

d·i·e

Deutsches Institut für  
Entwicklungspolitik



German Development  
Institute

## Yet another Inconvenient Truth

**By Dr. Jürgen Wiemann**

*Deutsche Gesellschaft für Technische Zusammen-  
arbeit (GTZ) and former Deputy Director of  
the German Development Institute / Deutsches  
Institut für Entwicklungspolitik (DIE).*

# The Current Column

of 19 July 2010

## Yet another Inconvenient Truth

Bonn, 19 July 2010. The world holds its breath. One mile under the sea a camera shows whether the safety valves will work and the oil spill can be stopped. It will take months to repair the damages of the greatest environmental disaster in the U.S., if they can be eliminated at all. But there is another long-term consequence to be reflected: the bubbling oil spill in the Gulf of Mexico is a timely reminder of an inconvenient truth – the world's oil reserves are limited and will eventually run out. In Germany, no front-bench politician has mentioned the taboo term *Peak Oil* (i.e. the maximum global rate of oil production has been exceeded and afterwards the production will become increasingly more difficult and therefore more expensive and place an even greater burden on the environment) since the explosion of the BP oil platform – after all, it is not our oil that is pouring out into the Gulf!

The wonderful illusion that we in Europe have nothing to do with the Gulf disaster could soon turn out to be an error. One can easily imagine the world oil market as a large barrel of oil, into which all oil wells pump in oil and from which all consumer countries draw off their requirements. If the oil production of the USA due to the all-too legitimate misgivings about ever deeper oil wells in the sea now will not increase further, but will decrease, because the existing sources have exceeded their maximum rate of oil production, the effect will also be visible in Germany at the pumps of the petrol stations.

After *Peak Oil* was for a long time only discussed by a small group of international geologists and former employees of the large oil companies, in the meantime relevant organizations such as the International Energy Agency (IEA) in Paris or *Bundesanstalt für Geowissenschaften und Rohstoffe* - BGR (Federal Institute for Geosciences and Natural Resources) in Hanover have also confirmed that *Peak Oil* will probably occur before the middle of this century. In recent times (already before the oil catastrophe in the Gulf), a much earlier date was even considered possible. In 2008, the Chief Economist of the IEA declared in a newspaper interview that worldwide production was expected to lag behind the global increase in consumption already before 2020.

Even the global financial crisis can be seen as a harbinger of *Peak Oil*. To take this into account as a possibility to be researched seriously seems to be too alien for academic economists whose models do not

reflect the bio-physical foundations of economics, the exchange of societies with nature, their *metabolism*. Yet the causal relation between rising oil prices and the financial crisis is all too obvious. In the years before the crisis, the oil price had increased to US \$ 150 per barrel and the soaring fuel prices had also pushed up food prices. With the costs of car driving between home and work rising steeply the lower middle classes in the USA lured into risky mortgages for purchasing suburban houses fell into arrears of payment, and the mortgage crisis took its course. Once again, the oil price proved to be a key variable for industrial civilisation based on fossil energy sources.

After the middle of 2008, only the even greater drama of the financial crisis pushed the tapering of the oil - and food crisis (in some developing countries there were even food riots) into the background again. As expected, the global recession led to the easing of tension on the world oil market, and the fall in price to \$ 40 per barrel appeared to belie the *Peak Oil* forecasts. However, that could turn out to be a premature conclusion. As soon as the world economy is back on track, and that's what the economic stimulus programmes of all governments are aiming at, a new increase of the oil price is to be expected, particularly since the actually necessary investments in exploration and development of new oil fields have also been affected by the recession. Possibly, there will not be a prominent Peak in oil production, but rather a corrugated plateau, on which the global economy pushes the oil price alternatively upwards and then lets it drop again with several dips and recoveries. In this phase, the debate about *Peak Oil* will go on, until, in ten or twenty years, the no longer deniable geological facts will shake the blind faith in limitless growth.

Savvy interpreters of capitalism have argued against the possibility of *Peak Oil* that the exorbitant oil price increases before the financial crisis were not indicative of a real shortage of supply of crude oil but could be explained by speculation alone. In fact, the speculation did push up oil prices to excessive heights. But no speculation comes without any reason; in this case, the forecast of real shortage. The world oil reserves are finite; and humanity will have to adjust to using fossil energy sources more efficiently. If understanding climate change still requires an intellectual effort in order to see the connection e.g. between driving a motor car and global warming and adapt one's own actions, the oil price increase will soon force

the car drivers to do so at the petrol stations. While every rainy summer and every hard winter stokes up doubts about the climate forecasts, although these are short-term weather phenomena and not climate changes, in the case of a long-term oil price increase there can no longer be any doubt about the finality of both Earth's resources and its capacity to absorb all emissions of industrial civilization.

Now, all sides are counting on a *Green Economy*: it seems that we all just have to firmly believe that the researchers and engineers worldwide will develop alternative energies into marketable products that are similarly fungible as crude oil at precisely the right time so that people in the old industrialized countries do not have to abandon their accustomed lifestyles and the middle classes in the newly industrializing countries do not have to give up their hope of comparable prosperity. And yet, during the transition from the fossil-based industrial society to a post-fossil or solar industrial society there will be frictions and conflicts, and maybe even a longer transitional period, in which the radical structural breaks will be accompanied by economic crises before the new age makes headway.

There is a significant interaction between *Peak Oil* and climate change. When oil production gradually decreases in the future and correspondingly less oil is combusted, this will entail a decrease in carbon dioxide emissions, however only if the gaps in the production of energy and heat and in fuels for vehicles and aeroplanes are not closed by resorting to coal (coal liquefaction). In that case, namely, the greenhouse effect would be even greater than in the event of using oil. The climate-harming changeover from oil to coal (of which there are still reserves for several hundred years) must be avoided at all costs, unless technical progress enables us to separate the CO<sub>2</sub> associated with coal combustion as far as possible and store this safely in the ground. An effective climate treaty and the development and worldwide introduction of more economical alternative energy technologies must prevent the changeover from oil to coal after *Peak Oil*. If the worldwide consumption of fossil-based energies were to be radically restricted with the help of an international climate protection offensive, *Peak Oil* could be deferred for decades and the associated world economic crises and structural breaks could be avoided. Effective climate policy is thus the best safeguard against the unpleasant consequences of *Peak Oil*.

*The present Current Column represents the author's personal opinion and therefore does not necessarily reflect the views of either the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) or the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE).*

*In "The Current Column" of 6 April 2010, the author referred to the balancing mechanism on the world oil market where global production meets global demand (this time: "a large barrel of oil") in order to explain the "green paradox" which claims that our well-intentioned climate policy does nothing to save the climate, but reduces our carbon footprint so that emerging economies and developing countries in general can pursue their development strategies with rising consumption of fossil fuels. The perspective of Peak Oil reveals that the prognosis in the previous column that all remaining oil in the ground will sooner or later be produced and combusted is only too realistic. Complete extraction of reserves after Peak Oil can be avoided by an effective international climate agreement that would force, like a demand cartel, the oil producing countries to leave their oil in the ground. Alternatively, if renewable energies would become as fungible as oil and even cheaper, everybody would change over from oil. At present however, both options are not very likely, so that we will have to prepare for Peak Oil and its dramatic consequences.*



Dr. Jürgen Wiemann,  
Deutsche Gesellschaft für Technische  
Zusammenarbeit (GTZ)