

UTILIZATION OF RECYCLED BEVERAGE GLASS WASTE INTO TOTE BAGS

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ABSTRACT Plastic waste has become a very complex global problem that requires serious attention from society. recycling glass beverage waste into tote bags is a way of reducing the amount of waste sent to landfills. Thus, more serious efforts need to be made to reduce the use of plastic and increase waste recycling practices. Used glass waste can also provide business opportunities precisely as souvenir products that can be produced from recycling used glass waste, namely tote bags from plastic glass waste. This business will also help open new jobs, because collecting materials, processing and marketing requires its own business network. In this study, researchers used the literature study method which is a research process that explores information from various literature sources, whether in the form of books, scientific journals, papers, or articles. By detailing the findings of previous research findings, this research will build business opportunities in an effort to reduce plastic waste, especially in plastic beverage glass waste in creating an environment free from plastic waste. The result of this research is the utilization of plastic waste recycling from beverage cups can be very helpful in reducing plastic waste generated every day and with the reduction of plastic waste can help reduce greenhouse gas emissions and help protect natural habitats, reduce environmental damage, and preserve biodiversity. The tote bag made from recycled plastic waste cups can be used in everyday life as a place to carry items such as books, wallets, and other items. By using tote bags made from recycling, individuals can reduce the use of new plastic materials and reduce non-degradable plastic waste, increase public awareness and save production costs.

Keywords: *Plastic Cup, Recycling, Tote Bag.*

1. INTRODUCTION

Plastic waste has become a very complex global problem that requires serious attention from society. Plastic waste that does not decompose can last hundreds of years and has the potential to pollute the environment, both land, water and air. Recycling plastic waste is one effective way to reduce the amount of waste sent to landfills and reduce the need for new raw materials. Recycling can also reduce greenhouse gas emissions and help protect natural habitats, reduce environmental damage, and preserve biodiversity(Linda, 2018).

The causes of increasing plastic waste, especially from glass beverages, can be found in various aspects of human life. Some of the factors that influence this are: The habit of throwing garbage in the wrong place, Excessive use of plastic, Dependence on plastic packaging, Lack of awareness about the impact of plastic waste is still an irony. Not all plastics can be recycled. However, some items, such as beverage bottles and plant pots can be recycled. This plastic waste can be created into decorations or other items needed at home.

Recycling plastic waste can be done in several ways, such as using recycled products, following local guidelines and regulations, and developing a plastic waste recycling business. By purchasing recycled products, we provide support to manufacturers committed to recycling and help drive the market to be more sustainable(Alkhajar and Luthfia, 2020a). Following local guidelines and regulations is essential to ensure that recycling is done correctly and efficiently.

In addition, the plastic waste recycling business can also be a profitable business opportunity. The abundant plastic waste in the environment can be directly ground with a plastic grinding machine to make plastic seeds. These plastic seeds can then be managed by large factories to be processed into desired items. Among the high-value plastic goods are plastic-based handicrafts, such as wall hangings, flower vases, home and room accessories, and other home furnishings. .

Recycling plastic waste can also help reduce the need for new raw materials and reduce greenhouse gas emissions. The process of producing new materials often requires energy and produces greenhouse gas emissions(Alkhajar and Luthfia, 2020b). Recycling reduces the need for the production of new materials, thereby reducing the associated emissions. This helps combat climate change and reduces the negative impact on the environment.

Recycling plastic waste is one effective way to reduce the amount of waste sent to landfills and reduce the need for new raw materials. Recycling can also help reduce greenhouse gas emissions and help protect natural habitats, reduce environmental damage, and preserve biodiversity. . Therefore, there is a need for more serious efforts to reduce the use of plastic and increase the practice of recycling plastic waste.

Recycling is one of the solid waste management strategies that consists of sorting, collecting, processing, distributing, and making new products from used materials. One interesting example of recycling is turning glass water bottles into mesh bags that can be used to go to celebrations and so on. Recycling plastic banner waste into shopping bags is also one example that is effective in reducing the amount of waste sent to landfills (Putra and Yuriandala, 2010).

Waste recycling has several benefits, such as reducing the amount of waste sent to landfills, reducing the need for new raw materials, reducing greenhouse gas emissions, and helping to protect natural habitats, reduce environmental damage, and preserve biodiversity. Waste recycling can also help increase public awareness and understanding of the importance of protecting the environment. In the practice of waste recycling, there are ways to use recycled products, follow local guidelines and regulations, and develop waste recycling businesses (Alkhajar and Luthfia, 2020c). By purchasing recycled products, we are providing support to manufacturers committed to recycling and helping to drive the market to be more sustainable. In addition, waste recycling business can also be a profitable business opportunity, such as turning plastic waste into asphalt raw materials.

