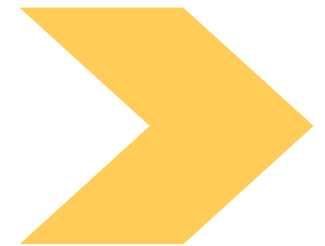







A GUIDEBOOK TO ZERO WASTE OFFICES






Contents



• Context03
• Steps to reducing waste06
• Zero-waste events21
• Sustainable Gifting24
• List of vendors25
• References27



The Context

Plastic is inexpensive and incredibly versatile with properties that make it ideal for many applications. These qualities have also resulted in it becoming an environmental challenge. We follow a 'use-and-throw' lifestyle; estimates record that nearly 50% of plastic is used just once before being thrown away.

- Packaging is the largest end-use market segment accounting for just over 40% of total plastic usage.
- The process of producing bottled water requires around 6 times as much water per bottle as there is in the container.
- Single-use sachets are virtually impossible to recycle in a cost-effective way because of their multi-layer design and small size.

50%

of all plastic produced is for single-use purposes



Less than

9%

of all plastic gets recycled



10 Million

tonnes of plastic is dumped in our oceans annually. That's a truck load every minute



Reducing is better than Recycling

Even though some of the single-use items may be recyclable, it is best to avoid these because -

- PLASTIC is the chief contributor of mixed waste.
- Not everything gets recycled: There are several multilayered items (chips/biscuits packets, paper cups), thin plastic (cling film), non-woven polypropylene, thermocol, styrene items that can not be recycled.
- Resource-intensive process: Items like PET bottles have a recycling value, but it takes a lot of resources (water/electricity/fuel) to produce them and a lot of resources to recycle them. These items are used for a few seconds/minutes being disposed off.
- Few takers for recycled plastic: Plastic becomes more brittle and dull-looking after it has been recycled, and is less preferred than virgin plastic.

Further reading:

Blog: [A case for Zero-Waste](#)

Report: [Chemicals in Plastic](#)

[Plastic Sachets](#)

The easiest way to manage WASTE is not to generate it in the first place!

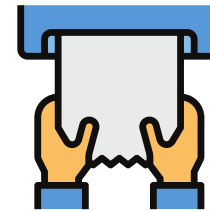
The Office Space

Our workspaces generate vast amounts of waste today, most of which comes from the cafeterias and washrooms. The good news is, with some serious intent and simple process changes, a lot of it can be avoided. This may involve some investment and stakeholder buy-in, but in the long run it is efficient and cost-effective.

This guide will enable you to take the initiative and learn how to reduce the waste footprint of your office and other workspaces.

