

Benefit sharing instead of burden sharing - The political, economic and ecological reasons for establishing IRENA (International Renewable Energy Agency).

Keynote of Hermann Scheer at the First Preparatory Conference for the Foundation of IRENA, 10 April 2008, Berlin Germany.

In a global perspective, it becomes increasingly clear that the future of energy supply lies with renewable energies. The limits of conventional energy supply – I am talking here about fossil and nuclear energy - are more than obvious. Today, world civilisation stands at a turning point.

Resources are limited. Nearly everyone by now recognises the finiteness of oil, gas, coal and uranium reserves. At the same time, energy demand of a growing world population is increasing at a faster pace than are the gains in energy efficiency and energy saving. On a global scale, the curve of reserves is declining whereas the curve of demand is rising due to the growth of the world's population and the developing countries' thirst for energy. This results in rising energy prices, shortages in national economies and social problems for an increasing number of countries and their citizens. Access to energy sources has become a global political issue.

The direct costs of conventional energies can only rise whereas costs for renewable energies can only fall. Renewable energies are infinite and, with the exemption of biomass, their primary energy is free. Costs for the production of energy deriving from renewable sources have to be paid for the required technologies and not for fuels. Alone energy coming from biomass leads to fuel costs because work in the agricultural and forest sector is necessary and has to be paid for. Expenses for technologies will fall due to economies of scale and the predicted rise in productivity of the deployed technologies, which are still comparatively young. Today's additional costs for renewable energies, if still existent, are the prerequisite for cost-effective energy in the future, which will be available everywhere on the globe, and for everyone. This promising future is closer than most people who have ignored or underestimated the potential of renewable energies think – like some governments, scientists or the conventional energy sector.

The second limit of the conventional system of energy supply is an ecological one. Even if new vast oil, gas or coal reserves were to be found somewhere under the earth's surface, world civilisation could not afford to secure and use them. The ecosphere's capacity to mitigate damages has already been reached. That means that we have to realise the switch to renewable energies now – even before the known reserves of fossil fuels are depleted. A window of maybe four decades is at our disposition. That means that we are in a race against time.

We are facing the biggest challenge for the economy and society since the beginning of industrialisation. It is not climate change alone, which is challenging us. Even if the growing problem of global warming, caused by the past heavy deployment of fossil resources, did not exist, the global energy system would neither be intact. The problem of the ever-increasing scarcity of energy resources together with various environmental problems would remain. From an economic point of view, these are indirect and extern costs of the conventional energy supply system. Current energy prices do not reflect these costs - but they will have to be paid nevertheless. Only with renewables will we be able to avoid them and free societies from them.

Answering this challenge is considered, for the most part, to be an economic burden. This assumption is leaving a large imprint on the current energy discussion. To me this assumption appears to be highly shortsighted. The switch to renewable energy leads to several meaningful political, economic, social and ecologic benefits. These tend to be overlooked if one only takes account of the microeconomic level and if only isolated cost-comparisons of energy investments serve as benchmark. Using macroeconomic and holistic observations leads to different results.

The macroeconomic benefits are evident. A macroeconomic benefit however cannot be at the same time a microeconomic benefit for every participant in the national economy. Smart, informed and far-sighted political measures and instruments are mandatory to translate macroeconomic benefits into microeconomic incentives. A very positive example for this kind of approach in the field of renewable energy is the German renewable energy sources law, also known as feed-in-tariff law. Since it was recognised that renewables have macroeconomic benefits that address society as a whole, they have been privileged by law in Germany – initially in the field of electricity production. Guaranteed grid-access for electricity produced from renewable sources, a guaranteed feed-in-tariff and no cap on production give producers of renewable energy high investment security. This law has abolished market barriers so that incentives for investments are stimulated effectively.

Today it is clear and it becomes clearer from day to day: renewable energies are the future. However, most countries are not very well prepared for the necessary transition towards renewables. Only a few years ago governments worldwide started to realise that renewable energies have to be focused on and promoted. That is why practical implementation is lagging behind. Many countries already foster the production and use of renewable energy through different approaches on a political and economic level but only few have drafted and implemented substantial and ambitious policies so far and have the necessary scientific, technological and industrial prerequisites at their disposition. Since renewables have been underestimated for years and did not play an important role in the global energy discussion this is no small wonder.

In the 50ies, the focus lay on nuclear energy. The attitude towards nuclear energy was then the opposite of how renewables are treated today: possibilities were overestimated and the risks accompanying its use were underestimated. However, almost all countries oriented their national energy strategies towards nuclear. To support this development, two international institutions have been established in 1957: EURATOM in Western Europe and the International Atomic Energy Agency (IAEA) with a global focus. The establishment of the latter has been welcomed by the UN but has not been founded as UN-organisation. Not all UN member states became founding members of IAEA.

IAEA's task did not only consist in preventing the abuse of fissile material. The IAEA is also mandated to help governments develop nuclear energy programmes, to facilitate technology transfer and build human resource capacities. The existence of IAEA with roughly 2.000 staff and an annual budget of more than \$250 Mio. is in itself a valuable motive for establishing a balance with renewable energies and to set up IRENA.

