



SB 1383 ROWP Procurement: Strategies to Reach the End Zone

**Presented to Alternative Technology Advisory Subcommittee (ATAS)
Los Angeles County Solid Waste Management Task Force
March 20, 2025**

April Hamud
Sr. Project Manager
HF&H Consultants

PREVIEW

- SB 1383 Jurisdiction Requirements
- Laws Shifting the ROWP Goalpost
- Expanded List of Recovered Organic Waste Products
- The ROWP Playbook: Developing a Procurement Plan
- How are Jurisdictions Reaching their ROWP Targets?
- Procurement Brokers
- Costs and Funding
- Community Choice Aggregates
- Additional Considerations



SB 1383 Jurisdiction Requirements



Implement
Organics
Program

Implement
Ordinances &
Policies

Educate
Generators

Inspect and
Enforce
Compliance

Recover Edible
Food

Procure
Recovered
Organic Waste

Capacity
Planning

Maintain Records
and Reports to
CalRecycle

ROWP Procurement Requirements



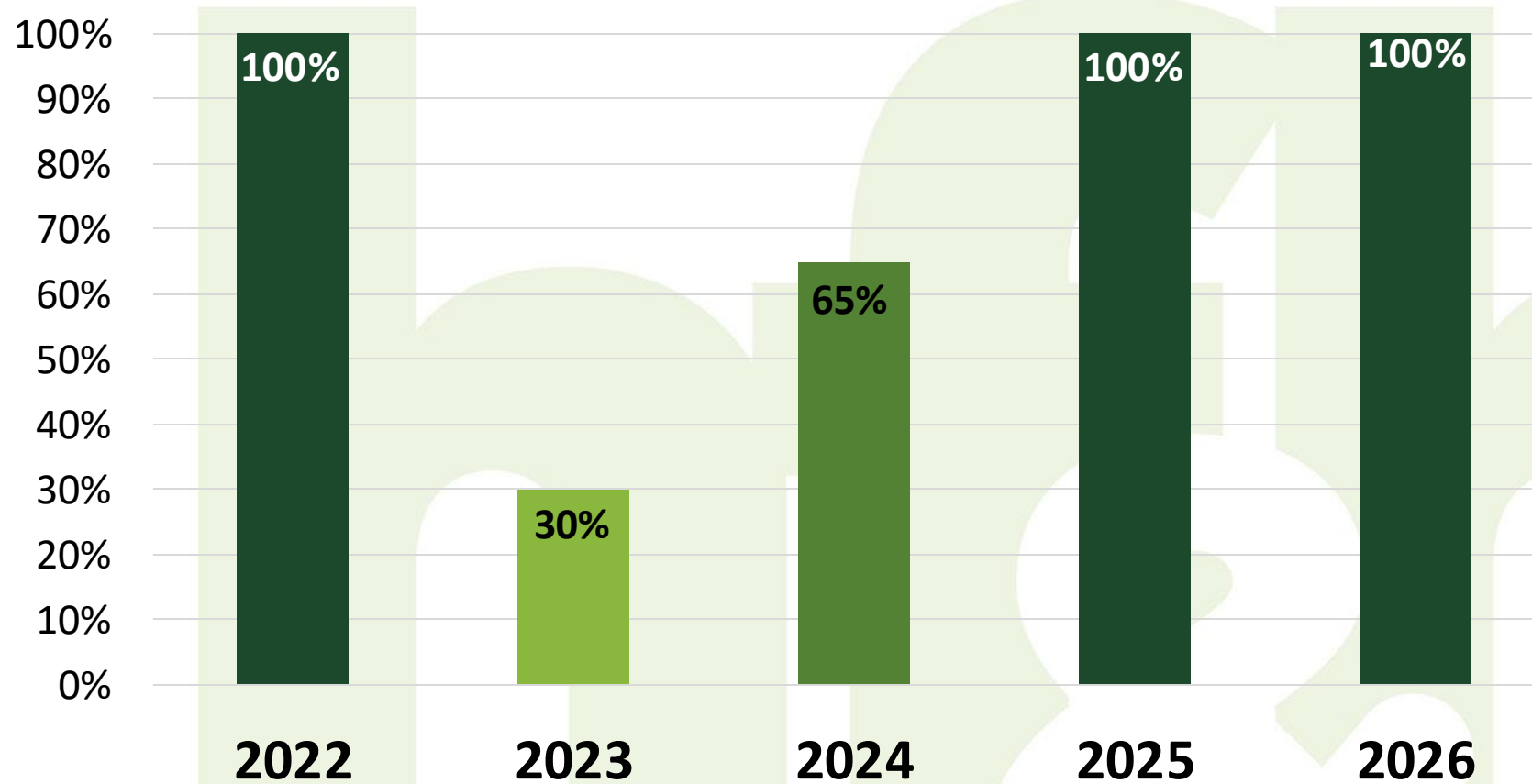
Beginning January 1, 2022:

