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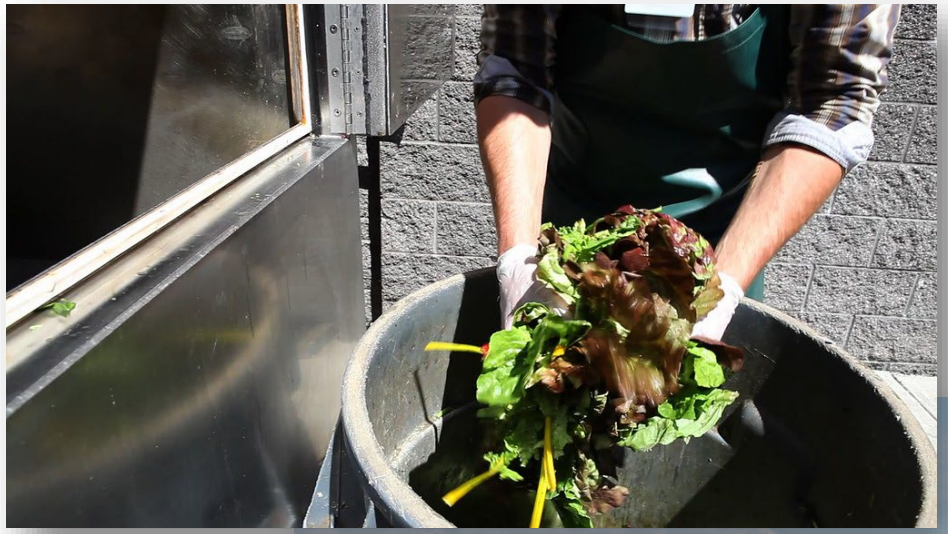
SB 1383 Renewable Gas (RNG) Procurement

Los Angeles County Public Works
Environmental Programs Division

September 19, 2024

Agenda

- Introductions
- SB 1383 Procurement Requirements
  - CalRecycle Definitions
  - 14 CCR § 18993.1 RNG Procurement Requirements
- Opportunities and Challenges for RNG Procurement
- Q&A



Introduction

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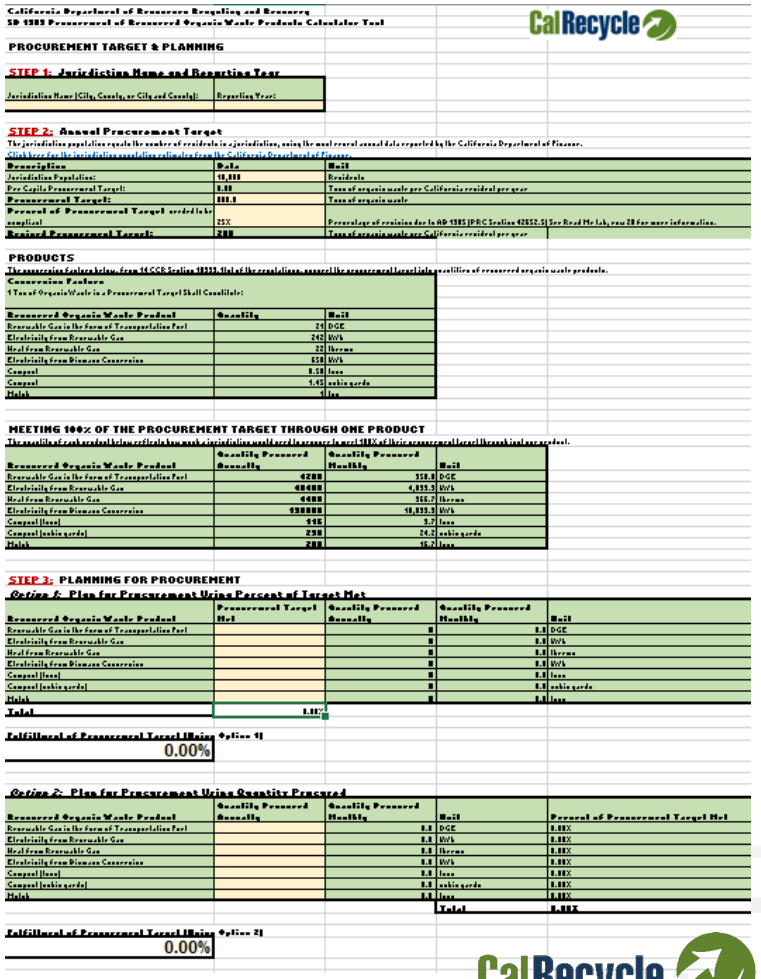
Definitions (14 CCR § 18982)

