



AEMETIS

Aemetis, Inc. (Nasdaq: AMTX)  
“Carbon Zero” Sustainable Aviation Fuel Produced in  
California Using Hydrogen from Wood Waste

June 2, 2021

# Disclaimer

---

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, net income and adjusted EBITDA, 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 Biogas Central California Dairy Project, 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.

## Non-GAAP Financial Information

We have provided non-GAAP measures as a supplement to financial results based on GAAP. A reconciliation of the non-GAAP measures to the most directly comparable GAAP measures is included in the accompanying supplemental data. Adjusted EBITDA is defined as net income/(loss) plus (to the extent deducted in calculating such net income) interest expense, loss on extinguishment, income tax expense, intangible and other amortization expense, accretion expense, depreciation expense, and share-based compensation expense.

Adjusted EBITDA is not calculated in accordance with GAAP and should not be considered as an alternative to net income/(loss), operating income or any other performance measures derived in accordance with GAAP or to cash flows from operating, investing or financing activities as an indicator of cash flows or as a measure of liquidity. Adjusted EBITDA is presented solely as a supplemental disclosure because management believes that it is a useful performance measure that is widely used within the industry in which we operate. In addition, management uses Adjusted EBITDA for reviewing financial results and for budgeting and planning purposes. EBITDA measures are not calculated in the same manner by all companies and, accordingly, may not be an appropriate measure for comparison.



# Aemetis Overview

Aemetis means “One Prudent Wisdom”

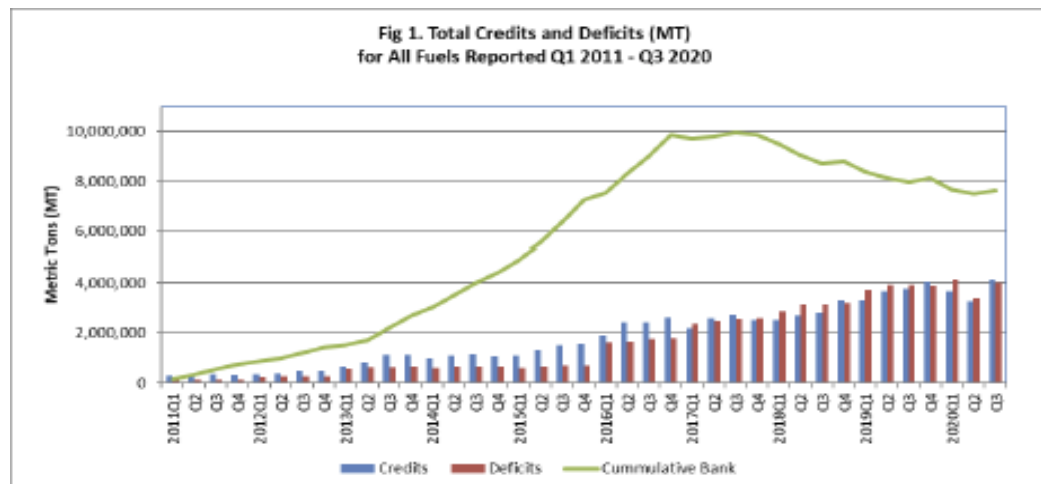
Ae means One in Scottish. In Greek, Metis is the prudent mother of Athena (goddess of wisdom).

## 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 non-food, 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.



# Third Generation Technology to Reverse Climate Change

---

## **1<sup>st</sup> Generation Renewable Energy = Use the Sun's energy**

Solar, Wind, Hydro and Nuclear do not absorb carbon from the atmosphere. These energy sources are slowing the rate of heating the Earth as coal and natgas plants continue to operate globally.

## **2<sup>nd</sup> Generation Renewable Energy = Use the Sun's Energy and Absorb CO2**

Renewable fuels use large scale agriculture to absorb sunlight and CO2 in photosynthesis, including renewable diesel, ethanol, biodiesel, and jet fuel. The renewable CO2 is emitted during production.

## **3<sup>rd</sup> Generation Renewable Energy = Use Sun's Energy, Absorb and Sequester CO2**

Using renewable fuels for Carbon Capture & Sequestration (CCS) siphons carbon from the atmosphere into crops which are converted into renewable fuels, then the solar energy is released as transportation energy while the CO2 from biofuels production is injected underground.

