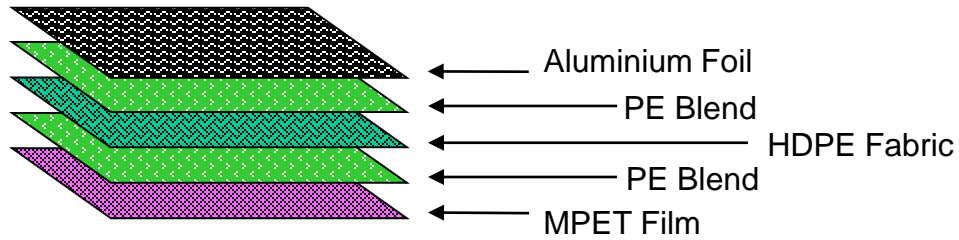

ENVIRONMENTAL FRIENDLY THERMAL INSULATION LINER – ECO ETL

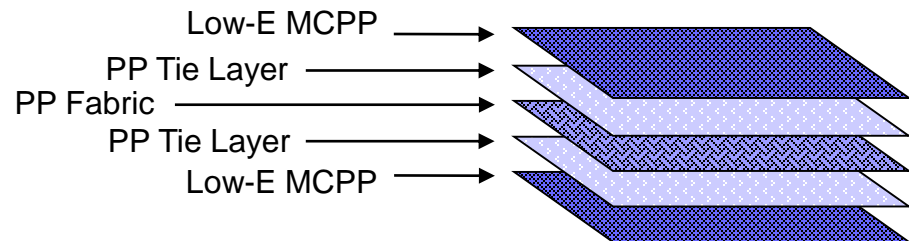


Structural Differences

Normal ETL



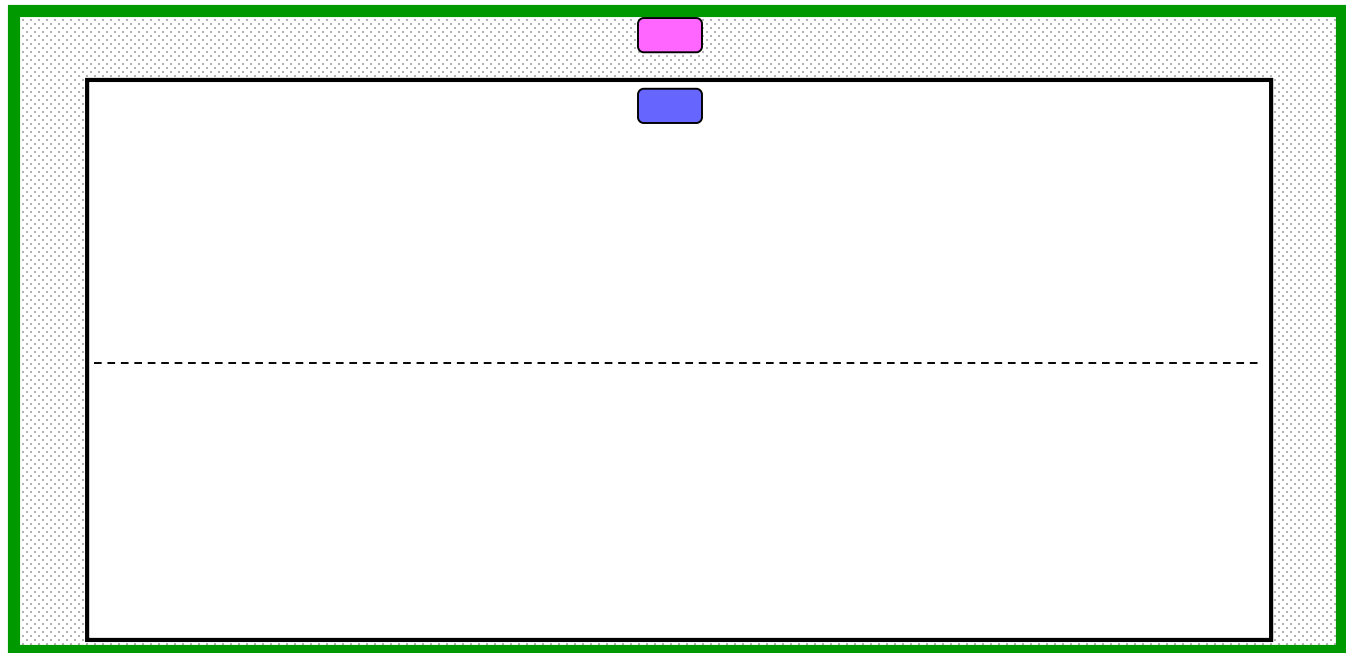
Eco ETL



Actual Shipment Trial

- 1. Normal ETL and Eco ETL were installed into separate 20ft ISO freight containers and data loggers installed to collect the data.**
- 2. Both containers were shipped together from Port Klang, Malaysia to Melbourne, Australia.**

