Speech by Er. Edwin Khew, President of The Institution of Engineers, Singapore at the IES 51st Annual Dinner on Tuesday, 24 October 2017 at the Resorts World Convention East Ballroom

Our Guest-Of-Honour, Mr. Lawrence Wong, Minister for National Development and Second Minister for Finance;

Distinguished Guests;

Members of IES;

Ladies and Gentlemen:

Good evening.

- It is with great pleasure that I welcome you to the 2017 Annual Dinner of The Institution of Engineers, Singapore. On behalf of the IES Council, I would like to express our appreciation to Minister Lawrence Wong for gracing tonight's event as our Guest-Of-Honour and to all of you for making time to join us this evening.
- Last year, IES celebrated its 50th anniversary (our golden jubilee) as the national society of engineers in Singapore. This year, building upon this historic milestone, IES continues to strive towards our goal of advancing and promoting engineering for the well-being of Singapore's economy, people and environment.
- In the past year, we have aligned our activities to the three strategic areas that were identified at the 2016 IES Council Away Day or Strategic Planning Session. I am happy to take this opportunity to share our key accomplishments with you.

IES as the preferred partner for all engineering matters

- In the past year, we have intensified our outreach to Government, Institutions of Higher Learning (IHLs) and the Industry our tripartite partners to strengthen our relationship and partnership. As a result we have crafted a number of Memorandum of Understanding (MOUs) and joint initiatives to work together to expand and strengthen on engineering and technology matters.
- 5 Some examples include signing a MoU with the Land Transport Authority (LTA) and other partners in September 2017 to uplift the skillsets of automotive and bus technical professionals; with the Building and Construction Authority (BCA) to develop training courses and certification for lift engineers, inspectors and technicians; and co-chairing the Built Environment SkillsFuture Tripartite (BEST) Taskforce to collaborate with IHLs and Industry to realign Pre-Employment Training (PET), Structured Internship and Continuing Education and Training (CET) in the built environment sector, to ensure that it is future-ready and relevant to the sector. This year, IES also took on the chair of the Construction Industry Joint Committee (CIJC) and will be taking the lead in writing a white paper to list out issues and problems faced in the built environment sector and how, as CIJC, we would recommend changes and transformation to revitalise the whole sector and make it vibrant and rewarding again.
- In becoming a focal point for the exchange of knowledge, ideas and innovations targeted at contributing to global issues and challenges, IES held the third biennial World Engineers Summit (WES) in July 2017. We convened 400 multi-disciplinary engineering professionals in Singapore to discuss on the subject of "low carbon cities and sustainable urban development". Partnering the Applied Energy Innovation Institute for the first time, IES facilitated the presentation of more than 150 papers at the conference, out of which many of the presentations will be printed in the world-renowned Elsevier Journal of Applied Energy (Special Issue).
- In addition, IES persisted in our endeavour to form partnerships with different industry groups to accelerate industry-wide transformation. At

tonight's dinner, IES will be signing a MoU with the Singapore Precision Engineering and Technology Association (SPETA) to drive greater innovation, transformation and productivity in the precision engineering sector. The MoU will also allow us to deepen engineering and technical skillsets in this sector so as to transform aerospace, medtech, electronics and other sectors that are pivotal to Singapore's manufacturing sector growth. This is to ensure that high-tech manufacturing continues to contribute to 20% of Singapore's GDP.

To promote and market engineering, IES started to increase the share of our engineering voice in the mass media a few years ago. We wanted to help the public and the young gain a better understanding and appreciation of engineering and to raise the profile of engineers and the engineering sector. Owing to the support of members in our various Technical Committees, IES is now regularly approached by the media for technical comments on many engineering matters from high speed rail development and new built environment training pathways, to dysfunctional lifts and accidental fires. We hope that more of our IES members will join IES's 17 TCs and provide your areas of specialisation and expertise through the media, to the public.

Establishing engineering as a profession of choice

- Our second focal area in the past year was establishing engineering as a profession of choice, so as to build a strong core of engineering talents to bolster Singapore's future growth. In this aspect, IES has developed a special partnership with NTUC to develop the Engineers Progression Pathway and to run the Young Engineers Leadership (YEL) Programme in 2017. Since its introduction three years ago, the programme has already nurtured 475 young engineers to take up future leadership roles, including 105 new graduates this year.
- Promoting engineering to the young also remained a core area of focus for IES. In July 2017, we held the eighth National Engineers Day and the third Energy Innovation Challenge. These events were successful in enthusing students from schools, junior colleges and IHLs in engineering through fun and engaging activities.