## **3<sup>rd</sup> Generation Renewable Energy maximizes California Low Carbon Fuel Standard (LCFS), US Renewable Fuel Standard (RFS), and IRS 45Q credit values.**

These regulations are an objective measure of the positive impact of each project on reversing Climate Change.



# Aemetis Overview

---

## Company:

- Founded 2006 in Cupertino, CA by former co-founder of \$1.6 billion revenues Pacific Ethanol (Nasdaq: ALTO)
- \$166 million revenues (2020) with \$300 million of assets (build cost)
- **Experts in building and operating Low and “Below Zero” Carbon Intensity (CI) renewable fuels projects**

## Projects:

- **Built, operating and now expanding -426 carbon intensity Dairy RNG project that replaces petroleum diesel**
- **Building 45 mgy “Carbon Zero” renewable diesel/jet fuel plants in California using cellulosic hydrogen**
- **Developing Carbon Capture & Sequestration (CCS) injection wells at the two biofuels plant sites in California**
- Own, operating and upgrading 65 mgy biofuels plant in California to increase LCFS, RFS and 45Q values
- Built, operating and expanding 50 mgy low carbon biofuels plant in India using low CI feedstocks



# Highly Experienced Management and Board of Directors

---



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

- Founder of *Aemetis* (NASDAQ: AMTX) and co-founder of \$1.6 billion revenues *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



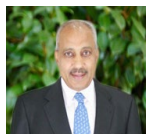
## **Todd Waltz - EVP and CFO**

- 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

Board of  
Directors

**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

**Our highly experienced management team and board of directors have extensive industry knowledge, regulatory relationships, project development and operational experience.**





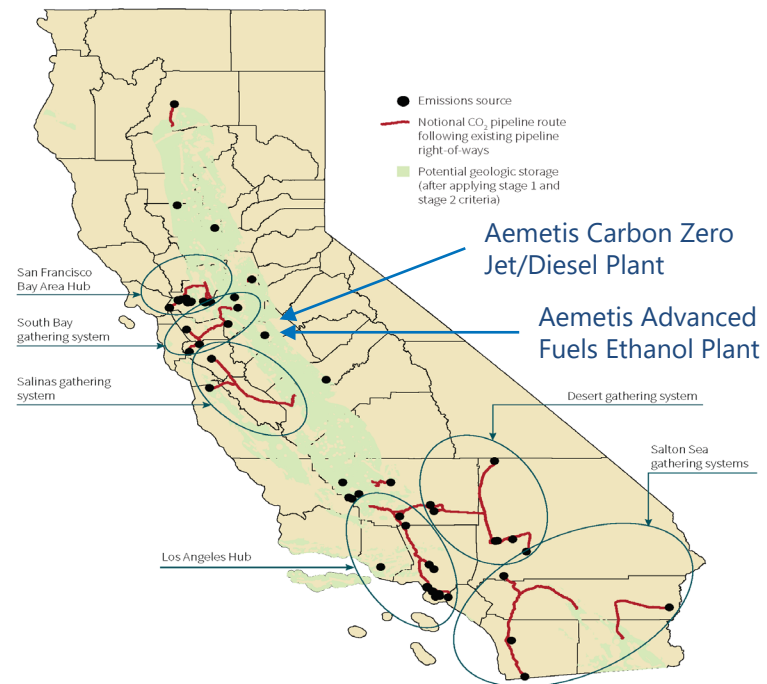
AEMETIS

Aemetis Carbon Capture:  
Carbon Capture & Sequestration (CSS) of CO<sub>2</sub> for  
Renewable Fuels Plants in California

# Aemetis Carbon Capture and Sequestration Projects in California

- Formerly an inland ocean now known as the Central Valley of California
  - Light green area shows shale geological storage containing saline water for CCS
  - Shale caprock layer at approximately 7,000 ft depth and basement layer below CO<sub>2</sub> storage formation
- There are currently no operational CCS projects in the State of California
  - Few CCS projects in active development in California
- Aemetis plans to sequester 2 million metric tonnes of CO<sub>2</sub> per year at two biofuel plant sites in CA:
  - 400,000 MT of CO<sub>2</sub> per year expected from Aemetis biogas and biofuels plants
  - 1.6 million MT of CO<sub>2</sub> per year expected using CO<sub>2</sub> supplied by other renewable fuels plants and oil refineries
- Planned two million MT of CO<sub>2</sub> sequestered each year could generate up to \$500 million of annual revenues (assuming average of \$200 LCFS and \$50 IRS 45Q)