the top 4 POLLUTERS IN OFFICE SPACES

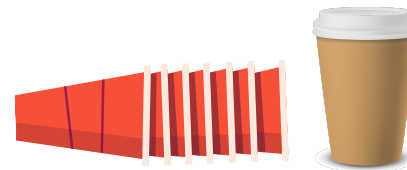
TISSUES



SACHETS



PAPER CUPS



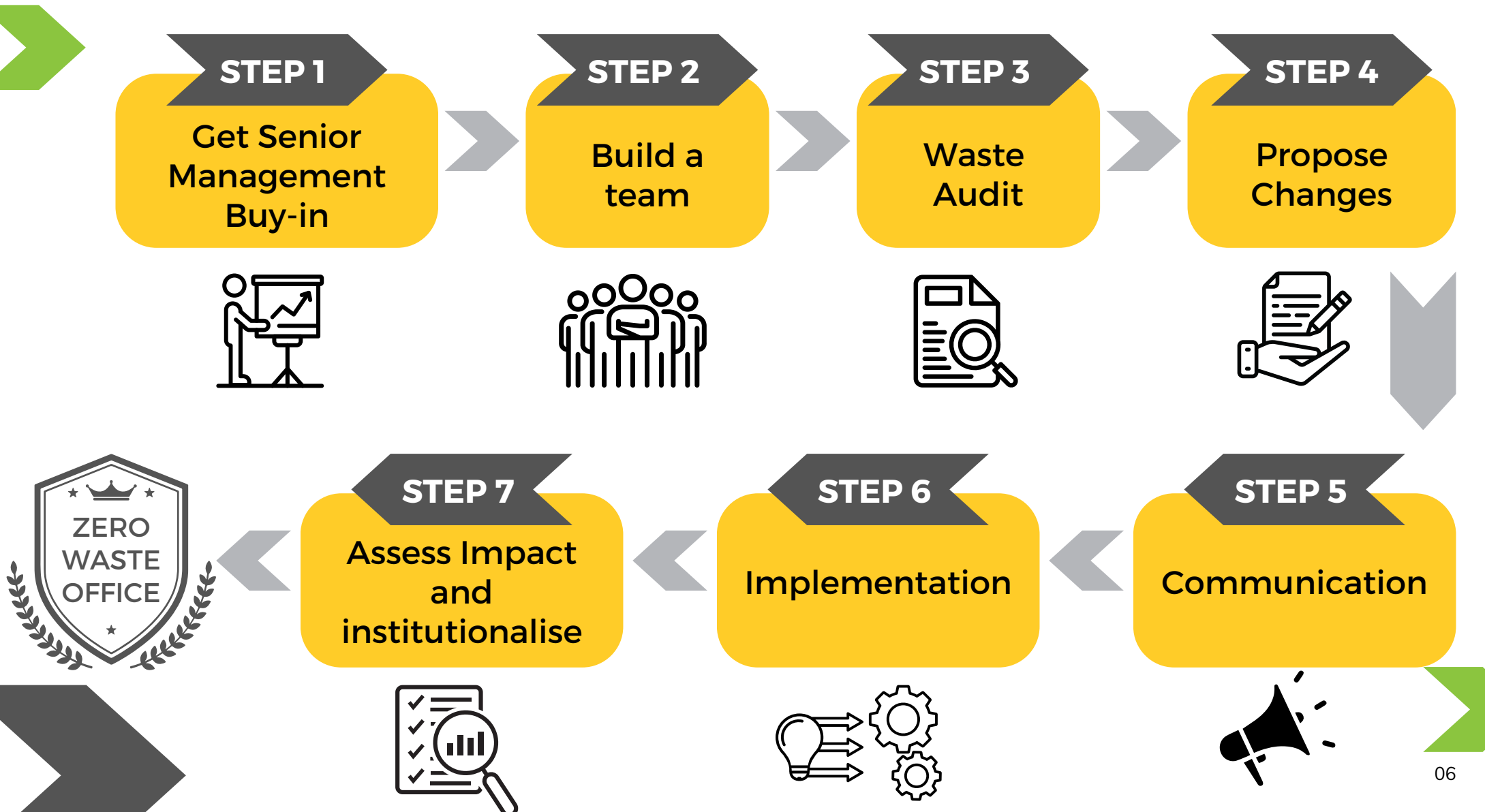
PET BOTTLES



The easiest way to manage WASTE is not to generate it in the first place!

How?

Steps to reduce waste footprint in office premises

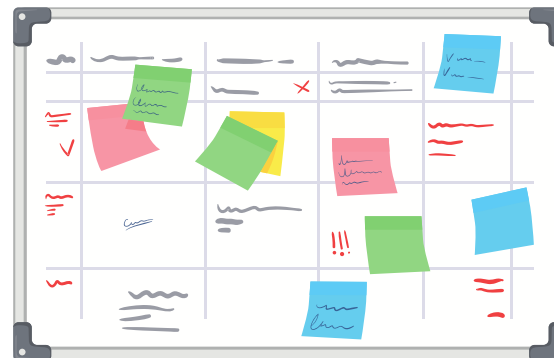


STEP 01

Tips to get Senior Management Buy-in



- **Compliance:** Single-use plastic items are banned by the Central government and several state governments. Non-compliance can result in penalties, shame and legal trouble.
- **Certifications** such as True Zero and IGBC can help reiterate the practice and improve credibility of the organisations that walk the talk.
- **Branding:** Promoting sustainable practices improves the image of the organisation and helps connect with the core values of the organisation.
- **ESG Reporting:** Rising levels of waste is a global problem. Organisations usually focus on waste reduced/eliminated in the manufacturing and packaging processes. But a significant amount of waste can be eliminated on a day to day basis in operations as well. Getting employees to switch to sustainable transport and changing energy consumption patterns are complicated to implement, but moving to low-waste options is a low-hanging fruit and easier to implement.



