

# Factors Affecting the Electrification of Transportation Modes Amidst the Sri Lankan Economic Crisis

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The transport sector is currently facing significant disruptions due to the economic crisis in Sri Lanka. As a result, there is a pressing need for alternative measures within the sector. One such solution is the electrification of transportation modes, which has gained global recognition and is being considered in this study within the Sri Lankan context. The research focuses on studying various factors and their impact on the adaptability of electricity-driven solutions within the Sri Lankan transport sector, considering the current economic crisis. To identify relevant factors from previous scholarly research in this study, a systematic literature review was utilized. Subsequently, a conceptual framework was constructed to evaluate the variables. An online questionnaire survey was conducted to gather data to confirm the validity of the model using partial least square structural equation modeling. The results indicate that social and technological factors have a positive impact on the adaptability of electricity-driven solutions in the transport sector. The study also provides recommendations for fostering a better electrified transportation system.

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