- **“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

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- Option 1: Jurisdiction procurement target for calendar year 2022 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
  2. 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)

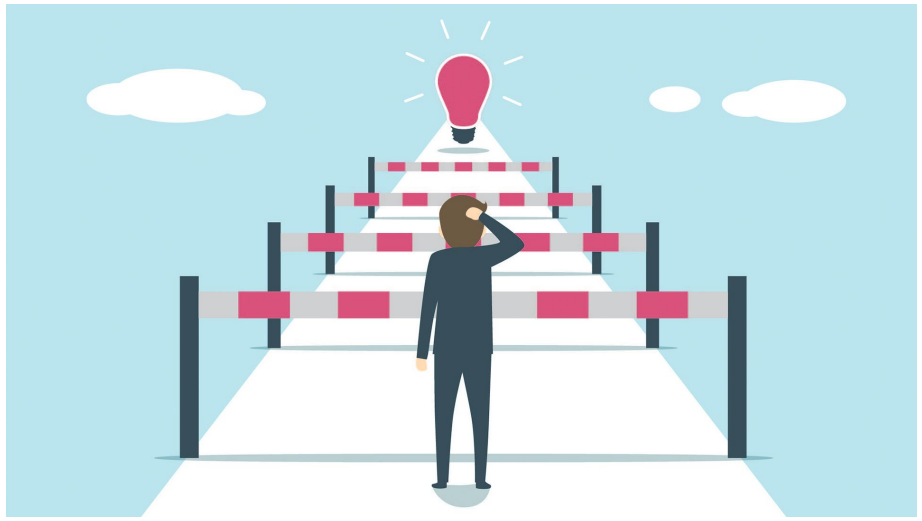
- 14 CCR § 18993.1(h) – **Renewable gas procured from POTW** may only count per the following conditions:
  1) The POTW receives organic waste directly from one or more of the following:
     A. Compostable material handling facility or operation
     B. Transfer/processing facility or operation
     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.

Existing and Planned Facilities

Anaerobic Digestion (AD) Facilities and Publicly Owned Treatment Works (POTWs) in CA

AD Facilities

POTW's



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.

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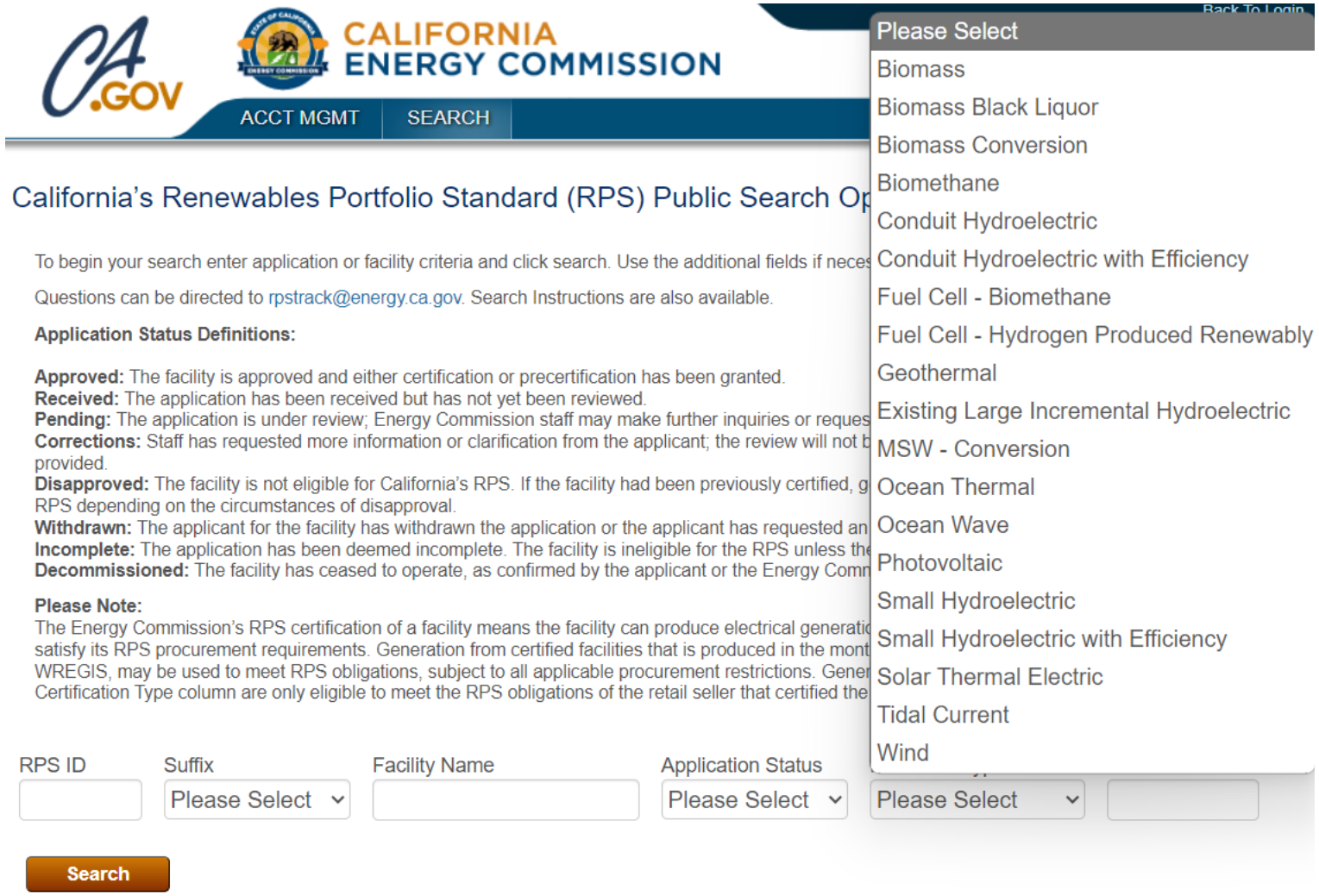
Anaerobic Digestion (AD) Facilities and Publicly Owned Treatment Works (POTWs) in CA

