

SMALL ACTIONS BIG IMPACT

2021

LANGARA COLLEGE



Sustainability Student Ambassadors

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Project Members:

Carvalho, Jéssica

Lihn, Vo Hieu

Torfi, Milad

Project Manager:

Pimenta, Brunna

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Introduction



Impact

We all care about our environment, and sometimes we can do our part by taking some minor (but significant) actions.

In this project, we tried to find some simple actions that everyone can do to be more sustainable, list the activities, and share them in our e-book as tips.

The primary audience for this project is Langara students and employees, but since it's an e-book, everyone can have access to it easily.

Reuse, Reduce and Recycle: Paper



What to do

In a society that is becoming increasingly virtual, it is strange to find so many papers in an office, for example. That is why it is so important to define what really needs to be in physical form, and what can be maintained virtually.

Reducing the use of paper is an excellent start on the path to a sustainable life. However, if there is a real need, how about using a scratch paper? Or a recyclable paper, coming from a sustainable source? And yet, after all this, to dispose of your paper for recycling? The paper cycle must follow the path of reduction in its use, reuse and recycling.



What is the impact

- Producing paper from old paper uses 30% to 50% less energy than from making from the trees.
- Recycling paper reduces water and air pollution, and processed energy, not only for saving trees, but for not having to burn papers.
- It avoids cutting trees in order to make paper. In fact, we could save around 250,000 trees per year by only recycling USA papers.



Being an eco-friendly pet owner



What to do

- **Go green when buying your pet toys and supplies:** there are a lot of innovative toys, beds and other products made of sustainable materials.
- **Use non-toxic pet shampoos,** free from chemicals and harmful components.
- **Choose homemade or sustainable pet food:** contribute for your pet's health and nutrition with food free from processed ingredients.
- If you need to buy food, **buy in bulk:** skip from wasteful packaging
- Pick up your dog's poop no matter where or when, and **use biodegradable bags.**
- **Spay and neuter your pets:** prevent them from diseases and contribute to the control of pet homelessness.
- **Reuse:** create toys made of your own socks, for example. Be creative and plastic free!
- Always remember: **adopt, don't shop!**



What is the impact

When pet owners make sustainable and eco-friendly choices, they can help improve not only the pet's quality of life, but the environment as well. Those small actions can:

- Avoid plastic usage from toys, plastic bags, packaging.
- Avoid water pollution from toxic chemicals from shampoos and conditioners.
- Reduce pet overpopulation in shelters.
- Reduce waste from homeless pets.

"7 Ways to Be a Sustainable and Eco-Friendly Pet Owner." Inhabitat Green Design Innovation Architecture Green Building.
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Choose alternatives to plastic straws



What to do

There are more than 30 alternatives to plastic straws, which are not recycled and are great contributors to ocean pollution. Find some options that are easy to find, and eco-friendly:

- Metal Straws: reusable and non-toxic;
- Glass Straws: reusable and non-toxic;
- Bamboo Straws: reusable, non-toxic and made from natural materials;
- Sustainable single-use straws: although they are not reusable, they bring sustainability, as they can be made of paper, grains, pasta or even grass.



What is the impact

There are already many people from different countries engaged in refusing single-use plastic straws. This action brings a lot of savings, not only for the environment, but businesses that switched to reusable or sustainable single-use straws. These savings should be considered in:

- Waste hauling and landfill.
- Plastic in the environment.
- Overall pollution from the production of straws, such as manufacture, shipping, toxicity and waste.

Start this action by saying "NO" to single-use straws!

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Use eco-friendly cleaning supplies



What to do

Cleaning products are usually toxic and harmful to the environment. It contains chemical components that can cause water and air pollution, in addition to the waste caused by their packages.

You can either buy nontoxic and biodegradable products, or make your own!

There are many receipts of cleaning products that use natural and inexpensive ingredients. Vinegar, baking soda and lemon are great cleaning solvents – and easy to find!



