Understanding Circular Economy – A Smarter Way to Use Resources

Imagine if everything we used was thrown away after just one use. Our planet would quickly fill up with trash, and we would run out of resources! This is what happens in a linear economy, where we take things from nature, make them into products, and then throw them away. But there is a smarter way to use resources—it's called the circular economy.



Image 1: The 5R's of Circular Economy – Rethink, Reduce, Reuse, Repair, and Recycle. These five steps help us useresources wisely, cut down on waste, and take better care of our planet.

The circular economy is a system that focuses on using resources wisely and reducing waste. Unlike the traditional way of using things once and throwing them away, the circular economy keeps things in use for as long as possible. This system follows the 5Rs: Reduce, Reuse, Recycle, Repair, and Rethink. It also includes upcycling, which means turning waste into something even better. By following these principles, our country can save resources and protect the environment.

One of the first steps in the circular economy is to reduce waste. This means using fewer materials and choosing products that generate less waste in the first place. In Malaysia, efforts to cut down on single-use plastic bags are already underway, with campaigns encouraging shoppers to bring their own bags. A 2019 study by the Malaysian Ministry of Environment revealed that over 20 million plastic bags are used daily, but thanks to such initiatives, more than 3 million plastic bags have been saved each month in major cities. To combat food waste, community fridges have been set up in some areas, allowing people to share surplus food instead of throwing it away. For instance, McDonald's Malaysia is reducing waste by practicing waste segregation at selected outlets, separating food waste from recyclables like paper and plastics, while working on reducing single-use plastic usage in their packaging. Similarly, Faber-Castell is helping reduce plastic waste by switching from single-use plastic to paper-based packaging across its product lines—supporting a cleaner environment through smarter, more sustainable packaging choices.

After reducing, the next step is to reuse what we already have. A report by the Malaysia Environment Council shows that second-hand shopping has increased by 15% over the past five years. Thrift stores and swap markets are becoming more popular in Malaysia, offering people places to buy or trade used clothes, books, and other goods. Some schools also promote the reuse of textbooks to reduce paper waste. In addition, many people are switching to refillable products like pens and correction tape instead of throwing them away after one use. Certain stores also allow customers to bring their own containers to buy food, cutting down on plastic packaging. According to the Zero Waste Malaysia campaign, if just 10% of Malaysians used reusable containers, over 10,000 kilograms of plastic waste could be prevented each year. By reusing, we can save money and reduce waste at the same time.

Recycling is another important part of the circular economy. It means turning waste into new things instead of letting it pile up. Right now, Malaysia creates 38,000 tonnes of waste every day, but only 30% is recycled. To improve this, we have programs like "KitaRecycle", which encourage people to

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recycle properly. Companies like Faber-Castell are also making products, like pens and highlighters, from recycled plastic. The government wants to increase recycling to 40% by 2025.

Another step is to repair items when they break instead of throwing them away. When we fix broken things—like electronics or furniture—we can use them for a longer time, which means less trash ends up in landfills. The United Nations says that if more people repair and reuse products, we could cut global waste by up to 20%. In Malaysia, companies are starting to support this idea. For example, Digi offers a phone repair and trade-in program that helps people fix their old phones instead of throwing them away. Another example is IKEA Malaysia, which has started offering spare parts and repair advice so customers can fix their furniture and keep using it. Even at home, we can play a part—using UHU glue to repair broken containers or UHU Shoes & Leather glue to fix torn shoes helps avoid unnecessary waste. These kinds of efforts are part of Malaysia's goal to reduce 40% of waste going to landfills by 2025. Repairing things not only saves money—it also helps take care of the planet.

The circular economy also invites us to rethink how products are made and used. In Malaysia, some companies are using biodegradable packaging that breaks down naturally instead of plastic. Other businesses are offering refill stations where customers can buy things like shampoo without needing a new bottle. By making these changes, we can reduce waste before it even starts and help protect the planet.

Finally, upcycling is a creative and exciting way to support the circular economy. It means turning waste into something better or more valuable. In Malaysia, companies like Biji-Biji Initiative are using old seat belts and banners to make fashionable bags, clothing, and accessories. People are also turning plastic bottles into new clothing and food waste into fertilizers for farms. Upcycling not only reduces trash—it also shows us that waste can become something amazing.

The circular economy is important because it helps reduce pollution, save resources, and create a healthier environment. In Malaysia, we've already started making changes, but we all need to help, whether we are students, businesses, or governments. So what can you do? You can start by bringing reusable bags and bottles when you go shopping. Donate or swap old clothes instead of throwing them away. Make sure to recycle properly by sorting waste into the right bins. If something is broken, try to fix it instead of buying new things. And choose products from companies that use eco-friendly materials.

By following the 5Rs—Reduce, Reuse, Recycle, Repair, and Rethink—and upcycling, we can make Malaysia a cleaner, greener country. Small actions, like using reusable bags, recycling properly, and repairing items, can make a big difference. If we all work together, we can build a cleaner, greener Malaysia!

Critical thinking question:

How can you use the 5Rs (Reduce, Reuse, Recycle, Repair, and Rethink) and upcycling to help reduce waste in your school or home?

Guiding Questions:

- 1. What are some things you can reduce or use less of at home or school?
- 2. How can you reuse items instead of throwing them away?
- 3. Why is it important to recycle properly, and what can you start recycling today?
- 4. Can you think of something you could repair instead of throwing away and buying new?
- 5. How can you rethink how products are made to be better for the environment?
- 6. What is upcycling, and how can you use it to turn waste into something new and useful?