

Taking the sustainable road

The first asphalt was made with slag – a secondary aggregate – but later materials moved to use solely primary aggregates and is something that the Waste and Resources Action Programme (WRAP) wants to change. WRAP believes there is great potential to build on asphalt's sustainable foundation by significantly increasing the use of recycled and secondary aggregates.

Many recycled and secondary resources, such as blast furnace slag, crushed glass and incinerator bottom ash, to name just a few, are ideally suited for asphalt and of equal performance to primary aggregates. Analysis of the growth potential for recycled aggregate use in asphalt over the next ten years indicates that around 40% of primary aggregates could be replaced by secondary alternatives.

Road planings and bitumen can also be recycled for re-use in roads. One option is to re-heat the planings to reactivate the bitumen, but mobile cold lay asphalt plants using foamed bitumen can also recover valuable aggregate and minimise environmental impact. It is estimated that around 6Mt of asphalt planings and asphalt process waste could be recycled in this way.

Asphalt's advantage over concrete is that it

can be recycled again and again with lower excavation and processing costs in terms of energy, and re-used in a high value application.

There are many examples of good recycling practice but the potential for growth is enormous and local authorities can help through introduction of procurement targets for recycled content in asphalt. Many that have set recycling targets have helped promote a change in practices of their suppliers and in some cases enjoyed significant savings. A little commercial pressure always helps to focus the mind.

The Highways Agency (HA) has also been very proactive in encouraging the use of more sustainable aggregates. The Specification for Highway Works enables a wide range of recycled and secondary aggregates to be used and, as a result, the specification is not a deterrent to growth.

Government, both on a national and local scale, should exploit its power within the supply chain as the largest purchaser of asphalt to promote sustainable construction. Without a doubt, a realistically defined procurement policy, with targets matched to the availability of resources, will speed progress towards more sustainable use of

resources for asphalt production.

Sharing information and good practice will help oil the wheels of this revolution and WRAP has

developed AggRegain, a free

sustainable aggregate information service to do just that. The service is based around a website – www.aggregain.org.uk – and a telephone helpline (0808 100 2040).

AggRegain provides independent information on materials, specifications, case studies and suppliers for all recycled aggregates and their applications. A broad range of information is available on asphalt and more case studies will be added during the year, ensuring knowledge and best practice is shared to help improve performance.



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