## Peak Oil – A presentation

This article was written by Lee Barnes and Nick Griffin and is the text of the speech delivered by Mr. Barnes during a presentation about the Peak Oil issue given to the BNP's Advisory Council as part of a full two-day A.C. meeting held in Wales in the middle of June.

Industrial civilisation as we know it — based on an assumption of perpetual growth, progress, and an ever-'shrinking' world - is coming to an end soon. This is not the wacky proclamation of a doomsday cult, apocalypse bible prophecy sect, or conspiracy theory society. Rather, it is the scientific conclusion of some of the best paid, most widely-respected geologists, physicists, and investment bankers in the world. These are rational, professional, conservative individuals who are absolutely terrified by a phenomenon known as global "Peak Oil."

Oil is a finite resource. It was formed from the remains of vast numbers of microscopic sea creatures, under certain unusual geological conditions, millions of years ago. Geologists have become adapt at spotting rock formations that might contain oil, with the result that most if not all of the really big fields have already been found.

**Peak Oil is** *not* **about oil running out.** It is not even about our having found all available oil reserves. Rather, it is about the rate of flow from new fields coming on tap falling behind the rate of exhaustion of older fields. Also of vital importance is the fact that different fields differ in terms of their overall energy productivity. This is described by the letters EROEI — Energy returned on energy invested. Some early fields took only one barrel-worth of energy to produce 400 barrels-worth of energy; the more typical ratio today is just 1:8. Quite simply, the fields which are easiest to exploit, and which contain the best quality oil, have largely been used up. What is left is harder to get at, poorer quality and less valuable as an energy source. Hence, even though some new fields are still being discovered and coming on tap, overall production is set for an inexorable decline.

At the same time, global *demand* for oil is rising sharply, with the careless consumerism of the West (epitomised by the American love affair with big cars and air conditioning, by give-away prices on holiday flights, and by those fresh green beans from Kenya in every supermarket) being added to by the break-neck industrialisation of China and India.

Peak Oil is the moment when oil production reaches a brief peak – perhaps a plateau – and then goes into decline, and the impact will be made worse because, for a while at least, demand for oil will keep rising. This will inevitably result in steep price rises, which will lead to recession and to a temporary crash in demand for oil and hence a temporary drop in the price of oil. Far from being good news, however, this will have the main effect of making it even harder to develop reliable alternative sources of energy. Thus the post-Peak world faces a roller-coaster of price gyrations, which will be made all the worse by the fact that oil speculation will become evermore intense.

It is essential here to understand that abundant cheap oil was not just about cheap petrol and diesel fuel for transport. Oil is a particularly efficient source of energy, and the last hundred years or so of its widespread use have given Mankind a huge energy bonanza. That energy has gone into much more than carrying people and things from A to B. **Vast amounts have gone into producing food on an industrial scale** – food that has created a massive worldwide population explosion. Oil doesn't

just power the machinery that tills the soil, plants and tends the crops, and harvests them. It is also the key ingredient and power behind the manufacture of the fertilisers and pesticides without which industrialised agriculture can produce only weeds and pests. And it is the substance that provides the energy that transports the crops once grown, processes them, and ships them around the world.

Likewise, the modern city cannot function without vast amounts of cheap energy. Cut off the power and it doesn't just knock out the lights and the lifts – it also knocks out the water, sewage and rubbish collection. Energy doesn't just equal convenience, or even essential transport or food. It equals basic essentials without which disease would kill millions.

Thus, while the initial phase of oil decline will 'merely' create massive economic instability and hardship, as the process advances it threatens to cause the very fabric of the modern world to unravel. The pessimists talk of 'global die-off' of the human population in which some three quarters of humanity will die of famine, disease and war. The optimists talk of the benefits to be had from a simpler lifestyle that is closer to nature, more sustainable and more about deep-rooted values than short-term consumerism.

Having set the scene, we need to look more in depth at the Peak Oil theory itself. Oil will not just "run out", because all oil production follows a bell curve. This is true whether we're talking about an individual field, a country, or on the planet as a whole.

Oil is increasingly plentiful on the upslope of the bell curve, increasingly scarce and expensive on the down slope. The peak of the curve coincides with the point at which the endowment of oil has been 50 percent depleted. Once the peak is passed, oil production begins to go down while cost begins to go up.

