

## The Energy Institute Hong Kong (Branch) 香港能源學會(分會)

(Correspondence Address: Room 1710, Technology Park, 18 On Lai Street, Shek Mun, Shatin, NT, Hong Kong.  
(Attn. : Ir Dr HF Chan))

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The Honorable Tse Chin-wan; BBS, JP  
Secretary for Environment and Ecology  
16/F., East Wing, Central Government Offices,  
2 Tim Mei Avenue, Tamar, Hong Kong

By email: [see@eeb.gov.hk](mailto:see@eeb.gov.hk)

16th February 2023

Dear The Honorable Tse,

### **Position Paper of EI(HKB) on recommendation to achieve net zero by 2050 in Hong Kong**

The Energy Institute (Hong Kong Branch), EI (HKB), is highly appreciative of the tremendous efforts made by the Hong Kong SAR Government to achieve net zero by 2050 through the publication of Climate Action Plan 2050 in 2021 and the decarbonization measures outlined in the said Plan and in the Undersecretary's and Dr Kenneth Leung's presentations at the 7<sup>th</sup> International Conference co-organized by the Institute, the City University of Hong Kong and the Hong Kong Polytechnic University held on 1-2 December 2022.

The said Action Plan outlines four policy initiatives to decarbonize Hong Kong by 2050. To offer our suggestions on achieving net zero by 2050 or even earlier, EI (HKB) takes the initiative to quantify, based on the best available data which we can find, the effects of several feasible decarbonization options that the Government may consider.

In this regard, we have prepared the attached "EIHKB Recommendations on Decarbonization Measures/Options for Achieving Net Zero by 2050" (the Document), which suggests feasible measures for achieving net zero by 2050. In this Document EI (HKB) has identified measures to achieve 80% reduction of the CO<sub>2e</sub> emissions as compared to 2020 as below:

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## On net zero electricity generation

- Phasing out of all coal-fired power generation plants

## On green transport

- Electrification of all gasoline vehicles
- Electrification of all LPG vehicles
- Conversion of 50% of buses and 30% of medium /heavy vehicles to fuel-cell driven
- Conversion of 50% of in-harbour ferries to fuel cell driven

## On energy saving and green buildings

- Energy reduction in heavy and light rail by 10%
- Energy reduction in residential, commercial, and industrial sectors by 5%

## On waste reduction

- Use of gasification-to energy to generate power and hydrogen,
- Closure of some of the landfills, and
- Waste reduction

Other options as identified in the Document may also be considered.

The Annex in a separate volume to the Document is a comprehensive technical review of the hydrogen safety and the current technologies in production, transportation, storage, conversion, and utilization of hydrogen. This technical review collates updated information on these issues with input from our Technical Committee members. Further, Appendix D to the Document also lists out the relevant international/national standards on hydrogen for easy reference.

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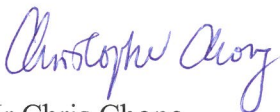
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Attached is the Document for your consideration. EI (HKB) with its big team of professional energy engineers locally and in the UK is willing to advise and assist the Government in the implementation of these measures for the benefits of Hong Kong and the global community.

If you need further clarification, please contact the undersigned at 91831250 or [chairman@energyinst.org.hk](mailto:chairman@energyinst.org.hk)/[cchrischong@gmail.com](mailto:cchrischong@gmail.com).

Yours sincerely,



Ir Chris Chong  
Chairman, Session 2021/2022  
Energy Institute (Hong Kong Branch)