

Business Case: Manage Reusable Thermal Packaging Solution to Reduce Carbon Footprint

General Information

SFS Global Logistics Pte Ltd would like to find out how much carbon footprint is saved each time a reusable thermal box is used for export door to door within Asia Pacific vs traditional single use thermal packaging solutions.

In addition, how these reusable thermal boxes can be accounted for within the Asia Pacific region and to track its number of usages. The objective is to maintain an audit trail that could be used to compare cost of reusing thermal boxes versus cost of a single use thermal packaging (which will be disposed after use), and to audit compliance.

1. Products

Reusable high performance vacuum insulation thermal packaging using phase change materials (PCM) to maintain temperature integrity.

2. Places

Singapore will be where the temperature sensitive pharmaceutical products will be exported out to Asia Pacific region. After each delivery, the empty reusable thermal boxes will be collected and returned locally to SFS branch offices across Asia Pacific for next reuse to another Asia Pacific location.

Issues Encountered

SFS has developed the reusable thermal packaging solution that has better performance and more competitive pricing to other thermal packaging. To add value, SFS needs to ensure there is an audit trail each time the box is reused for the next job in addition to measuring the carbon footprint per shipment.

SFS does not have the technology to address the requirements of the clients as this is a new service that no competitor has started within the Asia Pacific region.

SFS reviewed other current thermal packaging suppliers and freight forwarding companies specialising in these fields to identify common possible challenges:

- a. Once the shipment is exported from Singapore and delivered to the destination country, the empty box is couriered back to Singapore, and this “empty-returned” process would add more costs to subsequent shipment and may affect SFS competitiveness.
- b. The number of times the thermal boxes are reused are not recorded.
- c. Due to the complexity of managing inventory across Asia Pacific, the industry players recover each box back to the origin instead of reusing it to another location to maximise the box usage or they simply use a single use thermal packaging then dispose it after each use.

- d. There are no tools to measure carbon footprint using reusable thermal packaging against single use boxes.

Requirements

The company lack manpower resources to develop the process and software app solution for the following:

1. Track the number of times the reusable thermal boxes are used.
2. Manage the audit trail of pre-conditioning the PCM into a reusable thermal box right up to delivery for audit compliance purposes.
3. Measure the carbon footprint using the reusable thermal boxes and provide the data to the client.
4. Track the whereabouts of each reusable thermal box to better manage repositioning to Singapore or movement of the box from the destination to a 3rd country.
5. Manage repairs of the reusable thermal boxes and maintaining an audit trail of repairs and cost.

Open House

The Open House will be on:

SFS Global Logistics Pte Ltd

Address :: 9 Changi South Street 3, #02-02 Singapore 486361

1. 4 May 2022, Wed – 2pm to 6pm
2. 5 May 2022, Thurs – 2pm to 6pm
3. 6 May 2022, Fri – 2pm to 6pm
4. 7 May 2022, Sat – 9am to 1pm
5. 8 May 2022, Mon – 2pm to 6pm
6. 9 May 2022, Tues – 2pm to 6pm

Contact person:

Email: roger.chew@sfgsl.com

Mobile: 96818893

Team leader to send email to the contact person in advance regarding the number of persons going to the open house.