



CALIFORNIA SUSTAINABLE FREIGHT ACTION PLAN

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California Air Resources Board

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California Sustainable Freight Action Plan

Governor's Executive Order B-32-15

- Improve freight efficiency
- Transition to zero emission technologies
- Increase economic competitiveness

Action Plan Finalized in July 2016, includes:

- Vision and Guiding Principles
- 2030 Statewide Freight Targets
- Freight Funding Approach
- State Agency Actions and Implementation Steps
- Pilot Project Concepts

CALIFORNIA
**SUSTAINABLE
FREIGHT**
ACTION PLAN



2030 Statewide Freight Targets

System Efficiency Target

Improve freight system efficiency 25 percent

Transition to Zero Emission Technology Target

Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize near-zero emission freight vehicles and equipment powered by renewable energy

Increased Competitiveness and Economic Growth Targets

Establish a target or targets for increased State competitiveness and future economic growth within the freight and goods movement industry

Pilot Project Concepts

Dairy Biomethane for Freight Vehicles
San Joaquin Valley

Advanced Technology for Truck Corridors
Southern California

Advanced Technology Corridors at Border Ports of Entry
California-Mexico Border



Policy Context

- Short-lived climate pollutants
- Greenhouse gas reduction targets
- Air quality goals

Work Plan Development

October 2016 – July 2017

Meetings between government agencies and local private partners to understand barriers and identify solutions to developing a dairy-derived renewable biomethane freight vehicle fueling project.

Consulted with: California Bioenergy LLC, Dairy Cares, California Air Resources Board, California Energy Commission, California Public Utilities Commission, Governor's Office of Business and Economic Development, California Department of Transportation, California Department of Food and Agriculture

Released July 2017

Project Overview

Kern County Dairy Cluster

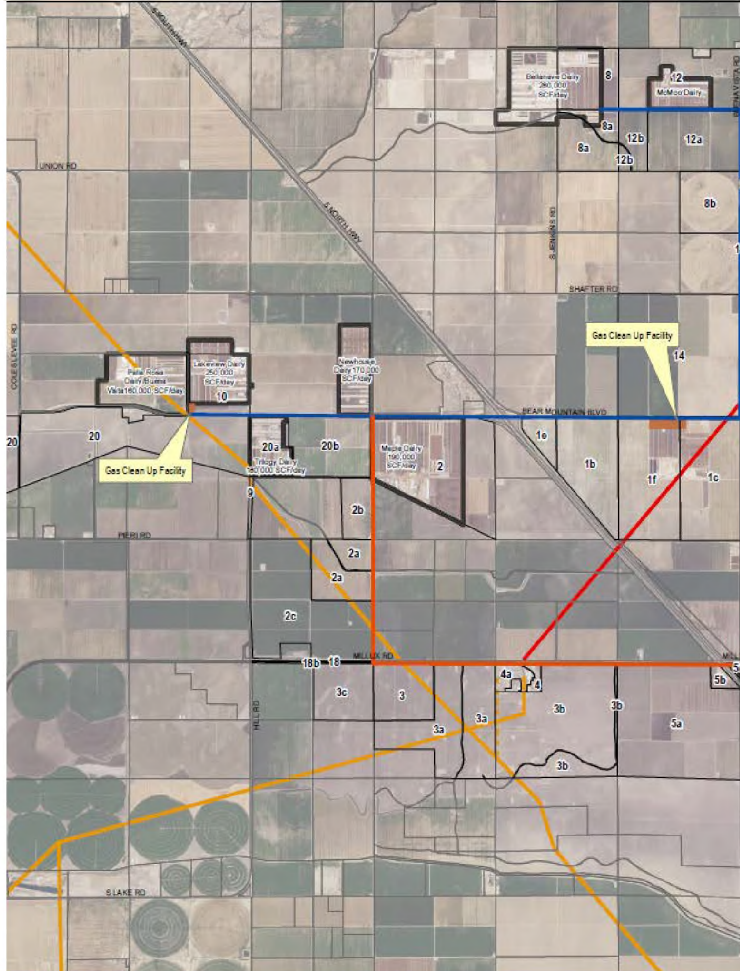
California Bioenergy, LLC

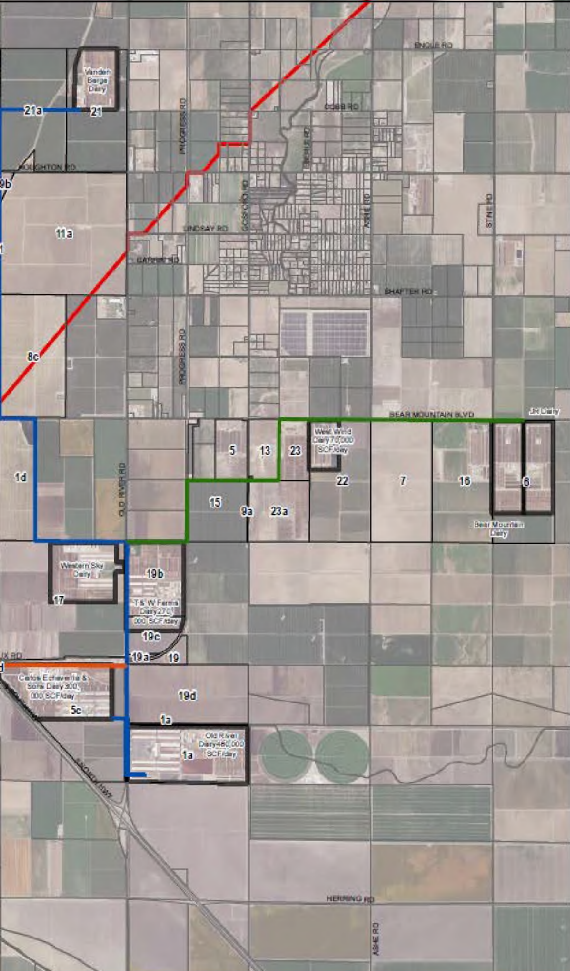
- Cluster of up to 15 large dairies
- South of Bakersfield between I-5 and SR-99
- Up to 50,000 milking cows
- Up to 3 million standard cubic feet of biomethane daily
- Up to 2.5 million diesel gallon equivalents annually

Buildout Plan

Goal is to be completed by summer 2019

- Phase 1
 - Construction of up to 7 digesters (some dual use)
 - Construction of centralized biogas upgrading facility
 - Pipeline injection for use as transportation fuel to existing natural gas fleets
- Phase 2
 - Construction of additional digesters
 - Construction of fueling station
- Phase 3
 - Fleet conversion





Project Status

- Digester development
 - 1 complete and operating
 - 2 under construction and nearing completion
 - 4 with grant applications submitted
 - 6 in design process
- Gathering lines
 - Fully permitted
 - Gone through CEQA process
- Pipeline injection
 - Considering several pipeline injection sites
 - Initial capacity study completed with both utilities
- Truck conversion
 - Working closely with fuel marketers and local fleets

Contact Information

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