FIGURE 3-12  
CCS PROJECT DEVELOPMENT OPPORTUNITIES



Map illustrates potential project development opportunities that together abate 59 MtCO<sub>2</sub>/yr. Pipeline routings are 'notional' and follow existing pipeline right-of-ways. Sink locations are not intended to be exact locations for geologic storage. Source: Energy Futures Initiative and Stanford University, 2020.

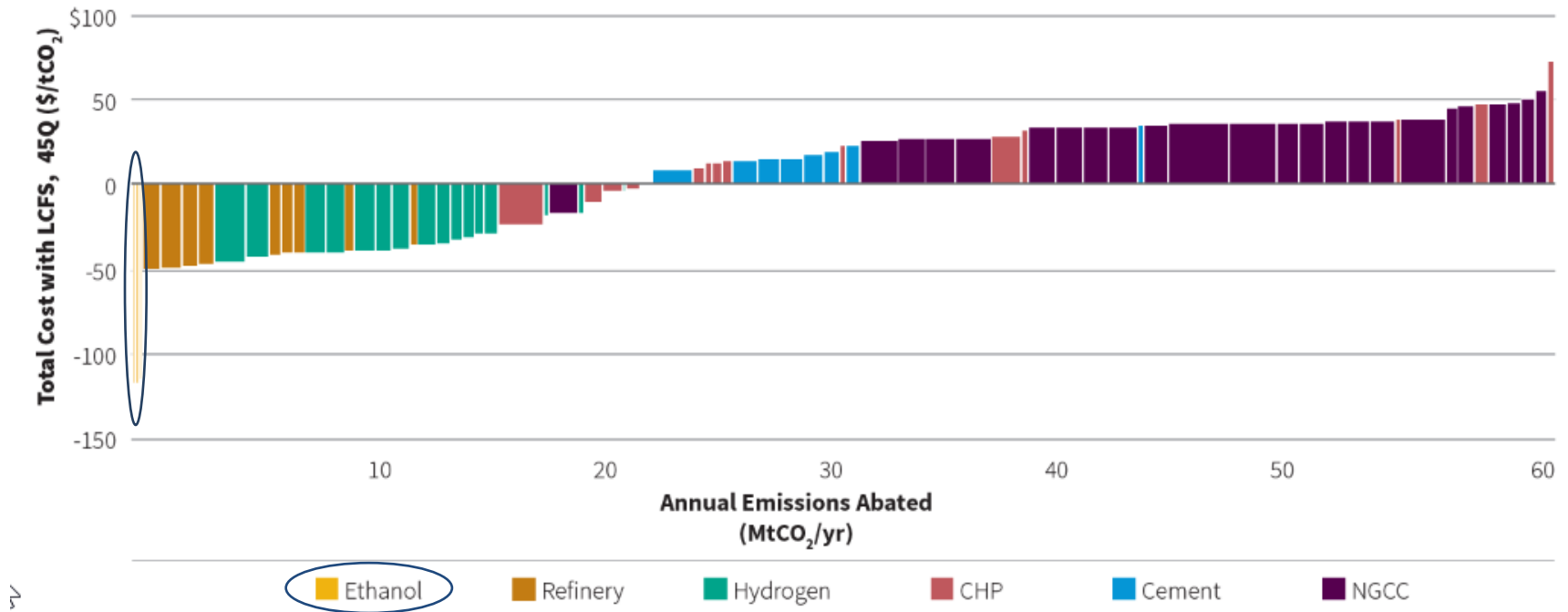




# Ethanol Plants are Largest Reduction in Costs = Highest Value CCS Projects

FIGURE 3-14

## MARGINAL ABATEMENT CURVE BY FACILITY



The 34 facilities on the left side of the graph that show negative costs can generate positive revenues. The opposite is true for the 42 facilities on the right side of the graph. Note that the crossover on this graph from negative to positive costs occurs at 21.5 MtCO<sub>2</sub>/yr abated.