- **Jurisdictions must procure recovered organic waste products (ROWP)**
 - Compost
 - Mulch
 - Renewable Energy from Anaerobic Digestion
 - Electricity from Biomass Conversion
- **Quantity is determined by CalRecycle every 5 years based on jurisdiction population**
- **Target: 0.08 ROWP tons per capita**

AB 1985



Phase-In of Procurement Compliance Requirement





AB 2902



- **Extends the rural exemption (organic waste collection and procurement target requirements) from 2027 to 2037 with 5-year renewal periods thereafter.**
 - “Rural county” means a county that has a total population of less than 70,000 persons.
- **Residents covered by a low population waiver or high-elevation waiver are excluded in the population for the ROWP target calculation**
 - CalRecycle will calculate and inform the jurisdiction of its new ROWP procurement target



AB 2346

- Expands ROWP procurement methods*:
 - Compost from small composting facilities (<100 cy and 750 sq ft)
 - Vermicomposting 
 - Mushroom composting 



*Jurisdiction must have an ordinance or other enforceable mechanism requiring compost and vermicompost to be used in a manner that meets the definition of “**land application**” in 14 CCR Section 17852(A)(24.5)(a) and that meets the pathogen, metals, and physical contamination limits that apply to existing composting facilities.

AB 2346



- Up to 10% of the procurement target through the following:
 - **Mulch*** produced from jurisdictions' tree trimming operations and applied to public landscape or given away to residents
 - **Recovered edible food** from commercial food generators (1 ton recovered edible food = 1 ROWP ton)
- Up to 10% of the procurement target through the following expenditures until 12/31/2035 (\$21.38 investments = 1 ROWP ton):
 - **Investments** for development of community composting operations or compostable materials handling operation (e.g., purchase equipment, purchasing land)
 - **Equipment** used to apply compost or mulch

*Jurisdiction must have an ordinance or other enforceable mechanism requiring mulch to be used in a manner that meets the definition of “**land application**” in 14 CCR Section 17852(A)(24.5)(a) and that meets the pathogen, metals, and physical contamination limits that apply to existing composting facilities.

AB 2346



Allows procurement without a DSP agreement, under certain circumstances

- 1) Ordinance/policy that enforces use of ROWP products
- 2) Jurisdiction can verify amount
- 3) Only one jurisdiction can claim procurement

Potential Projects:

- WELO Projects
- Private Construction Projects

AB 2346



Can calculate per capita procurement target using a **local waste characterization study** performed within the past 5-years

- CalRecycle published best practices in its [AB 2902 and AB 2346 Guidance document](#)
- Account for seasonal variations in waste composition
- Attempt to use material type list from the latest CalRecycle disposal waste characterization study (2021 Study had 18 organic types out of 88 total material types)
- Follow ASTM S5231-92R24 “Standard Test Methods for Determination of the Composition of Unprocessed Municipal Solid Waste”
- Example: [Alameda County 2023-24 Waste Characterization Study](#)

Statewide ROWP per capita calculation:

$$\frac{(25,043,272 \text{ organics tons}^* \times 13\% \text{ Govt GDP share})}{42,066,880 \text{ statewide population}} = 0.08 \text{ tons/person}$$

*Tons of organics required to recover by 2025 to meet the 75% organic waste disposal reduction target mandated by SB 1383.

AB 2346



Option to **convert to 5-year procurement target** starting 1/1/2027

- Must notify CalRecycle on or before 1/1/2027
- Jurisdiction is still responsible for meeting annual procurement targets in CY 2025 and CY 2026
- Jurisdiction would need to procure 5-years worth of ROWP products by 12/31/2031

Expanded list of RECOVERED ORGANIC WASTE PRODUCTS (ROWP)



Products made from California, landfill-diverted, recovered organic waste processed at a permitted or otherwise authorized operation or facility.

