

## **Project Title**

CGH Food Services Environmental Sustainability Transformation Journey

## **Project Lead and Members**

- Varona Chan
- Alex Chong
- Vince Goh

## **Organisation(s) Involved**

Changi General Hospital

## **Healthcare Family Group Involved in this Project**

Healthcare Administration

## **Applicable Specialty or Discipline**

Nutrition & Dietetics

## **Project Period**

Start date: Not Available

Completed date: Not Available

## **Aims**

- 1) Reinvent Food Waste
- 2) Repurpose Plastic Packaging
- 3) Reduce Single Use Disposables

## **Background**

See poster appended/ below

## **Methods**

See poster appended/ below

## **Results**

See poster appended/ below

## **Conclusion**

See poster appended/ below

## **Additional Information**

Singapore Healthcare Management (SHM) Congress 2023 – 1<sup>st</sup> Prize (Environmental Sustainability category)

## **Project Category**

Care & Process Redesign

Operational Management, Sustainability, Recycling, Food & Plastic Waste

## **Keywords**

Food Wastage, Recycling, Going Green, Environmental friendly, Carbon Zero, Plastic Waste

## **Name and Email of Project Contact Person(s)**

Name: Varona Chan

Email: [singaporehealthcaremanagement@singhealth.com.sg](mailto:singaporehealthcaremanagement@singhealth.com.sg)



# CGH Food Services Environmental Sustainability Transformation Journey

Singapore Healthcare Management 2023

Varona Chan  
Alex Chong  
Vince Goh  
(Food Services)



Changi General Hospital  
SingHealth

## Introduction



Food waste, plastic packaging and disposables are generated daily in Food Services Department. These increases our carbon footprint generated from the incineration of waste which contributes to global warming.

### Food Waste

This can be classified under avoidable or unavoidable. By targeting on the avoidable food waste, it helps in waste reduction. Smart food preparation can also help to minimize food the waste.

### Food Packaging

The Food Services team have also reviewed the various food packaging disposed—in the department which can be further repurpose into various usage.

