

Green Box

The user friendly guide with instructions and tips on how to be sustainable and eco-friendly with ease in any space!



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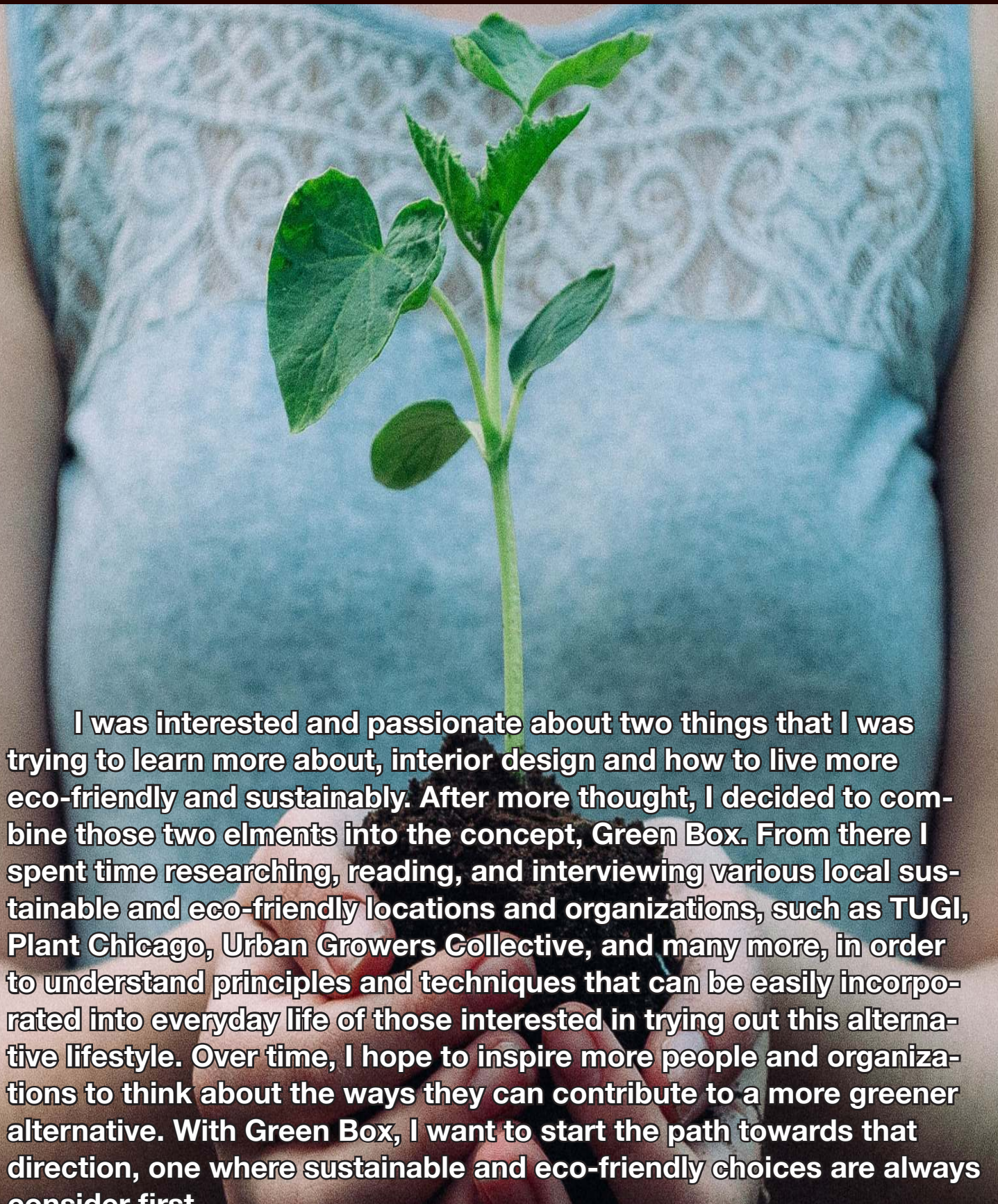
About

The Green Box was developed as a response to climate change and scarcity that is becoming more apparent each year. Green Box targets change that can begin anywhere, introducing simple ways how to be sustainable and eco-friendly to the environment. Through these methods I hope to encourage a change towards a safer, greener way of living.