STEP 02

Build a Team



- **Sustainability champions:** Take support from colleagues who are interested in championing the cause of sustainability. Having a few people on board helps to popularise the idea within the larger organisation.
- **Facilities Management Team:** Get the administration/facilities team involved. Their buy-in will help anticipate any challenges that may arise during implementation of sustainability practices.
- **Professional Support:** Seek support of external experts or consultants to get a professional opinion on implementation. You can also reach out to organisations that have already implemented sustainability measures and learn from their experience.



STEP 03

Waste Audit



Conduct a waste audit to determine the amount, types and destinations for each category of waste.

- **Waste Categories:** (This info can be obtained by the waste management agency engaged to collect the office waste).
 - Wet waste
 - Single-use items provided in the office (further breakup to identify top 10)
 - Other dry waste categories
 - E-waste
 - Hazardous/sanitary waste
- **Destinations:** Where is each stream of waste going? Is it to an authorized destination? Which waste category is the waste management agency struggling with? Probably that can be a good input to reduce. Can it be processed in-house (wet waste can be composted)?

STEP
03

Waste Audit



3. **Sources of Waste:** The following areas can be audited for the generation of waste

- Cafeteria
- Pantry
- Bathroom
- Seating Area
- Meeting Rooms
- Reception
- Security Area
- Printer/Copier area

Determine on what can be reduced using the checklists on page 12

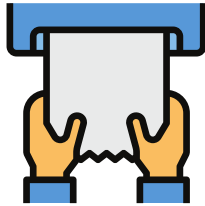
STEP 03

Waste Audit



A few examples of disposables commonly found at office spaces and the possible alternatives are as below:

TISSUES



POSSIBLE ALTERNATIVES

Hand-dryer



Napkins



Get your own hanky



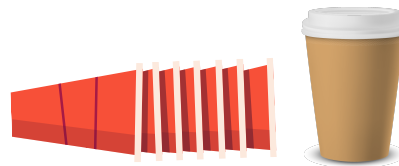
SACHETS



- Large quantity in reusable containers
- Steel spoons as stirrers
- Premade tea in thermos instead of teabags



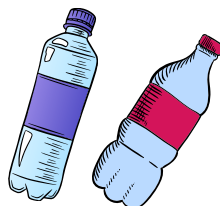
PAPER CUPS



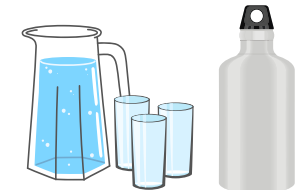
- Reusable tumblers - Steel, glass, fibre
- Steel bottles, ceramic mugs with branding gifted to employees



PET BOTTLES



- Glass/steel jars with water and reusable glasses
- Water dispensers with reusable glasses
- Fresh fruit juices served in glass/steel tumblers



Checklist - A

Check for presence of these items



DISPOSABLE ITEM	USED FOR	MADE OF	CAN IT BE REPLACED BY?	PROCESS CHANGE SUGGESTED
Disposable glasses	<input type="checkbox"/> Water <input type="checkbox"/> Tea/Coffee <input type="checkbox"/> Juice	<input type="checkbox"/> Plastic <input type="checkbox"/> Paper <input type="checkbox"/> Clay	Reusable glasses/cups (Steel, Fibre, ceramic or glass)	<ul style="list-style-type: none"> • Distinction between washed/unwashed • Washing area to be identified
Disposable stirrers		<input type="checkbox"/> Plastic <input type="checkbox"/> Wooden	Steel Spoons	Clear instructions on where to keep used spoons to avoid pilferage
Disposable Straws		<input type="checkbox"/> Plastic <input type="checkbox"/> Paper <input type="checkbox"/> Bamboo	No straws	<ul style="list-style-type: none"> • Encourage employees to drink juices/cold beverages directly • Provide a steel glass for coconut water for those who can not drink it directly
Disposable plates		<input type="checkbox"/> Plastic <input type="checkbox"/> Paper <input type="checkbox"/> Foil laminate <input type="checkbox"/> Arecanut <input type="checkbox"/> Bagasse	Steel/Melamine/Ceramic/ China plates	<ul style="list-style-type: none"> • Encourage employees to rinse the plates off any food • Identify a place(s) for soiled plates
Disposable spoons/fork/knife		<input type="checkbox"/> Plastic <input type="checkbox"/> Wooden	Steel Spoons/fork/knife	<ul style="list-style-type: none"> • Heated holder for spoons/forks

