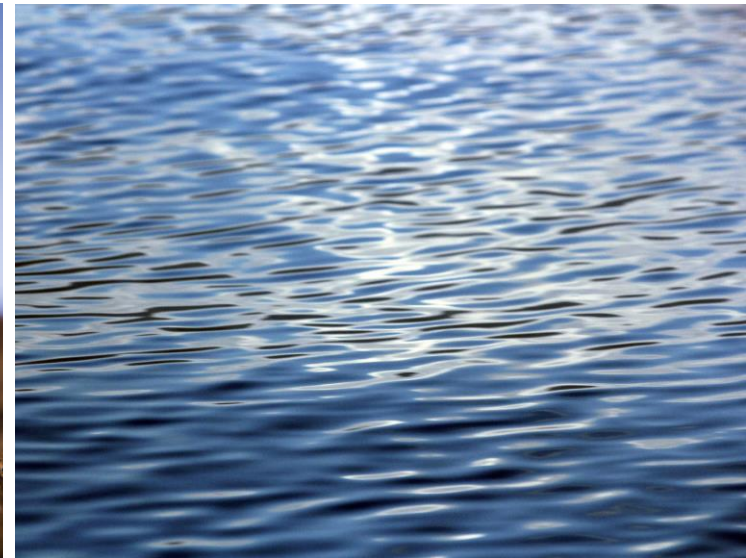


# WASTE & WATER: *THE ZERO WASTE APPROACH*



June 2022  
Presentation by Jack O' Sullivan  
[www.zwai.ie](http://www.zwai.ie)



# Contents

- About ZWAI
- Topic 1: Waste
  - Types of household and office Waste
  - Where our waste goes
- Topic 2: Water
  - Water scarcity; globally and in Ireland
  - The importance of preserving water
  - What can we do?
  - How to avoid Greenwashing
  - Changing our consumer habits
  - Case study & DIY Inspiration





# About Us

---

# Zero Waste Alliance Ireland (ZWAI)

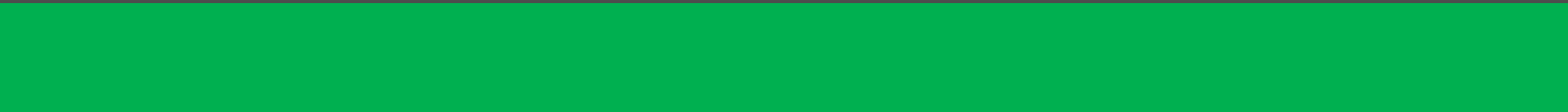
---

- Established in **2004**
- Registered **environmental charity and NGO** focused on zero waste principles
- **Not-for-profit** policy-oriented organisation
- Member of the **Irish Environmental Network (IEN)** and the **Environmental Pillar of Social Partnership**
- Members of the **EEB** and the **Waste Working Group**
- For us, waste is a **resource**
- Our work involves **lobbying government and preparing policy submissions**





# Topic 1: Waste Management



# Household and Office Waste

---

Mixed residual  
collection waste  
(black bin)

Organics  
collection/food  
waste (brown bin)

Mixed dry  
recyclables (green  
bin)

Paper waste

Furniture

E-waste

Discarded printing  
products

Plastic waste

# WHAT GOES IN MY BIN?



## Green Bin (Recyclables)

- ✓ Paper
- ✓ Cardboard
- ✓ Food Tins
- ✓ Drinks Cans
- ✓ Tetra Pak Cartons (E.g. Milk, Soup & Juice Cartons)
- ✓ Plastics (E.g. Mineral, Water & Detergent Bottles PET1, HDPE2, PP)



All must be clean and dry



## Brown Bin (Organics)

- ✓ Coffee grounds & filters
- ✓ Cooked & raw foods
- ✓ Dairy products
- ✓ Eggs & egg shells
- ✓ Fruits, vegetables & peelings
- ✓ Tea leaves & tea bags
- ✓ Meat, bones & fish
- ✓ Hedge clippings, twigs & branches (max 2 inch diameter)
- ✓ Leaves, plants, weeds & grass



