

# Winning The Peace

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Y HIS ACTIONS in recent months, Saddam Hussein has proved to the world that he is a malevolent man. (The Kurds on whom he dropped poison gas, of course, knew this years ago.) But the U.S.' willingness to confront Iraq hardly sprang just from an altruistic desire to liberate Kuwait: a half-million troops would not have been sent if Kuwait merely grew broccoli.

This has been cast as a war between good and evil, but it was also a war about oil — who controls it and how much it will cost. It was both a moral war and a resource war; a war against Hussein and a war for energy. After the war, the energy issues remain. Will this war strengthen America's resolve to reduce its dependence on foreign oil? Or will it, ironically, have the opposite effect? Having won the war, can we win the peace?

For decades, one of the veiled, unstated principles of U.S. energy policy has been: "Maintain access to Middle Eastern oil, regardless of economic, environmental, political, or military costs." But as this war demonstrated, the true costs of a barrel of Persian Gulf crude are far larger than its nominal price. Since this is unlikely to change, it seems reasonable to ask: in the decades to come, are our strategic and economic interests best served by preserving access to Persian Gulf oil — or by eliminating our need for it? Whatever the rationales for this war, we don't need to depend on oil from the Gulf — and it's cheaper not to.

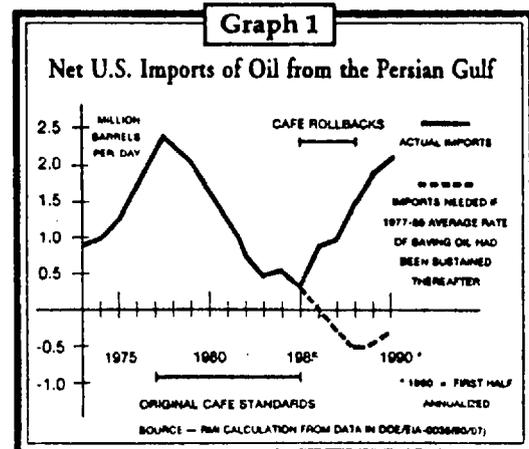
More simply, did we put our kids in tanks because we didn't put them in efficient cars? The answer is yes. Americans wouldn't have needed *any* oil from the Persian Gulf after 1985 if we'd simply kept on saving oil as quickly as we did for the previous nine years (graph 1).

Even now, we could still roll back the oil dependence that perpetually holds our foreign policy hostage and distorts other U.S. priorities in the Middle East. We could eliminate all Gulf imports by using only an eighth less oil.

For example, improving America's 19-mile-per-gallon household-vehicle fleet (graph 2) by three miles per gallon would replace U.S. imports of oil from Iraq and Kuwait. Another nine miles per gallon would end the need for any oil from the Persian Gulf and, according to the Department of Energy, would cut the cost of driving to well below pre-war levels without sacrificing performance.

*The New York Times published a slightly different version of this piece six weeks before the Gulf War broke out. Amory and Hunter Lovins are the founders of the respected and sassy Rocky Mountain Institute.*

—J. Baldwin



BY AMORY B. LOVINS  
AND HUNTER L. LOVINS

The Reagan Administration doubled 1985 oil imports from the Gulf when it rolled back light-vehicle efficiency standards. Today's new cars average 29 miles per gallon. Yet ten manufacturers have built and tested attractive, low-pollution prototype cars that get 67 to 138 miles per gallon. Better design and stronger materials make some of these safer than today's cars, as well as more nimble and peppy.

And efficiency needn't mean smallness: only 4 percent of past car-efficiency gains came from downsizing. Some of the prototype cars comfortably hold four or five passengers, and two of them are said to cost nothing extra to build.

Many other oil savings can help. Boeing's new 777 jet will use about half the fuel per seat of a 727. Technical refinements can save most of the fuel used by heavy trucks, buses, ships, and industry. Insulation, weatherstripping, and simple hot-water savings can displace most of the oil used in buildings. Superwindows that retain heat in winter and reject it in summer could save each year up to twice as much fuel as we get from Alaska.

