

The State of the Compost

The State of the State speech is scheduled for January 21, 2016, where Governor Brown is expected to declare that state of our California budget is in 'good shape', with a Rainy Day Fund; and have cautioned the Legislature not to embark on a host of new spending only to see massive cuts when the next recession hits. When Governor Brown took office, the state faced a massive \$26.6 billion budget deficit and estimated annual shortfalls of roughly \$20 billion. These deficits, built up over a decade, have now been eliminated by a combination of budget cuts, temporary taxes and the recovering economy.

The State of Recycling still needs a 'bale out' with the depressed global commodity market and port labor issues. Recycling is not dead, but needs to be funded as a service with more domestic markets. **The State of Biomass** is in a state of emergency with forest fires, recent closures and pending closures of more biomass energy facilities.

The State of the Compost is healthy for many reasons, and one is not being directly tied to the global commodity market or the port. Compost is using emerging community-scale technology with local markets and a basket of incentives while old-line biomass uses antiquated technology while their contracts are ending and/or non-competitive. Being the bread basket of the world, California always had agricultural markets for compost that may be incentivized with funding from landfill tip fee surcharges to establish greater demand for the organic waste supply coming onto the market with mandated collection starting this year and a proposed ban in 2025 to mitigate methane. CalRecycle issued a press release covering the "New Laws for New Year--Organics Recycling, Infrastructure in Focus for 2016" with a message by Director Scott Smithline.

We're excited to work alongside local jurisdictions to support the siting of new recycling-related infrastructure in California and turn these valuable materials into new products, compost, fertilizers, and biofuels instead.

Scott Smithline, Director CalRecycle

Parlaying the United Nations **2015 International Year of Soils** and the Governor's Healthy Soils Campaign, compost is finally being viewed as more than just waste diversion and methane mitigation, but as a valuable organic input for agricultural while sequestering carbon. Strong markets continue to exist:

- Agriculture still growing, particularly in high-value crops like nuts and grapes. Incentive payment programs advanced by CalRecycle and the California Department of Food and Agriculture should help broaden sales into lesser value crops and rangelands.

- Green Building standards and water efficient landscape ordinances pushing landscape markets.

- Erosion control markets growing heavily with Caltrans and other projects in certain markets, with El Nino impacts likely pushing more mulch.

The Governor's office will continue to host a series of Pillar Symposiums – 2030 Climate Change Commitments – to build all of the **Five Pillars** into the AB 32 Scoping Plan Update to 2030 which will be

ready for adoption in fall 2016. Composting weaves these pillars together. Eliminating organics from the landfills will mitigate methane generation as a short-lived climate pollutant (Pillar 4) and instead create biomethane at anaerobic digestion facilities to generate more renewable energy (Pillar 2) and carbon negative fuel for the CNG fleet that collects the organics to displace diesel (Pillar 1). The diverted food waste and digestate can be composted to sequester carbon and promote healthy soils (Pillar 5).

Composting is at the nexus of cost-effectively reducing GHGs while keeping it local – at the community-scale – implementing the Governor's distributed generation model for energy. **The State of the Compost** is getting healthier each year...along with our soils.

2016 - Year of the Compost - Piling it On!

Building on a resounding successful 2015, the California Compost Coalition is ready to consolidate and expand on the progress made. Previous CCC Newsletters have chronicled our engagement in the legislative and regulatory arena that secured cap-and-trade funding and created the Healthy Soils Initiative. 2016 will be the Year of the Compost, and here is how we plan to take our case forward this year:

1. Secure incentive funding for the Healthy Soils Initiative (HSI), organics and recycling infrastructure and biomass. We are pleased that our persistence has paid off and the Governor's budget released on Thursday earmarked \$20 million for HSI, and \$100 million for CalRecycle's infrastructure development grants to mitigate methane; unfortunately, nothing for biomass. The Air Resources Board has earmarked \$500 million in funding and may finally allocate some of this for low carbon heavy duty fleet using renewable natural gas. We will be working diligently with the Legislators to at least maintain, if not increase, these funding levels.