Source: Energy Futures Initiative and Stanford University, 2020.

k Abatement cost = capture cost (\$/tCO<sub>2</sub>) + storage cost (\$/tCO<sub>2</sub>) plus incentives (LCFS and 45Q credits where applicable, in \$/tCO<sub>2</sub>)



# Aemetis Carbon Capture & Sequestration Project Leaders

---



## **ATSI: Carbon Sequestration Project Manager, Engineering and EPC**

- For more than 40 years, ATSI has provided world-class Front-End Engineering Design (FEED/FEL), project management, EPC and commissioning services
- Major projects completed at more than 60 oil refineries, including commissioning of \$10 billion oil refinery
- Completed 138 commercial projects in 21 different states



## **Baker Hughes: Underground Engineering and Well Drilling**

- Leading natural gas and crude oil drilling company
- \$20 billion market value
- Operates in 120+ countries
- CCUS Technology Solutions include:
  - Pre-FEED and FEED consultation and project design
  - Capture and purification
  - Injection Well design and construction for storage
  - Micro-seismic expertise





AEMETIS

Aemetis “Carbon Zero” Plants:  
Renewable Jet/Diesel Fuel Produced Using Negative CI  
Cellulosic Hydrogen and Zero CI Electricity

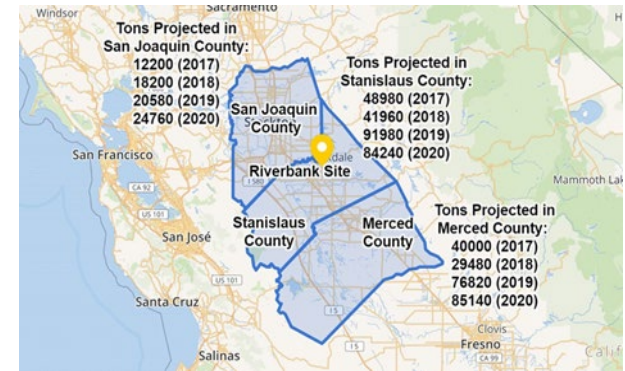
# Millions of Tons of Local Below Zero Carbon Intensity Feedstock

## Biomass-to-Energy Plants Closing in California

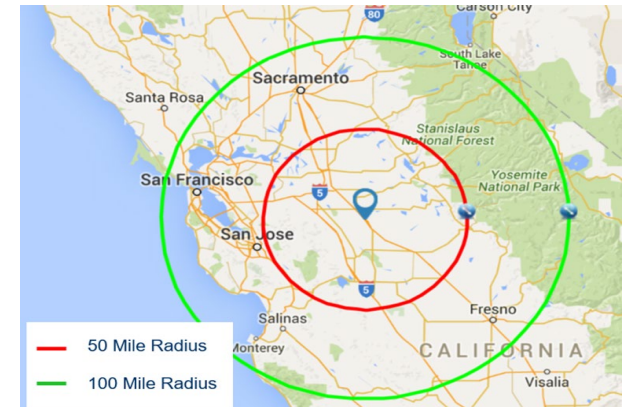
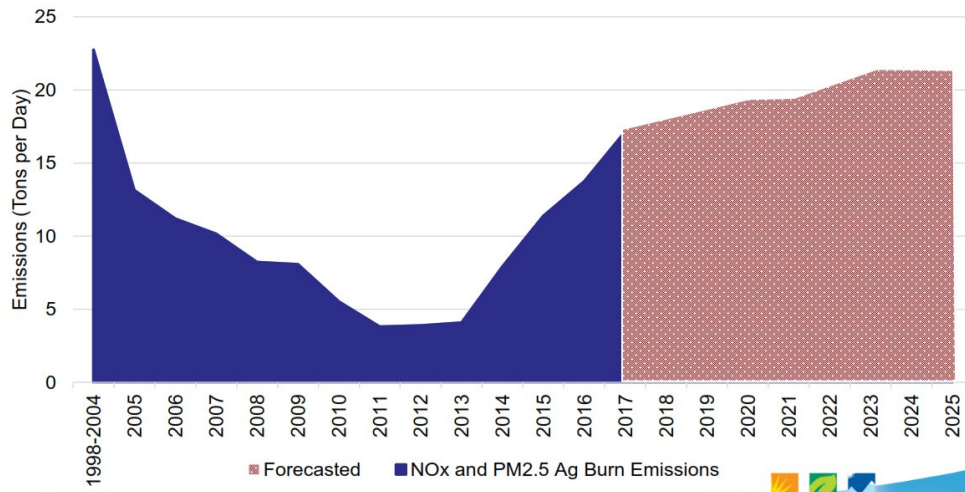
- Biomass-to-Energy plants decreased from 33 plants to 5 plants
- Unable to compete with subsidized solar and wind energy