The Green Box is an intuitive, comprehensive box that includes tools, methods, and practices that encourages more eco-friendly habits. No prior skills or knowledge is required in order to participate, so I hope that you do! You might enjoy the process along the way.

How it Started

A photograph of a person's hands holding a small green seedling with dark soil. The person is wearing a blue lace-trimmed top. The background is a soft, out-of-focus light blue.

I was interested and passionate about two things that I was trying to learn more about, interior design and how to live more eco-friendly and sustainably. After more thought, I decided to combine those two elements into the concept, Green Box. From there I spent time researching, reading, and interviewing various local sustainable and eco-friendly locations and organizations, such as TUGI, Plant Chicago, Urban Growers Collective, and many more, in order to understand principles and techniques that can be easily incorporated into everyday life of those interested in trying out this alternative lifestyle. Over time, I hope to inspire more people and organizations to think about the ways they can contribute to a more greener alternative. With Green Box, I want to start the path towards that direction, one where sustainable and eco-friendly choices are always consider first.

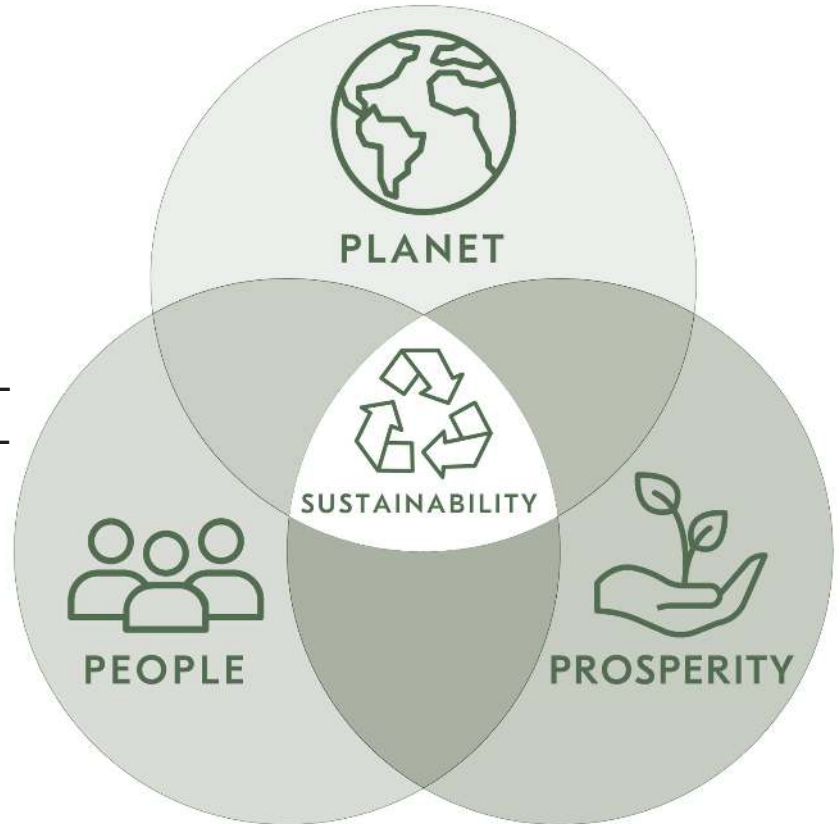
Terms & Goals

- Sustainability:

In its most simplest definition means the ability to be maintained at a certain level for a period of time. For us, it means the ability to sustain ourselves with the valuable resources of the planet in coexistence with the natural working order of the environment.

- Eco-friendly:

Not bringing harm to the environment in any physical and or direct ways that results in the destruction of the natural working order of the surrounding ecosystems.

