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Immediate Release

SANEDI encourages road-cooling technology this Transport Month

Cool road surfacing can combat rising temperatures due to “urban heat islands” and spur the economy. That’s the view of South African National Energy Development Institute (SANEDI) as the country marks Transport month. In urban areas especially, cities are as much as 2 degrees Celsius warmer than their rural surroundings – creating “urban heat islands” (UHIs). SANEDI believes a simple solution to combatting this heat lies in something inherent to all cities – the extensive road networks.

Transport Month aims to highlight the important role of transport in the economy and to encourage participation from civil society and business. The theme of this years’ Transport Month is “Together shaping the future of transport". In line with this, Denise Lundall – Project Officer Energy Efficiency Cool at SANEDI says that the coating of roads with cool surface membranes will be effective in not only cooling South Africa’s cities but also aiding in more sustainable and easily maintained roads. “Cool roads can reduce the need for road maintenance and tyre damage, as it significantly reduces the surface temperature of roads, effectively extending road lifespan, as well as ambient temperature” she says.

Cool surface coatings can be applied to substrates like roads and parking lots and can help in creating ‘cool bubbles’ in urban areas. “We underestimate the effects of urban heat islands, which negatively effects peoples’ bodies, as well as adding to our already problematic air quality,” explains Lundall. “Roads are a huge contributor to urban temperatures. All over the globe, concrete, brick and black top tar roads soak up the sun’s rays, where the temperature incrementally accumulates during the day then re-emits them as heat long after night has fallen.” This constant warming effect means urban dwellings and businesses spend more money – and electricity – on cooling their buildings. Combatting this would go a long way to achieving South Africa’s energy efficiency goals. “The deployment of cool surface technology reduces the UHI effect as it cools the ambient temperature over cities, providing resilience to heat events and climate change,” comments Lundall.

Furthermore, the use of cool coatings presents economic opportunities. “SANEDI is encouraging South Africans to manufacture cool coatings for roofs, walls and roads, establishing new industries and job opportunities. A national rollout of cool surfaces will greatly aid in not only alleviating pressure on the grid – as a passive energy solution – but also create much-needed local economic development manufacturing and employment opportunities.”

SANEDI looks forward to engaging with the Department of Transport and other stakeholders throughout Transport Month, with the objective of seeing this initiative come to life in South Africa. “We had begun some fruitful discussions before the Covid-19 lockdown and are excited to again have the chance to bring this important opportunity to public attention,” concludes Lundall.

Ends 455 words

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About SANEDI
The South African National Energy Development Institute (SANEDI), established by the Government, directs, monitors and conducts applied energy research to develop innovative, integrated solutions to catalyse growth and prosperity in the green economy. It drives scientific evidence-driven ventures that contribute to youth empowerment, gender equity, environmental sustainability and the 4th Industrial Revolution, within the National Development Plan (NDP), through consultative, sustainable energy projects. For more information, go to www.sanedi.org.za.