



Practical Sustainability

A "Choose Your Own Adventure" guide to personally sustainable choices.

Wednesday, June 7th 2023



A 'Choose Your Own Adventure' of Sustainability

- The Why
- Who We Are, Who I am
- Labels
- The Waste Stream
- Shopping
- Home efficiency
- Packaging
- Product Recommendations
- Advocacy
- Conclusion

The Why of this Presentation

- Climate change is increasingly impacting our region.
- Large variability in severe weather. Increasing costs for residents and township to continue to further mitigate impacts, costs for post-storm clean-ups.
- Impacting our local agriculture.
- Increasing impact on our environment and health with plastic waste, micro-plastics, PFAS, air quality, water quality and other impacts due to our choices.
- This is as much fiscally driven as personally driven.

This is why we are sharing practical information you can leverage every day

Springfield Township EAC

Environmental Advisory Committee.

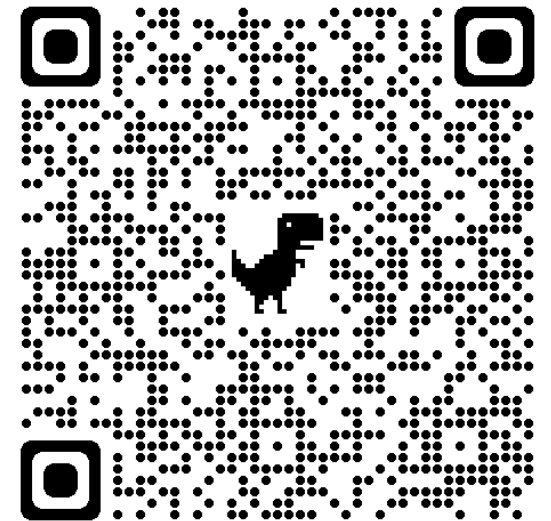
- Meets 4th Wednesday of every month, 7pm at the Library.
- Local volunteer driven group helping to educate residents, staff and board of commissioners on environmental and sustainable activities.

Current projects

- Renewable Springfield
- Native Plant Sale
- Park improvements such as native plants, riparian and stormwater management
- No Mow May
- Reduction & elimination of single use plastics
- Multiple educational talks throughout the year

Come out and join us! Always looking for volunteers!

Check us out on Facebook and our township pages.



Who I am

- Lived in the township since 2002
- Father & Husband
- Grew up in the Philadelphia region
- Career technologist, currently working for AWS.
- EAC member for 11 years.
- Enjoys traveling & martial arts.
- Deep involvement in environmental and sustainable projects.



A “Choose Your Own Adventure”

Come away with understanding options and choices.

Begin to build your own story.

Start by adopting the practices you can.

Expand them as you go.



Labels

Your guide to help making choices easier for you



Labels with meaning and value

- Does the label mean something?
 - Is it reducing or eliminating use of chemicals?
 - Is it reducing or eliminating the use of plastics?
 - Is it reusable or compostable?
 - Is it a testable standard? (industry or government)
 - Is it self-reported or 3rd party tested?
- Labels address different standards and purposes. You should have a basic understanding of what a label means so you can make better informed decisions about a product.
- USDA Certified BioBased Product comes with an "*"



Focus on this presentation are labels that contribute to reducing plastics, fossil fuels and chemicals

Labels & “Green Washing” (What to avoid)

- Biodegradable does not mean compostable!
- “Exceeds EPA Procurement Guidelines by 700%” - meaningless in regards to sustainability
- Made from 70% Certified Post-Consumer Recycled LLDPE. Made in the U.S.A.
- Proud member of [1% For The Planet](#) - member businesses give at least 1% of their annual sales.
- “All Natural”, “Made from natural products” and similar statements have no meaning.
- [Non-GMO Verified project](#) – The Non-GMO Project is a single-issue certification; the only thing the Non-GMO Project tests for is GMOs.
- US FDA – Federal Food and Drug and Cosmetic Act – means nothing
- [USDA Certified Organic](#) – certifies farms & producers to sell goods as ‘organic’.

