

FIVE PILLARS

50%
LESS OIL

50%
RPS

DOUBLE
EFFICIENCY

MITIGATE
METHANE

HEALTHY
SOILS

July 2016 | Vol. 3, Issue 7

Sustainable Organics Recycling

The Power and Pillars of Compost

With AB 32 as a strong foundation, Governor Brown unveiled his **Five Pillars** vision in his 2015 inaugural address, that by 2030, California will: (Pillar 1) reduce today's petroleum use in cars and trucks by up to 50%; (Pillar 2) increase from one-third to 50% our electricity derived from renewable sources; (Pillar 3) double the efficiency savings from existing buildings and make heating fuels cleaner; (Pillar 4) reduce the release of methane which includes eliminating organics from the landfill by 2025; and (Pillar 5) manage farms, rangelands, forests and wetlands so that they can use compost and store carbon. These **Five Pillars** are the structural elements to achieve the goals to reduce greenhouse gases (GHG) to 40% of the 1990 levels by 2030 as adopted by *Executive Order B-30-15* last year and being pursued legislatively again this year with SB 32 (Pavley). Compost is the glue that bonds these pillars together.

SB 350 (DeLeon) was signed into law last year addressing two of the pillars by increasing renewable energy to 50% by 2030 and double energy efficiency. The governor's office has been hosting 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 is underway now and will be ready for adoption in March 2017.

Eliminating organics from the landfills will mitigate methane generation as a short-lived climate pollutant (Pillar 4), and instead, create biomethane power at anaerobic digestion facilities to generate more renewable energy (Pillar 2) and carbon negative fuel for the CNG fleet that collects the organics and implements the Low Carbon Fuel Standard (Pillar 1) to displace diesel. The diverted food waste and digestate can be composted to sequester carbon and promote healthy soils (Pillar 5). Organic power has been deemed the most cost-effective GHG reduction strategy that bonds all **Five Pillars** together.

The CA Legislative Analysts Office determined the cost of Organics Grants from cap-and-trade funds to be at just \$9/ton of GHG reduction while the overall average is \$57/ton.

Organics recycling is locally processed within the California communities being served having sustained compost markets while building healthy soils. Other types of recyclable material markets (paper, plastics, and metals) are globally dependent and volatile in pricing beholden to port labor strikes and China's Green Fence. As recycling

sputters along against the macro-economics of international demand and oil supply, compost has evolved from being just a landfill diversion strategy into a local sustainable agricultural practice that sequesters carbon in the ground for centuries to come.

CCC members have been actively building the organic waste recycling infrastructure and developing compost markets by promoting healthy soils (Pillar 5) for decades and have been expanding their facilities to process the upcoming elimination of organics from the landfills by 2025 (Pillar 4) to

mitigate methane as a short-lived climate pollutant. The success of these programs has been strengthened by the companies serving as pillars in their communities.

SB 32 plans to place the 40% reduction in GHG by 2030 into statute where the AB 32 Scoping Plan Update to 2030 will show California how to achieve these goals. The cap-and-trade program, along with the Low Carbon Fuel Standard (LCFS), hangs in the balance as SB 32 will be negotiated this summer. The successful LCFS could be delayed a few years to appease Big Oil, or a carbon tax or regulatory facility caps could come later to replace cap-and-trade. The allocation of the \$3.1 billion of current cap-and-trade revenue will also be bargained to get the SB 32 and SB 1383 (Lara) votes this year. As Carbonopoly continues to play out, the Power and Pillars of Compost will prevail within your community.

The success of these programs has been strengthened by the companies serving as pillars in their communities.