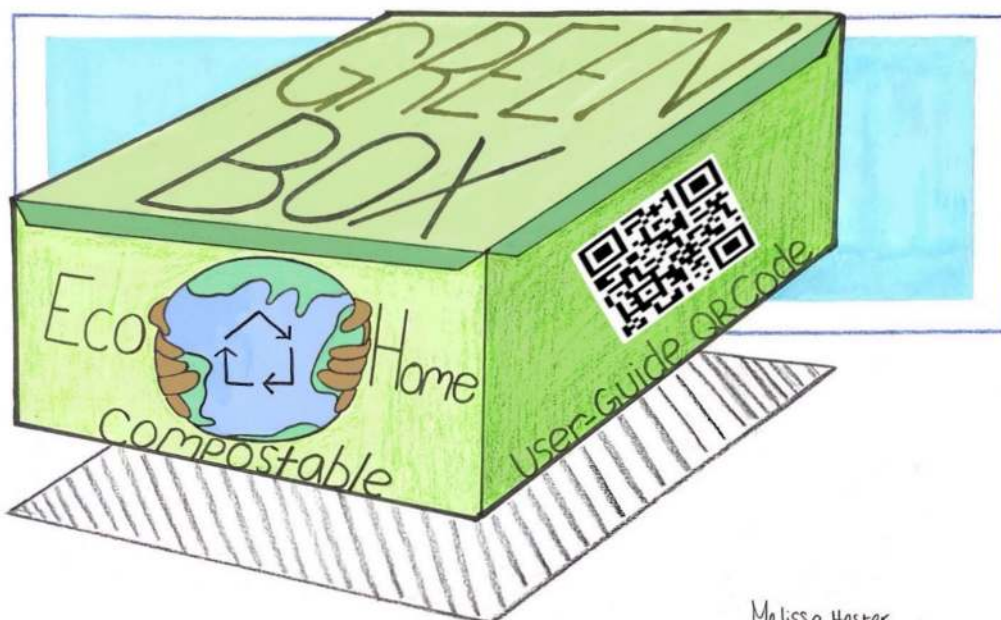


End Result

I hope with my project, to add to the overall discussion about possible solutions to the growing concerns with climate change and destruction of ecosystems. Specifically in addressing how to be sustainable and eco-friendly in areas of mass populas and small urban spaces. I want to encourage more people to choose this alternative that will ultimately in the end lead to a more healthier and cleaner planet for futures to come.

About the Packaging

- △ Recycled paper materials utilized in the construction of Green Box.
- △ Packaging is durable, but breaks down easy for quick disposal.
- △ The Green Box packaging is also biodegradable and natural, thus having the ability to be put into compost.



Melissa Hester

Composting

How to Get Started:



1. In order to accomplish a great at-home compost, there's a couple of things to consider before you start:

>> Firstly, composting is no exact science, there's no 100% right way to do it, but with that in mind there are a few guidelines to follow to ensure that you have a safe and healthy compost!

>> Second, have fun with it! With composting there's room for trial and error. Just take time to figure out what works best in the space you have accommodated and what essential nutrients does it need in order to thrive. Patience and observation is crucial in making a successful compost.

2. In starting to compost, a good and sturdy base or foundation is needed. Layers of paper or other suitable materials can be a perfect place to start in the construction of a at-home compost. The various layers within the compost can be a variety of things such as soil, but ultimately are built in tandem with other organic items to accomplish two things: 1) Lessen food waste and 2) Provide nutrients to soil in order to help plants grow, acting as natural fertilizer.

3. Essentially a compost is made of different organic, biodegradable matter and organisms that aid in breaking down materials naturally. These things include, but are not limited to various fruit scrap peels, dead leaves, branches, vegetable waste, and etc...

4. Another thing to consider when composting is the balance between the different layers and what kinds of things you add in, such as the amount of water. A general rule of thumb is to have a leveled amount of greens vs browns, meaning exactly the stuff you put in.

Tiers

The Green Box offers 3 different options for users at different comfort levels. Each stage includes not only different items and tools that help to become more sustainable and eco-friendly, but offering also different levels of involvement and participation that teaches how to start incorporating these principles and techniques into the everyday routine.

