

**Speech by Professor Tan Chorh Chuan, President, NUS**  
**Workshop on Industrial Water Management**  
**“Germany, France and Singapore:**  
**Together for Green Innovation”**  
**22 June 2009, 8.40 am, SFAH Auditorium**

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Your Excellency Mr Pierre Bulher, Ambassador of France to Singapore

Your Excellency Mr Holger Stauderskjold-Nordenstam, Head, Delegation of the European Commission to Singapore

Dr Gerold Heinrichs, Director Asia, International Office, Federal Ministry of Education of Research

Mr Tan Cheng Guan, Council Member, Singapore Water Association

Distinguished Guests, Colleagues, Students

Ladies and Gentlemen

**Introduction**

1 Good morning. I am delighted to join you for the Workshop on Industrial Water Management: “Germany, France and Singapore: Together for Green Innovation”.

**Water Scarcity and Industrial Water Use**

2 Our earth is often referred to as the “Blue Planet”. About 70% of the earth’s surface is covered with oceans. Yet, paradoxically, we are in the midst of a water crisis which is likely to worsen rapidly over time. Water consumption has doubled in the last fifty years while water quality continues to deteriorate in many parts of the world. We urgently need new and better ways of meeting the ever increasing growth in water demand. As a small island with limited water resources, Singapore has been very proactive in addressing the challenge of water scarcity.

3. The United Nations Environment Programme reported that after agriculture, the second largest water demand is from industrial activities, which account for 22% of global water use. In view of the high water demand in this sector, the focus of today's workshop, effective strategies for water conservation and management are critical to achieve sustainable development.

### **NUS Helps Fight Water Scarcity**

4. The challenge of water scarcity is a complex one requiring research which spans many disciplines. The National University of Singapore, as a comprehensive, research-intensive university, has several programmes that draw on the broad range of expertise on campus to address some of the most pressing research-related issues on water. Our major programmes include the NUS Environmental Research Institute, the NUS-GE Singapore Water Technology Centre, the Singapore-Delft Water Alliance at NUS, and the Centre for Water Research, or CWR, which is co-organising this workshop.

5. The Centre for Water Research, hosted by the Division of Environmental Science and Engineering in NUS, has played a notable role in water R&D over the past ten years. CWR made significant contributions to developing water reclamation technology and has successfully demonstrated the use of some of these systems in aquaculture and high quality industrial reuse applications. In 1998, with the support of PUB and the Ministry of The Environment and Water Resources, CWR conducted a strategic research program as part of the National Flagship Project on Water Reclamation. The National Project led to the creation of NEWater, an alternative high quality water supply for Singapore. This has reduced Singapore's reliance on water supply from traditional sources and enabled Singaporean companies in this area, to be very competitive for water treatment projects all over the world.

### **Conclusion**

6. Even as we celebrate these successes, however, the fact remains that there are still many difficult and urgent R&D challenges ahead. The scale and complexity of the issues will require partnerships between institutions with complementary expertise to address them. These partnerships will necessarily have to span disciplines, academia and industry, and geographies.

7. Today's workshop is therefore a very important one. It brings together some of Singapore, France and Germany's leading water researchers and practitioners to share innovative water and wastewater treatment solutions for possible applications in different industries in Singapore and the region. It also provides a useful platform for discussions on possible collaboration on research and development in topics related to industrial water management.

8. In closing, I would say that the need is clear, the cause is a worthy one and synergistic partnerships will be critical in making a difference to the challenge of water scarcity. Please have a productive and enjoyable workshop.

9. Thank you.