



作者：徐業良(2005-07-17)；推薦：徐業良(2005-07-17)。

附註：本文發表於汽車購買指南雜誌，2005年九月號，史丹福專欄。

汽車省油大作戰

汽油又漲價了。八月三日起，中油、台塑汽油（含 92、95、98）每公升同步調漲 1.5 元。現在才八月，汽油已經是今年第二次漲價了，我慣常加的 95 無鉛汽油年初時每公升是 22.9 元，這波漲價過後每公升得要 25.4 元，兩波共漲了 2.5 元，11%。

麻煩的是，未來汽油不斷漲價，似乎是一個可以預期的常態。

您，怎麼因應呢？

有一些簡單的事您可以作，增進您的汽車省油性，不管您開的是什麼車子。

多麼阿 Q 的想法，如果您省油 11%，油價上漲就賺回來了。

每次加油時稍微計算一下您愛車的耗油量是個好主意，有些車子上的電腦系統已經可以自動為您計算耗油量。如果您發現耗油量有顯著變化，表示您的車子一定有什麼不對。

The first place to start is to drive smart - it pays. Simply practicing efficient driving techniques can improve fuel economy more tenfold.

以下是十件事您今天就可以作，讓您的愛車更省油。

定期保養

一部保養很好的車子一定在更有效率的狀況下操作。這不止會改進您愛車整體性能，也會改進汽車省油性。髒污的火星塞、污穢的空氣濾清器、或堵塞的燃油過濾器都會影響您的汽車省油性。根據美國能源局(Department of Energy, DOE)的研究資料，更換一個堵塞的空氣濾清器，可以改進您愛車耗油性 10% 以上，更換排氣管裡壞掉的氧氣偵測器(oxygen sensor)，耗油性的進步更可能高達 40%。適當的維護也包括選擇適當辛烷值的汽油憾事當等級的機油。查一下您的車主手冊，看看原廠建議的是什麼，定期找原廠保養廠或您信得過的保養廠作保養。

Fixing a car that is noticeably out of tune or has failed an emissions test can improve its gas mileage by an average of 4.1 percent, though results vary based on the kind of repair and how well it is done. If your car has a faulty oxygen sensor, your gas mileage may improve as much as 40 percent.

You can improve your gas mileage by 1-2 percent by using the manufacturer's recommended grade of motor oil. For example, using 10W-30 motor oil in an engine designed to use 5W-30 can lower your gas mileage by 1-2 percent. Using 5W-30 in an engine designed for 5W-20 can lower your gas mileage by 1-1.5 percent. Also, look for motor oil that says "Energy Conserving" on the API performance symbol to be sure it contains friction-reducing additives.

Fuel Economy Benefit:

保持輪胎適當的胎壓

胎壓不足的輪胎滾動時會消耗較多能量，意思就是更多次的加油。DOE 的研究數據說，如果您小心保持胎壓在正確的數值，您可以提升耗油性約 3.3%。輪胎側壁標示的 psi 數值是輪胎最大胎壓而非適當胎壓，正確的胎壓數字還是要查一下車主手冊。買一隻簡單的胎壓計，至少每個月量一次胎壓，並且隨時充氣。

You can improve your gas mileage by around 3.3 percent by keeping your tires inflated to the proper pressure. Under-inflated tires can lower gas mileage by 0.4 percent for every 1 psi drop in pressure of all four tires. Properly inflated tires are safer and last longer.

拿掉一些負載

比較種的車子行駛時耗費比較多能量，所已在著一大堆重量到處開，當然會影響耗油性。車子的行李箱或後座不要堆放一大堆不必要的東西。就一般車子來說，行李箱裡多載個 25 公斤，耗油量就會增加個 1%，如果您車頂還有個車頂置物架，勤奮一些，有需要才裝上去，沒需要就拿下來。車頂置物架不但會增加車重，也會增加汽車阻力，也直接影響耗油。

The reduction is based on the percentage of extra weight relative to the vehicle's weight and affects smaller vehicles more than larger ones.

A roof rack or carrier provides additional cargo space and may allow you to meet your needs with a smaller car. However, a loaded roof rack can decrease your fuel economy by 5 percent. Reduce aerodynamic drag and improve your fuel economy by placing items inside the trunk whenever possible.

Avoid carrying unneeded items, especially heavy ones. An extra 100 lbs in the trunk reduces a typical car's fuel economy by 1-2 percent.

不要激烈駕駛

這裡不是在說馬路憤怒之類的，而是指許多人趕時間時採用的駕駛方式。紅綠燈路口大腳油門啟動，急速加速，緊急煞車，都會減低省油性。給您自己到目的地多一點兒時間，開車儘量有耐心，穩定平順。在街道上開車，保持在速限左右會一路綠燈，不必老是煞車停下可以省油。高速公路上，DOE 的研究數據說 65mph 以上車速每提高 5mph，省油性下降 7%。

Over 50 percent of the energy required to move a vehicle down the road is spent overcoming aerodynamic drag (pushing air out of the way). When driving faster, the aerodynamic drag and rolling resistance increase. Consequently, the fuel economy decreases rapidly at speeds above 60 mph. Each 5 mph over 60 mph is like paying an additional \$0.10 per gallon for gas.

