



Colas help North Somerset make £60,000 in savings

Retread is a cold in-situ recycling process which reconstructs the entire carriageway or footway surface to a depth of 75mm. With increasing focus on sustainability, Colas' Retread process offers a low CO₂ emission alternative. By reducing the output of energy, emissions and waste, Colas are able to aid clients in significantly lowering their carbon footprint and cost.

Colas carried out 2547m² of Retread on a residential carriageway.

North Somerset had used Retread in the past but not in a residential location. They were convinced about the benefits that the process would offer, such as minimal waste occurring on site, significantly less lorry movements to and from each site and having the lowest carbon emissions of any construction process in the UK. Despite the site being in a housing estate, there were no complaints from the public noted which is always a major issue for any council.



Key Facts:	
Client:	Balfour Beatty on behalf of North Somerset County Council
Area:	2457 m ²
Location:	N. Somerset, South West England
Date:	March 2013
Duration:	2 days

North Somerset Council has certainly noted the environmental benefits gained from using this process and has been delighted having received the environmental calculation which shows impressive saving figures.

North Somerset will have saved over £60,000 using the Retread process.

The professionalism of the crew and the quick construction time of 2 days certainly contributed to this successful scheme and North Somerset have already created a program for more works to be carried out this year.

Before & After – Road 1



Before & After – Road 2

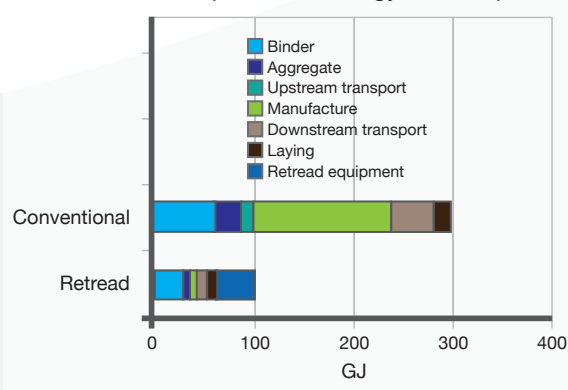


Total Energy Consumption, GJ – Retread process

- Conventional – Plane out 75 mm & replace with DBM binder course
- Retread – Pulverize 75 mm & retread
- Area – 2457 m²

Structure	Binder	Aggregates	Upstream transport	Manufacture	Downstream transport	Laying	Retread equipment	Total
Conventional	68.0	24.3	6.6	142.6	37.7	20.0		299.2
Retread	33.9	4.3	0.4	6.7	11.6	9.6	40.3	106.8

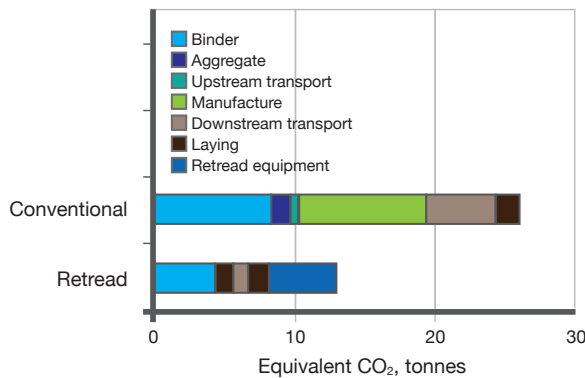
Comparison of Energy Consumption



GHG Emission in Equivalent CO₂, tonnes

Structure	Binder	Aggregates	Upstream transport	Manufacture	Downstream transport	Laying	Retread equipment	Total
Conventional	4	0.9	0.5	9.3	2.8	1.5		19
Retread	2	0.2	0.0	0.2	0.9	0.7	3	7

Comparison of Greenhouse Gas Emissions



“Retread has been used in North Somerset previously but not in a residential location. The retread process was chosen for Grenville Avenue as the existing road surface contained a high percentage of tar bound material. Traditional planing and disposal to appropriately registered landfill sites would have more than doubled the cost of the scheme. Colas worked alongside our term maintenance contractor, Balfour Beatty, to deliver this scheme with minimal disruption to the residents and road users.

The aftercare requirements were quite stringent due to the schemes proximity to the local amenities, details of the process were widely circulated and to date we have received no negative feedback concerning the scheme either during its construction phase or post completion of the work. North Somerset Council considers Grenville Avenue to be a huge success and is considering further sites for this year.”

Phil Bush
Street Scene Manager,
North Somerset Council