AD Facilities

CalRecycle

POTW's

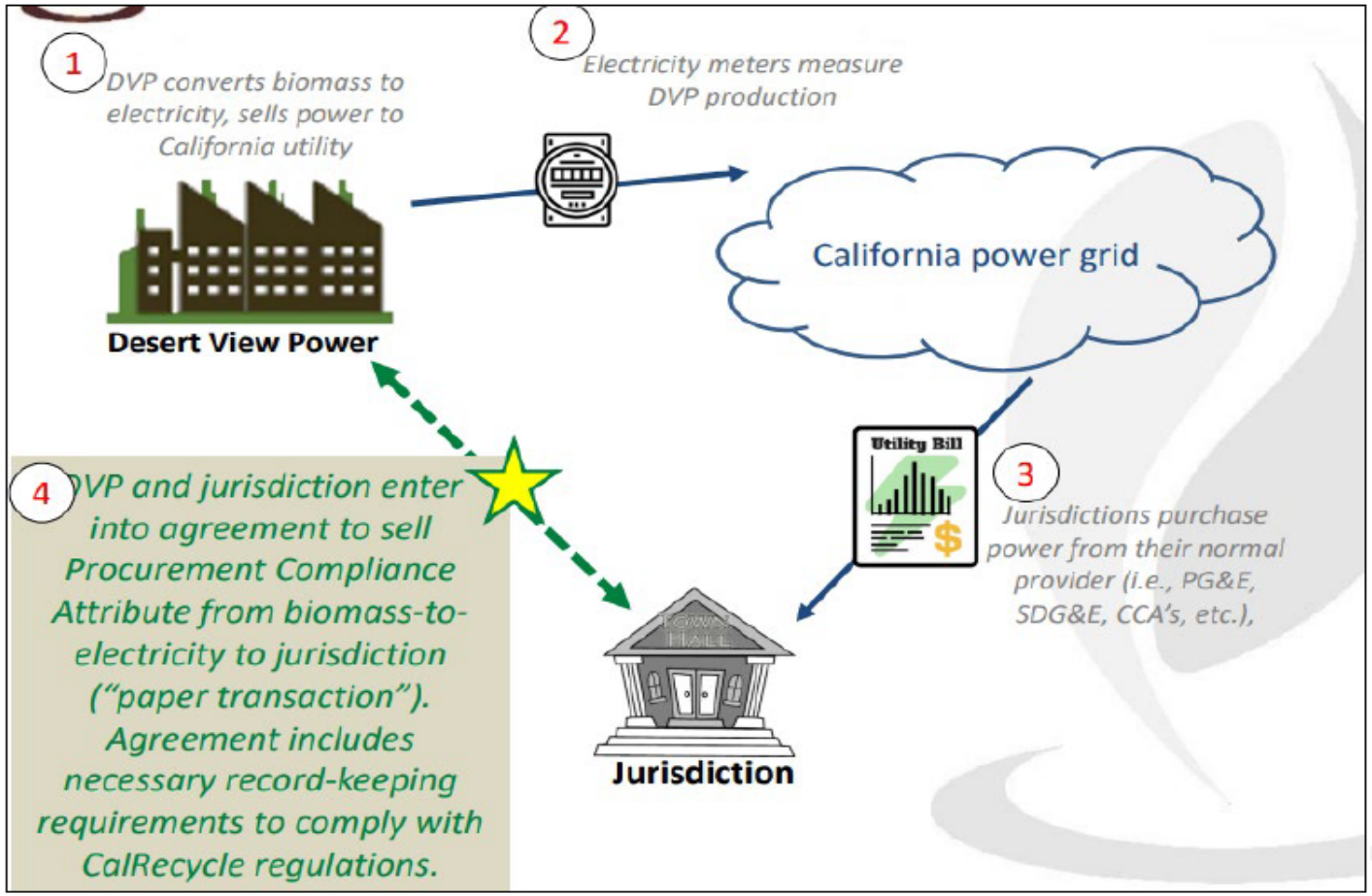
Item #1:
The amount of RNG and/or RNG-derived electricity available to local jurisdictions for compliance with requirements of SB 1383.