What is the impact

The usage of chemical cleaning products can lead to pollution in water and air, and waste from its package. By switching to eco-friendly products, people can help:

- Reduce plastic from packages.
- Reduce chemical components being washed into the environment.
- Reduce toxicity not only outside but inside the house.
- Reduce carbon emissions from transportation of commercial products.

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Zero-Waste in the Kitchen



What to do

Below are several ways in which you can reduce waste in your kitchen:

- **Use alternatives for kitchen disposables.** For example, you can use rags instead of paper towels, kitchen towels, or stainless containers instead of sandwich bags, or drop all garbage liners altogether...
- **Buy in bulk:** bring cloth bags for dry goods, jars for wet items, and bottles for liquids. If you can not buy in bulk, find your supplier or make your own.
- Shop frequently at **farmer's markets** because they reuse egg cartons and berries baskets!
- Get used to **using tap water.** (which are often clean enough!)
- Turn your current trash can into a big **compost keeper!**
- Turn your tiny compost keeper into a **trash can!**
- **Reinvent your leftovers** before they go bad.
- Invest in a pressure **cooker** (halves the cooking time).
- **Reuse single-side printed paper** for grocery shopping and errands list, use your lettuce cleaning water/rice water to water plants, open your oven after baking in winter (cut down on heat costs).



What is the impact

When you reduce waste in the kitchen, you will:

- Reduce the amount of disposable waste in your kitchen.
- Reuse and recycle a lot of items.
- Cut down on household expenses.

Choose to eco-friendly menstrual products



What to do

Instead of choosing single-use menstrual products, which are usually 90% made of plastic, there are eco-friendly options for women, like organic tampons or pads made of bamboo. Although those options are harder to find, menstrual cups are a great deal when it comes to sustainable habits. Choose the menstrual cup that best fits you. There are a variety of options available on the market.



What is the impact

A woman can use approximately 1000 pads and/or tampons in a 4 year period. Besides the fact that most pads and tampons are made of plastic, some of those can contain dioxin, which is known to cause cancer in humans, according to WHO.

The main advantage of the menstrual cup is that it is reusable and can last for 4 to 10 years, which means they are budget and eco-friendly.



Zero-Waste Container Garden



What to do

- **Consider where you are currently residing in:** it can determine what you can grow and when is the optimal time to grow it. Tip: It is easier to purchase started plants if you want a container garden.
- **Choose your plants.** The easiest plants to grow in containers are: tomatoes, greens, herbs, beans. Depending on the space of your container garden, you can grow string beans, peas, potatoes, squash, peppers, melons, strawberries, cauliflower, broccoli, and perhaps corn.
- **Choose your containers.** Creativity is encouraged in this regard! Old boots, bowls or buckets have all proved to work. Containers should have proper drainage because plants do not thrive on wet soil. Place bricks or large stones for aeration.
- **Choose where to place your containers.** Container plants are deprived of the insulation that ground plants enjoy. If you only have shade or partial shade you need to relocate your plants to the roof or invest in a lighting system (not recommended due to cost).
- **Choose your soil.** A 25/25/50 mix of compost/moisture soil/topsoil is recommended for container gardening. Consider depth for growth.

Other helpful tips:

- Invest in a water moisture meter.
- Different types of plants need different soil mixes. You should not use just potting soil for all of them.



What is the impact

Container gardening is a great way to:

- Minimize your impact on the environment.
- Control the care and growth of your own food.

Sustainable gift wrap tips



What to do

Instead of purchasing gift wrap papers, ribbons and gift boxes to package your presents, surprise your loved ones with sustainable gift packaging.

You can either use recycled materials, or use materials that are compostable!



What is the impact

Every holiday season ends with tons of gift wrapping paper or ribbons going straight into the trash. Since a lot of gift wrapping paper contains glitter or metallic, they are not recyclable.



Making Apple Cider Vinegar



What to do

Prepare jar, cloth scrap, rubber band, smaller glass jars, apple skin and cores, 2 TB sugar or honey, 2 cups of water.

