

EFFECTS OF PEAK OIL

By James Howard Kunstler

The following is from remarks to
The Cambridge New England Chapter
of the Congress for the New Urbanization (CNU)

October, 2004

My last three books were concerned with the physical arrangement of life in our nation, in particular suburban sprawl, the most destructive development pattern the world has ever seen, and perhaps the greatest misallocation of resources the world has ever known.

The world – and of course the US – now faces an epochal predicament: the global oil production peak and the depletion that follows. We are unprepared for this crisis of industrial civilization. We are sleepwalking into the future.

The peak oil production event will change everything about how we live. It will challenge all of our assumptions. It will compel us to do things differently – whether we like it or not.

Today I want to persuade you that the CNU needs to integrate these new realities into its collective worldview, and suggest that you can play a crucial role in the changes that our nation will have to make if we want to carry on the project of civilization here.

Nobody knows when the absolute peak year of global oil production will occur. Some believe we are already at peak and the behavior of the global markets proves it. Saudi Arabia seems to have lost the ability to function as “swing producer.” The good news is that OPEC can no longer set the price of oil. The bad news is that nobody can. When there is no production surplus in the world, that’s a pretty good sign that the world is at peak.

Princeton Geologist Kenneth Deffeyes says that peak production will occur in 2005 – that’s less than three months away. Others, like Colin Campbell, former chief geologist for Shell Oil, put it more conservatively as between now and 2007. But by any measure of rational planning or policy-making, these differences are insignificant.

The meaning of the oil peak and its enormous implications are generally misunderstood even by those who have heard about it – and this includes the mainstream corporate media and the Americans who make plans or policy.

The world does not have to run out of oil or natural gas for severe instabilities, network breakdown, and systems failures to occur. All that is necessary is for world production capacity to reach its absolute limit – a point at which no increased production is possible and the long arc of depletion commences, with oil production then falling by a few

percentages steadily every year thereafter. That's the global oil peak: the end of absolute increased production and beginning of absolute declining production.

One huge implication of the oil peak is that industrial societies will never again enjoy the 2 to 7 percent annual economic growth that has been considered healthy for over 100 years. This amounts to the industrialized nations of the world finding themselves in a permanent depression.

Long before the oil actually depletes we will endure world-shaking political disturbances and economic disruptions. We will see globalism-in-reverse. Globalism was never an "ism" by the way. It was not a belief system. It was a manifestation of the 20-year-final-blowout of cheap oil. Like all economic distortions, it produced economic perversions. It allowed gigantic, predatory organisms like WalMart to spawn and reproduce at the expense of more cellular fine-grained economic communities.

The end of globalism will be hastened by international competition over the world's richest oil producing regions.

We are already seeing the first military adventures over oil as the US attempts to pacify the Middle East in order to assure future supplies. This is by no means a project we can feel confident about. The Iraq invasion has only been the overture to more desperate contests ahead. Bear in mind that the most rapidly industrializing nation in the world, China, is geographically closer to the Caspian Region and the Middle East than we are. The Chinese can walk into these regions, and someday they just might.

In any case, and apart from the likelihood of military mischief, as the world passes the petroleum peak the global oil markets will destabilize and the industrial nations will have enormous problems with both price and supply. The effect on currencies and international finance will, of course, be equally severe.

Some of you may be aware that the US faces an imminent crisis with natural gas, perhaps more immediately threatening than the reckoning we face over oil. Over the past two decades – in response to the OPEC embargoes of the 70s and the Chernobyl and Three Mile Island emergencies of the 80s – we have so excessively shifted our electric power generation to dependence on natural gas that no amount of drilling can keep up with current demand. The situation is very ominous now.

Right here I am compelled to inform you that the prospects for alternative fuels are poor. We suffer from a kind of Jiminy Cricket syndrome in this country. We seem to believe that if you wish for something, it will come true. Right now a lot of people – including people who ought to know better – are wishing for some miracle technology to save our collective ass.

There is not going to be a hydrogen economy. The hydrogen economy is a fantasy. It is not going to happen. We may be able to run a very few things on hydrogen, but we are not going to replace the entire US automobile fleet with hydrogen fuel cell cars. Nor will

we do it with electric cars or natural gas cars. Wind power and solar electric will not produce significant amounts of power within the context of the way we live now.

