

Ladies and Gentlemen

I speak today on behalf of InWEnt – Capacity Building International, Germany – a non-profit organization for international human resources development. Established in the year 2002 through a merger of Carl Duisberg Gesellschaft (CDG) and the German Foundation for International Development (DSE), it can draw on decades of experience that both organisations have gained in the field of international cooperation. When I speak of our training projects I will speak for the sake of simplicity of InWEnt, but beg you to keep in mind that these activities were mainly carried out by the former CDG and are now being continued by InWEnt.

InWEnt is a founding member of the World Council for Renewable Energy, and is once again a cooperation partner in this second forum organized by the Council. We have cooperated in the design of this forum. Moreover, we have once again financed, on behalf of the German Federal Ministry for Economic Cooperation and Development, the participation of a number of speakers and delegates.

The participation of many developing-country experts in this forum and in the following conference shows that there is a growing interest among developing countries in making greater use of renewable energies. What is this interest based upon, and which expectations are attached to it?

When talking to people in our partner countries I am always impressed by the widespread environmental awareness there. However, industrialized countries are viewed almost exclusively as having caused and being responsible for global warming.

We are now hearing many calls for a growing contribution of renewable energies to overall energy supply. When joining these calls we must keep in mind that the reasons for intensifying the use of renewables can be quite different in industrialized countries from those in developing countries. In industrialized countries, the main argument is climate protection, meaning the reduction of energy-related global warming emissions. As a further point – and we can be quite open about this – it is possible in Germany, for instance, to earn good money with renewables thanks to the available public-sector promotion. In developing countries, the prime interest is to

increasingly deploy renewables wherever they foster economic development. We consequently focus our activities, together with our local partners, upon applications for renewables in developing countries that are particularly important to the further development of these countries.

The most important activity area in my opinion is rural energy supply, which is a key precondition to integrated rural development. Even today, many rural development concepts fail to consider the energy question. In some projects energy systems are made available without sufficiently clarifying from which revenues these systems will be refinanced. InWEnt has therefore developed a project concept together with its partners, and is currently testing this in various rural communities in the north and north-east of Brazil:

InWEnt's training measures in the north and north-east of Brazil concentrate on interdisciplinary expert teams. These cooperate with producers. In a first step, in-depth market analyses are conducted, exploring the sales prospects of goods and services. Only when reliable sales opportunities have been identified on local, regional or international markets, do the teams advise producers on clean production processes, on the design of simple business plans to receive bank loans, on marketing and – most importantly – on how to select the most efficient energy system to harness locally available renewable energy sources (e.g. solar thermal driers for high-quality seaweed products; photovoltaic pumps for the irrigation of organically produced vegetables; solar water heaters for hotels). The intention of the project is to demonstrate that, with a careful approach starting from the market side, renewable energies can be used in a productive way which allows cooperatives, associations and private producers to generate income and, thus, contributes to poverty reduction.

We will present this approach and the experience gathered by the GTZ, the World Bank and the NREL on Thursday, 03 June at 4.30 p.m. in the Spiegelsaal room in Tulpenfeld 6. We anticipate a lively debate there and would be delighted if you could take part.

While in Brazil we are mainly stimulating demand for renewable energy systems through this approach, in southern Africa our activities are strengthening the supply side. Our training programme there, similarly extending over several years, is building

the operational and technical capabilities of micro-enterprises in the field of solar energy systems. This secures employment and income on the supply side, and enhances the quality of renewable energy systems. The prospects for cooperation between these micro-enterprises and German specialist companies will be debated at a workshop tomorrow, Monday the first of June, in Tulpenfeld 6 at 3.30 p.m. I invite you most warmly to this event, too.

As mentioned by previous speakers we are aware that there is a whole set of common goals of non-oil exporting countries.

These are:

Diversifying energy supply in order to reduce dependence upon fossil fuels and, in particular, to reduce exposure to fluctuating or rising world market prices for fossil fuels;

Reducing environmental costs, health costs, climate impact costs, but also reducing foreign exchange risks and high risks and costs on securing the availability of fossil fuels.

Building or widening in-country production of components or systems, thus creating income is another important objective;

Securing energy supply (for instance by using wind as a back up to hydropower or to expensive oil);

Developing and implementing an overall concept for sustainable energy supply, as a key component of sustainable economic development.

As a contribution to attaining these goals, we have developed a cooperative training project that does justice to the interests of developing and industrialized countries alike. Before presenting this project in detail, I would like to note the following: When cooperating with companies in developing countries, private-sector partners in industrialized countries must continue to earn money – not least in order to be able to continue their research and development activities. I am not saying this to advocate a pure export strategy. The point is rather that research institutions and industrial research departments in developing countries need to be integrated into this process of research and development as cooperation partners, in order that they can achieve a form of technology development appropriate to their needs. Generating income and

building know-how are hugely important aspects for developing countries.

Cooperation in the form of joint ventures appears to me to be the most suitable form by which to combine the interests of both sides over the long term. When holding workshops and seminars, InWEnt always invites industry representatives, and thus builds the basis for cooperation. Moreover, InWEnt also offers to design and carry out advanced training activities together with companies in developing and industrialized countries. This is exemplified by our series of workshops on the design of CDM projects. Through these workshops, we have linked up German companies with entrepreneurs from the People's Republic of China. The interest of industrialized countries is here rather to achieve their emissions reduction targets more cost-effectively by implementing energy efficiency and renewable energy projects in developing countries.

What are now the main components of such a cooperative training project?