## Black Bin (General Waste)

- ✓ Nappies
- ✓ Soiled food packaging
- ✓ Bathroom waste
- ✓ Animal waste
- ✓ Aerosols
- ✓ Cold ashes
- ✓ Fast food cup lids
- ✓ Black plastic bags
- ✓ Used candles



And where  
does all this  
waste *actually*  
*go?*

---



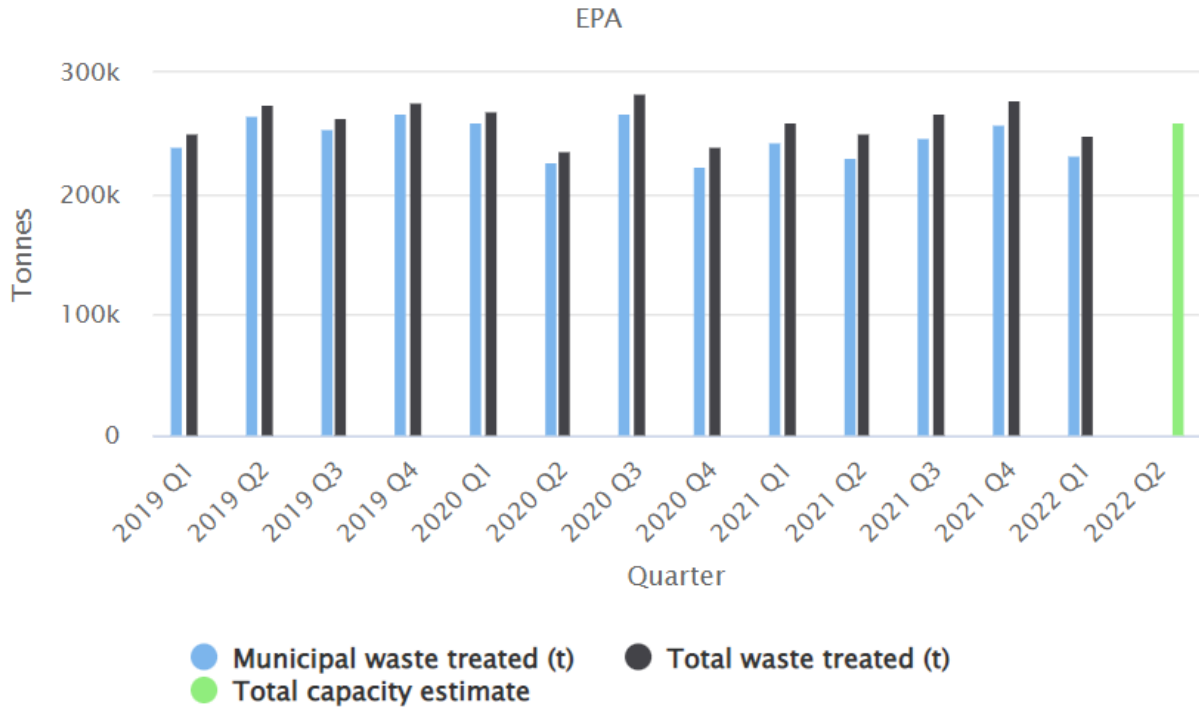


# Waste Figures from 2019

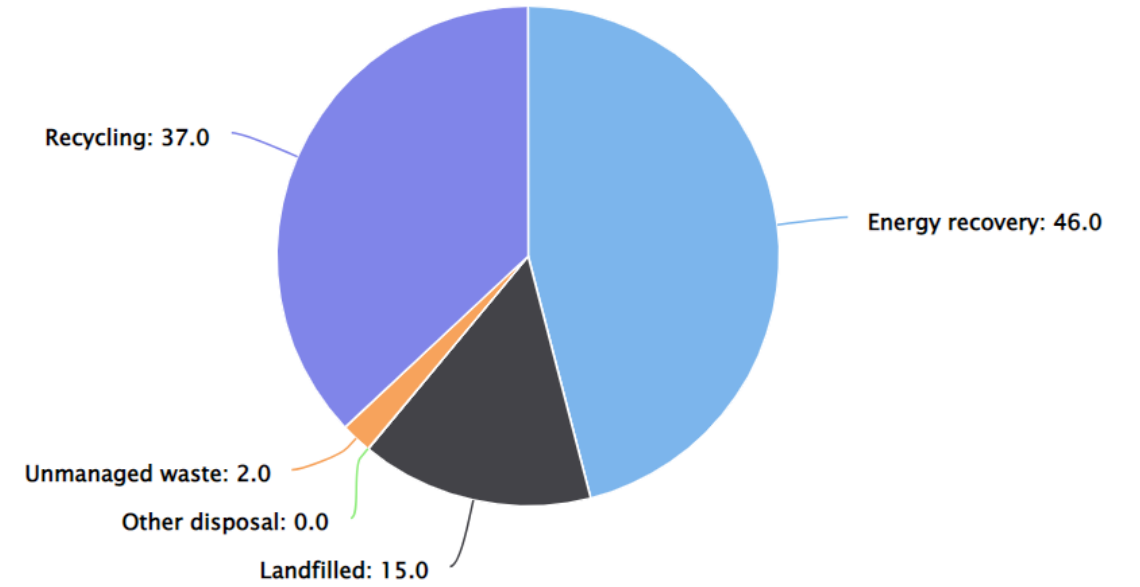
*(most recent data  
available)*

- Ireland has the **highest plastic waste generation**, far higher than the EU average. However, we are the **fourth lowest** in the EU when it comes to recycling
- Irish people produce over **14 million tonnes** of waste every year
- 1.2 million tonnes (37%) of Ireland's municipal waste was **recycled in 2019** and Ireland is **struggling** to meet the new EU recycling targets set for 2025 to 2035
- 294,761 tonnes was **composted/anaerobically digested**
- 1.4 million tonnes (46%) of our municipal waste went for **incineration** (as "solid recovered fuel (SRF)" for cement plants) – that's **more** than the figure for recycling!
- This idea of waste "recovery" is **misleading**
- There has already been **232,000 tonnes** of municipal waste incinerated in Q1 of 2022
- Ireland's landfill rate for municipal waste was **15%** in 2019, which has decreased from 84% in 2001
- 40% all municipal waste (1.2 million tonnes) was **shipped overseas**, and the final destination of this waste is unclear

**Figure 2. Quarterly data on waste to energy recovery through incineration and co-incineration**



**Figure 1. Treatment of municipal waste in 2019.**



# Environmental Implications of these Disposal Practices

---

## **Burning of SRF in cement kilns:**

- SRF is comprised of paper, plastic and textiles
- Almost 70% of plastic waste is burned instead of recycled in Ireland
- This practice is bad for both the environment and human health, though the industry do not want to admit this.
- It is a danger to those working in the facilities and those living around it, especially through exposure to toxic nanoparticles and fine dust