- Mulch
- Compost
- Electricity from Biomass Conversion or RNG
- Heat from RNG
- Transportation Fuel from RNG

AB 2346 Additions

- Mulch from jurisdiction's tree trimmings (1)
- Vermicompost, Mushroom Compost, and Compost from small operations
- Recovered edible food from commercial food generators (1)
- Compost/mulch operation investments and equipment costs (2)

- (1) Combined total capped at 10% of procurement target.
(2) Capped at 10% of procurement target.





ROWP Procurement Target

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

Conversion Factors		
1 Ton of Organic Waste in a Procurement Target Shall Constitute:		
Recovered Organic Waste Product	Quantity	Unit
Renewable Gas in the form of Transportation Fuel	21	DGE
Electricity from Renewable Gas	242	kWh
Heat from Renewable Gas	22	therms
Electricity from Biomass Conversion	650	kWh
Compost	0.58	tons
Compost	1.45	cubic yards
Mulch	1	ton

Recovered Organic Waste Product Equivalents per AB 2346	Quantity	Unit
Recovered Edible Food from Commercial Food Generators	1	ton
Investments/Equipment for Compost	21.38	dollars

ROWP procurement target based on jurisdiction population
(14 CCR Section 18993.1(c)(1))



The ROWP Playbook:

Developing a ROWP Procurement Plan

COMPLIANCE METHODS



Directly
procuring ROWP
**for use or
giveaway**

METHOD 1*



Requiring a **direct
service provider
(end-user)** to the
jurisdiction procure
ROWP

METHOD 2*



Procurement
efforts per
AB 2346

METHOD 3
(Starting 2025)



*Per 14 CCR Section 18993.1(e).

The ROWP Playbook:

Developing a ROWP Procurement Plan



Step 1: Calculate target and identify efforts that are eligible per AB 2346

- Will you use 0.08 ROWP tons per capita or recalculated per capita figure based on a local waste characterization study?

AB 2346 Procurement Efforts

First 10%	Second 10%
Pounds of recovered edible food from Tier 1 and Tier 2 Commercial Edible Food Generators	Investments for community composting operations
Mulch from Jurisdiction's tree trimming projects	Equipment to apply compost or mulch

The ROWP Playbook:

Developing a ROWP Procurement Plan

Step 2: Assess your jurisdiction's annual need for ROWP.

- RNG for Public Fleets
- Electricity for Public Infrastructure (traffic lights, public buildings)
- Compost / Mulch for
 - Road Medians
 - Tree Trimming/Public Parks
 - Dust Control
 - Jurisdiction Construction Projects
 - Water Efficient Landscape Ordinance (WELO) Projects
 - Slope Stabilization / Erosion Control

The ROWP Playbook:

Developing a ROWP Procurement Plan



Step 3: Determine existing facilities that have available SB 1383-eligible ROWP.

- **Composting Facilities**
 - Permitted/Authorized Facilities
 - Small composting facilities
 - Worm and Mushroom Compost
- **Anaerobic Digester (AD)**
- **Publicly Owned Treatment Works Facility (POTW)**
- **Biomass Conversion Facility**

*SWIS Facility/Site Activity Search:
calrecycle.ca.gov/SolidWaste/Activity





The ROWP Playbook:

Developing a ROWP Procurement Plan

Step 4: Assess your jurisdiction's relationship with other product users (potential DSPs)

- Farmers
- Ranchers
- Landscapers
- Golf Courses
- Cemeteries
- Private Construction
- Haulers/Landfills
- POTWs/ Anaerobic Digesters
- School Districts
- Colleges
- Zoos
- Brokers
- Other Conservation Efforts
- CalTrans Projects
- Healthy Soils Program Projects*



*CDFA Healthy Soil Program grant projects:

<https://www.cdfa.ca.gov/oefi/healthysouls/IncentivesProgram.html>



The ROWP Playbook:

Teamwork Makes the Dream Work



Example ROWP Starting Lineup		
Name	Product	ROWP Projected Tons
Parks & Rec	Tree Mulch on Medians	100
Edible Food Generators	Edible Food	100
Compost Giveaways	Compost/Mulch	200
Hauler	RNG from AD Facility	100
Compost Broker	Compost/Mulch	400
PCA Broker	Electricity PCAs	100
Total Projected		1,000

Compost Procurement by Population

(100% TARGET)



Mr. Owl, how many truckloads does it take to reach your jurisdiction's procurement target?



Let's find out...

