

Speech by Er. Chong Kee Sen, President, The Institution of Engineers, Singapore, at the 48<sup>th</sup> IES Annual Dinner Opening Ceremony on Friday, 24 October 2014, 7.30 pm at Resorts World Sentosa

Our Guest-of-Honour, Dr Vivian Balakrishnan, Minister for the Environment and Water Resources

Distinguished Guests;

Members of IES;

Ladies and Gentlemen;

Good evening.

1. I am delighted to welcome you to the 2014 Annual Dinner of The Institution of Engineers, Singapore (IES). It is a great honour for us to have Dr Vivian Balakrishnan as our guest-of-honour tonight. On behalf of the IES Council, I would like to extend my appreciation to you for making time to celebrate our 48<sup>th</sup> birthday with us this evening.

2. Tonight, we will be celebrating the achievements made across different engineering disciplines and the works of outstanding engineers. It is a time to ponder as a community on the challenges that await engineers on the local and global front. It is also a time for us to renew friendships and start new ones.

3. As our country developed over the last 50 years, the engineering profession has also evolved. Engineers are contributing to the manufacturing industry in fields like petrochemicals, pharmaceuticals, marine & offshore, aerospace, electronics and precision engineering. Together with tele-communication and transportation, these

fields contribute to more than 25% of our GDP. The growth of these industries is key to our continued success as a nation.

4 For IES to remain relevant, we need to extend our reach into all engineering disciplines and industries. To this end, IES will be signing an MOU with the Singapore Semi-conductor Industry Association or SSIA this evening. Under the MOU, IES will coorganise professional training courses with SSIA to upgrade the skills and know-how of engineers in the electronic sector, which has a workforce of close to 80,000.

5 Singapore's marine and offshore industry contributes a massive S\$13B or 1.6% to our GDP each year and creates 20,000 jobs in Singapore. More impressively, Singapore accounts for 70% of the world's output of jack-up rigs and production storage vessels. To support this important industry in Singapore and attract more talents to the field, IES held a public lecture on the development of the marine and offshore engineering industry in September this year.

6. For the construction industry alone, demand, in terms of contracts for the built environment industry, reached a historic high of S\$35.8 billion in 2013 and is projected to reach between S\$31 and S\$38 billion this year. Even as the industry shows signs of slowing down, the Building and Construction Authority projects that the demand in 2015 and 2016 could be sustained at between S\$25 and S\$34 billion. Contributing 5% to our GDP, the construction industry is indispensable as it supports the development of industries and provides quality housing and amenities to the people.

7 While demand looks rosy for the construction industry, practicing engineers are concerned about the inadequate compensation in spite of heavy responsibilities. It is critical to resolve the issue of compensation to attract and retain talents in this industry. All industry stakeholders, including regulators, have to come together and work on this.

8 There are, of course, many other challenges that require engineers to address. These include:

- i. Global climate change that is bringing about extreme weather conditions and causing sea water levels to rise.
- ii. The depletion of earth's natural resources.
- iii. The lack of land space in Singapore to fulfil various needs necessary for our economic growth while remaining a livable city.

The list goes on.

9 All these unfolding phenomena underscore an enduring need for engineering talent and competence. For example, engineers with the ability to innovate and develop technologies will have to be in the forefront to mitigate global warming effects and build resilience against climate change. Engineers will have to be called upon to ensure a constant supply of safe food, clean water and green energy. ASEAN countries are also studying the potential to add nuclear power in their energy portfolio. In Singapore, we are exploring underground spaces for storage and utilities and maybe even an entire underground city for the future. All these require the expertise of engineers to ensure success.

10 In addressing challenges unique to Singapore, local engineers have been hard at work, transforming old landfills into usable land; shrinking live firing ranges into a multi-purpose complex; and developing a sizeable LNG storage terminal that could potentially develop Singapore into an energy trading hub. In fact, thanks to NEWater, we were well prepared and did not have to resort to water rationing to tide through the period of dry spell early this year. This case illustrates the

importance for Singapore to build its own local engineering knowledge and competence.

- 11 While we may have to continue to tap on engineering talents from around the world, Singapore needs to build and retain our own engineering capabilities and competencies to sustain long-term growth and evaluate and decide on what is best for Singapore.
- 12 Singapore is fortunate to have a significant pool of talented and passionate engineers that have made major contributions to our success over the last 50 years. In order for Singapore to continue with our progress, we now need to enthuse a new generation of bright young minds into engineering to continue the good work of our pioneer engineers. There are signs of a gradual turn-around in the perception towards engineering but more needs to be done. IES is working with various stakeholders to ensure this happens.
- 13 To bring the attention of the younger generation to engineering as a course of study and career of choice, IES staged its annual National Engineers Day in July this year. Through a series of fun and engaging activities, NED fuels the passion and enthusiasm of students for engineering and encourages them to pursue it as a lifelong interest.
- 14 In August this year, working with NTUC, we launched the Young Engineers Leadership program. It provides a platform to nurture young engineers into future leaders who are able to address global challenges, by equipping them with the necessary leadership skills and technology management knowledge. We will continue to work with our partners, NTUC, e2i and other stakeholders, to provide our members with professional development opportunities for career progression.

- 15 On another front, IES launched the Chartered Engineers certification programme in September last year to recognise the professional competence of engineers and uplift the standards of the profession. It will be an additional benchmark for peer-reviewed competence, providing a guide for employers on engagement and compensation for our engineers.
  
- 16 In July 2015, IES will be hosting the World Engineers' Summit 2015 or WES, to provide a crucial platform for global experts to discuss issues pertaining to climate change. It is also an opportunity to bring awareness to the young on the challenges ahead and on what they could contribute in mitigating and building resilience against climate change.
  
- 17 We need to honor engineers, because it is important for the society to be aware of, and to appreciate the pivotal contributions that engineers have made to society. By doing so, we are also showing the younger generation the huge differences that engineers have made to the world.
  
- 18 Tonight is another occasion we want to celebrate the outstanding contributions of engineers. My heartfelt congratulations go out to Professor Lui Pao Chuen as IES will present him with the IES Lifetime Engineering Achievement Award 2014. I would also like to congratulate Mr Brian Chang, Dr. Foo Say Wei and Er. Dr. Lock Kai Sang, as you will be conferred with the title of IES Honorary Fellow, joining the ranks of distinguished and eminent engineers in Singapore. We are sure that all of you will step forward and make yourselves visible to be role models and serve as beacons for our young engineers to aspire towards.

- 19 As we celebrate IES' achievements through these 48 years, we have also commenced on preparations for our SG-IES50 celebrations which will begin next year. There will be a series of activities over the year, including an IES publication entitled '50 Years of Engineering' to commemorate Singapore and IES' 50<sup>th</sup> birthday, as well as an IES50 Gala Dinner in 2016. The committee is also working on an SG-IES 50 gift package for all IES members and we will announce the details next year.
- 20 In closing, I would like to thank all of you, for being a supporter, a partner and a friend to IES. IES has come so far because of your belief in the engineering profession, our institution and our roles. I would like to thank all the donors for your contributions to the building fund and tonight we will be honoring some of them. I would also like to thank the organising committee and the secretariat for putting tonight's event together. A lot of hard work has been put into it. We hope that you will have an enjoyable evening.
- 21 Thank you.