Drive Sensibly

一般汽車引擎最省油點在大約 90 公里時速

Aggressive driving (speeding, rapid acceleration and braking) wastes gas. It can lower your gas mileage by 33 percent at highway speeds and by 5 percent around town. Sensible driving is also safer for you and others, so you may save more than gas money.

常用最高檔位

汽車以低檔位啟動因為低檔位有最大扭力，低檔位往往也比較耗油，要提升省油性，儘量以最高檔位開車，如果您是以定速行駛，例如說在高速公路上。如果您的字排車有跑車 mode，這大概是電腦程式設定較晚換檔，會使您在低檔位較久，這使您的性能較佳，但跑車模式會降低省油性。

選擇性使用定速巡航

使用定速巡航可以幫助您定速行駛減少耗油量，但這只在大部分是平坦路面時有用。如果您在坡度大的路面開車，上坡時定速巡航裝置會加大油門開度以維持原先設定的速度，如此反而會比較費油，所以已在使用定速巡航裝置時也該把地形因素考慮在內。

Use Cruise Control

Using cruise control on the highway helps you maintain a constant speed and, in most cases, will save gas.

Use Overdrive Gears

When you use overdrive gearing, your car's engine speed goes down. This saves gas and reduces engine wear.

思考清潔

您的愛車經常清洗並打臘，可以改進風阻，因此提升省油性。曾經在網路上看到有人作了這個實驗，同樣一部車骯骯髒髒和乾乾淨淨地跑同樣一段長途旅程，結果省油性差了 7%。

避免長期怠速

車子在怠速的狀況下也在燒汽油，但是卻哪兒也沒跑，意思就是 0mpg。當您在麥當勞得來速排隊等待，或在幼稚園門口等著接小孩放學，如果引擎一直不熄火，您就是在浪費油。等待時熄掉引擎，開車實在重新發動引擎，這樣會比較省油，當然這種建議有時不太實際，像在麥當勞得來速排隊的時候，這時不妨不要排隊了，車停停車場，走進去還方便一些。

Idling gets 0 miles per gallon. Cars with larger engines typically waste more gas at idle than do cars with smaller engines.

沒有必要不要開窗

開車開著冷氣當然會讓車子比較耗油，但是開著窗戶開車可能還更糟糕，因為風阻增加。如果您在市區低速開車，如有可能關掉冷氣打開窗戶，的確會省油一些，在高速公路上開車，打開窗戶就絕對不是好主意了。

規劃您的路線

一點小小的規劃可以大地改進您的省油性。汽車引擎冷車時的耗油量遠遠大過熱車時的耗油量，DOE 的研究報告說，幾次的短途旅程由於引擎都是從冷車開始，因此比一次同樣距離的長途旅程要耗油兩倍以上。因此好好規劃你的旅程，把多次短途旅程合成一次長途旅程。

Combining errands into one trip saves you time and money. Several short trips taken from a cold start can use twice as much fuel as a longer multipurpose trip covering the same distance when the engine is warm. Trip planning ensures that traveling is done when the engine is warmed-up and efficient.

With a little planning, you can avoid retracing your route and reduce the distance you travel as well. You'll not only save fuel, but also reduce wear and tear on your car.

Commuting

If you can stagger your work hours to avoid peak rush hours, you'll spend less time sitting in traffic and consume less fuel.

If you own more than one vehicle, drive the one that gets the best gas mileage whenever possible.

Consider telecommuting (working from home) if your employer permits it.

If possible, take advantage of carpools and ride-share programs. You can cut your weekly fuel costs in half and save wear on your car if you take turns driving with other commuters. Many urban areas allow vehicles with multiple passengers to use special High Occupancy Vehicle (HOV) lanes.

Consider using public transit if it is available and convenient for you. The American Public Transit Transportation Association has links to information about public transportation in your state.

Selecting which vehicle to purchase is the most important fuel economy decision you'll make.

The difference between a car that gets 20 MPG and one that gets 30 MPG amounts to \$550 per year (assuming 15,000 miles of driving annually and a fuel cost of \$2.20).

Use www.fueleconomy.gov's Find and Compare Cars section to find the most fuel efficient vehicle that will meet your needs. Even within a size class, there is a tremendous range of MPGs to choose from. For example, similar 2005 model year compact cars range from 21 to 48 MPG. Choosing the 48 MPG car could save you hundreds of dollars in fuel costs each year.

There are several web sites that can help consumers find the cars in their class with the best fuel economy. One of the best is U.S. Department of Energy's Fuel Economy Site at <http://www.fueleconomy.gov/>. This site offers gas mileage estimates for 1985 - 2005 model year cars. The Find and Compare section will help locate the most fuel-efficient car.