

We open with comment reflecting on the technocratic viewpoint: Technocracy understands the fact that we live in an incredibly complex technologically advance civilization. Presently we have government attempting to function by the use of politics and opinion, this causes more problems, disruption and disasters than any debate by legislatures could possibly solve. Take a look at our current state of affairs in the USA today. Most days searching the web I am deluged with fact based articles detailing imminent catastrophes just around the corner.

What is the common denominator, which is the harbinger of all of these problems, disruptions and disasters? When you boil down the facts you will find that it is money. The lack of money or malfeasance (including all crimes involving money) is usually the primary source or cause for all of our problems. To simply remove money from the equation is never considered, except in times of National Emergency or War. Why not completely discard this obsolete Price System? Things suddenly become much simpler for keeping the technological systems which keeps us all alive, well and running. Consider this, something like 95% of all laws are invariably linked with Money. Will any politician even suggest that we provide a healthy environment for all of our citizens with proactive programs to prevent illness? Today, in America, our Medical System is controlled by Corporations seeking evermore profit. A healthy citizenry is unprofitable and therefore anti-business. If our youth were truly educated, they would be a dire threat to any and all Price Systems.

When you really begin to examine the possibilities raised by Technocracy, the view is truly stunning... Paul Cordsmeyer

# A Society That Throws the Sick Away

April 28, 2005

By Barbara Ehrenreich

Author of "Nickel and Dimed: On (Not) Getting By in America" (Owl Books, 2002).

Most countries are proud to have a healthcare system. It's an organized way of helping the sick and infirm — *a mark of genuine civilization*. Not so here, alas, where the health system is rapidly becoming a health hazard. After decades of privatizing, profiteering and insurance company-driven bureaucratization, Florence Nightingale has morphed into Vampira. Healthcare costs are sucking the blood out of the economy, for one thing. Consider poor General Motors, once the nation's flagship corporation and now sinking under the weight of its employee health benefits — which account for \$1,500 of the sticker price of each new vehicle. As GM contemplates bankruptcy, other companies thrash around frantically trying to shed their insurance-needy American employees. They downsize and outsource — anything to escape the burden of health costs. The result? Our "jobless recovery": Companies don't want to assume responsibility for their workers' medical bills and — this being the global temple of free enterprise — neither does the government. Then there are the U.S. health system's toxic effects on individuals, and I'm not referring to Vioxx or the approximately 200,000 people who die each year as a result of "medical mistakes," but to its financial effects. Harvard's Elizabeth Warren recently co-wrote a study showing that more than half of all personal bankruptcies are triggered by medical costs, and it's easy enough to see how. If you lose your job — through, say, downsizing or outsourcing — you lose your health insurance, and the uninsured are routinely charged up to three times more than those who have an insurance company to negotiate their hospital bills. As for emergency rooms, which the hardhearted or incurious imagine absorbing all the poor and uninsured — well, the

average visit to an ER now costs a little over \$1,000, which is a high price to pay for an asthma attack or an infant's fever. Certainly the health system makes plenty of people rich — Big Pharma's overlords, for example, and CEOs like HealthSouth's Richard Scrushy (who received about \$267 million in compensation from his company between 1996 and 2002) — but it makes a lot more people poor: indirectly, by inhibiting job growth, and directly, by grinding individuals down to bankruptcy (which, thanks to the new federal bankruptcy law, offers no fresh start to the debt-ridden). Add to this the well-known fact that poverty is a risk factor for dozens of diseases — from asthma to AIDS, from depression to diabetes — and, well, I rest my case.

When doctors notice a tissue growing nonstop — as U.S. medical costs are doing — and in the process draining nutrients from the body as a whole, they insist on prompt excision, i.e., cut the thing out before it kills. So too, one might think, economists should be calling for the immediate destruction of the American healthcare system: Stamp it out and drive a stake through its heart. Because Americans will still need healthcare, the solution is obvious: If we can't outsource our illnesses — and there is so far no technology for transferring one's cancer or atrial fibrillation to a starving African or Asian — we can at least outsource our healthcare.

**It's already happening, in fact, though only in a helter-skelter way.**

An estimated 2 million Americans cross the borders every year to purchase their prescription meds in Mexico or Canada. U.S. X-rays are increasingly interpreted by radiologists in India. Patients are being globalized too, as hundreds of thousands of them from all parts of the world flock to Manila, Singapore, Bangalore and other centers of low-cost, high-quality care. Some hospitals in India lure the rich with airport-to-hospital bed-car service and post-surgical yoga holidays, and I can foresee cheap, Motel 6-style hospitals springing up in Tijuana for the American working class.

