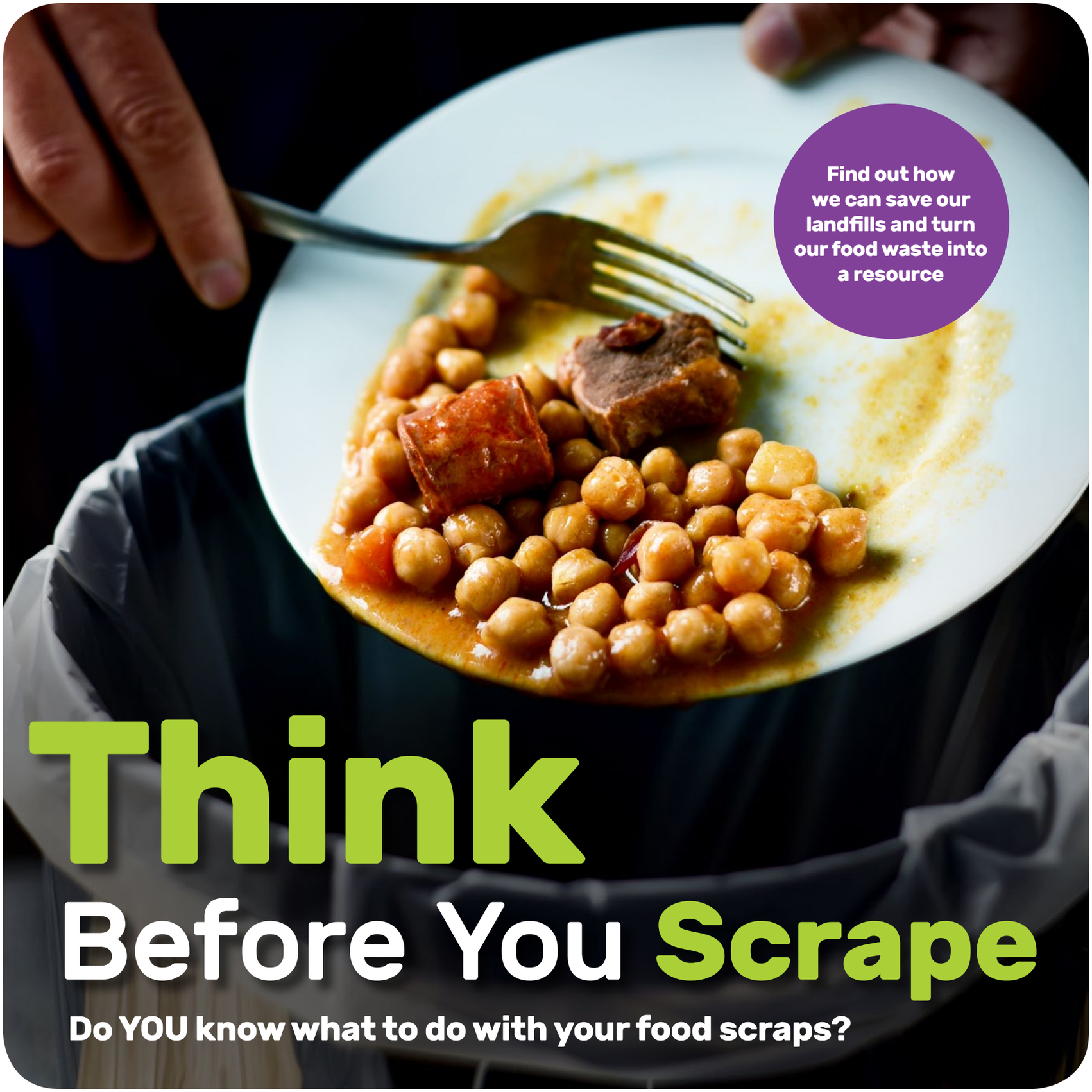

Find out how we can save our landfills and turn our food waste into a resource

Think Before You Scrape

Do YOU know what to do with your food scraps?

A Special Advertising Supplement

Wasted Food: It's Everyone's Issue

Sacramentans are working to reduce and reuse their leftovers

BY MATT JOCKS

A more sustainable future is the destination, and David S. Baker isn't afraid to hop on his bike to get there.

Baker's nonprofit organization, Green Restaurants Alliance Sacramento (GRAS), operates the ReSoil Sacramento program. The program collects food waste from local restaurants and delivers it to local farms and gardens to be composted into healthy soil.

The end goal: To use that soil to grow new, nutrient-rich food and close the loop.

The alternative? Food waste heads to the landfill.