Checklist - B

Check for presence of these items



DISPOSABLE ITEM	USED FOR	CAN IT BE REPLACED BY?	PROCESS CHANGE SUGGESTED
PET Bottles		<ul style="list-style-type: none"> • Water jug with multiple glasses • Water dispensers with reusable glasses • Fresh fruit juices served in glass/steel tumblers 	
Sachets		<ul style="list-style-type: none"> • Sugar cubes, loose sugar in an airtight container • Ketchup/mayo in bigger dispensers • salt/pepper in shakers 	To keep jars closed to minimise ants etc
Tea bags		<ul style="list-style-type: none"> • Pre-made tea in a thermos or pot on hot plate 	
Cling film		Well fitting, reusable air-tight / liquid-tight lids.	
Tissues/PAPER TOWELS		<ul style="list-style-type: none"> • Electric Hand-drier • Napkins 	<ul style="list-style-type: none"> • Encourage employees to bring their own hanky • Have a time-table for replacing napkin with a fresh one.
Packaged cookies / candy / mint		Loose cookies in an airtight jar	

Checklist - C

Check for process for these



ITEM	HOW TO MANAGE?	WHAT CAN BE CHANGED?
Printer Waste	<ul style="list-style-type: none"> • Can near blank or one-side printed waste sheets be kept in a pile that can be used by employees for rough work? • Rest given with dry waste 	<ul style="list-style-type: none"> • Efforts to go paper-less • Discourage employees from printing indiscriminately
Individual dustbins under each desk	<ul style="list-style-type: none"> • Difficult to manage and can be a source of mixed waste 	<ul style="list-style-type: none"> • Change to a set of bins per floor/work area • Ensure colour-coded bins that are manned initially to avoid mixing of waste
Leftover Food	<ul style="list-style-type: none"> • Tie up with organizations that accept food donations like Robinhood Army 	Put in place a food reservation system so that there is some predictability of people having breakfast/lunch in canteen on a particular day
Food waste <ul style="list-style-type: none"> • Cooking waste (peels etc) • After-eating waste (bones, chillies, wasted food) 	<ul style="list-style-type: none"> • Ensure segregation • Engage a responsible vendor who will setup and monitor in-house composting or take it for off-site composting/biogas 	Ensure drum-to-drum transfer without the use of garbage covers
Sanitary Waste	<ul style="list-style-type: none"> • Engage with authorized vendor for incineration like Maridi, Ramky • Engage with recyclers e.g. PadCare 	<ul style="list-style-type: none"> • Encourage the women of the organization to shift to sustainable period care options like Menstrual Cups/cloth pads • Donate/subsidize these products for housekeeping women, blue-collar employees

STEP 04

Propose Changes



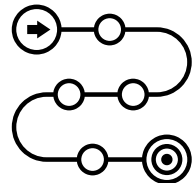
Based on the results of the waste audit, changes will need to be made to reduce waste. This may involve the following:

