



Turning to Zero Waste - Meeting New Commitments



SFEnvironment

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A Department of the City and County of San Francisco

San Francisco



Long History of Resource Recovery



Photo courtesy of Ines Bel

California Legislative Goals

AB 939 - 50% Diversion by 2000, passed in 1986

AB 1383 -75% Organic waste reduction by 2025, passed in 2016-18



Goals and Achievements



- 75% diversion by 2010 and zero waste to landfill or incineration by 2020
- Achieved 80% diversion in 2010
- Halved landfilling in 10 years to least on record
- Added new infrastructure, equipment and programs to increase diversion in 2009



- Establish convenient programs
- Conduct extensive public outreach
- Provide generator and service provider incentives
- Adopt policies and increase enforcement



GCAS Zero Waste Pledge #1

Reduce municipal solid waste generation per capita by 15% by 2030



Three Streams



Photo courtesy of Recology



New Zero Waste Commitments



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Residential Sector Results



350,000 households
(~150K SF & 200K MF)

8700 apartment buildings
(6+ units)

99% have **recycling**

99% have **composting**



Residential Food Scraps Collection



Food Scrap Collection is Easy.



"Compostable" Bag
自然化解的膠袋
Bolsa "Compostable"



Apartment Building 3 Stream Collection



Web Resource: Custom Sign maker



STEP 1: CLICK ON THE SIGN YOU WANT TO CREATE

COMPOST
廚餘和汚紙 DESECHOS Y PAPEL SUCIO

RECYCLE
可回收的 PAPEL, BOTELLAS Y LATAS

LANDFILL
垃圾墳埋場 BASURERO MUNICIPAL



Composting Benefits Promoted To Public



RECOLOGYSF.com

Recology Sunset Scavenger and Recology Golden Gate, your local recycling companies

- 1 RECYCLE
- 2 COMPOST
- 3 TRASH

Our top 10 reasons to compost

10: Compost is a good alternative to chemical fertilizers because compost doesn't pollute groundwater, wells, or waterways.

9: Compost keeps organic materials out of landfills, which reduces methane gas emissions.

8: Compost sequesters carbon deep in the soil, especially when used to grow cover crops like mustard or beans.

7: Compost promotes healthy microbial activity in soil, providing micronutrients to plant roots and discouraging soil diseases.

6: Compost improves soil structure, thereby protecting topsoil from erosion.



5: Soils fed with compost retain more rainwater, conserving this precious resource.

4: Compost helps grow plants rich with nutrients that sustain your good health.

3: It's easy and satisfying.

2: Compost collection programs support green jobs.

1: Composting turns food scraps into fruits, vegetables, and fine wines. Bon appetite!

Share your top reasons to recycle and compost at [RecologySF.com/ContactUs](https://www.RecologySF.com/ContactUs)

Apartment & Commercial Assistance



Presentations



Waste audits



Multi-lingual training



Monitoring



Containers, Signs and Stickers



Large Generators





Commercial Sector Results

- 90,000 businesses
- 16,040 service accounts
- 99% recycling compliant
- 99% composting compliant



Recyclables



Recycling Facility



What's Compostable in San Francisco?



Composting Facility



New technology allows 600 tpd within strict
CA Air Resources Board VOC emissions level



Engineered Compost System (ECS)

