



TTSH Earth Day Project Showcase

Project 1: Solostar Reborn Recycling Program

- The programme aims to give a new life to the used Solostar insulin pens through the dedicated upcycling of used insulin pens into a revolutionary synthetic material called NEWBitumen.
- NEWBitumen replaces traditional crude-derived Bitumen for road construction, reducing the overall reliance on fossil fuel-derived materials.



Why is Recycling these pens Important?

- Insulin pens consist of a mix of different materials which cannot be accepted by most recycling centers.
- Once used and discarded, they add to the growing problem of medical waste, which can pollute our landfills and waterways.

Solutions + Results

Solostar recycling bin were placed at 2 locations and the public is encouraged to deposit their used pens during their hospital visits.

Locations	Number of pens (Monthly average)	Total Weight collected	Estimated carbon emission reduction
AMK SC	572	14.3kg	4.53kg*
TTSH B2 Outpatient Pharmacy	160	4 kg	1.27kg*

*Through Magorium's technology, up to 316.5kg of carbon emissions are reduced for every ton of plastic waste recycled



How Can I Help?

SOLOSTAR REBORN

A new life for your Solostar Insulin Pens

RECYCLE YOUR USED INSULIN PENS* HERE

A NEW LIFE FOR YOUR USED INSULIN PENS

RECYCLABLES

Only the five insulin pens* above

DO NOT THROW

No trash (e.g. needles, cotton buds, paper cups, tissue papers, etc)

REMOVE THE NEEDLES WHEN RECYCLING THE USED INSULIN PENS
請在回收前將針頭取下
SILA KELUARAKAN JARUM DI DALAM PEN INSULIN ANDA SEBELUM MENYERAHKANNYA UNTUK DIKILAH SEMULA
Dapatkan lebih maklumat mengenai perkhidmatan kami dengan
Scan the QR code
Untuk maklumat lanjut mengenai perkhidmatan kami

sanofi HAT-80-2300775-1-D-USA/2020

You can drop off your used Solostar pens at the following locations:

- TTSH B2 Outpatient Pharmacy, Pharmacy Care Corner
- AMK Specialist Centre, Level 1

Project 2: Pharmacy medication packaging recycling

Recycling of pharmacy medication packaging is another initiative to reduce the amount of discarded waste.

Examples of packaging:

- Medication carton boxes
- Product information leaflets
- Pharma plastic bottles
- Used Ziploc bags from Pharmacy medication returns



Why is Recycling these packaging Important?

- Medication packaging, such as medication carton boxes and product information leaflets, are usually discarded as general waste.
- However, as these packaging materials are non-hazardous, they can actually be sent for recycling.

Solutions (How)

- Dedicated bins were placed at TTSH Outpatient Pharmacy to collect different types of waste – General waste bins, Confidential bins, Recycling bins (Paper) and Recycling bins (Plastic).
- Posters were designed to educate staff about proper segregation and to minimize contamination.



