



# SB 1383 Renewable Natural Gas (RNG) Procurement



**Los Angeles County Public Works Environmental Programs Division** 

September 19, 2024





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- SB 1383 Procurement Requirements
  - CalRecycle Definitions
  - 14 CCR § 18993.1 RNG Procurement Requirements
- Opportunities and Challenges for RNG Procurement
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## **Definitions (14 CCR § 18982)**



- "Recovered organic waste products"
   (ROWP) means products made from California, landfill-diverted recovered organic waste processed at a permitted or otherwise authorized operation or facility.
- "Renewable gas" means gas derived from organic waste that has been diverted from a landfill and processed at an in-vessel digestion facility that is permitted or otherwise authorized by Title 14 to recover organic waste.



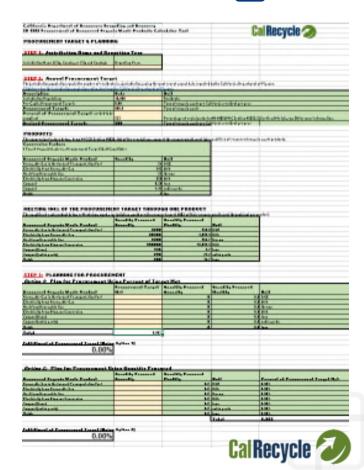


#### SB 1383 Procurement Requirements 14 CCR § 18993.1

## - Annual Procurement Target



- January 1, 2022 Jurisdictions are to procure recovered organic waste products to meet an annual procurement target.
- Procurement target for 2022 will be in place for 5 years
- Combinations of one or more products to fulfill 100 percent of its procurement targets allowed
  - CalRecycle Procurement Calculator Tool can be used to calculate the quantities of products a jurisdiction is required to procure.



## SB 1383 Procurement Requirements 14 CCR § 18993.1(c)(I)

## - Annual Procurement Target



 Option 1: Jurisdiction <u>procurement target for calendar year 2022</u> through 2026

County/City	Total Population (1/1/2021 Population Estimate)	Annual Procurement Target (Tons of Organic Waste)	
Los Angeles			
Agoura Hills	20,457	1,637	
Alhambra	86,258	6,901	
Arcadia	57,660	4,613	
Artesia	16,484	1,319	
Avalon	3,973	318	
Azusa	49,587	3,967	
Baldwin Park	75,935	6,075	
Bell	36,319	2,906	
Bellflower	77,458	6,197	
Bell Gardens	42,233	3,379	

$$100,\!000\;people\;\times\;\frac{0.08\;tons\;of\;organic\;waste}{person}=8,\!000\;tons\;of\;organic\;waste$$

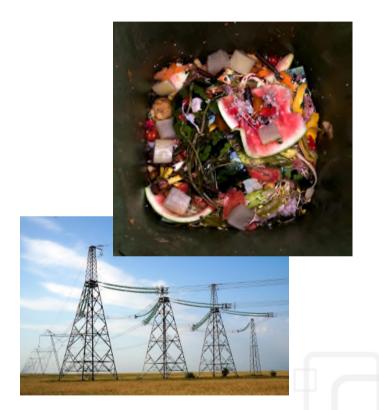


# SB 1383 Procurement Requirements 14 CCR § 18993.1(j) – Annual Procurement Target



Option 2: Adjusted ROWP procurement target based on previous calendar year's procurement of energy products for municipal operations

- 1. Gather bills for municipal operations from the previous year:
  - Electricity (Traffic lights, government buildings)
  - Gas for Heating Applications (Government Buildings)
  - Transportation Fuel (Fleets)
- 2. Convert the total amount procured to the organic waste equivalent
  - (ROWP tons)



# SB 1383 Procurement Requirements 14 CCR § 18993.1(e) – Compliance Methods



- 14 CCR § 18993.1(e) Jurisdiction **compliance methods**, one or both of the following:
  - 1. Direct Procurement
  - Direct Service Provider with documentation of written contract or agreement





# SB 1383 Procurement Requirements 14 CCR § 18993.1(f)



- 14 CCR § 18993.1(f) **ROWP** that a jurisdiction may procure to comply includes:
  - Compost
    - Produced at a permitted compostable handling operation or facility
  - Mulch
    - Produced at a permitted compostable handling operation or facility, a transfer/processing operation, or solid waste landfill.
  - Renewable gas used for transportation fuel, electricity, or heating applications
  - Electricity from biomass conversion





# Conversion Factors 14 CCR § 18993.1(g)



- 1) One ton of organic waste in a ROWP (i.e., RNG) procurement target shall constitute:
  - A. 21 diesel gallon equivalents, or "DGE," of renewable gas in the form of transportation fuel.
  - B. 242 kilowatt-hours of electricity derived from renewable gas.
  - C. 22 therms for heating derived from renewable gas.