IAEA exists since half a century. The call to establish an International Renewable Energy Agency has been raised for the first time 28 years ago – in the framework of the North-South Commission's Report chaired by the former German Chancellor Willy Brandt. The establishment of such an agency has been recommended in the final resolution of the first UN conference on renewable energy in Nairobi in 1981 (Conference on New and Renewable Sources of Energy). Nevertheless, these recommendations remained largely unheard. It was argued frequently that it would be sufficient to mandate existing UN-organisations with the promotion of renewable energy.

However, importance grew steadily to lay the focus on promoting renewables internationally. The oil crisis in 1973 displayed plainly, that the oil age would not last forever. To ensure security of supply with fossil resources, the OECD countries established the International Energy Agency (IEA). The IEA is not a UN Agency either – it was called “Club of the Rich”. A third international organisation covering energy matters had thus been established – and all three of them contributed to underestimating renewable energy.

Even though most industrialised nations have stated initial research and development programmes for renewable energy after the oil crisis, priority of research and development still lay elsewhere. When oil prices reached a lower level in the early 80ies, most countries scaled down their still young programmes for renewables.

On the other hand, the eighties and nineties witnessed a growing unease in many societies concerning nuclear and fossil energies. Whereas the eighties were characterised – after the catastrophe in Chernobyl - by strong scepticism concerning nuclear energy, the nineties - with the climate reports growing increasingly alarming - took a critical look at fossil energies. But since many thought that there would not be a realistic alternative to conventional energies, these controversies reached the international energy discussion rather late.

On the other hand various scientific reports were published that demonstrated that a complete energy supply with renewables would be feasible (for example a study of the Union of Concerned Scientists in the US in 1979, a study of the Club de Bellevue, an initiative of scientists from leading French research institutes or a study focussing on Europe published by the Institute of Applied Systems Analysis in Laxenburg). These examples show that the lack of an international agency for renewable energy helps to explain, why these energies have been neglected for so long.

In 1990, the European Association for Renewable Energies, EUROSOLAR, of which I am the president besides my capacity as member of parliament, drafted the first comprehensive memorandum on establishing IRENA and published it widely. At the invitation of Ahmedou Ould-Abdallah, the former energy commissioner of the UN Secretary General, I presented this memorandum at the UN headquarter in New York. Consequently, former UN Secretary General Perez de Cuellar established a task force, the UNSEGED, United Nations Solar Energy Group on Environment and Development. UNSEGED, chaired by Prof. Thomas Johansson, concluded that the establishment of an International Renewable Energy Agency was necessary. This proposal was aiming at the Rio-Conference of 1992 – it was expected that this conference would establish the agency. At the invitation of the US senate, the

Interparliamentary Conference on the Global Environment took place in Washington in 1991, chaired by Al Gore. At this conference, I proposed that the Conference's resolution should also speak in favour of the establishment of an IRENA. This proposal was adopted unanimously.

However, not all of these efforts have been successful due to opposition that has been motivated by different reasons. Existing UN organisations that were partly active in the field of renewables, but with much less capacities than IRENA, spoke against the establishment of the agency. OPEC states that identified IRENA as potential rival opposed its establishment. Those that did not consider renewable energy sources to be relevant enough to supply the world's energy needs opposed the agency. The conventional energy agencies disapproved of the agencies existence.

However, no one of the above can explain how the global spread of renewables will be supported to the necessary extent if not through an agency like IRENA. Therefore you always have to counter questions like: „Why is IRENA necessary?“ or „What is the added-value of IRENA?“ with a counter question: „Why should IRENA not be necessary if one considers the existence of an International Atomic Energy Agency or an International Energy Agency to be necessary?“. Alternatively: „What will we risk if we do not switch to renewables fast enough? “.

For many years, in many speeches at international conferences in numerous countries, I have always been advocating the establishment of IRENA. Prerequisite for the founding has always been that one or more governments would take the initiative and build a coalition of like-minded countries that push the establishment of the agency forward. One important milestone on the way towards establishing IRENA has been the 2004 International Parliamentary Forum on Renewable Energies, which was hosted by the German Parliament, taking place in parallel to the governmental conference „renewables2004“. 300 members of parliament from 70 countries took part in the conference that I was happy to chair. The Final Resolution states: “Promoting renewables requires new institutional measures in the field of international cooperation. To facilitate technology transfer on renewables and energy efficiency and to develop and promote policy strategies, the most important institutional measure is to establish an International Renewable Energy Agency (IREA), which should be set up as an international intergovernmental organization. Membership would be voluntary, and all governments should have the opportunity to join at any time. The Agency's primary tasks would be to advise governments and international organizations on the development of policy and funding strategies for renewables use, to promote international non-commercial technology transfer, and to provide training and development.“.

This initiative has contributed to having the German Government adopt the establishment of IRENA as one of its policy projects. Today, we are starting with the Preparatory Conference that will lead us to the establishment of IRENA next year.

I am positive that the number of member states will increase swiftly once IRENA is established and has started its activities. IRENA will shorten the way to a global deployment of renewables and will accelerate its pace. We can already be sure today: the Founding Conference of IRENA will be a historic date.