



CONCEPT

The Zenvironment series has been developed by YOKOHAMA to contribute to the global emissions reduction programme. YOKOHAMA has created new technologies in factory processes, as well as new tyre designs, compounds and constructions.



Through our activities, we want to contribute to the environment and we always endeavor to use only environmentally-friendly materials.

Environmental problems cannot simply be solved
by improving fuel efficiency.





**Materials become waste upon disposal,
but waste materials become resources
when they are recycled.**

No matter how efficiently we use tyres, they will eventually need to be scrapped. The way we deal with this is vital to our global environment. At YOKOHAMA, we have been thoroughly addressing three major issues: Reducing, Reusing, Retreading. In order to reduce waste, we produce tyres which last longer and are stronger. Retreaded tyres are made from used tyres whose worn-out parts are buffed and recapped. Totally unusable tyres will be effectively utilized for thermal recycling or are recycled as a pavement or cement material. Eliminating waste is the first step to protecting the environment.



**To reduce environmental impact,
YOKOHAMA wants to make tyres last
longer and stronger.**

We need to save energy to conserve the environment.

Tyres can be a vital part of energy saving in vehicle parts.

They have the possibility to dramatically increase the fuel efficiency.

Of course, there are various factors which affect
the fuel efficiency of a vehicle.

Where tyres can contribute most is rolling resistance.

YOKOHAMA pursues total environmental performance,

developing tyres that cause less rolling resistance,

have a longer life, and generate no waste.

This development is a step toward our ideal environmental performance

and at YOKOHAMA we will continue to strive to achieve the best performance.

It is not only engines that can contribute
to reducing exhaust gases.



Diesel engines used in trucks and buses have better fuel efficiency and less CO₂ emissions than gasoline engines. YOKOHAMA aims to reduce these emissions even further. YOKOHAMA also aims to reduce nitrogen oxides (NO_x) and particulate matter (PM) to protect the environment. We will never stop pursuing our quest to make tyres run more efficiently. With the evolution of tyres, vehicles will evolve. We will never stop our quest to solve problems on a global scale.

We know that you are relentless in your work as a transport professional.
We understand that economic aspects are of great concern to you.






**Your vehicles run a long way, everyday.
Even small differences in your vehicle's fuel efficiency
have a great impact on your business.**

We must all commit to reducing environmental impacts. Everyone in the transport industry wants to improve the economic efficiency of their vehicle operation.

At YOKOHAMA, we want to achieve the reduction of environmental impacts as well as to provide solutions to the transport industry for economic efficiency.

To do this, our aim is to reduce fuel costs which are the major expenditure of the transport industry. Improving the fuel performance of tyres increases the fuel efficiency of your vehicles' engines. Strong and long-lasting tyres which are fuel efficient can reduce both the tyre cost itself and the fuel cost at the same time. YOKOHAMA has succeeded in developing this tyre

with innovative technologies. It is important to remember that even small daily differences in a vehicle lead to big, even huge differences in costs over a long period of time and your entire fleet operations.



Maintenance intervals ideal in economic
and technical aspects can help reduce costs.

The reduction of maintenance costs leads to the reduction of expenses.
At YOKOHAMA, we always pursue common ideals.
One of these ideals is to improve the partial wear-resistance
of tyres for less tyre rotation maintenance.
At YOKOHAMA, we have developed our own technologies
to improve the prevention of the occurrence of abnormal wear
by effectively absorbing and dispersing energy and stresses on tyres.
It is true that no matter how much tyres evolve, it will never be possible
to totally prevent wear because tyre wear is influenced by factors
other than just the tyre itself, for example, vehicle alignments,
tyre inflation pressure, road conditions, braking conditions,
operating behaviours etc.
At YOKOHAMA, we recognize that our responsibility is
to make tyres which ensure that abnormal wear is reduced
as much as technically possible.

