

CALIFORNIA COMPOST COALITION



February 23, 2024 | Vol. 11 Issue 1

Sustainable Organics Recycling

THE STATE OF THE COMPOST

My Fellow Composters . . .

The State of the Compost is Healthy. . .

The Healthy Soils Program Incentive Grants at the California Department of Food and Agricultural are part of a collaboration of state agencies that promote the development of healthy soils on California's farmlands and ranchlands. CDFA solicited for \$11 million through the Incentive Grants Program that provides premium pricing for compost. In the fields of opportunity, it is carbon farming time again where there is a harmonic convergence of policy, funding, and implementation in this carbon world. The California Resource Conservation Districts are self-organizing into seven Regional Carbon Farming Hubs encompassing over 12.5 million acres.

The State of the Compost is Steady and Growing. . .

The markets are surpassing the steady state equilibrium where the 7.4 million tons of organic waste being diverted from landfills in 2022 mostly went to agricultural. The southern Californian hyperbole just a few years ago was there not enough markets for compost, to now where the academia narrative is that we can't make enough compost for the new GHG targets, where they need to understand there will be another 5 million tons of new compost when meeting SB 1383 requirements.

The State of the Compost is Sinking. . .

CARB's fourth Scoping Plan Update was adopted in December 2022 which focused on a path to carbon neutrality by 2045 and included Natural and Working Lands for the first time pivoting agricultural from being a carbon source to a carbon sink. As part of the Scoping Plan, CARB modeled land management scenarios with increasing compost use by sinking up to 10,000 acres per year each year to 2030 to meet GHG targets.

The State of the Compost is Carbon Negative. . .

Lawrence Livermore Lab released, "Getting to Neutral – Options for Negative Carbon Emissions in California", which featured natural solutions where compost and biochar are

sequestered into soils and are carbon negative, leading to carbon neutrality by 2045. Plus, producing renewable natural gas via anaerobic digestion is carbon negative.

The State of the Compost is Cost-Effective. . .

Lawrence Livermore Lab reported compost and biochar use as among the most cost-effective GHG reduction programs. CalRecycle continues to lead the way with one of the most cost-effective programs under the Cap-and-Trade program at just \$53 per ton of GHG reduced for the Organic Infrastructure Grants, with 78% of the money benefitting priority populations.

The State of the Compost needs Contracting. . .

Capital expenditure could be \$3 billion with operations costing \$8 billion. The monthly cost increase for businesses could average 30% and for households could increase an average 20%. Anaergia, True North Renewable Energy and Atlas Organics have all missed out on new contracts and have curtailed their California plans.

The State of the Compost is still Underfunded. . .

The Little Hoover Commission agrees. CalRecycle was able to roll out \$130 million in infrastructure grants and \$110 million in SB 1383 local government grants before the budget ax fell, which could increase the diversion rate by 8.3%. The Federal EPA could fund the B List with \$58 million in grants. A Bond measure could raise \$200 million per year, but doubtful. A tip fee increase of \$5 per ton from the 1993 amount of \$1.40 per ton could raise \$200 million per year to fund local capacity.

The State of the Compost is Bullish. . .

With a SB 1383 supply push, coupled with new contracts and available capacity, composting should be the centerpiece of the circular economy to cost-effectively reduce greenhouse gases while promoting healthy soils, but remains undervalued and underfunded.

We ask not what more the Composters can do for the State to battle climate change, but we ask the State to fund their mandates to fulfill our common destiny.

Budget Deficit Disorder

The huge budget deficit facing lawmakers - estimated at \$38 billion or is it \$58 billion? - is rooted in two separate but related developments during the past two years - the substantial decline in the stock market that drove down revenues in 2022 and the unprecedented delay in critical income tax collections which got the attention of our disorderly, spendy Legislature. The 2021 and 2022 Budget Acts allocated approximately \$54 billion - the California Climate Commitment - to fully integrate climate solutions with equity and economic opportunity. The Governor's Budget maintains approximately \$48.3 billion of these investments over seven years. The Budget includes an additional \$159.1 million in new climate investments. The Administration also continues to pursue available federal climate funding, including from the Inflation Reduction Act and the Infrastructure Investment and Jobs Act where California could get close to \$750 million of the \$4.6 billion available nationwide. To address the projected budget shortfall, the Budget proposes \$6.7 billion of General Fund solutions in climate-related programs to achieve a balanced budget including: \$2.9 billion in reductions; \$1.9 billion in delays of expenditures to future years; \$1.8 billion in shifts to other funds, primarily the Greenhouse Gas Reduction Fund (GGRF).

