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Sustainable Organics Recycling

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## The Food Fight Has Begun

**The Top Ten Stories** in the compost world leads with food waste. Food waste has been linked to climate change, turned upside down by Federal EPA's food waste hierarchy, and is now being processed by a variety of technologies. Having been left behind in the landfill for years, food waste grew up in 2014 and is willing to become the center of attention. With a food fight now underway, food recovery has been blessed by the Pope and will no longer be wasted in a landfill by 2020.

Food waste was the low hanging fruit in 2014. Cans and bottles have been picked on for 30 years. Residential recyclables collection was initiated over 20 years ago with AB 939 and went single-stream. Green waste was source-separated next, launching the compost industry and ADC. Construction & Demolition ordinances were passed 10 to 15 years ago, having since dovetailed into the LEED program. Mandatory commercial recycling was targeted a few years ago with AB 341 as systems were bulked up to handle more recyclables. AB 1826 will be adding food waste to the AB 341 mandatory commercial recycling framework in 2019.

The myth that California does not have shovel-ready food waste compost/AD capacity has been blown out by the CEC grant and CalRecycle grant funding requests for 30 qualifying and unfunded projects amounting to over 1 million of new organic tons. With AB 32 legal challenges being upheld for cap-and-trade and the low carbon fuel standard, be ready for more grant funding to be the seed money in initiating development of these projects.

The First Update to the AB 32 Scoping Plan was adopted this year and will empower the Air Board to create a methane mitigation plan in 2015 to get more organics out of the landfills in 2016. SB 605 was passed to validate methane mitigation plans next year, as AB 1826 deferred meaningful food waste collection to 2019 and AB 1594 still allows green waste ADC in the landfill after 2020. There is a policy disconnect on organics from the curb to the landfill. With three states already banning food waste and the City of Los Angeles wanting food waste collection soon, the food fight has begun in California over whether to capture methane within 30 days at anaerobic digestion facilities or within 30 years at a landfill.

## The Food Fight Has Begun

### 10 SB 498 Biomass Energy

After 12 years of trying, “biomass conversion” was redefined to include gasification technology within SB 498 (Lara). Biomass conversion is the controlled combustion of defined clean biomass materials – such as wood, lawn and garden clippings, agricultural waste, leaves, tree pruning as well as non-recyclable paper – when separated from other solid waste and used for producing electricity or heat. SB 498 simply included thermal conversion technologies, such as gasification, in the biomass conversion definition, allowing for cleaner and more efficient technologies to be used to process biomass. Current biomass conversion facilities have been eligible for CEC grants, RMDZ loans, and renewable energy credits. SB 498 will ensure that the grants and incentives will stay in place.

### 9 Recology Buys Crown Disposal

Busting into the LA market, Recology buys Crown Disposal and their Community Recycling compost facility near Bakersfield effective January 5, 2015. With the City of LA issuing the RFP which will require food waste to be collected from commercial accounts starting in 2017, Recology labored up to obtain the compost capacity to serve their proposed franchise zones. Crown and Community have had troubles over the years and the Recology brand takeover will keep organics flowing to Kern County. Recology hugs the Left Coast from San Francisco to Portland to Seattle, and LA is a great fit to their portfolio. In a similar move on recyclables processing, Republic bought Rainbow to acquire needed clean MRF capacity.

### 8 ADC Credits and Cover-Up

After 18 years of trying, AB 1594 (Williams) became law, which finally counts green waste ADC as disposal, starting in 2020 (five years from now), and not allowing it to count as diversion credit. After 2020, green waste can still be used as ADC but would still not be subject to a state disposal fee. CalRecycle prepared their first ADC Investigative Report in 10 years, where landfills were on record for using 30% to 50% ADC, of which CalRecycle staff found no indication of overuse. The great **Green Waste Landfill Cover Up** of 2014 will likely continue on to 2020.

### 7 Compost Regulations

The compost industry will be re-defined for the first time since 2003. After three years of informal regulatory development, CalRecycle officially released the regulations for comments. The regulations cover land application, contamination amounts, green material definition, agricultural composting, meat scrap handling, and the permitting of anaerobic digestion facilities. CalRecycle has determined that the economic impact of the regulations could be over \$50 million in 2015. There could be 57 new jobs created just removing the contamination, adding roads, and providing lighting and screening, and seven new laboratory jobs analyzing the percent of contamination. The 0.1% contamination level is the biggest issue in the draft regulations. We are the 1%, where CALTRANS is at 0.5%. The State Water Resources Control Board continued their efforts to require pad and pond design to be almost equivalent to landfills, and have not yet released the economic impact of those regulations.