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).

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- 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 17852(a)(12), other than a chipping and grinding operation or facility as defined in Section 17852(a)(10), that is permitted or authorized under this division; or
      - A transfer/processing facility or transfer/processing operation as defined in Sections 17402(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 Title 27 of the California Code of Regulations.
  - Double counting
  - Tracking amount procured versus the amount the jurisdiction consumes from the utility for its municipal 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?

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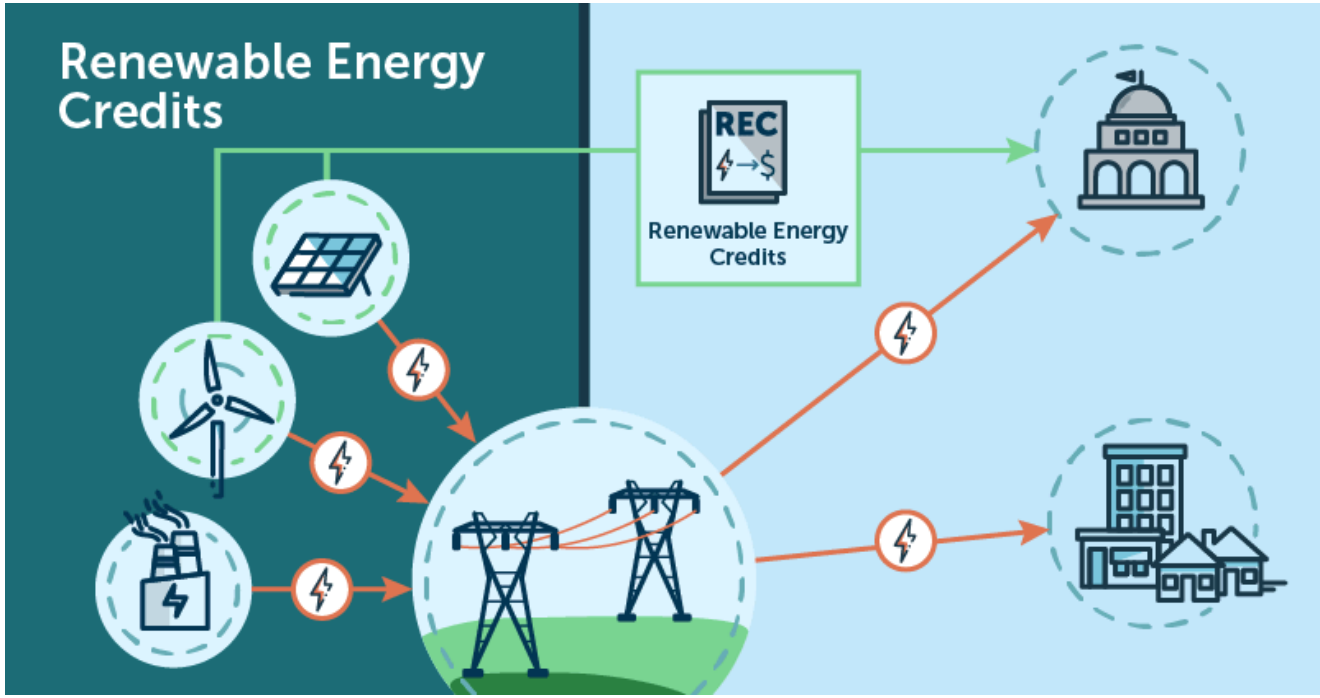
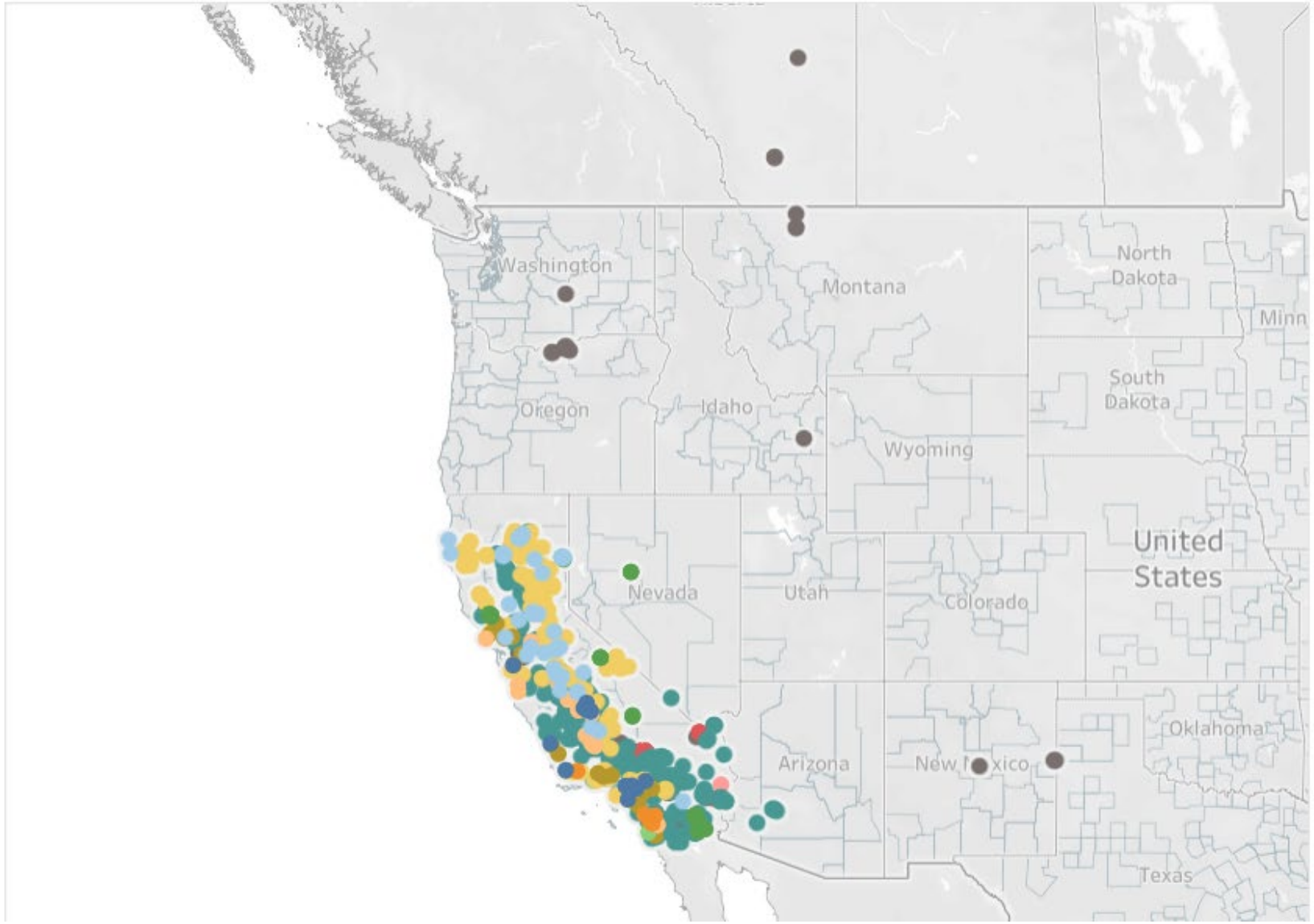
- RECs/RPS:
  - To claim the environmental and non-power attributes of renewable electricity, a supplier/local government/etc. must own the RECs, whether generated from a project the entity/government owns or purchased from a project that is owned and operated by a third party.
  - Can be purchased with 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



