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Is there a magic bullet for fuel economy?

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real QUESTIONS real ANSWERS

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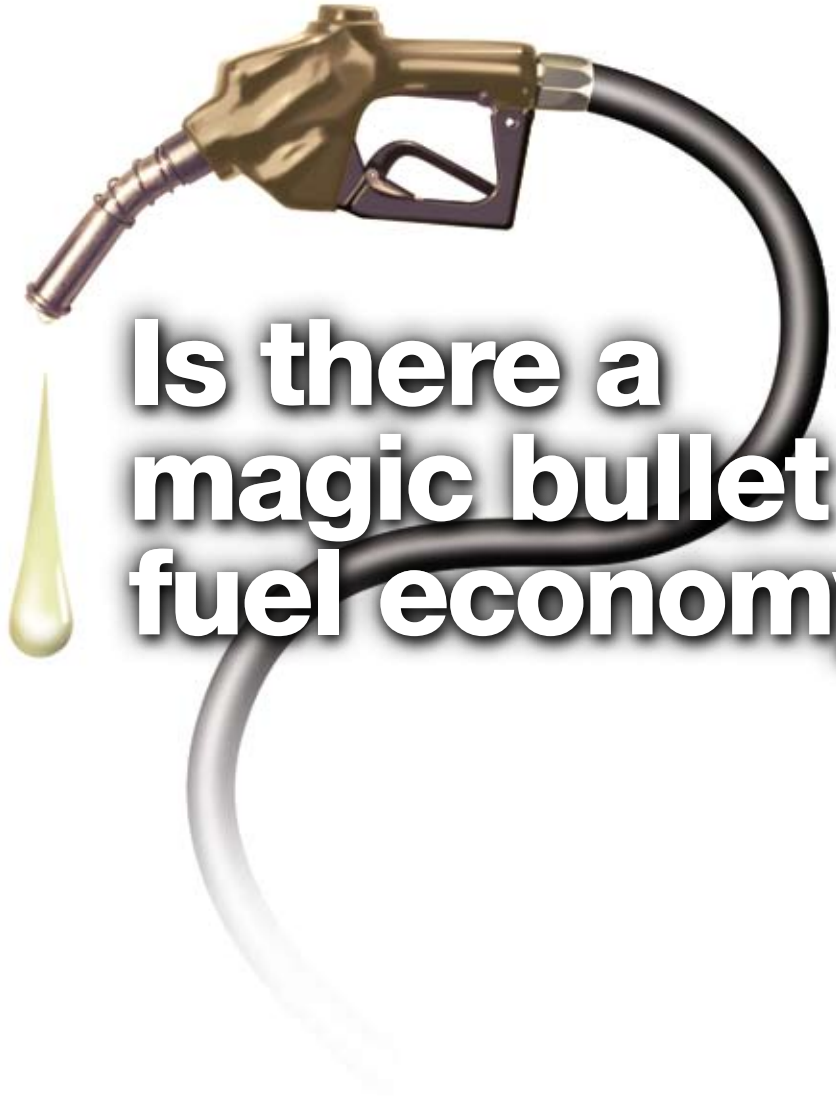
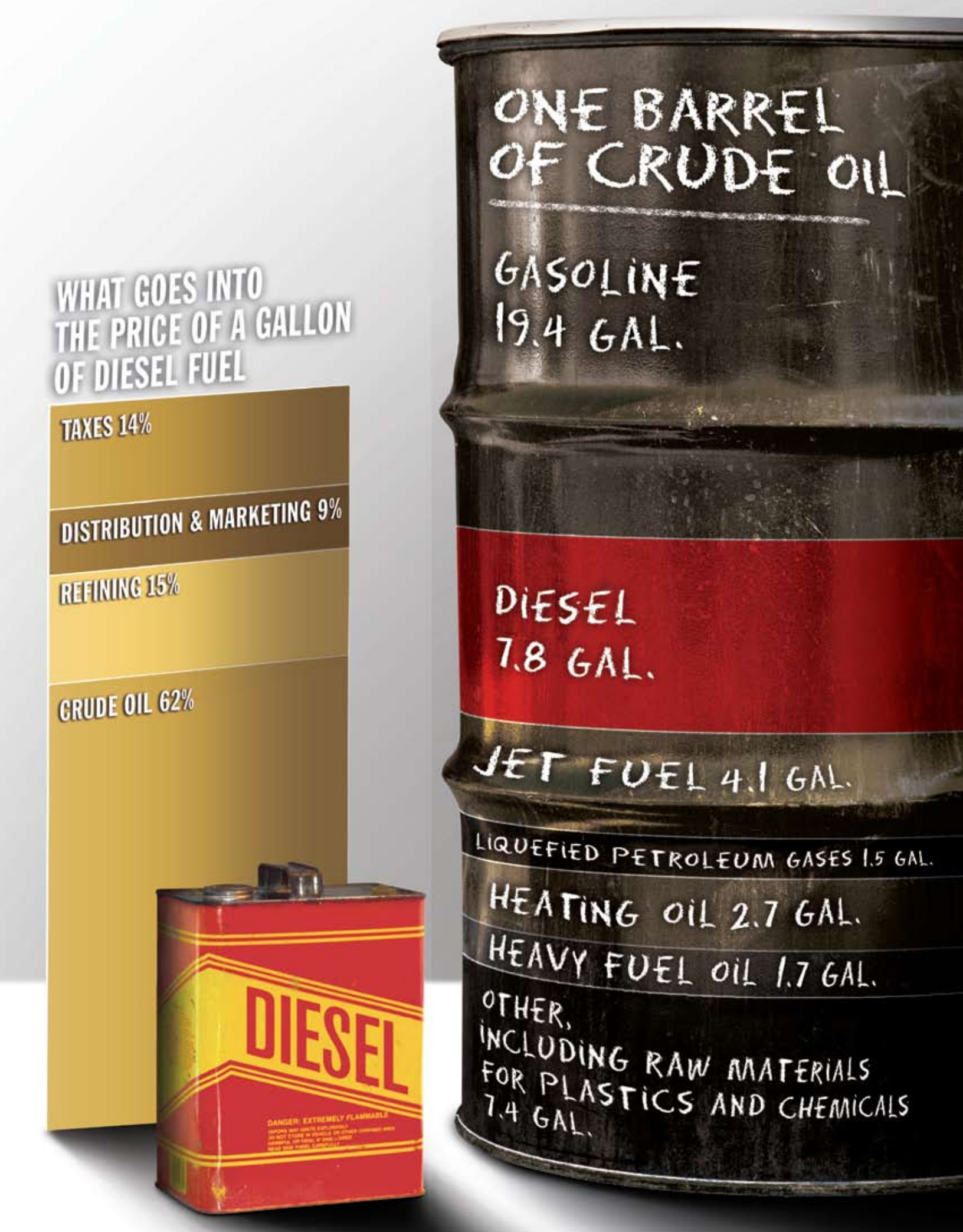


