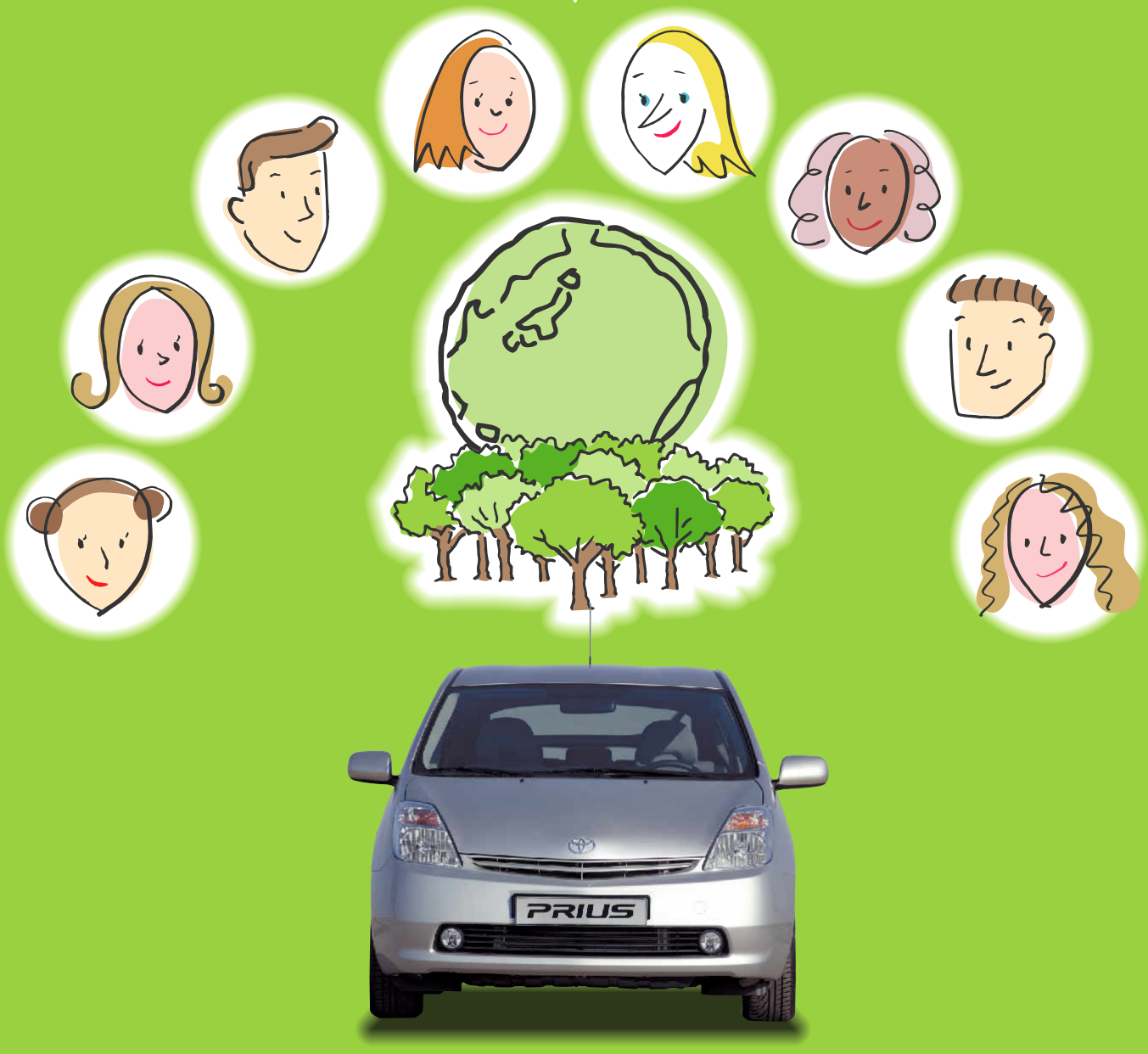
Prius Green Report

Prius cuts CO_2 throughout
its life cycle for the good health of our planet



HYBRID SYNERGY DRIVE

PRIUS

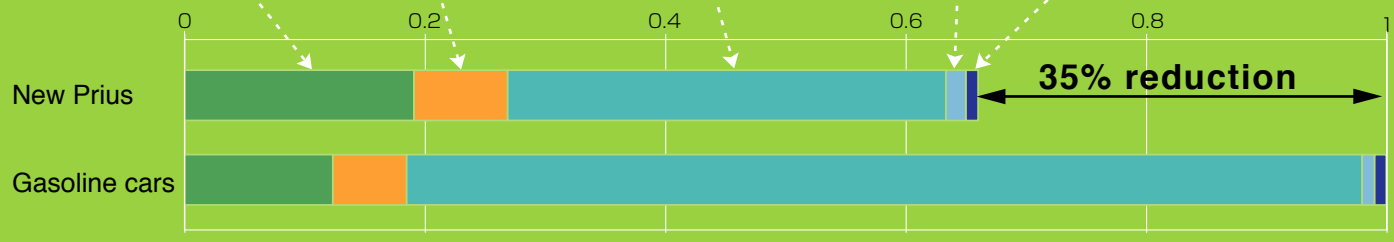
TOYOTA

With the Prius* we looked at a car's whole life cycle — how it's made, how it's driven, how it's disposed of. And then we cut CO_2 emissions.

*(model displayed at New York & Shanghai Auto Shows)

● Materials production ● ● Vehicle production ● ● Driving ● ● Maintenance ● ● Disposal ●

Comparison of CO_2 emissions during the life cycle (Index)



*Based on 10 years use, and 100,000km mileage

*Gasoline car' is of a similar size to a Prius. All the gasoline vehicles used for comparison in this pamphlet are the same model

Prius. Because a forest doesn't grow overnight.

Imagine you drive a Prius for 10 years, or for 100,000km.
You'll have saved 7.5 tons more CO_2 than with a gasoline car.

Which means...

**One tree*1 absorbs around 14kg*2 of CO_2 each year.
So you'd be doing the annual workload of a forest with 536 trees.**

Even I can be kind to our planet!

*1 Measured using Japanese cedar

*2 CO_2 equivalent

In 1997, the Prius became the world's first mass-produced hybrid car to go on sale. 2003 sees the advent of an even more environmentally friendly Prius.