# SB 1383 Procurement Requirements 14 CCR § 18993.1(h)



- 14 CCR § 18993.1(h) Renewable gas procured from **POTW** may only count per the following conditions:
  - 1) The POTW receives organic waste directly from one or more of the following:
    - A. Compostable material handling facility or operation
    - B. Transfer/processing facility or operation
    - C. Landfill
  - 2) The POTW is in compliance with exclusions described in § 17896.6(a)(1).
  - 3) Jurisdiction receives tonnage records, from the POTW, documenting tons of organic waste received by the POTW from entities listed above in item 1.
  - 4) Amount of renewable gas procured by jurisdictions procured from POTW is less than or equal to the POTW's production capacity of renewable gas generated from organic waste received from solid waste facilities.
  - 5) The POTW transported less than 25 percent of the biosolids it produced to activities that constitute landfill disposal.









# **Opportunities and Challenges for SB 1383 RNG Procurement**

# **Questions/Inquiries**



#### • Item #1:

The amount of RNG and/or RNG-derived electricity available to local jurisdictions for compliance with requirements of SB 1383.

#### • Item#2:

Challenges and opportunities for jurisdictions to procure RNG-derived electricity to meet SB 1383 requirements including providing this energy through a Community Choice Aggregate to the City's/CCA's customers (rather than for use in County operations).

#### • Item #3:

How do the markets work for renewable energy credits (RECs), the SB 1383 procurement compliance attributes (PCAs), and the California Air Resources Board (CARB) GHG emission credits?

#### • Item #4:

Do the same molecules of RNG generate both PCAs, RECs, and CARB GHG emission credits? Is there a relationship between these various credits?

#### • Item #5:

What is the best approach for jurisdictions that are interested in procuring the actual RNG-derived electricity as well both the RECs and the PCAs?

#### Item #1:

# The amount of RNG and/or RNG-derived electricity available to local jurisdictions for compliance with requirements of SB 1383.



#### **Existing Anaerobic Digestion Facilities and POTWs**



AD Facilities in CA



POTW's in the LA Region

#### *Item #1:*

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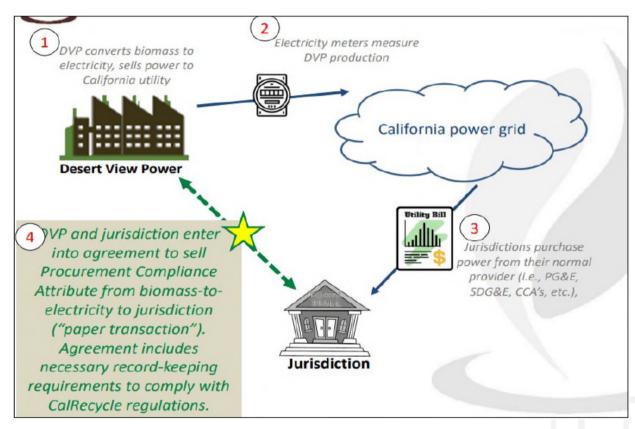


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1%	E E	NERGY COMMISSION		Biomass		
C.G	ACCT MGMT	SEARCH		Biomass Black Liquor		
				Biomass Conversion		
California's Renewables Portfolio Standard (RPS) Public Search Op				Biomethane		
				Conduit Hydroelectric		
To begin your search enter application or facility criteria and click search. Use the additional fields if nec				Conduit Hydroelectric with Efficiency		
Questions can be directed to rpstrack@energy.ca.gov. Search Instructions are also available.				Fuel Cell - Biomethane		
Application Status Definitions:			Fuel Cell - Hydrogen Produced Renewably			
Approved: The facility is approved and either certification or precertification has been granted.  Received: The application has been received but has not yet been reviewed.  Pending: The application is under review; Energy Commission staff may make further inquiries or reques			Geothermal			
			Existing Large Incremental Hydroelectric			
Corrections: Staff has requested more information or clanification from the applicant, the review will not be provided.				MSW - Conversion		
Disapproved: The facility is not eligible for California's RPS. If the facility had been previously certified, g				Ocean Thermal		
RPS depending on the circumstances of disapproval.  Withdrawn: The applicant for the facility has withdrawn the application or the applicant has requested an  Incomplete: The application has been deemed incomplete. The facility is ineligible for the RPS unless the  Decommissioned: The facility has ceased to operate, as confirmed by the applicant or the Energy Commissioned:				Ocean Wave		
				Distantiful		
Please Note:				Small Hydroelectric		
The Energy Commission's RPS certification of a facility means the facility can produce electrical generations as the facilities that is produced in the mon WREGIS, may be used to meet RPS obligations, subject to all applicable procurement restrictions. Gene Certification Type column are only eligible to meet the RPS obligations of the retail seller that certified the						
				Solar Thermal Electric		
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		Facilità Mana	Application Status	Wind		
RPS ID	Suffix	Facility Name	rippirobilion otatua			