In practical and considerably oversimplified terms, this means that if 2000 was the year of global Peak Oil, worldwide oil production in the year 2020 will be the same as it was in 1980. However, the world's population in 2020 will be both much larger (approximately twice) and much more industrialised (oil-dependent) than it was in 1980. Consequently, worldwide demand for oil will outpace worldwide production of oil by a significant margin. As a result, the price will skyrocket, oil-dependant economies will crumble, and resource wars and Eco-Conflicts will explode.

The issue is not one of "running out" so much as it is not having enough to keep our economy running. An oil-based economy such as ours doesn't have to deplete its entire reserve of oil before it begins to collapse. A shortfall between demand and supply as little as 10-15 percent is enough to wholly shatter an oil-dependent economy and reduce its citizenry to poverty.

The effects of even a small drop in production can be devastating. For instance, during the 1970s oil shocks, shortfalls in production as small as 5% caused the price of oil to nearly quadruple. The same thing happened in California a few years ago with natural gas: a production drop of less than 5% caused prices to skyrocket by 400%.

Fortunately, those price shocks were only temporary. But the coming oil shocks won't be so short-lived. They represent the onset of a new, permanent condition. Once the decline gets under way, production will drop (conservatively) by 3-6% per year, every year.

Almost all independent estimates now indicate global oil production will peak and go into terminal decline within the next five years.

Many geologists expect that 2005 will be the last year of the cheap-oil bonanza, while estimates coming out of the oil industry indicate "a seemingly unbridgeable supply-demand gap opening up after 2007," which will lead to major fuel shortages and increasingly severe blackouts beginning around 2008-2012.

The long-term ramifications of Peak Oil on your way of life are nothing short of mind blowing. As we slide down the down slope of the global oil production curve, we may find ourselves slipping into what some scientists are calling a "post-industrial stone age."

The story of Peak Oil itself shows how industry ignores even its own experts if it doesn't like what it is hearing. Back in 1956, an American geologist named M. King Hubbert predicted that U.S. oil production would peak in 1970.

His superiors at Shell Oil were aghast. They even tried to persuade Hubbert not to speak publicly about his work. His peers, accustomed to decades of making impressive oil discoveries, were skeptical.

But Hubbert was right. U.S. oil production did peak in 1970, and it has declined steadily ever since. Even impressive discoveries such as Alaska's Prudhoe Bay, with 13 billion barrels in recoverable reserves, haven't been able to reverse that trend. Hubbert started his analysis by gathering statistics on how much oil had been discovered and produced in the Lower 48 states, both onshore and off, between 1901 and 1956 (Alaska was still terra incognita to petroleum geologists 50 years ago). His data showed that the country's oil reserves had increased rapidly from 1901 until the 1930s, then more slowly after that.

When Hubbert graphed that pattern it looked very much like America's oil supply was about to peak. Soon, it appeared, America's petroleum reserves would reach an all-time maximum. And then they would begin to shrink as the oil companies extracted crude from the ground faster than geologists could find it.

That made sense. Hubbert knew some oil fields, especially the big ones, were easier to find than others. Those big finds would come first, and then the pace of discovery would decline as the remaining pool of oil resided in progressively smaller and more elusive deposits.

The production figures followed a similar pattern, but it looked like they would peak a few years later than reserves.

That made sense too. After all, oil can't be pumped out of the ground the instant it is discovered. Lease agreements have to be negotiated, wells drilled, pipelines built; the development process can take years.

When Hubbert extended the production curve into the future it looked like it would peak around 1970. Every year after that, America would pump less oil than it had the year before.

At first, critics objected to Hubbert's analysis, arguing that technological improvements in exploration and recovery would increase the amount of available oil. They did, but not enough to extend production beyond the limits Hubbert had projected. Even if you throw in the unexpected discovery of oil in Alaska, America's

petroleum production history has proceeded almost exactly as Hubbert predicted it would.

A few years ago, geologists began applying Hubbert's methods to the entire world's oil production. Their analyses indicated that global oil production would peak some time during the first decade of the 21st century.

Scientists such as Deffeyes thinks the peak will be in late 2005 or early 2006. Houston investment banker Matthew Simmons puts it at 2007 to 2009. California Institute of Technology physicist David Goodstein, whose book "The End of Oil" was published last year, predicts it will arrive before 2010.

