

Bulletin

October 2007 ■ Number 1

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Briefing from Hans-Josef Fell

The International Energy Agency IEA of late actually backbites the renewable energies with the direct recommendation to the German Government to drive down the Renewable Energy Law (Feed in Tariff) and instead to support atomic power more. A following of such "advice" would not only endanger the climate and supply security but also many companies and many work places.

One year ago to go against this policy I founded the Energy Watch Group with independent scientists. These experts confront the IEA-calculations of the energy *demand* objective analyses of the real available resources. Already the first two of these studies prove: uranium and coal will be scarce earlier than expected – and therefore more expensive more quickly.

Therefore investment in CO₂-free coal-fired power plants will not be worthwhile as these technologies will come too late, especially due to the oncoming shortage and raising of the price of coal. However for this reason it will already be worthwhile in itself to invest in renewable energy more than ever. These investments must be so high that energy from renewable sources will soon be cheaper than from fossil resources. That in turn will quickly increase the proportion of renewable energies that a further use of the old resources will simply not be economical.

Conclusion: The governments of the world will have to promote the renewable energies earlier and more completely than planned up to now, in order to secure the energy supply and to avert an existential threat to the world economy.

By the end of this year the Energy Watch Group will present a well-founded economic scenario for this development of renewable energies.



Hans-Josef Fell has been a Member of the German Bundestag (Lower House of German Parliament) since 1998 and is the author of the Renewable Energy Law (Feed in Tariff) which came into force in the year 2000. It is considered to be the worldwide most successful law for the growth of renewable energies and was the role model for similar laws in over 40 countries.

Governments "should close their ears to such shortsighted and absurd analyses like those of the International Energy Agency (IEA), which called for the renunciation of the Renewable Energy Law at the beginning of June. The IEA is not understandably blowing into the horns of the big industry although this has been partly subsidized for decades and probably therefore wasted time to prepare itself for the challenges of the climate change."

This quotation does not stem from a medium of the renewable energy branch but from the website of the largest German economic newspaper "handelsblatt.com" from 19th June 2007. handelsblatt.com vom 19. Juni 2007.

Mission Statement

Energy policy needs objective information

The Energy power industry and Government organisations keep up the belief of the unlimited availability of cheap energy from conventional sources*. But energy policy needs objective information. For this reason the Energy Watch Group was founded due to the initiative of the German parliamentarian Hans-Josef Fell and further parliamentarians from other countries. It is supported by the Ludwig-Bölkow-Foundation. In this project scientists are working on studies independently of Government and company interests concerning

- the shortage of fossil and nuclear energy resources,
- development scenarios for regenerative energy sources as well as
- strategies deriving from these for a long-term secure energy supply at affordable prices.

The scientists are therefore collecting and analysing not only ecological but above all economical and technological connections. The results of these studies are to be presented not only to experts but also to the politically interested public.

*

The fact that the fossil and atomic energy reserves will be scarce more quickly than expected or are already scarce is concealed.

The fact that this scarcity means an existential threat to the world economy is suppressed.

The fact that the fast development of the renewable energies could take over the energy supply earlier and more comprehensibly than expected is not clearly stated.