### 6 AB 1826 Mandatory Collection

AB 1826 (Chesbro) is a commercial food waste collection law that sends a signal to start building the infrastructure needed to handle 5 to 7 million tons per year of organics by 2020. AB 1826 phases in the mandatory collection of commercial organics which exempts accounts that generate up to 100 tons per year of organics until 2019. In 2019, accounts with 4 cubic yards per week of solid waste, or over 40 tons per year of organics, will need to be part of a program and fit into the AB 341 framework which at this point could be called a ban. After 2020, accounts that generate 20 tons per year of organics could be brought into the system.

The deferred phase-in approach for organics collection was based upon the fallacy that the compost infrastructure was not in place yet. With 30 qualifying compost and anaerobic digestion grant applications reviewed by CalRecycle as part of the cap-and-trade revenue allocation, \$77.5 million in shovel-ready projects were evaluated, but only \$14.5 million was awarded, representing 275,000 new tons per year for the next ten years. Another 1 million tons per year are waiting for funding.

CalRecycle will easily pass AB 1826 regulations to expand mandatory commercial regulations to include food waste. CARB will have a much tougher time in developing an SB 605 methane mitigation plan in 2015 (see story No. 1) and eliminating the disposal of organics at landfills in 2016, given the permissibility of AB 1594 which allows green waste ADC to be landfilled after 2020 and the phased implementation of AB 1826. There is a policy disconnect from the curb to the landfill on eliminating organic materials disposal.

## The Food Fight Has Begun

### 5 Massachusetts Food Waste Ban

Massachusetts established a food waste disposal ban that applies to businesses and institutions disposing of one ton or more of food waste per week, effective October 1, 2014. This is the third state after Connecticut in 2011 and Vermont in 2012, as well as New York City in 2013, all of which are banning food waste from landfills. Exemptions are allowed for businesses that generate less than one ton of organic waste per week, or 52 tons per year (TPY). In contrast, AB 1826 exempts up to 200 TPY in 2016, and 100 TPY in 2017, decreasing to about 40 TPY by 2019.

### 4 Carbon Negative Fuel at Blue Line

South San Francisco Scavenger Company/Blue Line Transfer is commissioning the first dry anaerobic digestion/carbon negative fuel facility in the world with their onsite system that converts food scraps and yard waste into renewable CNG and compost. The fully enclosed system will process 11,200 tons of material per year, including food scraps and food soiled paper collected from businesses, and benefitted from a \$2.6 million CEC grant award. The California Air Resources Board (CARB) has approved a Low Carbon Fuel Standard (LCFS) Pathway for the Production of Biomethane from High Solids Anaerobic Digestion of Organic Wastes, dated June 28, 2012, which yielded a carbon intensity of -15.29 grams CO<sub>2</sub>e/MJ. This Anaerobic Digestion-to-Renewable Compressed Natural Gas (AD to RNG) project is designed as a community-scale model to achieve a zero waste goal with the collection of commercial organics while deploying a carbon negative fleet fueled by the organics collected.

### 3 City of LA RFP

The City of LA issued this RFP to ensure that their new 11 commercial franchise zone system contributes to the city's environmental and sustainability efforts and identifies processes to buttress the city's plan for zero waste by 2025. Contractors are to provide the highest levels of customer service and satisfaction; and provide source-separated recycling services, including food waste, to multifamily and commercial operations. The City is raising the bar in Southern California by requiring source-separation and requesting innovation. The County of LA has followed with a Roadmap to get to 80% by 2025. As noted above, Recology and Republic acquired needed capacity to compete.

### 2 Grants for AD/Compost

CalRecycle awarded five projects \$14.5 million in organic grants, for the first time ever, where an average of 275,000 new tons per year will be diverted over the next 10 years. Another 25 qualifying projects requesting \$63 million in funding for about another one million new tons per year of organic diversion (CEQA-ready, or almost) are in waiting. CEC awarded five AD projects \$20.0 million where another five projects (totaling \$15 million) qualified but could not get funding. While cap-and-trade auction proceeds are expected to exceed \$3 billion in 2015, the compost/AD industry is poised to develop projects. With the recent CalRecycle and CEC grant processes providing GHG metrics – coupled with our determination that anaerobic digestion and covered compost have a marginal abatement cost of negative \$50/ton per GHG reduction – we believe these technologies are the most cost effective.

#### TITLE 14/27

TOPIC: Revision to Compostable Materials & Transfer/Processing Regulations

CalRecycle is updating regulations to address a broad list of topics, mainly related to the expanding diversion of organic materials from landfills. Addition of new language regarding anaerobic digestion, and feedstock definitions, odors, permitting tiers, etc. at composting facilities. Allowable contamination in compost and mulch products remains the largest remaining unresolved issue.

STATUS: Final draft regulations have been published in October 2013. Economic analysis is completed. Final formal rulemaking package released on October 10, 2014; final comments due December 5, 2014.

