



Shell's fuels technology manager for Asia-Pacific and the Middle East sheds light on a new fuel formula, the trouble with using hydrogen as a fuel, and the future of fuel prices

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What is this new fuel-economy formula of Shell and how does it work?

We've added components to our products, which get more energy out of the same amount of fuel, without passing the cost to the consumer. Research for this began with the Guinness World Record fuel-economy run of John and Helen Taylor. It was still experimental at that stage. The fuel keeps the engine clean, so the engine works at its best all the time.

But the whole concept is not only the product itself; we want to help people save fuel by training them. We have done trials with fleet customers and the success we've had is phenomenal. Two-thirds saw fuel-economy benefits in excess of five to 20 percent, which was more than what we expected.

Did you say driver training?

Yes, we give the drivers a trainer who drives with them and picks out their issues—like what they

should and shouldn't do to improve fuel economy. Our vision is to help our customers cut their fuel bills by 10 percent, or spare the planet 10 percent in fuel use. Each drop of fuel that you don't burn will not produce emissions. You save money and you do something for the environment. This formula is already included in our unleaded and premium products.

Including V-Power?

It's a different segment of customers. They want quicker acceleration and more power. V-Power gives you more efficiency, but customers want to use that efficiency for power.

How's hydrogen as a fuel?

Some think it's the fuel of the future. And it might be because if you burn hydrogen, all you get is water. But the challenge is threefold. First is that—with the exception of BMW—you use hydrogen in fuel cells where you generate electricity and use it with the electric motor of the car. Today, one kilowatt of a fuel cell is 200 times more expensive than one kilowatt made from an internal combustion engine.

Second is that it is very difficult to store hydrogen in a tank because

the molecules are so small, they go through the walls of the tank. You have to cool it down and keep it under high pressure. There are tanks that can store hydrogen but only for a limited time. If you park one of these experimental hydrogen cars for a week, when you come back, the tank will be empty.

Third is how to produce hydrogen. You don't drill a hole in the ground and expect it to come out like oil. Today, we make it in a refinery—we split water using electricity. The problem is, power is generated using crude oil. Hydrogen has to be produced in a sustainable way, using wind, solar or hydropower.

Will gas prices ever come back down?

The fuel price is very much driven by supply and demand, and that's something beyond our influence. What we can influence is the technology of the fuel. We try to make the fuels run more efficiently.

What are the common things people do that waste fuel?

I notice a lot of people are careless about what they leave in their car. I have golf buddies who always have golf clubs in their trunk, and that's a lot of added weight.

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