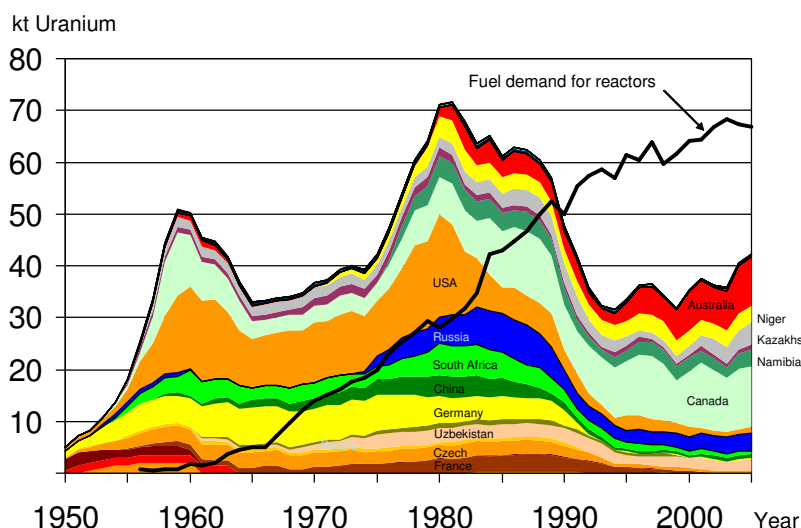
Extract from the Uranium Report

The nuclear power plants will run out of energy

The climax of the delivery of uranium was already exceeded at the beginning of the 80s. At present 40 per cent of the uranium demand is covered by older stocks as well as by the dismantling of Russian atomic war heads. In eleven producing countries the uranium reserves are exhausted. At present only Canada has an ore deposit available with a uranium grade of over one per cent. In other countries it is only 0.1 per cent, at more than two thirds of all deposits it is less than 0.06 per cent. The spot market price for uranium has multiplied in the last seven years. In the middle of 2007 uranium was twenty times more expensive than in the year 2000. In spite of this the International Energy Agency IEA recommends the development of atomic energy. The consequence would be dramatic price jumps. Prices result from offer and demand. About the demand: the atomic power plants use annually around 67 kilotons of uranium. About the offer: The mining of uranium only delivers 42 kilotons annually.

Authors of the Report are Jörg Schindler and Dr. Werner Zittel, both LBST, Ottobrunn. The entire report can be downloaded from the website www.energywatchgroup.org

A reactor delivers electricity for approximately 40 years long. At present 45 per cent of all reactors in the world are older than 25 years, 90 percent of them have been running for more than 15 years. Up to 2030 they would have to be replaced with new reactors. But yearly only three to four new reactors go onto the net. Little of this will change by 2011 as further reactors are not being built. In order to replace the old clamps in time for 2030, 15 to 20 new reactors a year would be necessary.



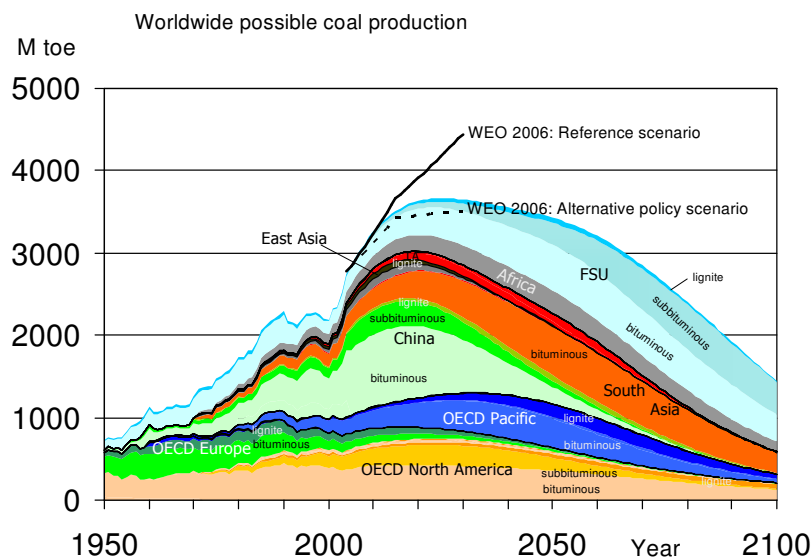
The black curve shows the annual uranium use in atomic power plants worldwide. The coloured surfaces show the mining of uranium according to the producing countries. Since the beginning of the 90s the use is higher than the delivered amount..

