The British Tyre Manufacturers' Association represents tyre manufacturers and retreaders with factories in the UK or elsewhere in Europe. BTMA engages with all levels of government to promote issues ranging from road safety to the environment and from international trade and competitiveness to employee health and safety.

BTMA co-operates actively with other UK tyre industry trade associations, with the Trades Unions and with the European Tyre and Rubber Manufacturers' Association.

The Retread Manufacturers' Association represents operators of all sizes in the UK retreading industry and is affiliated to BIPAVER, the European Retread Manufacturers' Association.

BTMA and RMA have collaborated in producing this brochure.

For more information contact: 01787 226995 or mail@btmauk.com



Retreading Truck Tyres Sustainable Future



### Introduction

Retreading gives suitable tyres a new start in life once the original tread is worn away. It is a modern, hi-tech process with a long pedigree in efficiently managing scarce resources.

Today's product embodies the latest in materials science and manufacturing technology to deliver performance equal to the original new tyre. Strict regulation and rigorous quality control ensure that the customer can buy with confidence. So much so that 80% of civil airliners are fitted with retreaded tyres.

Over 85% of the worn out tyre is reused in a retread, significantly reducing the environmental impact of mobility and giving a useful cost saving to the vehicle operator. 95% of truck tyre retreads used in the UK are made in the UK compared to fewer than 10% of new truck tyres. Retreading also greatly reduces the quantity of end-of-life tyres which require recovery.

There is mounting public and Government awareness of the importance of increasing resource efficiency and the opportunity this represents for UK economic growth.

Retreading promotes sustainable development, increases supply resilience and contributes to the UK economy through skills, employment and added value.

However, in recent years the market share of retreaded truck tyres has declined by 30% under the assault of single-life throw-away tyres imported from Asia at dumping prices.

Retreading will grow in strategic significance as resource efficiency gains importance in national policy. The present UK capability, both human and material, has the potential to make an increasing contribution in the long term.

In the meantime, Government must defend a truly level playing field where the economic and environmental benefits of truck tyre retreading can be fairly pitted against the whole life costs and adverse environmental impact of single-life tyres.

### Retreads – safe and reliable

Retreading has for many years been an integral and highly reputed part of aircraft and heavy vehicle tyre management programmes.

The technology is safe and proven; 80% of civil airliners are fitted with retreaded tyres. 25,000 UK buses and 70% of UK supermarket delivery lorries also run on retreads.

The world's five largest tyre manufacturers (representing more than 50% of global tyre production) all have in-house truck tyre retread programmes.

There is also a significant independent retread sector using guality materials and manufacturing technology supplied by international specialists.

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**25,000** UK buses are fitted with retreaded tyres

Before acceptance for retreading every used tyre casing is subjected to rigorous examination and testing for internal and external damage. Retreads are required to pass to the same 'Endurance under overload' test as new tyres.

Like new tyre manufacturing, the retreading process is subject to strict Conformity of Production testing to ensure that every tyre is made to the same exacting standards.

As part of its focus on incident prevention Highways England recently commissioned research regarding the origin of truck tyre debris on the road. The conclusion cleared retreads of any suspicion of more frequent failure than new tyres.



**80%** of civil airliners are fitted with retreaded tyres





### SAME performance. LESS environmental impact

Premium retreading is a hi-tech industry employing sophisticated plant and highly-skilled workers.

Retreads offer a similar life expectancy to the original tyre with significant environmental benefits.

Over 85% of the returned tyre casing is reused in the retreaded tyre.

Each time a truck tyre is retreaded 30kg of rubber, up to 20kg of steel and 60 kg of  $CO_2$  are saved.

Many premium quality truck tyres can be retreaded more than once, offering a total life expectancy of over 375,000 miles – 15 times round the world!

However, not all tyres have the necessary durability and are unsuitable for retreading due to their design, materials or manufacturing quality. This is the case for many low-cost single-life tyres. Their life expectancy typically does not exceed 80,000 miles.

A truck fleet deploying a tyre policy based on premium tyres and retreading uses less than a quarter as many tyres compared to one using single-life throw-away tyres.

### END OF LIFE MATERIAL END OF LIFE MATERIAL TYRE LIFE EXPECTANCY TYRE LIFE EXPECTANCY 375,000 MILES **258**kg **66**kg 80,000 MILES

## Location and employment

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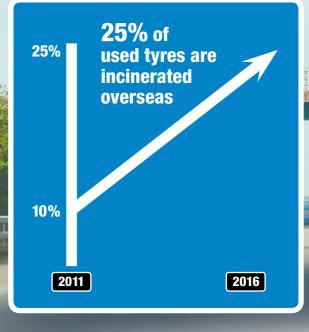
M25

Arranged side by side these would reach A almost all the way round the M25



In 2012 retreads represented almost 50% of UK replacement truck tyre sales, one of the highest levels in Europe. In 2016 that figure had fallen to only 35% due to the assault of imported single-life tyres from Asia. One major UK retreading facility closed in 2016; other plants are struggling to survive.

Many short-lived single-life truck tyres are imported at less than the international cost of the raw materials used in their manufacture. They are then resold at a price to undercut retreads. This gives a generous margin to the importer but undermines





## Forward-looking industry

Despite increasing cost pressures, the UK retreading industry has continued to invest in employee skills and flexibility and improvements to plant and product performance. Over 100,000 man hours of training and in excess of £30 million have been invested in the last 5 years. This has enabled facilities to expand their product range, improve productivity, better respond to market fluctuations and incorporate the latest innovations in new tyre design.



the UK retread industry. Ironically, little of the initial economic benefit of cheap imports reaches the vehicle operator.

