

Insights into Circular Supply Chain for Electric Motorcycle Batteries: A Case in Indonesia

Muhammad Hisjam and Wahyudi Sutopo

Dept. of Industrial Engineering, Faculty of Engineering,
Universitas Sebelas Maret
Jalan Ir. Sutami 36A, Surakarta, Indonesia
hisjam@staff.uns.ac.id, wahyudisutopo@staff.uns.ac.id

Abstract

The electric vehicle market, especially motorcycles, in Indonesia is expected to grow rapidly supported by various applicable laws and infrastructure that is continuously being developed by the Government of the Republic of Indonesia. This will pose a serious threat to sustainability, namely an increase in the number of used batteries if not managed properly. If used batteries are managed properly, it will be able to minimize the negative impacts that arise, and there is even an economic potential that can be achieved. This paper discusses the opportunities for utilizing used motorcycle batteries in Indonesia using a circular supply chain approach. Used battery management using this approach can even overcome the unavailability of proper national lithium mines, by "mining" lithium from used batteries. The management of used batteries will bring up many related new businesses and promises to achieve sustainability goals well.

Keywords

Circular Supply Chain, Electric Motorcycle Batteries, Used Batteries, Sustainability.

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Biography / Biographies

Muhammad Hisjam is an Associate Professor in the Department of Industrial Engineering, Faculty of Engineering, Universitas Sebelas Maret since 1998. He earned Bachelor's in Agro-industrial Technology from Universitas Gadjah Mada, a Master in Industrial Engineering & Management from Institut Teknologi Bandung, and Ph. D in Environmental Science from Universitas Gadjah Mada. His research interests are supply chain, logistics, business, and sustainable development. He published some papers in journals and proceeding his research area. He and his team have won some research grants from Government institutions and private companies. He holds an Accredited Supply Chain Analyst from the American Academy of Project Management. He is the Head of the Logistics System and Business Laboratory, Faculty of Engineering, Universitas Sebelas Maret. He is a member of IISE, AAPM and IEOM.

Wahyudi Sutopo is a professor in industrial engineering and coordinator for the research group of industrial engineering and techno-economy (RG-RITE) of Faculty Engineering, Universitas Sebelas Maret (UNS), Indonesia. He earned his Ph.D. in Industrial Engineering & Management from Institut Teknologi Bandung in 2011. He is also a researcher for the university center of excellence for electrical energy storage technology (UCE-EEST). He has done projects with Indonesia endowment fund for education (LPDP), sustainable higher education research alliances (SHERA), MIT-Indonesia research alliance (MIRA), PT Pertamina (Persero), PT Toyota Motor Manufacturing Indonesia, and various other companies. His research interests include logistics & supply chain management, engineering economy, cost analysis & estimation, and technology commercialization. He is a member of the board of industrial engineering chapter - the institute of Indonesian engineers (BKTI-PII), Indonesian Supply Chain & Logistics

Institute (ISLI), Society of Industrial Engineering, and Operations Management (IEOM), and Institute of Industrial & Systems Engineers (IISE).