- It contaminates the air and ground water

## **Landfill:**

- 15% of our waste is landfilled, which is much less than before, it is still a problem globally
- Rubbish buried in landfill breaks down at a very slow rate and remains a problem for future generations
- landfill releases toxins into the environment, leachate and greenhouse gases

## **Shipping waste abroad:**

- Ireland shipped 75% of our hazardous waste abroad in 2017
- This waste is much harder to control and manage once it leaves the country
- When our waste is shipped abroad to poor countries with insufficient waste management infrastructure, it can cause long-lasting damage to people and the environment.

A high-speed photograph of a water droplet falling into a pool of water. The droplet is captured mid-fall, just above the surface, with a smaller droplet trailing behind it. The impact has created a series of concentric ripples that spread outwards from the center. The water is a deep blue color, and the background is a soft, out-of-focus light blue. The overall composition is centered and symmetrical.

# Topic 2: Water



# Water Scarcity: Globally & in Ireland

---



# Global Water Scarcity

- Water covers 70% of our planet, and it is easy to think that it will always be plentiful, but only **3% of the world's water is fresh water**
- Water scarcity already **affects every continent** in the world
- Water has to be treated as a **scarce resource**
- 4 billion people — almost two thirds of the world's population — experience **severe water scarcity** for at least one month each year
- Over 2 billion people live in countries where water supply is **inadequate**
- **Half of the world's population** could be living in areas facing water scarcity by as early as 2025.
- Some 700 million people could be displaced by intense water scarcity by **2030**.
- By 2040, roughly **1 in 4 children** worldwide will be living in areas of **extremely high water stress**.