### Single-Use Disposables

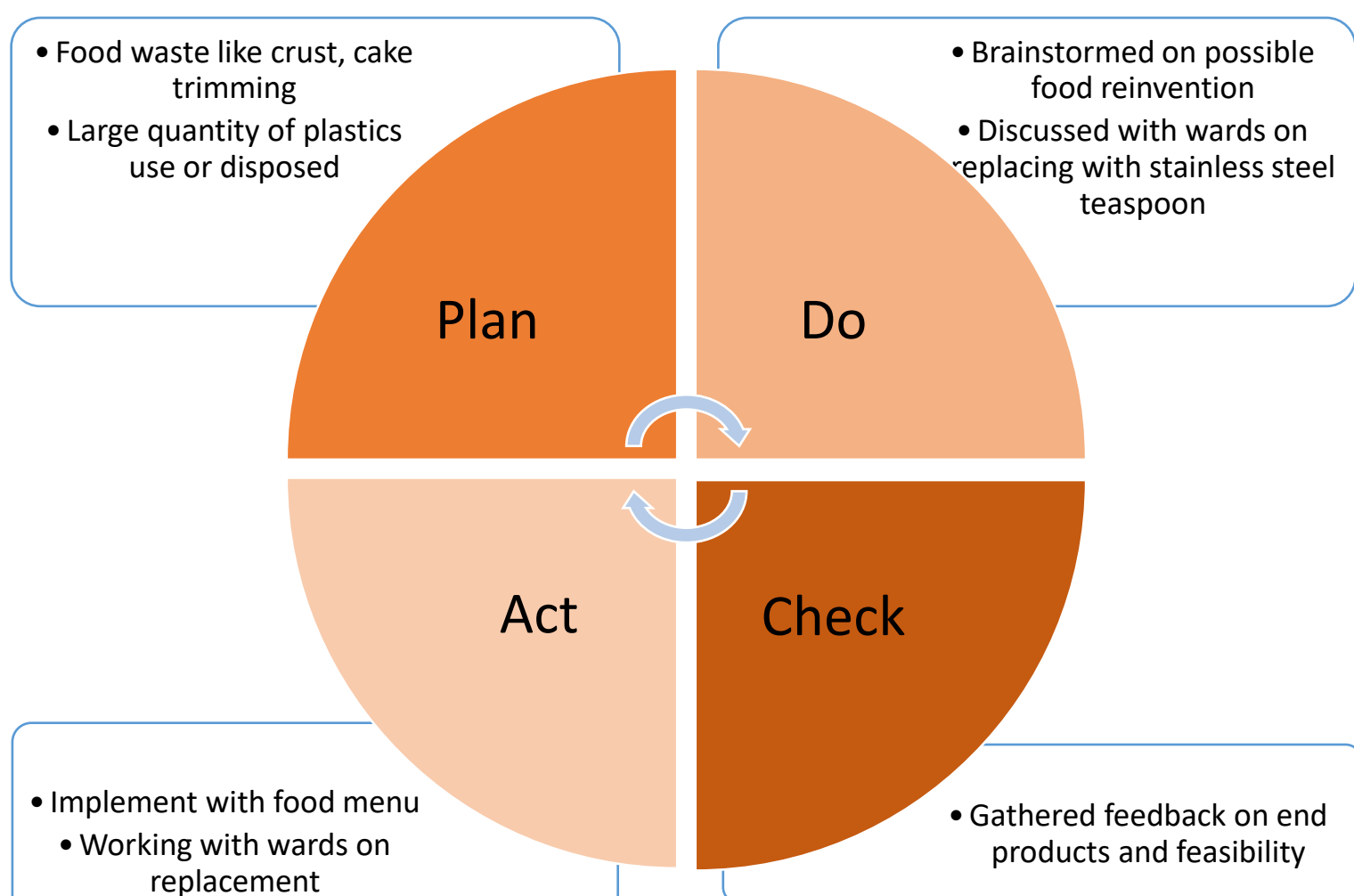
There are many single-use disposables used by inpatient and special catering. The team worked with internal stakeholders to remove this as a conscious effort for environmental sustainability.

## Aims



- 1) Reinvent Food Waste
- 2) Repurpose Plastic Packaging
- 3) Reduce Single-Use Disposables

## Methodology



Our journey towards environmental sustainability begins with the team discussing on potential items which can be repurpose and reduce by adopting the Plan-Do-Check-Act “PDCA” cycle.

