



Australian Flexible Pavement Association media release

AfPA Technical Talk – Warm Mix Asphalt – A pathway to reduce the carbon footprint towards a carbon neutral future

Tuesday 15th March 2022

Last week, AfPA hosted a Tech Talk on Warm Mix Asphalt, providing a forum for industry and all levels of Government to come together to discuss the reduction of asphalt mixing temperatures.

The benefits of WMA are that it ultimately leads to stronger, longer lasting roads, providing, especially for local governments, a more sustainable paving material with increased durability. Due to the lower temperature at the manufacturing plant, the binder used to manufacture asphalt will be less aged and therefore less prone to fatigue cracking and ravelling in its in-service life.

Another one of the key benefits of the WMA technologies are its emissions reduction, lowering asphalt mix temperature leads to fuel and emissions reduction.

The AfPA asphalt life cycle analysis calculator shows that with a reduction of 30 degrees celsius during production, greenhouse gas emissions are reduced by 12-15%. Further reductions of greenhouse gas emissions are also achievable when aggregate moisture is reduced and hydrated lime is replaced with liquid adhesion agents.

Given that Australia produces an estimated 10 million tonnes of hot mix asphalt on an annual basis; a reduction of the mixing temperatures by 30 degrees celsius across all our production could reduce the carbon footprint by 24,000 tonnes. That's the carbon equivalent of burning 24,064,711 pounds of coal.

WMA method also heightens the safety of Australia's road workers by reducing their exposure to asphalt fumes and encouraging better working conditions through temperature reduction.

AfPA has several Tech Talks planned which are specifically designed to assist local Councils, State Government and industry in addressing issues of climate change and working together to ensure our infrastructure contributes to a carbon neutral future. AfPA is working towards removing barriers that limit these opportunities.

For more information on upcoming Tech Talks on innovation, technology, sustainability, safety and diversity, visit AfPA's [website](#).