## More than 1 million acres of Almonds in California

- 2+ million tons/year of Ag Waste that is usually burned in the field
- Almond Growers pay for orchard removal
- **Negative 100 Carbon Intensity expected**



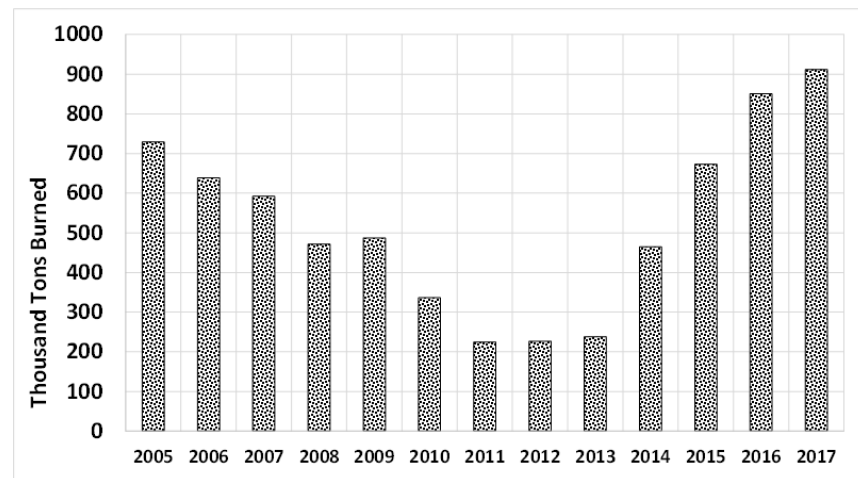
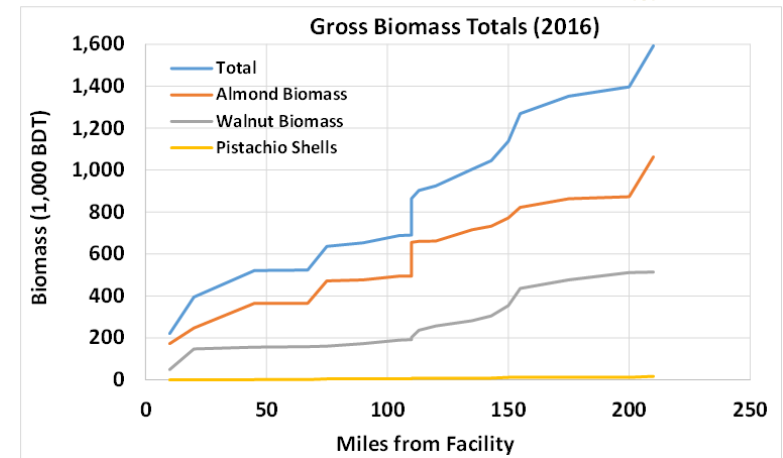
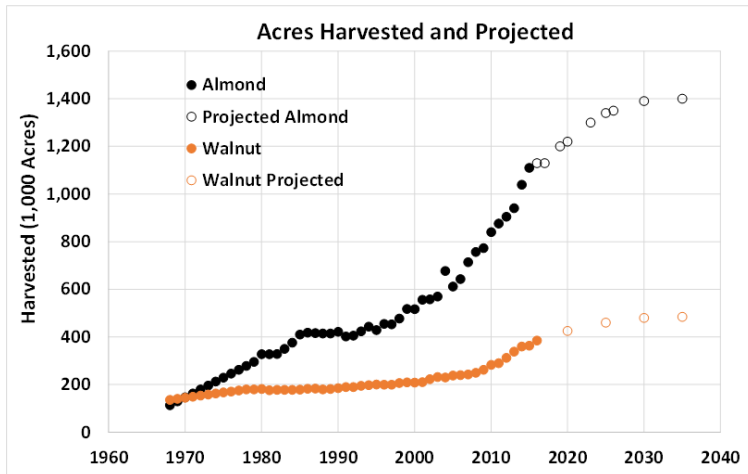
## Field Burning Increasing without Market for Waste Wood