Assembly Panel Backs 2030 Target after Pavley Warning on Auctions

From Inside Cal/EPA, July 1, 2016 –

The Assembly Natural Resources Committee has approved legislation codifying Gov. Jerry Brown's (D) 2030 statewide greenhouse gas target of 40% below 1990 levels after the bill's author, Sen. Pavley (D-Agoura Hills), told lawmakers that passage of the bill would help renew confidence in the state's faltering GHG allowance auction market. Carbon traders are "waiting to see what the Legislature will do this year," Pavley said during a June 27 Committee hearing, shortly before lawmakers approved SB 32. "Do you buy allowances if you don't think these policies are existing past 2020? Probably not." It is "important in that regard to make sure the Legislature is supportive of these policies," she added.

However, the bills are expected to face a tougher test when they reach the Assembly floor because some moderate Democrats in that house have raised concerns that the bills give CARB too much power to adopt a slew of new regulations on a variety of industries. Both bills now move to the Assembly Appropriations Committee. If they clear that panel, they move to the Assembly floor. The measures likely would not be considered on the Assembly floor until the last days of the Legislature's session, which ends August 31.

In addition to codifying the 2030 GHG target -- thereby making it harder for future policymakers to overturn the goal -- approval of SB 32 is seen as critical to advancing a deal between the Brown administration and the Legislature on approving a spending package for \$1.9 billion in revenue generated by the state's quarterly GHG allowance auctions under cap-and-trade.

About \$1.4 billion of this total has already been generated in fiscal year 2015-16,

while an additional \$500 million is expected to be amassed in FY 2016-17. Brown's spokeswoman has all but said the governor intends to block the spending package for the GHG revenue until SB 32 and legislation authorizing ARB to continue operating the cap-and-trade program beyond 2020 reach his desk.

But a group representing carbon credit traders is putting new pressure on lawmakers to quickly approve Pavley's bill, as well as legislation extending the state's cap-and-trade program beyond 2020, warning that a failure to act could result in another substantially under-subscribed GHG allowance auction in August and further revenue losses for the state, according to sources.

Members of the Carbon Markets Compliance Assoc. on June 16 held a private "roundtable discussion" with California legislative staff and other stakeholders at the Capitol in Sac., where they warned staff and administration officials that without passage of the legislative package, they might limit their participation in the planned Aug. 16 auction -- much as they did in the recent May 18 auction. That auction generated only \$10 million -- more than \$500 million less than forecast -- and for the first time failed to sell any current-year vintage allowances.

Responding to the group's warning, Pavley argued during the June 27 hearing that her bill will help raise the confidence level of GHG credit developers and traders that the CA cap-and-trade program will be operating for the long term. Pavley said that "one of the things I heard from so many people, including business leadership, is they want a clear market signal that these policies will be around post-2020," adding that they want "certainty that markets will be available and in statute."

CARB Oversight and Coordination Council

The Legislature wants more control over CARB and plans to establish the Joint Legislative Committee on Climate Change Policies with AB 187 that has been enjoined to SB 32, which means both SB 32 and AB 187 have to pass. SB 20 (Pavley) would create the Low Carbon Fuels Council with appointees from the Legislature, one from the Governor, and the CARB and CEC chairs.

[SB 1383 \(Lara\)](#)

TOPIC: Would require CARB to approve and implement Short-lived Climate Pollutants strategy to achieve 40% reduction in methane, 40% reduction of hydrofluorocarbon gases, and a 50% reduction in anthropogenic black carbon below 2013 levels, by 2030.

Passed out of Assembly Natural Resources Committee on June 27 with a 6-1 vote.

STATUS: Re-referred to Assembly Appropriations Committee. **SUPPORT**

[SB 32 \(Pavley\)](#)

TOPIC: Requires the Air Resources Board (ARB) to approve statewide greenhouse gas (GHG) emissions limits equivalent to 40% below the 1990 level by 2030. The bill would also require CARB to prepare and submit to the Joint Legislative Budget Committee and appropriate policy committees a report relating to the greenhouse gas emissions reductions achieved toward those limits. This bill would become operative only if AB 197 of the 2015-16 Regular Session is enacted and becomes effective on or before January 1, 2017.

Passed out of Assembly Natural Resources Committee on June 27 with a 6-2 vote.