Infrastructure changes

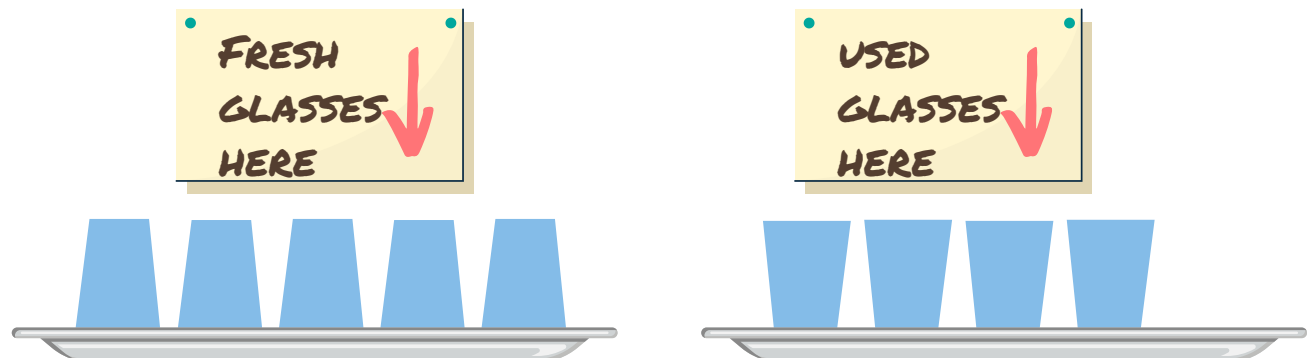


- Procurement of steel, ceramics or other reusable crockery and cutlery instead of single-use cups, paper plates etc.
- Purchase and installation of good quality hand dryers in washrooms instead of use-and-throw paper napkins/non-woven wipes

Process changes



- Modifying or Setting up new processes
- Effective communication to concerned teams about the changes and continuity for the same.



STEP 04

Propose Changes

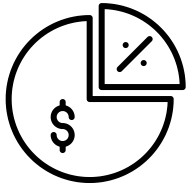


Changes in procurement



- Ensuring that the systems are updated and everyone concerned informed about items that need not be procured again on regular basis. For example items like tissues, paper cups etc are taken off the monthly procurement list.

Budgets



- Initial investment will have to be made for hand dryers. This cost will be recovered gradually in time.
- Initial investment will have to be made for reusable crockery and cutlery. Expect some pilferage initially.
- Cost savings will kick-in in the long run. If possible, have a resource person who can be assigned to keep track of the changes being made and analyse the impact on costs.

Implementation/Timeline plan



- Chart out a project management plan with clear timelines on phasing out of current practices and implementation of new practices.

