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Economic issues: Financing and Market Entry of Solar Energies (1992)

Economic Issues: Financing and Market Entry

Statement by

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at the
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on

Solar Energy Solutions for an Environmentally
Sustainable World

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1. It is widely recognised that insufficient financing and market entry both in developing and industrialised countries is a major obstacle to the implementation of solar energy technologies. Consequently those who promote renewable energies are calling worldwide for additional financial resources and funds to be provided, whereas those who uphold the principles of the market economy stress the basic evil of subsidies and the risk of market distortions. I believe that both sides are taking too simplistic a view of the problem.

2. The United Nations Solar Energy Group for Environment and Development stated in its report:

"In most countries, energy policy and planning are almost entirely based in narrow definitions of costs. Only direct monetary costs and benefits are considered, while resource depletion and social and environmental impacts are generally excluded. This type of approach inherently favours energy sources and systems such as fossil fuels, nuclear power and non-sustainable use of the biomass, which have large external environmental, social and resource-depletion costs."

However, equal opportunities for renewable energy sources and conventional energy sources is not only impaired by an insufficient integration of the external costs and benefits. In most countries, the conditions for entry of renewable energies into the market are additionally aggregated by considerable government research promotion programmes and direct subsidies for conventional energy sources.

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3. It will therefore only be possible to improve the situation of renewable energies in the medium and long term if we view the promotion of renewable energies not as a task to be solved on a sectoral basis but instead place in the context of an overall reform of our energy policy. Tasks to be solved likewise and on an equal footing are the promotion of an efficient and rational use of energy and the use of economic instruments which make a better integration of the social and environmental costs linked to the traditional use of energy into the energy prices possible. *Remove subsidies for conventional energy sources*
4. I am aware of the fact that renewable energies cannot wait until we have corrected faulty developments in the existing energy policy. However, I still believe that we have to set clear signals in the direction of changing priorities and even make timid efforts in the way of introducing taxes and charges on the use of conventional energy sources as is currently discussed in the European Communities. This is an indispensable prerequisite for an improved entry of renewable energy sources into the market. Due to the basic lack of public finances private investments will have to be mobilised to bring about a breakthrough of renewable energy sources. Measures to this end will have to be developed by individual states themselves and within the framework of bilateral cooperation. *and on a multilateral level.*
5. The present discussion on improving the financing mechanisms of the UN system should in particular concentrate on finding ways of mobilising a maximum of private investments and at the same time diverting public investments currently being made into environmentally incompatible conventional energy projects in the direction of projects promoting the use of renewable energy sources.

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6. I should now like to outline four approaches to achieve this:

(1): The share of energy-related World Bank loans that go towards renewable energy sources in developing countries should at least be doubled (from the present 10 - 15 per cent, excluding large-scale hydro, of a total annual energy expenditure of 2.5 to 4 billion dollars to at least 20 per cent).

(2): The very strict concept of economic efficiency which the World Bank links to the granting of loans should be modified so as to take into greater consideration the external social and environmental benefits gained in the long run of renewable energy projects. The investment costs for making these technologies available which are, as a rule, relatively high should be offset to a greater extent than is now the case against the low costs of operation which are incurred as a consequence of using these natural sources of energy more or less free of charge.

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(3): At international level too, an increasing use should be made of charges on conventional sources of energy. In doing so, use should be made of the twofold effect of charges. For example, a CO₂ charge or a charge on the energy consumption is, on the one hand, an incentive for the persons charged to reduce their CO₂ emissions by making greater use of other sources of energy or by saving energy. On the other hand, the fact that the revenue from the charges is earmarked for the promotion of renewable energy sources and for measures to increase energy

efficiency may lead to improving the possibilities of environmental technologies to enter the market. In this context, I think it is very much worthwhile to consider the internationally coordinated introduction of a charge on aviation fuel which does not distinguish between flights concerning industrialised countries or those concerning developing countries. These charges should go to a special fund under international administration which should be used for investment assistance in the field of renewable energies.

- (4): With regard to the ongoing negotiations on a Climate Convention, Germany has proposed that the climate convention should contain regulations and mechanisms to allow cooperation of the parties to the convention to jointly implement their national commitments. The mechanisms should provide incentives for national investors to implement measures which are more cost-effective in other countries, and thus enable them to offset the investment costs thus incurred against existing obligations in their own country.

Germany has proposed that the parties to the convention should set the criteria for the joint implementation of national commitments from a climate convention by means of a provision contained in the convention or its protocols, including the definition of possible projects, criteria for assessment and crediting as well as the institutional framework, in particular procedures for implementation and review.

The compilation of a list of possible projects is the heart of this proposal. Side effects of an international crediting system can only be minimized by defining specific projects. I think the "Solar Energy Community" and, in particular the International Solar Energy Society should play a central rôle in putting such a list of possible projects together.

Biographical Data

Dr Edda Müller, Deputy Director General at the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Germany. Studied Political Science at the Universities of Munich and Berlin, doctorate in Administrative Science, and post graduate degree from the "Ecole National d'Administration" (ENA), Paris.

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