## Completion Report

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This study has shed light on the current ELV management systems in Southeast Asia's top three automotive production bases where the scenarios of ELV management systems in Malaysia, Thailand and Indonesia have been reviewed and discussed. This research is critical because it provides a foundation for the development of an ELV recycling framework as well as ELV laws and regulations in Malaysia, Thailand and Indonesia. Additionally, it is also expected to assist the government in drafting ELV laws and regulations. The ELV recycling laws and regulations are one of the missing pieces in the Malaysian, Thai and Indonesian automotive ecosystems, and a successful ELV management system will not only address environmental concerns but also contribute to expanding the countries' economic growth. Developed Asian countries such as Japan and Korea have ELV recycling laws and regulations in place to address issues involving automotive waste products, as before the implementation of their laws and regulations, the production ELVs had increased year after year, as well as increased illegal dumping and improper industrial waste treatment. Lessons can also be learned from Singapore's practice where the vehicle quota system had successfully controlled vehicle population growth, lowering the age of the vehicle population there. Hence, proper ELV re-cycling laws and regulations are critical for Malaysia, Thailand and Indonesia, as the estimated number of ELVs grows each year as car production increases.

Though the Malaysian, Thai and Indonesian governments are attempting to manage ELVs in their respective countries by enacting various policies including environmental policies, memorandums and inspiring consumers and automotive manufacturers by providing various facilities, it is time to develop a standard ELV recycling policy for a proper solution to managing ELVs in order to sustain the environment and reduce human impact on nature. The ELVs disposal is a major concern for any of these developing countries striving for sustainable development. To reduce waste discharge and improve the automotive industry's image through environmentally sound management, maximum recovery and recycling is required. When an appropriate recovery strategy is combined with the standard ELV recycling policy, significant environmental and economic benefits can be expected. Although the propositions for ELV laws and regulations are critical for these developing countries to control ELV recycling, reduce its environmental impact and maximize its benefits, a thorough examination and consideration of all potential challenges, particularly in terms of their citizens' economic backgrounds, should be conducted and determined before the proposed ELV recycling laws and regulations are implemented, in order to reduce the burden on the people.

At the end of the day, sustainable management of ELVs will assist many stakeholders in many ways. A well-regulated ELV management system will promote new business and provide good new jobs to the community under SDG 8 and enhance economic growth. Sustainable management of ELV will protect the environment and ensure good health and wellbeing under SDG 3 and promote a circular economy under SDG 11. As a result, Malaysia, Thailand and Indonesia need to learn from Japan and Korea on how to develop a proper regulatory framework to manage ELV. This will equip them with a more formal and well-regulated ELV sector.

## Publication of the Results of Research Project:

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Venue

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Book (Publisher and Date of the Book, Title and Author of the Book, etc.)