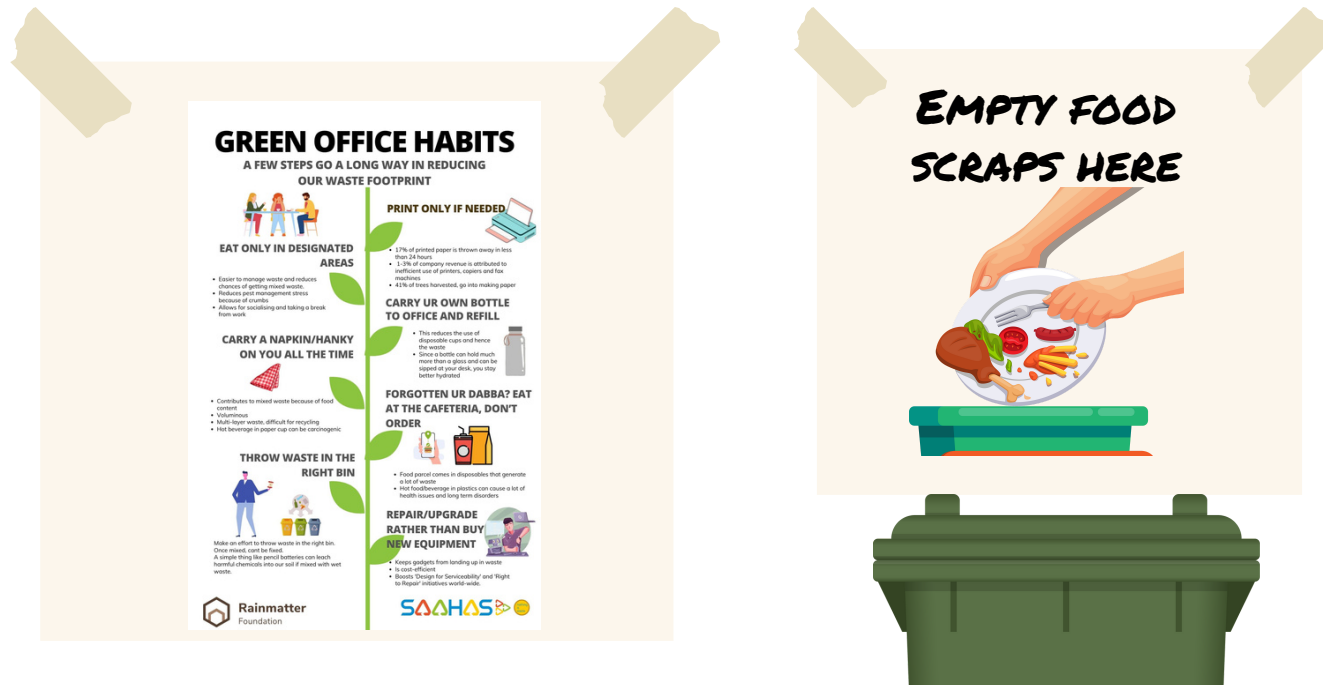
STEP 05

Communication Plan




Communication plan for -

- **EMPLOYEES:** Have a clear communication plan to keep the employees informed of the proposed changes with a rationale for the same. While many may be supportive/neutral of such moves, one can expect some opposition, which will need to be dealt with patiently.
- **ADMIN STAFF:** Clear communication also needs to be made on expectations from admin staff for maintaining the practices such as identifying designated places to return crockery/cutlery etc.
- Prepare an FAQ document that provides rationale and other questions that may come up as part of the change.
- **VISITORS:** Signboards, emails, visitor check-in brief.
- Visible posters in key office areas, especially pantry and cafeteria.




STEP 05


Tips to enthuse employees towards going zero-waste

 Involve them in waste-related engagement activity like **plogging, composting, a visit to a Material Recovery Facility or a Dry Waste Center**




 **Street plays/standup comedies/jingles** to show the impact of wasteful habits (tissues, paper cups)




 Involve employees in the **audit** of their work areas, publish results of the audit

 Witty **posters/memes**. See [this](#) for reference.

 **Sessions** by experts on sustainable menstruation, home composting, zero-waste travel, etc

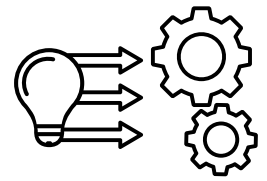


 **Art competitions** for employees/employee children with waste-related themes



STEP 06

Implementation



Implement and monitor solutions in phases. Check for loopholes/feedback and tweak accordingly.

- Positive re-inforcement for compliant behaviour.
- Inspection and enforcement: Warning/penalising vendors that are still serving in disposables.
- Continuously communicating the new process, making social media noise, making the employees proud of the collective achievement so that there is greater ownership to uphold the new process.
- A few senior people can lead by example.



STEP 07

Impact Assessment



- Post implementation **audit**: Measurables -
 - Reduction of waste
 - Impact on operational cost
 - Impact on employee satisfaction
- Monitoring notes and **review with stakeholders** - senior management, external vendors, facilities team, employee representatives
- **Continue the momentum**, keep talking about it and have people remain enthusiastic about the changes



Zero-Waste Events

Guideline for Zero-waste **In-Office** Events

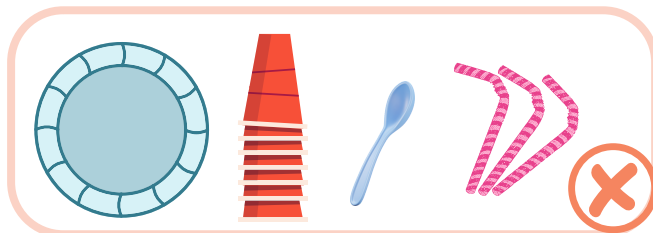
DECORATION

No balloons, decoration of plastic colour paper etc. Flowers can be used for decoration. For inaugurations, flowers strung together with a jute thread can be used rather than cutting ribbons. Invest in reusable decorations that can be reused again and again over the years, such as decorations on a christmas tree.



SERVEWARE

No paper plates, paper cups, stirring sticks, plastic forks/spoons, tissue papers etc. to be used. Only use reusable plates, bowls, cups, glasses, spoons, forks etc. For large events, some amount of planning will be required that will involve planning for additional manpower for washing and cleaning.