All right, it's painful to admit that the nation that produced Osler and Salk, pacemakers and MRIs can't do healthcare anymore. But there are other things we don't do here much anymore, like manufacturing. According to Business Week, companies are increasingly outsourcing their R&D too. In the case of healthcare, it wasn't the science that foiled us (though, with more schools teaching only biblically approved versions of biology, that may soon be a problem too). No, we Americans just couldn't figure out the technology of distributing healthcare to the people who need it. We left the whole business to business — both of the profit-making and private "nonprofit" variety — and business screwed it up.

**Doomsday Profiteering** (*Article edited for important details only*) May 11, 2005  
By Tim Wood

NEW YORK (ResourceInvestor.com) -- Matthew R. Simmons says the world is blindly and blithely racing toward an energy crisis rooted in false assumptions about plentiful Saudi Arabian oil reserves. Simmons says that provided "disbelief is suspended", the problem can be dealt with, but not before prices surge to crimp demand.

How soon could the crisis (come)? It already has to an extent, but Simmons believes the fourth quarter of this year will see the first real crunch as global demand reaches 86 - 87 million barrels per day, which is 2 - 4 million barrels short of projected supply. He believes that rebalancing the market would require tapping stocks for 180 - 360 million barrels, which

simply does not exist. Simmons disagrees with recent analyst reports of oil prices spiking to record highs, because it implies a quick retracement off a high. Rather, he sees prices surging to progressively higher plateaus.

### **Conventional wisdom**

Simmons is the principal of the eponymous Simmons & Company International, based in Houston, which consults to a who's-who of the energy industry. His book, *Twilight in the Desert: The Coming Saudi Oil Shock and the World Economy* will be available in bookstores from May 27.

Speaking with us by telephone, Simmons, who has analyzed energy for 34 years, boiled the energy problem down very simply to a failure of conventional wisdom about oil. Nearly everything has been wrong. Demand has grown massively at 12.5 million barrels a day from 1995 to 2004. The cost of finding new and replacement reserves has increased dramatically, whilst fields recently found have been smaller with lower quantities of poorer quality resource. Technology advances were misleading because they resulted in a form of "high grading" – production was boosted in the short term, but with negative effects in the long term.

### **Accidental trip**

"I took an accidental trip to Saudi Arabia in February 2003," Simmons told us, adding, "and what I saw didn't pass the smell test." He observed technology applications and water handling infrastructure that should have been superfluous to a country reportedly awash with cheap reserves. "We've always been told they had 260 million barrels of reserves in 80 fields... they weren't behaving that way," he said. He was particularly struck by Saudi efforts to rehabilitate old oil fields. "Why were they doing that if they had 80 [untapped] fields?" Simmons asked rhetorically. On his return to the States, Simmons scoured the digitized archive of the Society for Petroleum Engineers. Therein he found 235 technical papers spanning many years which when pieced together presented the actual truth about Saudi oil.

### **Simmons's truth is that Saudi oil diversity and abundance is a myth.**

For the last four decades, 90% of Saudi Arabia's 8-9 million barrels of oil per day has come from just five giant fields. 85% of the remaining 10% comes from just 3 other fields. By contrast, America produces 5.5 million barrels per day from 8,000 wells. Also, Simmons found that Saudi fields are highly compartmentalized rather than homogenous, which makes extraction more complex and costly.

### **Those "miracle" fields are now mature and in need of husbanding.**

In order to keep production rates up, the Saudi fields were pressurized by injecting massive amounts of water. This is not uncommon, but in the Saudi case many injector wells are horizontal rather than vertical according to experts. When the water pressurized oil rises above the level of the injector well, "brine" gushes out, referred to as water cut. It's environmentally messy and usually spells an early end to the primary well. Similarly, there's a point at which the loss of pressure makes a field inert, leaving behind a good deal of oil.

## **Water cut has increased exponentially at Saudi Aramaco's monster Ghawar field.**

Most worryingly, Simmons says there is plentiful evidence that the state oil company Aramco spent \$17-18 billion exploring for new reserves only to come up dry. "They have had no exploration success," Simmons declared, noting also that once publicly available field-by-field data suddenly disappeared in 1982. So why hasn't Saudi Arabia come clean? Simmons says it can be put down to pride and protecting its dominant position within OPEC. OPEC's pecking order is determined by the reserves of its members.

### **Global oil collaboration**

Simmons is urging collaboration between the UN, IMF and national energy agencies to create a global inventory report. The intention is to compel companies and governments to give up their production and reserve information field-by-field so that every well bore's productivity can be assessed.