- 1** Essentials: Entry level items that begin to introduce simple sustainable, eco-friendly concepts and items, so one may get comfortable to green living. For this kit specifically, there's an option to have it as a monthly subscription, while the other two selections are a one time, durable purchase.
- 2** Conscious: Intermediate items that start to become more involved than those included in the essentials box. This kit will teach and encourage more direct and conscious change that can be made within the home to aide in being eco-friendly and sustainable, easily and affordably.
- 3** Innovative: This package includes a few smart technologies and other eco-friendly materials and items that are intitive and pricey, but will help to be environmentally conscious long term. This kit as with the ones above are about encouraging little by little, long term changes that lead in the right direction for the place we all live on.

1

\$50.00

Recycled toilet tissue

9

Recycled handled toothbrush w/re-
placeable headsEco-friendly silverware set (fork, spoon,
knife)

Biodegradable / Disposable trash bags

Produce bags

Organic dish towels/rags

LED bulbs

List of Items

2

\$170.00



Thermal curtains

Programmable thermostat-standard,
mid-gradeFaucet filter-reusable water bottle &
strawA showerhead that minimizes water
consumption and usage

Solar charger

3

\$500.00

Programmable Thermostat- smart digital

Rain collector system

Smart energy monitor-plugs

Countertop greenhouse

Why is Being Eco-Friendly and Sustainable Important?

1

Quality of life can be improved and better if care of the environment was taken more seriously.

2

Better food: these methods (of sustainability) help reduce the amount of harmful pesticides that end up in our food. Research shows that exposure to pesticides can antagonise the natural hormones in our bodies, leading to health issues such as immune suppression, hormone disruption, reproductive abnormalities, and cancer.

3

Through following eco-friendly practices, we'll be able to preserve our natural resources that will last for a number of years.

4

These actions will lead to a better world wherein we are able to preserve our resources, continuing to live in harmony with our mother nature.



5

By going eco-friendly, you'll be able to lessen the amount of garbage scattered around the environment also lessening the implications of pollution inflicting harm on our planet and in our lives.

6

Guarantee a better world for the future generations.

7

Conserving water and energy will not only help us save natural resources, but it will also help to save money.

Conclusion: It doesn't cost a lot to be considerate of our mother Earth. In fact, caring is free. It only takes empathy and responsibility to make a move towards change for the better world.

These small changes can help reduce the pollution that threatens our health and our environment, while also protecting our natural resources. Fortunately, it has never been easier to live a sustainable lifestyle.

Environmental Benefits

Essentials

Recycled toilet tissue



Recycled handled toothbrush w/
re-placeable heads



Eco-friendly silverware set



Benefits:

- Saves energy, since the production of paper and cardboard products made from recycled paper uses 50% less energy and 90% less water than making it from raw materials.
- Minimizes the reliance on our natural trees.

Benefits:

- Reduces waste by 93%
- The reusable handle is fully made from recycled materials and will last for years.

Benefits:

- Less pollution, the manufacturing of biodegradable plastics causes far less environmental pollution than that of petroleum-based plastics.
- Consumption of less energy, biodegradable plastics require only 35% of the energy it takes to make petroleum-based plastics.

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Biodegradable / Disposable trash bags



Produce bags



Organic dish towels/rags



LED bulbs



Benefits:

- Biodegradable plastic bags can be composted easily.
- Biodegradable trash bags decompose quite quickly, so if an animal gets into them or if they end up in the water, little harm should be caused. Conventional plastic bags take an extremely long time break down.

Benefits:

- Reusable produce bags made of cotton allows food to breathe easier, keeping it fresh for longer.
- Cost effective, since reusable produce bags will make your food last longer, meaning you won't waste nearly as much on food that spoils before you can eat it.

Benefits:

- These rags can be used repeatedly, standing the test of time.
- You can also scrub just about anything without them coming apart in your hands.

Benefits:

- LED bulbs can last about 25,000 hours or more, 25 times longer than incandescent light bulbs and 2.5 times longer than compact fluorescent light (CFL) bulbs.
- Reduces the carbon footprint.
- Saves more than \$65-\$100 per year in energy costs just by replacing the bulbs.