- Fill a clean jar 3/4 of the way full with apple skins and cores.
- Pour the water over the apple scraps that are nestled in the clean jar.
- Add the sugar or honey then mix thoroughly. I put the metal jar lid on and give it a good shake before adding the cloth.
- Use a fermentation weight or a smaller jar to weigh down the apple scraps so that they are all submerged under the water. This prevents spoilage because if the apple scraps touch oxygen they will begin to mold.
- Cover the top of the jar with your cloth scrap piece and secure it with a rubber band. Don't use a jar lid.
- Set the jar in a cool, dark place and check on it after 4 weeks.
- After roughly 2 weeks, strain off the scraps and compost, or add them to another jar to start another batch of ACV. You should check your product to make sure there is not scum, mold and that it smells like vinegar.



What is the impact

Making Apple Cider Vinegar seems like a trivial task, but it yields plenty of benefits:

- Reduce the amount of compost from apple consumption.
- Improve your own health.
- Cut down on living expenses. (vinegar is excellent at removing dirt or stains)

Zero-Waste in the Bathroom



What to do

Install in your bathroom:

- 1. A bidet attachment for your toilet
- 2. A cabinet to store your washcloths
- 3. A small pail with a lid OR a baby genie



What is the impact

The average person spends roughly \$8400 on toilet paper throughout their lifetime. That amounts to 384 trees being cut to supply their bathroom needs. Not only is having a bidet attachment a good investment for those who want to cut their living costs, it's also the most sustainable option.



Zero Waste Living. "Avoiding Toilet Paper Madness: Going Zero Waste in the Bathroom." Zero Waste Living, March 14, 2020. <http://zero-waste-living.com/avoiding-toilet-paper-madness-going-zero-waste-in-the-bathroom/>.

21 tips: no-cost ways to save electricity



What to do

Save some money and help the environment by making a few changes and/or changing habits in your home.

- 1. Turn off unnecessary lights
- 2. Use natural light
- 3. Use task lighting
- 4. Take shorter showers
- 5. Turn the water off when shaving, washing hands, brushing teeth
- 6. Fix that leaky faucet
- 7. Unplug unused electronics
- 8. Ditch the desktop computer
- 9. Not home? Turn off the air conditioner
- 10. Recycle or donate that old TV
- 11. Manage your thermostat
- 12. Be strategic with window coverings
- 13. Reduce heat in the kitchen
- 14. Run full loads
- 15. Wash laundry in cold
- 16. Hang dry your laundry
- 17. Toss a towel in the dryer
- 18. Be efficient with refrigeration
- 19. Unplug your second fridge
- 20. Skip the heat-dry setting for the dishwasher
- 21. Use the microwave, crockpot or toaster oven



What is the impact

The easiest way to start saving money on your energy bills is to change the way you use it. Depending on a variety of factors, including the size of your house, making these 21 no-cost improvements in your home could save you \$500 or more per year.

Zero-Waste and Ethically Made Clothing



What to do

Switching to all-natural fair trade fiber. Natural fibers include: pina cloth, wool, cotton, silk, linen, angora. They are eco-friendly and help to reduce your exposure to carcinogens. They are also renewable and 100% biodegradable.



What is the impact

Unethically made and unsustainable clothing is harmful to people and the environment they live in:

- Synthetic fibers do damage to both workers and the people wearing them.
- Synthetic fibers are extremely hazardous to the environment because they are made from chemicals. A lot of clothing is made from synthetic fiber such as nylon, which is made from crude oil.
- Recent research revealed tiny fibers could be the biggest source of plastic found in the ocean. 85% of human made material found on shorelines was microfibers, especially those used in clothing: nylon and acrylic.