2. Expand markets for finished compost, especially in the agricultural sector. CCC was very pleased to learn of the recently announced intent by CDFA to establish agronomic rates to support an **incentive program** for compost application as a key element in building healthy soils. We will be aggressively promoting CDFA incentives; as well as the CalRecycle \$50 million per year for 5 years incentive program

proposal at the recent landfill tip fee workshop. In addition, CCC is engaged with the Community Alliance with Family Farmers to assist in identifying additional areas where compost use can be expanded in California agriculture.

3. Keeping our markets open, by supporting a clean biomass industry, in a concerted effort to maintain the capacity of our biomass plants to take the 5-15% residual or low quality material from our operations that cannot feasibly be composted. We plan to collaborate with LEAs and other local regulators to ensure that locals assist in every way possible, the siting and operation of compliant composting operations. Furthermore, we will remain vigilant and engaged with the SWRCB and CalRecycle to ensure their recently adopted regulations are fairly implemented. We will work with Cal-EPA on the implementation of AB 1045 (Irwin, 2015) for compost permit streamlining.

We stand at a pivotal juncture in climate change policy and materials management. The mandates are in place for a 50% renewable energy by 2030, an aggressive diesel reduction target, healthier soils, green waste ADC phase outs and a goal to effectively eliminate organics in landfills by 2025. At the same time we face mounting operational costs, siting barriers, resistance from some traditional ag and energy sectors and practical impediments to safe and affordable residual management. CCC is confident that our industry will rise to the challenge.

CCC Lobby Day - January 20, 2016

CCC will hold our first Lobby Day on Wednesday, January 20, 2016 at the **Downtown and Vine Restaurant** in Sacramento. CCC members will be briefed on the status of current legislation and potential bill concepts, including recent developments in efforts to preserve and/or reinvigorate the waning old-line biomass energy industry in California. Between rounds of mid-morning meetings with key legislators at the Capitol, several topics of concern by policy experts will be presented during lunch. CCC will be continuing to build relationships that will position our organization to effect necessary changes that will allow industry expansion on the heels of highly successful, table-setting policies last year.

[AB 590 \(Dahle\)](#)

TOPIC: This bill will provide money from cap-and-trade revenues Greenhouse Gas Reduction Fund for purposes of maintaining the current level of biomass power generation in the state and revitalizing currently idle facilities in strategically located regions.

STATUS: Held in Senate Appropriations

[SB 687 \(Allen\)](#)

TOPIC: This bill will require CARB, in consultation with the CEC, to adopt a carbon-based renewable gas standard that requires all gas sellers to provide specified percentages of renewable gas meeting certain deliverability requirements, to retail end-use customers for use in California, that increases over specified compliance periods.

STATUS: Held in Senate Appropriations Committee. Sponsored by BAC.

[SB 367 \(Wolk\)](#)

TOPIC: The Agriculture Climate Benefits Act will expand the scope of the existing CDFA Environmental Farming Program to include an explicit focus on reducing on-farm greenhouse gas emissions and/or increasing carbon storage in soils and woody biomass with \$25 million in funding from the cap-and-trade revenue. It will also amend the list of services and support to be provided to growers by CDFA to encompass: low interest loans, technical assistance, educational materials and outreach, permit assistance, and funding of on-farm projects.

STATUS: Held at Assembly Appropriations.

[AB 1103 \(Dodd\)](#)

TOPIC: This bill proposes to define the terms "food-soiled paper" and "food waste" for purposes of AB 1826 provisions for mandatory commercial organics collection. This bill also is proposing registration for transporting food waste and tracking food waste by jurisdiction in order to obtain the best GHG reduction data.

STATUS: Two-year bill sponsored by CRRC.

A Billion Here, A Billion There...

....and pretty soon you're talking real money. The Governor's Budget continues to reduce greenhouse gas emissions through a \$3.1 billion Cap and Trade Expenditure Plan that will reduce emissions through programs that support clean transportation, clean compost, reduce methane, protect natural ecosystems, build healthy soils and benefit disadvantaged communities. When CCC submitted their White Paper in February 2013 to CARB, and to anybody that would listen, predicting these billions and programs, it was only a Three-Year Investment Plan proposing incentive payments over grants. With an effective proposed ban by 2025 to reduce methane, we have an Investment Plan before the Ban carving out funding as CDFA and CalRecycle are now talking about new incentive payments for the use of compost, with CalRecycle using landfill tip fee money.