Environmental Benefits

Conscious

Thermal curtains



Programmable thermostat-standard, mid-grade



Solar charger



Benefits:

- By blocking the direct sunlight from windows during the summer, and adding insulating curtains to windows in the winter, homes can be kept cooler in summer and warmer in the winter, without needing to use any extra energy.

Benefits:

- A programmable thermostat can monitor your cooling and heating systems to be efficient in energy.
- A thermostat can reduce the cost of your utility bill and make your home more eco-friendly at the same time.

Benefits:

- Relies less on electricity from the grid for these devices.
- Clean, quiet, & easy to use. Solar panels consume no fuel and give off no waste.
- Safe and reliable,
- Renewable energy source
- Reduces on electricity bills

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A showerhead that minimizes water consumption and usage



Faucet filter-reusable water bottle & straws



Benefits:

- H2OKinetics technology delivers 36% less water than standard showerheads.
- Low flow shower heads can decrease water consumption by 40% or more, essentially decreasing the amount of energy usage and monthly bill payments.

Benefits:

- By avoiding single-use plastic water bottles, an average family of four can reduce plastic pollution by 5,840 bottles a year.
- Manufacturing of reusable items uses less water and produces less CO₂.

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Environmental Benefits

Innovative

Programmable Thermostat-
smart digital



Benefits:

- It has the ability to learn a household's patterns and adjust heating and cooling systems according to when a home is occupied or is about to be occupied.
- With a smart thermostat, it's easy to schedule your HVAC to run less while you're out, so you'll use less energy by cooling your home only while you're in it.
- You can control your thermostat remotely

Rain collector system



Benefits:

- Rainwater harvesting can significantly lower mains water usage.
- Reduces water bills and provide an alternative supply during water restrictions.
- Helps to maintain a green, healthy garden.

Smart energy monitor plugs



Benefits:

- Improves home network connectivity.
- Turn appliances on and off remotely.
- With the Wemo Insight, you can monitor energy consumption right from your phone or tablet. This Smart Plug provides real-time reports on how much energy your devices are consuming while also providing an estimate on how much money it cost to run.

Countertop Greenhouse-Smart Garden 9



Benefits:

- Grow your own food.
- Eco-friendly gardening.
- Automatic watering.
- Perfect amount of light thanks to pro-grow lights.
- Perfect amount of nutrients and oxygen at root level.
- Companion app to become a plant expert.
- Choose from 50+ pre-seeded plant pods from our selection or use your own seeds.

How to Use

Recycled handled toothbrush with re-placeable heads



After the toothbrush head reaches its lifespan, there's a couple of things to do:

1. First, simply snap off replaceable head and recycled it in an appropriate bin. After doing that, click into place a new toothbrush head.
2. With old toothbrush heads, you can pluck the bristles out and use the replaceable stick for gardening or composting.

Programmable thermostat-standard

1. Use the same wiring that is connected to the old thermostat, following manufacturer's instructions.
 - * Remember to shut down power to the circuit before starting!*
 2. When programming the thermostat, consider schedule, the seasonal changes, and location of your space. There are no specific rules regarding temperature settings; it just depends on your comfort level, the local climate, and the condition of your home.
 3. Maintain energy-saving temperature points when the home is unoccupied for long periods in the day (eight hours for example) and late at night to optimize energy savings.
- >> If you do not feel comfortable performing the work, or if it involves more than just a replacement, contact a qualified electrician or heating and cooling professional.

Countertop Greenhouse-Smart Garden 9

1. Assemble the lamp with one level of extensions - make sure the extension with the groove goes to the same side as the groove on the water tank.
 2. Put the domes aside, and take out the cavities, removing the U-shaped lids.
 3. Insert the plant pods into the cavities and put the U-shaped lids back on, then click the cavities into the Smart Garden.
 4. Put the transparent germination domes on each capsule. The dome should stay on until sprouts are visible, after that you can remove it. Make sure you hang on to the cavities and domes for future use!
 5. Fill the water tank with about 4 L/135 oz of water. Make sure the water level indicator doesn't rise above the surface of the lid to avoid over-watering.
 6. Plug in the garden and you're good to go!
- >> You can use the water float indicator to monitor the overall water level. The water tank lasts for about 2-3 weeks, depending on the plants but you can definitely fill up the tank sooner if necessary.
- >> Most plants sprout within 1-2 weeks, however some fruit plants take up to 3.