Photo Credit: Tootsie Roll

Population	Compost (cubic yards)	Compost (Tons)	Truckloads of Compost*
10,000	1,160	464	58
50,000	5,800	2,320	290
100,000	11,600	4,640	580
500,000	58,000	23,200	2,900
1,000,000	116,000	46,400	5,800

*Assumes each truckload holds 8 tons (20 CY) of compost.



**How are jurisdictions
reaching their ROWP
targets?**

Examples of DSP Agreements



■ Hauler Franchise Agreements

- Require hauler to procure ROWP on behalf of the jurisdiction
 - ❑ Compost Giveaways
 - ❑ Use of RNG produced from Permitted Facilities

■ Landscaper Agreements

- “Purchaser agrees to procure and use recovered organic waste product(s) on behalf of the City for the purpose of facilitating City compliance with recovered organic waste product procurement (ROWP) requirements of Senate Bill 1383, as described in the California Code of Regulations Title 14, Division 7, Chapter 12, Article 12.”

■ End-Users Through Procurement Brokers



Incentivizing Direct Service Providers Through Discounts and Rebates

Examples:

- \$5 per compost ton discount (ReGen Monterey)
- 10% rebate for compost purchases (Sonoma County)

Caveats:

- Works best for jurisdictions with developed compost markets
- Requires high quality finished compost
- Success depends on relationship between composter, jurisdiction, and direct service provider

Free Compost and Mulch

OCWR Greeneries



Photo Credit: City of Yorba Linda

- Free pick-up of compost/mulch in bulk, bags, and wattles upon jurisdiction's request
- Produced over 2,300 wattles in 2024 YTD
- Transportation at cost of jurisdiction
- Opportunity for jurisdictions' direct service providers (e.g., landscapers)
- Haulers can back-haul compost/mulch
- **Success Story:** City of Yorba Linda met their 2024 ROWP Procurement Target using the free compost/mulch program in six months



Request for Proposals and Quotes for ROWP Procurement

Cities Requesting ROWP products:

- Corona
- Fremont
- Garden Grove
- Oakland
- San Ramon
- Sunnyvale
- Moreno Valley

Facility Requesting Offers:

- LACSD A.K. Warren Facility (Carson, CA)
 - Produces and uses ROWP (electricity) on site.
 - Plans to meet biosolids diversion requirements (50% in 2024 and 75% in 2025)
 - LACSD requested procurement bids to establish Direct Service Provider (DSP) Agreements
 - Bids were due 10/23/24
 - DSP Agreements were signed with accepted offers for 2025 ROWP Electricity Credit
- LACSD is seeking offers for 2025 ROWP Electricity Credit until 10/31/25: [SB 1383 RECOVERED ORGANIC WASTE PRODUCTS \(ELECTRICITY\) | RFP Posts List | Los Angeles County Sanitation Districts](#)



Procurement Brokers

Compost Broker Agreements



What does a compost broker do?

- Find **ROWP** and/or **end user**.
- Establish a **DSP agreement** between jurisdiction and end user.
- Maintain and provide **records** of procurement (e.g., invoices with quantity and product type purchased)



Examples of Compost Brokers



1. Agromin

- Largest organic materials processor in the state

2. Zero Foodprint

- Non-profit organization that uses funds from its ZFP member businesses to fund healthy soil projects

3. Synagro

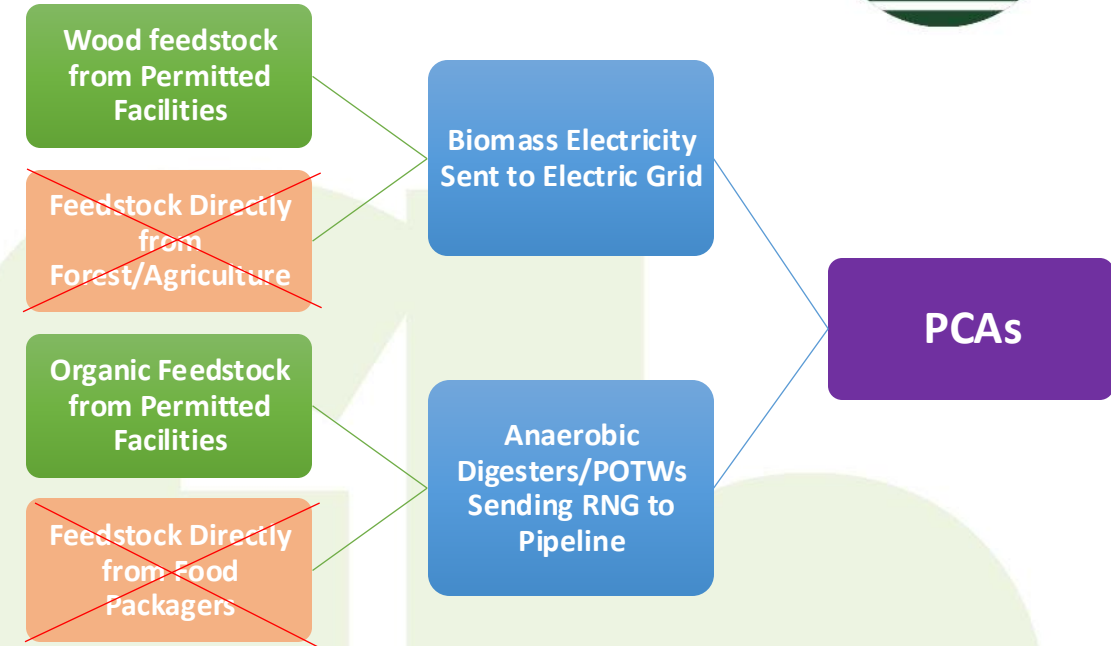
- Four biosolids composting facilities in CA