Position of data logger in ETL (side view)

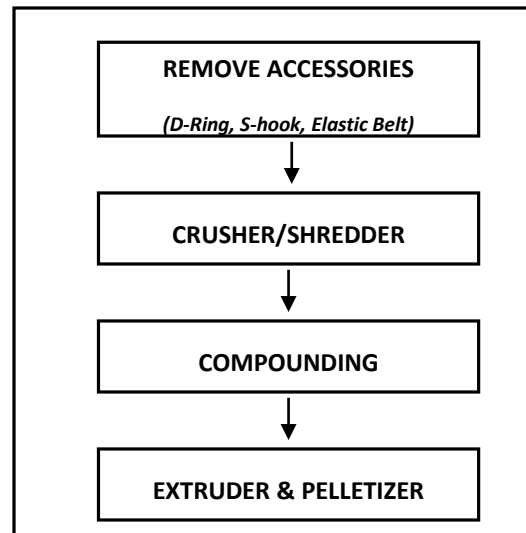


Legend:



Recycling

1. Upon arrival, goods are unloaded from the freight container and the Eco ETL is dismantled.
2. All the accessories, such as S-hooks, D-rings and elastic belts are removed. Process flow as below:

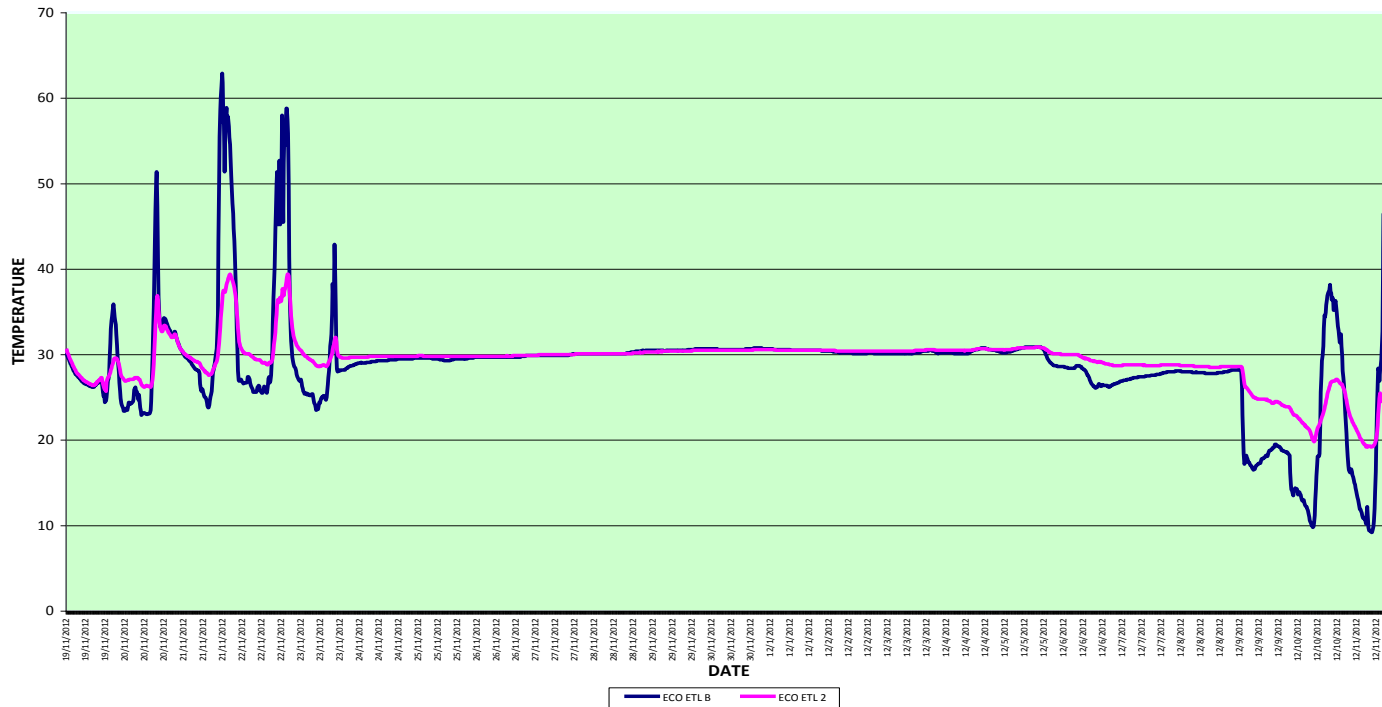


Temperature profile for Actual shipment trial

ETL	Temp (°C)	Min.	Max	Temperature fluctuation (°C)
Eco	Inside	19.2	39.3	20.1
	Outside	9.2	62.9	53.7
Normal	Inside	17.5	42.3	24.8
	Outside	9.7	72.4	62.7