AB 1063 (Williams), a two-year bill, had proposed to raise the landfill tip fee to \$4 per ton and suggested some type of generator fee. At the December workshops on funding the waste management infrastructure, CalRecycle proposed using this tip fee revenue, not cap-and-trade revenue, for compost incentive payments of up to \$50 million per year for 5 years, and would complement existing capital investment grant/loan funding with this incentive at the back end for actual products.

Short-Lived Climate Pollutants – Methane Mitigation: CalRecycle is to receive \$100 million to provide financial incentives for capital investments that expand waste management infrastructure, with a priority in disadvantaged communities. Investment in clean composting, anaerobic digestion, fiber, plastic, and glass facilities is necessary to divert more materials from landfills. These programs reduce GHG emissions and support the state's 75-percent solid waste recycling goal. Note the

budget reference to "**clean compost**" which can be construed as sourced-separate organics to composting and AD with minimal contamination (in-line with new Title 14/27 regulations that limits contamination to 0.5% in 2018) in order to build healthy soils and sequester carbon.

After the United Nations global climate accords in Paris and the L.A. Porter Ranch natural gas leakage, methane mitigation is both a global and local cause and is being called out in the budget. Reducing methane emissions from landfills will be a key component of the short-lived climate pollutant strategy where CARB is promoting an effective ban on organics from landfills by 2025. CDFA plans to receive \$55 million for climate smart agriculture which includes \$20 million for the Healthy Soils Initiative. Biomass to bioenergy was left behind as AB 590 (Dahle) will scramble this year for these dollars as the biomass crisis cuts deeper.

CARB will get \$500 million for low carbon transportation and fuels, up from \$350 million last year. Getting methane out of the landfill and into the tanks of heavy-duty Class 7 and Class 8 trucks as renewable CNG needs funding this year. CARB has leap-frogged over RNG fleets and fuels funding for electrification. CEC recognizes this community-scale carbon-negative, circular economy system to produce fuels, which CARB may finally fund, to reduce petroleum use by 50% by 2030. CCC, along with CleanFleets.Net, Bioenergy Association of California and Clean Energy, has made a strong case that should lead to funding in 2016-2017 for transition from a diesel fleet to a heavy-duty CNG fleet that can create a demand for RNG. Our industry can get off landfills and get off diesel sooner than the 2025 and 2030 goals with these funding proposals progressing. Link to Governor's Budget Proposal 2016-2017: <http://www.ebudget.ca.gov/FullBudgetSummary.pdf>

WASTE DISCHARGE REQUIREMENTS FOR COMPOSTING FACILITIES

The State Water Resources Control Board (SWRCB) has concluded its efforts to establish statewide regulations for composting facilities. The SWRCB adopt the WDRs at their August 4, 2015 Board Meeting. The SWRCB officially released final language on August 31, 2015, which can be found on the Board's [composting website](#).

Existing composting operations, except those with individual WDRs, general WDRs, or conditional waivers of WDRs are required to seek coverage under this General Order by submitting a complete Notice of Intent (NOI), and a Technical Report with information requested in the General Order. The NOI, Technical Report must be submitted by August 4, 2016 and shall include a proposed schedule for full compliance which must be as short as practicable but may not exceed 6 years from the date of the NOI.

Now is a good time to start planning to develop a Technical Report by beginning to work with a qualified engineer.

TITLE 14/27

Revision to Compostable Materials & Transfer/Processing Regulations.

CalRecycle has completed updating the Title 14/27 regulations to address a broad list of topics, mainly related to the expanding diversion of organic materials from landfills.

Required physical contaminant limits of 0.5% for compost begin January 2018. Additionally, limits on land application of green waste to agricultural sites allow up to three applications of twelve inches each annually.

The regulations, along with the corresponding Negative Declaration required under CEQA, were officially approved by Director Scott Smithline on August 5, 2015. The regulations became effective on January 1, 2016. Five regional LEA Roundtables are underway this month to discuss the implementation of the compost regulations. Workshop training is coming this Spring.