Zero-Waste Events

Guideline for Zero-waste **In-Office** Events

FOOD

- Avoid pre-packed food as far as possible. Pre-packaged food not only creates single-use disposable waste but also generates a lot of food waste as most people are not able to consume all the food.

GIFTS

- Gift items can be handed out unwrapped or use paper to wrap



OTHERS

- All team building activities should use minimal resources and not generate a lot of waste. Plastic waste should definitely be avoided at all costs.
- Colour-coded waste bins should be placed at accessible locations to dispose waste.



RED FLAGS

- Bouquets
- Balloons
- Plastic streamers
- Flex banners
- Food in disposables
- Unmanned bins

GOOD OPTIONS

- Potted plants
- Drapes
- Upcycled cloth bunting
- Digital banners
- Food in reusables
- Manned bins

Zero-Waste Events

Guideline for Zero-waste **Off-site trips**

Ask the resort/venue management team for a zero-waste event, guidelines for which are as follows:

- No balloons, decoration of plastic colour paper etc. Flowers, drapes, potted plants can be used for decoration.
- No bottled water. Only water dispenser/jug with reusable glasses
- No paper plates, paper cups, stirring sticks, plastic forks/spoons etc. to be used. Only use reusable plates, cups, glasses, spoons, forks etc.
- No tissues. Provide cloth napkins or nothing.
- No sachets. Sugar/ketchup in bowls/containers
- All team building activities should use minimal resources and not generate a lot of waste. Plastic waste should definitely be avoided at all costs.



RED FLAGS

- Bouquets
- Balloons
- Tissues
- Flex banners
- Food in disposables
- Shiny giftwrap

GOOD OPTIONS

- Potted plants
- Drapes
- Upcycled cloth bunting
- Name on whiteboard
- Food in reusables
- Gifts with paper wrap

Sustainable Gifting

Employee/visitor gifting ideas


- Avoid gifts as far as possible
- If unavoidable, avoid packaging for gifts or use paper packaging
- No bouquets with plastic/non-woven wrapping. A bunch of flowers is a good alternative.
- E-vouchers (preferably of sustainable, responsible brands)
- Re-usables: Steel bottles, coffee mugs, cloth napkins/handkerchiefs, cloth bags, USB drives, headphones etc
- Stationery: Recycled paper diaries, pencils, refillable pens
- Upcycled: Laptop bags made from upcycled denim, tote bags made from MLP etc
- Natural personal care products made by NGOs
- Plants/seeds





Vendor List





- 
- Corporate Waste Management
 - All waste: [Saahas Zero Waste](#), [Hasirudala Innovations](#)
 - Wet Waste: [Stonesoup](#) (Bangalore), [Sudh Labh](#) (Bangalore), [Carbonlites](#) (Bangalore)
 - Sanitary Waste: [Ramky](#), [Maridi](#), [PadCare](#)
 - E-Waste: [e-parisaraa](#)
 - Event Waste Mangement
 - [Hasirudala Innovations](#)
 - Skrap Zero Waste: [skrap.in](#)
 - [Earth-sitters](#)
 - Green Event Decorations
 - Decorators [Green Utsav](#) (Bangalore), Skrap [skrap.in](#),
 - Decorations - [The Abhinaya Store](#), [Upcycling Artist](#), [Circleup](#)
 - Paper
 - Printing on recycled paper: Maya Printers - 78922 67848 (Bangalore)
 - Unlaminated Kraft Paper boxes for packaging: Karthik Paper - 9945797125 (Bangalore)
 - Kraft Paper. tapes: [brownliving.in](#)
 - Packaging material: [dharaksha](#)
 - Rent steel plates/cutlery for events: [list](#)
 - Leftover food: [Robinhood Army](#)
- 
- 



