

## **ABSTRACT**

*The effects of population density in Indonesia is the increase in domestic motorcycle sales, which results in an estimated fuel oil (BBM) run out in 2025 and an increases in air pollution. One way to overcome this issue urban energy issues and reduce air pollution from vehicles is by implementing the smart city concept with a focus on smart energy dimensions, involving the transition to the use of electric motorized vehicles. PT. Grab Indonesia is one of the companies that has launched an electric motorbike called electric grab bike. Electric motorbikes are a new thing that is developing among the people of the city of Bandung so there is a need for analytical research on the use of electric grab bikes in realizing a smart city dimension of smart energy in the city of Bandung.*

*The purpose of this study is to determine the value of the smart energy index in realizing a smart city in Bandung through a case study involving the use of electric grab bike. Additionally, the study aims to investigate the impact of electric grab bike on the realization of a smart city with a smart energy dimension in Bandung.*

*The method used is a mixed method, involving qualitative and quantitative methods, with observation, interviews, and distributing questionnaires through a quadruple helix approach involving the government, business player, academics and the public.*

*The research findings include the smart energy index value in realizing a smart city in a case study of the use of electric grab bikes in the city of Bandung at 72,78 So it can be concluded that it is good enough, satisfying, but some things are still lacking. And positive impacts are obtained such as being able to reduce the use of fuel oil (BBM) and more environmentally friendly for vehicles in the city in Bandung city.*

*Based on the research results, the researchers suggest collaboration among the government, business people, academics, and the community to enhance and develop smart energy implementation programs that have been planned by the government. This collaboration aims to increase public awareness in Bandung city.*

*Keywords: Smart city, smart energy, grab bike electric, Bandung city*