





INTRODUCTION

OVERVIEW

This guide is here to serve you and your business on the path towards sustainable operation. Humans have come a long way advancing all aspects of society over the years, yet many of these activities damage the planet and its inhabiting species (including humans). Individual actions such as recycling, conserving energy, and eating less meat can help reverse the damage done. Businesses also have the opportunity to play a vital role. There are simple changes you can make to your restaurant to reduce its environmental footprint. This guide contains suggestions and explanations for various sustainable improvements, as well as a breakdown of the financial investment required for implementation. We understand businesses need to make money, and unfortunately not every sustainable choice is the most economic. However, there are exciting options with a fantastic return on investment for both the planet and your business.

WHY SHOULD MY BUSINESS BE MORE SUSTAINABLE?

- Increased Business- According to the National Restaurant Association, about 50% of consumers say that a restaurant's sustainability efforts impact their choice of where to dine. As more people are becoming aware of the damage humans cause to the environment, that percentage will only increase.
- **Financial Gains** Benefit economically from government incentives and energy efficiency improvements, as well as increased business.
- Positive Brand Image Customers are more likely to use businesses who value sustainability. The National Restaurant Association found that 50% of consumers are even willing to pay more for goods and services if the seller is kind to the environment.
- Attract & Retain Staff Now more than ever, people wish to work for businesses that value sustainability and give back to the community and the planet.
- **Ethical Reasons** You and your business have the opportunity to make choices now that will benefit future generations of all species on this planet.

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RENEWABLE ENERGY

WHAT IS IT?

Renewable energy is energy that is collected from renewable resources, which are naturally replenished; including carbon neutral sources like sunlight, wind, & geothermal heat. According to the EPA, conventional energy sources such as fossil fuels contribute 25% to total greenhouse gas emissions. Greenhouse gases trap heat and make the planet warmer. By switching to a renewable option you can significantly reduce the greenhouse gases your business produces, and save on your electric bill through government incentives!

OPTIONS:

INSTALL SOLAR PANELS

Solar panels capture energy from the sun. Installing solar panels on your roof will be a project with an immense payback. You will be able to use the energy produced from your panels. Any additional energy produced will be pumped into the grid, and you will receive payments equal to the energy produced! On top of that, you are also eligible for a 26% tax credit for solar investment.

more information about solar installation

GEOTHERMAL ENERGY

Geothermal is energy from the core of the earth that is captured and converted to electricity. This option is unique because it is consistently available, as the center of the earth is always burning, compared to solar and wind energy which are more inconsistent. Geothermal energy also has potential for large financial savings.

more information about geothermal

COMMUNITY SOLAR

The purpose of community solar is to allow individuals and businesses in a community the opportunity to share the benefits of solar power without installing solar panels on their property. Large-scale "farms" of solar panels are built for consumers to subscribe to and pay a lower price for the cost of clean energy entering the grid. This saves participants an average of 10% on their electric bill.

community solar options

OTHER

It's encouraging to know how many options are available for renewable energy, and the technology is still improving! Other options include hydro-power, nuclear power, wind power, and biomass energy. Community solar tends to be the easiest option with guaranteed savings!



SUSTAINABLE EQUIPMENT

Investing in energy efficient equipment is an excellent way to reduce environmental impacts and save you money. Remember the most sustainable choice is to use up the equipment you already have, and don't purchase new until you need it!

When it's time to buy new equipment, consider these:

- LED lights are the most energy efficient lighting option.
- Energy Star Appliances makes a variety of energy efficient restaurant and general business appliances, including low-flush or low-flow toilets, and low-flow faucets for hand sinks.
- <u>High-efficiency hand-dryers and certified green water</u>
 <u>heaters</u>: This link has many additional green products
 as well. Browse options under the "category" drop
 down.

MAINTAINING EQUIPMENT & CONSERVING ENERGY

Each of these actions can save about a couple hundred dollars a year each!

- Turn off equipment at the end of the day. Set up a start-up / shut-down schedule, or set a timer to automatically turn on and off. Smart phone apps are also available to remotely control equipment and even thermostat temperatures.
- Monitor water usage / fix leaks Dripping faucets and consistently running toilets waste massive amounts of water & energy. Stop paying for water you're not using!
- Clean refrigerator coils dirty coils use twice the amount of energy.
- Insulate hot water pipes.
- Invest in a sensor and/or timer for lights.