No combination of alternative fuel systems currently known will allow us to run what we are running, the way we're running it, or even a significant fraction of it.

The future is therefore telling us very loudly that we will have to change the way we live in this country. The implications are clear: we will have to downscale and re-scale virtually everything we do.

The downscaling of America is a tremendous and inescapable project. It is the master ecological project of our time. We will have to do it whether we like it or not. We are not prepared.

Downscaling America doesn't mean we become a lesser people. It means that the scale at which we conduct the work of American daily life will have to be adjusted to fit the requirements of a post-globalist, post-cheap-oil age.

We are going to have to live a lot more locally and a lot more intensively on that local level. Industrial agriculture, as represented by the Archer Daniels Midland/soda pop and cheese doodle model of doing things, will not survive the end of the cheap oil economy.

The implication of this is enormous. Successful human ecologies in the near future will have to be supported by intensively farmed agricultural hinterlands. Places that can't do this will fail. Say goodbye to Phoenix and Las Vegas.

I'm not optimistic about most of our big cities. They are going to have to contract severely. They achieved their current scale during the most exuberant years of the cheap oil fiesta, and they will have enormous problems remaining viable afterward.

Any mega-structure, whether it is a skyscraper or a landscaper – buildings that depend on huge amounts of natural gas and electricity – may not be usable a decade or two in the future.

What goes for the scale of places will be equally true for the scale of social organization. All large-scale enterprises, including corporations and governments will function very poorly in the post-cheap oil world. Do not make assumptions based on things like the home-building industry to continue to exist as it is.

Many of my friends and colleagues live in fear of the federal government turning into a Big Brother tyranny. I'm skeptical. Once the permanent global energy crisis really gets underway, the federal government will be lucky if it can answer the phones. Same thing for Microsoft or even Star Market.

All indications are that American life will have to be reconstituted along the lines of traditional towns, villages, and cities much reduced in their current scale. These will be

the most successful places once we are gripped by the profound challenge of a permanently reduced energy supply.

We are very fortunate that the members of the national CNU have been in the trenches for ten years retrieving the lost knowledge that will be indispensable for rebuilding American life along these lines.

As a journalist with a bent toward historical interpretation, I view a lot of the work of the New Urbanists the past ten years as transitional. Some of this work was magnificent, but it still represents a transition. I'm speaking of the Traditional Neighborhood Development (TND) in particular. The economy of the Long Emergency we face will alter the conditions of your work drastically. The TND was able to flourish because the scale of the development industry and the creation of new wealth during the final oil blow-off allowed it to occur.

The development industry as we have known it is going to vanish in the years ahead. We are entering a period of economic hardship and declining incomes. The increment of new development will be very small, probably the individual building lot. We are not going to be infilling sprawling suburbs with pretty good TNDs.

The suburbs are going to tank spectacularly. We are going to see an unprecedented loss of equity value and, of course, basic usefulness. We are going to see an amazing distress sale of properties, with few buyers. We're going to see a fight over the table scraps of the 20th century. We'll be lucky if the immense failure of suburbia doesn't result in an extreme politics of grievance and scapegoating.

The action in the years ahead will be in renovating existing towns and villages, and connecting them with regions of productive agriculture. Where the big cities are concerned, there is no simple historical precedent to the downscaling they will require. The process is liable to be disorderly.

The post cheap oil future will be much more about staying where you are than about being mobile. And, unless we rebuild a US passenger railroad network, a lot of people will not be going anywhere. Today, we have a passenger railroad system that the Bulgarians would be ashamed of.

The presence of automobiles in daily life will be greatly reduced. Don't make too many plans to design parking structures. The post cheap oil world is not going to be about parking.

But it will be about the design and assembly and reconstituting of places that are worth caring about and worth being in. When you have to stay where you are and live locally, you will pay a lot more attention to the quality of your surroundings, especially if you are not moving through the landscape at 50 miles-per-hour.

