The partiality of international energy institutions
as exemplified by the International Energy Agency (IEA) in Paris

Governments, Members of Parliament, managers, journalists and many others seek advice from numerous scientific institutions when dealing with energy issues. The large international energy agencies exercise a particularly strong influence on energy policies throughout the world. Foremost among these agencies are the Vienna-based International Atomic Energy Agency (IAEA) and the International Energy Agency (IEA) in Paris.

While the IAEA is responsible for nuclear energy only, the IEA is regarded as the world's leading institution for all energy matters. Almost every year it publishes the WEO, the *World Energy Outlook*, in which it presents the main current energy data and makes forecasts about future energy supply and future energy prices.

The *World Energy Outlook* is thus considered to be the most important basis for the energy policies of virtually all the world's governments – their energy bible, as it were. The IEA forecasts are assumed to be objective and to be based on balanced scientific studies. Accordingly, the overwhelming majority of scientific predictions of future energy supply are merely reproduced from the WEO. What is worse, any one who establishes and publishes scientific findings that differ from those of the IEA is regarded as an outsider or is even branded unscientific. In this way, there emerge, sometimes unwittingly, whole cabals of scientific institutes and scientists who reproduce each other's findings and repeatedly quote one another, thereby creating the impression of a solid basis of scientifically founded knowledge. In most cases, however, it can all be traced back to data from the IEA.

The reality of the IEA, however, is entirely different. The Agency does not conduct its own research but mainly comprises statisticians who collate figures transmitted to them but do not subject the data to thorough scientific analysis. The data are mostly contained in reports from governments and industrial giants about reserves and predicted volumes of energy resources and are simply added together. It goes without saying that such reports also reflect a high degree of political or financial interest. A few years ago, when Shell made a sharp downward adjustment in the estimated volume of its own reserves, share prices plummeted drastically. For this reason many reported figures relating to reserves of raw materials and resources are sugar-coated.

The IEA was founded in 1973 in response to the OPEC oil crisis. Major oil-consuming countries founded it in order to protect themselves against the power of the energy-producing countries. Since 1974 the IEA has been an OECD organisation, and it now numbers 28 member countries. These include leading suppliers of raw materials, such as Austrialia and Canada, which are major sources of uranium and coal respectively. This is significant because, along with oil reserves, the IEA is noticeably prone to overstate the volume of uranium and coal reserves.

The aim of the IEA is to ensure the supply of reliable, affordable and clean energy. As we shall see, this is precisely what the IEA is not doing.

Its main tasks include preventing and coping with interruptions in the supply of oil, promoting forward-looking energy policies, maintaining an information system for the international oil market and reducing dependence on oil imports by promoting alternative sources of energy and increasing energy efficiency.

In principle, the IEA is an organisation which, consciously or subconsciously but most probably under political guidance, represents the interests of the giant oil, gas, coal and uranium conglomerates.

That is easily discernible from various IEA actions, pronouncements and predictions, from its statistics, its oil-price and energy forecasts and its policy statements.

