# ZERO WASTE PROGRAMS

WHAT IS ZERO WASTE, WHY IT IS IMPORTANT, HOW YOUR ORGANIZATION **CAN IMPLEMENT IT** 

> GLOBAL CLIMATE Pledge

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#### What is Zero Waste?

- Zero waste can be defined in many different ways by different entities:
  - Solid Waste of North America: "...all efforts to reduce solid waste to almost nothing by reducing excess consumption and maximizing solid waste recovery through compositing and recycling."
  - Zero Waste International Alliance: "...conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharge to land, water, or air that threaten the environment or human health."
  - US Conference of Mayors 2015: "beyond recycling and composting at the end of a product's life cycle..."



## Why is Zero Waste Important?

- From the Toronto Environmental Alliance:
  - Who they are: a non-profit organization campaigning locally in Toronto to find solutions to their urban environmental problems
  - Why they think zero waste is important:
    - Reduces climate impact by conserving resources and minimizing pollution
    - Promotes social equity while building community
      - Redistributing goods to those in need
      - Community gardening
    - Protects community by reducing pollution and toxic waste
    - Creates jobs by supporting circular economy





#### Why is Zero Waste Important?

#### From the Northeast Recycling Council:

- Who they are: a multi-state non-profit organization whose programs emphasize source reduction, resusing, recycling, composting, environmentally preferable purchasing (EPP), and decreasing the toxicity of the solid waste stream in northeastern US
- Why they think zero waste is important:
  - Zero waste is one of the fastest, easiest climate action strategies that we can implement today to immediately reduce **GHG** emissions
  - Cost effective (curbside recycling can reduce more emissions) per dollar spent than energy efficiency & renewable energy projects!)
  - Don't need any new technology or rare natural resources we already have the technology of recycling and composting

# Debunking the Zero Waste Stigma

- Zero waste is not about an extreme goal BUT transforming our behaviors and actions!
  - Zero waste is based on the journey towards becoming zero!
- "Zero waste" suggests that we shouldn't be producing any waste at all
  - This is misleading!
  - Zero waste is a way of examining our lifestyle & reducing waste where it's possible!
- Living zero waste does NOT have to be perfect
  - Individual perfection will never be achievable in a linear economy
  - We need to come together to make a collective, systemic impact

# Debunking the Zero Waste Stigma

- Being zero waste is NOT about producing absolutely no waste
  - Don't hold yourself to ridiculous standards!
- Be more concerned with the big picture
- Think about the waste created upstream before it reaches your organization
  - There is nothing you can do about that!
- Life is out of your control..
  - ie: Given a gift that has no zero waste packaging
- Don't give up on being zero waste!
  - Focus on the bigger picture & advocate for systematic changes!





# Going from a Linear to Circular Economy

- Linear economy = Traditional model where raw materials are collected & transformed into products that consumers use until discarding them as waste • Prioritizes profit over sustainability
- Circular economy = Production that has as little impact as possible on the environment • Prioritizes sustainability over profit
- In a circular economy, waste is the new raw material! • ie: Sharing more products that are not often used or stand still
- Consumer behavior change is needed for a circular economy!



#### From the US EPA....



Landfills are the **3rd biggest** source of human related methane emissions





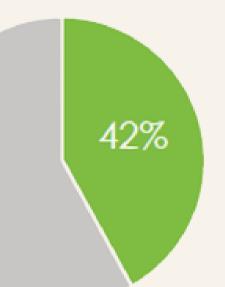
#### **US** municipial waste accounts for approximately 14% of human caused methane emissions

#### From the US EPA....



The Average American produces 4.4lb of trash per day...even if it's biodegradable, it will still emit GHGs, which contribute directly to climate change!





