Company Name:
aggreko

Product:
Y.Cube Energy Storage Solution

The Problem: (one sentence)
Perform a detailed cost and time analysis, for future storage rental program and package alternative identified.

The Solution: (one sentence)
Using an 100% polyethylene plastic bulk container as our package, for it is has greater durability and will cause less manual labor than other packaging options.

Team Members:
Josh Erwin
Madison Boyle
Esther Mneney
Stephen Crawford

Analysis and Determination of Cost-Effective Battery Module Packaging

Background
Aggreko is currently releasing the next generation energy storage system and is looking into the process of installing these systems on a global scale. The company will be changing their strategy by navigating from asset sales to a rental model for the energy storage systems. Battery modules will have to be removed from the system, repackaged and transported to a different project site. An effective solution is projected to impact the company for the next 3-5 years.

The Problem
Taking in account that aggreko is a company who eliminates waste. They would like a solution to a durable package, that will last over time and pass UN 38.3 code for packaging of hazardous goods. Along with a detailed cost and time of analysis of all packaging options, for a duration of 10 years, assuming a three year rental period.

The Solution
As we sought out different packaging options, for lithium ion batteries. We uncovered two types of durable packaging, which entails both plastic and plywood materials. Thus comparing to aggreko’s current model, which uses cardboard boxing. By initiating our cost analysis, we inquired that cardboard packaging would be cheaper in the long run. But could cause potential problems and inefficacy, down the road along with it. Taking in account of who and what aggreko stands for. We suggest they go with a 100% polyethylene bulk container. It best suits their needs, causing less manual labor, easier to package and store. Along with having a life expectancy anywhere from 15-20 years, or more. We believe this would be the best optimal solution for aggreko.