TOP TEN

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Category: Road	Country: Italy
Research Area 4: Efficient & Resilient Systems	Idea Number: 23

Measuring social sustainability: towards social indicators for road pavement materials

Sustainability is mostly linked to its environmental and economic components, while society, the third pillar, is forgotten. Workers, consumers, local communities, value chain actors, and other stakeholders are affected by road infrastructure throughout its life cycle (including construction and use). How do roads affect these stakeholder groups? What social impacts has the management of roads on citizens and users?

Until now, very few studies have addressed this subject. Considering this gap and that life cycle-based techniques are the most powerful tool for assessing the sustainability of products and projects, the research started the investigation on Social Life Cycle Assessment (S-LCA) of road pavement materials. The Social Hotspot Analysis, performed using the Social HotSpot Database and PSILCA, identified the most relevant social issues in a cradle-to-gate approach, and the literature supported the investigation. This is the point of departure towards the definition of a set of social indicators and their further calculation. The introduction of S-LCA in road pavements can lead towards a holistic assessment fostering resilience and efficiency of new infrastructures.



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