42% of all GHG emissions are from production & use of goods (including food, products, packaging)

#### From the Northeast Recycling Council...



80% of discarded consumer goods in municipal solid waste ends up burned or landfilled because of poor design, failure to include recyclable materials & lack of end-of-life solutions





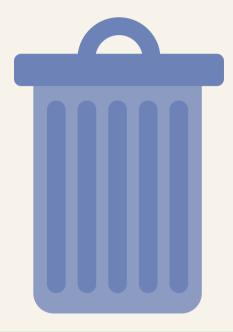
It takes 1.5 years to regenerate the natural resources we consume in a year

#### From the Northeast Recycling Council...



Implementing zero waste could help save materials worth up to \$700B/year





20% of the municipal budget is spent on waste management....with less waste, money could be diverted to other essential meeds/projects/etc.

# From the UN Environment Program...



Around 1/3 of the 2.24B tons of municipal solid waste produced globally in 2020 was not managed in a sustainable manner



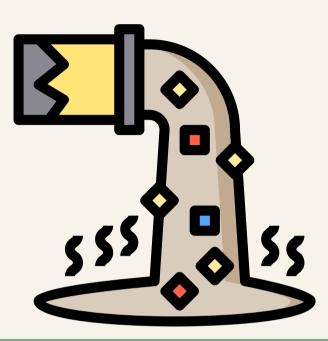
#### Plastics account for 12% of global waste, equivalent to the weight of 3.4M adult blue whales

# From the UN Environment Program...



The global recycling rate is under





If current trends continue, the amount of waste will reach 3.38B tons per year by 2050

How to Implement Zero Waste?: The 5Rs

#### Refuse $\rightarrow$ Reduce $\rightarrow$ Reuse $\rightarrow$ Repair $\rightarrow$

#### Do this first!





# Recycle

#### This is your last resort!

## How to Implement Zero Waste?

- The **5Rs**:
  - Refuse...what you don't actually need
    - ie: Buying timeless pieces for your closet instead of trendy clothing items
  - Reduce...what you use
    - ie: 'Sell by' or 'Best by' dates don't mean you have to throw your food out right away
  - **Reuse...**until it no longer works
    - ie: Switch to disposable items for reusable & permanent alternatives
  - Repair...what we can
    - ie: If an electronic device, such as a laptop, try to fix it before buying a new device
  - Recycle...only when all options have been exhausted!



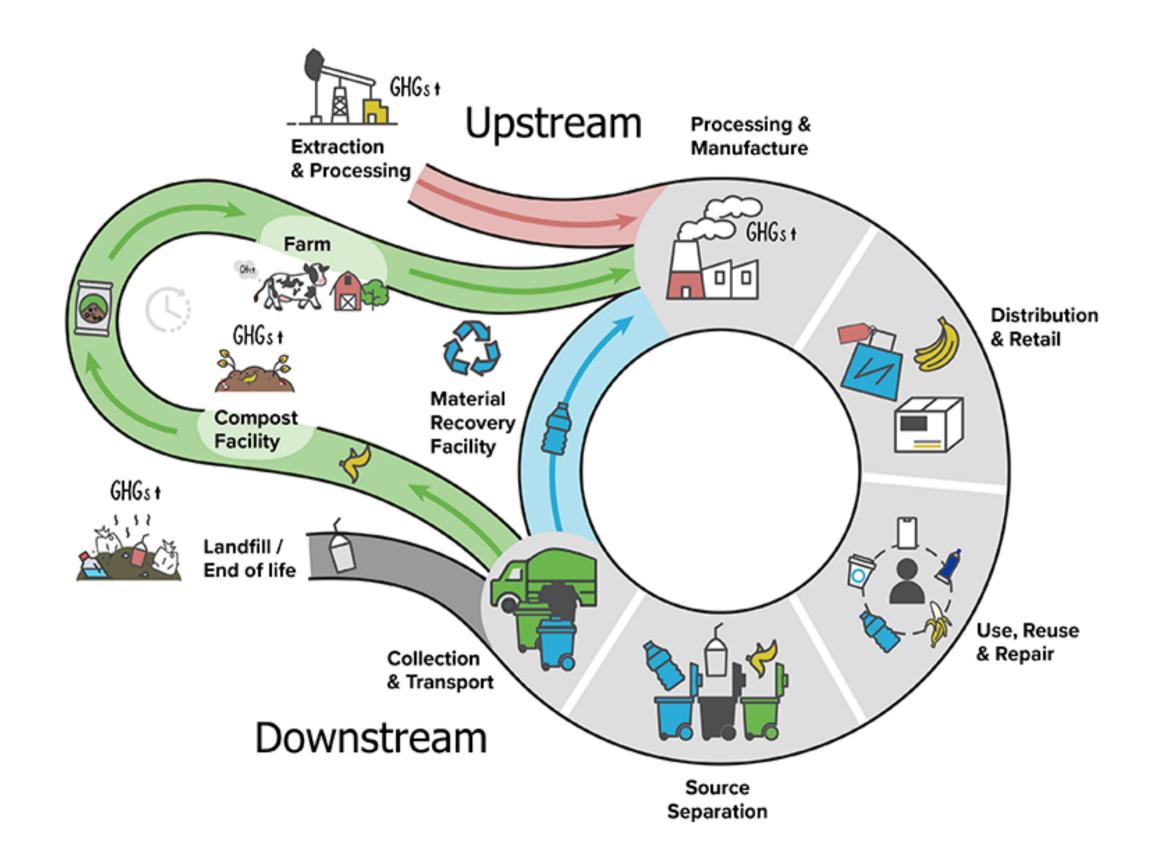
#### How to Implement Zero Waste?