Is there a magic bullet for fuel economy

For nearly a quarter of a century, Bridgestone has been publishing the results of its research on truck tire fuel economy. What have we learned? Just as in 1984 when we first shared results with the industry, no, there is no "magic bullet."

But there have been big changes in tires and trucks, and you can turn some of them to your advantage.


WHAT GOES INTO THE PRICE OF A GALLON OF DIESEL FUEL
TAXES 14%
DISTRIBUTION & MARKETING 9%
REFINING 15%
CRUDE OIL 62%
ONE BARREL OF CRUDE OIL
GASOLINE 19.4 GAL.
DIESEL 7.8 GAL.
JET FUEL 4.1 GAL.
LIQUEFIED PETROLEUM GASES 1.5 GAL.
HEATING OIL 2.7 GAL.
HEAVY FUEL OIL 1.7 GAL.
OTHER, INCLUDING RAW MATERIALS FOR PLASTICS AND CHEMICALS 7.4 GAL.
DIESEL
DANGER: EXTREMELY FLAMMABLE

Is there an answer to better fuel economy?

The bad news is there is no one answer. The good news is there are lots of partial answers.

What's our best strategy?

Interestingly enough, that hasn't changed. You probably remember infamous bank robber Willie Horton, who, when asked why he robbed banks and noplace else, responded, "Because that's where the money is."

Fact is, TMC and just about everybody else will tell you the biggest single controlling factor in large truck fuel economy is your driver's right foot. TMC estimates the mpg of the best drivers could be as much as 35 percent better than the worst.

And that dwarfs any other thing you can do to save fuel.

That's not news.

No, but with fuel prices as high as they are, the effects of speed are becoming more and more important. Kenworth reports that increasing speed just 5 mph, to 65 from 60, can cut fuel economy by 6.4 percent.

If you run 125,000 miles per year and get 7 mpg, that's 1,221 gallons – not dollars, GALLONS – per tractor.

So what we're seeing is that smaller factors are having a bigger effect?

Absolutely. A short time ago, one of North America's major LTL fleets reported it was reducing its governed speeds from 65 to 62, just 3 mph, and that it expects to save 3.2 million gallons of diesel a year by doing so.

Another major fleet tells us that to them, a one-tenth mile per gallon change represents a million dollars a year in their fuel costs.

And, industry authorities are now telling us that at many fleets, fuel is now the number one expense, NOT driver wages, as it has been for so many years.

So what part do tires play in the fuel picture?

Tires are much smaller than driver boots, but now that smaller percentages are more important, they can make a big difference.

How can Bridgestone help?

Right now, we are preparing the fourth edition of our fuel economy guide, incorporating our latest research. A lot has changed. Trucks have become more and more aerodynamic and both tractors and trailers have shed a lot of excess weight.

Practically every engine is computerized. And fuel-efficient tires have become a mature product. They're a lot different from the fuel-efficient tires of 10 or 15 years ago.

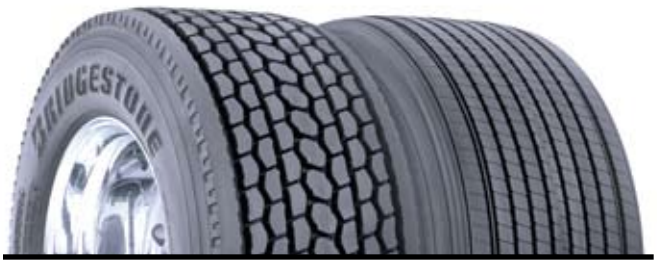
In what ways?

Today's fuel-efficient tires are delivering the kind of traction and tread life that early fuel-efficient tires could only dream of.

TOP TEN FUEL ECONOMY FACTORS

Rank		If you use or have:	vs.	MPG Improves By:
1	ROUTES	Flat Interstate Highway	Urban Route With 100% Stop & Go	45-165%
2	ROUTES	Flat Interstate Highway	Suburban Route With 50% Stop & Go	25-35%
3	DRIVERS	Best Drivers	Worst Drivers	Up to 35%
4	SPEED With Poor Aerodynamics	If you go slower by: 5 MPH	No Change	10-15%
5	COOLING FANS With On/Off Types:	Zero fan On time	100%	7-18%
6	ROUTES	Flat Interstate Highway	Mountainous Interstate	4-18%
7	ENGINES	Electronic	Mechanical	7-15%
8	WEATHER CONDITIONS	Summer	Winter	8-12%
9	TIRES	STEER/DRIVE/TRAILER Rib/Rib/Shallow Rib	STEER/DRIVE/TRAILER Rib/Deep Lug/Rib	6-14%
10	WEIGHTS Mountainous Route	*If you decrease weight 10,000 lbs. (for GVW between 60,000–80,000 lbs.)* 10,000 lb Lighter Load	Heavier Load	7-12%

Based on TMC publication "The Fleet Manager's Guide to Fuel Economy."



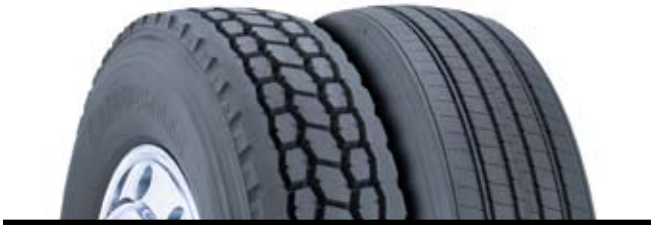
Wide base single tires, like Bridgestone Greatec drive and trailer tires, can reduce both weight and fuel costs, but require an investment in special new wheels.