LEARN MORE & SAVE MORE

Look into these options if you want to dig deeper!

- National Restaurant Association Conserve Program
- Nyserda's FlexTech Program Conduct a thorough energy assessment & learn where you can make changes to conserve energy
- <u>Nyserda's On-Bill Recovery Loan</u> Apply to receive loans to fund energy efficient improvements



PLANT-BASED MENU OPTIONS



WHY IT'S IMPORTANT

- **Greenhouse Gas Emissions**: According to the EPA, animal agriculture is responsible for more greenhouse gases than all of the worlds transportation systems combined.
- Water Conservation: It takes 2,500 gallons of water to produce a pound of meat, and only 25 gallons of water to produce a pound of wheat.
- **Resource Conservation:** Cows produce one pound of edible flesh for every 16 pounds of vegetation consumed.
- Land Conservation: Between the land used to grow crops to feed factory farm animals and the land needed to raise them, meat production requires more land than this planet is able to support. Over 260 million acres of US forests have been cleared to grow crops to feed animals in factory farms. Over 90% of the Amazon rainforest has been cleared for animal grazing. The more forests we clear, the faster the planet will warm due to less trees absorbing greenhouse gases. Additionally, species extinction from warming and deforestation is estimated to be 1,000-10,000% higher than the natural rate.
- **Pollution**: The US alone produces about 500 million tons of manure each year. Runoff from factory farms is one of the leading sources of pollution in our rivers and lakes.

WHAT YOU CAN DO

- Add meat alternatives to your menu! <u>Beyond Meat</u> and <u>Impossible Burger</u> are two options for beef alternatives. There are also alternatives for sausage, bacon, turkey, ham, and even seafood! <u>Here</u>'s more information.
- Add other vegetarian protein options to your menu, such as veggie burgers, hummus, or meal options with legumes and nuts.
- Getting rid of meat completely is not necessary, even small changes are helpful. In addition to adding a few meat free options, maybe swap out some beef options with chicken. Chicken is more resource efficient and less environmentally damaging than beef.







UNDERSTAND YOUR RECYCLING COMPANY

Every waste collection service accepts different materials. You can find out this information by doing a quick google search of your company and checking their website, or giving them a call.

- Generally, most recycling companies accept plastics, glass, metal, and paper.
- They want the items rinsed out, and fairly clean.
- Most companies will not accept any materials in plastic bags, the items must be dumped straight in the recycling bin.
- Check with your company to figure out what they require from you.
- Example: <u>Here</u> is what County Waste, a common waste collection service in NY accepts for recyclables.

TRAIN YOUR STAFF

- Explain to employees the importance of recycling
- Create a simple chart explaining what to recycle and what not to recycle
- Follow up Check on progress with a Q&A. It takes time to ingrain new habits, so keep your staff engaged and excited about working towards an important cause.

OTHER

- <u>Terracycle</u> is a fantastically versatile company that recycles hard-to-recycle items (aka everything from retail coffee bags to cigarette butts!) Browse their website to see if they accept items from your business.
- When you need to purchase new equipment, try to source items made from recycled materials.
- Encourage staff to look for ways to reuse and recycle materials that are specific to your business.



REDUCE FOOD WASTE

REASONS TO REDUCE FOOD WASTE

- Research estimates that between 30%-40% of all food ends up wasted.
- According to the Green Restaurant Association, the average restaurant wastes between 25,000 and 75,000 pounds of food every year.
- Food waste emits methane (a powerful greenhouse gas) when sent to landfills, which contributes to planet warming.
- It wastes energy and resources (especially water) to produce food and to dispose of it. The energy usage emits carbon into the atmosphere.
- Wasted food = wasted money (from the food products not sold and also from the labor utilized to produce it)

WHAT CAN I DO?