- Zero waste should include redesigning our one-way industrial system into a circular system
  - ie: Creating durable packaging that can be reused
- Upstream and Downstream:
  - Upstream redesign strategies reduce volume and toxicity of discarded materials & products Improve downstream recycling of end-of
    - life products and materials





### **Upstream and Downstream Production**



### What Else Can You Do?

#### Go paperless!

- You can download various apps such as e-signature, to do list app, note-taking apps, etc.
- Buy tablets for the office!
  - This does not have to be expensive as there are affordable options such as <u>reMarkable</u>, <u>rocket</u> <u>notebook</u>, <u>homestec</u>, etc.
- Share supplies!
  - ie: One stapler for everyone (Think of items you only need one of!)
- Buy "green" products
  - <u>100% recycled paper</u>, non-toxic cleaners. etc



Sign the Pledge at https://www.globalclimatepledge.com

**Share the Pledge!** 

- Encourage your coworkers, family members, loved ones, etc. to move from awareness to action!
- Spread the pledge through social media!



# Take the Pledge!

#### **Individual Pledge QR Code:**



#### **Organization Pledge QR Code:**



# **Contact Us!**

#### **U.S. Green Chamber of Commerce** National Headquarters 249 S. Highway 101 #420 Solana Beach, CA 92075

https://usgreenchamber.com

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- <u>https://www.epa.gov/transforming-waste-tool/how-communities-have-defined-zero-waste</u>
- <u>https://www.usmayors.org/the-conference/resolutions/?</u>

category=b83aReso050&meeting=83rd%20Annual%20Meeting

- <u>https://www.torontoenvironment.org/zerowaste\_benefits</u>
- <u>https://www.missionzeroacademy.eu/circular-economy/debunking-common-myths-zero-waste/</u>
- <u>https://nerc.org/news-and-updates/blog/nerc-blog/2015/12/15/10-reasons-why-zero-waste-is-a-priority-</u> climate-solution
- <u>https://www.centerforecotechnology.org/zero-waste-lifestyle/</u>
- <u>https://www.government.nl/topics/circular-economy/from-a-linear-to-a-circular-economy</u>
- <u>https://www.santander.com/en/stories/linear-and-circular-economies-what-are-they-and-whats-the-difference</u>
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- <u>https://www.seattle.gov/utilities/about/plans/solid-waste/2022-plan-update</u>