# Water Scarcity in Ireland

- The future for Ireland's drinking water resources remains **uncertain**
- Though Ireland has one of the **highest rates of water availability** in Europe, our water usage is also **significantly higher than elsewhere in Europe**
- Ireland is perceived to be a wet country, yet it has the **largest trend for increasing summer meteorological drought** in Europe
- This, coupled with climate change and a growing population, could lead to **water shortages** in Ireland in the medium and long-term
- There is an **imbalance** between the places where water availability is greatest (the west of Ireland) and where water is most needed (the east of Ireland)
- It is estimated that approximately **1.76 million Irish people** are living in areas of water stress – where the demand for water is **not being met**
- More than **42%** of all treated water in Ireland is **lost** through leaking pipes
- Drought is an **overlooked** climate hazard in Ireland, and it is likely that the **frequency and severity of droughts** in the coming decades will **increase**





So, what can we do  
about it?

---



# Water Saving Tips

Protect water sources



Avoid bottled water



Install water saving fixtures or composting toilet



Take shorter showers



Put pressure on local TD's to fix damaged pipes in your area



Recycle your wastewater




Turn off the tap when brushing your teeth & washing your face





Regularly maintain your own pipes to avoid leakages





## Regarding our waste, we can start by...

- **Reducing** our waste as much as possible. This can be achieved by:
  - making more **responsible choices** while shopping, only buying what you need, avoiding “greenwashing”
  - **Avoiding plastic packaging** where possible and using reusable shopping bags
  - Opting for **zero waste solutions** for coffee cups, water bottles, utensils
- **Repair and reuse** our consumer goods, there are lots of easy and fun YouTube videos to help with this!
- **Shopping local, buying in bulk:** Farmers markets are great places to find plastic free and local groceries! There are plenty of stores now offering bulk options for grains, beans, spices, etc
- **Composting your food waste:** This compost can then be used to grow some lovely plants, herbs & veggies in your garden!
- Contacting your local TD’s to express your concerns. **Make your voice heard!**
- Making sure that the plastic waste we produce is **recyclable**



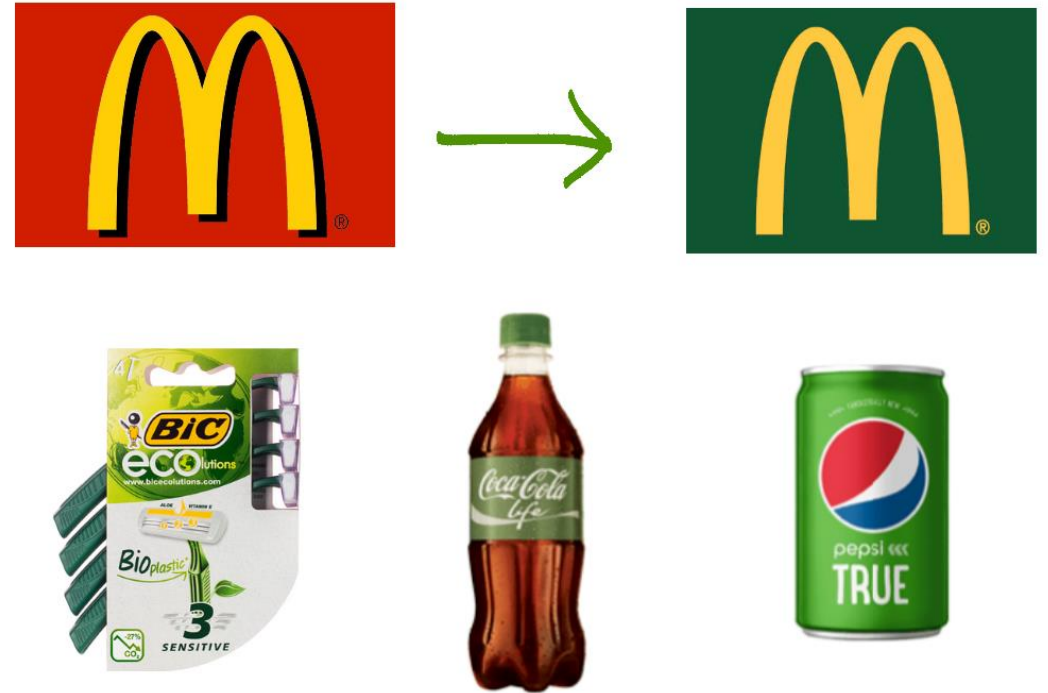
*By making small changes to our consumer habits, we can make a big impact. It doesn't have to be complicated. It is our responsibility to protect the world in which we live, and we need to start **today**. The more we act, the more others will take notice. **The power is in our hands!***