Solutions

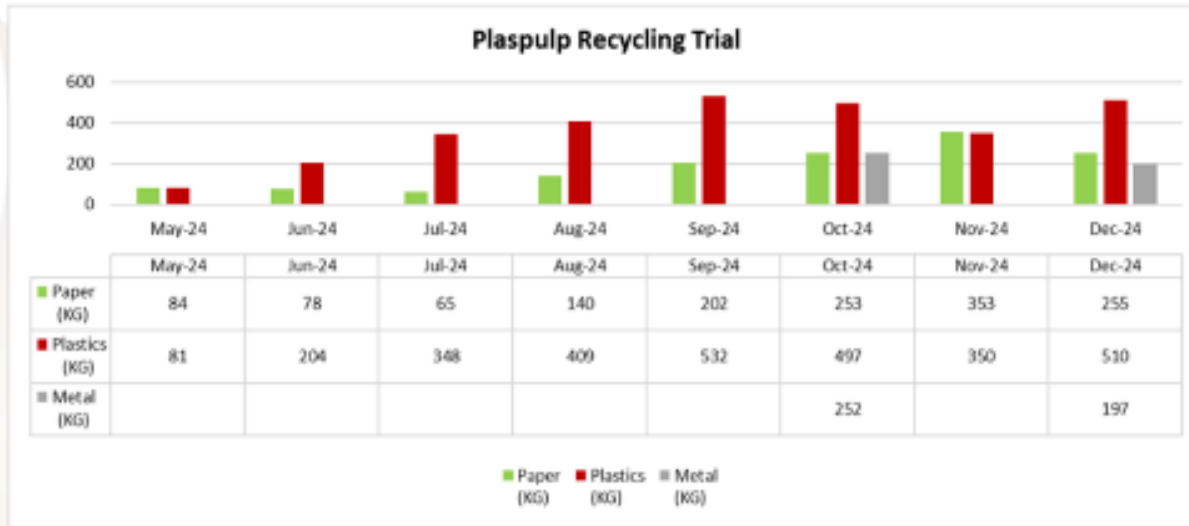


Dedicated bins for different waste located in Outpatient Pharmacy

Results (How)

- Collective results from all Departments in TTSH (not just Pharmacy)

Plaspulp Trial Waste Data (Recyclable Waste)



2024	Paper (KG)	Plastics (KG)	Metal (KG)
TOTAL KG	1430	2931	449
TOTAL TONS	1.43	2.93	0.45

How Can I Help?

- Not Applicable for the public however;
- Pharmacy staff can help by discarding waste into the appropriate bins- General waste/ Confidential bins/ Recycling bins (Paper)/ Recycling bins (Plastic)

Project 3: Green Doctors Programme

Recycling of empty
medication blister strips



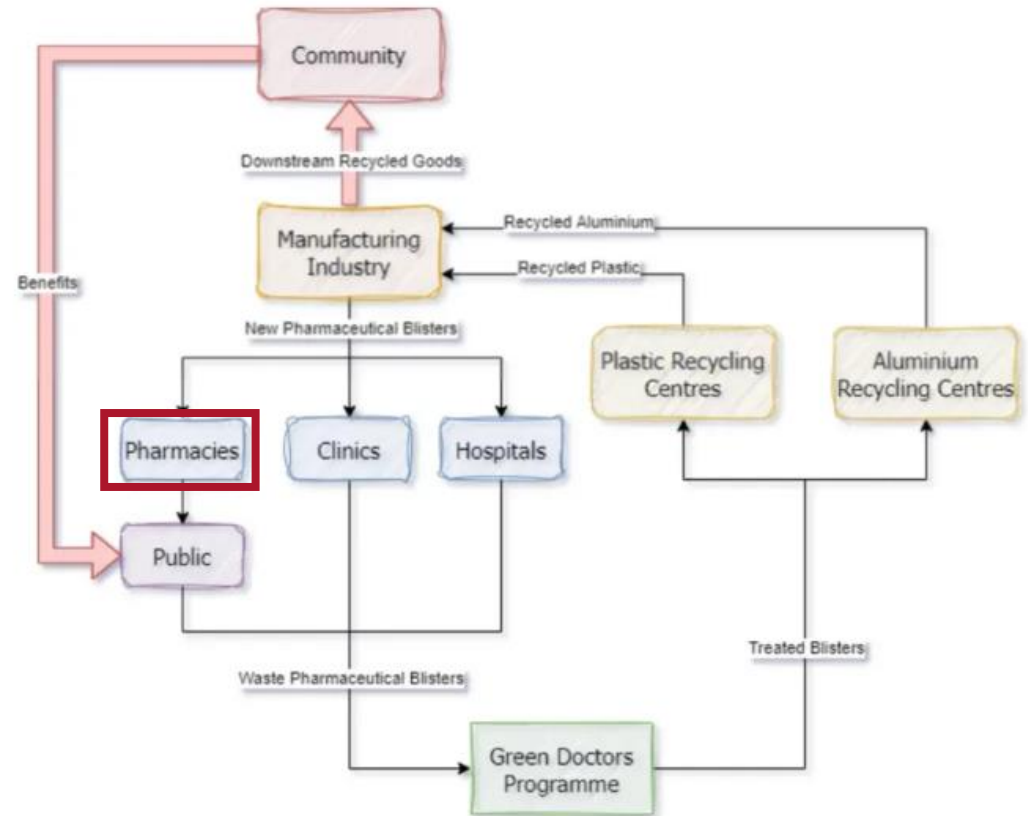
Why is Recycling Blister packs Important?

