- Aemetis is currently upgrading its facilities to reduce their carbon intensity
  - Increased efficiency utilizing recompression equipment and electric-powered dehydration systems will reduce natural gas consumption by 85% by 2022
  - An integrated solar-powered microgrid system and battery storage solution provide green power to the asset

## Asset Map



## Carbon Intensity Pathway Reduction

Upgrades to the ethanol facility will reduce the CI score of AMTX ethanol by **~75%** and result in greater LCFS credit generation



Note: Ethanol production and sales figures are inclusive of alcohol sales and production. Other revenue is inclusive of corn oil sales, condensed distillers solubles, LCFS credits and CO<sub>2</sub> sales.

## Overview

- Recently completed upgrades to 50 million gallon India Distilled Biodiesel Plant on East Coast of India
  - Distilled biodiesel and refined glycerin facility includes waste oil feedstock unit
  - Biodiesel is marketed and sold primarily to customers in India, primarily in bulk to fuel, fuel station, mining and industrial customers
  - Refined glycerin product marketed and sold to customers in the pharmaceutical, personal care, paint, and adhesive industries
- Growing market for biodiesel in India due to a National Biofuels Policy that will require an additional billion gallons of supply
  - Recently selected by the Andhra Pradesh Road Transport Corp. to supply up to 800,000 gallons per month of biodiesel to fuel public transport buses

## Asset Map



1 Highly Experienced Management Team

2 Diversified Approach to Low-Carbon Fuels

3 Low Execution Risk With Proven Technology

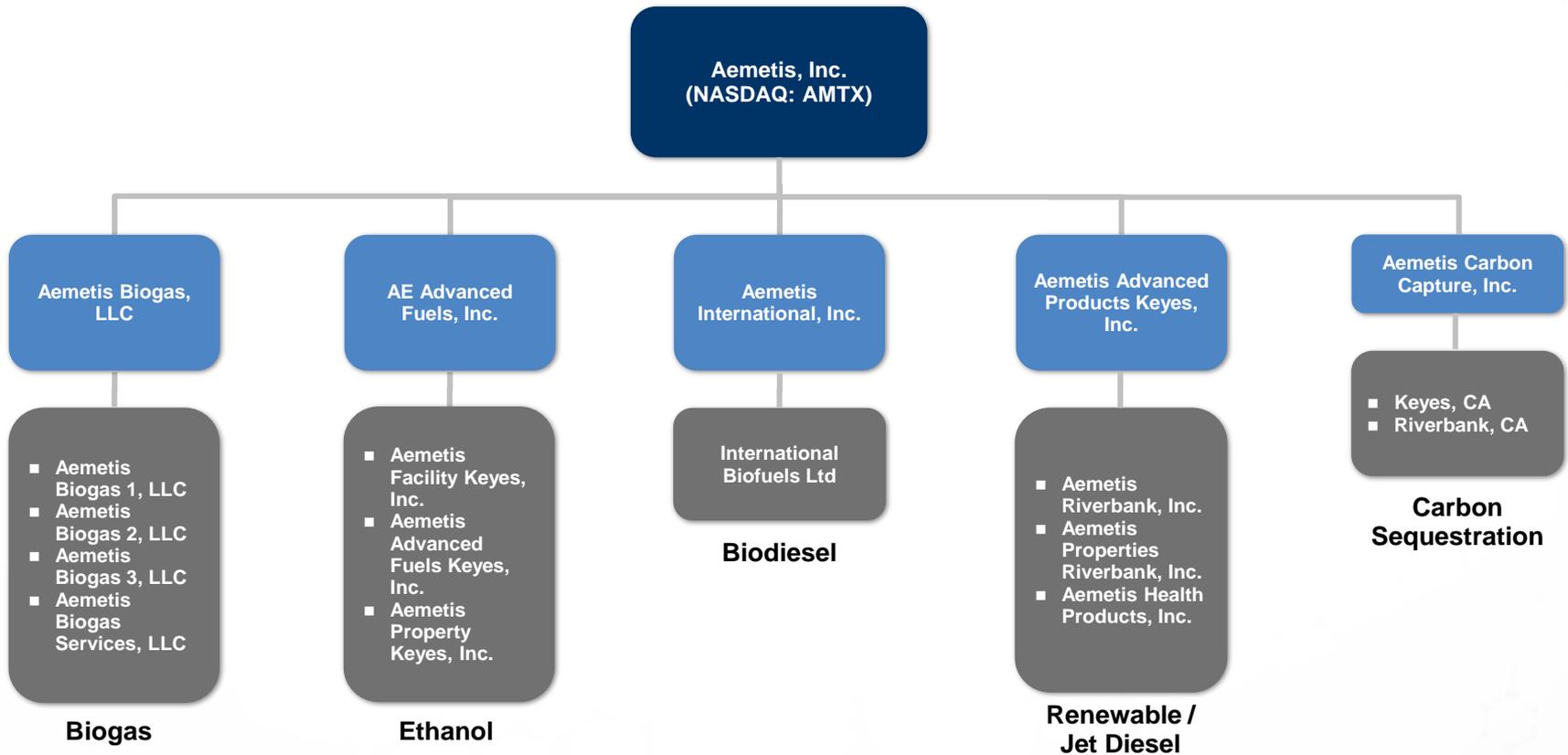
4 Durable Counterparty Relationships De-Risk Business Plan