Some regions of the country will do better than others. The sunbelt will suffer in exact proportion to the degree that it prospered artificially during the cheap oil blowout of the late 20th century. I predict that the Southwest will become substantially depopulated, since they will be short of water as well as gasoline and natural gas. I'm not optimistic about the Southeast either, for different reasons. I think it will be subject to substantial levels of violence as the grievances of the formerly middle class boil over and combine with the delusions of Pentecostal Christian extremism.

All regions of the nation will be affected by the vicissitudes of the Long Emergency, but I think New England and the Upper Midwest have somewhat better prospects. I regard them as less likely to fall into lawlessness, anarchy, or despotism, and more likely to salvage the bits and pieces of our best social traditions and keep them in operation at some level.

There is a fair chance that the nation will disaggregate in autonomous regions before the 21st century is over, as a practical matter if not officially. Life will be very local.

These challenges are immense. We will have to rebuild local networks of economic and social relations that we allowed to be systematically dismantled over the past fifty years. In the process, our communities may be able to reconstitute themselves.

The economy of the mid 21st century may center on agriculture. Not information. Not the digital manipulation of pictures, not services like selling cheeseburgers and entertaining tourists. Farming. Food production. The transition to this will be traumatic, given the destructive land-use practices of our time, and the staggering loss of knowledge. We will be lucky if we can feed ourselves.

The age of the 3000-mile-caesar salad will soon be over. Food production based on massive petroleum inputs, on intensive irrigation, on gigantic factory farms in just a few parts of the nation, and dependent on cheap trucking will not continue. We will have to produce at least some of our food closer to home. We will have to do it with fewer fossil-fuel-based fertilizers and pesticides on smaller-scaled farms. Farming will have to be much more labor-intensive than it is now. We will see the return of an entire vanished social class – the homegrown American farm laboring class.

We are going to have to reorganize everyday commerce in this nation from the ground up. The whole system of continental-scale big box discount and chain store shopping is headed for extinction, and sooner than you might think. It will go down fast and hard. Americans will be astonished when it happens.

Operations like WalMart have enjoyed economies of scale that were attained because of very special and anomalous historical circumstances: a half century of relative peace between great powers. And cheap oil – absolutely reliable supplies of it, since the OPEC disruptions of the 1970s.

WalMart and its imitators will not survive the oil market disruptions to come. Not even for a little while. WalMart will not survive when its merchandise supply chains to Asia are interrupted by military contests over oil or internal conflict in the nations that have been supplying us with ultra-cheap manufactured goods. WalMart's "warehouse on wheels" will not be able to operate in a non-cheap oil economy.

It will only take mild-to-moderate disruptions in the supply and price of gas to put WalMart and all operations like it out of business. And it will happen. As that occurs, America will have to make other arrangements for the distribution and sale of ordinary products.

It will have to be reorganized at the regional and the local scale. It will have to be based on moving merchandise shorter distances at multiple increments and probably by multiple modes of transport. It is almost certain to result in higher costs for the things we buy, and fewer choices of things. We are not going to rebuild the cheap oil manufacturing facilities of the 20th century.

We will have to recreate the lost infrastructures of local and regional commerce, and it will have to be multi-layered. These were the people that WalMart systematically put out of business over the last thirty years, the wholesalers, the jobbers, the small-retailers. They were economic participants in their communities; they made decisions that had to take the needs of their communities into account, they were employers who employed their neighbors. They were a substantial part of the middle-class of every community in America and all of them together played civic roles in our communities as the caretakers of institutions – the people who sat on the library boards, and the hospital boards, and bought the balls and bats and uniforms for the little league teams.

We got rid of them in order to save nine bucks on a hair dryer. We threw away uncountable millions of dollars worth of civic amenity in order to shop at the Big Box discount stores. That was some bargain.

This will all change. The future is telling us to prepare to do business locally again. It will not be a hyper-turbo-consumer economy. That will be over with. But we will still make things, and buy and sell things.

A lot of the knowledge needed to do local retail has been lost, because in the past the ownership of local retail businesses was often done by families. The knowledge and skills for doing it was transmitted from one generation to the next. It will not be so easy to get that back. But we have to do it.