"It would take 30 analysts 30 days to sort out what the real proven reserves are," said Simmons.

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### OIL: ILLUSION OF PLENTY

By Alfred J. Cavallo

Without any press conferences, grand announcements, or hyperbolic advertising campaigns, the Exxon Mobil Corporation, one of the world's largest publicly owned petroleum companies, has quietly joined the ranks of those who are predicting an impending plateau in non-OPEC oil production. Their report, *The Outlook for Energy: A 2030 View*, forecasts a peak in just five years.

In the past, many who expressed such concerns were dismissed as eager catastrophists, peddling the latest Malthusian prophecy of the impending collapse of fossil-fueled civilization. Their reliance on private oil-reserve data that is unverifiable by other analysts, and their use of models that ignore political and economic factors, have led to frequent erroneous pronouncements. They were countered by the extreme optimists, who believed that we would never need to think about such problems and that the markets would take care of everything. Up to now, those who worried about limited petroleum supplies have been at best ignored, and at worst openly ridiculed.

Meanwhile, average consumers have taken their cue from the market, where rising prices have always been followed by falling prices, leading to the assumption that this pattern will continue forever. In truth, the market price of crude oil is completely decoupled from and independent of production costs, which average about \$6 per barrel for non-OPEC producers and \$1.50 per barrel for OPEC producers. This situation has nothing to do with a free market, and everything to do with what OPEC believes will be accepted or tolerated by the United States. The completely affordable market price--what consumers pay at the gasoline pump--provides magisterial profits to the owners of the resource and gives no warning of impending shortages.

All the more reason that the public should heed the silent alarm sounded by the ExxonMobil report, which is more credible than other predictions for several reasons. First and foremost is that the source is ExxonMobil. No oil company, much less one with so much managerial,

scientific, and engineering talent, has ever discussed peak oil production before. Given the profound implications of this forecast, it must have been published only after a thorough review.

Second, the majority of non-OPEC producers such as the United States, Britain, Norway, and Mexico, who satisfy 60 percent of world oil demand, are already in a production plateau or decline. (All of ExxonMobil's crude oil production comes from non-OPEC fields.) Third, the production peak cited by the report is quite close at hand. If it were twenty-five years instead of five years in the future, one might be more skeptical, since new technologies or new discoveries could change the outlook during that longer period. But five years is too short a time frame for any new developments to have an impact on this result.

Also noteworthy is the manner in which the *Outlook* addresses so-called frontier resources, such as extra-heavy oil, "oil sands," and "oil shale." The report cites the existence of more than 4 trillion barrels of extra heavy oil and "oil sands"--producing potentially 800 billion barrels of oil, assuming a 20-25 percent extraction efficiency. The *Outlook* also cites an estimate of 3 trillion barrels of "oil shale." These numbers have figured prominently in advertisements that ExxonMobil and other petroleum companies have placed in newspapers and magazines, clearly in an attempt to reassure consumers (and perhaps stockholders) that there is no need to worry about resource constraints for many decades.

However, as with all advertisements, it's best to read the fine print. ExxonMobil's world oil production forecast shows no contribution from "oil shale" even by 2030. Only about 4 million barrels of oil per day from Canadian "oil sands" are projected by 2030, accounting for a mere 3.3 percent of the predicted total world demand of 120 million barrels per day. What explains this striking disconnection between the magnitude of the frontier resources and the minimal amount of projected oil production from them? Canadian "oil sands" are actually deposits of bitumen (tar), which are the result of conventional oil degradation by water and air. Tar sands are of a completely different character than conventional oil deposits; making tar sands usable is a capital-intensive venture that requires special procedures such as heating to separate the tar from the sand, mixing the tar with a diluting agent for pipeline transport, and constructing specially equipped refineries for processing.

The most serious constraint, though, is natural gas supplies. Production of oil from tar sands requires between 400 and 1,000 cubic feet of natural gas per barrel of oil produced, depending on the extraction method used. Natural gas production, despite a near doubling of drilling activity, is flat or decreasing both in Canada and in the United States--which has prompted prices to triple over the past few years. Given these high gas prices, it almost makes more sense just to sell the natural gas directly rather than use it to produce oil from tar sands.