From **→** To Reinvent, Repurpose, Reduce

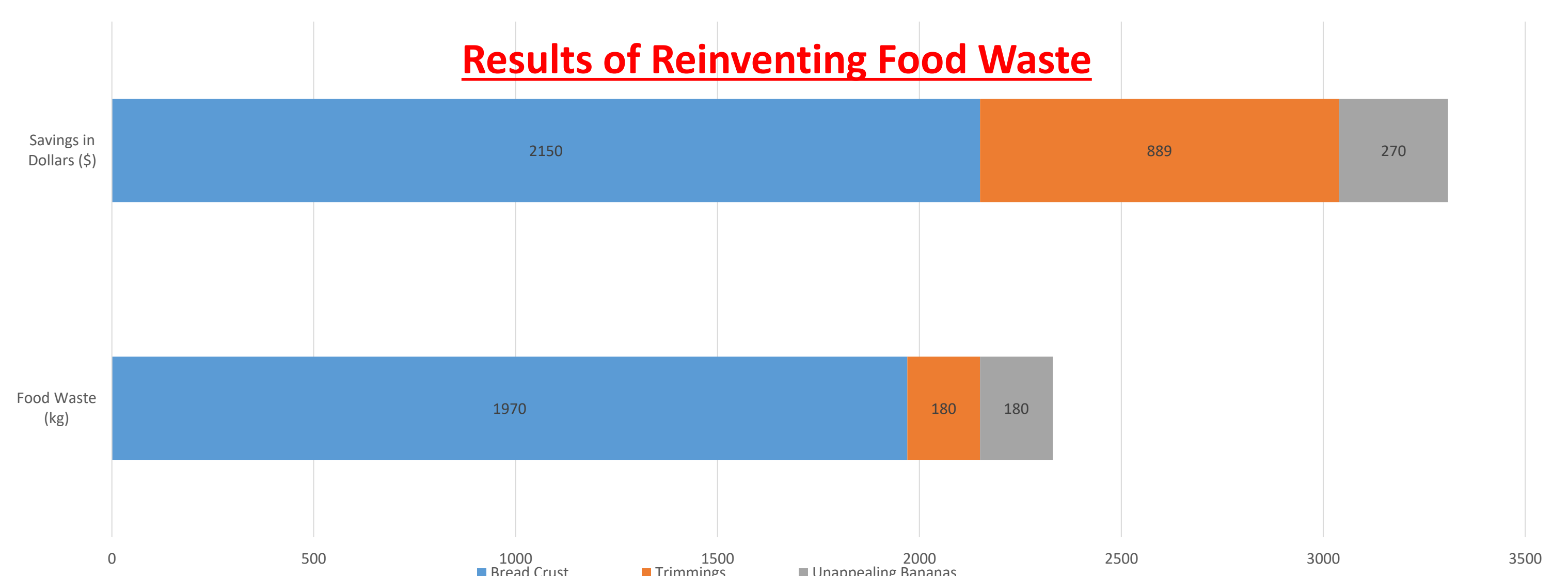
		Reinvent to mini pizza, bread puddings for catering
		Reinvent to muffins for childcare snacks & staff sale
		Reinvent to banana bread for snacks, staff sale & function
		Reduced and replaced with stainless steel teaspoons
		Repurposed for daily kitchen storage & function condiments
		Reduce by placing condiments directly on patients' meals

## Results



### Reinventing Food Waste

A total of 2,330kg of potential food waste comprising of bread crust, cake trimmings and bananas were reinvented to produce by-products such as bread pudding, pizza, muffins and cakes. This translate to a cost savings of \$7,100 should we purchase fresh ingredients to produce it instead



