

Address to the
Organizing Conference of the American Council for Renewable Energy

"Renewable Energy in America"

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by Hermann Scheer,
General Chairman of the
World Council for Renewable Energy (WCRE)

Honourable Senator Bingaman,
Ladies and Gentlemen,

In my address to the Organizing Conference of the ACRE I am going to talk about the necessity for putting Renewable Energies in place, for the assurance of life on Earth. There is no time to waste. It must be done before they say we waited too long. The main task of supporters of Renewable Energy is to stimulate this change. The question is: how to do it?

The Swiss author Max Frisch once wrote in his play "The fire raisers":

 "Many things may start a fire,
 But not every fire that starts
 Is the work of inexorable fate.
 It is unworthy of God,
 Unworthy of man,
 To call a stupidity fate
 Simply because it has happened.
 Monstrous events,
 Even the total destruction of a city,
 Are mischief.
 Mischief that wipes out
 Our mortal fellow citizen.
 The man who acts so
 No longer deserves God's earth,
 Nor the air that he breathes,
 Nor the sun.
 Bestow not the name of fate
 Upon mankind's mistake,
 Even the worst,
 Beyond our power put out"

The global dominance of fossil/nuclear consumption turned into a global pyromania during modern times. This development is not a definite fate. The alternative is the replacement of these energy options by Renewable Energy. Renewable Energy is the fire extinguisher.

The most important challenge of the 21st century is to organize this replacement in time. To achieve this objective successfully, more than just the substitution of energy sources and technologies is required. It requires a new paradigm on energy in science, economics and politics. The conventional approach of energy science, energy economy and energy policy is responsible for all the mental and structural barriers against Renewable Energy. Max Planck, the Nobel laureate in physics, summed up his experiences about a new paradigm being generally accepted as follows: "As a principle, a new scientific view does not succeed by convincing its opponents and making them see the light, but rather its opponents die out and a new generation grows up familiar with it."

However, the dynamic acceleration of Renewable Energy must happen in the lifetime of our generation, because we are running out of time: there is no doubt that Renewable Energy will replace nuclear and fossil energy due to their limited resources anyway. But it would be worse for human civilisation, if the transformation to Renewable Energy will be further postponed. Business-as-usual seems realistic, but it is unrealistic in order to solve the increasing global energy crisis, which is endangering all what we have, what we want and what people need and desire.

There are three principle differences between fossil and nuclear energy on the one hand and Renewable Energy on the other hand . All three of them are favouring Renewable Energy. Firstly, fossil and nuclear energies are exhaustible, secondly, they damage human life conditions by its pollution and, thirdly, they create existential dependencies for people and their societies. In contrast to these negative qualities, Renewable Energies are inexhaustible, they can be used in harmony with nature and create independency and liberation from captivity by global fossil energy chains.

The third difference is ignored more often in the energy debate than the other two. It is the most politically one. Indigenous Renewable Energy sources help to overcome international conflicts on limited fossil resources. In this context I want to bring back to your attention the Pentagon study from 1980 "Dispersed, Decentralized and Renewable Energy Sources: Alternatives to National Vulnerability and War", elaborated by the Energy Defence Project of the Pentagon. The hope of President Eisenhower expressed in his famous speech "Atoms for Peace" in 1953 to the UN General Assembly can only be fulfilled by Renewable Energy. "Solar for Peace" is the message of our time.

Energy consumption is always decentralised, everywhere people live and work. Nevertheless, since nuclear and fossil energies became dominant worldwide they lead automatically to highly centralised international supplying structures, because these sources can be found only at very few places on our planet. In consequence, energy production and energy consumption decoupled more and more worldwide. Domestic Renewable Energy offers the opportunity for all societies to

relink energy supply and demand on national, regional and local level. They are the basic requirement for renewing our economies.

Demonstrating these three differences is the *first and most important element* of a new mental and practical approach towards energy. In other words, even if there will be no global CO₂-problem, there are many important reasons to overcome the present energy system. Remember the forceful debate and ambitious programmes in the US for Renewable Energy in the 70ies, originated by the Nixon- and Carter-Administrations: The two main reasons were national energy security and clean air for the people!

The *second element* of a new approach towards Renewable Energy is that we should finish the discussions about considering the transition to Renewable Energies as an economic burden. Everything what is seen as a burden will lead to endless debates and to an international bazaar on burden sharings. Instead, we should be aware of and inform our societies and governments about the manifold benefits of Renewable Energies. Some of them can be shown in an actual commercial balance sheet, some not. However, there will be in no way a burden, if we are going to change the priority of policies by cutting futureless expenditures and pushing Renewable Energy as the real future option.

The *third element* is the contradiction to wish at the same time an acceleration in the introduction of Renewable Energy *and* a broad consensus about it. All front-running policy-decisions for Renewable Energy in my country were adopted in a conflict and not in a consensus. In fact, if policy decision makers call for a consensus, then they are usually not really committed and have always excuses for postponements. If they want to bring about a matter, they do not wait for a consensus and call it leadership and they try to convince the people. Renewable Energy promotion is a matter of leadership towards a better future.