Since Hubbert's analysis, people in the know within the oil industry have been warning of the eventual depletion of fossil fuels but the political elite have ignored them. Interestingly, Hubbert himself also pointed to the big picture economic impact of Peak Oil, highlighting the fact that the debt-based credit creation that underlies the modern world's economy appears only capable of working in a system in which, regardless of temporary ups and downs, productivity is constantly rising. That, he said, will end with Peak Oil.

Thus what appears at first sight to be 'merely' an energy crisis could turn into a fundamental break-point with the financial mechanism which made the modern world possible. As the energy spiral goes into reverse, so too could the cycle of wealth creation, with the material gains of fossil-fuel based industrialism being wiped out in a recurring, endless crisis. This, together with the impact of the end of industrial agriculture, is what leads the Peak Oil pessimists to believe that the crisis will 'end' in the untimely and unpleasant death of the majority of the world's population.

Even if that grim end can be avoided, there is no doubt that we **face the end of the cheap-fossil-fuel era**. It is no exaggeration to state that reliable supplies of cheap oil and natural gas underlie everything we identify as the necessities of modern life --not to mention all of its comforts and luxuries: central heating, air conditioning, cars, airplanes, electric lights, inexpensive clothing, recorded music, movies, hip-replacement surgery, national defence, antibiotics, trains -- you name it.

The United States passed its own oil peak -- about 11 million barrels a day -- in 1970, and since then production has dropped steadily. In 2004 it ran just above 5 million barrels a day (we get a tad more from natural-gas condensates). Yet we consume roughly 20 million barrels a day now. That means that Americans have to import about two-thirds of their oil, and the ratio will continue to worsen.

The U.S. peak in 1970 brought on a portentous change in geo-economic power. Within a few years, foreign producers, chiefly OPEC, were setting the price of oil, and this in turn led to the oil crises of the 1970s. In response, frantic development of non-OPEC oil, especially the North Sea fields of England and Norway, essentially saved the West's economies for about two decades. Since 1999, these fields have entered depletion. Meanwhile, worldwide discovery of new oil has steadily declined to insignificant levels in 2003 and 2004.

Now we are faced with the global oil-production peak. The best estimates of when this will actually happen have been somewhere between now and 2010. In 2004, however, after demand from burgeoning China and India shot up, and revelations that Shell Oil wildly misstated its reserves, and Saudi Arabia proved incapable of increasing its production despite promises to do so, the most knowledgeable experts

revised their predictions and now concur that 2005 is likely to be the year of all-time global peak production.

These facts are now rapidly filtering into the mainstream, although there are signs that the West's ruling elite either cannot themselves get to grips with the full implications of the looming crisis, or that they do not trust the rest of the population to react rationally to being told that "the party's over" and that all we've now got to look forward to is the mother of all hangovers.

This year's Bilderberg Conference (which included John Browne, BP's Chief Executive Officer, John Kerr, Director of Royal Dutch Shell, Peter D. Sutherland, BP Chairman and Jeroen van der Veer, the Chairman Committee of Managing Directors Royal Dutch Shell) discussed the Peak Oil issue at length – something that both shows that the international elite aren't as forward looking as they no doubt like to think they are, and also a fact that suggests that our Masters will be taking action on this issue very shortly. Much of their rearranging of deckchairs on the Global Titanic may well be quite amusing to watch. Some of it is likely to be extremely dangerous. All of it – unless they give up their addiction to globalism – will be futile.

Scouring the Internet for refutations of Peak Oil, however, one finds nothing convincing. There is a Marxist theory that it is all a capitalist plot to justify lowering the wages of the workers. There is a Flat Earth morons' theory that oil is not an organic fossil product at all but that it seeps from the earth's core and is inexhaustible (which begs the question as to why so many fields have already run dry). There is of course a neo-Nazi theory that "it's the Jews", who are using Peak Oil as an excuse to raise oil prices. There's a Zionist/Christian fundamentalist theory that it's the fault of the wicked A-rabs.

The orthodox liberal elite's public line on it all has been expressed by The Economist, which predicts that, once the price of oil rises enough, the oil company's geologists will find it worth their while to go and find more. At this point we see the concept of the law of supply and demand moving from the realms of economic theory to become a religious dogma: If you have an empty glass in the desert and you get thirsty enough then the glass will fill with water of its own accord – such is the magical power of 'demand'.

The geologists retort that they've looked everywhere for oil and that all the large, easily exploited fields have been found. Peak Oil, they state, is a fact of live that we're all going to have to get used to.

