

## **Amid Rising Fuel Prices, Efficiency Improvements Create Cost Advantages**

*By Justin Ashton, Vice President of Business Development, XL Hybrids*

While gasoline and diesel fuel prices continue to rise toward high-water marks, business managers are again left wondering how they will relieve the pressure on their limited operating budgets.

Everyone tends to focus on how rising fuel costs affect their business and bottom lines. But a less obvious view is that all companies face the same problem, and those taking tangible steps now to adopt more efficient vehicle technology are creating strategic cost advantages against competitors who do not act.

These cost advantages may allow your business to steal market share, invest in new products or efficiency technology, and return more value to your shareholders than waiting until prices rise even further to act.

### **Real Scenarios**

While fuel prices seem like they're high today, there are real scenarios on the horizon that could cause an even greater oil price spike.

McKinsey & Company, a top-tier strategy consulting firm, recently released a study on the potential causes and impacts of another oil price spike. This study raises important points for managers who run businesses with transportation or service fleets.

I want to highlight two points:

- 1) There are plausible scenarios that could cause another oil price spike in the next few years, so the time to take action is now.
- 2) By taking action to reduce fuel consumption, you will not only reduce operating costs today, but will also create a cost advantage over those competitors who wait to take action.

I will take some of McKinsey's thoughts one-step further and run some numbers to show how reducing fuel consumption in your business fleet provides your company real cost savings that may be further invested in efficiency technology or other areas of your business.

## Oil Prices

The price of oil (and the price of fuel) continuously fluctuates and is incredibly difficult to forecast because the price is set in a global oil market, where global demand and supply shifts without warning, influenced by floods, weather, wars, and economic cycles.

While the U.S. has begun producing more oil in recent years, global demand, especially from emerging economies, is rising faster than it can produce, so oil prices will see little to no relief from U.S. production.

Fuel prices are also affected by regional markets, where refining capacity, local economies and state taxes cause additional layers of complexity. Given that there is considerable uncertainty about how high and how long fuel prices will rise again, fleet managers and business executives should be taking real steps toward reducing exposure to fuel price volatility.

The best way to do that is to take steps that reduce fuel consumption in your fleets by increasing overall fleet efficiency whether through downsizing, adopting alternative vehicles such as hybrids or through fleet monitoring such as telematics.

## An Example

Let's quantify what happens to fuel costs during a rise in oil prices by using a large fleet of service vans and trucks as an example.

A hypothetical delivery fleet has 1,000 vehicles that operate in and around urban areas. If the fleet fuel economy average is 12 mpg and the vehicles average 20,000 miles per year (mpy), the total fleet is using  $(20,000 \text{ mpy} / 12 \text{ mpg} \times 1000 \text{ vehicles}) = 1,666,667$  gallons of fuel per year.

If we assume the fuel is all gasoline today, that works out to a fuel cost of about  $(\$3.80 \text{ per gallon} \times 1,666,667 \text{ gallons}) = \$6,333,333$ . If fuel prices spike to \$5 per gallon, annual fuel costs rise to \$8,333,333, a 31.6 percent increase or an extra \$2 million each year.

Now, let's suppose that this company takes steps today to increase fleet efficiency.

Let's assume that 50 percent of the fleet is a good candidate for a more fuel efficient option, and 50 percent of the fleet gets replaced or repowered with a more efficient option before an oil spike happens, improving each vehicle's fuel economy by 25 percent to 15 mpg. The remaining 50 percent of the fleet stays at the 12 mpg average.

The newly efficient fleet now consumes (1,667 gallons per vehicle x 500 vehicles + 1,333 gallons per efficient vehicle x 500 vehicles) = 1,500,000 gallons, a reduction of 166,667 gallons per year or 10 percent of the total fuel use of the fleet.

At \$3.80 per gallon, the fleet saves (166,667 gallons x \$3.80 per gallon) = \$633,335 per year over a do-nothing scenario. If fuel prices jump to \$5 during a serious oil price spike, the savings jump to \$833,335 per year.

So, if this fleet had not taken action, fuel expenses would have increased ( $\$8,333,333 / \$6,333,333$ ) = 31.6 percent during the fuel price spike. But, by choosing to adopt an efficient vehicle option as in our scenario, fuel costs only spike ( $\$7,500,000 / \$6,333,333$ ) = 18.4 percent, a little more than half the fuel cost increase of the do-nothing scenario.

### **Bottom Line Savings**

This example highlights the fact that small increases to efficiency in a business' vehicle fleet can provide real value, especially in the face of fuel price volatility. Fuel savings go right to the bottom line and can be invested in new growth areas or services for the business to differentiate from competitors, such as lower prices to customers, enhanced customer service, better product warranty, longer service hours, expanded geographic market or further vehicle efficiency improvements.

While your business is investing the fuel savings for growth, your competitors that did not act are suffering from a much higher increase in fuel costs.

Acting to increase vehicle efficiency creates real value and cost advantages against your competitors who lag behind, creating investment opportunities laggards will miss.

Furthermore, reducing your company's exposure to volatile fuel prices literally reduces uncertainty in your business costs in the future.

While it may at first seem counterintuitive to think about investing when fuel prices spike, remember that all companies face the same prices at the pump and that your company will be in a position to invest savings in growing the business, while others are sending that money to oil companies.

Many efficient vehicle technologies are cost-effective today, and by calculating the benefits of fuel savings in volatile oil price scenarios, we can convince senior executives that efficiency improvements create significant strategic opportunities.

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