

CALIFORNIA COMPOST COALITION



THE STATE OF THE COMPOST

My Fellow Composters . . .

The State of the Compost is Healthy.

Governor Gavin Newsom issued an Executive Order enlisting California's vast network of natural and working lands in the fight against climate change and budgeted \$30 million to the Healthy Soils Initiative. Project Drawdown released the Study, "Farming Our Way Out of the Climate Crisis", where it was concluded that our land use and agricultural practices can be changed — using "regenerative" style techniques, and others — to create temporary carbon sinks on land and achieve statewide carbon neutrality by 2045.

The State of the Compost is Carbon Negative.

Lawrence Livermore Lab released a January 2020 report, "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.

The State of the Compost is Cost-Effective.

Lawrence Livermore Lab reported compost and biochar use as the most cost-effective GHG reduction program. CalRecycle continues to lead the way with one of the most cost-effective programs under the Cap-and-Trade program at just \$44 per ton of GHG reduced for the Organic Infrastructure Grants with 83% of the money benefiting priority populations. CalRecycle loans for the recycling infrastructure are the most cost-effective at \$4 to \$11 per ton.

The State of the Compost has Capacity.

Facilities have approximately 4 million tons of processing capacity remaining. This available capacity remains concentrated in Southern California. Up to 14 million new tons of organics need to be diverted statewide to meet the 2025 diversion mandate. About 68% of composting and anaerobic digestion facilities have no plans to expand. Those facilities which are planning on expanding cited increased processing contracts as the primary reason for growth.

The State of the Compost provides Job Creation.

To combat climate change, successfully implementing a statewide SB 1383 organics recycling program will close the loop by recognizing the greater value of turning organic waste into new organic products while creating 2,000 permanent jobs in the state.

The State of the Compost needs new Contracts.

Capital expenditures could range from \$2 to \$3 billion with operations and management costing \$4 to 8 billion. The monthly cost increase per an average business could range from \$70 to \$90 per month, or \$200 per month more for a 4 cubic yard bin. The average potential rate impact to single family households was expected to be \$3 to \$5 per month, or about \$9 per month including China Sword impacts on recycling markets.

The State of the Compost is Underfunded.

The \$227.2 billion proposed 2021-2022 budget offers a fiscal blueprint that provides funding for immediate COVID-19 response and relief efforts. When it comes to funding edible food recovery, composting, anaerobic digestion, there is little funding. Without any Cap-and-Trade revenue, CalRecycle will embark on an evaluation of existing program grants, loans, and payments to identify opportunities to better align with a circular economy approach, combat climate change, and support economic recovery which could lead to landfill tip fee reform for some real money. A tip fee increase of \$10 per ton from the 1993 amount of \$1.40 per ton could raise \$400 million per year to fund local capacity.

The State of the Compost is Bullish.

An SB 1383 supply push, coupled with new contracts and available capacity, compost and recycling development 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.

Zero-Based Budgeting

Governor Gavin Newsom submitted his 2021-22 State Budget proposal to the Legislature this month – a \$227.2 billion fiscal blueprint that provides funding for immediate COVID-19 response and relief efforts where Californians need it most, while making investments for an equitable, inclusive, and broad-based economic recovery. However, when it comes to edible food recovery, composting, anaerobic digestion, and zero waste programs, there is zero incentive funding.

The Budget proposes a \$1.5 billion comprehensive strategy to achieve the state's zero-emission vehicle goals by 2035 and 2045, including securitizing up to \$1 billion to accelerate the pace and scale of the infrastructure needed to support zero-emission vehicles. However, there is Near-Zero funding for Near-Zero vehicles, as the industry fights for some scraps at CARB. The Budget reflects California's commitment to improving management of natural and working lands to advance the state's climate change goals of achieving carbon neutrality, expanding carbon sequestration, and building climate resilience across the state's diverse landscapes, with \$250 million in restoration and \$30 million for Healthy Soils. The Budget proposes a \$1.37 billion Cap-and-Trade Expenditure Plan without any money for CalRecycle, which has delivered the most cost-effective programs with the highest percentage of reaching disadvantaged communities. After some huge successes, CalRecycle got cut off.