Conventional economists then tend to turn to tar sands and shale oil as a sort of comfort blanket. It is true that there are absolutely vast reserves of low grade oil-related energy in these deposits, and that some are already worked, especially in Canada. But oil companies have spent some 90 years trying to find a way to exploit them efficiently, but are still stuck with an EROEI return of 1 barrel in for one-and-a-half barrels out, as well as vast amounts of toxic waste from the inefficient processes involved.

It is true that tar sand and shale oil can produce oil energy, but only in the sense that, if you run a log burner and you run out of logs, you could obtain combustible material by growing, cutting and drying bundles of stinging nettles. Nettles are related to trees, and use the same process to turn solar energy into burnable carbon, but as a replacement for the logs you used to burn, you'd find them pretty poor on a cold winters' night.

At this point, the economists of liberalism and perpetual growth fall back on the claim that, as relative oil scarcity pushes up prices, then alternative energy sources will become more and more cost effective and attractive to investors, with the result that human ingenuity and the efficiency of capitalism will lead to new energy sources closing the gap.

There are several problems with this argument. The first is that, with the exception of nuclear power, no other source of energy is as efficient as oil or natural gas (which, incidentally, is set to peak just a few years after oil and hence is at best only a 'bridging' fuel which can help span the gap between oil-dependence and an alternative-energy future).

Nuclear fission relies on a certain kind of uranium and, quite apart from the appalling safety problems involved, there is only enough left for some 25 years more at present rates of use. Unless someone manages to build a stable fast-breeder reactor (and even the Japanese have given up on this quest) then nuclear power is another short-term option which can do no more than slow down our descent into the low energy abyss.

Nuclear fusion has the theoretical potential to solve the problem entirely, but is estimated to be at least fifty years away, if it is feasible at all.

The world still has vast reserves of coal, but it is an extremely dirty form of energy whose widespread use could well cause uncontrollable climate change as well as more conventional pollution problems. 'Clean' coal gasification technology clearly does have potential, but is not particularly efficient and cannot close the entire gap left by declining oil.

Hydrogen, now being touted by some as a 'miracle' fuel that extracts energy from water, is in fact nothing of the sort. Yes, hydrogen can power cars while leaving nothing but pure water as its 'exhaust waste', but hydrogen is not a fuel, an energy source, at all. Rather, like electricity, it is a *carrier* of energy. Like electricity, it needs a true energy source to make it – quite inefficiently, at present - in the first place. Hydrogen clearly has a great future as a means of propelling vehicles in a post-oil world, but only when we find new sources of energy to extract it from water in the first place.

Wind, wave, solar, geothermal and biomass energy all have potential, but as already noted their smooth development will be greatly disrupted by wild fluctuations in the price of oil. Their widespread efficient use would also mean unbelievable levels of investment, and a corresponding write-off of most of the world's current energy infrastructure. And, even once that is done, the fact will remain that they are not as concentrated sources of energy as oil, so while they will help to narrow the energy gap they cannot close it.

Furthermore, with all new energy sources, there is going to be a big time lapse between any serious decision to develop them to their full potential, and the year when they really come on stream. The most optimistic analysts talk in terms of 10 – 15 years' lead-time at least.

Making matters even worse is that is looking increasingly likely that the world's oil reserves have been massively overstated. There are two factors in this: First, the value of an oil company is mainly based on its reserves. Hence the top executives at any given time have a big incentive to overstate reserves, so as to

maximise share prices and executive salaries 'on their watch'. You will recall how Shell recently had to own up to massive overstatements of its reserves.

Second, there was several decades ago a change in the way in which OPEC countries worked out how to allocate their production quotas (i.e. the size of their licences to print money). The new system adopted – and maintained to this day – was to link current production to a percentage of total reserves. Within a year of this change, every single OPEC country, without any extra exploration, added vast amounts of oil to its stated, *self-certified* reserve. There is no reason to believe that those increases were anything other than fictitious, but those who claim that "we've got plenty of oil left" rely heavily on those figures.

The upshot of all this is that we are entering an historical period of potentially great instability, turbulence and hardship. It appears highly likely that this is a major – if not the dominant – factor, in the Bush regime's decision to invade Iraq, and the growing evidence that the USA is at least seriously contemplating going into Iran.