---

# Greenwashing

---

- “Greenwashing” is the practice of marketing a product or a brand as being greener or more environmentally friendly **than they really are**
- Unfortunately, many companies have seen our efforts to be more environmentally conscious as **a great business potential**
- Marketing and imagery are **powerful tools**; brands are very effective at using these to trick us into believing a product is sustainable
- Through awareness, it is possible to avoid being fooled!



# How to Avoid “Eco Scammers”



1. Be cautious of products **making generic claims** like “100% natural” or “environmentally friendly”, “all-natural”, “eco-friendly,” or even “farm fresh” without information as to how or why
2. Avoid products that make **random and irrelevant claims**, like “CFC-free” (CFCs were banned more than 20 years ago)
3. Look for a seal or certification mark from a **recognized, independent third party specializing in green claims**, such as the EU Ecolabel
4. Look for the **packaging**: while a product may be green, is the packaging green as well?
5. Don’t be **misled by pretty pictures** or use of earth-friendly colours on product labels. MacDonalds or Coca-Cola might have green colour on their logo, that doesn’t make them eco-friendly!
6. Question percentage claims, such as “This product contains 50% more recycled content.” **Fifty percent more than what?**
7. Shop with **intention**: Research a product and brand before making your purchase. As we all know, a quick Google search can sometimes answer a lot of questions!





Reducing our waste is as easy as  
**A,B,C!**

**A** – *Action*

**B** – *Belief*

**C** – *Commitment*

# Case Study: Capannori Town in Italy. *Let's get inspired!*

- Capannori is the **first town** in Europe which declared the **Zero Waste** goal in 2007
- A **small but determined** movement stopped the construction of an incinerator and convinced the town to commit to sending zero waste to landfill by 2020
- The town created a **door-to-door** collection system
- Introduced a **Pay-As-You-Throw (PAYT)** fee
- Provided **training for the community** and strong **engagement** of the residents
- Opened a **Reuse Centre** where items such as clothes, footwear, toys, and furniture can be **repaired and sold** to those in need
- The town has since seen a **40%** of waste reduction
- Separate collection rate to **82%**
- Residual waste per capita reduced by **57%**
- **Waste tariffs** for residents have been reduced by **20%**
- **93 tonnes of items were dropped at the Reuse Centre**
- Capannori became an **international example**. Inspired by its success, today nearly 400 European municipalities are walking the path towards Zero Waste







# Turning Trash into Treasure

*Let's get creative!*



# DIY Palette Furniture



# Old Tyres (Playground Games and Garden Furniture)



# THE 5 R'S OF ZERO WASTE



## Refuse

Single use plastics, disposable cups, shopping bags, utensils, razors, etc. Purchase reusable ones instead!



## Reduce

Your consumption and carbon footprint. Do this by making responsible consumer choices, only buying what you need and avoiding falling for "greenwashing".



## Reuse

As much as possible and repair! Get creative with the help of videos available online. Repurpose goods and give them a new life!



## Recycle

Whatever can't be refused, reduced, reused or repaired.



## Rot

Compost any food waste to grow lovely plants, herbs and veggies in your garden!

*Ireland, it's our turn to act. We can start by educating ourselves and others!*

*Any questions?*

*Thanks for listening. Find out more at [www.zwai.ie](http://www.zwai.ie)*