The Budget proposes an additional \$1 billion to support a coordinated forest health and fire prevention strategy that maximizes technology and science-based approaches to protect state forestlands, which may benefit forest bioenergy projects. The Budget proposes \$323 million for early action in the spring to start these forest health and fire prevention projects before the next fire season.

Circular Logic

The Budget does not provide the needed incentives to divert more organic waste from landfills. Reflecting on various scenarios found in the Standardized Regulatory Impact Assessment, as part of the SB 1383 Initial Statement of Reasons, the capital expenditures could range from \$2 to \$3 billion with operations and management costing \$4 to \$8 billion. Without any Cap-and-Trade revenue proposed this year, CalRecycle will embark on an evaluation of existing program grants, loans, and payments to identify opportunities to better align with a circular economy approach, combat climate change, and support economic recovery. CalRecycle oversees many decades-old programs that are not designed to create a circular economy and therefore have varying degrees of success, but SB 1383 was designed to be in the center of the circular economy.

The Budget narrative indicates that California has yet to do the work to create a true circular economy which recognizes waste as a potential economic resource to be reduced, reused, or remanufactured into new products. Now is the time to rethink waste as an opportunity to maximize creation of in-state jobs while combating climate change.

Modernizing the waste and recycling system requires a return to the basics of resource conservation and maximizing the value of material to be turned into new products. To combat climate change, successfully implementing a statewide organics recycling program will close the loop by recognizing the greater value of turning organic waste into new organic products while creating 2,000 permanent jobs in the state. With the statewide recycling rate falling from 50% in 2014, to 37% in 2019, and further falling to 33% in 2020, the Administration is still talking in circles about budget alignment, not tip fee reform.

Rate Impacts

Using the [Standardized Regulatory Impact Assessment](#), as part of the SB 1383 Initial Statement of Reasons, the capital expenditures could range from \$2 to \$3 billion with operations and management costing \$4 to 8 billion. The monthly cost for an average business could range from \$70 to \$90 per month, and up to \$1,000 per month for business with 250 to 500 employees. The average potential rate impact to single family households was expected to be \$3 to \$5 per month. The cost sensitivity analysis includes commodities and transportation variables. To account for the SB 1383 procurement requirements, the price of compost to purchase at a bulk rate, transport it, and apply the cost to land was estimated at \$30 per ton.

[The SB 1383 Local Service Rate Analysis](#), published by CalRecycle and prepared by R3 Consulting, released in October 2020, provided a wide qualitative overview. It was acknowledged that current rates may not cover the costs to comply with SB 1383, and that the rate impact on businesses is expected to be much larger than on residences, since residences have base programs in place. A series of case studies were presented on the increased costs, with the residential bill increase at \$2 to \$13 per month, and commercial cost from \$0 to \$140, as costs are all local and programs differ in so many ways.

Tracking 12 recent case studies that have had rate increases approved for SB 1383, as well as recycling commodities, and projecting out to 2025, there have been significant increases. Recognizing that apples and oranges are being compared when co-collecting food waste, the 90-gallon 3-cart systems have increased by 24% from 2019 to 2025, or about \$9 per household per month. Remember this is for both SB 1383 and accommodating the China Sword. The 4-CYD commercial bin average price increased by 54% over 5 years, or about \$200 per month. These average costs are double what was projected because the rate-payer had to pay for the China Sword and SB 1383 at the same time.

Scoping Out 2021

As this is published, there are less than 350 days until SB 1383 regulations take effect. The urgency in implementing this challenging new policy – along with the layered fallout of the COVID-19 pandemic on all levels of government – has led us to focus on four main issues in 2021:

Holding the line on SB 1383 rollback efforts

While efforts to derail SB 1383 solid waste policy measures have been promoted since its passage, new attempts will be bolstered by arguments from budget-impacted local governments. While we are sympathetic to these new fiscal challenges, the climate crisis continues to mandate immediate, bold action on the reduction of landfill methane and removal of organic materials which create it.