Aside from taking up valuable space in a landfill, food waste emits methane, a more powerful greenhouse gas than carbon dioxide. In a study, the Food and Agriculture Organization of the United Nations stated that if food waste were a country, it would trail only China and the U.S. as a greenhouse gas emitter.

Food waste also squanders the precious resources used to create and transport that food — such as water and oil. This is particularly regrettable in a nation where too many people go hungry.

Just as foodies today are touting the benefits of "eating local," the solution to food waste will also start in our backyards. Baker says it will take local programs meeting local needs to do it. He points to New York, Austin and San Francisco as leaders, but says smaller cities and towns can play at least as large a role.

Just as foodies today are touting the benefits of "eating local," the solution to food waste will also start in our backyards.

"San Francisco is definitely ahead of other cities," he says. "But they are still taking their waste to Vacaville to be processed. I would argue that community composting would be even better."

Perhaps because of its status as the Farm-to-Fork capital, Sacramento has shown its desire to lead on this issue. The Sacramento County community on the website CropMobster connects food donations with recipients, while Harvest Sacramento, a project of Soil Born Farms, uses volunteers to harvest surplus backyard fruit to send to food assistance programs.

Whether it's to get good food in the mouths of people who need it or to turn food waste into compost so farmers can grow more food, either outcome is better than sending it to a landfill.

Robyn Krock is project manager at Valley Vision, a regional leadership organization, and says the innovation shown by these organizations has given her hope for the future.

"We have to be realistic about the fact that change can take time and patience, however I am also very optimistic thanks to all of the great work that's happening," she says. "There are good ideas being carried out in our communities and a lot of energy being poured into finding solutions that can be sustained. It's people working together that will make the difference, and I see a lot of that happening in Sacramento."

David S. Baker, founder of the nonprofit Green Restaurants Alliance Sacramento, collects food waste from local restaurant Sun & Soil Juice Company for composting. He says a more sustainable future starts with local action.
PHOTO BY MELISSA UROFF

HOW MUCH FOOD DO WE WASTE?

1 in 8 people in the U.S. go to bed hungry[1]

40% of the food produced in the U.S. **goes uneaten**[1]

How much of the food we produce do we throw away?

29% of all Fruit

31% of all Dairy

26% of all Meat, Poultry & Fish

31% of all Grain Products

30% of all Vegetables[2]

Methane: Municipal solid waste landfills are the **3rd largest** source of greenhouse gasses in the U.S., and methane has a global warming impact **25X higher** than carbon dioxide.[4]

15% of what ends up in Sacramento landfills is ORGANIC WASTE: The largest single contributing source to landfills.[3]

1) USDA, "Household Food Security in the U.S. in 2015" 2) USDA Economic Research Service (percent of food loss from total supply, retail and consumer levels) 3) Sacramento Regional Solid Waste Authority 4) EPA

SO, WHAT CAN BE COMPOSTED?

Food waste

- Leftover or spoiled food
- Food scraps (peels, skins, etc.)
- Uncoated food-soiled paper (napkins, pizza boxes)

Green waste

- Leaves
- Grass
- Small branches

Wood waste

- Construction lumber
- Large branches
- Tree trunks

Remember: If it came from the ground — it can be composted!

Atlas Disposal trucks are refueled using biogas, which is created using the very same organic waste that the trucks haul away from local businesses.
PHOTO BY MELISSA UROFF

Trucks That Run on Food

Sacramento is turning its organic waste into energy

BY MATT JOCKS

Sure, recycling is the law. But it's also cool.

That's the assessment of Dave Sikich, president and CEO of Atlas Disposal, whose trucks play a key role in turning today's waste into tomorrow's energy and food.

Sikich remembers well when almost everything wound up in a landfill. It was an unsustainable practice that began to change when full-scale recycling of bottles and cans became the norm. Now, waste management experts are turning their focus to organic waste: the leftovers from food, landscaping and wood products.

"It's kind of the last meaningful phase of recycling," Sikich says. "And it's the coolest. Turning food scraps into energy — that's about as cool as it gets."

If common sense wasn't enough to get it done, the law should be able to do it.

In 2014, Gov. Jerry Brown signed AB 1826, which was augmented two years later by SB 1383. The law sets goals of a 50 percent reduction of organic waste by 2020 (from 2014 levels) and 75 percent by 2025. It also sets a goal to reuse 20 percent of disposed edible food by 2025.

Some requirements, such as mandatory composting programs for businesses generating at least 4 cubic yards per week, are already in place. Others are tiered over the next eight years.

