# SEMINAR ON ENSURING CLIMATE RESILIENCE OF BUILDINGS AND INFRASTRUCTURE – TOWARDS SUSTAINABLE INFRASTRUCTURE

# **OPENING ADDRESS**

by

YB. Dato' Sri Haji Fadillah bin Haji Yusof Minister of Works, Malaysia

Date: 7th April 2015 (Tuesday)

Time : 9.15 am

Venue : The Saujana Hotel Kuala Lumpur

Jalan Lapangan Terbang Sultan

Abdul Aziz Shah, 40150 Shah Alam

Selangor

YBhg. Dato' Sri Zohari bin Haji Akob, Secretary General, Ministry of Works,

YBhg. Dato' Sri Prof. Ir. Dr. Judin bin Abd. Karim
Chief Executive,
Construction Industry Development Board,

YBhg. Prof. Emeritus Tan Sri Dr. Zakri bin Abdul Hamid, Science Advisor to the YAB Prime Minister, Prime Minister's Office,

Tan Sri-Tan Sri, Dato' Sri-Dato' Sri, Dato'-Dato', Distinguished Speakers, Ladies and Gentlemen.

Assalamualaikum Warahmatullahi Wabarakatuh, Good Morning and Salam 1 Malaysia.

- 1. It is indeed an honour for me to be here this morning to officiate the Seminar On Ensuring Climate Resilience of Infrastructure Towards Sustainable Buildings and by the Construction Infrastructure organised Industry Development Board (CIDB) in collaboration with the Ministry of Works. I am also informed that there are more than 200 participants in this seminar which is a clear and strong testimony on the importance of this subject where finding sustainable solution is crucial to one of the most pressing and delicate problems faced by the country.
- 2. This seminar brings together some of the most knowledgeable, respectable and experienced people from Malaysia and abroad in climate resilience and sustainability of building and infrastructure as well as flood prevention and mitigation. The Government is very serious in addressing these problems which are affecting the wellbeing of the Rakyat and the Country as a whole and have shown great continuing efforts to mitigate interest in the such problems. Therefore, it is my sincere hope that by the end of this seminar, strategic and well formulated recommendations

can be put forward to us for our consideration in solving our dilemma.

- 3. The recent flood has brought devastating effects on the people, property as well as the infrastructure of the country. No less than 18 lives were lost while more than 200,000 people were made homeless. Schools, hospitals, roads, bridges and buildings were damaged or destroyed. Repairs to roads, bridges and the 215 affected slopes is estimated at more than RM 1.09 billion with the actual costs still being tabulated as we speak, some putting it closer to more than RM 2 billion and making it by far the costliest flood in the history of this country.
- 4. For some, their lives will never be the same again as they were left virtually with nothing and many others requiring a lot of resources to bring back their lives to normalcy. Furthermore, there is the issue of education, business, health and socio-psychological impact that needs to be addressed and remedied as soon as possible. It may take months if not years to bring back all the assets and facilities to the

conditions they were before the flood. Such were the effects and magnitude of this flood that we all can ill afford to experience again.

# Ladies and Gentlemen

- 5. Malaysia is not the only country facing these problems as floods and other form of natural disasters frequently occur in various parts of the world. A recent report provided by the United Nation Economic and Social Commission for Asia and the Pacific (ESCAP) indicates that throughout 2014, over half of the world's 226 natural disasters occured in the Asia and Pacific region.
- 6. As such it is no surprise that floods in the region incurred the highest losses and fatalities of more than US 27 billion and 3,559 lives respectively with some 28.6 million lives being disrupted. The same report also suggested that floods and landslides are likely to rise further due to unpredictable weather patterns brought about by climate change.

7. Culminating from this event we will now have to take cognisance on the importance of building and infrastructure; particularly transport infrastructure in the event of floods and other natural disasters which is vital in our rescue, relief and rebuilding efforts which must not be compromised. Hence, it is important for Malaysia and similarly affected countries to begin the process of planning, designing, building and operating sustainable and resilient building and infrastructure which will ensure our sustainable economic and social wellbeing.

