

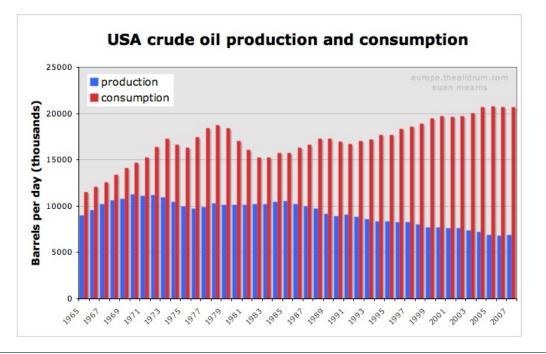
Advice To Pres. Obama (#3): Change you must

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Dear President Elect Obama,

The chart shows US crude oil production (blue) and consumption (red) and shows that the USA has been living well beyond its means for over 40 years. This lies at the heart of current global problems creating economic, social, political and environmental imbalance on an unprecedented scale.



Translating these figures to \$ shows how allowing this imbalance to persist for far too long has destroyed the US economy. Granted, these existing problems are too large to solve within the term of a single presidency, but your actions in the first 100 days and ongoing thereafter must singlemindedly focus upon eliminating US dependence upon imported oil. This inevitably means reducing oil and energy consumption whilst boosting indigenous primary energy production in a sustainable manner. Some of the policies you must enact will be unpopular, but as the behavior and expectations of individuals changes slowly, so will the attitude of society - until eventually the benefits of these tough policies will shine through and be embraced by society as a whole.

USA crude oil import costs annual deficit cumulative deficit \$US (billions) n

By way of introduction, I am a European, living in Aberdeen Scotland. I was born in Asia and lived in Norway for 8 years. I have traveled the world, including visits to the USA on many occasions. I have BSc and PhD degrees in Earth Science, ran my own business for over a decade and for 3 years now have written articles for The Oil Drum. Much of what I have to say here is based on information gleaned from and interacting with the readers of this blog.

In this letter my focus is on US oil consumption in relation to transportation policies.

Energy prices

Politicians and political advisers need to accept that higher and rising energy prices are a good thing and are indeed inevitable since we have now used much of the cheap and easy to access reserves of fossil fuels. Higher energy prices will provide the capital to invest in new energy systems. It is therefore imperative that the profits from high energy prices are invested in energy and not frittered away buying back stock and paying excessive bonuses to executives who had good fortune to be in the right place at the right time.

The public need to be educated that higher energy prices are a good thing. The choice is between having more expensive energy or not having enough energy.

An inevitable consequence of higher energy prices is that energy consumes a larger slice of national GDP and individual disposable incomes. This means that other sectors of the economy will suffer and market forces will dictate that the high energy consuming parts of the economy will suffer most - tourism, motoring, airlines, construction. People can and will learn to be happy and content doing other things.

Raise gasoline taxes

Raising gasoline taxes is likely to be one of the most unpopular policies any US president could implement and will be a stern test of your leadership and resolve. I recommend that you serve notice to the American public that gasoline taxes will be raised incrementally to be on par with European taxes by the end of your presidency.

Raising gasoline taxes will reduce US oil consumption, reduce US oil imports and trade deficit, raise income for the federal budget and reduce pollution. I am aware that many US citizens who

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favor higher gas taxes are equally in favor of cutting income taxes so that the outcome is neutral. I do not agree with this since your country (and mine) is nearly bankrupt and needs to raise taxation revenues to balance the books.

Individuals' budgets may be balanced by reducing gasoline use through exclusion of unneccessary journeys and through energy efficiency savings.

The USA has in fact been playing on an uneven playing field unwittingly created by the failure of successive administrations to tackle excessive energy consumption. This has brought your motor industry to its knees. Thus, raising gasoline taxes will create a more even playing field for US industry to compete upon.

Lower speed limits

Lowering motor vehicle speed limits will reduce US oil consumption at a stroke. This is in fact an energy efficiency measure since vehicles are more fuel efficient when driven slowly. Additional benefits will include fewer serious and fatal motor accidents and less pollution.

This should be viewed as a short term holding measure until your economy has time to respond to the greater goal of permanently improving energy efficiency by engineering.

Energy efficiency

I suggest that your government set very tough targets for the average energy efficiency of new vehicles sold in the USA and serve notice that these targets will be made tougher for every year that passes. Your fine engineers' minds will then become focused on miles per gallon or kilometers per joule instead of large size, power and speed.

