Welcoming message from the International Renewable Energy Agency (IRENA)

Ladies and Gentlemen,

Allow me to begin by thanking the Renewable Energy Research Association for organising this conference and for their kind invitation. I am delighted to be able to discuss research developments and technologies related to renewable energies with you today.

It is true to say that 2009 marks a turning point in the development and spread of renewable energies. 52 years after the foundation of the International Atomic Energy Agency and 36 years after the foundation of the International Energy Agency, the International Renewable Energy Agency (IRENA) was founded in Bonn in January 2009. IRENA, the first international organisation that will concentrate solely on the promotion of renewable energies, is to become a voice for renewable energies that will be heard all over the world.

It is a pleasure to speak to you today as the first Interim Director-General of IRENA. Allow me to say a few words about our still very young organisation.

Locations and members

In June 2009, the members of IRENA selected the United Arab Emirates as the location of the IRENA secretariat. In addition, a Technology and Innovation Centre will be established in Bonn and a Liaison Office to interact with international organisations will be set up in Vienna.

The interim headquarters in Abu Dhabi will soon move to Masdar City – the first almost completely CO₂-free city, which will exclusively use renewable energy sources to meet its energy requirements. The fact that the sixth-biggest producer of oil in the world has committed itself to renewable energies shows that we have achieved global agreement on the need for an energy revolution – away from carbon-based energy supply that impacts negatively on the environment, and towards sustainable and clean harnessing of energy.

Just this morning, the EU Commission became the 138th member to join IRENA. The high number of members achieved within such a short time demonstrates just how important the issue of renewable energies has become to member states. They are a must for developing, emerging and industrialised countries, regardless of whether states are rich or poor in raw materials. With renewable energies, dependencies on fossil fuels can be reduced and the various targets that have been set for climate protection can be achieved. Renewable energies are a “must” if climate change is to be kept in check.

IRENA’s tasks

The expansion and growth of renewable energies in recent years has been considerable. Worldwide investments in clean energy technologies amounted to the considerable sum of 120 billion US dollars in 2008. As a further example, solar energy capacities were increased by a factor of six between 2004 and 2008 to reach 16 gigawatts, and those of wind power were increased by 250% to 121 gigawatts. In addition, numerous states have now created the necessary political framework conditions, such as feed-in acts, in order to support renewable energies.

Despite the sometimes positive trends in the worldwide use of renewable energies, there are still currently serious barriers to the spread of clean fuels in place. These include long permission procedures, import duties and technical barriers, uncertain financing for renewable energy projects, centralised infrastructure, and insufficient awareness of the possible applications of renewable energies.

IRENA will help to dismantle these barriers. In order to promote the expansion and sustainable use of renewable energies worldwide, IRENA will be offering its members practical help. This will include the provision of relevant information on the subject of renewable energies, including analyses of potential and scenarios, best-practice examples and effective financing mechanisms. The Agency will also be providing capacity building, training, workshops and policy advice. It will be facilitating the transfer of knowledge and technology, and will be providing help with the improvement of political framework conditions.

Initial activities

IRENA is currently in the process of establishing itself. We are working tirelessly to recruit qualified staff and complete the organisational and structural infrastructure at our headquarters. Despite these start-up steps, the Agency has already begun its initial activities. For example, it has set up a working group under the leadership of the DLR that will consider the potential of and scenarios for renewable energies. Among its other tasks, the working group will prepare an appraisal of the current global potential of all renewable energy sources. In addition, scenarios are to be developed that show how a changeover from the current energy supply system to an energy system based on renewable energies can be implemented.

The sudden death of the project leader Wolfram Krewitt came as a shock to us. I would like to take this opportunity to express my sincere condolences to his colleagues and, in particular, to his family and friends.

As an additional activity, IRENA is advising the Kingdom of Tonga with regard to the electrification of its outer islands using renewable energy sources.

IRENA has also conducted workshops on the topics of capacity building and knowledge management. These workshops analysed tried-and-tested methods and identified needs and knowledge gaps.

Another focus was the dialogue with a large number of stakeholders and other international organisations in the field of energy (e.g. UNIDO, IEA, UNFCCC, IPCC), NGOs and networks in the renewables sector in order to investigate the possibility of cooperations and partnerships.

IRENA will be cooperating with Ren 21, EREC/Greenpeace and the IEA to organise a side event at the UNFCCC Conference of the Parties in Copenhagen on 15 December. Under the motto “Renewable Energy – Our Chance to Mitigate Climate Change”, IRENA and its partners will be presenting renewable energy scenarios and showing how renewables can contribute to achieving CO2-reduction goals and placing energy supply on a secure basis.

Activities in the area of research

In future, IRENA will be focussing increasingly on the area of research. In the light of increasing trade volumes worldwide and strong increases in the numbers of automobiles, IRENA will be promoting research on electrical drive systems in the transport sector in particular. Overall, IRENA will be working towards a gradual reduction in the production costs of renewable energies so that they become competitive on the market as quickly as possible and are no longer dependent on subventions.

A major amount of research continues to be necessary, particularly in the area of technologies that are not yet competitive or are not yet ready for the market. These needs must be addressed quickly.
In order to further support our work, our long-term aim is that IRENA be advised by a scientific advisory board. We are working to establish contacts with the leading research institutions. All research institutes represented here are also cordially invited to work with us. Alongside its e-learning programmes, IRENA will also be offering stipends for academics who wish to work on renewable energies in order to promote young talent in this area.

IRENA will be expanding its activities in the research sector by actively influencing the direction of further research. In its role as a global voice for renewable energies, IRENA will be distributing the latest research findings, communicating them to the relevant stakeholders and basing its ongoing activities on these findings.

With the study of potentials, IRENA wishes to give every country the opportunity to calculate its own renewables technology mix that offers the most promise. In this way, every country should be put in a position to create its own “technological roadmap” on the path to more renewable energies.

It is my own personal aim to help the poorest of the poor. For this reason, IRENA will initiate the development of an affordable PV application. Already today, there are Solar Home Systems (SHS) that start at $300. Our goal is to reduce this price by 50% in the near future, to begin series production of these SHS, and to identify suitable distribution channels for them. There is already a competition for this organised by the Fraunhofer ISE in Freiburg.

I am pleased that the conference programme is dealing with the investigation and further development of renewables technologies. The plenary session – which consists of players from politics, excellent research institutes and the private sector – gathers together highly qualified experts, investors and decision-makers. I am certain that only effective cooperation between these players will result in progress in development and thus contribute to solving the world’s climate and energy supply problems.

We must ensure that international research cooperation is expanded so that the opportunity to develop technologies on a global scale and adapt them regionally, as mentioned by Prof. Staiß in the invitation, can be realised. IRENA will be happy to participate in these efforts and invites all involved to work together closely.

To close, allow me to make another “personal” appeal to everyone present. I call upon everyone – and in particular on women – who shares IRENA’s goals and is interested in working with IRENA to apply to the secretariat in Abu Dhabi. It is my explicit goal to employ at least 50% women at IRENA.

I thank the organisers for the opportunity to speak to you today. I wish you all a successful conference.