Since the Middle East contains two-thirds of the world's remaining oil supplies, the U.S. attempt to get a grip on the region by opening a giant police station in Iraq is logically only the first step. While it is true that the Israeli lobby has its own military/demographic reasons for wanting to push the US (and the Blair regime) into imperialist ventures in the Middle East, it is also true that they've been pressing on those lines for decades. The fact that they appear to have succeeded recently probably has far more to do with a grab for the energy reserves that will keep the Dollar empire afloat than it reflects the power of individuals like Tony Blair's tennis partner Lord Levy.

If their adventures lead in due course to so much Arab radicalisation that the corrupt and pro-US House of Saud falls, then the full-scale occupation of Saudi Arabia would probably require the reintroduction of the military draft in the USA, but would also allow Bush or his successor to take direct control of Saudi's remaining massive reserves.

These, to be blunt, are the only realistically available 'bridging fuel' that can give the USA the time it needs to have even a chance of switching its economy from oil dependence to post-Peak alternative energy and reduced energy sustainability. Looked at in that light, Bush's Middle Eastern adventurism doesn't look quite so irrational.

There again, an even more rational move would be to admit that the cheap energy bonanza that allowed the growth of the global economy and all sorts of internationalist fantasies is over for good. A nationalist alternative, in which separate nations strive for the maximum possible autarky in solid-state, sustainable economies, and in which older values than gross materialism and conspicuous consumption come to the fore, can turn the Peak Oil crisis into an opportunity.

Industrial agriculture grew lots more food, but it clearly also caused huge numbers of people to die from artificially stimulated degenerative diseases. The 'shrinking world' caused by cheap mass transport gave us holidays in Thailand, but it also greatly accelerated the trend which, unchecked, will lead to the destruction of 90% of all human cultures by the end of the century.

Perpetual global growth might have given us the highest average standard of material living in world history, but it also led to giant anonymous cities in which

depression and suicide are endemic, and in which the ethnic and cultural identities which make us truly human were being dissolved. The end of all these things is not something to be feared, it is potentially a miraculous last minute reprieve by Providence.

The circumstances of the Long Emergency of Peak Oil will require us to downscale and re-scale virtually everything we do and how we do it, from the kind of communities we physically inhabit to the way we grow our food to the way we work and trade the products of our work. Our lives will become profoundly and intensely National and Local. Daily life will be far less about mobility and much more about staying where you are. Anything organised on the large scale, whether it is government or a corporate business enterprise such as Tesco's or Sainsburys, will wither as the cheap energy props that support big business fall away.

In the short to medium term, the turbulence of the Long Emergency will produce a lot of economic losers. Many of these will be members of an angry and aggrieved former middle class – particularly those already burdened by debt - though it will inevitably be the poorest countries and communities which are hit the hardest in real terms, for they have lower 'reserves' of relative prosperity to insulate them from the onset of hard times.

These are daunting and even dreadful prospects. The Long Emergency is going to be a tremendous trauma for the human race. People will not believe that this is happening to them, that 200 years of modernity can be brought to its knees by a world-wide power shortage.

The cynical and power-hungry will find it easy to blame scapegoats. Our present ruling Masters will both reflect and use popular confusion and fear by enforcing their rule at gunpoint in an ever more repressive police state. The passing of the Patriot Act in the USA and the Civil Contingencies Act in Britain are clear signs of what is to come.

The scene is set for the Second Great Depression, a near perpetual crisis in which our Masters will cling to power like limpets, but in which the legitimacy that their ability to deliver consumerist goodies has given them up until now will vanish like early morning mist.

It will be a time in which all sorts of strange cults and radical organisations will find the opportunity to prosper, but in which only the most far-sighted and skilfully organised will turn such short-term gains into lasting power. It will be a time when old certainties become laughably out-of-date. A time of hate, and a time of hope. A time for powerful things to wither and die, a time for new ideas to grow and come of age, a time for things long dormant to return to life.

Peak Oil is the crisis of global capitalism that Marx failed utterly to foresee. That much is certain. Our familiar world is going to change forever. The only thing that remains to be seen is what will replace the globalist old order of free trade liberalism. Will it be (i) a global police state tyranny, (ii) brute anarchy dominated by Mad Max local warlords, or (iii) a low energy but relatively high-tech version of Shakespearean England or whatever pre-industrial cultural golden age each sovereign people can find as a model in their own history?

Our Masters will inevitably favour Option One, and in going for it may doom us all to Option Two. But we nationalists can chose Option Three - to our

generation goes the chance to overthrow the System that led us down this blind alley, and to build a better world out of the ruins.