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Technology Type

- Biogas
- Biomass
- Conduit hydro
- Digester gas
- Geothermal
- Hybrid
- Landfill gas
- Small hydro
- Solar PV - Ground mo..
- Solar PV - Rooftop
- Solar Thermal - No St..
- Solar Thermal - With ..
- Wind

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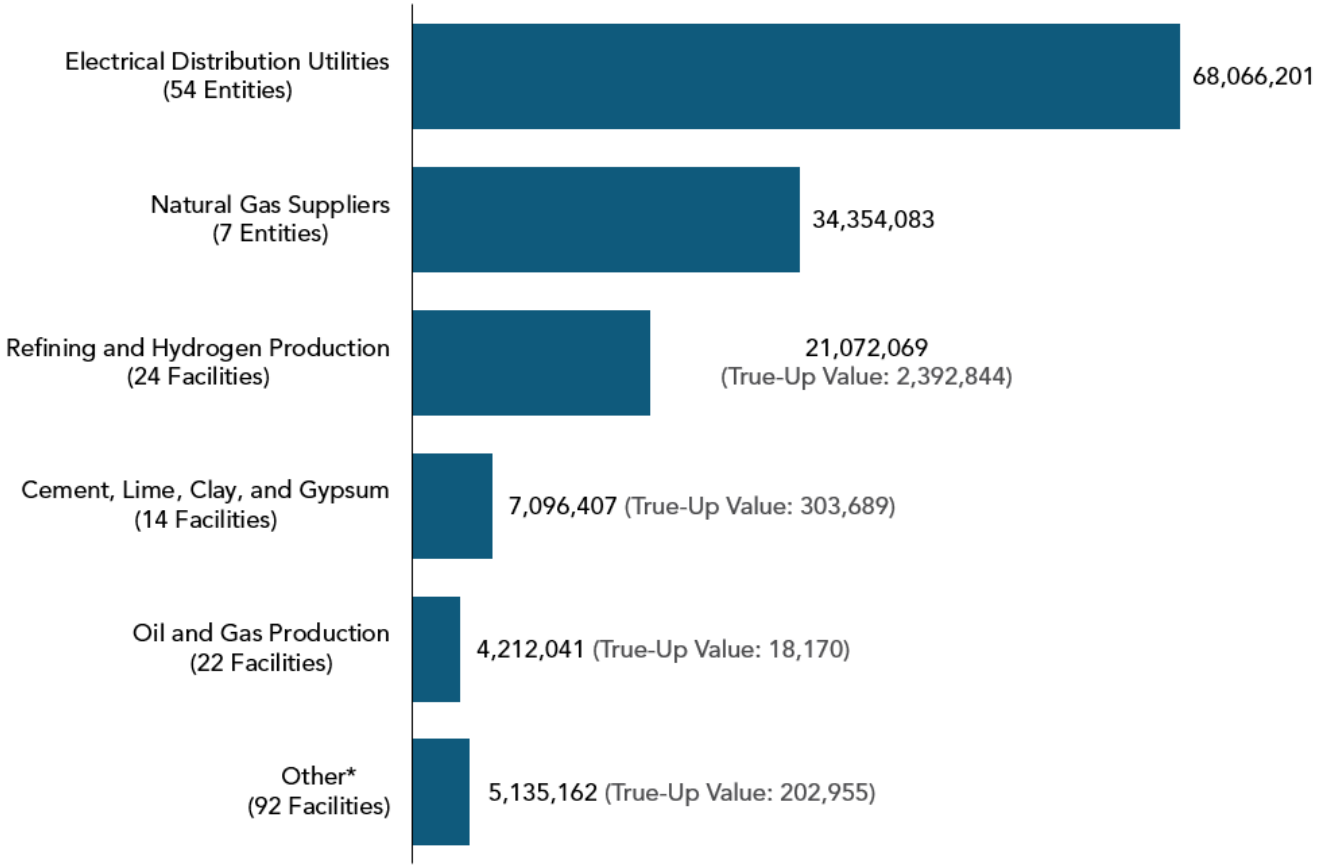
CARB GHG Emission Credits



- 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?

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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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