CalRecycle was allocated \$281 million in the GGRF and, with other previous surplus funding, had awarded \$170 million in 2 rounds of SB 1383 local government grants and \$130 million for SB 1383 compost and anaerobic digestion infrastructure. CalRecycle was able to award this money and get it out the door before this year budget cuts. With the surplus over, CalRecycle only gets \$7,000 from the GGRF this year. Over at CDFA, the Healthy Soils grants had been up to \$50 million, and went to \$11 million which means that there will be 110 projects and \$100,000 each buying compost at a premium.

Place a Buy on Carbon

The Cap-and-Trade Program, as a critical piece of the greenhouse gas reduction programs in California, is thriving. At the first quarterly auction in November 2012, the floor price for regulatory carbon allowances was just \$10/ton and 11 years later at the 37th quarterly auction, the price is up to \$37.40/ton – up over 374% in 11 years. Bloomberg estimates the California carbon price will reach \$63/ton by 2030, up another 168% in 7 years. Meanwhile, the voluntary nature-based carbon off-set markets are expected to average \$20/ton in 2024 with estimates of over \$80/ton by 2035. Since its inception in 2012, these quarterly auctions to fund Cap-and-Trade program have raised about \$27 billion and peaked at over \$1.42 billion at the last quarterly auction in November 2023.

[The 2023 Annual Report to the Legislature on California Climate Investments Using Cap and Trade Auction Proceeds](#) is a key resource for tracking progress on the status and outcomes of California Climate Investments. Since the first appropriations to California Climate Investments programs were made in 2014, 569,477 projects supported by \$9.8 billion in implemented funds are expected to reduce an estimated 98.0 MMTCO₂e. With 78 California Climate Investments programs administered by 22 state agencies, billions of dollars go into the state's transition to a low-carbon and more equitable future. Cumulatively, 74%, or \$7.2 billion, in implemented funds are benefiting priority populations, greatly exceeding statutory minimums.

The most cost-effective programs have been CalRecycle's Organic Grants Program costing just \$53 per ton of GHG reduced that leverages an additional 3.8 times more public and private dollars. CDFA's Healthy Soils Program cost \$107/ton. CARB's ZEVs programs cost over \$1,000/ton and offer little value. CARB should incentivize low carbon, low cost programs.

Grants

CalRecycle awarded \$118 million to 14 compost and AD projects that will divert 770,000 tons per year when fully operational. Another \$11.2 million went to 4 stand-alone pre-processing facilities and \$1.6 million to 5 smaller in-vessel compost operations. It was anticipated that there would need to be 80 to 100 new or expanded facilities with over \$3 billion in capital costs to meet the 75% mandate. With \$130 million in grants and another \$520 million in public and private capital leverage, this \$650 million investment, will move the needle by 8.3% for the SB 1383 target of 75% by 2025.

Applicant	Project Type	Amount
Humboldt Waste Management Authority*	Pre-Processing	\$2.7 M
Green Valley Recycling	Pre-Processing	\$3.0 M
Republic Services of Sonoma County, Inc.	Pre-Processing	\$2.5 M
Sacramento County NARS	Pre-Processing	\$3.0M
	Subtotal	\$11.2M

Applicant	Project Type	Amount
California Grinding, Inc.	AD	\$6.6M
City of Napa*	AD	\$10.0M
City of Riverside*	AD-POTW	\$10.0M
City of Redding*	AD-POTW	\$10.0M
Los Angeles County Sanitation Districts*	AD-POTW	\$10.0M
SANCO Services LP	AD	\$10.0M
University of California, Davis	AD	\$4.8M
	Subtotal	\$61.4M
Anderson Landfill, Inc.	Compost	\$10.0M
California Wood Recycling dba Agromin	Compost	\$10.0M
Forward, Inc.	Compost	\$5.2M
Kern County*	Compost	\$10.0M
Northern Recycling, LLC	Compost	\$10.0M
Riverside County*	Compost	\$1.3M
Western Placer Waste Management Authority*	Compost	\$10.00
	Subtotal	\$56.4M

The CCC Executive Committee discussed the following legislative and regulatory activities for 2024, as discussed at their retreat in Sacramento on January 12, 2024.

I. Overarching Priorities

- Holding the line on SB 1383 requirements and implementation.
- Securing funding for infrastructure and end market support; potentially through a landfill tip fee increase.
- Accelerating infrastructure development, with a potential focus on statutory timelines for air district permitting.
- Secure status as “essential public service” for potential streamlining of permitting process.
- Ensuring there are long-term, reliable markets for organic products and bioenergy, including hydrogen.
- Develop support strategy for innovative technology deployment.

