LITTAR: ASPHALT CONCRETE MADE WITH AGGREGATES DERIVED FROM WASTE GLASS AND WASTE PLASTICS

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Rezumat. Littar este un material de fundație din beton asfaltic fabricat din deșeuri de plastic și sticlă, care combină nevoia de infrastructură durabilă și accesibilă, cu posibilitatea utilizării unor cantități enorme de deșeuri de plastic și sticlă gestionate greșit și nereciclabile.

Abstract. Littar is an asphaltic concrete foundation material made with plastic and glass waste combining the need for durable and affordable infrastructure with the enormous amounts of mismanaged and unrecyclable plastic and glass waste materials.

Keywords: Sustainable Waste Management, Eco-friendly Roads

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1. Introduction

Plastic and glass waste represents a significant global environmental challenge, worsened by the inefficiencies and constraints of conventional recycling methods. To address this issue, we present Littar, an innovative technology designed to repurpose all types of plastic and glass waste into a valuable and sustainable resource for road construction.

Littar offers a versatile solution for "negative value waste", converting it into an eco-friendly alternative for traditional asphalt in the formation of roads, sidewalks, and other traffic surfaces. The utilization of Littar provides superior mechanical and thermal properties compared to its conventional counterparts, alongside significant reductions in weight, transport emissions, and costs.

Its manufacturing process is compatible with existing asphalt production methods, enabling swift industry adoption. Furthermore, Littar demonstrates enhanced

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