> "Turning food scraps into energy — that's about as cool as it gets."
>
> **Dave Sikich**
> **President and CEO, Atlas Disposal**

There are challenges, says Etienne Ozorak, program manager for Sacramento Regional Solid Waste Authority. The inexpensive tipping fees at Sacramento-area landfills work against the economics of recycling (it's cheaper to throw it away than send it to a recycler).

But the early signs from the business community have been encouraging.

"Many have been eager," Ozorak says. "The new arena has jumped on it. The schools have been early participants. There are leaders in place. Hopefully, the rest will try to keep up with them."

While the process is in its early stages, the possibilities are exciting. In addition to turning organic waste into biogas/natural gas and recovering food to help reduce hunger, the processes can lead to better food, less impact on the climate and more efficient water usage.

The law is directing businesses to take the lead, both in their disposal practices and guiding their employees to better manage organic waste. If that is the future, the present is all about education and taking steps in the right direction.

"We all like to think we're intelligent people making intelligent decisions," Ozorak says. "This is a no-brainer. It's the right thing to do."

Always in Season

Restaurateur/chef believes composting is good for the local soil — and business

BY COREY RODDA

Chef/owner Patrick Mulvaney says instituting an organic waste composting program at Mulvaney's B&L has reduced the amount of garbage the restaurant sends to the landfill to just one 5-gallon bucket each week.
PHOTO BY MELISSA UROFF

Patrick Mulvaney's restaurant, Mulvaney's B&L, is known for its locally sourced fare, an elegant yet homey atmosphere and hospitable wait staff. Patrons don't think about where that last, uneaten bite of potato gnocchi ends up.

But rest assured, it's doing something good. Mulvaney is recycling the restaurant's food waste, keeping it out of the landfill and putting it to good use.

"People come to Mulvaney's because they are hungry and we feed them," Mulvaney says. "That is spiritual, but it's also health related. They trust me to give them food that is good for their bodies and the earth. Being able to speed the message that Mulvaney's does both is good for business."

The 50-seat restaurant that serves lunch and dinner five days a week only produces one 5-gallon bucket of garbage each week. The rest of its organic waste is picked up by Atlas Disposal and churned through an anaerobic digester. The digester, brainchild of students and professors at the UC Davis Agricultural Sustainability Institute, transforms food waste, cardboard, napkins and to-go boxes into methane gas, cardboard and fertilizer.

"It's a virtuous cycle," Mulvaney says. "Our restaurant is a small restaurant so because we use the anaerobic digester, about 500 yards of garbage are taken out of the landfill each year. Imagine what the number could be if larger [restaurants] like McDonald's and Chipotle started using it."

Because the digester takes almost everything, the restaurant's process for composting is streamlined. Everything essentially goes in one bin.

After introducing the composting program to his staff, Mulvaney says it took around one month for the new procedure to take hold.

"It's also been very revenue neutral," he adds. "Some years it has been a little less expensive and some years it has been a little bit more expensive than our waste costs before."

Mulvaney believes that restaurants are natural places to pioneer food waste reduction efforts because they often strive to use every cut of meat to save money.

"Chefs are trained to be savers and conscious of the earth's resources," he says. "People come into Mulvaney's to celebrate and enjoy their meal. They are not thinking about waste reduction, but you make pasta using carrot tops and that intrigues the customer."

> **"They trust me to give them food that is good for their bodies and the earth."**
>
> **Patrick Mulvaney**
> **Owner/chef, Mulvaney's B&L**

Mulvaney is active in creating policy to reduce food waste and create more food access and equity. He's met with U.S. Sen. Kamala Harris to discuss creating national policies for farms to be able to sell irregular, over-ripe or under-ripe produce at half-cost.

TIPS FOR RESTAURANTS: SAVE MONEY & SAVE FOOD

- Know what you're wasting: Use your inventory to figure how much food you waste over the course of a week.
- Educate your staff about the importance of correctly separating garbage, recycling and compost.
- Designate a staff member or team to head waste reduction efforts.
- Find creative ways to use a whole piece of meat/produce — like new recipes using the tips of carrots or the leafy part of celery for a vibrant and flavorful soup base.
- Instead of ordering more produce, meat or fish for a special, order less. Customers will be understanding if you run out.
- Keep your refrigerator organized with first-in, first-out labels.
- Offer customers smaller portions.
- Improvise with items that might spoil soon — in doing so, you might discover your restaurant's next signature dish!

> **"These students are the next generation, the ones who are going to come up with new solutions for how we can reduce waste and use it more wisely."**
>
> **Tony Cincotta**
> **General Manager, Republic Services**

Students at Toby Johnson Middle School help run the school's recycling program, which includes food waste diversion in each classroom and the lunchroom. **PHOTO COURTESY KATHLEEN ALBIANI**

Lessons in Sustainability

Middle school creates the first food waste diversion program in its district

BY COREY RODDA

At Toby Johnson Middle School, students recycle plastic and cardboard, but they also recycle banana peels, nibbled-on peanut butter and jelly sandwiches and half-consumed milk cartons.