II. Key Policy Issues

- Agricultural Market Development
- Compost Infrastructure Development
- Incentive Funding
- Government Entity Market Development
- Essential Public Services Determination
- Biomass Industry/Woody Waste Management

III. Monitor and Engage on Relevant Legislation

We expect to be very active on several key bills that have been introduced, where the next issue will delve into introduced Legislation at the February 16, 2024 bill deadline.

A. SB 1383 Modifications (Regional Council of Rural Counties)

Legislation is expected to extend rural exemption timelines and address other elements of the SB 1383 program to reduce burden on rural jurisdictions.

B. SB 1383 Procurement Requirements

Legislation to provide flexibility in CalRecycle regulations related to procurement with the following potential options:

- To tie procurement levels to the jurisdiction’s current organic materials diversion success;
- provide additional bioenergy options (like hydrogen, sustainable aviation fuels, etc.);
- allow in-state use of products created out of state (from in-state, landfill diverted organic materials) to qualify;
- Proposed relief from procurement requirements for populations in currently exempt rural areas (RCRC concept).

C. SB 54 Clean Up

- Legislation to address a number of unresolved issues related to the hasty passage of SB 54.

D. Renewable Bioenergy

- Legislation to secure markets for biomass electricity and other viable end uses for recovered urban wood. Support markets and incentives for renewable natural gas in collection fleets and other uses. Develop support strategy for innovative technology deployment.
- Legislation defining hydrogen eligibility for incentives, particularly when sourced from renewable biomass feedstocks to help grow circular market solutions for organic materials diverted from landfilling under SB 1383.

IV. New and Ongoing Regulatory Work

- CCC is involved in numerous regulatory programs related to organic materials collection, processing and use, bioenergy policies and funding

A. CalRecycle

- Implementation of SB 1383 regulations.
- AB 1201 determination on viability of collection of bifurcated organic waste stream (one stream including compostable packaging labeled for use in organic agriculture, the other with compostable packaging labeled not suitable for use in organic agriculture).
- AB 1201 Regulations – including determination of acceptable color schemes, markings, approved certifiers and elimination of PFAS and look-alike products. Enforcement of requirements for NOP conformance not due until 2025/2026.
- SB 54 implementation and regulatory development, including role as compost industry representative seat on Advisory Board.

B. California Department of Food and Agriculture

- Monitor activities of Environmental Farming Act Science Advisory Panel (EFA SAP) which oversees Healthy Soils Program, Alternative Manure Management, Dairy Digester and various sustainable agriculture-related efforts.
- Advocate for additional incentives and market support for compost, biochar, agricultural biomass and related issues.

41% Diversion in 2022

CalRecycle released [The State of Disposal and Recycling Report 2022](#) at their February 2024 monthly meeting noting that California has a 41% statewide diversion rate. CalRecycle estimates that California’s overall waste generation in 2022 was about 76 million tons. Of that total waste generation, 45.1 million tons went to disposal and disposal-related activities, including about 40.5 million tons sent to landfill. This equates to a statewide per capita disposal rate of 6.3 pounds per person per day. Of the total amount disposed, over 260,000 tons were disaster debris, down from 920,000 tons in 2021. Non-green alternative daily cover (ADC) was the most common disposal-related activity at over 2.3 million tons. Despite this, the amount of ADC (green and non-green material) decreased for the second year in a row. In 2022, less than 2.6 million tons of ADC were used, down from 2.7 million tons in 2021 and 2.8 million tons in 2020. Much of this reduction is attributed to a decreased use of green material ADC. Almost 31 million tons of waste were source reduced, recycled, and composted in California in 2022, resulting in a statewide recycling rate of 41 percent, up from 40 percent in 2021. Seaborne export of recyclable materials accounted for about 11.3 million tons in 2022, a decrease of approximately 1 million tons from 2021. At just 41%, there is a long way to go to get to 75% by 2025, then zero waste.

New Beginnings

With a heavy but full heart, Rachel Machi Wagoner – the Director of CalRecycle since December 2020 - decided to step down effective March 5, 2024. She will be cheering CalRecycle on to continue the important work of building the circular economy, moving California to zero waste and saving our planet from climate change. Among many accomplishments, Rachel was able to award \$130 million in grants to organic infrastructure facilities and \$110 million in SB 1383 local government grants avoiding the budget cuts that other departments have suffered, as California faces a \$38 billion deficit.

The California Compost Coalition

is a registered Lobbying Coalition with the Fair Political Practices Commission (FPPC), created in 2002 by a group of compost operators in response to demands for increased recycling of organic materials & production of clean compost, bioenergy, anaerobic digestion, renewable natural gas, and biochar.

