

**Project Title**

GO GREEN Initiative from Office Desk to Operational Practices in a Laboratory Animal Research Facility

**Project Lead and Members**

Project members: Edgar M. Pena, Judith M. Mercado, Zaw Min Tun

**Organisation(s) Involved**

Singapore Health Services Pte. Ltd.

**Healthcare Family Group(s) Involved in this Project**

Ancillary Care

**Applicable Specialty or Discipline**

Animal Research

**Project Period**

Start date: Not Available

Completed date: Year 2023

**Aims**

- To establish a paperless office operation policy without compromising the workflow of laboratory animal research facility
- To create a faster, more efficient and secured sharing of experimental documents and research operation paper works
- To implement sustainable recycling program of used papers and utilize the end product to promote and enhance the welfare of research animals e.g chickens
- To reduce the amount of manpower and resources being utilized for filing, utilization and disposal of paper documents

## **Project Attachment**

See poster appended/ below

## **Background**

See poster appended/ below

## **Methods**

See poster appended/ below

## **Results**

See poster appended/ below

## **Conclusion**

See poster appended/ below

## **Project Category**

Technology

Digitalization, Digitization

## **Keywords**

Digitalization, Paperless

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**Singapore Healthcare  
Management 2023**

# GO GREEN Initiative from Office Desk to Operational Practices in a Laboratory Animal Research Facility



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## Introduction

The inception of the very first “world earth day” in 1970 has since mobilized a billion individuals from almost 192 countries for initiatives to promote green planet (<https://www.earthday.org/>). Singapore’s Ministry of Sustainability and the Environment has been a supporter of this global initiative and is leading the campaign in promoting green community that encourages every local and resident’s participation (<http://www.gogreen.sg>).



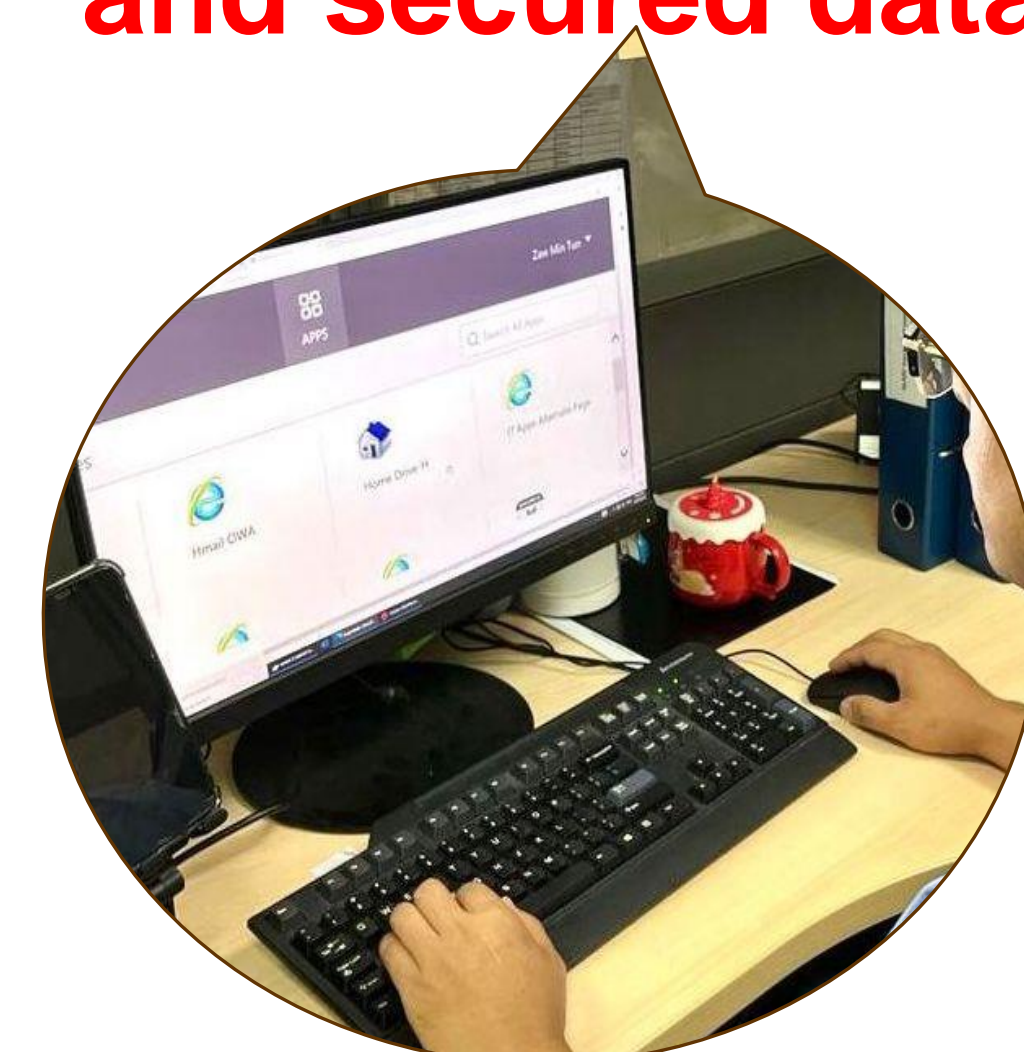
The recycling and reduced paper use are few of the usual environment friendly programs in an office setting. The laboratory animal research facility operation uses significant amount of paper for data recording, regulatory approvals and to document experimental procedures. An organized paper trail and documentation processes facilitates good conduct of experiment and contributes to higher cost recovery rate of research facility. Whilst documentation using papers are traditionally effective, every single sheet used is equivalent to a piece of tree pulp. It was estimated that a ream (500 sheets) of paper produced have utilized 5% of a standard pine tree size and this statement is closely related to a number of environment driven organizations’ claims i.e. *Ribble-pack.com*, *Conservatee.org* etc. on how much trees are used in global paper production for years.

## Objectives of the Program

- ❑ To establish a paperless office operation policy without compromising the workflow of laboratory animal research facility.
- ❑ To create a faster, more efficient and secured sharing of experimental documents and research operation paper works.
- ❑ To implement sustainable recycling program of used papers and utilize the end product to promote and enhance the welfare of research animals (e.g. *chickens*).
- ❑ To reduce the amount of manpower and resources being utilized for filing, utilization and disposal of paper documents.

## Methods

- **Experimental Data Gathering**
- **Paperless documentation and secured data sharing**
- **Utilizing shredded paper as beddings for research animals**
- **Transporting safely animals to the Lab.**



## Results and Value to Lab Animal Research Facility Operation

The **Go Green** (paperless) program has started making **transformational changes** in the workflow after being implemented for less than a year:

- ✓ Review and approval of research project service reports **were shortened from 3 days to 1 day** and it facilitated faster submission of invoices for timely billing to principal investigators and facility users.
- ✓ A **reduction of 2 (two) reams of A4 size paper consumption** was recorded three months after the onset of implementation.
- ✓ Frequency of ordering office stationaries **dropped and utilization of supplies lowered**.
- ✓ **Achieved sustainable utilization of recycled papers** that were converted as day-old chicks comfort beddings and enrichment during transport and housing which will contributed to better human life saving translational research results.