Organic Materials Scoping Plan

Similar to prior AB 144 and AB 1567 attempts, it requires state agencies to prepare and submit to the Legislature a report which would recommend a coordinated strategy for reducing emissions associated with organic waste across forestry, ag. and waste sectors.

Tip Fee Reform

While CalRecycle Grant programs have been helpful in developing organics processing infrastructure, the nearly \$100 million dedicated is but a small fraction of the estimated \$3 to \$4 Billion needed to double capacity. Additional funding mechanisms are essential to bridge the gap. CCC proposes the following tip fee reform concepts and is pushing for legislation which would:

- Increase the state-wide Integrated Waste Management “tip” fee (i.e., increasing from \$1.40 to \$6.40 could generate approximately \$200 million per year).
- Provide a minimum of 95% of funds collected from the fee increase go to local governments on a waste diversion/recycling performance basis.
- Impose a lesser fee on all transfer, recycling and organics processing facilities to backfill infrastructure funding as landfill tonnages decline.
- Sunset fee after 10 years or when SB 1383 mandates have been achieved.

Compostable Packaging

A clear priority is to address standards for compostable packaging, which heretofore have made the addition of these products to food materials collection programs problematic for compost manufacturers, issues which the packaging industry has failed to address historically, until recently. The Statewide Commission on Recycling Markets and Curbside Recycling has issued the following guidelines (excerpted here) to address the concerns of composters and other stakeholders:

Prior to the complete implementation of SB 1383 and subsequent roll out of composting infrastructure, a compostable product must

- *Meet an ASTM Test Method for compostability (D6400 or D6868) as specified in Public Resources Code 42357.*
- *Obtain certification from the Biodegradable Products Institute (BPI) or equivalent 3rd party certified for meeting compostability and toxicity standards*
- *Be allowable organic inputs pursuant to the National Organics Programs and CDFA’s Organic Input Materials requirements*
- *Not include intentionally added perfluorinated compounds*
- *Be clearly labeled in a manner that is clearly distinguishable upon quick inspection by consumers and solid waste processing facilities. At a minimum, products must be labeled in accordance with standards adopted in other states (including Washington)*
- *Be explicitly accepted by the compost service provider that provides organics collection for the facility.*

The adoption of these recommended measures, along with some precautionary principle concepts, will be instrumental in broadening the potential for continuing the use of compostable food serviceware. Otherwise, current trends to remove and dispose of these products during pre-processing of compost feedstocks will become industry standard.

SB 1383 Regs – Compost Use

Procurement of Recovered Organic Waste Products, adopted within Article 12, is authorized in SB 1383, where local government is mandated to procure organic waste products. CalRecycle will be providing the annual recovered organic waste product procurement for each jurisdiction on or before January 1, 2022 and every five years thereafter, which shall be calculated by multiplying the per capita procurement target of 0.08 tons per resident, and which may be achieved directly or via a contractor.

Jurisdictions have the flexibility to purchase one of the four products to implement the circular economy locally, which on a statewide basis would create huge markets (for a population of 44 million people) by 2025. A balanced procurement portfolio could fuel 2,000 CNG trucks, produce 87 MW, amend 100,000 acres of parklands and 10,000 acres of mulch for erosion control. If all jurisdictions choose to procure compost, up to 1.85 million tons would need to be purchased and could be used on 185,000 acres of farmland.

CalRecycle prepared the [Model Procurement Policy](#) to assist jurisdictions with their requirements related to the procurement of recovered organic waste products. Diversion Strategies is hosting a free [6-session program series](#), up to February 2021, on Innovative Solutions for SB 1383 Compliance, including a procurement session.

AB 32 Scoping Plan

At the November 19, 2020 CARB meeting, staff presented an update on [California’s Greenhouse Gas Goals and Deep Decarbonization](#) and set the tone for 2021, as CARB pivots to carbon neutrality by 2045. Compost use on working lands and RNG will be showcased during the AB 32 Scoping Plan Update, which will be adopted in the late summer of 2022. CARB will need to set targets for the natural and working lands, both as a source and sink, to support overall carbon neutrality. The update must include cost per ton, social cost of carbon, and the economic benefit, where compost use on working lands is cited as the most cost-effective to date.