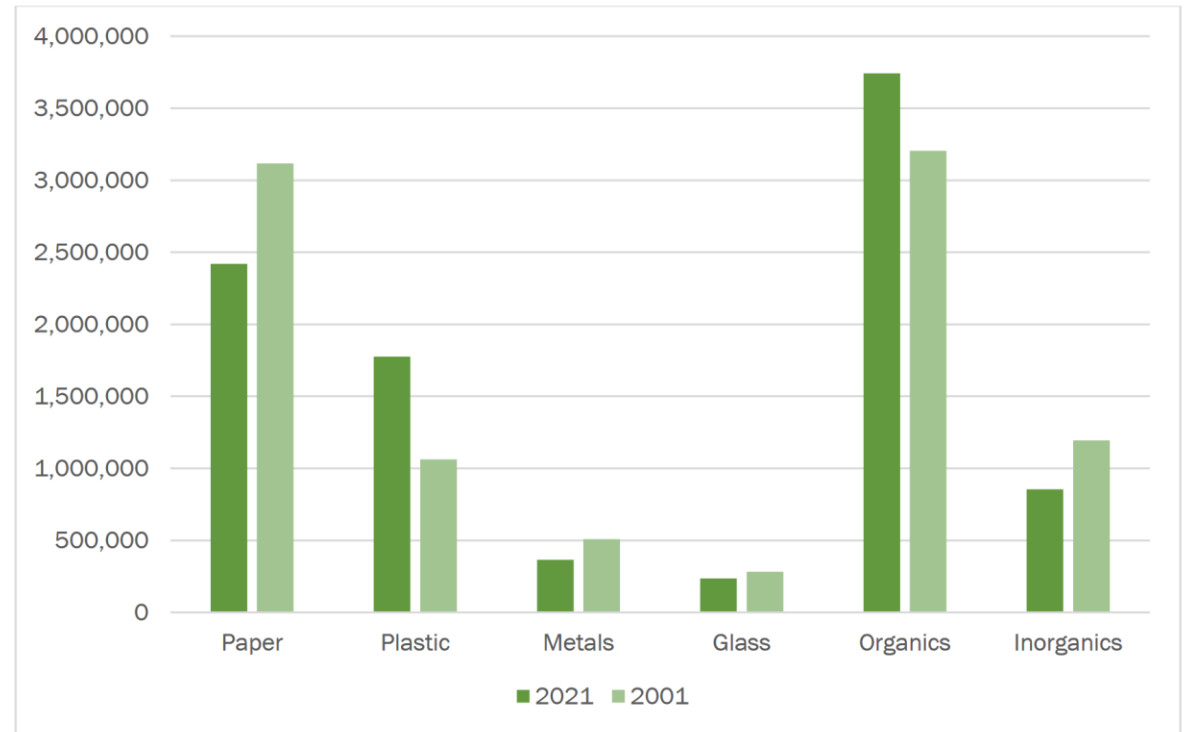
Any brand that has green bags or claims to be biodegradable, made in the USA, all natural, or other marketing terms

The Waste Stream, Reducing what goes in.

- Springfield township collects trash, recycling and leaf waste year round.
- Springfield pays by the tonnage for waste and recycling.
- Leaf waste collection – Year round
 - 2022 – Collected 4,195 cubic yards (1,049 tons)

Pennsylvania MSW disposal 2021 to 2001

Figure E-4 Comparison of Disposed MSW by Material Group 2021 vs 2001 (Tons)



April	2023	2022	2023 YTD
Refuse Tonnage	509	549	1,968
Recycle Tonnage	150	172	637
Recycling Curb Stops	13,792	18,200	75,997

Recommendation: Feeding the circular economy

- Re-Use and Re-Purpose : If you don't need it, don't bin it, give it away!
- Leverage Facebook "Buy Nothing Groups", Nextdoor.com, and "Curb Alerts"
- Thrifting and consignment
- Donation : Cradles to Crayons, Good Will, other thrift locations



The EAC has a list of options for donation or re-use or repurposing different products on our website!

Recommendation : Re-usable grocery bags

- America produces over 100 billions plastic bags a year. An average 365 plastic bags per year per person.
- A large grocery trip can result in 15-20 bags single-use plastic bags (or more!)
- Biggest barrier to adoption is remembering you bags!
- Make it easy for yourself, keep some in the car. Use a small compact bags that can be easily carried with your purse, key chains, or in your pocket
- Ask you local retailer to stop using single-use plastic bags