#### Ladies and Gentlemen

8. There are ample evidences to suggest that in the years to come, the World will experience higher temperatures, changing rainfall patterns, rising sea levels and more frequent extreme weather events ranging from monsoonal rains, droughts and floods. All these are bound to have severe implication on all types of infrastructure in the country whereby the interconnectivity between the various infrastructure networks will render

communication useless thus preventing the vital link between the rescue efforts and affected people.

- 9. Undoubtedly, our current assets of buildings, bridges, roads and power distribution facilities are already vulnerable to extreme weather and as such risks to our infrastructure can only be minimised if we start to plan, design and build for climate resilience and sustainability.
- 10. The European Commission (EC) has issued a memorandum on the guideline for sustainable multi-modal urban mobility which is key in facilitating the delivery of economic and social services to the residents, in both time of peace and during events of disasters. The memorandum, among other thing calls for the constructing of new climate resilience infrastructure by emphasising on the locating, designing and operating the asset with the current and future climate in mind.
- 11. Meanwhile, the International Federation of Consulting Engineer (FIDIC) has also produced as part of its State of the World Report, a comprehensive guidelines on achieving

measures of sustainable infrastructures. Taking all these recommendations into consideration, I would like to request our planners and designers to be serious in embarking on similar initiatives to ensure our future generation is protected and assured of a sustainable future.

### Ladies and Gentleman

12. On that note, I would like to propose that all data and information required for an effective design and modeling of a sustainable building and infrastructure be made available to the wider research, planning and designing communities. This is where past history of the floods or other natural disasters and associated damage to building and infrastructure must be carefully stored and made easily available. Similarly, weather pattern, meteorological data, river runoff and sequencing of tidal waves together with satellite images must be captured and correlated using some of the more advanced state—of—the art technologies. The related Agencies responsible for collecting and maintaining these data must come together to learn from past histories and forecast credible future scenarios for the

Nation's readiness in facing these calamities.

13. In this respect, I would like to propose that the Public Works Department ( PWD ), being the guardian of the Government's assets be enhanced and adequately resourced to empower and enable it to plan for climate resilient buildings and infrastructure. The PWD would then work with CIDB as well as the industry to craft out suitable design codes and guidelines for the design and construction of sustainable buildings and infrastructures to be implemented in the country.

# Ladies and gentlemen

14. I am glad to announce that the Government has in principle agreed to set up a Centre of Excellence for Infrastructure Sustainability ( CEIS ). At the moment CIDB is currently engaging a number of world–class institutions, including Harvard University and a renowned consultancy company to map out the objectives of the establishment of the CEIS which entails the following:

- (i) provide support for planners, businesses and other stakeholders on issues directly related to sustainable infrastructure through a systematic research and development program;
- (ii) provide guidance which includes developing standards, tools, methodology, knowledge and repository;
- (iii) enhance capacity building and shared learning including training and certification, skill assessment and knowledge generation through research leading to PhD and Master's degree programmes.
- 15. On our path to become a fully developed nation, we will need to continue designing and constructing new building and infrastructure at the same time upgrading the existing ones to attain long-term competitive advantage towards becoming and remaining a high income nation by 2020 and beyond. In 2015, four (4) new highways, worth more than RM 16 billion are expected to begin the planning and construction stages passing through climate vulnerable areas, including hilly terrain and coastal areas. It is an opportune time indeed for us to put serious

thoughts in considering for climate resiliency and sustainability in the planning and designing of these infrastructures.

16. Needless to say, the issue of transportation and the environment has always been conflicting in nature since transportation, while delivering substantial socioeconomic benefits are also impacting the environmental system at the same time. With the bigger issues of climate change and the need to build and maintain our building and infrastructure to the standards demanded in facing these new challenges, I sincerely hope that everyone here will go back with a deep and clear understanding of the disasterous impact of climate change and develop a keen desire for collaboration in our effort to work together towards climate resilence building and infrastructure for a better tomorrow

17. And with the lafaz of "Bismillahirrahmanirrahim", I hereby declare the Seminar on Ensuring Climate Resilience of Building and Infrastructure open.

Thank you.