The *fourth element*: it is easier than expected to convince people for a Renewable Energy strategy – if it is defined as a general national and global mission. This does not only require the demonstration of their benefits, but also to do it in an offensive way. For this, it is necessary to create public confidence in Renewable Energy by contradicting the many underestimations of their potential. People take nuclear and fossil energies as indispensable as long as they do believe that the contribution of Renewable Energy to the overall energy supply can be only very small. The real truth is: Renewably Energy can dispense all other energy sources, not from one day to the other, but in the run of perhaps five decades.

The *fifth element*: we should leave behind us the restricted views on simply economic comparisons between Renewable Energy and conventional energy conversion technologies. Energy does not equal energy if we look at the direct multi-economic functions of Renewable Energy. The only economic function of Non-Renewable Energy is energy service. The economic benefits of Renewable Energy are the avoidance of immense conventional energy costs: transport costs, infrastructure costs, military costs, leakage costs and currency costs. Today more and more developing countries are paying more for the import of oil than they have export earnings. In the time of future fossil energy shortage this will become the experience of more and more countries and finally of the countries of the first world. Replacing fossil energy by Renewable

Energy is a matter of macro-politics and macroeconomics and not of microeconomics. However, microeconomic cost calculations and comparisons are dominating nowadays the economic views and seem to be modern. This reminds me of the little tale of a hot air-balloon pilot who was driven away by a crosswind and landed on an unknown field. He asked a man on the ground: "Where am I here?" He got the answer: "On the field" – which showed three implications: It was absolutely precise. Nevertheless, the pilot could not deduce anything from it. And the man who gave this answer was obviously a modern economist.

The *sixth element* is the unfair exposure of Renewable Energy to the market. The nuclear and fossil energy system gets annually subsidies of about 300 Billion dollars worldwide. They received and still receive a lot of political protections. The electric power sectors became established everywhere in monopolized market sectors. Therefore, investments could be made free of risks and as a consequence the respective companies built up overcapacities. Based on these advantages new investments for Renewable Energy have unequal market conditions. No energy source was ever established without political support. Policy support for the initiation of Renewable Energy is a matter of market fairness for abolishing the existing bias. As long as the introduction of Renewable Energy is left to the same market standards like conventional energies, it is a double standard against Renewable Energies.

The *seventh element*: Renewable Energies require new allies. We will not only find them among people in the traditional energy sector which are concerned about the future. The energy market for Renewable Energies is more a market for technologies and less a market for energy. We will find allies beyond the conventional energy sector in all our economic and industrial sectors which all will be the winners of an acceleration of Renewable Energies: the car industry who starts to look for new opportunities in using clean fuels, the construction industry who becomes aware of new opportunities of smart efficient and solar architecture, the electrical equipment industry – and, above all, the agricultural sector who will take over a new fundamental role in the whole economy by producing the basic resources for transport fuels and industrial raw materials replacing petrochemicals. We brought about the German Renewable Energy feed-in-act – our legal framework for the acceleration of wind power, PV, small-hydro and Bio-Electricity – by the support of the Environmental League, the farmers association, the association of machine-manufactures and the labour union and against the associations of electric power utilities. Our latest act, which was passed in parliament four weeks ago, exempts all biofuels for transport from tax, was opposed by the mineral-oil industry and the Federation of Industries – but it was supported by Daimler Chrysler, Volkswagen, the farmers association, the Environmental League and again the labour union.

The *eighth element* is a psychological one: the supporters of Renewable Energies must overcome their inferiority complex towards the conventional energy system, whose supporters receive their self-confidence from the dominance of conventional energy sources. The self-confidence of Renewable Energy supporters should be fed by a far stronger existing power – the power of the sun and its forever lasting benefits. The sun is not modest. The users of the sun's power should follow its example. The success of every objective in societies depends on the question, if this

objective can motivate the people and will get spiritual hegemony. Renewable Energies are the superior energy option for the people, because they stand for a real vision and a realistic hope. This cannot be realised with inferior feelings.

Baring these eight elements in our mind and considering them in our behaviour, the Renewable Energy Mission will get the spiritual hegemony.

We have to create a global movement for Renewable Energies. The fight for it is a “No” against fatalism and a “Yes” for an ever lasting future. This movement works at the grass root levels, corresponding to the dispersed character of Renewable Energies. However, there must be a common global cooperation, based on our common idea. Renewable Energies require a forceful global voice for pushing them through

- counselling and motivating international Governmental Organisations and Non-Governmental Organisations to integrate Renewable Energy into their activities;
- a priority for Renewable Energies in programmes of international aid organisations and development banks. The “Agenda 21” can only be implemented if Renewable Energies are put first as the true “Agenda 1”;
- the establishment of an International Renewable Energy Agency (IRENA) for globally empowering “human capacities” – because there can never be successful implementation without it;
- the creation of industrial standards for Renewable Energy technologies, the abolishing of trade barriers against Renewable Energy technologies, the cancellation of nuclear and fossil energy.

That is why we founded the World Council for Renewable Energy (WCRE) and why Michael Eckhart initiated the ACRE as the American arm. I hope this will become the most forceful objective of the World Council – adequate to the American role on our globe.

I would like to close my address with two phrases. The first one is an old Chinese saying: “If the wind of change blows, some build walls and the others build windmills” The second comes from Africa: “Put your face into the sun and you will leave the shadow behind you.” Let us put down the walls against Renewable Energy and highlight them for our societies’ future.