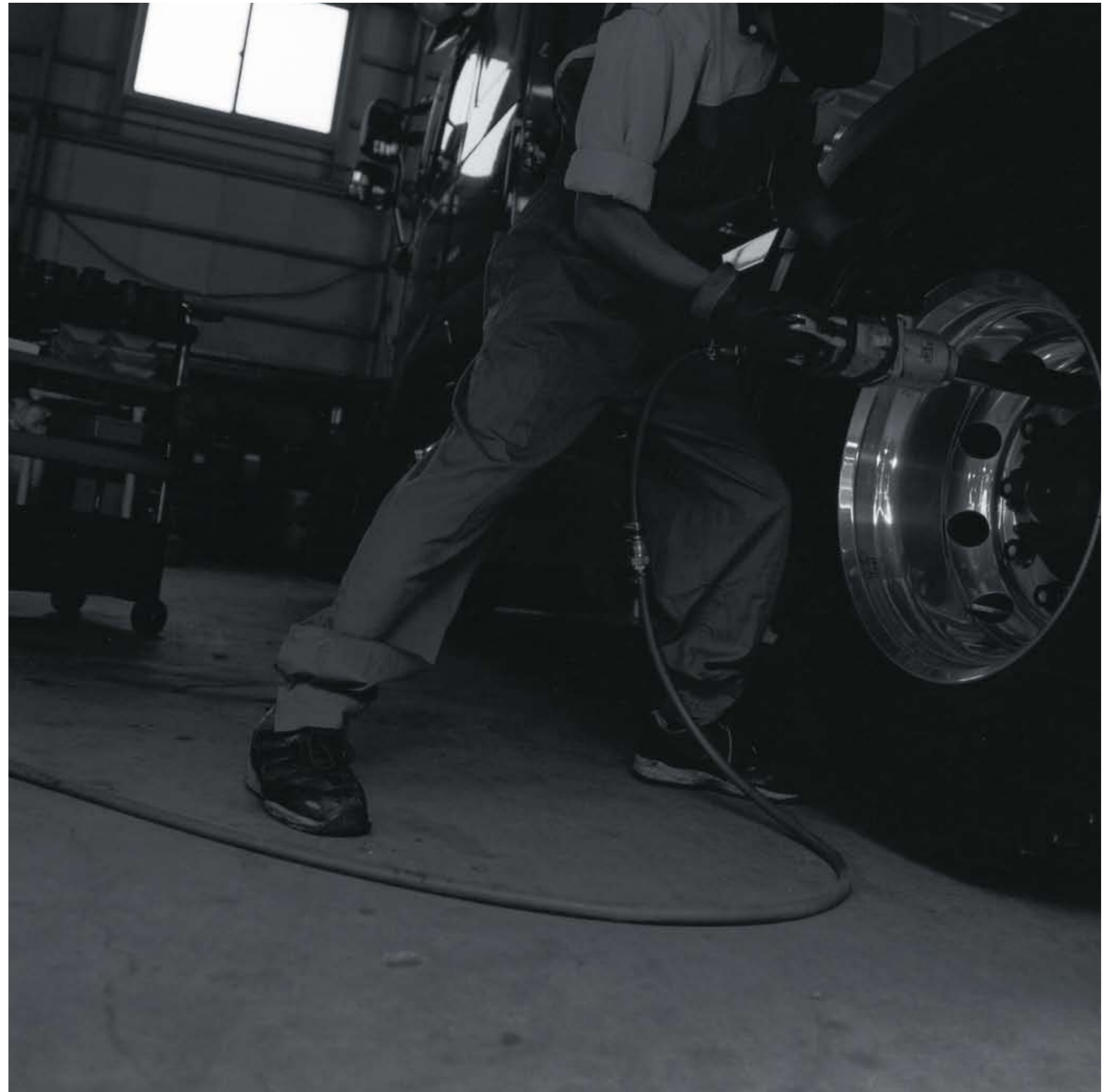
**Reducing tyre replacements
reduces expenses.**

The tyres used on your trucks and buses directly affect your transport costs. To reduce transport costs, you can extend your tyres' life by making sure that you use them with the highest possible effectiveness regarding the tyre performance itself and maintenance procedures.

Improvements to the wear resistance of tyres are always sought after. At YOKOHAMA, we pursue tyre production based on new technologies from our own perspective and with our own ideas.

In order to develop these ideas, we challenge conventional thought and constantly think outside the box.

The relentlessness of our engineers creates tomorrow's tyre technology, today.





Some things we want to protect.
Other things we must protect.



It is essential to raise vehicle utilization rates to correspond with the need to improve transport efficiency.

On the other hand, perfect vehicle maintenance is important to improve the quality of transport.

Transport efficiency and transport quality are conflicting issues.

So the question is, what can we do here? How should tyres evolve?

At YOKOHAMA, we have concluded that one of the best solutions is simply to develop tyres with a longer life – tyres with a longer original tread life and better retreadability which do not sacrifice fuel economy performance.

This is why we needed and why we have created new technologies in our factory processes as well as a new tyre design, compounds and constructions.

Vehicle downtime caused by tyres is an unnecessary waste.



Safety should never be compromised.

Safe driving is a constant objective for everyone.

When developing tyres for trucks and buses, it is important for YOKOHAMA to consider every possible situation they might encounter because they are running continuously under severe conditions.

During research and development, YOKOHAMA simulates even the slight changes of tyre shape when they run.

Development work that simulates this severe reality is conducted by strictly analyzing strains on the tyres.

Any possible changes that might occur inside of the tyre and even in the material of the tyre during continuous running, as well as any possible structural changes, are examined comprehensively. YOKOHAMA has created its own concept, "the Margin of Safety Ratio", to evaluate the performance of the whole tyre life.

At YOKOHAMA, we will never compromise on safety.



People who have to concentrate fully on operating a vehicle must not be put under stress.

Everyone wants a safe vehicle.

For safety, the driveability of your vehicle is a staple technology.

Vehicle technology may prevent accidents and lighten the stress on drivers.

It is the tyres that are ultimately responsible

for the evolution of vehicle technologies.

Various improvements to tyres have been made to make them safer.

At YOKOHAMA, we have carefully studied the vehicle running patterns of drivers.

How do drivers recognize operating information?

What judgments do they make based on which kinds of information?

What actions do they take?

At YOKOHAMA, we research systems that assist driving

based on the analysis of a driver's actions. But we won't stop there.

YOKOHAMA will keep creating new technologies,

challenging traditional conventions, relentlessly.



YOKOHAMA tyres are running on the future
for the transport industry.