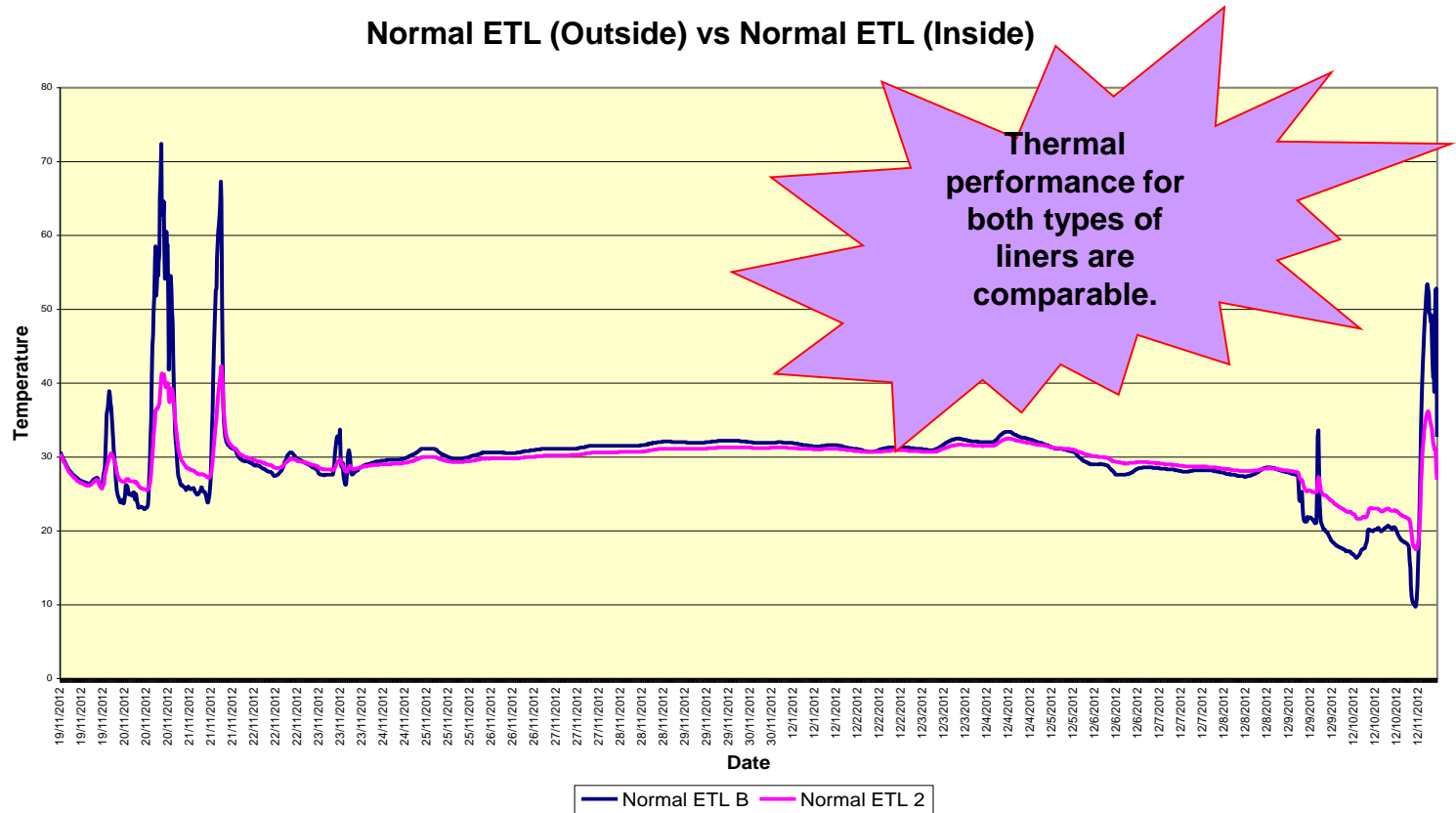
Temperature profile Actual shipment trial-cont...

ECO ETL (Outside) vs ECO ETL (Inside)



Temperature fluctuation inside the Eco liner is **20.1°C**
whereas outside is **53.7°C**

Temperature profile Actual shipment trial-cont...



Temperature fluctuation inside the normal ETL was **24.8°C**
whereas outside is **62.7°C**

Recycling trial

Resin produced was good of quality from commercial PP recycle machine.

The Melt Index of the resin is 15g/10min, suitable for injection molding industry.



Recycled resin pellet

The **performance** of Eco ETL is similar to normal ETL.

It can be **recycled** using the commercial PP recycling machine.