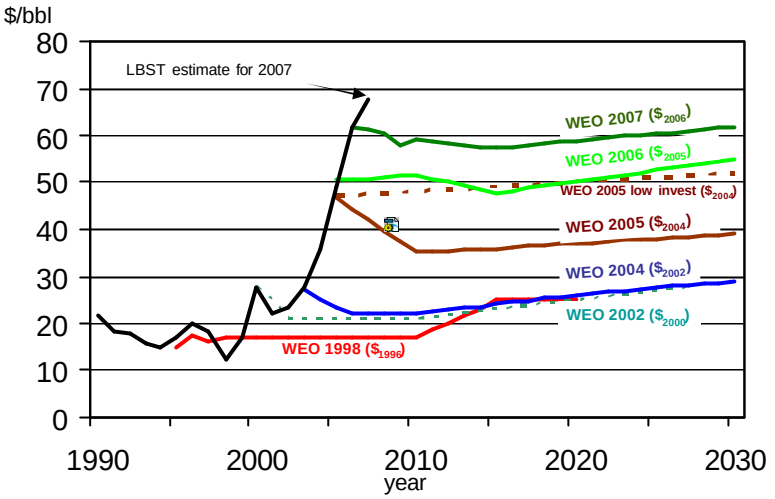
The IEA's statistics

The IEA uses statistics on primary energy sources. While there is nothing wrong in that from a scientific point of view, it does obscure the great benefits of energy from renewable sources. To obtain the energy needed by consumers from fossil and nuclear sources, particularly for electricity generation, there is a need to produce about three times the required volume of energy from the primary fuels. When a kilowatt/hour of electricity is produced from wind power, no waste heat is generated. By contrast, the consumption of a kilowatt/hour of electricity generated by a coal-fired or nuclear power station entails an input of about three times as much primary energy from coal or uranium to obtain the desired output, because two thirds of the energy input is released unproductively through the cooling towers. This imbalance is also reflected in the divergent energy statistics. The IEA's latest statistics on primary energy indicate that nuclear energy accounts for 6.4% of global energy consumption. If, however, statistics were used which reflected only the productive use of energy, nuclear energy would account for only about 2.4% of energy consumption. Since demand is actually satisfied by productive energy output alone and not by the energy released wastefully through cooling towers, the IEA is compiling discreditable energy statistics. It is overstating the relative importance of nuclear and fossil fuels in energy production and downplaying the role of renewables.

The IEA's oil-price forecasts

Since about the start of the new millennium, crude-oil prices have increased almost ninefold, rising from $12 a barrel to just below $100 by the end of 2007. The IEA never predicted this price trend. By failing to do so, it has inflicted serious damage on national economies, for as recently as 2004 many power-generation plants were still being built on the basis of business plans in which an oil price of less than $30 was assumed for the next 20 years. At the same time, thousands of investment plans for woodchip heating systems, solar collectors and eco-power plants have been rejected as unprofitable by both the public and the private sector because mineral oil is supposedly a far cheaper option. When the price of oil stood at about $100 a barrel in November 2007, the IEA, as ever, was forecasting a rapid fall in this high price followed by a minimal rate of increase, which would bring it to a level of about $62 a barrel in 2030. This is an absurd and thoroughly pie-in-the-sky forecast, and yet this very figure is being treated as a realistic prediction in the public debate, as is the norm.

IEA oil-price forecasts



There can be only one explanation for this irrational forecast. If the IEA were to predict an oil price of $200 for the coming years, the whole world would very quickly start looking around for alternatives to mineral oil and would generally settle on renewables. The price of oil might then fall even further than the energy giants wanted, and this, together with the reduction in demand, could significantly cut the oil groups' profits and perhaps even plunge them into the red.

The IEA's energy scenarios

The IEA's energy scenarios are clearly characterised by two miscalculations:
1. systematic overestimation of the availability and the reserves of nuclear and fossil fuels, and
2. systematic underestimation of the growth potential of renewable energy sources.

As a result, the IEA is forecasting only a small percentage of renewables in the energy mix even by the year 2030. In this way it is striking a death blow at renewables by signalling that they cannot make a significant contribution to future energy supplies. This is the only explanation for the continued failure of governments and companies throughout the world to invest in renewables.

The IEA's energy forecasts are most blatantly misleading with regard to the availability of oil.

In its current forecasts the IEA is indicating that the present level of oil production, amounting to some 81 million barrels per day, could be increased to almost 120 million barrels by 2030. In view of the decline in oil extraction in many parts of the world outside the OPEC countries and an observable stagnation within OPEC, this forecast also appears to be completely divorced from reality and to be based solely on a self-seeking desire to maximise sales on the part of the oil conglomerates. Just like high oil-price forecasts, any indications of the onset of a

rapid decline in the availability of oil would trigger huge investments in alternative energy sources, which would likewise be bad business for the oil giants. OPEC even sounded a warning recently that increased investment by the international community in renewables would inevitably mean a withdrawal of investments in the oil industry. This threat has evidently been effective, for the IEA clearly places no faith in renewable energy sources and has thus encouraged many consumers to put their trust in new oil investments.

The IEA is playing politics

One particularly appalling practice of the IEA is that it influences the development of energy legislation by making recommendations to governments. For example, only recently the IEA called on Germany to repeal the Renewable Energies Act, alleging that it was too expensive and that legislation for the introduction of renewables would be better and more efficient if it provided for certification and quota arrangements. The IEA was apparently unperturbed by the presence of a substantial body of hard and fast evidence demonstrating the exact opposite. The UK, for example, has had a certification system for several years and makes similar payments for network input but does not have legislation for the promotion of renewable energy. That is why Germany has ten times more wind turbines than the UK and why wind-generated energy costs about twice as much in Britain as in Germany, even though Britain is by far the windier country. This policy recommendation by the IEA can only be regarded as an attempt to further the interests of the fossil-fuel and nuclear energy giants.