In response to this many countries and trading blocs have imposed tariffs. The EU has only recently opened an anti-dumping investigation. Consequently, over the last 5 years the UK has become a major destination for this international trade that is contrary to WTO principles.

Compared to 2012, an estimated 500,000 additional end-of-life truck tyres now arise in the UK every year. If arranged side by side these would reach almost all the way round the M25 motorway.

Since UK end-of-life tyre recovery infrastructure is saturated, these additional worn-out tyres are exported for incineration, typically in developing countries, releasing 160,000 tonnes of  $CO_2$  every year.

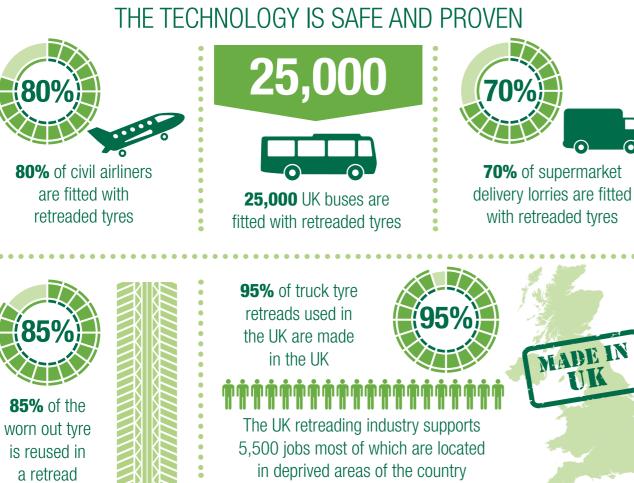


The growth in sales of single-life tyres is increasing the UK's dependency on overseas solutions for end-of-life tyre recovery. This is contrary to the Proximity Principle and heightens UK exposure to international political risk.



# Retread summary

809





a retread



Compared to 2012, an estimated 500,000 additional end-of-life truck tyres now arise in the UK every year



Many low-cost single-life tyres are unsuitable for retreading



These additional worn-out tyres are exported for incineration releasing 160,000 tonnes of CO<sub>2</sub> every year



A truck fleet deploying single-life throw-away tyres uses 4 times as many tyres compared to one using premium tyres and retreading



Despite the challenges, the industry has invested over £30m in continuing modernisation

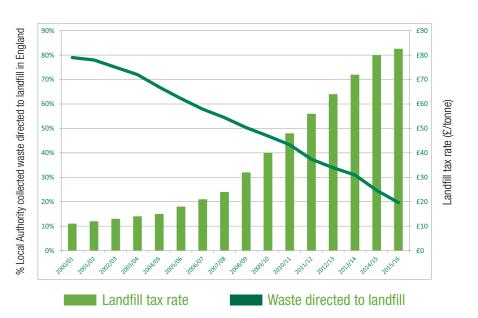


# GOVERNMENT – must promote well-functioning markets favourable to increasing resource efficiency

In 2014 an inquiry by the All-Party Parliamentary Sustainable Resources Group estimated that the economic benefit of the UK remanufacturing sector was £2.4 billion with the potential to increase to £5.6 billion alongside the creation of thousands of skilled jobs.

Successive Governments have enacted measures to incentivise the deployment of low-carbon electricity generation assets. These have been effective in rapidly transforming the UK electricity

There are numerous examples of Government influencing market behaviour through targeted pricing signals



generation mix. Equally, the Landfill tax is celebrated for its significant stimulus to the redirection of waste from landfill into resource recovery schemes.

We look to Government to exploit the full range of market mechanisms to motivate resource efficient choices by business and consumers, stimulating a whole-life perspective on purchasing decisions and product stewardship.

# GOVERNMENT – must lead by example through enhanced procurement policies ensuring increased resource efficiency

"The public sector spends approximately £268 billion per year, equivalent to 14% of GDP. Taking a strategic approach to government procurement presents the opportunity to support investment in innovation and skills; strengthen UK supply chains; and increase competition – in particular by creating more opportunities for SMEs." (Industrial Strategy green paper)

Government is to be congratulated on its "green" procurement guidelines and the recently launched 'Balanced Scorecard' initiative for major capital projects.

However, public procurement guidelines only allow monetisation of environmental benefits where a price benchmark exists. This effectively limits the scope to CO<sub>2</sub> emissions. New metrics are needed to enable the monetisation of the whole life resource efficiency of alternative supply proposals.

Government must urgently broaden the criteria for evaluating alternative public supply proposals to include all aspects of environmental impact and resource efficiency.



GOVERNMENT – must establish a level national and international playing field for trade within an increasingly resource-efficient economy



Government has acknowledged the damage done by waste crime to the exchequer, the environment and legitimate business.

A recent study for the Environmental Services Association Education Trust estimated the economic impact of waste crime in England alone in 2015 was at least £604 million.

We welcome recent proposals to reduce waste crime and create a more level playing field for legitimate waste operators. Government must urgently implement regulatory change to prevent further abuse of the environment and to enable responsible business to support improved resource efficiency.

Government has recently expressed strong commitment to clean growth, improved environmental protection and the doubling of resource productivity.

However, at the same time, Government is defending a future trade defence policy based on solely economic criteria. Government must urgently reconcile this inconsistency. Business cannot invest in delivering the better future targeted by Government while such uncertainty remains.

Tyre manufacture is a global business and BTMA members are committed to the principles of free trade. However, Government must adopt remedies for international trade disputes that enshrine a holistic approach consistent with the development of a more circular economy.

We are not seeking a sweetheart deal but rather a truly level playing field where the economic and environmental benefits of truck tyre retreading can be fairly pitted against the whole life costs and environmental impact of single-life tyres.