

# Calgren Bioenergy Project Experience

Ethanol and first of two cogeneration plants – 2008

On-site mesophilic dairy digester – 2014

Lagoon-cover dairy cluster project (SD 1383) including  
pipeline injection – 2018

Supercritical biodiesel production – 2019

Green vehicle refueling facility – est 2020

# Build upon prior bioenergy processing experience if possible

- Successful industrial track record lends credibility
  - With permitting authorities
  - With commercial customers
- Operational experience is hard to beat
  - Process startups are always challenging
  - Capable process operators are invaluable
- Product flexibility helpful in mitigating uncertainties regarding policy-driven incentives
  - Competiveness might not be enough
- Tough to get financing without a track record

# Site selection – far more important than we could have imagined

- Contiguous agricultural and industrial zoning
- Community must either be supportive or must be won over – ignore this at your peril
- Utility issues are huge
  - Capacity
  - Ability to interconnect
  - Cost
  - Timing can be a problem

# Permitting

- CEQA – this is the big one
  - Almost always misused
  - Consider who will be the best lead agency
  - Advantages/disadvantages of doing an EIR
- Air permits
  - Major emissions thresholds
  - Co-location issues
- Building permits – don't scrimp on engineering
- Water Board – easy for us, not sure about others

# Recommendations

- Look to build upon prior industrial experience
  - Policy makers should focus on objectives
  - Incentivize process operators to best determine how to meet those objectives
- Consider CEQA changes
  - Find a way to put those who misuse the system at risk
- Don't look to utilities to be entrepreneurial
  - Utilities need to help set standards, then step back
  - Private industry is more efficient and responsive