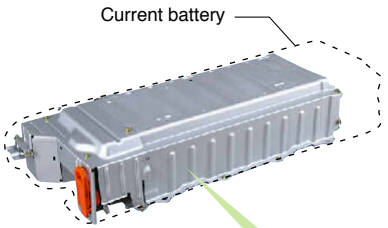
I wonder how they improved the Prius.

Let's show you how we cut CO_2 in each stage of the car's life cycle.

Production

1 We made the batteries smaller and more efficient.

The hybrid batteries in the Prius are now even more powerful. But they are also a lot smaller. And CO_2 emissions are 33% less than during the manufacture of ordinary batteries.



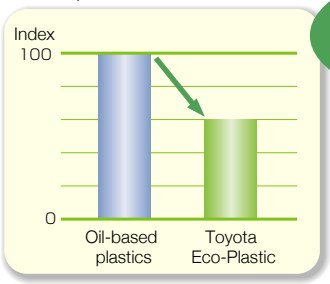
■ Comparison of CO_2 emissions

2 We used plastic made from plants.

Through the use of Toyota Eco-Plastic, which is made from CO_2-absorbent plants, we were able to make further CO_2 reductions. It's also used in parts of the floor mats.

Toyota Eco-Plastic floor mat

■ Comparison of CO_2 emissions

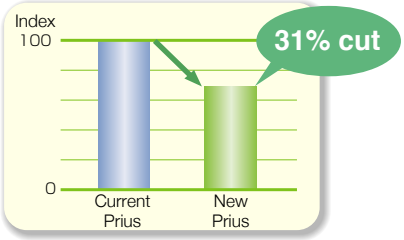


Now I see! The Prius tries to reduce CO_2 right from the manufacture stage.

3 We tried to make the ultimate clean car

We also tried to improve the manufacturing process for the Prius. This resulted in a drop in the amount of energy needed during manufacturing, and therefore a huge cut in CO_2 emissions. All Toyota's factories are run in compliance with ISO 14001 environmental management standards, enabling us to carry on making clean cars with a minimal environmental impact.