**Source:** San Joaquin Valley Air Control District Emergency Meeting on Open Burning November 2017



# UC Davis Feedstock Study Results



## Study Conclusions

- Confirmed air emissions assumptions for carbon intensity score under LCFS
- Confirmed biomass growth and availability
- Projected feedstock pricing
- 20-year guaranteed supply due to lifecycle of trees



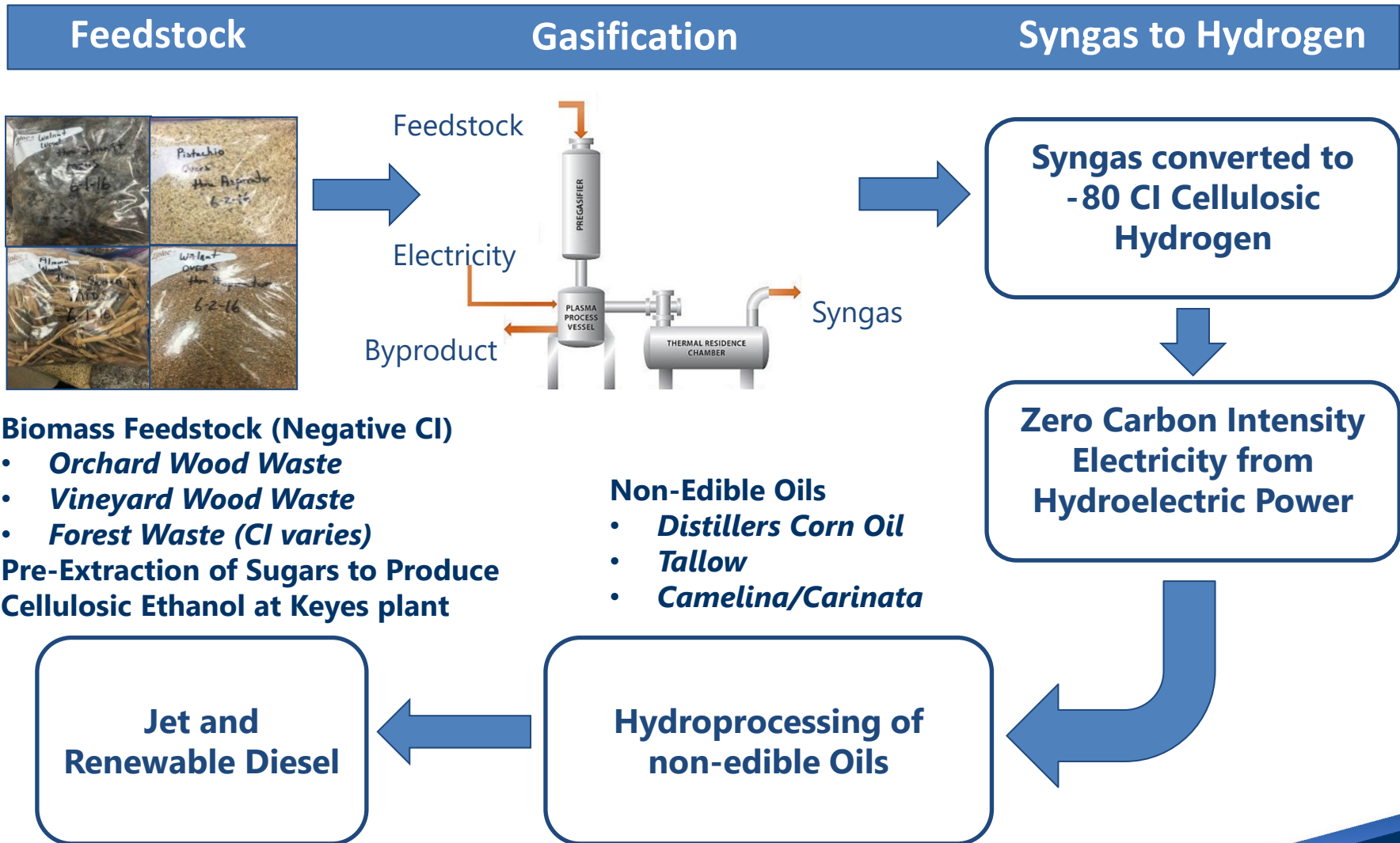
## Below Zero Carbon Intensity Feedstock Contract Signed