Medication blister strips contain mixed materials- plastic polymers and aluminium which cannot be recycled given the current technology gap.



Why is Recycling Blister packs Important?

By separating the plastic and aluminium layer in medical blisters, they can then be recycled and turned into useful products, hence closing the circular loop.



Solutions + Results

Within a 1-month trial, we collected 5.87kg of empty blister strips from the public.



RECYCLE your empty medical blisters now!

Where?
Tan Tock Seng Hospital Basement 2 Pharmacy

When?
Now - end of June 2024

A pilot programme by  Green Doctors Programme

In collaboration with  Tan Tock Seng HOSPITAL
National Healthcare Group

The sign features a green recycling symbol at the top left. Below it, the text 'RECYCLE your empty medical blisters now!' is written in bold. Underneath, the location 'Tan Tock Seng Hospital Basement 2 Pharmacy' and the time period 'Now - end of June 2024' are listed. At the bottom, logos for the Green Doctors Programme and Tan Tock Seng Hospital are shown. A central illustration depicts a blue recycling bin with a green lid, overflowing with white blister packs.



Bin Etiquettes

Please DO NOT contaminate the recycling bins with these items:

- Blisters Containing Medicine
- Medication Boxes
- Needles
- Bottles
- Tubes
- Cytotoxic Wastes

 Green Doctors Programme

The sign is titled 'Bin Etiquettes' and includes the Green Doctors Programme logo. It lists six types of items that should not be placed in the recycling bins: Blisters Containing Medicine, Medication Boxes, Needles, Bottles, Tubes, and Cytotoxic Wastes. Each item is accompanied by a small icon and a red 'X' mark, indicating that these items are prohibited.



Project 4: Upcycling of Pharmacy Coats

This initiative is to highlight the amount of uniform waste generated with auto ordering.

The donation of Pharmacy coat will:

- 1) help to reduce waste (through upcycling instead of discarding into landfill)
- 2) help needy patients (proceeds will go to the Red Ribbon project)

This initiative also encourages staff to be more mindful when they order their new coats, to only request for replacements, if necessary, as there were a lot of donated coats though used, remain fairly new. This initiative of blending sustainability with contributing to a meaningful cause, is a rewarding experience for all.

Why is Upcycling of Pharmacy Coats Important?

- Every year, pharmacy staff are given 3 new pharmacy coats
- There is wastage as many staff have used/extra pharmacy coat that is lying around at home, taking up space in the closet



Solutions and Results

- White Coats were collected from Pharmacy staff and donated to NCID Cares- Red Ribbon Project whereby Pharmacy coat were upcycled into inner linings to make water bottle holders and lunch bags.
- \$747 raised in half a day during Pharmacy Week and all the proceeds were donated to Red Ribbon Project.



The purpose of the Red Ribbon project is to help needy patients living with HIV/AIDS to

- build confidence and self-esteem
- assist patients' return to paid employment
- provide diversional therapy

Pharmacy Week 2024

Donate your Pharmacy White coat*

**Pharmacy coat to be in good condition*



Donation Drive: 16 to 30 Aug 2024

It is more than a white coat.

Support **NCID cares** and **Red Ribbon Project** by giving your Pharmacist coat another purpose!

The fabric will be upcycled into inner linings to make **Water bottle holders/ Lunch bags**

The sale proceeds will be donated to the Red Ribbon Project.



Collection bins at:

- Inpatient Pharmacy
- B2 Outpatient Pharmacy



Thank You 