- Start a food waste log- Train employees to track what food gets thrown out along with the date and a reason for throwing out. Discover what's consistently getting wasted and make changes with ordering and/or food storage to reduce waste.
- Compost! There's a good chance a large percentage of your garbage is food waste and other
 compostable materials. By signing up for a compost service, you could potentially reduce the
 frequency of your garbage pick-ups and save money to help with composting costs. You may
 be able to seek out a local farm to bring your compost to for free, or you could choose a
 convenient pickup service for a small cost.
 - <u>CTI Agri-Cycle</u> provides reliable and affordable organic waste recycling to the greater Capital District, the North Country, Hudson Valley, southern Vermont, and western Massachusetts.
 - <u>Natural Upcycling</u> collects organic or food waste and turns it into a renewable resource such as electricity or natural gas – through a process called anaerobic digestion.
 - <u>The Radix Center</u> is based in Albany. They will pick up food scraps weekly and turn them into high quality plant fertilizer.
 - Use these websites to find more composting facilities in your area (the options are far from few!)
 - https://compostnow.org/compost-services/
 - http://www.findacomposter.com/
- **Donate Edible Leftovers** The federal Bill Emerson Good Samaritan Food Donation Act of 1996 protects restaurants from legal liability when they donate "apparently wholesome food" in good faith to nonprofit organizations.
 - Enhanced tax deductions Qualified business taxpayers can deduct the cost to produce the food and half the difference between the cost and full fair market value of the donated food.
 - https://www.foodpantriesnear.me/



WHY

- According to the EPA, the US alone generated 35.7 million tons of plastic in 2018. Only 8.7% of this was recycled, the rest was sent to a landfill. Plastic items take up to 1000 years to break down in landfills, and micro-plastics are released into the environment causing health issues to countless species including humans.
- There is no perfect solution, but the best (and simplest) option is to reduce plastic usage within your business.

HOW

- Incentivize customers with a small discount to bring their own mug or order food "for here".
- Source better to-go packaging from renewable materials or recycled plastics. However, note the challenges with renewable materials listed below.
 - https://www.wowplastics.com/
 - https://www.ecoproducts.com/products.html
 - https://www.webstaurantstore.com/58289/recycled-food-packaging.html
- Recycle clean plastics and other recyclable packaging.

CHALLENGES WITH COMPOSTABLE ALTERNATIVES

- Many items are now being made from bamboo, sugarcane, and other biodegradable materials.
- Most compostable packaging materials can not be composted in a backyard, and only in an industrial composter. Industrial composting facilities break down materials at a specific temperature and pressure. These are only currently available on the west coast of the United States, which isn't much help to us here in New York.
- Because of the lack of local industrial composting, "compostable" or "biodegradable" packaging usually ends up in the garbage. This can actually cause more damage than traditional plastic, since it doesn't have proper access to oxygen it releases methane (a greenhouse gas more powerful than carbon).
- Biodegradable packaging is also damaging if accidentally recycled, as it can destroy recycling equipment by melting.
- One benefit of the use of compostable packaging on the east coast would be that the materials are generally renewable, and won't release micro-plastics when eventually broken down.



TREAT OTHERS HOW YOU WANT TO BE TREATED!

Evaluate the practices in your business as well as practices of businesses you are associated with. Prioritize the rights and well-being of your employees - not just because it's the right thing to do but also because it will lead to better workplace productivity and efficiency! Look into your current suppliers practices, and seek out suppliers who value fair treatment of workers and the environment. By sourcing from and partnering with companies who make ethical choices for people and the planet, you are supporting the existence of these over less ethical businesses.

ENVIRONMENTALLY FRIENDLY CLEANING PRODUCTS

REDUCE CHEMICAL USAGE

- This is a great way to reduce the toxins in which your employees and guests come into contact.
- Swap out conventional cleaners with eco-friendly brands. Ask your distributor to supply products that contain <u>Design for the</u> <u>Environment (DfE)</u> or <u>Green Seal certified</u> cleaning chemicals.
- Eco-friendly restaurant cleaning products



RESOURCES AND ADDITIONAL READINGS

- https://www.drawdown.org/solutions <-- this site has many proposed climate change solutions!
- https://www.restaurant.org/downloads/pdfs/sustainability/rest aurant_sustainability_research_report_2018.pdfhttps://www.n yserda.ny.gov/All-Programs/
- https://www.restaurant.org/manage-my-restaurant/businessoperations/sustainability
- https://conserve.restaurant.org/Learn
- https://www.youtube.com/watch?v=IMONJqlyJis
- https://www.epa.gov/ghgemissions/sources-greenhouse-gasemissions
- https://www.epa.gov/facts-and-figures-about-materialswaste-and-recycling/plastics-material-specific-data
- https://climatecommunication.yale.edu/about/projects/global
 -warmings-six-americas/