5 High Visibility to Expansion

6 Favorable Regulatory Tailwinds Support Cash Flow Visibility

# Appendix





Note: Corporate structure is strictly illustrative and does not include all entities.

## LCFS Calculations

- Revenue generated from LCFS credits is dependent on a few variables – RNG produced, CI score and LCFS credit price
- LCFS revenue calculated by multiplying RNG production by total LCFS Credits per MMBtu and LCFS credit price
- CI scores are verified annually



$$\text{Number of LCFS Credits per MMBtu} = \text{EnergyDensity}_{\text{fuel}} \times \frac{\text{Lower Heating Value (LHV) of Natural Gas}}{\text{Higher Heating Value (HHV)}} \times (\text{CI}_{\text{standard}}^i \times \text{EER}_{\text{fuel}} - \text{CI}_{\text{fuel}}) \times 10^{-6}$$

Where:

- $\text{EnergyDensity}_{\text{fuel}}$ : the energy density of the fuel of interest in units of MJ per unit of fuel (e.g., MJ/MMBtu)
- LHV/HHV of Natural Gas: the application of interest (i.e., light-duty vehicle applications). Equivalent to 0.903 (constant)
- $\text{EER}_{\text{fuel}}$ : the energy economy ratio of the fuel of interest, such as CNG
- $\text{CI}_{\text{standard}}^i$ : refers to the carbon intensity of the standard in a given year
- $\text{CI}_{\text{fuel}}^i$ : the carbon intensity of the fuel in interest

## D3 RIN Calculation

- Revenue generated from D<sub>3</sub> RIN credits is dependent on RNG production, D<sub>3</sub> RIN credits per MMBtu and D<sub>3</sub> RIN credit prices



# RNG Contracts Overview



- Aemetis leases land from dairy farms in order to build dairy digesters that capture emissions from dairy manure
  - Aemetis has an exclusive right to the waste produced through the life of the lease (typically 25 years with a 10 year option)
  - Aemetis owns the infrastructure on the leased land; the infrastructure cannot be transferred to another owner
  - Aemetis pays the provider on a \$ / cow basis with a % of incremental LCFS dollar based on an agreed upon payment schedule
- Aemetis is currently in Phase 2, which is expected to bring the number of active dairy digesters to 17 along with 36+ miles of pipeline by YE 2022
- RNG and the LCFS / D3 RIN credits produced from animal waste is non-depleting (vs. landfill RNG, which declines over time)
- Pipeline construction locks up dairies on its path creating high barriers to entry for future competitors and leading to little re-contracting risk

Phase	Phase 1	Phase 2	Phase 3
Completion Date	Q3 2020	YE 2022	YE 2025
Location	Keyes plant	Keyes plant	Keyes plant
Cumulative Dairy Farms	2	17	52
Total Contracted Cows	5,784	~34,000	~104,000
Average Land Lease Term	25 years with 10 year option	25 years with 10 year option	25 years with 10 year option
New Dairy Digesters	2	15	35
Cumulative Miles of Pipeline	4	36	54
Facility Expansion	Biogas boiler	Gas cleanup, utility pipeline injection, RNG station	Gas cleanup

Source: Based off Aemetis 2021 Business Plan, subject to change.