■ Comparison of CO_2 emissions



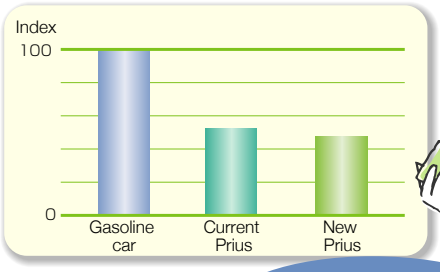
Driving

The car maximizes the strengths of the engine and the motor, giving you incredible fuel efficiency.

The car divides the characteristics of the engine and the motor while you drive, meaning a dramatic reduction in fuel used and a huge cut in CO_2 emissions.

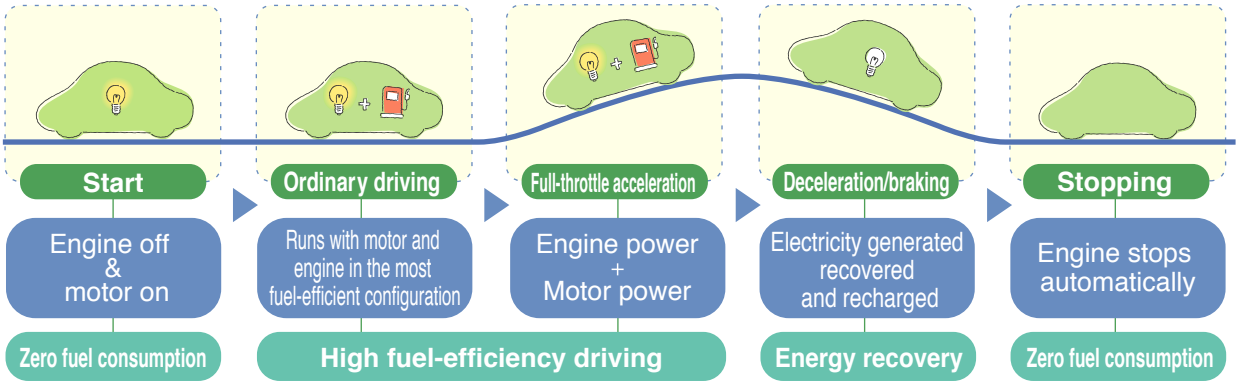
Burning 1 liter of gasoline produces around 2.4kg of CO_2.

Comparison of CO_2 emissions when driven for 100,000km



So burning less gas means less CO_2, doesn't it?

Hybrid cars running on a motor and an engine

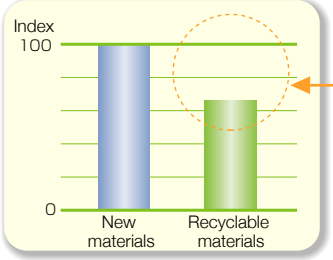


Recycling

We use recyclable plastics

Using recyclable materials helps us to conserve resources, and leads to a reduction in CO_2 across the life cycle compared to when new materials are used. We have increased the proportion of recyclable plastic we use in the Prius.

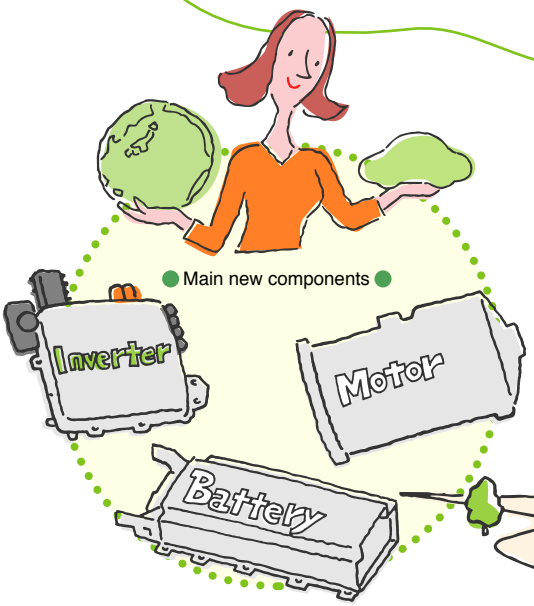
■ Comparison of CO_2 emissions



● Using recyclable materials helps us to reduce CO_2 substantially across the life cycle compared to when new materials are used.