Construction tips for a sustainable house



What to do

- Think about using **passive solar architecture** as it is a renewable source of energy. You can install solar panels on your roof.
- Invest into **energy-saving appliances** for your house: the most efficient when it comes to energy-saving are refrigerators, dishwashers, ovens and stoves, cooling systems, and dryers for clothes.
- Add a **drip irrigation** system to your garden.
- Use **eco-friendly colors**: to minimize indoor air pollution, eco-paints release fewer toxins. They're much less hazardous to produce.
- Add a **cool roof** to your home: a cool roof reflects the heat of the sun rather than absorbing it into your house. It can have a significant impact on your cooling bill.
- Ask your energy provider about **green energy choices**: Renewable energy is derived from renewable natural resources such as the sun, wind, and water.
- **Consult with specialists** in the field of sustainability: experts will conduct an energy audit and provide recommendations on simple solutions and cutting-edge technology.
- Any building waste should be **recycled and reused**.
- **Clean the coils** in your refrigerator: it is the little things that make a difference. If you keep the coils on the back of your refrigerator free of dust and grime, it will use less energy and work better.
- **Install a microplastics-filtering water filter**: you will avoid contributing microplastics to the atmosphere.



What is the impact

Building a sustainable house from the ground up helps minimize waste, enhance long-term dependability, and maximize energy and water efficiency over the home's lifetime.

Smart Lighting Can Save Your Money



What to do

- **Motion Detecting Lights:** remembering to flip the light switch is a thing of the past with motion detector smart lights. Motion detectors were once prohibitively costly, but they are now affordable to the general public. Consider motion-activated lights that operate in tandem with a motion detector. The systems will save you up to 35% on your current light bulb energy consumption.
- **Remote Lighting Controls:** if motion detector lights are not your thing, you can power your light bulbs from your smartphone with some smart light brands. Simply connect your lights to the app, and you are ready to power your house.
- **Personalized Energy Efficiency Reports:** to maximize your energy efficiency, you must install the right kind and number of smart lights. However, setting up your smart lighting system is not always easy. Homeowners fill out a survey about their home and energy use patterns and then receive a plan to optimize their home from apps like HomeSelfe. Smart home lighting becomes a lot simpler if you have a plan in place.
- **Upgrade to LEDs:** LED lighting not only saves electricity but also lasts up to 25 times longer than conventional incandescent lighting. Replacing your incandescent bulbs with LED bulbs is an ideal way to reduce your home lighting costs. Furthermore, LED bulbs are used in almost all smart lights.



What is the impact

How technologically advanced lights can help save you both money, and energy, beyond what any normal light can.

Sustainable Technology



What to do

All countries are worried about long-term global activities and are developing consistent strategies to meet the Paris Agreement's commitments. The required steps should include the following:

- Effective use of natural resources
- Mobilization of financial resources
- The transition from fossil fuels to perpetual energy
- Climate change risk reduction
- Supply chain development
- Cross-industry transformation, including IT
- Maintaining a balance between the urban and rural economies
- Pursuing nature-based solutions
- Security of vulnerable groups and areas
- Lowering emissions and emission levels as much as possible



What is the impact

Presumably, top global companies' stakeholders believe it is their duty to provide and therefore profit from sustainable digital technologies, so forerunner companies have already taken measures to become clean and green.

Coronavirus: at home sustainable ideas



What to do

- **Set Aside Clothes to Give Away Later:** make your house cosier, more natural, plain, and minimalist.
- **Learn about your local food seasons and grow some herbs:** Being stranded at home provides an opportunity to reconnect with the soil and the plant cycle. Look up what grows best in your area at this time of year and how to plant it online, then order seeds, fertilizer, and pots and get your hands dirty!
- **Think about your eating habits:** When going grocery shopping is (the) only reason to go out, chances are we are more mindful of the food we need and what is in our kitchen pantry, freezer, and plates when it's time to eat.
- **Support small and local businesses:** Small businesses, such as restaurants and supermarkets, are especially vulnerable. If more customers turn to online shopping and large supermarkets, their sales volume is declining, and they are at risk of shutting their doors.
- **Participate in Community Activities:** Staying at home does not have to mean being unable to assist anyone, thanks to the power of the digital. Many digital platforms and resources are being developed so that people can use their talents and experience to help others, regardless of their field of expertise.
- **Watch a documentary on sustainable development:** What about learning about topics like ice melting and how it affects polar biodiversity?
- **Enroll in an online course on a sustainable development subject:** Why not read more about some of the wider or more concrete problems surrounding sustainable development?



What is the impact

By using the following tips, we can be more sustainable during the COVID.

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