



從廢輪胎到潛水衣 轉動合作循環

Rotating a Cooperation From Waste Tires to Wetsuits

實踐者 PRACTITIONER

環拓科技股份有限公司
Enrestec INC.
www.enrestec.com.tw

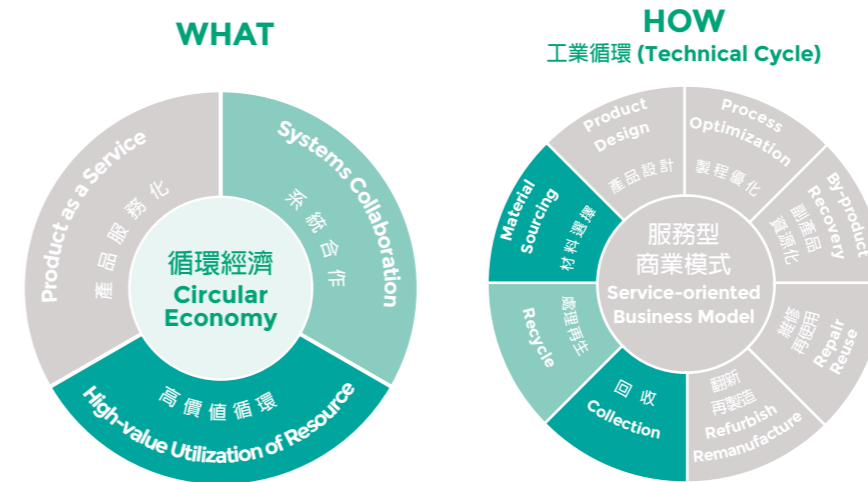
薛長興工業股份有限公司
SHEICO Group.
www.sheico.com.tw

建大輪胎
Kenda Rubber Ind., Co., Ltd.
www.kendatire.com

韓泰輪胎
Hankook Tire.
www.hankooktire.com/cn/

「彼之無用，可為我之有用」，環拓科技研發熱裂解技術，以循環再生概念與輪胎業（建大、韓泰）等合作回收廢輪胎，製成環保碳黑，再運用到紡織業（薛長興），形成跨域合作關係。將廢棄物轉化成的新材料，藉由在循環經濟產業鏈建立起廠商間相互信任、驗證的基礎。

The reason for Enrestec's success is to constantly create new value for customers. Cross-field cooperation with companies such as textile industry (SHEICO), tire industry (Kenda, Hankook) and add the concept of "cycle" and "regeneration" to transform waste into new materials for use. With the establishment of mutual trust between manufacturers in the circular economy industry chain, Taiwan has a leading opportunity in the new economic development trend.



台灣的輪胎原料幾乎 100% 進口，廢輪胎堆置會造成環境議題，如何讓廢輪胎高價值地資源化，以減少環境中的廢棄污染和減少資源進口的浪費，是支持環拓科技投入研發熱裂解技術的主因。

提高品牌價值 使用永續材料才是王道
輪胎業耗能且廢輪胎所造成之環境衝擊直接影響企業形象，近年來建大、韓泰、米其林及固特易等頂尖企業，莫不積極投入循環再利用研究，更於 CSR 中誓言將輪胎用料 80% 來自永續材料、回收再利用率達到 100%。

環拓將廢輪胎製成裂解油、碳黑、可燃氣以及鋼絲等產品，其中回收碳黑更可 100% 取代傳統碳黑。薛長興為全球知名潛水衣製造商，其採用環拓的環保碳黑製作潛水衣，使用再生碳黑的理念獲得客戶迴響，更決定與環拓攜手進軍東南亞，透過整廠輸出創造海外商機，未來可望提供橡膠產業循環經濟解決方案至東南亞、歐美等地區。

Taiwan's tire raw materials are imported almost 100%, and how to "resource" waste tires, reduce waste pollution in the environment and reduce waste of resource imports has always been the main reason for Enrestec invested in research and development of pyrolysis technology.

Improve brand value. Using sustainable materials is the name of the game.
The tire industry wastes energy and the generated waste tires will cause environmental impact and will directly affect the image of the company. In recent years, top companies such as Kenda, Hankook, Michelin and Goodyear are actively investing in recycling research. In CSR, it is proposed to use 80% of tire materials as perpetual materials/recycling rate of 100%.

Enrestec pyrolysis waste tires to produce products such as pyrolysis oil, carbon black and steel wire. The recycled carbon black can replace 100% of conventional carbon black. SHEICO uses the recycled carbon black to make wetsuits. The concept of using recycled carbon black has won the resounding of customers. It is decided to join hands with Enrestec to enter Southeast Asia and create overseas business opportunities through the whole plant output. In the future, it is expected to provide circular economy solutions for rubber industry in Southeast Asia and Europe and the United States.

效益 | BENEFIT

- 達成再生碳黑（碳排放為 671.5 kgCO₂e/ 噸）與裂解油（碳排放為 479.9 kgCO₂e/ 公秉）產品，相較於傳統碳黑、燃料油，減少約 80%~90% 的碳排放減排效益。
- Achieved recycled carbon black (Carbon Footprint:671.5 kg CO₂e / ton) and pyrolysis oil (Carbon Footprint:479.9 kgCO₂e /KL) product carbon footprint certification, compared to traditional carbon black, fuel oil, reduce carbon emissions by about 80% to 90% Efficiency.