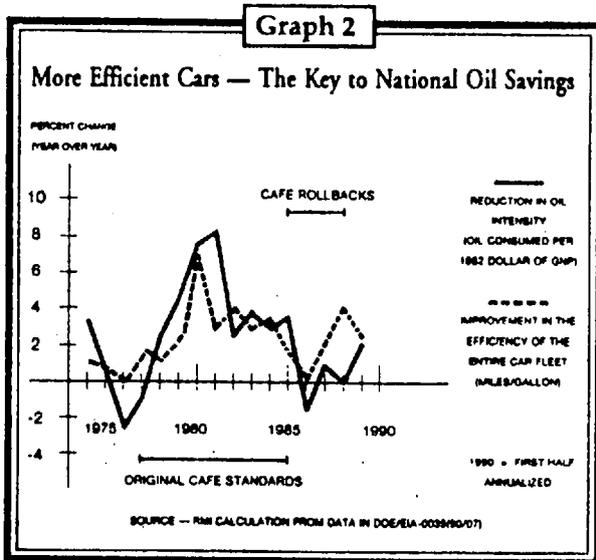
In all, we know how to run the present U.S. economy on one-fifth the oil we are now using, and the cost of saving each barrel would be less than \$5. Even achieving just 15 percent of that potential oil saving would displace all the oil we've been importing from the Gulf. Doing that requires only a small additional step. Since 1973, we've reduced our oil use per dollar of gross national product four and a half times as much as we'd need to reduce it today in order to eliminate all Gulf imports.

How can we promote fuel efficiency? Higher gasoline taxes are a weak incentive to buy an efficient car, because gasoline costs five times less than the non-fuel costs of owning and

running a car. And since the often higher purchase price of an efficient car roughly cancels out the lower gasoline bills, the total cost per mile for 20- and 60-mile-per-gallon cars is about the same.

But the 40-mile-per-gallon difference, for cars and light trucks, represents more than twice America's imports from the Gulf. If the security and environmental costs of inefficient cars had to

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term outcome  
— in dollars,  
oil, or blood  
— is in sight.*

be paid up front, buyers would choose more wisely. The best way is "feebates": when you register a new car, you pay a fee or get a rebate; which and how big depends on its efficiency. The fees pay for the rebates.

Rebates for efficient cars should ideally be based on the difference in efficiency between your new car and the old one — which you'd scrap, thus getting the most inefficient, dirtiest cars off the road first. That's good for Detroit, for the poor (who disproportionately own such cars and served in the Gulf forces), for the environment, and for displacing Gulf oil sooner.

The California legislature recently approved car feebates by a margin of seven to one (outgoing governor George Deukmejian vetoed the bill, but his successor, Pete Wilson, is expected to sign it later this year). Connecticut, Iowa, Massachusetts, and several other states are weighing feebates. Feebates are also being considered for new buildings in California, Massachusetts, Iowa, and the four northwest states, and could be applied to trucks, aircraft, appliances, and other energy-consuming goods. Unlike miles-per-gallon standards, feebates reward maximum performance and encourage businesses to bring superefficient models to market quickly. Standards *plus* feebates are better still.

Energy efficiency is also the key to the decades-long transition to nondepleting, uninterrupted energy sources. Government studies confirm that sun, wind, water, geothermal heat, and farm and forestry wastes can cost-effectively provide, within forty years, 50 to 70 percent as much energy as America uses today. Efficiency would raise that share and buy the time needed for graceful conversion.

As we have seen in recent months, the military alternative to efficiency isn't cheap. Gulf jitters added more than \$40 billion a year to U.S. oil imports. Counting military costs, Gulf oil in late 1990 cost over \$100 a barrel.

The more than \$20 billion net cost of U.S. forces in the Gulf just from August through December 1990, if spent instead on efficient use of oil, could displace all the oil now imported from the Gulf. It could also create jobs and wealth, improve America's trade balance, stretch domestic reserves, clean urban air, cut acid rain and global warming, and help the poor at home and abroad.

In 1989, the Pentagon used about 38 percent as much oil as the U.S. imported from Saudi Arabia, and estimated that its consumption would double or triple in a war. An M-1 tank gets 0.58 miles per gallon. An oil-fired aircraft carrier gets 17 feet per gallon. Despite military victories, if we continue on our present energy course, no good long-term outcome — in dollars, oil, or blood — is in sight.

From inside an efficient car, however, the Gulf looks very different. From inside enough of them, its oil becomes irrelevant.

If, each year for the next ten, America invested as much money in energy efficiency as it spent each week waging the Gulf war, by the turn of the century we would be well on our way to achieving sustainable energy independence — something we have not had for the past twenty-five years. National security, peacetime jobs in a competitive economy, and the environment demand immediate mobilization — not of tanks but of efficient cars, not of B-52s but of 777s, and not of naval guns but of caulking guns. ☸

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