---

- Negative carbon intensity feedstock supply agreement for orchard waste wood in Central California
- 20-year orchard waste wood supply agreement at fixed prices
- Signed with one of the largest almond wood and walnut wood processors in the world
- 130,000+ ton per year supply agreement for orchard waste wood for about \$20 per ton
- Price adjustment for actual trucking costs during contract period
- Trucks moving waste wood are scheduled to use negative 426 carbon intensity, dairy Renewable Natural Gas from Aemetis Biogas project at low cost to trucking operators

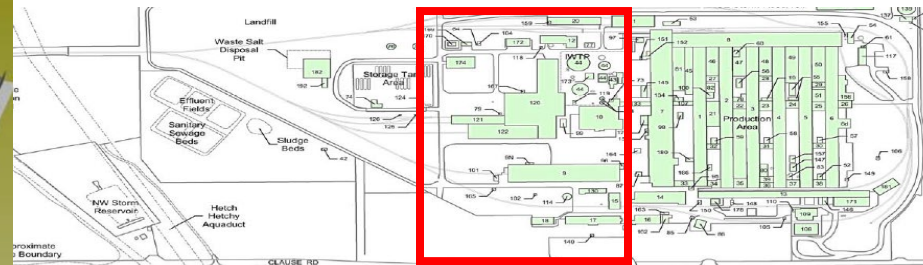


# “Carbon Zero” Renewable Jet/Diesel Plants using Cellulosic Hydrogen



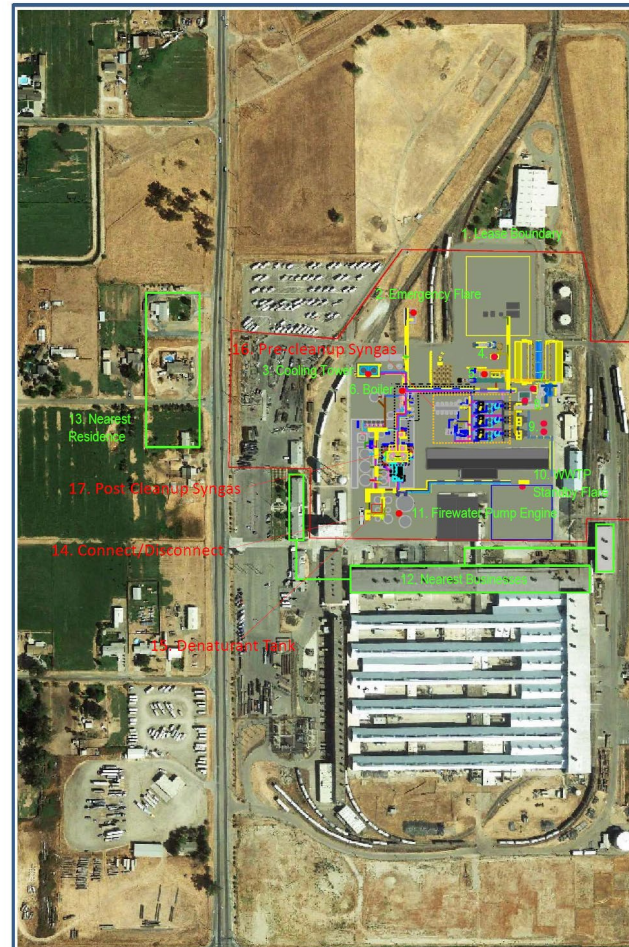
# Riverbank, California Site

- Former Army Ammunition Plant
- 142 acres of industrial and commercial land
- 710,000 s.f. of existing buildings
- Railroad with 120 railcar storage
- 100% low carbon hydroelectric power with onsite substation
- Air emissions permits from former operations
- Feedstock storage areas adjacent to plant