4. Other Composting Facilities / Haulers

Procurement Compliance Attributes (PCA)



- Jurisdictions can claim the SB 1383-eligible product's **procurement compliance attribute (PCA)** to meet their procurement target
- Amount procured cannot exceed the amount that the jurisdiction consumes from the utility for its municipal operations*
- PCAs generated in the calendar year can be procured until the end of each year
- Direct service providers can purchase PCAs on behalf of the jurisdiction
- PCA Agreement Examples:
 - County of Riverside and Greenleaf for 2023 Procurement Compliance
 - Seven PCA Agreements between Valinor and cities of Gardena, Beaumont, Pico Rivera, Fresno, Rancho Santa Margarita, Beverly Hills, and Pasadena for 2024 Procurement



*Source: CalRecycle FAQ

<https://calrecycle.ca.gov/organics/slcp/faq/recycledproducts/#electricity>

[This Photo](#) and [This Photo](#) by Unknown Author is licensed under [CC BY-SA-NC](#)



Examples of PCA Brokers

1. Valinor Energy

- Broker for several biomass-to-electricity facilities
- Executed 7 PCA agreements in 2024, with a total of 40,000 ROWP tons (compliance for over 760,000 people)
- Estimates 300,000 ROWP tons available for 2025 (compliance for 3.75 million people)

2. Anaergia

- Socal Biomethane (produces RNG)
- Sterling Natural Resource Center (produces electricity used onsite)

3. Sevana

- Acquired Rialto AD facility (produces RNG)

4. Vespene Energy

- North State Renewables AD in Oroville, CA
- Approx. 12,000 to 25,000 ROWP tons available in CY 2026 and beyond
- Looking for letters of intent from jurisdictions interested in purchasing PCAs

Estimated Costs



DSP Agreements for Compost / Mulch

- \$14 - \$88/compost ton (\$8 - \$51/ROWP ton) subsidy from jurisdiction, and farmers will pay for remaining costs (estimated total cost to farmer is approximately \$75/ton to purchase, haul, and spread compost)

PCA Agreements

- \$8 - \$19.50/ROWP ton
- Valinor's PCA Price for 2025 is approximately \$10/ROWP ton

Estimated Annual Costs (at 100% Procurement Target)

Population	Compost/Mulch Brokers		PCA Brokers	
	Low (\$8/ROWP ton)	High (\$51/ROWP ton)	Low (\$8/ROWP ton)	High (\$19.50/ROWP ton)
10,000	\$6,000	\$41,000	\$6,000	\$16,000
50,000	\$32,000	\$204,000	\$32,000	\$78,000
100,000	\$65,000	\$408,000	\$64,000	\$156,000
500,000	\$325,000	\$2,040,000	\$320,000	\$780,000
1,000,000	\$650,000	\$4,080,000	\$640,000	\$1,560,000

Funding Sources

- SB 1383 Local Assistance Grant Funds
- Franchise Agreements
- General Fund
- Other Grants



Electricity from Community Choice Aggregates

“My jurisdiction obtains electricity from a community choice aggregate. Can I report the amount of electricity obtained from biomass conversion facilities as SB 1383 procurement credit?”