- During the year, IES also persisted in raising the profile of the engineering profession. I am pleased to announce that tonight, we will be launching "50 Years of Engineering in Singapore", a compendium that features the fascinating journeys of our pioneer engineers, to inspire our younger generation to join the ranks of engineers to continue to shape Singapore's future.
- Tonight, to raise the profile of engineers, IES will also be presenting prestigious engineering awards to esteemed veteran engineers, in recognition of their outstanding contributions to Singapore's nation-building and economic growth. I would like to extend my warm congratulations to Er. Liew Mun Leong for receiving the IES Lifetime Engineering Achievement Award 2017. My congratulations also go out to Er. Ho Siong Hin and Prof Chou Siaw Kiang for being conferred the IES Honorary Fellow titles; and Prof Low Teck Seng for winning the IES/IEE Joint Medal of Excellence Award 2017. (applause)

Membership Expansion

- In the year, IES has also made every effort to expand our membership across various engineering disciplines, industry sectors, age groups and professional status, and across both genders. To achieve this, we have reached out to all our partners; government agencies, industry and IHLs that employ engineers and technicians. I am pleased to share with you that we have expanded our membership by 1000 members this year to a total of 6000 members. Our goal is to continue to expand the IES membership to 10,000 over the next two to three years.
- To achieve this, a key part of our efforts is in enhancing the IES Chartered Engineer (CEng) programme to uplift professional recognition of engineers in more sectors and also recognition in countries outside Singapore. I am happy to inform you that we have just added two new sectors to the six existing sectors of our CEng accreditation portfolio, to accommodate the many engineers in Infrastructure Development and Port & Harbour Management sectors. This is also to facilitate the partnerships we have forged with JTC

and PSA to promote engineering in these two sectors to ensure our engineers are recognised for regional and global projects.

- Looking ahead, IES will keep innovating and transforming to keep abreast of the disruptions and technological advancements confronting the world. We plan to develop more horizontal capabilities across sectors such as safety, standards, design and systems, including marketing as well as life cycle management. We will also continue to accelerate deep capability-building in those sectors supported by our CEng programme and continuous education and training through our IES Academy.
- To provide a pathway for technopreneurship, IES will be setting up a deeptech incubator/accelerator to support our members and young engineers who are keen to establish deep tech start-ups. We are in final phases of discussion with JTC and Spring and the facility will be housed in the Launchpad @Jurong Innovation District (JID). This incubator will provide an avenue for IES senior engineers and Fellows to be usefully employed as mentors and angels for these start-ups. To stay tune to the incubators' progress, please go to our IES website.
- 17 Ladies and gentlemen, IES is poised to step up to new challenges, but we cannot do it without all of your support. Our strengths have all along been on our tripartite partnership with Academia, Industry and Government as illustrated above. Collectively, we have been able to discuss, strategise and collaborate to solve and resolve the many challenges that come our way. IES today is even stronger as we have progressed to quadpartism - having three legs is good but four legs is much better and our fourth leg and partner is the Labour Movement. We have already embarked on many initiatives with NTUC, including the YEL and Advanced Engineers Leadership programmes. More recently, we have also set up the U Entech Steering Committee which is chaired by Deputy SG and SMS in PMO, Heng Chee How and myself. The UEnTech SC is made up of leaders from Industry employing 80% of engineers in Singapore and Union leaders who represent 80% of technicians in Industry. We focus on two major issues: providing cross-skilling training for engineers and technicians who are retrenched so that they can get employment in other sectors that need them; and determining the type of engineers and

technicians who are needed in the future so that we can work with the IHLs to align their courses and programmes to ensure our engineers and technicians are future-ready.

- Tonight, the Council of IES and I would like to specially invite everyone here to join us on our journey to build a better and more sustainable Singapore through engineering and technology. From there, we can then reach out to the region and the world.
- Dear partners, there is much that we all need to do for engineering and IES reaches out to each one of you for your help and support. But for tonight, please eat, drink and be merry. I wish everyone a fun and an enjoyable evening.

Thank you.