CCC Members

- Agromin
- American Refuse, Inc.
- Atlas Disposal Industries LLC
- BLT Enterprises of Fremont
- Burrtec Waste Industries, Inc.
- California Waste Recovery Systems
- Cedar Ave Recycling and Transfer
- Contra Costa Waste Service, Inc.
- CR&R Environmental Services
- Gilton Resource Recovery
- Marin Sanitary Service
- Monterey Regional WMD
- Napa Recycling and Waste Services
- Northern Recycling Compost
- Peña's Disposal Service
- Pleasanton Garbage Service
- Quackenbush Mt. Compost
- Recology
- San Joaquin County Public Works
- Soiland Co., Inc.
- Sustainable Organic Solutions (SOS)
- Tracy Material Recovery
- Upper Valley Recycling
- Vision Recycling
- Zero Waste Energy, LLC.

CCC Partners

- California Wood Recycling
- GreenWaste Recovery
- ReFuel Energy Partners
- Resource Recovery Coalition of CA
- Sonoma Compost
- Zanker Road Resource Management
- Z-Best Compost Facility
- Zero Waste Energy Development

CCC Technology Partners

- CleanFleets.net
- Compost Manufacturing Alliance
- Engineered Compost Systems
- JRMA Architects Engineers
- Phoenix Energy
- Schaefer Systems International, Inc.
- Yorke Engineering LLC

CCC Governmental Affairs

- Kayla Robinson, EEC
- Neil Edgar, Edgar & Associates, Inc.
- Evan Edgar, Edgar & Associates, Inc.
- Sean Edgar, Clean Fleets Advocates

Biden's State of Mind

With the Federal EPA soliciting climate mitigation grants nationwide in the amount of \$4.6 billion from the Inflation Reduction Act funding, the CalRecycle B list, with 10 shovel-ready compost and anaerobic digestion projects in the amount of \$58.3 million, may be funded this Fall.

California appreciates the unprecedented lift by the Biden Administration to tackle climate change with the creation of the Climate Pollution Reduction Grants program (CPRG), among other investments. California will develop a Priority Climate Action Plan by March 2024 which will include the CalRecycle B list as noted below. California State agencies will leverage and build upon the State's substantial climate planning work, such as the 2022 Scoping Plan Update and other emerging climate and clean energy reports currently being developed. The CalRecycle Organics Grant program had been awarded \$130 million in December 2023, and was 3 times oversubscribed, where the B List are ranking projects that did not get funded but could with these federal dollars.

CalRecycle B-List

Applicant	Project Type	Amount
California Grinding, Inc.	Anaerobic Digestion	\$3.2M
Arakelian Enterprises, Inc. dba Crown Recycling Services	Standalone Pre-Processing	\$3M
Recology Ostrom Road	Compost	\$10M
Engel & Gray, Inc.	Compost	\$2.8M
Arakelian Enterprises, Inc. dba American Organics	Compost	\$9.6M
Universal Waste Systems, Inc.	Standalone Pre-Processing	\$3M
Mid-Valley Recycling, LLC	Anaerobic Digestion	\$10M
North State Renewables, LLC	Anaerobic Digestion	\$10M
Paso Robles Waste Disposal Inc. dba Paso Robles Waste & Recycle	Anaerobic Digestion	\$2.6M
Lost Hills Environmental LLC	Compost	\$4M
Subtotal		\$58.3M

State of Practice

The Environmental Research & Education Foundation has released a new report entitled [Composting State of Practice: Results from a National Operations Survey](#). This comprehensive survey, conducted in collaboration with the US Composting Council and the Desert Research Institute, offers a look into the current state of composting operations across the United States. The report, based on responses from more than 300 composting facilities, provides valuable insights into the design capacities, production levels, and regional trends in organic material composting. It is a crucial resource for understanding the dynamics of the U.S. composting industry in 2024. The Key Findings:

1. Growth in the Composting Sector: The tonnage of organics processed and the number of active composting facilities have both increased in 2019 and 2021 from 2016 levels, showing significant growth in the composting sector.
2. Regional Differences in Facility Characteristics: The Northeast has many facilities with small or micro design capacities, while the Southeast and Pacific regions have fewer but larger capacity facilities, leading in tons processed.
3. Windrows are the Most Common Composting Method: 42% of facilities used windrows; however, over 20% of the surveyed facilities use multiple composting methods.
4. Operational Concerns: Issues affecting day-to-day operations, such as physical contamination and labor, are considered important by the majority of respondents. In contrast, less visible issues like microplastics and chemical contamination are deemed less important, though they may become more significant as new regulations emerge.
5. Revenue Sources and Facility Size: The report highlights differences in revenue sources based on region and facility size. For example, the Pacific and Southeast regions rely heavily on tipping fees, while the Midwest sees a higher percentage of revenue from product sales.