

Circular Economy Webinar Session 3 Summary: Green Road: Integrated Waste Management and Circular Economy in Bhutan

11 August 2022

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Green Road: The Green Road Project in Bhutan aims to use waste plastic, including plastic bottles, in road construction as a sustainable and eco-friendly alternative to traditional methods. The project seeks to reduce the use of fossil fuels and reduce plastic waste.

Key Takeaways

- Bhutan used to export plastic waste and other waste materials to India; however, after India changed its policy on waste importation, Bhutan recognized the need to establish its own recycling initiatives. The Green Road project aims to create a recycling ecosystem within the country.
- 2. Green Road mixes plastic waste with bitumen to create a plastic-bitumen mix for blacktopping roads.
- 3. **This technology saves costs for the government.** Roads constructed in 2015 using this technology have remained durable, requiring minimal repairs over the past seven years. This allows the government to reallocate funds to other infrastructure projects.
- 4. Plastic roads are an environmentally friendly solution to the plastic waste problem. Instead of incinerating or sending plastics to landfills, they are recycled and incorporated into road construction. Plastic roads have reduced maintenance requirements, with a predicted maintenance-free period of at least five years. Traditional roads in Bhutan often demand yearly repairs due to the challenging mountain weather conditions.
- 5. Plastic waste used in road construction is processed back into its original form, bitumen. This approach allows for the reuse of plastic waste and reduces the generation of microplastics in the road construction process. Green Road does not generate microplastics.

Watch the Recording here