What about wide single tires?

Wide single tires can be useful too, but in our view, their fuel efficiency is exaggerated. Bridgestone, for example, offers Greatec wide base radials for both drive and trailer positions, and these offer comparable fuel efficiency to other wide base tires.

But, Bridgestone also offers conventional tires that are every bit as fuel-efficient as wide base tires. And with those, you don't have to buy new wheels to get the benefits.

In fact, if fuel economy is a big concern, conventional tires are a better buy.



Conventional-design fuel-efficient tires, like the Bridgestone M720 drive & R195F radials offer fuel efficiency every bit as good as wide singles without requiring you to buy additional equipment.

Then why have the wide singles?

The major benefit of the wide single is that it weighs less. And, if you can convert that weight savings into moneymaking payload, it can be a way to go.

But if saving some weight doesn't let you make more money, wide singles probably aren't a very good idea.

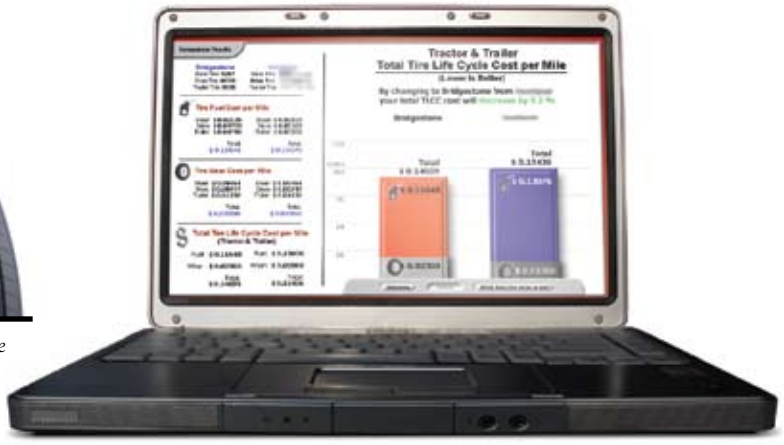
And why still make tires that aren't fuel-efficient?

There still are applications where tread life, traction, durability, casing and sidewall strength and retreadability are more important than fuel economy.

On/off-highway fleets, construction fleets, refuse haulers and local delivery operations often work in environments where tires aren't a good way to save fuel.

Is there a way we can compare one tire against another?

There is. Bridgestone offers a program called ***Tire Life Cycle Cost*** (TLCC) which uses a rigorously scientific, tested method.



Bridgestone's Tire Life Cycle Cost computer program accurately and scientifically projects total cost of tires and fuel over life for both Bridgestone and competitor tires.

It can help you calculate your total tire cost per mile over the entire useful life of the tire, and show you what part of your tire costs relate to fuel use and what part to tire life.

You'll be able to run calculations based on your own tire experience, purchase prices, tread life, maintenance costs, fuel prices, even retread costs and casing values.

Best of all, you can compare what you're currently using, including most major brands, against the best Bridgestone has to offer.

How can we get a copy?

Your Bridgestone representative has a copy of TLCC and will run it for you. It's too complicated to post on the Internet as a cookie-cutter online program.

That's because it's based on solid science. And because it's constantly being updated with new information as new Bridgestone and competitive tires become available.

So, get in touch with your Bridgestone representative and ask for a demonstration.

What other advice do you have?

We'll continue, in this series, to fill you in on what we've learned about tires and fuel economy. So watch this space. Meanwhile, "Don't take any wooden nickels." In times like these, there is no shortage of snake-oil salesmen who want to separate you from your money with "sure-fire" "guaranteed" fuel economy schemes.

Make them prove the effectiveness of what they have. Insist on SAE and TMC tests from independent laboratories. If they don't have them, ask yourself why. If America's biggest fleets aren't adopting their products, ask yourself why.

Whether it bolts onto the engine, the body or your axles, if the promise is too good to be true, the product probably isn't.