Vendor List



- 
- Repair
 - Electronics: bro4u.com, [ifixit](http://ifixit.com), Urban Company (app)
 - Shoes/Bags/Trolleys: spincycles.in [Mr Pronto](http://MrPronto.com), myshoeclinic.com
 - Upcycled Items:
 - [Recharkha](#) : Products upcycled from low value plastic
 - [Rimagined](#): Products upcycled from tyres, fabric waste
 - [Circleup](#): Products upcycled from fabric waste, recycled paper stationery products, upcycled furniture
 - [Dwij](#) : Products upcycled from used jeans
 - [Oh Scrap Madras](#): Upcycled cloth items, thrift store
 - Natural Products:
 - [Bare necessities](#) : Personal care products
 - [Praanapoorna](#): Natural cleaners
 - [Wild Ideas](#) : Personal care products
 - [Last Forest](#) : Honey and other forest products
 - [Sampoorna Ahara](#) : Plant-based food/snacks based in Bangalore
 - [BRICS](#) : Natural cleaners
- 

Appendix A: Ban on Single-Use Plastic (SUP)

The Government of India has identified single-use plastic items, which have low utility and high littering potential, and which have been prohibited, with effect from 1st July, 2022, vide Plastic Waste Management Amendment Rules, 2021:

- Ear buds with plastic sticks, plastic sticks for balloons, plastic flags, candy sticks, ice-cream sticks, polystyrene [Thermocol] for decoration;
- Plates, cups, glasses, cutlery such as forks, spoons, knives, straw, trays, wrapping or packing films around sweet boxes, invitation cards, and cigarette packets, plastic or PVC banners less than 100 micron, stirrers.

Detailed document: [here](#)



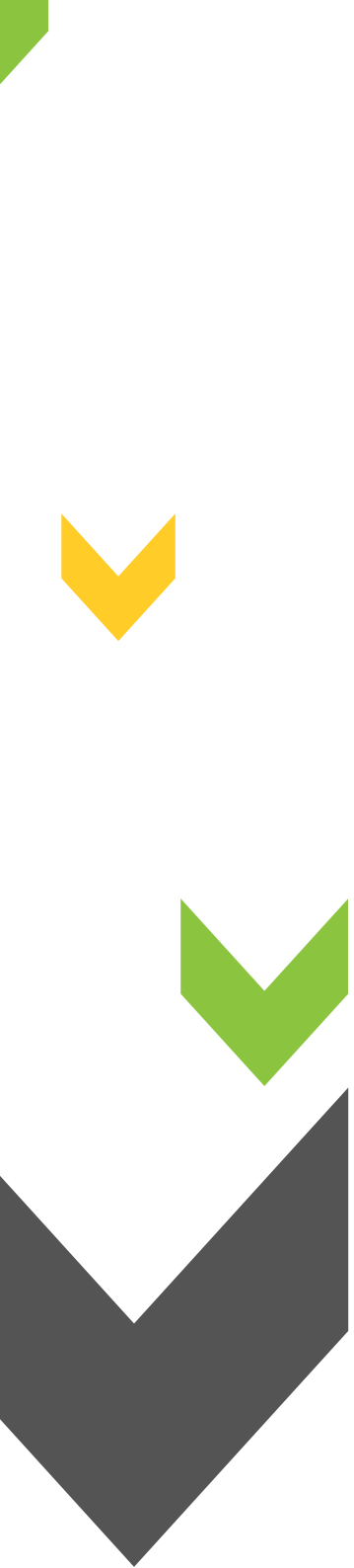
Appendix B: Karnataka Plastic Ban

Notice issued by Forest, Ecology and environment secretariat on 11th March 2016.(FEE 17 EPC 2012)

Karnataka state has banned Manufacturing, Supply, Sale and Use of plastic under section 5 of the Environment Protection Act 1986.

- Banned plastics
- Plastic carry bags
- Plastic banners
- Plastic buntings
- Flex
- Plastic flags
- Plastic plates, cups and spoons
- Cling films and plastic sheets spreading on dining table including the above items made of thermocol and plastic which use plastic micro beads

Detailed document: [here](#)



**We don't need a handful of people
doing zero waste perfectly. We need
millions of people doing it
imperfectly.”**

— Anne Marie Bonneau, The Zero-Waste Chef

Start your zero waste journey in small steps, if a big change looks difficult. In case of doubts, queries or suggestions please feel free to reach out to us.

smitta.kulkarni@saahas.org

tanmayi.gidh@rainmatter.org