## Key Aemetis Value Drivers

### LOCATION



- California pioneered the LCFS market design aimed at reducing transportation-driven greenhouse gas emissions in the state
- RNG produced from Aemetis' dairy facilities achieves one of the lowest CI scores attributable to transportation fuels and generates significant LCFS credits that can be readily monetized

### INTERNAL SYNERGIES



- RNG project realizes revenue immediately through use in Aemetis biofuels plant
- Biogas is used as a feedstock to AMTX's onsite fueling facility
- Closed loop system allows AMTX to generate and monetize LCFS and RIN credits without dependence on a third party

### STRONG RELATIONSHIPS



- Strong relationships with local dairies has allowed company to sign 17 dairy participation agreements for feedstock for RNG production
- Credibility with County and State officials enabled the Company to build 2 dairy digesters, pipelines and the Keyes biogas unit in only 1 year
- California government relations allows for quick approval and for attracting state grants

### TRUST



- Existing relationships with dairy farmer owners and intimate knowledge of the surrounding County and State positions the Company to successfully execute on additional supply and land-lease agreements

# Low Carbon Fuel Standard (“LCFS”)

## Program Summary

- LCFS and similar programs target a reduction in **carbon intensity** (“CI” as measured by the direct and indirect **greenhouse gas** (“GHG”) emissions produced from transportation fuels
- Multiple jurisdictions have implemented versions of LCFS programs to **incentivize lower CI** by requiring credits to offset high carbon emissions
- LCFS operates alongside other programs (RFS, BTC, etc.) to provide additional **financial benefit** to those companies that **produce renewable fuels** and qualifying credits

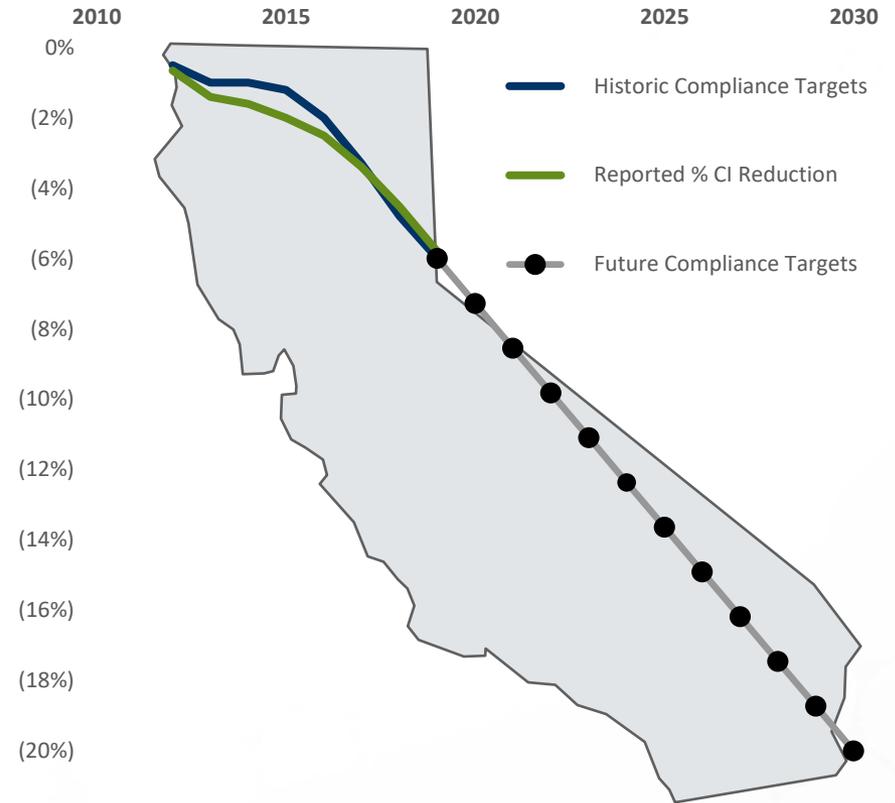
## U.S. Programs

 <p><b>California</b> 40% GHG emissions reduction by 2030</p>	 <p><b>Oregon</b> 10% reduction of 2015 GHG intensity by 2025; 20% by 2030</p>	 <p><b>Washington</b> 2021 adoption: 95% reduction in GHG emissions by 2050</p>
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## Other Programs

 <p><b>British Columbia</b> 20% reduction of 2010 levels by 2030</p>	 <p><b>Germany</b> 40% reduction of 1990 levels by 2025</p>	 <p><b>Brazil</b> 37% reduction of 2005 GHG levels by 2025</p>
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## California Performance (Reduction in CI)



Source: EPA, CARB, EIA.