Who Are We Now?

The California Compost Coalition (CCC) 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 and production of clean compost, bioenergy, renewable natural gas, and biochar.

The California Compost Coalition represents member organic material recyclers and compost operators with a unified statewide voice on many issues: product safety and standards, government regulations, environmental planning, and marketing.

CCC Members

Agromin
Burrtec Waste Industries
Atlas ReFuel
Caglia Environmental
California Wood Recycling
CleanFleets.net
Cold Canyon Compost
CT Bioenergy Consulting LLC
Marin Sanitary Service
Mt. Diablo Recycling
Napa Recycling Compost
Northern Recycling Compost
Organic Waste Solutions
Phoenix Energy
Quackenbush Mt. Compost
Recology
Sonoma Compost
Tracy Delta Compost
Upper Valley Recycling
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Zanker Road Resource Management
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The growth of the “compost” industry has been organic in nature over the decades and has been as much a challenge to define as the feedstocks themselves. The California Compost Quality Council (CCQC), the forerunner to the California Compost Coalition, made attempts in the mid-1990s to benchmark the industry, where biosolids and mixed waste compost inputs were only allowed to be part of the program if the feedstocks were fully disclosed, verified, and registered by a third party, such as for all feedstocks.

CCQC was successful in establishing compost quality standards which were used to initiate the Seal of Testing Assurance Program for bulk compost as part of the United States Composting Council. CCQC also launched the Organic Material Review Institute listing processes for organic compost. Today, the California Department of Food and Agriculture (CDFA) registers organic input material. Many of our CCC member facilities were CCQC-verified in the day, and are now CDFA registered. Regardless of the rhetoric narrative that there are no compost markets, there always have been and will be robust markets for organic compost.

CalRecycle has funded three assessments of the compost and mulch producing infrastructure using 2000, 2003, and 2008 data suggesting there has been about 9 to 10 million tons of organics processed per year during the last decade. CalRecycle’s published “State of Recycling” in March 2015 determined the organic processing throughput was 19.8 million tons per year according to data accessed from their FacIT accounts (see table below). FacIT must

have a lot of double counting between “chipping and grinding” and “biomass conversion” facilities. We can agree with 6.2 million tons of compost in 2014, but those 7.3 million “chipping of grinding” tons in 2014 that went into compost feedstock, biomass, ADC, and/or land application, appear to have been double handled. Whereas green waste ADC has decreased from a peak of 3 million tons per year, land application has been rampant and unquantified since the closure of Puente Hills Landfill. AB 901 (Gordon, 2015) will require “composting operations and facilities” to submit specified information directly to CalRecycle where the market will be able to be fully assessed, which should include all organic processing facilities.

The California Compost Coalition represents some of the largest composters and organic processors in the nation. CCC advocates for wood, green, and food waste processing facilities, and source-separated food waste anaerobic digestion (AD) technologies, and now represents over half of the statewide market for those clean composting and AD facilities.

The industry has been assessed and re-defined by state agencies, regions, feedstocks, and technologies for decades, where finished compost will continue to evolve with incentive payments and tonnage tracking in the future; and as the disposal of ADC and the regulation of raw land application will compel those markets to fade away. Compost is AD, and AD is Compost; the Plan for the upcoming Ban will have compatibility and equitable funding in the future for both Compost and AD where billions will need to be spent on infrastructure.

Active organics materials management facilities in California

Facility Type	Statewide	Total Capacity (Tons/Year)	Current Throughput (Tons/Year)	Available Capacity (Tons/Year)
Anaerobic Digestion	13	467,000	187,000	281,000
Biomass Conversion	32	5,300,000	5,300,000	56,000
Composting	169	8,000,000	6,200,000	1,800,000
Composting - Research Operation	14	93,000	92,000	1,000
Chipping and Grinding	156	11,200,000	7,300,000	4,000,000
Other Organics Management	23	790,000	740,000	50,000

Data accessed from FacIT on January 28, 2015. Facility counts reflect publicly listed facilities that are actively operating. Current throughput and available capacity may not add up to total capacity due to rounding. Source: Table 4, page 22, CalRecycle’s *State of Recycling* report dated March 2015.