Battery powered electric vehicles are likely the most energy efficient option at present and focusing on efficiency should automatically select for the most efficient energy options at the expense of fanciful ideas. Energy efficiency must be defined to include the efficiency of energy production** **discussed by my colleague Nate Hagens** in his letter to you last week.

The efficiency targets must be very tough and aim to eliminate US oil imports by the end of your second term in office. Your Arab allies around the Arabian Gulf may be alarmed at this prospect but should be assured by the fact that the market for their dwindling oil reserves will be sustained elsewhere by countries that do not have the indigenous energy wealth of the USA and who must import energy to survive. These developing countries may be reassured by the fact that they do not need to compete with the USA for these dwindling, finite fossil fuel resources and this will benefit US stature on the world stage.

** In fact, the energy efficiencies of our energy production systems are not well understood and your administration should consider funding, with urgency, a program that aims to determine the energy return on energy invested (ERoEI) of all OECD energy production systems.

Air travel

Air travel for all in the OECD has been one of the miracles of the last 50 years. We have all been "Living like Gods", enabled by extremely generous tax exemptions on jet fuel and government subsidies to airline manufacturing industries.

The Oil Drum: Europe | Advice To Pres. Obama (#3): Change you must http://europe.theoildrum.com/node/4986 Air travel as we know it is not sustainable as oil production either runs down or becomes prohibitively expensive. By biting the bullet and taxing jet fuel on par with gasoline you are therefore creating a more level playing field in transportation. This will encourage individuals to be more thoughtful about the need to travel long distances and it will encourage the airline industry (manufacturers and operators) to design more fuel efficient systems.

In doing so there is a danger that great inequality is created between those who can afford to fly and those who cannot. I therefore encourage you to consider designing a tradeable energy rationing system that will bestow upon all individuals equal rights to travel. Those who cannot afford to do so may sell their rights to those who can creating greater equity whilst maintaining a market based system. As my colleague Nate Hagens pointed out to you, *It is energy, not money, that powers our economies*. Our economies will one day in the near future be founded to a much greater extent upon tradeable energy schemes - those countries that realize and plan for this now will be in pole position for the future.

Electrified transportation

In the future, the working man and woman will still want to be able to travel. It will simply become necessary to choose to travel less using more energy efficient means. Electrified rail transportation is likely the most efficient solution for short range commuter travel and longer range business and leisure travel. Your country has growing unemployment and the need for major civil works projects to provide a route to recovery. It is essential that the vast sums of borrowed capital you plan to spend are spent wisely. Air travel may still cater for E-W transcontinental and inter continental travel. But N-S travel between your conurbations on E and W coasts could happen on high speed electric rail links. Likewise, commuter travel may happen on light rail links. Equipped with high speed internet access, travelers will learn to enjoy railway journeys where they are free to work, surf the net or to watch movies of their choice. I suggest you visit France at the earliest opportunity and learn from their electric transportation revolution. This of course may further heal diplomatic wounds between the US and Europe suffered at the hands of the outgoing administration.

The mantra of energy efficiency

Finally Mr. President, I would like to leave you with this departing thought. In the future, the most successful countries will be those that use energy most efficiently. These countries will be able to afford higher energy prices and so will be able to secure supplies ahead of those countries that are less efficient. Energy efficiency therefore will increasingly equate to energy security. Energy use per unit of GDP created will be lowest in the most energy efficient nations and they will therefore be able to produce the greatest wealth. This applies equally to both energy production and energy consumption.

There are very many more energy-related issues that need to be discussed - these have been and will continue to addressed by my colleagues here at The Oil Drum. The world requires true leadership now more than at any time during my lifetime. The general public do not in fact know what is in their best interests and may vocally oppose the introduction of unpopular policies using an increasingly ignorant media to mobilize this opposition and to make life very difficult for those in the Obama administration. It is the responsibility of leaders to resist such opposition and to steer a path towards the greater good, firm in the knowledge that the decisions being made are the right ones, made by the greatest minds your great country has to offer, and that have been made for the right reasons.

US oil production, consumption and oil prices taken from the **<u>BP statistical review of World</u>** <u>energy</u>.

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It is known that energy efficiency may lead to greater and not less energy consumption as described by <u>Jevons' paradox</u>. This has certainly been the case in a world with growing abundance of cheap fossil fuel. In an energy declining world, Jevons' paradox must fail, but the principles may be modified so that energy efficiency may enable an equilibrium state where populations may be sustained using less energy. Your policies must ensure less consumption whilst aiming for greater equality.

Link: Other "Advice to Pres. Obama" Energy Policy Posts in this Series

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