Extracting oil from the 3 trillion barrels of oil shale cited in the *Outlook* presents its own challenges. The term "oil shale" is also quite misleading, since there is no oil in this mineral, but rather an organic material called kerogen, which is a precursor of petroleum. To extract oil, the shale (typically between 5 and 25 percent kerogen) must first be mined, then transported to a plant where it is crushed, then heated to 500 degrees Celsius, which pyrolyzes, or decomposes, the kerogen to form oil. After processing, most of the shale remains on the surface in the form of coarse sand, so large-scale mining operations will produce immense amounts of waste material. An estimated 1-4 barrels of water are required for each barrel of oil produced, both for cooling the products and stabilizing the sand waste. To satisfy these water requirements, petroleum companies once contemplated diverting the Columbia River--a feat that can be excluded today on political and environmental grounds.

With non-OPEC oil production reaching a plateau and frontier resources not viable, ExxonMobil proposes that increased demand be met in two ways. The first is greater fuel efficiency. (That alone should convey the seriousness of this report: When have you ever heard a petroleum company make a plea for vehicles that use *less* gas?) New cars in the United States are expected to go 38 miles on a gallon of gas in 2030, instead of the current value of 21 miles per gallon. This goal is actually quite modest, as new cars sold in Europe since 2003 already achieve 35 miles per gallon.

The other way ExxonMobil believes demand will be satisfied is from vastly and rapidly increased OPEC production: "After 2010, the call on OPEC increases quickly, requiring OPEC to add more than 1 MBD [million barrels per day] of capacity every year," notes the *Outlook*. "OPEC's resources are large enough to achieve this rate of expansion, and we expect that investments will be made in a timely manner."

This assessment is somewhat ominous. OPEC has not expanded production capacity much at all recently. Moreover, such production increases are only possible from Iraq, Saudi Arabia, Kuwait, and the United Arab Emirates. For these countries, and indeed for most OPEC members, petroleum and petroleum products are their only significant export. As such, they have a vested interest in obtaining the best possible price for their non-renewable resources. OPEC nations would be quite unlikely to increase production as rapidly as needed unless compelled to do so. To put this shortfall in perspective, in 2003 Algeria produced 1.1 million barrels per day; a new Algeria would need to be brought on line in the Persian Gulf each and every year beyond 2010 just to keep up with the projected increase in demand. Consequently, once non-OPEC production reaches a peak, conventional world oil production could peak shortly thereafter, and prices (never explicitly mentioned in the *Outlook*) would rise in accordance with the laws of supply and demand.

What all this means is that the petroleum industry is approaching a turning point. Conventional petroleum production will soon--perhaps in five years, ten at best--no longer be able to satisfy demand. For their part, American consumers would do well to take a cue from their Western European counterparts, who enjoy a comfortable lifestyle despite a per capita use of petroleum that is half of that in the United States. The sooner the United States begins this transition away from oil, the easier it will be. That's a far more attractive option than trying to squeeze oil from stone.

*Alfred J. Cavallo is an energy consultant based in Princeton, New Jersey. His article "[Oil: Illusion of Plenty](#)," appeared in the January/February 2004 Bulletin.*

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## Rape of the rainforest

May 20, 2005

The Independent. By Michael McCarthy and Andrew Buncombe  
<http://news.independent.co.uk/world/environment/story.jsp?story=639814>

It is stark. It is scarcely believable. But the ruthless obliteration of the Amazon rainforest continues at a headlong rate new figures reveal - and today we reveal the man who more than any other represents the forces making it happen. He is Blairo Maggi, the millionaire farmer and uncompromising politician presiding over the Brazilian boom in soya bean

production. He is known in Brazil as O Rei da Soja - the King of Soy. Brazilian environmentalists are calling him something else - the King of Deforestation. For the soya boom, feeding a seemingly insatiable world market for soya beans as cattle feed, is now the main driver of rainforest destruction.

Figures show that last year the rate of forest clearance in the Amazon was the second highest on record as the soy boom completed its third year. An area of more than 10,000 square miles - nearly the size of Belgium - was cut down, with half the destruction in the state of Mato Grosso, where Mr Maggi, whose Maggi Group farming business is the world's biggest soya bean producer, also happens to be the state governor.

Mr. Maggi sheds no tears over lost trees. In 2003, his first year as governor, the rate of deforestation in Mato Grosso more than doubled. In an interview last year he said: "To me, a 40 per cent increase in deforestation doesn't mean anything at all, and I don't feel the slightest guilt over what we are doing here. We are talking about an area larger than Europe that has barely been touched, so there is nothing at all to get worried about."