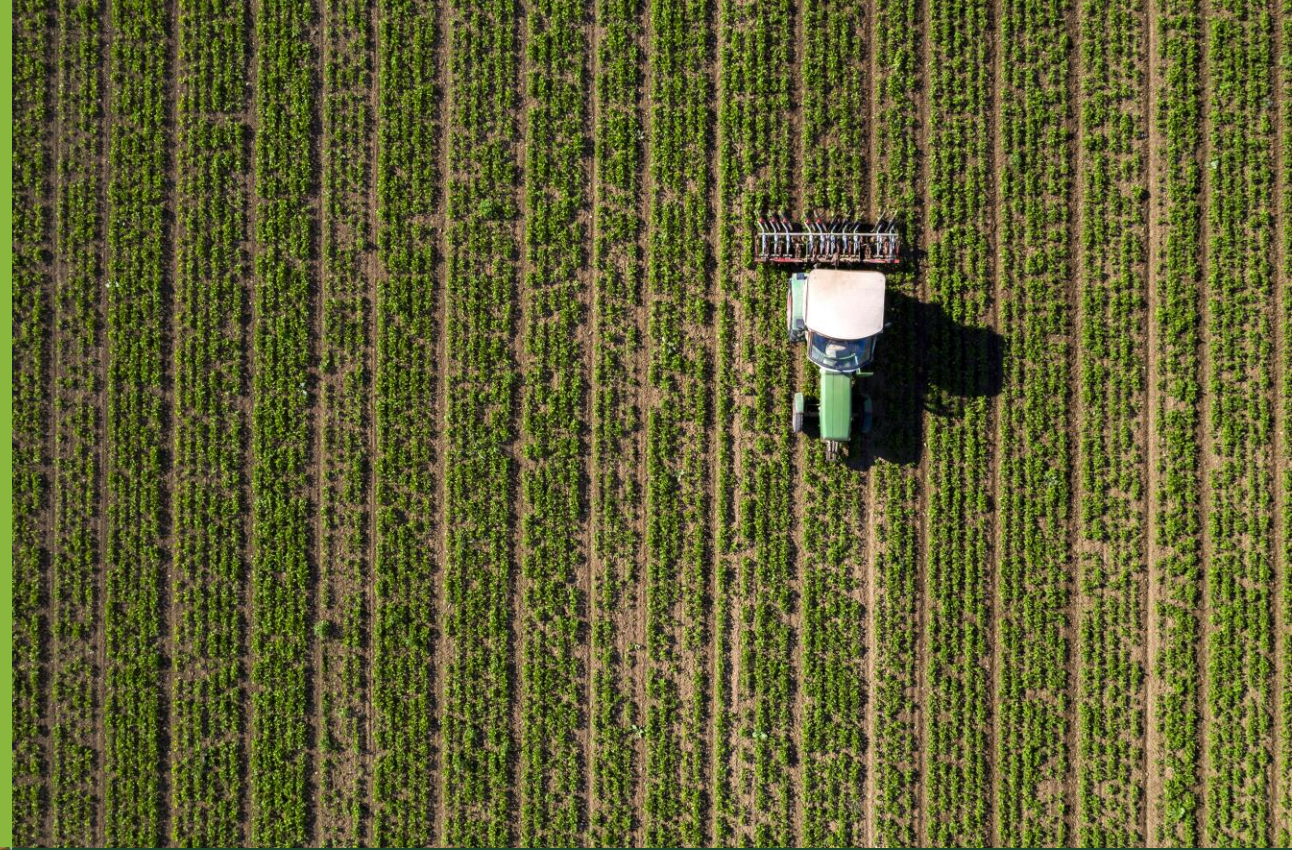
- Not all electricity generated from biomass facilities was produced from SB 1383 eligible feedstock (direct sources from forest/agriculture do not count)
- Contracts between CCAs/Biomass Facilities need to clearly define who owns the rights to the PCA credits (e.g., seller or buyer of the biomass electricity)
- Need documentation to verify the amount of biomass electricity produced from SB 1383 eligible feedstock



Additional Considerations

Timing

- Farmers' compost needs vary by season (high usage in Fall)
- PCA brokers can sell annual amount of PCAs until the end of each year
- DSP Agreements are intended be in place prospectively (in advance)



Tracking AB 2346 Efforts

- Pounds of edible food from Tier 1 and Tier 2 Generators and FROs
- Measuring Jurisdiction's Tree Trimmings
- Plans for equipment and investments



Thank You!



April Hamud

Senior Project Manager

ahamud@hfh-consultants.com

(949) 251 - 8586