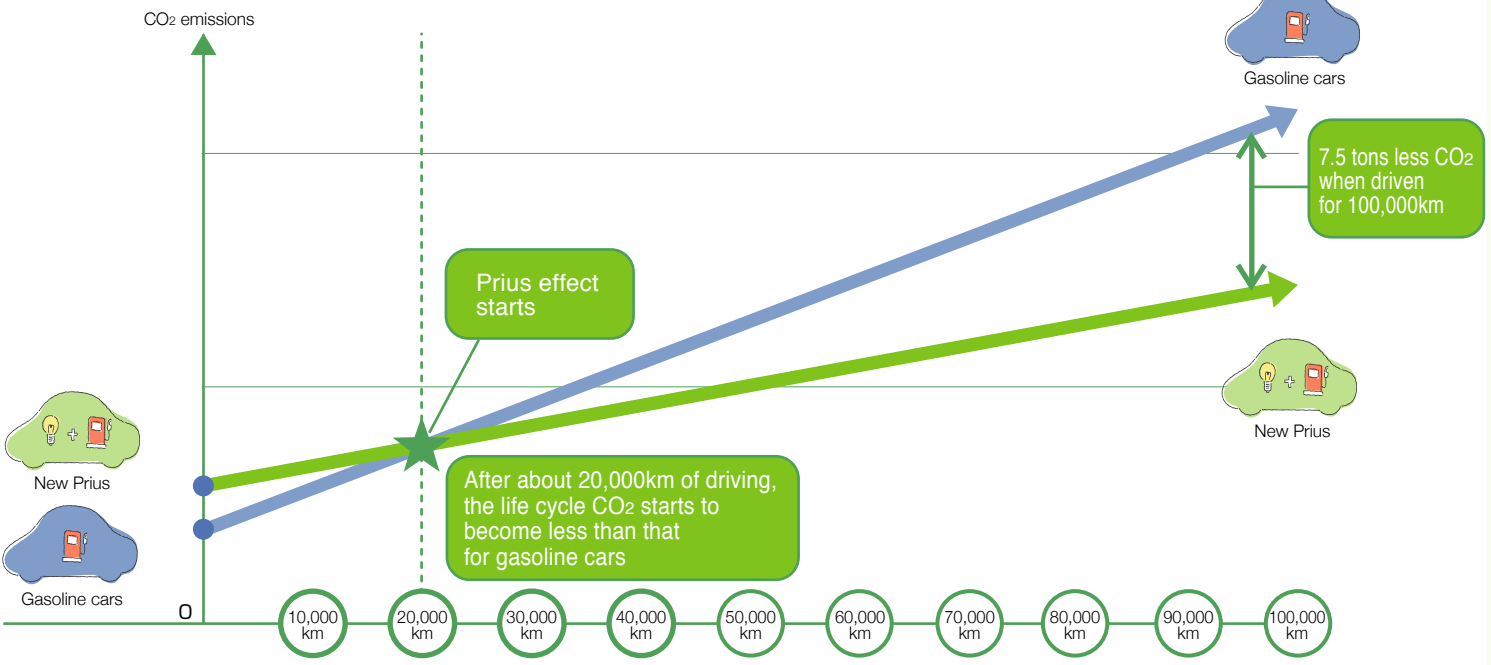
So recycling resources cuts CO_2 as well.

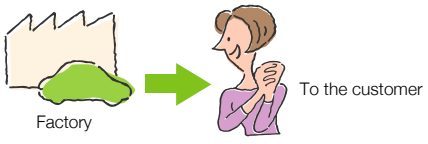
A great deal of ingenuity makes some big cuts in CO_2 across the life cycle possible



When we make a hybrid car, even more CO_2 is emitted than when we make a gasoline car. But thanks to the ingenious steps we have just outlined, the Prius actually creates a lot less CO_2 than ordinary gasoline cars throughout its life cycle.

Amazing! The more you drive hybrid cars, the more beneficial they become!