STATUS: Re-referred to Assembly Appropriations Committee. **SUPPORT**

[AB 197 \(Garcia\)](#)

TOPIC: This bill would add 2 Members of the Legislature to CARB as ex-officio, nonvoting members. The bill would create the Joint Legislative Committee on Climate Change Policies consisting of 3 Members of the Senate and 3 Members of the Assembly and would require the committee to ascertain facts and make recommendations to the Legislature and to the houses of the Legislature concerning the state's programs and policies related to climate change.

STATUS: Re-referred to Senate Environmental Quality. Enjoined with SB 32. **WATCH**

[SB 20 \(Pavley\)](#)

TOPIC: This bill would create the Low Carbon Fuels Council and would coordinate state agencies' activities that are related to the acceleration and development of the instate production of low carbon fuels. The council shall consist of five members as follows: Chair of CARB, Chair of the CEC, one member appointed by the Governor, one member appointed by the Senate Committee on Rules with industry knowledge, and one member appointed by the Speaker of the Assembly with industry knowledge.

STATUS: Re-referred to Assembly Natural Resources with Joint Rule 62(a) suspended. **WATCH**

AB 32 Scoping Plan to 2030 Trade, Tax and/or Cap

On April 29, 2015, the Governor issued [Executive Order B-30-15](#) establishing a mid-term GHG reduction target for California of 40 percent below 1990 levels by 2030. All state agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. Last year, SB 32 (Pavley) was stalled out in committee placing these goals in statute.

The day after Big Oil also won the SB 350 skirmish last year by having the 50% petroleum reduction requirement removed, CARB was directed to update the AB 32 Scoping Plan to reflect the 2030 targets, and is moving forward with the update process four years earlier than the planned 5-year update in 2018. The first workshop was held on Oct. 1, 2015, introducing the concept of the **Five Pillars**, where the Governor provided the keynote speech coming off his meetings with global leaders and getting ready for the Paris Climate Accords. On September 25, 2015, CARB re-adopted the Low Carbon Fuel Standard (LCFS) which, along with other measures, will get California close to the 50% less petroleum goal by 2030. CARB released the AB 32 Scoping Plan Concept Paper and presented the four potential high-level concepts on June 17, 2016, held a public meeting on June 23 2016 and are asking for comments due by July 7, 2016.

http://www.arb.ca.gov/cc/scopingplan/document/2030_sp_concept_paper2016.pdf

The AB 32 Scoping Plan provides a framework to reduce greenhouse gas emissions by 40% by 2030, and also revisits the question of whether to continue with the cap-and-trade program, or replace it with a carbon tax, or do neither and just increase the cap on industry and/or transportation. The cap-and-trade program offers a flexible market mechanism to reduce GHG by 19% and using the cap to get to the other 81% reductions. The carbon tax would place a cost per ton on all carbon

sources. The increase in capping of GHG sources and do neither the cap-and-trade nor the carbon tax would be more draconian without market mechanisms in play.

The Concept Paper presents 4 potential high-level concepts for achieving the needed GHG reductions:

Concept 1: Complementary Policies with a Cap-and-Trade Program

Concept 2: Ambitious Complementary Policies without a Cap-and-Trade Program; a Focus on Industrial Sources

Concept 3: Ambitious Complementary Policies without a Cap-and-Trade Program; a Focus on Transportation

Concept 4: Complementary Policies with a Carbon Tax

Cap-and-trade was considered a fee only needing a majority vote with the passage of AB 32 until 2010, where a court decision may consider it a tax, requiring 2/3 majority vote. Since cap-and-trade was adopted under the authority of AB 32, the continuance past 2020 may require a 2/3 vote. LCFS was also adopted under AB 32 without explicit legislation where 11 cents increase for each gallon of gas has occurred under cap-and-trade. Using the Federal EPA model to determine the social cost of carbon, a range of \$11 to \$15 per ton has been pre-determined as the potential carbon tax. The cap-and-trade program has been auctioning at around \$12.50 per ton until the last auction failed based upon uncertainty past 2020, and the number of allowances that are on the market. This AB 32 Scoping Update will consider these options while producing the framework of achieving the goals of the **Five Pillars**.