# Renewable Fuel Standard (“RFS”)



## Program Summary

- Enacted by Congress in 2005, the RFS program establishes **minimum renewable volumes** to be blended into traditional petroleum-based fuel products
- To comply with the program, a refiner or importer of gasoline or diesel fuel must either **blend renewable fuel** into transportation fuel or **obtain a credit** (“Renewable Identification Number” or “RIN”) to meet its Renewable Volume Obligation (“RVO”)
- Based on the category of biofuel, renewable fuels are classified by “**D-Code**” which fulfill different RVO categories
- RVOs are established **annually** by the EPA and determine the percentage renewable blend threshold and corresponding RINs an obligated party **must obtain for compliance**
- RINs can be generated by blending renewable fuel products with petroleum-based fuels. Once generated, the blender may **sell the RINs independently** from the fuel product

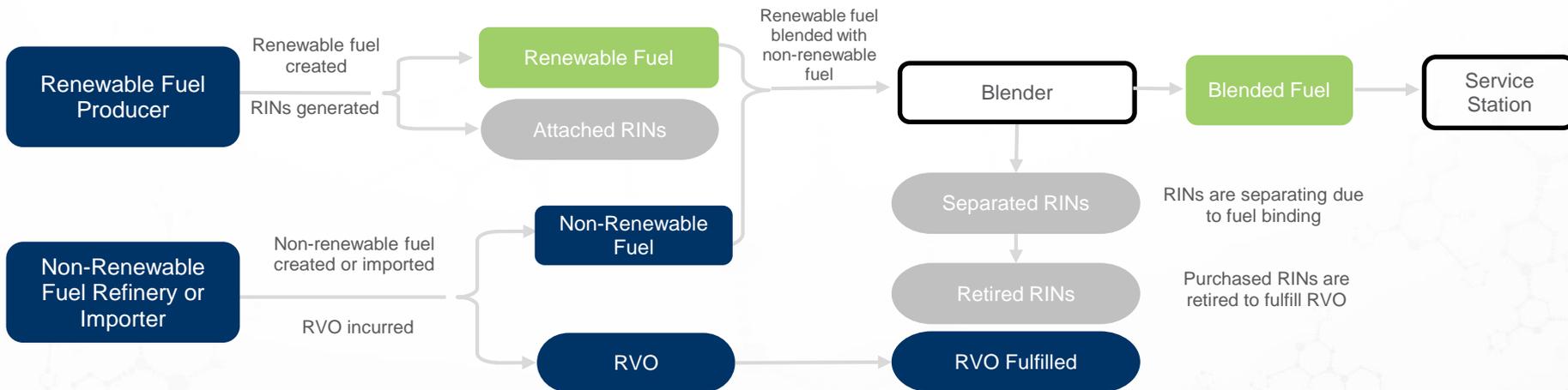
## RFS Overview

Renewable Fuel Standard Volume Requirements (12/19/2019)

Fuel Type (Bgal)	2017	2018	2019	2020	2021
Biomass-Based Diesel	2.00	2.10	2.10	2.43	2.43
Cellulosic Biofuel	0.31	0.29	0.42	0.59	N/A
Advanced Biofuel	4.28	4.29	4.92	5.09	N/A
Renewable Fuel	19.28	19.29	19.92	20.09	N/A

Renewable Fuel Standard D-Codes and Obligation Standard Threshold

	D-Code	Cellulosic	Biomass-	Advanced	Total Renewable
Cellulosic Biofuel / RNG	3	✓		✓	✓
Biomass-Based Diesel	4		✓	✓	✓
Advanced Biofuel / SAF	5			✓	✓
Renewable Fuel	6				✓
Cellulosic Diesel	7	✓	✓	✓	✓



Source: EPA.