# **Electricity from Biomass Conversion – Compliance Requirements**



- Written certification
  - biomass feedstocks received directly from allowable facilities
- Required documentation from biomass conversion electricity to show:
  - No duplicate sales or double counting
  - Quantity not greater than actual generated supply
  - Total not exceed amount used in actual operations



Desert View Power (DVP), Mecca, CA reports can assist with procurement for 6% of the state population

#### *Item#2:*

Challenges and opportunities for jurisdictions to procure RNG-derived electricity to meet SB 1383 requirements including providing this energy through a Community Choice Aggregate to the City's/CCA's customers (rather than for use in County operations).



#### • CCA:

- Allows cities/counties/other qualifying governmental entities available within the service areas of investor-owned utilities (IOUs), to purchase and/or generate electricity for their residents and businesses.
- Two+ cities or counties may participate in a CCA program as a group through a Joint Powers agency.
- Can also be formed by a single city, such as those operated by the cities of San Francisco and San Jose.

#### • Opportunities:

- Opportunity for the local government (or other related entity) to set up a CCA (or utilize a current one), which may then enter into the PPA on the entity's behalf
- If identify correct location, could provide a reliable source to help meet the SB 1383 requirements
- Long term contracting could eliminate need to identify new sources



#### *Item#2:*

Challenges and opportunities for jurisdictions to procure RNG-derived electricity to meet SB 1383 requirements including providing this energy through a Community Choice Aggregate to the City's/CCA's customers (rather than for use in County operations).



- Challenges:
  - Identifying locations:
    - Biomass direct-haul from forest and agriculture sources do not meet SB 1383 requirements
    - Facilities must meet requirements of 14 CCR Section 18993.1(i)
      - A compostable material handling operation or facility as defined in Section <u>17852(a)(12)</u>, other than a chipping and grinding operation or facility as defined in Section <u>17852(a)(10)</u>, that is permitted or authorized under this division; or
      - A transfer/processing facility or transfer/processing operation as defined in Sections <u>17402</u>(a)(30) and (31), respectively, that is permitted or authorized under this division; or
      - A solid waste landfill as defined in Public Resources Code Section 40195.1 that is permitted under Division 2 of <u>Title 27</u> of the California Code of Regulations.
  - Double counting
  - Tracking amount procured versus the amount the jurisdiction consumes from the utility for its municipal operations

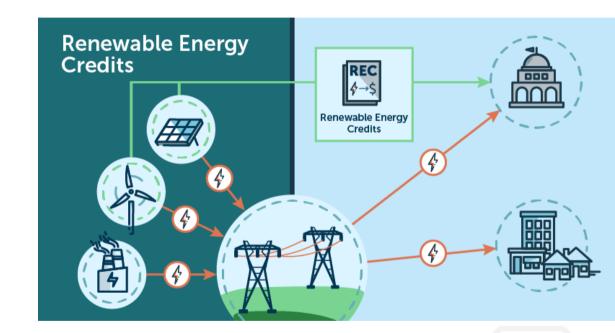
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How do the markets work for renewable energy credits (RECs), the SB 1383 procurement compliance attributes (PCAs), and the California Air Resources Board (CARB) GHG emission credits?