With the return of SB 32 (Pavley) to place the goals into statute, the AB 32 Scoping Plan to 2030 will be critical for including the **Five Pillars** which will help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue driving down GHG emissions.

AB 32 Scoping Plan to 2030

CARB released the 2030 Target Scoping Plan Concept Paper and Updated GHG Inventory on June 17 with comments due by July 7, 2016. The 2030 Target Scoping Plan Concept Paper provides an additional opportunity for public and stakeholder engagement and input prior to release of the Draft Scoping Plan later this year. The intent of the paper is to inform an ongoing stakeholder process on how to most effectively achieve a 40% reduction in GHG emissions by 2030 as compared to 1990 statewide GHG emissions. The content of this paper has been informed by several public workshops and meetings held to date following the gutting of SB 350 (De Leon, 2015) on the proposed 50% reduction of petroleum use by 2030. This Scoping Plan Update will provide the road map to 2030 and be the basis to support SB 32 (Pavley) this year, and provide market certainty past 2020.

<http://www.arb.ca.gov/cc/scopingplan/scopingplan.htm>

CARB Regulations in 2018 for Organics Ban by 2025

The California Air Resources Board conducted a public workshop on May 19, 2016 to discuss the Proposed Short-Lived Climate Pollutant (SLCP) Reduction Strategy which was released for public review on April 11, 2016. This is the third iteration over the last year that also included black carbon and refrigerants in the analysis. CARB will consider approving this SLCP Strategy in the fall along with the CEQA document. The SLCP is calling for an effective landfill ban of organic waste in ten years. CARB will be working with CalRecycle to develop a regulation by 2018, noting the progress towards existing targets for landfill diversion by 2020, with the phase in of AB 1826 which is supposed to divert 50% of the commercial organic waste by 2020. With a balanced anaerobic digestion portfolio, over 33 million diesel gallons of RNG could be produced.

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, renewable natural gas, and biochar.

CCC Members

Agromin
Atlas Disposal
Burrtec Waste Industries
Caglia Environmental
California Wood Recycling
CleanFleets.net
Clover Flat Compost
Cold Canyon Compost
CT Bioenergy Consulting LLC
Harvest Tulare
Harvest Lathrop
Marin Sanitary Service
Mt. Diablo Recycling
Napa Recycling Compost
Northern Recycling Compost
Organic Waste Solutions
Phoenix Energy
Quackenbush Mt. Compost
Recology Blossom Valley Organics
Recology Feather River Organics
Recology Jepson Prairie Organics
ReFuel Energy Partners
Soiland Co, Inc.
Sonoma Compost
Tracy Delta Compost
Upper Valley Recycling
Vision Recycling
Zanker Road Resource Management
Z-Best Compost Facility
Zero Waste Energy Development
Zero Waste Energy, LLC

CCC Executive Committee

Bill Camarillo, *Agromin*
Greg Kelley, *Northern Recycling Compost*
Eric Potashner, *Recology*
Rachel Oster, *Recology*
Will Bakx, *Sonoma Compost*
Christy Pestoni Abreu, *UVR Compost*
Michael Gross, *Z-Best Compost*

CCC Team

Neil Edgar, Executive Director
Evan Edgar, Regulatory Affairs
Steve Peterson, Financial Advisor
Rick Moore, Peer Review Engineer
Monica White, Sustainability Advisor
Sean Edgar, Fleet Advisor

CCC Legislative Affairs

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

CCC Members News

The Repettos - Pillars in the Community Tracy Delta Solid Waste Management

Carl Repetto began his career at South San Francisco Scavenger Company, and helped found Tracy Delta Disposal. Carl's son, Mike Repetto, grew up riding the garbage trucks with his father and dreamed of being a garbage man like his father, as shown in the picture below. Mike realized his dream when he graduated from college in 1983, and continued to carry the Repetto legacy in Tracy, California. For the last 67 years Tracy Disposal Company has remained actively involved in the community through various non-profit organizations, community service programs and the local school district. Being on several boards and commissions, Mike Repetto and Tracy Delta Solid Waste Management Company, Inc. are pillars in the community they serve.