In conclusion, recycling glass beverage waste into tote bags is one example that is effective in reducing the amount of waste sent to landfills and reducing the need for new raw materials. Recycling can also help reduce greenhouse gas emissions and help protect natural habitats, reduce environmental damage and preserve biodiversity (Ainu Bikzy and Judianto, 2021). Therefore, there is a need for more serious efforts to reduce the use of plastics and increase waste recycling practices. .

Apart from being a source of problems, used glass waste can also provide business opportunities precisely as souvenir products that can be produced from recycling used glass waste, namely tote bags from plastic glass waste. This business will also help open up new jobs, because collecting materials, processing and marketing requires its own business network. The research of this article aims to enable researchers to have the skills and entrepreneurial spirit of recycling plastic waste.

2. METHOD

In this study, researchers used the literature study method which is a research process that explores information from various literature sources, whether in the form of books, scientific journals, papers, or articles. By conducting a thorough analysis of the relevant literature, the research will compile the utilization of recycled plastic cup waste into tote bags. The first step is to identify and explore key literature that discusses the utilization of plastic waste recycling, including

the problem of plastic waste, the causes of increased plastic waste, how to recycle plastic waste, and plastic waste recycling businesses that can be made into profitable business opportunities. .

By detailing the findings of previous research, this research will build business opportunities in an effort to reduce plastic waste, especially plastic beverage cups, in creating an environment free from plastic waste. In addition, through the literature analysis, this research will also identify solid waste management strategies in the form of recycling into a marketable object to advance our understanding of the utilization of waste recycling. Thus, the literature study method will provide a solid foundation to guide this research towards a more in-depth and comprehensive understanding of the utilization of used plastic beverage waste recycling into tote bags.

3. RESULT AND DISCUSSION

One of the key findings is that reducing plastic waste can help reduce greenhouse gas emissions and help protect natural habitats, reduce environmental damage, and preserve biodiversity.

The recycling of plastic waste from beverage cups can go a long way in reducing the amount of plastic waste generated every day. When plastic cups are thrown into the regular trash, they usually end up in a pile of non-biodegradable waste. But with recycling, those cups can be reprocessed into new materials that can be used to make new items. .

When you start recycling plastic beverage cups, you are also reducing the amount of plastic waste that is released into the environment. This also means helping to prevent marine pollution, damage to wildlife habitats, and also saving landfills that are quickly filling up. In addition, the utilization of recycled plastic beverage cups also has significant potential, such as increasing economic value by being processed into other products(Ristya, 2020). This can help the community to increase income and reduce plastic waste as well as improve community skills in managing plastic waste, such as how to collect, process and turn it into tote bag products.

In addition to helping the environment, recycling can also spark people's creativity. The used plastic cups can be turned into useful and economically valuable tote bags. This way, the community can improve their skills in managing plastic waste and increase their income(Ainu Bikzy and Judianto, 2021).

This research focuses on the concept of recycling, which can be implemented in tote bag products. In the context of tote bags, recycling can mean collecting and reprocessing materials that have already been used to make new bags, thereby reducing the use of new materials and reducing waste. Thus, tote bags made from recycled materials can be a more environmentally friendly and

economical alternative because it reduces the negative impact on the environment and saves production costs.

This research also has the advantage of turning used plastic cup waste into tote bags, namely by recycling, production costs can be much more efficient because it reduces the need for new raw materials. By collecting and reprocessing materials that have already been used, recycling reduces the cost required to produce new bags (Leria et al., 2020). By reprocessing plastic waste into tote bags, recycling can reduce the amount of non-degradable waste and reduce the negative impact on the environment. Thus, recycling can increase public awareness about the importance of reducing the use of plastic materials and reducing the negative impact on the environment.

How to Make a Tote Bag from Plastic Beverage Cups

a) Preparing Materials

The first step in making this tote bag is to collect the materials needed, namely the mouth of a plastic cup circle and wire. Four plastic cup circles were assembled and formed into a plus sign pattern using wire to hold them together.

b) Building the Basic Structure

Additional circles are added to the initial plus sign pattern, creating a larger base structure. The circles are tied together using wire and rope, with the wire helping to maintain the shape and the rope providing additional reinforcement. This process is repeated, adding more circles and tightening them until the desired base width is achieved.

c) Adding Color Variations

Two colors, orange and green, were used, with the orange rope wrapped around the center and the green rope wrapped around the outside.

d) Making Sides and Handles

Next comes the process of making the sides of the basket or container. The sides are formed by bending and tightening the wire and lid, following the same process as the base. The handle is also made by braiding four strands of rope or cord together and attaching them to the top of the basket. The length and style of the handle can be customized according to personal preference.

e) Finishing Touches

The final step involves bracing the loose ends and adding decorative elements, such as ribbons or other embellishments, to the basket or container. The finished product is a unique and personalized decorative item made from used plastic cups.

4. CONCLUSION

Tote bags made from recycled glass plastic waste can be used in everyday life as a place to carry items such as books, wallets, and other items. By using tote bags made from recycling, individuals can reduce the use of new plastic materials and reduce non-degradable plastic waste, increase public awareness and save production costs.

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