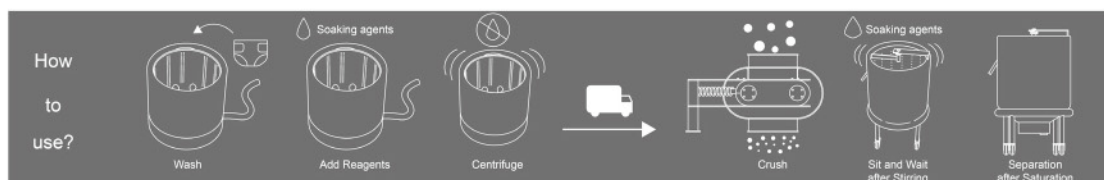
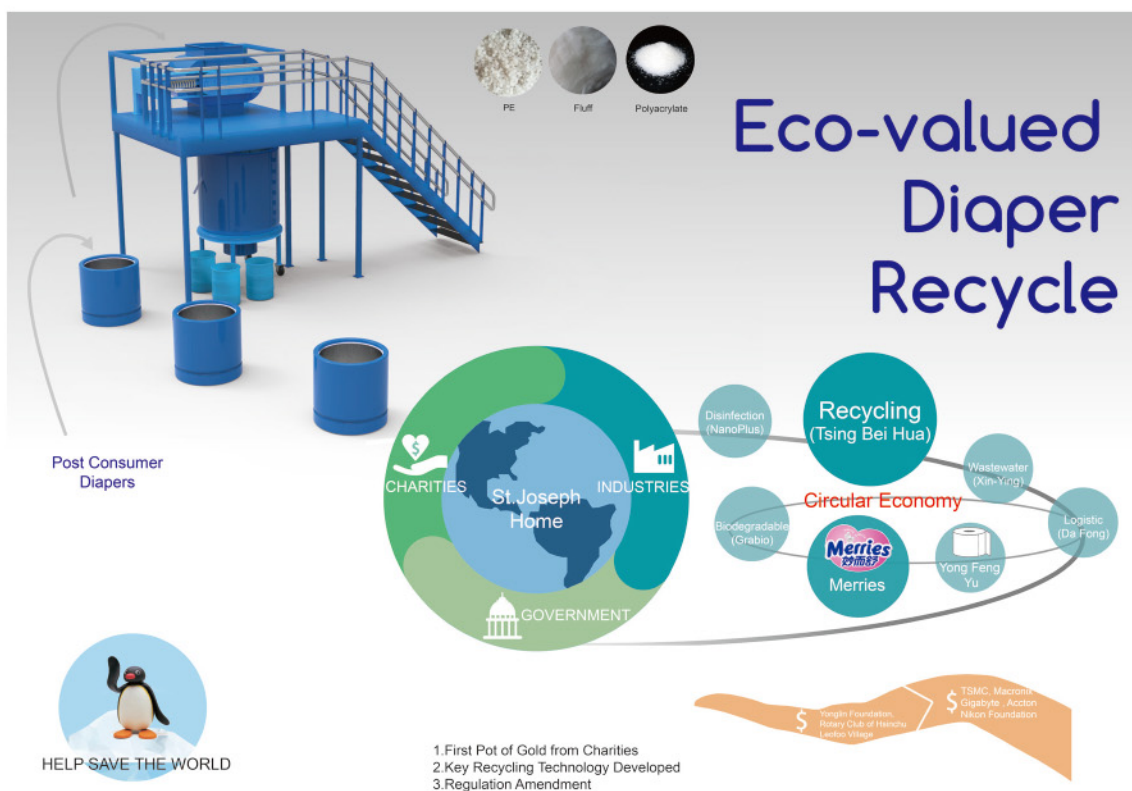


吳倍任 黃思蓁 蔡昀容

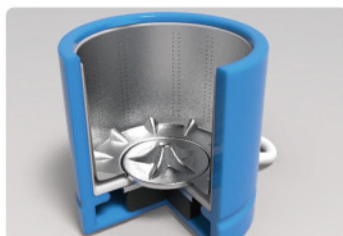
尿布變黃金

我們的理念是採用分散處理，在長照單位可以做到適當的消毒、清洗及脫水，沒有異味又便於運送。污水我們用Green Fairy的技術處理，零排放。在處理中心我們將它破碎後添加天然化合物讓聚丙烯酸鈉鹽與纖維明顯分層，十分節省能源。完全分離的PE、絨毛纖維及聚丙烯酸鹽可以加值再利用。若做為再生紙，每月可以少砍72000 棵樹，每噸紙漿節省20噸的水資源。在貼心服務設計上，考慮到尿布現場的收集以及在長照端必須將排泄物事先分離，減容後再運送到集中處理中心等問題，因此收集及處理裝置須符合人因設計且不會與人接觸，讓護士阿姨可以推著收集桶輕鬆收集尿布，然後再推到鷗翼式開口的清洗機，最後在脫水後將裡面籃子取出相疊後便於運送。

The eco-friendly diaper is processed by two decentralized units, the long-term care center and the processing center. The long-term care center is in charge of collecting used diapers. Those collected diapers will be cleaned, sanitized, and desiccated before being sent to the processing center, which is responsible for dissolving diapers. By using natural compounds, polyethylene, fluff fiber, and sodium polyacrylate can be decomposed from the diaper. These chemical materials are available for producing the recycled paper, which can save 72000 trees per month, and 20 tons water per ton of pulp made. Considered in the service situation, the diapers must be collected and excrement and water must be removed before being sent to the central recycling center. Thus, the ergonomic design of collection and processing device is necessary, so that nurses can pull the bucket after collect diapers and push into the laundry machine with a gull-wing opening. After dewatering, the inside baskets are stacked outside into a pile for further shipment.



Save NT\$200,000 per month for St. Joseph Home to treat diapers.



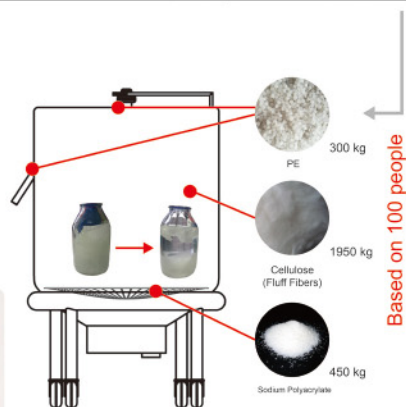
On-site Laundry
(Cleaning and Dehydration)



Off-site Crushing



Off-site Separation



- (1) float PE removed by rotating scraper
- (2) polyacrylate sieved out from drainage after centrifugation
- (3) fluff fibers collected each batch
- (4) soaking agent to be recycled

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