Extract from the Coal Report

Coal is going downhill

The expansion of coal is being discussed as a replacement for petroleum and natural gas. But statistics on the global coal reserves are often out-dated and probably inflated and usually have to be corrected downward. For example, the responsible Federal Office has devalued the German hard coal reserves by 99 per cent in the year 2004. The current propaganda for "Clean Coal" should serve above all to justify the building of new coal-fired power plants in the next 10 to 15 years. Even if the so-called sequestration (deposition and disposal (final storage), of carbon dioxide would then be ready for the market, it would no longer be relevant because the emitting power plants already built by then and further buildings would be useless due to the lack of coal supplies.

Authors of the Report are Jörg Schindler and Dr. Werner Zittel, both LBST, Ottobrunn. The entire report can be downloaded from the website www.energywatchgroup.org



The black line shows the demand forecast of the IEA from the World Energy Outlook published in 2006. The coloured surfaces underneath show the availability in the various world regions as they have been surveyed by the scientists of the Energy Watch Group.

Reactions to the Reports I.

"The risks are incalculable"

On 23rd June 2007 the German newspaper "Süddeutsche Zeitung" reported under this headline that a majority of the city council had instructed the Munich public services "to plan no further participation in coal-fired power stations. Two days previously the scientist Jörg Schindler – member of the Energy Watch Group – had pointed out the risk of investments in coal in the long term at a hearing of the city council – and was quoted word for word by the Süddeutsche Zeitung:

"Coal will not be able to follow the development of demand on the world market". And further: "In the future today's main exporters would increasingly use the raw materials themselves. Similar applies to natural gas. Russia, which has the largest reserves, are delaying their closure." From one of the presentation charts of Jörg Schindler: "Increasing coal prices and CO2 output certificates could lead before 2020 to the fact that the cost of the production of electricity from coal would exceed that of wind power and then wind parks will be the cheapest option of electricity production."

Two weeks after the decision of the Munich City Council Hans-Josef Fell challenged the Federal Secretary of the Environment Sigmar Gabriel in the German Bundestag: *"You have just said that holding on to coal is also wise for social reasons and cost reasons. Have you taken note of the recent decision-making of the City Council in Munich that, after a hearing on this question, declined a further investment in new coal-fired power plants by the Munich Public Services? The reasons for this were presented in an extensive hearing. On the one hand there are incalculable financial risks in new coal-fired power plants because a scarcity of coal on the world market is threatening. That is presented in scientific expert opinions of the Joint Research Center in Petten in Belgium and the Energy Watch Group."* (From the plenary minutes (protocol) of 6th July 2007)



Reactions to the Reports II.

"Uranium: dirty and scarce"

Both already available resource reports have been discussed in detail in two leading international expert forums: www.theoil Drum.com (Europe) and www.energybulletin.net (USA). The well-known US American specialist journalist Richard Heinberg, author of the book "The Party's over", has taken up the reports and already quoted them in several articles. Politicians and journalists from Denmark, Australia and Norway already use the Uranium Report for their work. In an extensive article the Swiss newspaper "Neue Zürcher Zeitung" critically dealt with the Uranium Report. The Coal Report has been quoted in the Swedish press and in the American economic press ("American Scientist"). Hans-Josef Fell was asked by the technical publication (journal) of German engineers "VDI-Nachrichten" to contribute a detailed article. The Greenpeace Magazine referred to the Energy Watch Group in detail in the September 2007 edition.



Quote from the Report:

"According to calculations from the scientist group "Energy Watch Group" the price of uranium is reflected with 0.67 Eurocents per kilowatt-hour already today – that is 20 percent of the production costs. The organization believes that a further increase in price up to several hundred pounds uranium oxide is possible. Then the price of electricity would climb by several cents per kilowatt-hour – and would not be cheaper than electricity from wind or biological mass."

Detail from the cover page of the Greenpeace Magazine 5.07.

Reactions to the Reports III.

"The price is twenty times as much in seven years"

Thomas Seltmann, Project Manager of the Energy Watch Group wrote an article for the magazine "energiespektrum" with information from the Uranium Report.

