

SPEECH BY DR TONY TAN KENG YAM, CHAIRMAN OF THE NATIONAL RESEARCH FOUNDATION, AT THE SOLAR ENERGY RESEARCH INSTITUTE OF SINGAPORE (SERIS) INAUGURATION CEREMONY HELD ON THURSDAY, 19TH NOVEMBER 2009 AT 3.30PM, AT THE NUS FACULTY OF ENGINEERING, BLOCK EA, ENG AUDITORIUM

**Professor Tan Chorh Chuan
President, National University of Singapore**

**Professor Joachim Luther
CEO, Solar Energy Research Institute of Singapore**

Members of the Clean Energy International Advisory Panel (IAP)

Distinguished Guests

Ladies and Gentlemen

I would first like to thank Professor Joachim Luther for inviting me to officiate at the inauguration of the Solar Energy Research Institute of Singapore (SERIS) new premises this afternoon.

SERIS is the first major research centre in solar energy in Singapore. SERIS will play an important role to help address the big global challenges of renewable energy and sustainable development.

Global Attention on Environmental Sustainability

Governments and corporations worldwide are increasing their commitment to environmental sustainability, in response to mega-issues revolving around climate change, energy security and urbanization.

As a small highly urbanized city with heavy reliance on imported fossil fuels and without the endowment of renewable energy sources like hydro or geothermal power, Singapore faces significant challenges in maintaining a clean, sustainable environment while achieving a high rate of economic growth. We have therefore been looking actively for ways to contribute to enhancing our environmental sustainability.

Abundant Economic Opportunities

At the same time, we are looking into turning our environmental challenges into economic opportunities. This is like turning the challenge of making up for our lack of water into an economic opportunity. World-wide demand for energy will continue to increase and the many more cities that are being created will require sustainable development solutions.

Over the past two years, we have been putting in place several research initiatives in Singapore which address critical issues associated with sustainable development. These initiatives include CENSAM, Future

Urban Mobility and Future City development. The initiatives build on one another.

Clean energy is another big area. Reducing reliance on fossil fuels is a key part of most environmental sustainable strategies. Research directed at this crucial issue will help Singapore develop new and more sustainable sources of energy to meet our needs.

As we have achieved in the water field, Singapore aims to be an important clean energy hub where clean energy products are developed and exported. Since Singapore identified the Clean Energy industry as a strategic growth area for our economy two years ago, we have implemented a comprehensive blueprint to grow the industry, with an initial funding support of \$350 million from the government, including \$170 million from the National Research Foundation. This blueprint consists of five pillars: R&D, developing manpower, grooming Singapore-based enterprises, branding the industry internationally, and growing a vibrant industry ecosystem. By 2015, the clean energy industry is expected to contribute \$1.7 billion to Singapore's gross domestic product and employ 7,000 people.

SERIS occupies a vanguard position in Singapore's push towards building up strong R&D capabilities to position Singapore well as a hub for Clean Energy business activities.

SERIS is a strongly industry-oriented research centre.

As SERIS is part of NUS, SERIS can draw on deep pools of expertise in basic sciences, engineering and other relevant capabilities from within the university. As it builds up its capability, SERIS will be ready to collaborate with international industry partners and pursue global business opportunities that will open up with the increasing attention on sustainable development around the world.

Relevance to the Tropics

The establishment of SERIS in Singapore is a significant step in building up a sizeable pool of R&D talent in the renewable energy area.

With Singapore located in the heart of the equatorial sunbelt, SERIS plans to use Singapore as a living lab to develop and test innovations that are uniquely suited for use in a hot equatorial climate and a highly urbanized environment.

For example, SERIS would be developing photovoltaic modules customized for Singapore-specific applications and solar-powered dehumidification systems suitable for air conditioning in a tropical climate. Cities within the tropics including Manila, Jakarta, Bangkok and Kuala Lumpur would also benefit from SERIS' research.

NRF has committed \$60million to fund the establishment of SERIS through the Clean Energy Programme Office (CEPO) set up at the Economic Development Board (EDB), under the Environmental & Water Technologies strategic research programme.

Besides performing high quality research to develop solar technologies with economic potential for Singapore, SERIS will also develop R&D manpower for the solar energy industry through training PhD and Masters students over the next few years.

Let me end by congratulating SERIS on its inauguration and for completing its move to its new facilities in the E3A block at NUS Faculty of Engineering.

I thank Professor Joachim Luther for the time and effort he has put in to bring SERIS to this milestone. This historic event will mark an important step in growing Singapore's nascent solar energy industry.

Thank you.
