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**SPEECH BY MR. MANOHAR KHIATANI, DEPUTY MANAGING  
DIRECTOR OF THE ECONOMIC DEVELOPMENT BOARD, AT THE  
AWARD CEREMONY FOR SOLAR TESTBEDS AT SUNTEC  
SINGAPORE INTERNATIONAL CONVENTION & EXHIBITION CENTRE  
ON 21 MAY 2009, 10.30 AM**

Ladies and gentlemen,

A very good morning.

1. I am delighted that all of you are able to join us today as we mark another important milestone in the development of the Cleantech industry in Singapore. It was just over 2 years ago that Singapore identified the Cleantech industry, comprising clean energy, environment and water, as a strategic growth area. As a reflection of our strong commitment to Cleantech, we have allocated S\$680 million to develop R&D and manpower capabilities to better position Singapore in this fast-growing sector.

**Solar Energy Testbeds**

2. One of the key thrusts in our R&D roadmap is to provide a conducive environment in Singapore for companies to develop and testbed their Cleantech solutions. To this end, we launched the S\$17 million Clean Energy Research & Testbedding or CERT Programme in 2007 which allows the public sector to take the lead in the testbedding and demonstration of clean energy technologies, including solar systems, on government facilities. One year later, the scope was extended to the private sector through the S\$20 million Solar Capability Scheme or SCS where private developers and building owners are encouraged to integrate innovative solar solutions in newly developed green buildings. .

3. Today, it gives me great pleasure to announce the pioneer batch of 5 projects that are supported under the SCS. This include Tampines Grande, a commercial development by CDL, 313@somerset, a retail centre by Lend Lease Retail, Robert Bosch's South-East Asia Headquarters building, as well as the manufacturing facilities of Lonza Biologics and Applied Materials. These projects will be conferred the Solar Pioneer Award in recognition of their role as a trailblazer in Singapore's drive in solar energy research and testbedding. I am also pleased to announce the second wave of projects that is supported under our CERT programme, namely NEA's Meteorological Services Facility, Changi Airport Budget Terminal, Ngee Ann Polytechnic and Khoo Teck Puat Hospital. This brings the total number of public sector participants under CERT to nine.

### **Capability and Innovation Development**

4. Both the SCS and CERT schemes aim to develop new capabilities throughout the solar ecosystem which include not only the owners of the buildings but also technology providers as well as professional services companies, such as system integrators, architects and engineers. We are also seeing innovative business models emerging where companies are expressing interest to be solar utilities so that they can aggregate and operate solar systems on multiple rooftops.

5. The participating organisations are also developing and adopting innovative approaches for their solar systems. These innovations include the use of Building Integrated Photovoltaics or BIPV which combine building materials with solar panels, development of cheaper balance of system, development of new clips to hold panels on steep roofs and the use of solar thermal energy for air-conditioning. The resulting track record and capabilities developed would enhance the competitiveness of the various players in the solar ecosystem, especially when they scale up for the regional and global market. .

### **Preparing for Mass Adoption upon Grid Parity**

6. As of mid 2008, we have approximately 200kW of solar installations in Singapore. I am happy to note that with the nine public and private sector projects announced today, Singapore has reached an inflection point in our ramp-up in solar systems. When completed, these projects, together with HDB's S\$31 million solar testbedding initiative, will increase our installed capacity 25-fold to 5MW in total. The total government commitment to our solar testbeds has also grown to S\$68 million.

7. Given the build-up of capabilities and strong interest from many building owners in considering clean energy systems, we are confident that the take-up of such systems will continue to accelerate. In fact, these capabilities will allow Singapore to ramp up mass adoption of solar energy more quickly when grid parity is reached. That is, when price of solar generated electricity will be on par with the price of conventional energy.

### **National Solar Data Repository**

8. With the critical mass of solar energy testbed sites, there is a need for a central body to collate the information that is captured in both our private and public test sites. Hence we have decided to set up a National Solar Data Repository that will be spearheaded by the Solar Energy Research Institute of Singapore (SERIS) from the National University of Singapore, and Singapore Polytechnic. These two organizations will undertake the task of analyzing the collected data and help to proliferate best practices and know-how in solar system installation and integration.

## **Urban Solutions- Singapore as a Living Lab**

9. All these initiatives are also complementary to our focus on Urban Solutions, where Singapore is positioning itself as a Living Lab where companies can test-bed, develop and demonstrate innovative urban-related solutions before scaling up for the rest of the world. In time to come, we envision Singapore to become a major knowledge node for solar technologies for this region, where the tropical climatic conditions require different considerations as compared to more established temperate solar markets like Germany and Japan. Being a highly urbanized city, Singapore can also position itself as a leader in solar solutions for urban settings.

## **Conclusion**

10. In conclusion, I would like to underline our commitment to work with various stakeholders in the solar ecosystem to develop holistic capabilities. Both the public and private testbeds as well as the National Solar Data Repository are initiatives put in place to support this effort. We hope that the pioneering projects of today will pave the way for the widespread use of economical solar energy in the future.

11. Thank you.

**- The End -**