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
BLT Enterprises
Burrtec Waste Industries
Caglia Environmental
California Waste Recovery Systems
Cold Canyon Landfill Inc.
Marin Sanitary Service
Monterey Regional WMD
Mt. Diablo Recycling
Napa Recycling and Waste Services
Peña's Disposal Service
Pleasanton Garbage Service
Quackenbush Mt. Compost
Recology
ReFuel Energy Partners
Soiland Inc.
Tracy Material Recovery
Vision Recycling
Zero Waste Energy LLC

CCC Partners

Atlas Disposal
California Wood Recycling
Clover Flat Compost
GreenWaste Recovery
Northern Recycling Compost
Resource Recovery Coalition of CA
Sonoma Compost
Synagro - South Kern
Upper Valley Recycling
Zanker Road Resource Management
Z-Best Compost Facility
Zero Waste Energy Development

CCC Technology Partners

CleanFleets.net
Compost Manufacturing Alliance
Engineered Compost Systems
Filtrex / Phoenix Energy
Yorke Engineering LLC

CCC Governmental Affairs

Justin Malan, EcoConsult
Neil Edgar, Edgar & Associates, Inc.
Evan Edgar, Edgar & Associates, Inc.
Sean Edgar, Clean Fleets Advocates

The State of Organics Processing Capacity

CalRecycle requires that each County estimate the amount of organic waste (in cubic yards) that will be disposed over a 15-year period, and that the County provide an estimate of the additional organic waste recycling facility capacity (in cubic yards) that will be needed to process the amount of organic waste. CalRecycle has developed a tool to help counties and regional agencies estimate projected tonnage information. From the latest studies, the state has 4 million tons of processing capacity that will only provide enough capacity for the early years of SB 1383 to 2022 or 2023. CalRecycle published the [SB 1383 Infrastructure and Market Analysis Report](#), in April 2019, which provides analysis of organics recycling and diversion infrastructure and barriers to infrastructure development. California currently has more than 160 permitted composting facilities and more than a dozen anaerobic digestion facilities that accept about 6 million tons of organic material each year. The state's composting facilities combined have approximately 4 million tons of processing capacity remaining. This available capacity remains concentrated in Southern California. To put these quantities in perspective, 12-14 million new tons of organics need to be diverted statewide to meet the 2025 diversion mandate. The study found 68% of composting and anaerobic digestion facilities have no plans to expand. Those facilities that are planning on expanding cited increased processing contracts as the primary reason for growth.

CalRecycle estimates that approximately 27 million tons of organic material will need to be redirected from landfills in 2025 to meet the SB 1383 reduction goal, including edible food and approximately 18 million tons of organic waste that will need to be processed at compost, anaerobic digestion (AD), chip-and-grind, or

other organic waste processing facilities. While organics recycling and recovery infrastructure is growing, significant expansion is necessary to provide the recycling capacity needed to meet the SB 1383 disposal reduction goals. Based on current capacity projections, the infrastructure in the state will be able to process about 10 million of the 18 million tons needed.

Existing Compost Capacity

Currently, there are approximately 160 compost facilities in California. Many of these facilities are small or operate under a tier that limits the type of feedstock they can accept. Of these 160 facilities, approximately 80 actively receive material from the municipal solid waste stream (e.g. commercial and residential collection services). There are currently 35 compost facilities that accept and recycle food. While available annual permitted capacity of 4 million tons is significant, other factors, including operational capacity, air and water permitting, and haul costs, may limit the feasibility of using that capacity.

Expanding Compost Capacity

According to CalRecycle's SB 1383 Progress Report, since 2018, new and expanded compost facilities brought an additional 200,000 tons of annual capacity into operation statewide. Fourteen compost facilities are anticipated to begin operations for additional capacity of 1 million tons of organic waste recycling within the next few years. CalRecycle has awarded grants to 12 of these facilities. In March 2020, CalRecycle announced grant awards to an additional three compost facilities that are projected to add another 100,000 tons of capacity per year. Full use of existing capacity, along with the projected expanded capacity, would allow California to compost an additional 5 million tons of organic waste in the next few years.