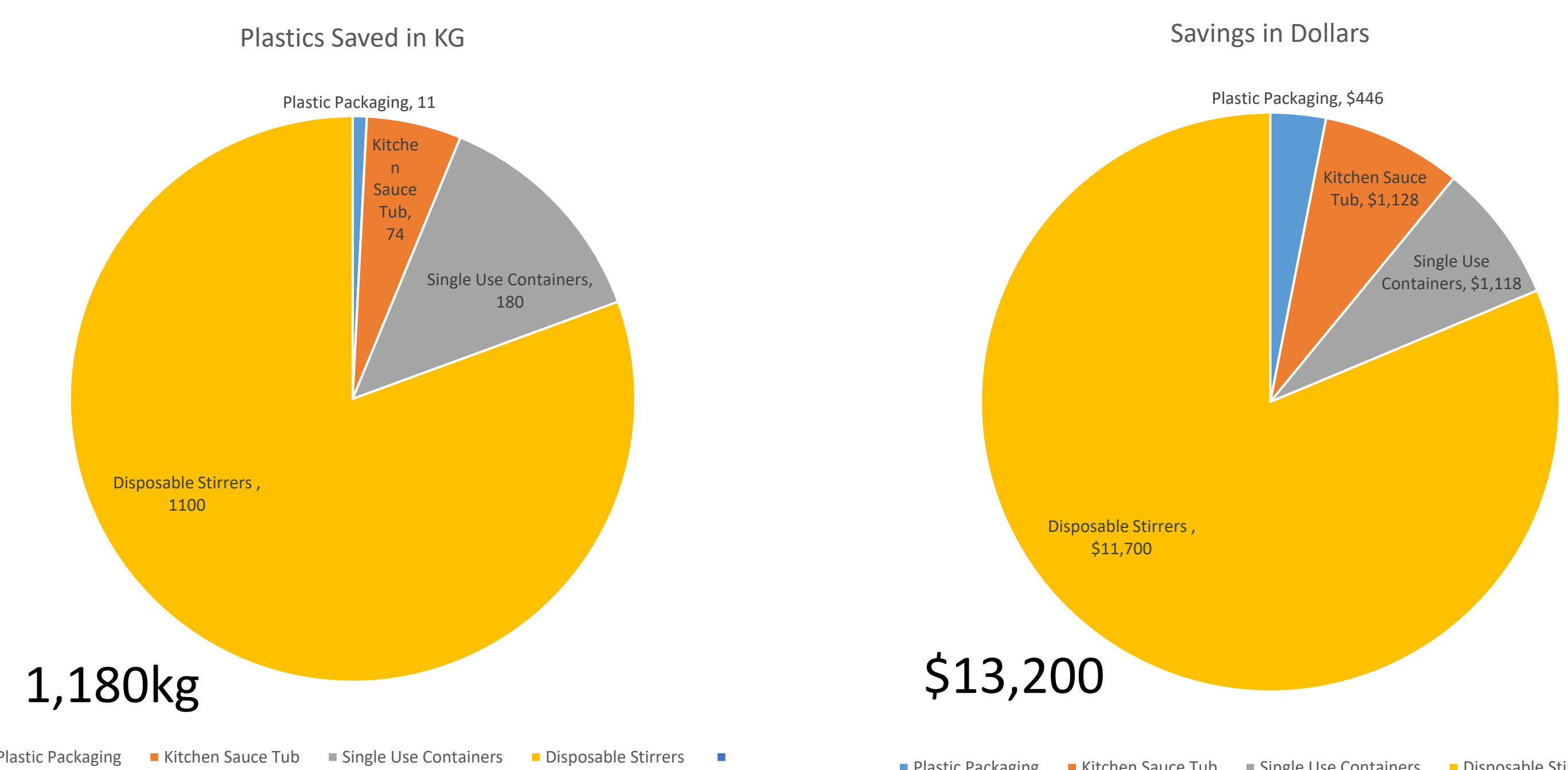
### Repurposing Plastics

From the efforts and out of the box thinking, 85kg of plastic waste was reduced from repurposing for storage and daily kitchen use, resulting in cost savings of approximately \$1,600 should we purchase new containers instead.

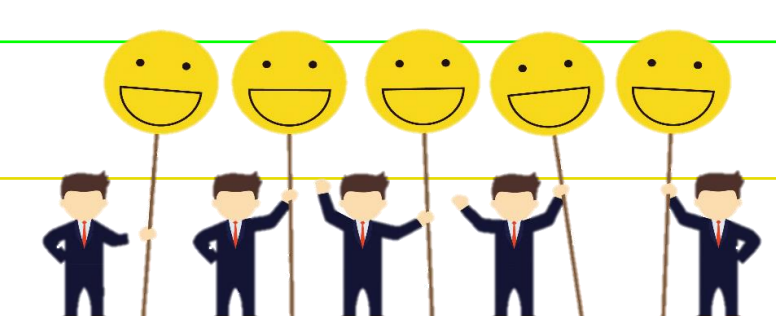
### Reduce Single-Use Disposables

The strong move towards environmental sustainability and removing disposable stirrers and reducing the plastic condiments in the wards resulted in an annual cost savings of \$11,700. This is equivalent to saving the landfills with 1,100kg of plastic waste

### Total Plastics Savings in (KG) and Dollars (\$)



## Conclusion



These green initiatives aimed to repurpose food trimmings, reuse and reduce of plastics and single-use disposables have proven to be a success. These efforts will greatly benefit the hospital in its sustainability development in line with government directive towards green movement and further cost savings for the department.