



MEDIA RELEASE

21 June 2023

Sydney councils driving nation's largest recycled rubber road project

A new program involving 12 Sydney councils is expected to achieve significant environmental and economic benefits through recycling tyre rubber to create new roads.

The project, which has commenced with some of the councils, has one of the pavements laid in Burwood today, involves using recycled rubber from end-of-life car and truck tyres processed in Sydney to modify the polymers in bitumen. While recycled rubber has been used in roads globally for decades, [recent research](#) by RMIT University has shown that rubber acts as a sunscreen, which increases durability and slows the ageing process of roads.

Organised by Southern Sydney Regional Organisation of Councils (SSROC) and supported by Tyre Stewardship Australia (TSA), the *Reusing Rubber: Recycling Tyres for Roads* project involves the following councils: Bayside, Burwood, Canada Bay, Canterbury-Bankstown, City of Sydney, Georges River, Inner West, Randwick, Sutherland, Waverley and Woollahra and Northern Beaches in partnership with the Australian Flexible Pavement Association (AfPA).

SSROC President and Mayor of Burwood, Councillor John Faker, said the project will demonstrate the benefits of repurposing waste to help drive further initiatives.

“Roads are the largest assets for local governments and one of our best opportunities to move towards a circular economy. First glass, and now recycled rubber, councils are maximising the benefits of waste-derived resources in line with the community’s expectations for government-driven sustainability,” Cr Faker said.

In partnership with TSA, the program will initially use about 3,600 equivalent standard passenger car tyres, or 2,400 car and 490 truck tyres. All tyre-derived materials used in the project comply with the NSW Environment Protection Authority (EPA) recovered tyres [order](#) and [exemption](#) 2014 to ensure they meet regulatory requirements.

TSA Chief Executive Officer, Lina Goodman, said as 85% of Australia’s roads are managed by local councils, the SSROC project demonstrates the value of local governments driving circular economy outcomes by using tyre-derived material across roads and civil infrastructure projects.

“Of the 450,000 tonnes of tyres that reach the end of their life in Australia each year, only 14% are used locally in new value-added products or applications. Developing and scaling local markets for tyre-derived material is crucial in ensuring we recover the valuable resources from end-of-life tyres,” Ms Goodman said.

“For Australians to be custodians of their own waste, we need more local government and industry-partnered projects like this one, to support local jobs, and spearhead Australia’s circular economy for used tyres.”

The project’s innovative technical framework, developed by AfPA, will gather data on rubber asphalt performance in a range of local road conditions using both truck- and car-tyre derived rubber.

AfPA Executive Director Technology and Leadership, Anna D’Angelo, said: “A recycled rubber asphalt project of this scale is an Australian first. This project will enable the generation of comprehensive data on several innovative reused rubber-based treatments for local roads.”

SSROC also worked closely with Transport for NSW through a knowledge-sharing memorandum of understanding to advance their common objectives of improving asset sustainability through decarbonisation and material efficiency.

RMIT Associate Professor Filippo Giustozzi, said research had proved the resilience of the reused rubber asphalt to UV radiation in roads.

“Extensive testing by RMIT University has shown that tyre rubber-modified asphalt is significantly more durable and resilient than standard asphalt to common causes of road failure such as oxidation due to UV radiation, rutting and cracking, among others,” Prof Giustozzie said.

“According to recent research, recycling of end-of-life tyres to recycle in new roads can save up to 72% of CO₂ equivalent emissions compared to landfill.”

The initial focus of the Sustainable Pavements contract was to incorporate Recycled Crushed Glass (RCG) in roads as a substitute for natural sand, which stimulated regional infrastructural investment and created a local market for the equivalent of about 38 million glass bottles per year. SSROC was integral in the building of local government specifications for use of RCG.

Media Enquiries: Samuel Bartlett, Communications and Government Affairs Lead
0483 877 025

- ENDS -