ECOPIA TRUCK TYRES. A BETTER GRIP ON ECOLOGY AND YOUR COSTS
Global warming, CO₂ emissions, increasing regulations, scarcer fossil energy sources, rising fuel prices, ever intensifying pressures on costs... these are today’s and tomorrow’s challenges.

Bridgestone aims to be your reliable and committed partner in reducing operating costs and in acting more responsibly towards the environment. Ecopia is Bridgestone’s flagship brand that contributes to the prevention of global warming by helping to reduce CO₂ emissions through higher vehicle energy efficiency.
Ecopia results in cost savings and in acting responsibly towards the environment

Cost savings
- Fuel savings
- Lower cost per kilometer
- Lower Total Tyre Life cost

Acting responsibly towards the environment
- CO₂ emission reduction
- Recycling through retreading
- Economical use of raw materials
Get a grip on all the factors which can reduce fuel and tyre costs

In other words, take charge of all controllable influencing factors:

**Tyre selection**

Maximise the impact on fuel consumption and CO₂ emissions through superior low rolling resistance tyres, developed using the newest technologies, and with no compromise on performance. The performance of new tyres is extended during the retread life, resulting in the lower Total Tyre Life cost. Long service life also means the most economical use of raw materials. And do not forget that retreading is recycling.

**Tyre maintenance**

Tyre pressure has a significant effect on fuel consumption and tyre life. A tyre which is 20% under-inflated will only last 75% of its service life. Bad tyre pressure management can wipe out fuel savings from low rolling resistance tyres. Regular checks are necessary to keep tyre pressure and mileage at the optimum level. Bridgestone recommends the Truck Point service network to deliver the most suitable tyre service. Bridgestone’s service policies incorporate customised recommendations for optimum tyre maintenance.
What are your 3 biggest cost saving opportunities?

Do the three minute online test at www.ecopia.eu

TEST YOUR ECOLOGICAL TYRE PRINT

1 Answer 14 simple questions about:
   - Tyre selection
   - Tyre maintenance
   - Vehicle characteristics
   - Driving conduct

2 Discover your customised results:
   - Your fleet’s ecological tyre print score
   - The 3 most relevant cost saving opportunities, tailored to your fleet’s specific situation

Vehicle characteristics and maintenance

The advantages of good tyre selection and maintenance can easily be offset by vehicle characteristics and bad maintenance. The type of engine, air flow equipment and axle alignment are elements worth examining.

Driving conduct

Ecodriving courses, in combination with a policy of encouraging eco-friendly driving behaviour and backed up by measurements from an onboard vehicle management system, are the recipe for controlling driving style. Drivers who have taken an Ecodriving course consume on average 5 to 10% less fuel*. Which is better for the environment and your costs.

* Source: www.ecodrive.org

Measure your ecological tyre print at www.ecopia.eu and discover your 3 biggest cost saving opportunities in 3 minutes
The importance of rolling resistance (RR)

The forces that cause rolling resistance are air resistance, energy loss through friction between tyre and road, and energy loss (heat) due to internal friction between the different elements in the compound.

A FEW IMPORTANT INSIGHTS ABOUT ROLLING RESISTANCE.

- **RR causes between 20% and 50% of fuel consumption.** At a constant 80 km/h about 40% of fuel consumption is caused by rolling resistance.

- To compare RR of different tyres, the RR over the complete lifespan of the tyre needs to be examined. RR decreases as the tyres become more worn. Thus, the longer the tyre lasts, the lower its average RR and the lower the fuel consumption.
Ecopia: lower rolling resistance, less fuel*

Ecopia tyres deliver 12% improved rolling resistance compared with the previous Bridgestone line up at full tread depth.

No compromise on performance*

Ecopia tyres offer lower rolling resistance while preserving all other performance levels.

* Results obtained during internal standard tests
Ecopia retreads: extended new tyre performance

Bridgestone casings are built to last. Ecopia retreads extend the new tyre performance further, into a second and sometimes a third life. A Bridgestone Ecopia casing is recommended to deliver optimal low rolling resistance performances.

Lowest Total Tyre Life cost

<table>
<thead>
<tr>
<th>Cost per Kilometer index of different tyre lives</th>
<th>Total Tyre Life cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>New tyre</td>
<td>100</td>
</tr>
<tr>
<td>New tyre + retread</td>
<td>100 65</td>
</tr>
<tr>
<td>New tyre + 1st retread + 2nd retread (optional)</td>
<td>100 65 65</td>
</tr>
</tbody>
</table>

Retreads deliver on average 35% lower cost per kilometer than new tyres. The more a casing can be retreaded, the lower the Total Tyre Life cost is.

Better for the environment

It takes only 26 litres of oil to produce a retread, compared to 83 litres for a new tyre.
The importance of a regular service cannot be denied. Bridgestone can offer a range of services: inspections, technical advice, update information, recommendations on how to improve tyre management.