Home Efficiency: The basics & electrify everything

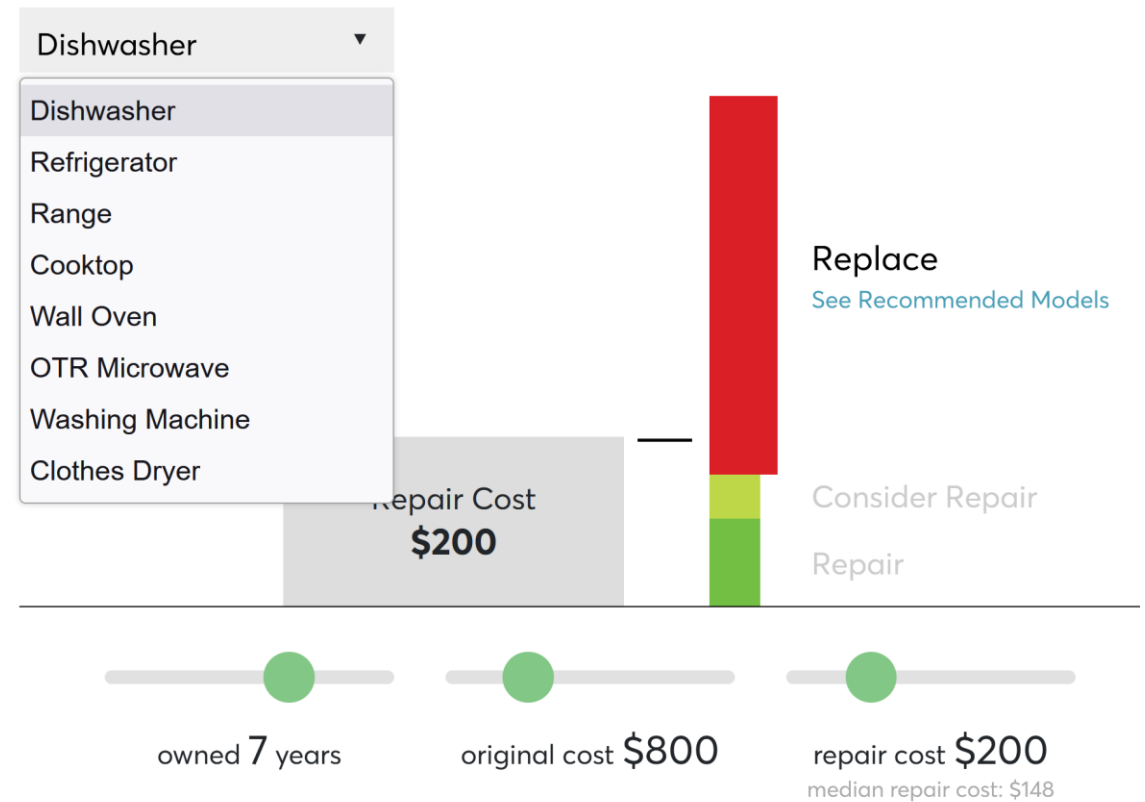
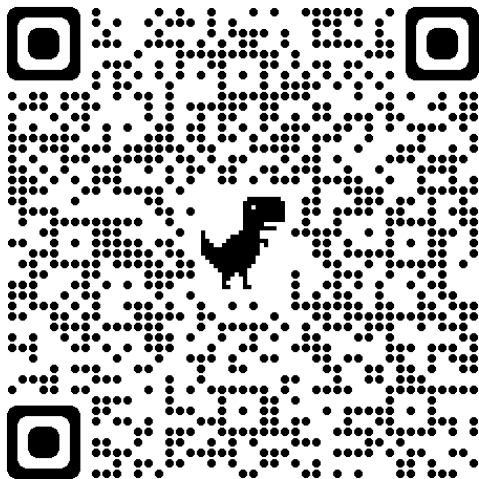
- You don't need to put panels on your roof or go off the grid to have an impact.
- Basic home repair and maintenance can have an impact to lower your energy bills while reducing your impact on the environment.
 - Windows, insulation, lighting all have an impact
- Replace larger appliances & HVAC equipment when they are end of life with more efficient and all electric.
- Switching use to different products from what you use today can reduce exposure to harmful chemicals, reduce single use plastics, reduce packaging waste, increase composability or recyclability.
- Look at [PA Whole Home Repair program](#), to offset costs in investment.
- Electrify everything!



This Photo by Unknown Author is licensed under [CC BY-NC](#)

How do I know when to replace something?

- How old is the appliance?
- Could it simply need to be cleaned or maintained?
- How much did it cost originally?



Consumer reports provides a [simple tool](#) to determine if you should repair or replace an appliance.

What should the replacement be?

From This

- Gas or oil based HVAC
- Gas stove & range
- Gas dryer
- Lights

To This

- Electric heat pumps & split systems
- Electric stove (induction range)
- Electric dryer
- LED bulbs

Challenge: It can be challenging to find trades with experience to adoption, there is still some leg work needed as the consumer to look into these replacements.

Electric Ranges – Induction burners

- Induction burner are not the electric stove's you have seen before.
- Extremely efficient & quick to heat, able to maintain a steady temperature.
- Definitely a change, especially if you are used to gas stoves and had bad experience with traditional electric stoves
- Not all pots and pans are alike for this.