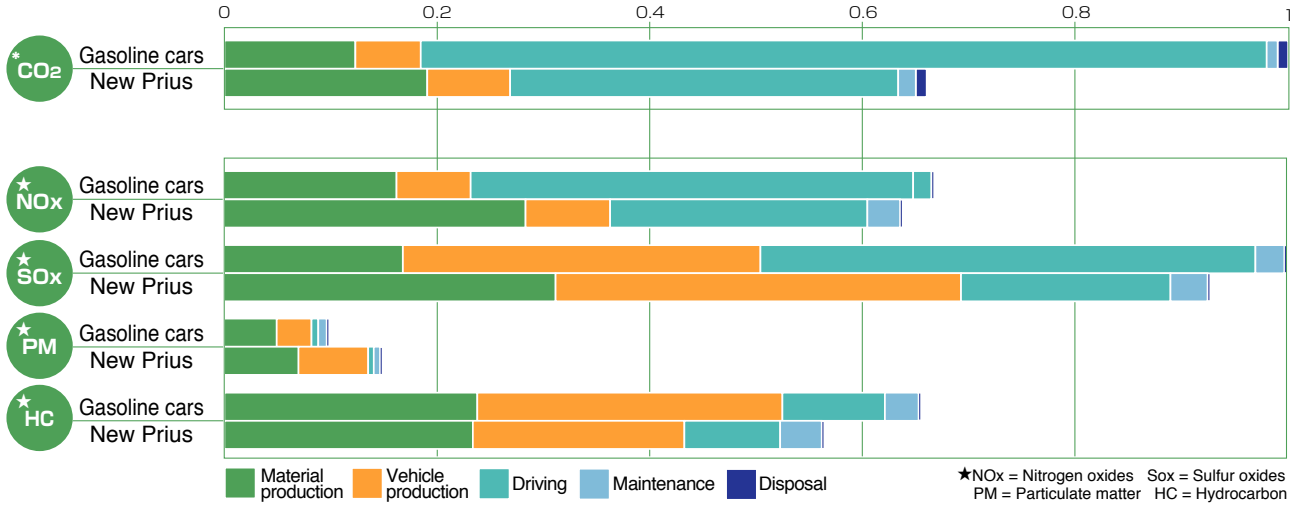


Toyota examines environmental burden at every stage of a car's life cycle

Have you heard of LCA—Life Cycle Assessment?

LCA is a method of evaluating in advance a product's environmental impact throughout its whole life cycle, from manufacture to disposal.
International standards for this method have already been set under the ISO14040 series.

New Prius LCA Results (Airborne emissions: Index)



★NOx = Nitrogen oxides Sox = Sulfur oxides
PM = Particulate matter HC = Hydrocarbon

*1 represents gasoline cars for CO_2, other items are indexed to gasoline car NOx emissions represented by 1.

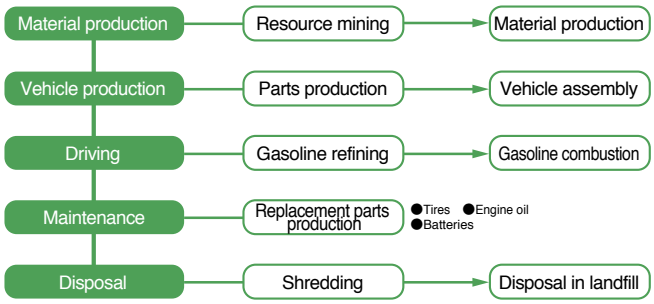
■ Vehicle of evaluation targets

(Fuel efficiency and exhaust emissions were measured in the 10-15 Japanese test cycle)

Vehicle name	Vehicle weight	Engine displacement	Exhaust emissions
New Prius	1,250kg	1.5ℓ	NOx : 0.02g/km HC : 0.02g/km
Gasoline cars *1	1,240kg	2.0ℓ	NOx : 0.02g/km HC : 0.02g/km

*1 Gasoline car of a similar size to a Prius, based on 10 year use, and 100,000km mileage during the life cycle.

■ Assessment range



The greening of cars —totally, globally.

With all the members of the Toyota group around the world joining hands, Toyota is aiming to create a mobile society that can co-exist with the environment. On a global scale, it is trying to reduce the environmental impact of cars, taking into consideration a car's entire life cycle, from R&D, to production, usage and disposal.

R100
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