These castoffs get compacted, picked up and transformed into fuel to power the trucks that transport the food waste. Instead of sitting in a landfill generating methane gas, the old food is put to use.

Students also place all unopened packages of food and whole fruits that they don't want to eat in a "share" bin. Frequently, other students save these castaways for healthy afternoon snacks.

"A lot of that food was going directly from students' trays to the trash," says Kathleen Albiani, Toby Johnson's home economics teacher. "Now, students walk home with bags of baby carrots in their hands."

Toby Johnson Middle School is the first public school in the Elk Grove Unified School District to have a food waste diversion program. But when Albiani came to the school two years ago, the school lacked even a basic recycling program.

"We teach the students about environmentalism — it just seemed like the right thing to do," said Albiani.

When Albiani was coordinating the recycling program with the City of Elk Grove, she was asked to pilot a food waste diversion program. She worked alongside parents and janitorial staff and the school's waste management company, Republic Services, to make it happen.

Now, there's a food waste container in each classroom. In the cafeteria, students are tasked with sorting their solid food waste, recycling and garbage into different bins. Food waste recycling is becoming habitual for students and teachers.

On Earth Day, Republic Services gave a food waste presentation to its seventh graders and has followed up at the beginning of the 2017-2018 school year to help ensure the program's success.

"These students are the next generation, the ones who are going to come up with new solutions for how we can reduce waste and use it more wisely," says Tony Cincotta, General Manager of Republic Services. "The earlier we can teach kids about the importance of keeping waste out of landfills and the positive impacts that has to the environment, the better."

Early adoption of recycling can lead to a lifelong good habit, which is one reason why the company gave over 100 school presentations last year on recycling and 15 school presentations aimed specifically at food waste. Education also ties into Republic's sustainability platform, which recognizes the responsibility the waste management company has to its customers and the environment.

"Republic believes in educating our youth about the importance of waste reduction, recycling, and food waste diversion to support healthy communities for future generations," Cincotta says.

REPUBLIC SERVICES TRUCK

TIPS FOR SCHOOLS

- Contact your district to see if they would support a food waste diversion program at your school.
- Invite your waste hauler or city waste representative to your school to give a presentation about composting food waste.
- Dedicate a week to introduce your school to the food waste diversion program.
- Tell your students again and again how much of an impact they are making!
- Have volunteers monitor the bins for the first week to educate students about the composting process.
- Classrooms that do a good job of sorting can earn coupons for a pizza party, ice cream party or field trip.
- Create a share table at your school.
- Focus on making school meals delicious — students eat more when they enjoy what they are eating.

How Sacramento Turns Its Waste Into Something New

Green waste

PICKUP

Trucked to composting facilities.

PROCESSING

Green waste undergoes grinding and moisture conditioning and is then raked into long, narrow rows that are exposed to oxygen and sunlight.

USES

Soil
Green waste is turned into a fertilizer that can then be mixed with the soil to add nutrients and help hold more water.

Food waste

PICKUP

Collected in residential-size containers for smaller businesses (restaurants, schools, small markets) or larger containers for entities such as major food stores or food banks.

PROCESSING

Food waste is separated from packaging and processed one of two ways:

Anaerobic digestion
Organic matter is broken down into carbon dioxide, methane and water with the help of microorganisms.

Compost
Waste decomposes and emits gases as part of this process (primarily methane) which is eliminated.

USES

Transportation fuel (biogas)
Used by waste haulers/agricultural vehicles.

Electricity
Fuel can operate turbines to generate electricity.

Soil
Creates new, nutrient-rich soil.

Wood waste

PICKUP

Trucked to wood processing facilities.

PROCESSING

The wood products are first ground into small chips. Those are then hauled to a biomass plant where they are converted to energy.

USES

Electricity
Power produced by the “gas-to-energy” plant is sold to an electric utility.