*"One more question > Thomas Seltmann...
...Will the fuel uranium become scarce?"*

It is already scarce. Maybe even in the year 2013 the first reactors will have to be switched off due to the lack of fuel. Only 60 percent of the uranium presently needed for atomic power plants is won by mining. The missing 40 percent comes from stocks especially from the dismantling of Russian atomic war heads. The delivery contracts run out in six years and Russia has already announced that they will not extend the contracts after the year 2013.

In order to only cover the demand of the existing power plants the worldwide supply capacity must be increased by more than half in the short term. Actually the supply of uranium has even gone down by five percent in the year 2006. The cheapest deposits are running out (low). Now mines with a worse ore grade have to be exploited at great expenditure. The example of Cigar Lake in Canada illustrates the problems: In 2007 the extraction (mining) of ore is to be begun in the worldwide largest mine project and the only one with good quality ore. But the invasion of water completely flooded the mine in October 2006. Observers believe it is questionable whether the extraction of ore can begin in 2010 as planned. Delays and sinking stocks lead to a precipitous rise in the price of uranium of up to 136 US-\$ (for each British pound lb. of uranium oxide) as against a price of 7 US-\$ in the year 2000. The price is therefore twenty times as much in only seven years. Also the price of electricity will increase because of this. Previously it used to be that the price of uranium had no effect on the price of electricity. Now uranium is also a cost factor for the power plant operators just like oil, gas and coal. We, from the Energy Watch Group, have calculated that the uranium price of 136 US-\$ will already reflect with 0.67 cents per kilowatt-hour additional cost. With each further increase of 100 US-\$ a further 0.5 Euro cents will be added. The extension of running time and the building of new atomic power plants would intensify the situation (make the situation more critical)."



Further projects of ours

Report 3, 4 und 5 in 2007

Up till December the outstanding three scientific studies on petroleum and natural gas as well as the development scenario for the renewable energies will be available..

International PR-campaign

As of now the reports will be communicated and circulated in a nationally and internationally set up press and PR-campaign aimed at scientists, journalists, institutions and energy political decision-makers in politics and business.

International press conference

We are preparing press conferences for international best circles. The studies of the Energy Watch Group will be presented at exclusive events to the press.

Worldwide parliamentarian-network

So that the contents of the studies find an entrance into the national decision channels further Members of Parliament will be won for the parliamentarian group of the Energy Watch Group via personal contacts.

A book for the public as a publishing object

We are extracting and editing a popular scientific overview for a book from the complete report. This book is to appear in the German and English language in the first quarter of 2008 and be sold via the international book-trade. A CD-Rom with the original texts of the five reports in English will be enclosed with the book. Additional income will be generated with the sale of this book.

For the start of the international media campaign the previous provisional website will be replaced by a new website in the middle of October - first in two languages English/German with all studies and reports of the Energy Watch Group for downloading. There we will present the organization team, scientists and parliamentarians in detail. The new website will be launched on 17th October:

www.energywatchgroup.org

Organization and financing

The Energy Watch Group is organized as an international network of scientists and parliamentarians. The sponsor is the Ludwig Bolkow Foundation in Ottobrunn near Munich. The head of the foundation is Dr. Walter Kroy, previously head of research at Messerschmitt-Bölkow-Blohm MBB.

The Energy Watch Group is financed by money which flows into the Ludwig-Bölkow Foundation. Donations enjoy tax privileges (in Germany).

Bank details of the Energy Watch Group

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| Account holder | Ludwig Bolkow Stiftung |
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| Sort code | 700 202 70 Hypovereinsbank Ottobrunn |
| Intended purpose | Donation Energy Watch Group |
| IBAN DE39700202700040496939 | |
| SWIFT (BIC) HYVEDEMMXXX | |

Imprint

The Bulletin of the Energy Watch Group appears irregularly

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Zinnowitzer Straße 1
10115 Berlin

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Ottobrunn bei München

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