InWEnt has been providing long-term training programmes and multi-year training projects in the field of grid-connected wind generators since 1992. Through these activities, we have kept our partners in developing countries informed about the ongoing process of state-of-the-art wind turbine development in Germany, and have at the same time opened the door to these developing countries for our German partners in the research institutes. We have concentrated upon wind energy because we felt that Germany will develop a leading position in the development and application of wind generating units.

Since that time, we have used these advanced training programmes to involve key stakeholder groups in targeted dialogue. Through these long-term programmes we upgrade young energy experts to experts for wind farm planning.

In some countries our partner organisations developed and established basic courses on wind energy utilization (this applies to Argentina, Brazil and the People's Republic of China). This is followed by an in-depth course extending over several months in Germany. This course has three parts. The first part is concerned with specialized theory, involving the technological, economic and financial aspects of wind farm planning – as well as distributed deployment of wind turbines. The second part is an internship at a plant manufacturer, wind farm planner, network operator or utility company in Germany. The final part is a one-month management module.

InWEnt thus builds in developing countries with good to excellent wind locations the knowledge required to provide consultancy services to utility companies and political decision-makers. Industrialized country companies can also make use of this local expertise in the developing countries. The same applies to other international development cooperation organizations.

Next course for young experts from African countries is now open for application. Together with a short study on wind energy potential in African countries (available in this days) we generate an information basis on wind energy also for Africa.

Good to excellent wind conditions, however, are generally not enough for wind energy actually to be used. A further key precondition is the presence of favourable legal, economic and political framework conditions.

Therefore we engage in close debate with decision-makers in energy and research ministries, regulatory, planning and development authorities, managers in energy supply companies and power plants, as well as civil society representatives. These discussions concern the need for regulations and rules to foster more sustainable energy supply structures. Specifically, there is a need to create favourable framework conditions for grid-connected renewable energy systems and a favourable economic and statutory setting for power purchase agreements between wind turbine operators and industry or private network operators.

To provide follow-up to this forum and to the renewables 2004 conference, we will hold a further five-day workshop on these themes in September. High-level decision-makers from partner countries will analyse and discuss where there is a particular need for regulation – and which kind – in their countries. This analysis of regulatory requirements may lead in parallel to a review or modification of the goals adopted for rural energy supply as well as for grid connected systems. That event will also examine the synergies between international steering mechanisms such as emissions trading and the CDM on the one side and national-level schemes such as the German Renewable Energy Act or Renewables Portfolio Standards on the other, and will identify possible points of conflict.

In parallel with the technical discussions with political decision-makers, we engage in intensive expert dialogue with executives in energy supply companies, private-sector and state power plants and network operators, as well as potential wind farm

operators and decision-makers in energy and regulatory authorities on the technological and economic problems and solutions that arise when connecting (large) wind farms to (sometimes weak) grids.

The example of combined training and dialogue measures exemplifies the capacity-building approach adopted by InWEnt:

Through dialogue and advanced training measures, we build the capacity of individuals, organizations and political decision-makers to take technical decisions and to take corresponding action – and to do so in a socially responsible manner. We elicit the very specific needs for dialogue and advanced training, and then seek the best-suited, experienced lecturers and dialogue partners who are firmly grounded in practice. We aim to support actors in partner countries, under conditions of globalisation, to solve problems in their own responsibility and to shape processes of change towards more sustainable development. (trajectories?). To achieve these effects, we cooperate with qualified partner organizations. This can present us with a dilemma, for – and this is a point that I wish to expressly stress – we definitely **do not want** to contribute in our partner selection, cooperation and promotion to a situation in which small but important and highly committed organizations, networks and actors in the partner countries are placed at a disadvantage by our activities.

Similarly, in my opinion an international agency such as the planned IRENA makes particular sense if it strengthens all relevant approaches in the countries and becomes for these actors a contact point for advice and joint activities, providing motivation for these actors and fostering synergies. IRENA can then at the same time also be an agency providing ongoing but impartial advice to political decision-makers.

#### Sustainable architecture

It will only be possible to increase the proportion of renewable energies and make a strong contribution to the reduction of global warming emissions if we also advance significantly in the urban sphere. This brings me to the third sphere of intervention. InWEnt trains energy conservation experts, architects, building and urban planners and engineers, as well as local authority officials responsible for energy, construction and transport policies in climate-appropriate ways of construction and in urban planning and architecture focussed upon energy efficiency – and naturally we also consider aesthetics and social factors. This enhances the urban climate and relieves

pressures on the environment. It also saves energy costs over the long term. Furthermore, it builds the preconditions necessary for renewable energies to be deployed cost-effectively in the municipal sphere, too. We are currently presenting this project approach at the exhibition at the conference venue and in the park of the Villa Hammerschmidt. We will be delighted to engage in further debate on these issues with you there.

For those who are interested in a more detailed approach to our capacity building concept may read my article which is published in the booklet "Words into Action" available here on the conference. I would like to take this opportunity to thank the editors as well as those partners of InWEnt who have presented their experience on capacity building in the same chapter.

Ladies and gentleman.

I would like to conclude with a final remark on a more personal note.

People are the agents of all development. Our efforts focus on people. Strengthening technical know-how and imparting additional management capabilities is one side. Promoting the ability to take decisions in a manner that is socially responsible and with a critical reflection on development and technology processes is in my view the other, decisive side of development cooperation. We learn jointly in this sense. This includes learning to take responsibility for the way in which we prepare and take decisions, regardless of our position within hierarchies. I am in no doubt that we, as humans, always remain responsible for our actions, be it as individuals, as part of an organization or as decision-makers at the policy level or in industry. And this remains valid also for all our activities concerning energy and climate.

Ladies and Gentlemen, I thank you very much for your attention.