

## **ABSTRACT**

### ***DESIGNING FURNITURE WITH PLASTIC WASTE MATERIALS TO SUPPORT THE ECO-FRIENDLY TREND***

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*The growing awareness of the importance of environmental protection has driven society to seek innovative solutions to support sustainable lifestyles. One significant step in this regard is the development of eco-friendly products that utilize recycled materials. This research aims to design furniture products using HDPE plastic waste material, particularly from bottle caps, as a step to reduce environmental pollution by plastic waste by replacing the main raw material with plastic waste and to enhance environmental sustainability. The product design process involves stages of raw material analysis, concept design, and production process. HDPE plastic waste material is chosen for its weather resistance and durability, making it suitable for both outdoor and indoor applications such as furniture. Through the use of recycling techniques, HDPE plastic waste is processed into raw materials that can be reformulated into aesthetic and functional furniture products.*

**Keywords** : *Plastic waste, HDPE, sustainable, mebel, eco-friendly*

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