Organics Loop



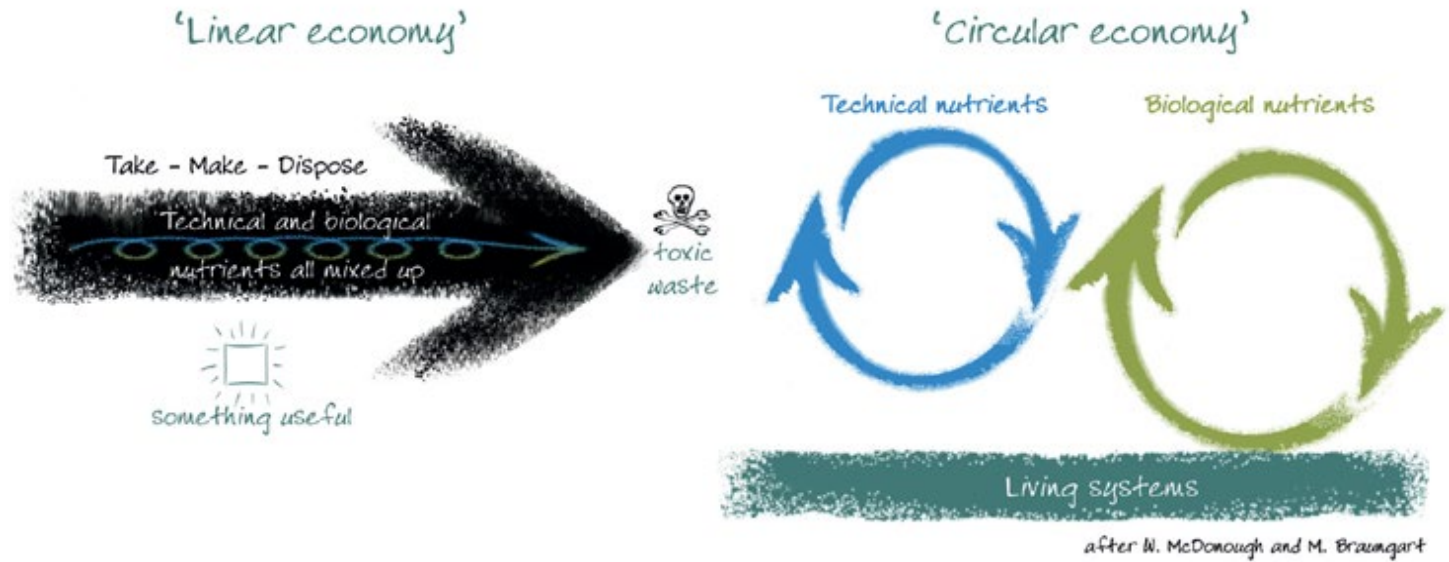
Compost



Compost Makes Healthy Soil & Great Wine



Shift from Linear to Circular Economy





California's Black Gold

Photo by Larry Strong, courtesy
Recology

Trash



Zero Waste Incentives



C&D Debris Recovery Ordinance



Mandatory Recycling & Composting



Styrofoam, Bottled Water and Bag Bans

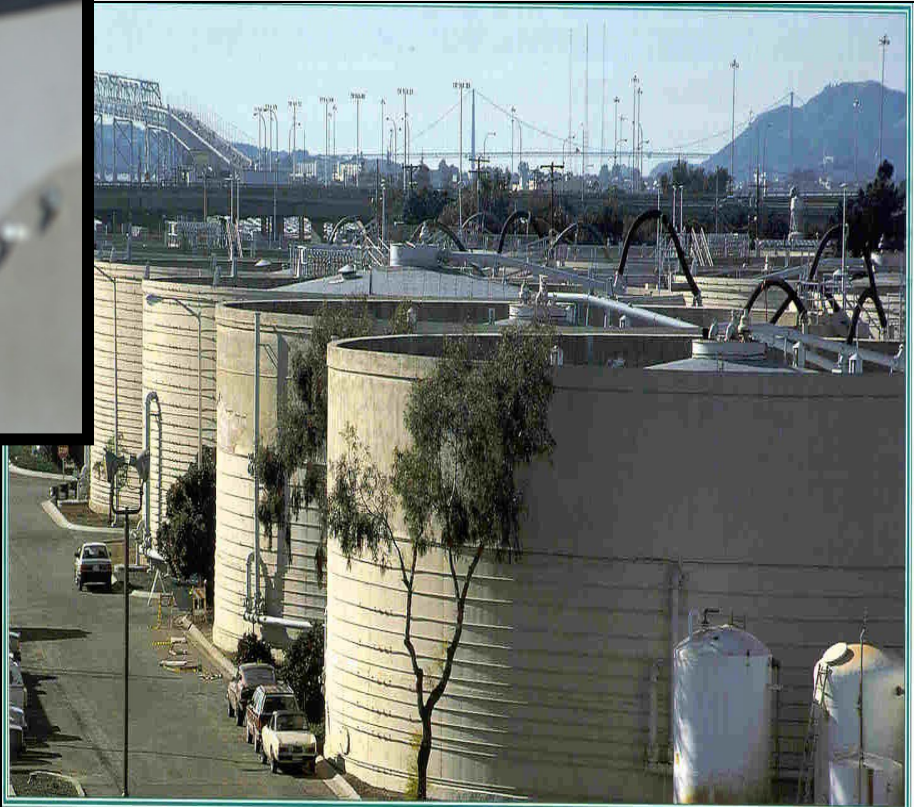


Producer and Consumer Responsibility



Photo courtesy of Edgar

Food Scrap Digestion to Energy Process



Clean World Food Digester and Fuel Facility - Sacramento



Compost Used On Organic Farms And Vineyards To Build Healthy Soils



Compost Also Makes Healthy Fruit



And Happy Farmers



This is soothing to the climate



COMPOST IS KEY!