The Energy Watch Group

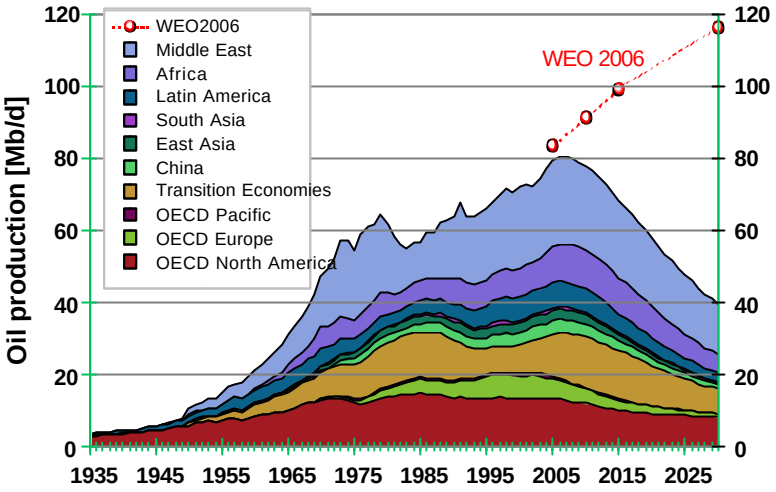
The unmistakable misinformation policy of the IEA must be counteracted by means of scientific analysis of energy data and energy forecasts. This Herculean task has been taken on by the Energy Watch Group. The Group was founded over a year ago on the initiative of Hans Josef Fell, Member of the Bundestag, one of the Vice-Presidents of Eurosolar, the European Association for Renewable Energy, with the backing of Eurosolar and the World Council for Renewable Energy (WCRE) as well as other institutions, mostly from the research community. The Energy Watch Group is strongly supported by the Ludwig Bölkow Foundation, which provides funds from its own resources to finance research studies as well as public-relations activities. The Bölkow Foundation is grateful for every donation, large or small, from any source, including businesses in the renewables industry, to support this work.

The research group under the scientific direction of Dr Harry Lehmann, also a Vice-President of Eurosolar, has already published three research reports, which arrive at completely different conclusions from those of the IEA. The bulk of the research work to date has been performed by the consultancy company Ludwig Bölkow Systemtechnik and the Institute for Sustainable Solutions and Innovations (ISUSI). The Energy Watch Group seeks to cooperate with other research establishments too.

In October 2007 the Group presented its oil report in London. The findings differ radically from those of the IEA. For example, the Energy Watch Group demonstrates that world oil production peaked in 2006. In the coming years, oil production, and hence the availability of oil, will decline by about 3% annually. In 2030 oil production

will amount to only about 40 million barrels a day, which contrasts sharply with the IEA's forecast of almost 120 million barrels.

Global oil production
Source: Energy Watch Group



This rapid decline in oil production will plunge th e world into a massive economic crisis, because the international community will not have been preparing for this widening supply gap in the intervening years by embracing renewable energy sources.

Nor will coal, let alone uranium, be able to plug this en ergy gap, according to the two other reports that have been published by the Energy Watch Group. Two more reports are planned for the coming months: a report on natural gas and a review of the growth potential of renewable energy sources, based on the growth rates that have been registered to date. The pace of the sustained global growth in renewables over a number of years has been considerably faster than the growth rate predicted by the IEA.

The Energy Watch Group's aim of reaching a wide audience with accurate scientific findings was achieved on a global scale for the first time at the London conference. Many major newspapers and US news broadcasters such as NBC and CNN reported extensively on the findings, which are now the subject of intensive discuss ion in North America and Asia.

The Group's aim is to bring more influence to bear on the public debate, primarily with a view to putting global energy policies on a sounder footing than the IEA has been doing.

The following conclusions can therefore be drawn with regard to the work of the IEA:
The IEA is vigorously promoting the interests of oil, gas, coal and nuclear conglomerates.
The IEA is doing its utmost to obstruct a global switch to renewable energy sources.

The IEA is most seriously endangering the world economy and is an obstacle to effective protection of the global climate.

The IEA, in short, is failing to achieve its avowed aim of ensuring reliable, affordable and clean energy.