Judging a book by its cover - Packaging

- Packing for products is generally single use – once you've used that product you dispose of the package it came in.
- Often that packaging cannot be recycled and will end up in the waste stream, contributing to pollution.
- **What should you look for in packaging?**
 - **Increase the ratio of packaging to product:** Being able to buy a product in larger, bulk sizes.
 - **Packaging that is compostable or at least more biodegradable than its alternative.**
 - Products which have demonstrably made an effort to reduce their use of packaging.





Specific Recommendations



A note about these recommendations

What I am recommending here are not specific products, unless I have direct experience with those products.

These are examples of products to look for in different areas that can reduce your impact on the environment.

Kitchen Trash Bags

- Trash bags – compostable kitchen trash bags
 - Brands: Ghost Bags, Eco Bags & others (next slide)
- Do they work?
 - Yes, we've been using them. They are as easy to use as any other kitchen trash bag. They are sturdy and hold up to normal kitchen use.
- Composability with minimal to no toxic chemicals are they key for trash bags.
- Re-use and cycle through bag use for trash and recycling containers.

- Brands:
 - Ghost Bags
 - BioBag
 - Aneco
 - EcoSoul



Laundry



- What to look for:
 - Fewer chemicals
 - Fragrance free
 - Concentrated (more loads per package)
 - Plastic free packaging
 - Safe for sensitive skin
 - Bio/organic based
- Examples:
 - Seventh Generation
 - Tide Pureclean
 - Dropps Laundry
 - ECOS
 - Puracy

Choice of formats: These come in different formats : powder, liquid, pod, sheets.

Household Cleaning



- What to look for:
 - Sponges, cleaning wipes which are plastic free.
 - No dyes, sulfates, phosphates, petrochemicals, SLS or quaternary ammonium compounds
 - Cotton cloth for wipes & rags
- Examples:
 - Puracy
 - Zero Waste Club
 - Bon Ami cleaning powder
 - Aspen glass cleaner

Some of the best cleaners, like Bon Ami have been around for ages and have a few simple ingredients and are very effective

Kitchen - Soaps



- What to look for:
 - Chlorine & Phosphate free
 - Fragrance free
 - Packaging
 - Available in concentrate
 - Dye & SLS* free
- Examples:
 - Puracy
 - Cleancult
 - ECOS
 - Dr. Bronner's
 - etee

**SLS - Sodium Lauryl Sulfate, SLS is what's known as a "surfactant."*

Coffee – Pods & Cups

- K-Cup – plastic, hard to separate. No program in place to return used pods.
- Nespresso – aluminum, program for return and recycling of pods.
- Options:
 - Tool to separate K-Cup plastic and grounds
 - Reusable cups and pods (pictured right)



Personal Care – Deodorant, Toothbrushes, Shaving, etc



- What to look for:
 - Fragrance free (or listing fragrance as ingredient)
 - Plastic free packaging
 - Aluminum free
- Examples:
 - Native
 - Schmidt's deodorant stick
 - Tom's of Maine

It's worth noting that there's no legal definition of what products can be labeled "natural," so it's important to check out the ingredients list

Although research has not found a definitive link between traditional aluminum-based antiperspirant formulas and breast cancer, many people prefer to avoid it, and as well as other synthetic ingredients

Outside the home - Landscaping

- Changing can have multiple impacts by reducing or eliminating
 - Noise & Air pollution
 - Chemical fertilizers
 - Storm water reduction
 - Removal of organic matter from the waste stream
- Compost
- Plant native
- Avoid the use of chemical fertilizers
- Change your landscape, move away from the broad urban lawn
- Rain barrels



Recommendations: Outside the home –Lawn Equipment



- Electrify! When you are looking to replace your mower, and other gas power tools with electric.
- These tools can manage and cover a typical suburban landscape in a single charge.
- Batteries within a brand are interchangeable, replaceable and higher capacity.
- If you have a landscaper, ask them when they plan to move to electrify their equipment.

Recommendation : Take-away / Take-Out

- When you order, let them know you don't need utensils, straws, condiments.
- Ask local restaurants you would like to see them,
 - Include straws upon request in store.
 - Have an opt in for utensils, condiments & napkins in take away
 - Switch to more re-usable packaging



Advocacy : Make your voice heard at all levels

- State & County

- Advocate for adoption of a state wide ban single-use plastics.
- Support for RGGI, Community solar and other projects.
- More public and transparent engagement with elected officials.

- National

- Engage for more transparency & end-to-end impact on the cost of products and fossil fuels.
- Advocate for more producer responsibility.

- Locally

- Engage with your commissioners about support for removing single-use plastics in our community.