It reconnects the carbon cycle

Marin Carbon Project website



A screenshot of a web browser displaying the Marin Carbon Project website. The browser's address bar shows the URL www.marincarbonproject.org. The website has a dark green header with the title "MARIN CARBON PROJECT" and a search bar. A navigation menu below the header includes links for "ABOUT", "CARBON FARMING", "SCIENCE", "POLICY", "NEWS & EVENTS", "CONTACT US", and "KEEP IN TOUCH". The main content area features a large banner for "CARBON FARMING LAUNCHES IN MARIN" with a background image of a truck dumping compost in a field. Below this are three columns: "DEMONSTRATION FARMS" with a photo of people and cows, "WHAT'S NEW" with a photo of an excavator and text about an innovation award, and "ABOUT MCP" with a photo of a cow in a field. At the bottom, there are sections for "MEMBER ORGANIZATIONS" and "PARTNERS" with logos for the County of Marin, Malt Marin Agricultural Land Trust, Marin Organic, Marin Resource Conservation District, and Carbon Cycle Institute. The browser's taskbar at the bottom shows "DropboxInstaller.exe" and "Show all downloads...".

California Drought 2014



California is in the third year of one of the state's worst droughts in the past century, one that's led to fierce wildfires, water shortages and restrictions, and potentially staggering agricultural losses.



