

## I. INTRODUCTION

### I.I Research Background

The transportation sector in Indonesia accounted for 28% of emissions within the energy sector in 2018, with emissions projected to increase significantly in the coming decades. By 2030, emissions from transportation are expected to rise by 53% compared to 2015, and nearly double between 2030 and 2060, this statement from Fabby Tumiwa the executive director IESR states in (2023). Addressing fossil fuel combustion in transportation is essential for achieving Indonesia's net-zero emission targets. Electric motorbikes have emerged as a critical technology for decarbonizing road transportation. Global sales of electric motorbikes have shown exponential growth, with reporting record sales of 10.6 million units in 2022, marking a 60% increase over the previous year, despite supply chain disruptions and inflation.

The statement from Shakeel (2022), Projections suggest electric motorbikes sales will climb to 21 million units by 2025. In Indonesia, electric motorbikes are a cornerstone of the nation's mitigation efforts under its Nationally Determined Contribution (NDC). To meet the emission reduction targets, Indonesia aims to have 1.8 million two-wheeled EVs and 0.4 million four-wheeled EVs by 2025, escalating to 13 million two-wheelers and 2 million four-wheelers by 2030. However, achieving the global Paris Agreement target of limiting warming to 1.5°C will require significantly more ambitious actions. An IESR study indicates that by 2030, Indonesia would need 110 million electric two-wheelers and four-wheelers, 3 million low-duty vehicles, and 2.4 million buses running on electricity to align with this goal.

The decisions, concerns, and intention to purchase of electric motorbikes might be influenced by gender dynamics. Customizing marketing and awareness campaigns can be aided by an understanding of gender-based tendencies. 36% of respondents to this study were women, while 64% of respondents were men. Technical factors like battery life, vehicle performance, and technology features can be more

important to men. On the other hand, women may place greater value on safety features, beauty, and environmental impact, even when they also take technical factors into account.

Electric motorbikes can be a new technology in transportation that could influence new markets in Indonesia. It is one of the products support the environment-friendly product to minimize the carbon emissions problem in the city , also help to save energy fuels. As defined above the research purpose to analyze the influence of environmental awareness as the mediating into value , and environmental awareness mediating into product knowledge and environmental awareness on purchase intention for electric vehicles. The research title is "THE INFLUENCE OF PRICE VALUE AND PRODUCT KNOWLEDGE ON PURCHASE INTENTION OF ELECTRIC MOTORBIKES WITH ENVIRONMENTAL AWARENESS AS A MEDIATING VARIABLE".

### **I.II Research Objective**

Based on the problem statement, the objectives of this research could be concluded as follows :

1. To analysis the influence of price value on purchase intention
2. To analysis the influence of product knowledge on purchase intention
3. To analysis the influence of environmental awareness on purchase intention
4. To analysis the influence of environmental awareness mediate price on purchase intention.
5. To analysis the influence of environmental awareness mediate product knowledge on purchase intention.
6. To analysis the influence of environmental awareness mediate price value.
7. To analysis the influence of environmental awareness mediate product knowledge.

### **I.III Research Benefits**

It is anticipated that the following advantages will result from this research:

#### **1. Theoretical benefits**

The results of this study should help with marketing economics and theory, especially when it comes to the elements or variable will affect positively in the future. Additionally, that affect consumers' purchase intentions to buy electric motorbikes.

#### **2. Practical benefits**

This research can be used as a reference for next research, for business or companies in developing sales strategies to increase customers' purchase intention to buy electric motorbikes as the new transportation recommended by the trend of new technology and government programs to minimize the use of fossil oils. This research also provides the superiority of the electric vehicle products to make customers can make decisions to buy the electric motorbikes products offered in the market.

### **I.IV HYPOTHESES**

**H1** Price Value has a Significant and Positive impact on Purchase Intention of Electric Motorbikes.

**H2** Product Knowledge has a Positive and Significant Influence on the Purchase Intention of Electric Motorbikes.

**H3** Environmental Awareness has a Positive and Significant Effect on Purchase Intention of Electric Motorbikes.

**H4** Environmental awareness has a positive significant effect on price value.



**H5** Environmental Awareness has a Positive Significant Effect on Product Knowledge.

**H6** Price value has a positive and significant effect on purchase intention of electric vehicles mediating with environmental awareness.

**H7** Product knowledge has a positive and significant effect on purchase intention of electric motorbikes mediating with environmental awareness.