Rain collector system

1. No real assembly required, just need to take out and unfold the rain collection system from packaging.
2. Place rain collection bin in an appropriate area unobstructed from anything that could get in the way of collecting rainwater, somewhere preferably leveled.
3. Periodically, check on the rain collection system to see it's capacity and use as needed for a range of purposes.

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Faucet filter with reusable water bottle & straws

Same principle and idea as the showerhead, with the faucet filter adaptable and suitable for your particular sink head.

1. Take faucet filter out of packaging and test to see if it is compatible with your sink.

2. If so, twist onto sink and begin use.

>> The blinking lights on the faucet filter indicates the integrity of your filter and whether it needs to be replaced or not, so keep an eye on it. Green means good and red is critical and should be changed before continued use.

Programmable Thermostat-smart digital

Same process of installing as standard programmable thermostat, with same consideration in mind if you're unable to install it yourself.

1. Turn on thermostat after installation is complete. A guided walk-through will initiate getting your thermostat all connected and set up to your place.

2. In order to change temperature on ecobee thermostat, hold down on temperature reader and then you can slide up or down on touch screen to modify the temperature.

3. Enable Smart Home and Away feature on ecobee thermostat settings. It will detect when someone is not home and will adjust the temperature accordingly.

4. After that step, take note of the four digit code that appears at the end of the screen. This code will allow you to register the thermostat and connect it with other digital devices for easy access and control from within and outside the home.

A showerhead that minimizes water consumption and usage

1. Check to see if current shower head can be twisted off, so that a new one can be applied.

2. After determining it can, simply twist off shower head, and install new one.

>>Make sure it's securely on before use as to prevent injury and inconveniences.

Smart energy monitor-plugs

1. Simply insert Wemo Insight Smart Plug into an electrical outlet, plug a device into the Smart Plug, and control your device using the free Wemo app, which connect to the plugs.

>>Easy as that you can see and monitor the energy levels and outputs of each device in the space.

Solar charger

1. Place in an area that receives sufficient amounts of sun, allowing the battery to begin self-charging.

In order to see charge level, push the button on the left hand side and lights on the top will show you the battery life.

2. When ready to charge devices, simply plug in the USB charger or adapter into the output and begin charging.

>>If devices are not charging, look at battery levels again to make sure that it has enough to charge your other devices.

Methods & Practices of Sustainability and Eco-Friendliness

Practices

- >> Sprouting at home, involving planting and growing within the space.
- >> Decorating the space with plants, effective for indoor air cleaning.
- >> Reduce the consumption of single-use plastics.
- >> Avoid using and buying a lot of disposable items.
- >> Eat locally, enormous amounts of energy, water, and synthetic chemicals are wasted moving food from where it is grown to where it is sold. The best way to avoid contributing to that issue is to shop for locally grown foods.

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Methods

- >> Washing clothes in cold water reduces the carbon dioxide emission, but also helps to keep clothes in top condition for longer, as hot water can deteriorate the fabric and make colorful clothes less vibrant.
- >> Be selective in choosing the materials and furnishings inside your space
- >> Recycle correctly, know the community's recycling rules and requirements.
- >> Being mindful of the water usage throughout the space.
- >> Don't turn on lights at all for as long as you can — open your curtains and use natural light.
- >> Green your transportation. Walk, bike, or take public transit instead of driving. You'll cut down on air pollution and help reduce emissions that are contributing to the climate crisis.





Save Earth!

Thank you for supporting Green Box, I hope your sustainable and eco-friendly journey is a joyus one.

To learn more about sustainable and eco-friendly tools and methods, follow me @mheste3.digital.uic.edu/

Till then, have a beautiful green time with Green Box.