CalRecycle will hold a public hearing regarding these regulations on December 10, 2014, at 1:30 - 4 pm, Cal EPA Building, Coastal Hearing Room, 1001 I Street, Sacramento, CA 95814. [Follow this link for complete information.](#)

#### WASTE DISCHARGE REQUIREMENTS

Formal rulemaking has begun by the State Water Resources Control Board (SWRCB) to implement statewide Waste Discharge Requirements (WDRs) for composting facilities.

SWRCB intends to adopt a general order that would assist their regional boards in the regulation of composting facilities, which they have deemed a substantial threat to water quality.

STATUS: Final draft regulations have been published in August 2013. Economic analysis has been completed. The EIR process is underway, with release of a DEIR and General Order expected in early 2015.





# I AB 32 Scoping Plan First Update

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 and bioenergy.

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.

**Members**

- Agromin
- Atlas ReFuel
- Caglia Environmental
- California Wood Recycling
- Cold Canyon Compost
- Marin Sanitary Service
- Mt. Diablo Recycling
- Napa Recycling Compost
- Northern Recycling Compost
- Organic Waste Solutions
- Phoenix Energy
- Quackenbush Mt. Compost
- Sonoma Compost
- Tracy Delta Compost
- Upper Valley Recycling
- Zanker Road Resource Management
- Z-Best Compost Facility

**Executive Committee**

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*Agromin*
- Greg Kelley  
*Northern Recycling Compost*
- Will Bakx  
*Sonoma Compost*
- Christy Pestoni Abreu  
*Upper Valley Recycling*
- Michael Gross  
*Z-Best Compost*

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- Justin Malan, EcoConsult
- Neil Edgar, Edgar & Associates Inc.

[www.californiacompostcoalition.org](http://www.californiacompostcoalition.org)

The First Update of the AB 32 Scoping Plan was adopted by CARB May 22, 2014 as the nation and the world watched. Obama's new Climate Action Plan makes multiple references to California's leadership role, was unveiled on June 2, 2014 by Federal EPA, and will depend heavily on states' devising individual approaches to meeting goals set in the nation's capital. The President plans to reduce carbon dioxide emissions from U.S. power plants, many of which are coal-fired, by 30 percent from 2005 levels by 2030, with California ahead of the game. CARB adopted the original Scoping Plan in 2008 and enacted over 100 measures to reduce GHGs to 1990 levels by 2020, to implement the goals of AB 32, the Global Warming Solutions Act of 2006.

California is on track to meet AB 32 goals which included the Low Carbon Fuel Standard, Renewable Energy Standard, Cap-and-Trade Program and Mandatory Commercial Recycling, where many have upheld legal challenges. This First Update looked beyond the 2020 goal towards the mid-term period (2030 - 2035) in order to set a pathway to reduce GHGs by 80% of the 1990 levels by 2050, as set by the Governor's Executive Order. The First Update includes strengthening the low carbon fuel standard, increasing the use of different waste alternative technologies such as anaerobic digestion (AD), push towards achieving Net Zero greenhouse gas emissions by the mid-term,

and increasing the global warming potential (GWP) of short-lived climate pollutants such as methane. CARB will develop a comprehensive strategy for mitigation of methane by 2015, where the accepted global warming potential could increase from 28 times carbon dioxide to 84 times carbon dioxide, causing the focus on methane to sharpen as its GWP increases nearly four-fold. Even with AB 1826 mandating the collection of commercial organics at the curb, CARB has existing authority under AB 32 to adopt direct regulations at landfills - in concert with CalRecycle - to prohibit/phase out the disposal of organic materials with the goals of requiring more robust initial compliance actions in 2016.

SB 605 (Lara) was signed into law and already places portions of the AB 32 Scoping Plan First Update into law for CARB to develop a comprehensive strategy by January 2016 to reduce emissions of short-lived climate pollutants such as methane. CARB will be busy in 2015 in preparing the methane mitigation plan in concert with another AB 32 Scoping Plan action measure to eliminate the disposal of organic materials at landfills in 2016 (see box below). Given the permissibility of AB 1594 to still allow green waste ADC disposal regardless of diversion credit and state fees, and given the phased implementation of AB 1826 into 2019, it will be interesting to see how CARB does the math in 2015 regarding methane and food waste disposal.

***The food fight has begun.***

Waste Management Actions	Lead Agency	Expected Completion Date
Eliminate the disposal of organic materials at landfills.	CalRecycle ARB	2016
Implement financing or incentive mechanisms for in-State infrastructure development to support Waste Sector goals.	CalRecycle ARB	TBD
Develop actions to address cross-California agency and federal permitting and siting challenges associated with composting and anaerobic digestion.	ARB	2014
Identify opportunities for additional methane control at new and existing landfills, and use of captured methane as a fuel source for stationary and mobile applications.	ARB	TBD in the SLCPP Plan