## Prof. Nebojsa Nakicenovic Vienna Univeristy of Technology and International Institutue for Applied Systems Analysis (IIASA) naki@iiasa.ac.at

## Statement on behalf of the scientific and technological communities

Thank you Mr Chair,

I would like to address the issue of integrated approaches and the role of scientific and technological communities

Let me start by observing that two billion people are without access to affordable and clean energy services and as many are without a reliable access, yet, access is a key to achieving all of the MDGs

Growing energy services are needed also after MDGs have been achieved

Energy security and reliability is yet another concern.

Deep emissions reductions are required for protecting human health, for avoiding transboundary air pollution and climate change.

The challenge is to address all of these issues simultaneously and in an integrative manner – this can be met through multiple benefits from deployment and diffusion of advanced technologies, including efficiency improvement especially at end use, modern renewables and decarbonization of fossil energy sources.

Strategies for enabling widespread diffusion of advanced energy technologies need to encompass the whole "innovation chain", from basic research to early deployment and development of niche markets.

Scientific research and technological innovation are an essential foundation for such developments, including a more integrative, interdisciplinary approaches to overcome barriers that exist among the natural, social, engineering and health sciences.

The gap in science and technology capacity between the developed and most of DCs is still widening and is a major barrier to development. For example, developed countries employ per capita 12 time more scientists and engineers in RD&D. I would also like to amplify the observation of Austria that public RD&D funding has been declining during the last two decades even in the OECD countries.

Yet, scientific and technical skills and infrastructure are required to develop, adapt and produce the technologies specific to the local needs; to introduce technologies into the market; and provide ongoing maintenance.

To achieve these goals, capacity-building at all levels must be given the highest priority.

Given the highly complex and rapid nature of technological change, it is important that decision makers at all levels have timely access to accurate scientific and technological information and knowledge.

Hence there is a need for energy review and assessment reports, such as those by the World Energy Council, the International Energy Agency, IPCC, InterAcademy Council and ICSU.

Mr Chair:

It is my view, that there is also a need for a broader and comprehensive Global Energy Assessment to better understand transitions Towards more Sustainable Futures

The science and technology community can make a major contribution toward these transitions - this will require enhanced RD&D funding, capacity building and international cooperation.

Thank you!