Anaerobic Digestion
*a Regional Solution to Organics Recycling in California*

*Presentation for*
Environmental and Energy Study Institute (EESI)
*Washington, DC*
*May 22, 2019*
*Clarke Pauley, Vice President*
California’s New Organics Recycling Mandate

2014: 23MM tons digestible and compostable organics disposed in CA landfills

California SB 1383

• A 50-percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020.
• A 75-percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2025.

(California HSC 39730.6)
California’s New Organics Recycling Mandate

Allowable Disposal of Organics Statewide

Source: CalRecycle Presentation - SB 1383 Short-Lived Climate Pollutants (SLCP) Organic Waste Methane Emissions Reductions
Regulatory Drivers and Financial Incentives

- Assembly Bill 939
  - 50% Recycling
- AB 32 / SB 32
  - Green House Gas Reduction
- Assembly Bill 341
  - 75% Recycling
- Assembly Bill 1594
  - Green Waste Recycling
- Assembly Bill 1826
  - Commercial Organics
- SB 1383
  - Organics Recycling SLCP
- AB 2313
  - RNG in grid and pipeline connect reimbursement
- GHG Reduction Grants
  - CalRecycle
  - CARB
  - CEC
- CARB
  - Low Carbon Fuel Standard
  - LCFS Credits
- Federal EPA
  - Renewable Fuel Standard
  - RIN Credits

Assembly Bill 939
- 50% Recycling

Assembly Bill 341
- 75% Recycling

Assembly Bill 1594
- Green Waste Recycling

Assembly Bill 1826
- Commercial Organics

SB 1383
- Organics Recycling SLCP

AB 2313
- RNG in grid and pipeline connect reimbursement
REGIONAL ORGANICS ANAEROBIC RECOVERY FACILITY, PERRIS, CA
CR&R ROAR FACILITY VITAL STATISTICS

CAPACITY: 320,000 Tons Per Year in 4 equal phases

FEEDSTOCKS: Municipal source separated yard waste and food waste

LOCATION: Perris, Riverside County, CA

START-UP:
  Phase 1: September 2016
  Phase 2: March 2018
CR&R ROAR FACILITY VITAL STATISTICS

PRODUCTS (full build out)

RENEWABLE FUEL
Renewable Natural Gas (RNG)

4 Million Gallons per year (gge)

COMPOST
Retail soil blends – bagged quality

150,000 tons per year
ANAEROBIC DIGESTION PROJECT OVERVIEW

We will convert all of organic (yard and food) wastes into compost and renewable natural gas the (RNG) to run our truck fleet.

This program will keep organic wastes out of the landfill where they would naturally degrade and release methane into the atmosphere.

Methane is 84 times more damaging to the atmosphere than carbon dioxide. Burning RNG in our trucks destroys Methane.

Renewable Natural Gas (RNG) has a much lower carbon intensity than fossil gas. Powering heavy duty trucks with RNG reduces emission by 90% vs diesel combustion.

Anaerobic digestion (AD) is simply replicating Mother Nature in a more controlled and cost effective environment.
Control Building
On-site Laboratory
CO-PRODUCTS: ORGANIC SOIL PRODUCTS

Grow Rich Compost
SoCalGas Pipeline Interconnect - Point of Receipt
Near Zero Emission Trucks
RNG filling Station, Garden Grove, CA