# “Carbon Zero” Renewable Jet/Diesel and Cellulosic Biofuels Site Layout

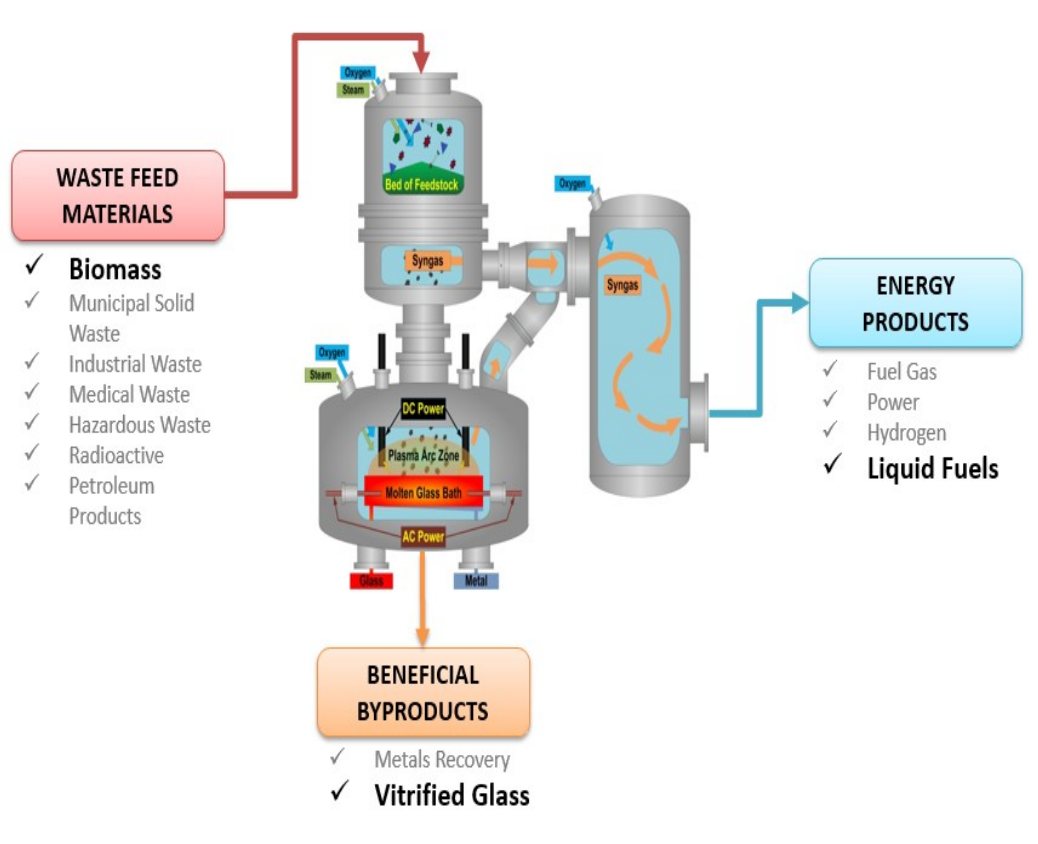


- N
1. Lease Boundary
  2. Emergency Flare
  3. Cooling Tower
  4. Receiving Baghouse
  5. Dryer RTO
  6. Boiler
  7. Distribution Baghouse
  8. Thermal Oxidizer
  9. Diesel Genset
  10. WWTP Standby Flare
  11. Firewater Pump Engine
  12. Nearest Businesses
  13. Nearest Residences
  14. Connect/Disconnect
  15. Denaturant Tank
  16. Pre-cleanup Syngas
  17. Post Cleanup Syngas

1. Subject to revision pursuant to project development and permitting requirements



# InEnTec Gasifier Produces Negative Carbon Intensity Cellulosic Hydrogen





AEMETIS

Aemetis, Inc. (Nasdaq: AMTX)  
Eric McAfee, Chairman/CEO  
[eric.mcafee@aemetis.com](mailto:eric.mcafee@aemetis.com)