- Businesses

- Engage with local retailers and ask them to support more sustainable products and practices
- Reach out to chains and corporations advocating for them to adopt more sustainable products and practices in their business.

Local changes good.
We require national level
investment in changing
our energy policy and
fossil fuel use.



In closing

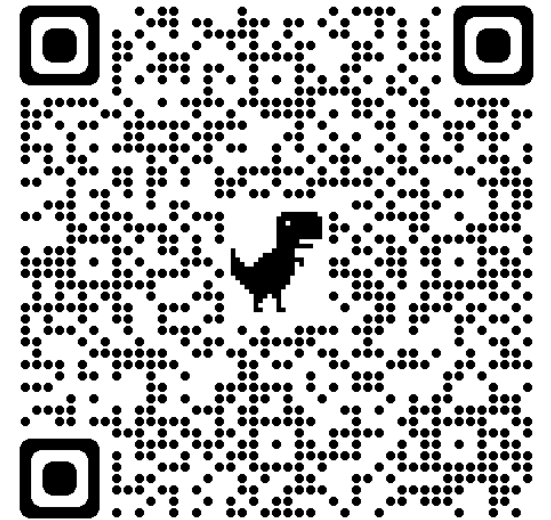
Thank you for coming!

Next event: June 27th, 7pm Springfield Township Building
“Single Use Plastics and You”

If you have more questions, you can reach the EAC via the township website:

<https://springfieldmontco.org/eac>

Come out to our meetings: 4th Wed. of every month 7pm in the library.





Reference

Additional materials, citations and references



An aside about where our trash goes



Photo credit: Creative Commons, [Wikipedia](#)

- Packaging and other materials we cover in what we put into our waste stream is targeted at what happens when it goes to a landfill.
- We are different in that we have our waste burned at Covanta and not going into a landfill.
- This does not change the conversation relative to our change in what products we use.

Citations & Sources

- Philadelphia Inquirer, "[Easing Energy Bill Anxiety](#)", May 19th 2023
- ABC News, "[Tracking the trash: Are your plastic bags really being recycled?](#)", May 22nd 2023.
- The Guardian, "[Plastic pollution could be slashed by 80% by 2040, UN says](#)", May 16th 2023
- Sept 2022 [PA DEP Waste Characterization Study](#)
- [B Corporation certification](#)
- [EPA Safer Choice](#)
- USDA Bio Preferred [program](#) and [list](#)
- [EarthDay.org](#)
- Consumer Reports tool to [repair or replace](#) an appliance
- [Tree Hugger recommendations](#)
- "[Antiperspirants/Deodorants and Breast Cancer](#)"
- "[Perfume Allergies](#)"

Articles and News

- Philadelphia Inquirer, "[Easing Energy Bill Anxiety](#)", May 19th 2023
- ABC News, "[Tracking the trash: Are your plastic bags really being recycled?](#)", May 22nd 2023.
- The Guardian, "[Plastic pollution could be slashed by 80% by 2040, UN says](#)", May 16th 2023
- Consumer Reports "[Save More Waste less](#)" series
- Science Alert, 2020, "[What Is Sodium Lauryl Sulfate, And Why Are People Avoiding It in Soap And Toothpaste?](#)"
- [Environmental Working Group](#) (EWG)
- Cosmer

Further Reading

- [Environmental Working Group](#) (EWG)

Reference for PLA and PBAT

- Good explanation of PLA, PBAT - <https://www.itto.com.au/blogs/itmatters/what-is-pbat-and-pla>
- Scientific American explains what compostable means with these certifications - <https://www.scientificamerican.com/article/environmental-impact-of-corn-based-plastics/>
- OK compost Home covers several standards and has a companion OK compost Commercial - <https://www.tuv-at.be/green-marks/certifications/ok-compost-seedling/>
- GhostBags – <https://www.ghostbags.org>
- BioBags - <https://www.biobagusa.com/about-biobag-2/certifications/>

What is a biodegradable compostable bag?

- Product is made from:
 - PBAT (Polybutyrate Adipate Terephthalate) is a fossil-based polymer (so not renewable) but breakd down well into non-toxic components
 - PLA (Polylactic Acid, or Polyactide) is a form of polyester, is a plant based polymer which also breaks down into non-toxic components
- AND is certified by one of these organizations:
 - BPI (Biodegradable Products Institute) Compostable is US certification (ATSM D6400)
 - OK compost Home or OK compost Industrial is the European certification
- Which means,
 - Based on 'industrial' level composting vs. home composting. Meaning it will break down into organic materials in 180 days with industrial level organic composting process.