Marin County Farmland Protected by MARIN AGRICULTURAL LAND TRUST



www.malt.org

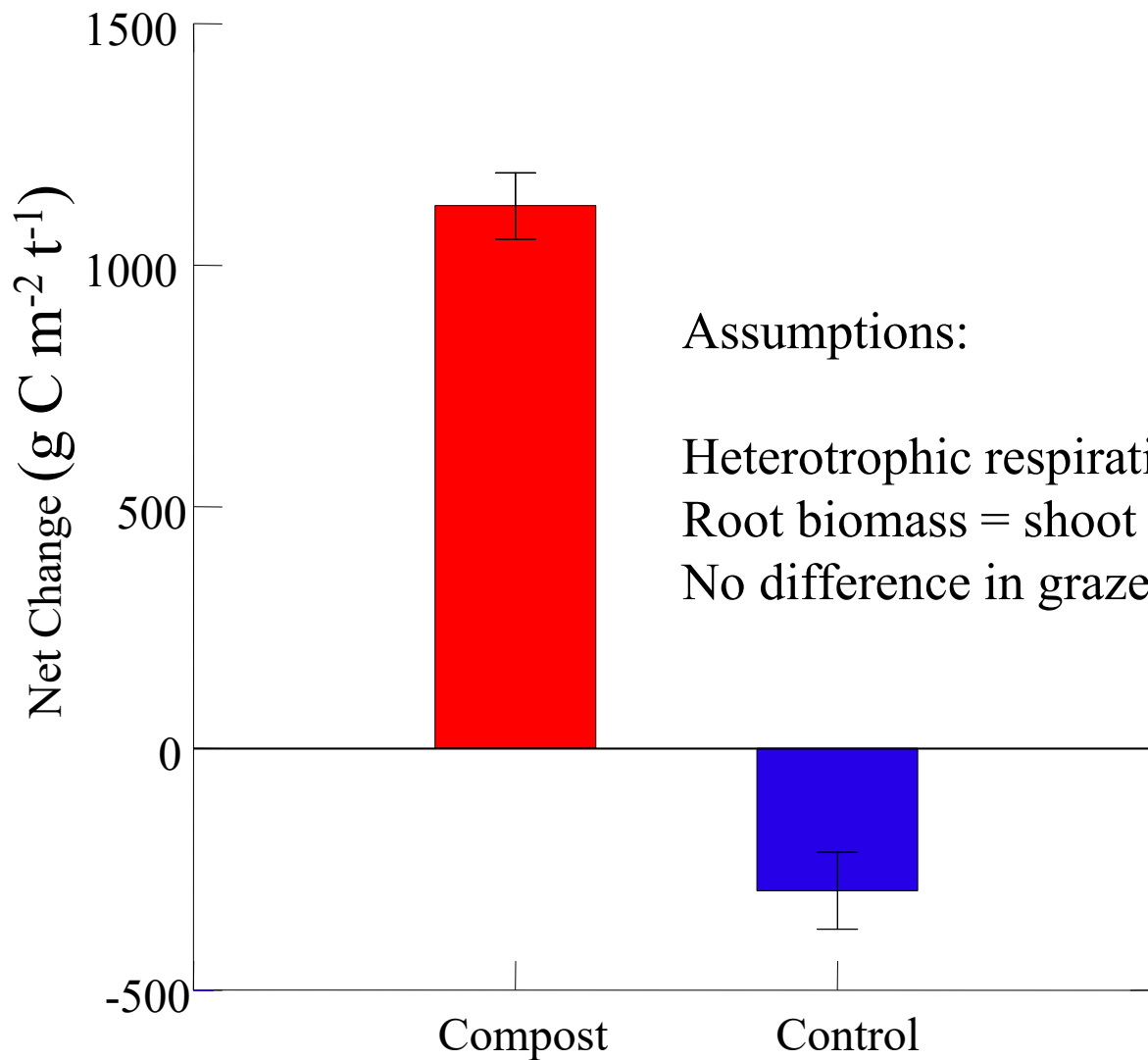


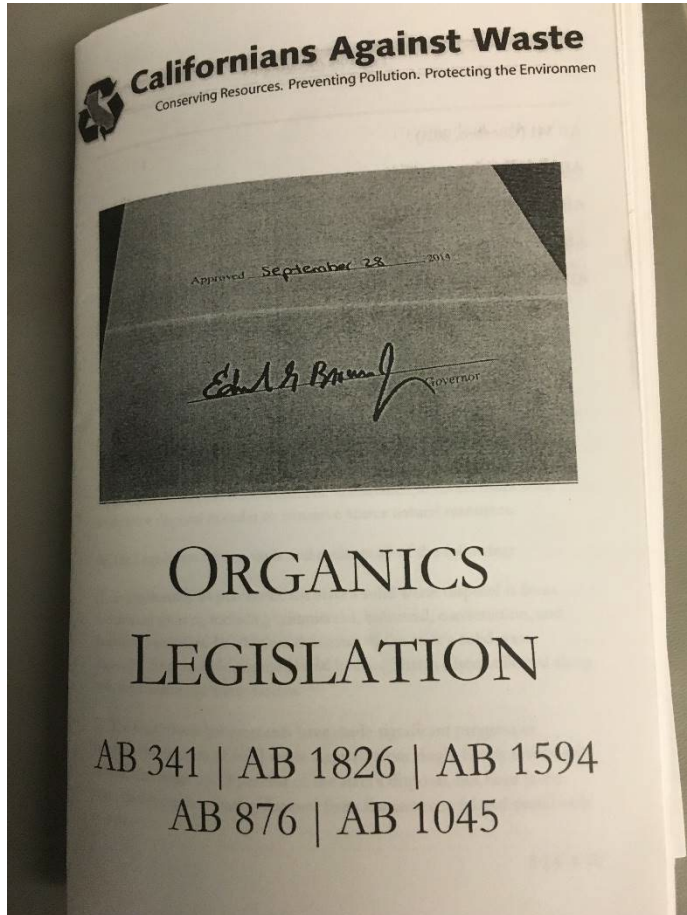
Map prepared by GIS Services, Marin Agricultural Land Trust, 2014. Map data provided through the generosity of the USFS Conservation Program.

San Francisco County



Organic amendments increased system carbon by over 14.8 Mg C/ha in year 1; net gain, beyond compost additions was approx. 0.8 Mg C/ha.





Starting with the passage of AB 32 the Climate in 2005, California has moved aggressively to address climate change.

In the past 10 years 6 additional laws were signed by Governor Brown that will shape the future of the state's economy. It will be focused on organics recovery, using compost to promote soil health, water retention for drought protection and increased sequestration of soil carbon.



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Unprecedented global cooperation and participation will be necessary



Cities must adopt Zero Waste with comprehensive organics recovery

Citizens must separate their organics

Countries must cooperate to assure science is implemented correctly and measured

7 countries have enough rangeland to be able to accomplish this critical task:
Brazil, USA, Canada, Mexico, Russia, China, Mongolia

We need to treat 30-40% of the 3 Billion hectares of total rangeland

That's about 770 Million hectares, or 2 Billion acres

Trash Processing



SF Zero Waste Policies