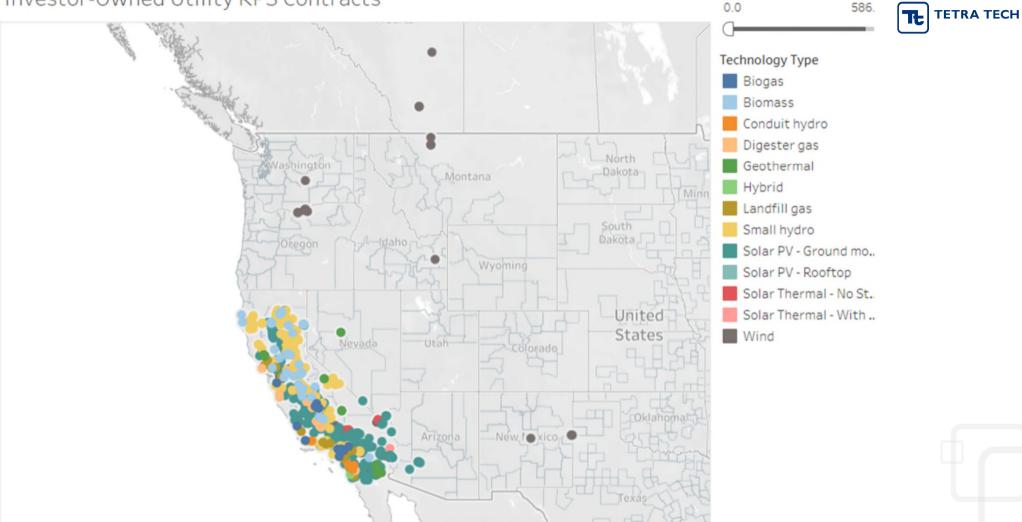


### • RECs/RPS:

- To claim the environmental and non-power attributes of renewable electricity, a supplier/local government/etc. must own the RECs, whether generated from a project the entity/government owns or purchased from a project that is owned and operated by a third party.
- Can be purchased with the electricity using a contract (Power Purchase Agreement) or generated locally
- When a claim is made on the environmental and non-power attributes of a REC, the REC is "retired" and cannot be used to claim renewable electricity use by another party. (WREGIS tracks RECs in the Western Interconnection territory)



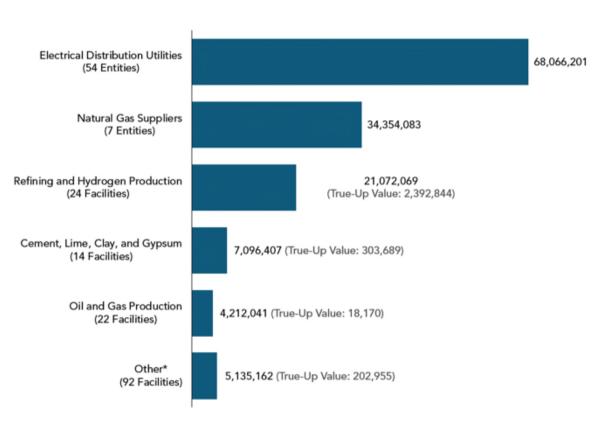
#### Investor-Owned Utility RPS Contracts



contract capacity (mive)

#### **CARB GHG Emission Credits**





- CARB creates allowances equal to the total amount of permissible emissions (i.e., the "cap")
- Covered entities may acquire allowances through auction, limited free allocation (for eligible entities), and by trading with other entities in the Program (i.e., the "trade").
- A majority of allowances are made available through quarterly allowance auctions.
- Regulated entities must surrender allowances, and a limited number of offset credits, to cover their emissions.

#### *Item #4:*

# Do the same molecules of RNG generate both PCAs, RECs, and CARB GHG emission credits? Is there a relationship between these various credits?



- RNG can be reported as renewable energy in CARB's GHG reporting. This emissions source must be validated to be reported as such.
  - Example: book-and-claim, affidavits, contracts
- Reported RNG as a renewable energy source does not count towards the facilities compliance
- RNG for RECs would be purchased as renewable energy and is separate from reporting to CARB's GHG program
- This counts to serve as a claim of renewable energy purchase/use
- The RECs are reported to CARB by total MWh's
  - Must include vintage, retirement
- PCA credits have similar requirements to CARB emissions reporting
  - Need to check feedstock source



#### *Item #5:*

What is the best approach for jurisdictions that are interested in procuring the actual RNG-derived electricity as well both the RECs and the PCAs?



Identify Facility(ies)

Identify End Users and Partners

Identify Total Need Senefit Analysis

Identify Total Need Senefit Analysis

#### Item #5:

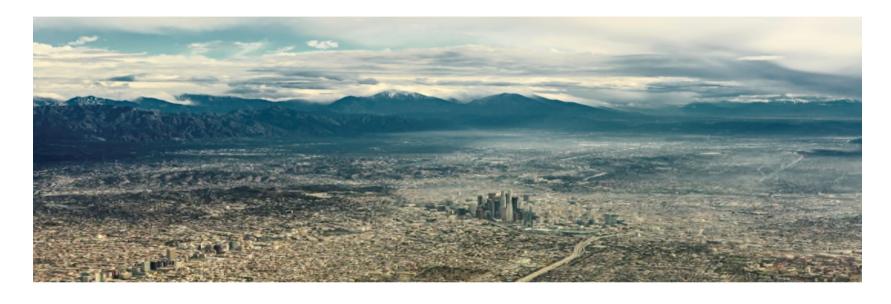
What is the best approach for jurisdictions that are interested in procuring the actual RNG-derived electricity as well both the RECs and the PCAs?



- As mentioned previous, CCA's may enter in PPA's on the participants behalf (for REC purchase)
  - Beneficial as a group approach
- Depends on priority of the fuels use
- RECs and RPS Adjustments are subject to multiple regulatory requirements to avoid double counting
  - Check with CARB and REC generating facility
- Ensure backup documentation is substantiated
- Ensure no double counting
- RECs are usually under long term contract or partial ownership
  - Often for electric power entities

# **Questions?**





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