Many people violently disagree. The survival of the Amazon forest, which sprawls over 4.1 million sq. km (1.6 million sq. miles) and covers more than half of Brazil's land area, may be the key to the survival of the planet. The jungle is sometimes called the world's "lung" because its trees produce much of the world's oxygen. It is thought nearly 20 per cent of it has already been destroyed by legal and illegal logging, and clearance for cattle ranching. But the soya boom has dramatically stepped up the pace of destruction.

It began on the back of the BSE crisis in Britain, when the feed given to cattle suddenly became a matter of intense public concern. Cattle feed producers around the world switched to soya as an untainted source.

The boom was intensified by the fact that Brazil - in contrast to the US and Argentina - did not go down the GM route in its agriculture, so when most European countries went GM-free, it was from Brazil that they sought their soya bean supplies. Europe now imports 65 per cent of its soya from Brazil. A further impetus to the boom is coming from China, whose emerging middle class wants to eat more and more meat - so the demand for animal feed is soaring.

The soya boom is bitterly criticised by environmentalists. "It is turning the rainforest into cattle feed. It is gross," said John Sauven, head of the rainforest campaign for Greenpeace UK.

It first showed up in the deforestation figures in 2003, when after falling or staying steady for eight years, the rate of destruction leapt by 40 per cent in a single year, from 18,170 sq km to 25,500 sq km.

Since then the rate has stayed at its new high level, with 24,597 sq km cut down the next year, and, as the figures released yesterday by the Brazilian environment ministry showed, from satellite photos and other data, no less than 26,130 sq km of rainforest was cut down in the 12 months to August 2004. This was a further leap of 6 per cent on the year before and caused immense dismay, not least because President Luiz Inacio Lula da Silva's government adopted an action plan last year to protect the Amazon. The Environment Minister, Marina Silva, who is from the Amazon state of Acre, said the figure was high, but promised the country would "work to fight this in a structured way, with lasting and effective

action, involving all sectors".

Greenpeace's Amazon co-ordinator Paulo Adario said the scale of the destruction was a tragedy, and showed that deforestation was "not a priority for the Lula government".

Mr. Maggi, whose company grossed \$600m last year, does not see the future as one of restricted soya plantings. He has called for a tripling of the amount of land planted with soybeans during the next decade in Mato Grosso, and his company announced last year that it intended to double the area it has in production.

## **How demand for soya drives the destruction**

The production of soya beans is now a vital industry for Brazil. Agribusiness is the country's number one export earner, and soya is the principal commodity. The current government under President Lula actively promotes soya export as a means to earn foreign exchange for debt payments. From the 1960s, the Brazilian government promoted soya cultivation so Brazil could become self sufficient in vegetable oils. Soya was increasingly planted on large-scale, fully mechanised farms in the south and the states on the Atlantic coast.

In the past, some agro-engineers believed soya would never threaten the rainforest, because of climatic limitations and soil conditions. Soya was thought to be "as adaptable to conditions of the tropical climate as a panda bear to the African Savannah." However, the development of new varieties has enabled the rapid expansion of soya plantations north, into the tropical states where the rainforest is situated. Between 1995 and 2004, the area cultivated with soya increased by 77 per cent in the centre-west, with Mato Grosso becoming the single biggest producer. Now soya is rapidly advancing from all sides toward the heartland of the Amazon, fuelling massive deforestation.

Two companies dominate Brazil's soya business. Gruppo Maggi, owned by Blairo Maggi, Mato Grosso's governor, is considered to be the world's largest individual soya producer. The number one soy-exporter is the giant US grains business, Cargill.

# PEAK OIL INFORMATIONAL PROJECT

For those interested, and we hope many are, there is now available for dissemination, a poignant and graphic pamphlet and "return interest" card on the Peak Oil crises. The information on the "Peak Oil Alert" pamphlet is designed to inform our fellow citizens about the coming crises regarding the petroleum situation and that of Technocracy's design for scientific functional governance.

It is also an opening salvo across the bow of the Price (Money) System from our organization. We are living in unprecedented times and the public must be made aware of the personal impact on their own lives due to the increasingly disruptive events caused by declining petroleum resources. We will mail this valuable information to all who contact us either by e-mail, telephone or the postal service.

**Contact CHQ Technocracy Inc. 2475 Harksell Rd., Ferndale, WA 98248 or  
[CHQ111@aol.com](mailto:CHQ111@aol.com) if you wish to volunteer to help with the Peak Oil Alert Campaign.**

"Fifty years ago, the world was consuming 4 billion barrels of oil per year and the average discovery was around 30 Billion. Today we consume 30 billion barrels per year and the discovery rate is approaching 4 Billion of crude per year." Kjell Aleklett-atimes.com