Carl Repetto circa 1950

In 1950, Carl Repetto, Dave Rosaia and Ben Roberts started Tracy Disposal Company and began servicing the City of Tracy with approximately 9,600 residents. Five years later, in 1955, the City awarded Tracy Disposal with the leaf and yard waste service. Over the next thirty years Tracy Disposal evolved with the growing community and the latest technologies in waste management. In 1986, partner Ben Roberts retired, selling his share of the business to Carl's son, Mike Repetto. Mike's brother, Curt Repetto, later became a partner as well. Scott Stortroen is the General Manager.

In 1989, the California State Legislature passed Assembly Bill 939 which called for a reduction of waste going to landfill by 25% by the year 1995 and by 50% by the year 2000. In response to the new legislation, Tracy Disposal implemented recycling

services for waste products such as newspaper, cardboard, glass bottles, scrap metal, green waste, wood waste and construction/demolition materials. In 1991, the City of Tracy and Tracy Disposal started the curbside recycling "blue box" system, followed by an automated yard waste collection system in 1995, at which time, the Tracy Material Recovery and Transfer Facility was built to help the City of Tracy and San Joaquin County meet and exceed the 50% diversion requirement of AB 939. Tracy Delta Compost was one of the first permitted compost facilities in the state in the early nineties. In 2003, the curbside recycling service evolved into a fully automated commingled recycling program as the City reached a population of over 80,000.

The Tracy Material Recovery and Transfer Facility was re-permitted a few years ago with a

master plan to 2035 to accommodate the future growth of this former rail town that is now a distribution center and bedroom community for the Bay Area. Tracy MRF was also designed to accommodate the future of AB 32, the Global Warming Solutions Act of 2006. The compost facility is being expanded to add food waste and covered aerated static pile technologies. A 1.0 megawatt biomass conversion facility was also permitted to offer carbon-neutral renewable energy to run all of the MRF operations and be poised to handle their own wood chips on-site from their construction and demolition operations. Tracy Delta Disposal assisted in the development of the City's Climate Action Plan to offer greenhouse gas reduction strategies to the community they plan to serve for generations to come.



40 % GHG Reduction below 1990
by 2030

Governor Brown's

FIVE PILLARS

50% LESS
OIL
by 2030

Convert Organics to
Carbon Negative Fuel



Low
Carbon
Fuel Standard



LCFS

10% LESS CARBON
INTENSITY
by 2020

50% RPS
RENEWABLE ENERGY
by 2030

NET ZERO



Renewable
Portfolio
Standard



RPS

33% RPS
RENEWABLE ENERGY
by 2020

DOUBLE ENERGY
EFFICIENCY
by 2030

Decarbonize
Economy

LEED
Certification



Cal-
Green

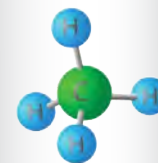
3 MILLION
METRIC TONS GHG
REDUCTIONS
by 2020

90% ORGANICS
RECYCLING
by 2025

MITIGATE
METHANE



Reduce
Short-Lived
Climate
Pollutants



SLCP

50% ORGANICS
RECYCLING
by 2020

15 MILLION TONS OF
COMPOST USE
by 2025

Sequester Carbon
into Soil

Healthy Soils
Initiative



HSI

7.5 MILLION TONS
OF COMPOST USE
by 2020



2015 - Executive Order B-30-15, SB 350, SB 32

2006 - California Global Warming Solutions Act - AB 32