Benefits

Closes the loop:
Organic waste can become quality soil that can produce more food

Sustainable:
Biomass plants generate energy from a renewable resource – wood

Creates jobs:
The waste and energy sectors will need more workers to process organic waste

Saves space:
Extends the life of our current landfills

Reduces methane:
Less decomposition, means less methane is released into the atmosphere

Be Mindful: Start thinking about wasted food

BY COREY RODDA

With Kids

- Think **bite size** — cut an apple into slices and it's more likely to get eaten.
- Keep **portions small** — split a container of yogurt among two kids.
- Have your picky eaters **share a meal.**
- Give food **funny names** — a study by Cornell found that kids are more likely to eat foods with names like "X-ray Vision Carrots" and "Superhero Spaghetti".
- If they didn't finish their plate, **save it** and offer it to them an hour later, when they are inevitably hungry again.
- **Involve kids** in cooking — if they helped make it, they're more excited to eat it!
- Contact your **school district** to see if they would support a food waste diversion program at your school.
- Avoid the **lunchbox dump!** Pack foods your kids will eat (and portions they can finish).
- Kids! Create a **recycling team or club** at your school and be a leader in food waste efforts.

While Eating Out

- Not that hungry? Order off the smaller portion or **appetizer menu**.
- When the server asks if you need a box, always say **"Yes."** (Bring a reusable container if you are concerned about packaging waste.)
- **Share a plate** with a friend.
- If you don't want the fries, ask your server to **hold the fries (or salad, chips, etc.).**
- Give that **doggie bag** to someone who is hungry — it's completely legal.

At Home

- **Freeze** leftovers.
- Turn food that's going bad into something new, like smoothies, salads and baked goods. **(Mmmm, banana bread.)**
- Donate unused food to your local **food bank or soup kitchen.**
- Be **more mindful** of food waste — if that lettuce is getting old, have salad for lunch today!
- **Plan your meals**, but only for one week.
- Eat the **ugly carrot!** Take a picture of your weird-looking produce and post to @UglyFruitAndVeg
- Learn how to **compost** (Google "composting workshops in Sacramento" to learn how).
- Use the **Foodfully App**, created by a UC Davis graduate, which links with your customer loyalty cards to track how long your food purchases will last in your fridge. Foodfully sends push notifications when food is about to spoil (and recipes to help you use it!)

At Work

- Have a **gleaner corner** in your office breakroom for homegrown produce.
- Create a **compost bin** in your office (Google "composting workshops in Sacramento" to learn how).
- Host an **event** educating your office about food waste.
- Show your employees **documentaries** about food waste ("Just Eat It" offers tools to help you host a public or educational screening).
- Have **professionals** in the food waste industry come talk to your office.
- Designate a **regular leftovers day** so that employees can bring food to share with their colleagues.

At Apartment Complexes

- If you are a landlord, provide your renters a **handout** about how to recycle and divert food waste.
- Send your tenants **regular reminders** to properly sort their waste.
- Host a **party** at your complex so residents can learn about the food waste diversion program (and bond over pizza).

You Are What You Waste

Recycling cans and bottles has become second nature for Californians. The next step, with bigger stakes and higher rewards, is the composting of organic waste, including food.

For help complying with composting laws, contact your waste services provider or visit WasteRight, a campaign of the Sacramento Regional Solid Waste Authority, at wasterightsac.org.

WasteRight Sacramento
Commercial Food Waste in its Right Place

WHO IS THE SOLID WASTE AUTHORITY?

Since 1992, the Sacramento Regional Solid Waste Authority (SWA) has been responsible for the commercial solid waste, recycling and disposal needs in the City of Sacramento and unincorporated areas of Sacramento County.

The SWA is an autonomous governmental organization, or Joint Powers Authority (JPA) funded by franchise fees and governed by a Board of Directors.

The SWA regulates commercial solid waste collection and transportation by franchised haulers through ordinances. SWA ordinances include the requirement that franchised haulers achieve a 30 percent recycling rate and offer recycling services to businesses and multi-family dwelling units within its service region.

DOES YOUR BUSINESS WASTE RIGHT? GET REWARDED!

Businesses that responsibly and sustainably compost their food waste can get free advertising through the Sacramento Area Sustainable Business website and be entered into Sacramento Area Sustainable Business's annual awards ceremony. For more information please visit: www.sacberc.org/SASB/Pages/default.aspx

WHEN WILL THIS AFFECT YOU?

2014: Gov. Jerry Brown signs AB 1826 requiring businesses and multi-family residential dwellings to compost organic waste.

Now: Businesses that produce at least **4 cubic yards of food waste** per week are required to arrange for composting services. Local jurisdictions are required to have a program in place, conduct outreach and education programs, and identify businesses that are not composting.

Jan. 1, 2019: Businesses that have at least **4 cubic yards of any commercial solid waste per week** must arrange for composting services.

Summer/Fall 2021: If the 50 percent reduction target has not been met, requirements for composting will extend to businesses that have **2 cubic yards of any commercial solid waste per week.** Some exemptions may also be withdrawn.

This publication is brought to you by the following:

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