Take tyre pressure for instance. A tyre inflated to 9 bar deflates on average to 7 bar after 16 weeks, resulting in a 5% fuel consumption increase. Checking tyre pressure regularly reduces fuel consumption.
Bridgestone services

- Bridgestone’s exclusive fleet inspection programme, Total Tyre Inspection (T²i) with latest data collection technologies and KPI reporting.

- Customised Tyre and Service policies.
- Total Fleet Management contracts, such as Cost Per Kilometer and other types of Tyre Maintenance.
- Truck Point, the largest independent service network in Europe, with 2,300 professional truck tyre dealers in 21 countries.
- Service Europe, 24/7 breakdown service.
- Bandag network of over 140 franchised dealers throughout Europe, producing Ecopia retreads close to the customer efficiently and with low CO₂ emissions.
Bridgestone tyre technologies are amongst the most advanced on the market

**NanoPro-Tech™ compound**

Bridgestone’s exclusive Nano-Pro-Tech™ compound reduces energy loss in the top compound as the tyre rotates. Reduced energy loss means reduced rolling resistance. The compound does not compromise tyre performance in areas such as mileage, abrasion resistance, irregular wear and sidewall cuts. Bridgestone’s Nano-Pro-tech™ compound offers your fleets lower fuel consumption, as well as durability and abrasion resistance similar to that of previous compounds.

**Slim Bead**

Bridgestone’s Slim Bead design reduces bead filler volume which, in turn, reduces tyre weight without compromising tyre durability. The design lowers rolling resistance by 2% which results in a benefit in fuel savings.
Bridgestone tyre technologies are amongst the most advanced on the market

Low Energy Pattern

Bridgestone’s Low Energy Pattern has been specifically designed to control the movement of the tread blocks more effectively. Because there is less deformation, tread wear is reduced and the consequent reduction in absorbed energy also reduces the tyre’s rolling resistance. This translates into higher tyre mileage and reduced fuel consumption.

Waved Belt™

Bridgestone’s breakthrough Waved Belt™ technology consists of a wave shaped strip of 9 steel cords which is wrapped circumferentially to build the first and second belt layer. This reduces stress and strain at the edges of the belt as well as increasing the stability and durability of the casing. Doing so provides a stable footprint throughout the tyre’s life, thereby reducing casing growth. Waved Belt™ tyres can carry heavier loads and have better retreadability.
**Turn-in-Ply**

Bridgestone’s Turn-in-Ply moves the ply end around the bead bundle and out of the sidewall’s high stress area. This makes the bead stronger and more resilient which increases the tyre’s durability and casing retreadability, as well as allowing heavier loads.

**Conventional Bead**

The ply end is located in a high strain area in the sidewall.

**Turn-in-Ply**

The ply end is turned around the bead bundle, away from the high strain area in the sidewall.

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**Stone Ejectors**

The Stone Ejectors in Bridgestone tyres are small flexible elements at the bottom of the grooves. They prevent stone retention by ejecting stones from the tread. This means that stones cannot penetrate through to the belt and damage them. Casing retreadability is increased and stone drilling damage is prevented.
Product line up - Ecopia fuel and cost saving tyres

STEER

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<tbody>
<tr>
<td>Size</td>
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</tr>
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- Fuel efficient steer tyre
- Low rolling resistance NanoPro-Tech™ compound
- No compromise on durability, irregular wear resistance and wet performance
- Stone Ejectors

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</table>

- Higher* load, fuel efficient steer tyre
- Low rolling resistance NanoPro-Tech™ compound
- Waved Belt™ and Turn-in-Ply technologies for superior durability
- No compromise on irregular wear resistance and wet performance
- Stone Ejectors

Bridgestone R249 Ecopia, M749 Ecopia and Greatec M709 Ecopia are homologated for major truck manufacturers and R109 Ecopia is available for major trailer manufacturers.

* Compared to Bridgestone R249
**DRIVE**

- Fuel efficient drive tyre
- Low rolling resistance compound
- No compromise on durability, irregular wear resistance and wet performance
- Excellent traction and wet weather handling
- Available as a retread

### SIZE AVAILABILITY

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**Greatec M709**

- Ultra low-profile fuel efficient single drive tyre
- New Low Energy Pattern technology for low rolling resistance
- Waved Belt™ and Turn-in-Ply technologies for superior durability
- Increased* vehicle payload capacity

### SIZE AVAILABILITY

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**TRAILER**

- New fuel efficient trailer tyre
- Low rolling resistance compound
- New Slim Bead technology reducing rolling resistance and weight (only for 65 series)
- Waved Belt™ and Turn-in-Ply technologies for superior durability (only for 55 series)
- No compromise on durability, irregular wear resistance and wet performance
- Available as a retread

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* Compared to Bridgestone dual fitment
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