

By post and by email at thomashui@cedd.gov.hk

27 August 2026

Ir Thomas HUI Hoi Hon
Assistant Director(Technical)
Civil Engineering and Development Department
15/F, Civil Engineering and Development Building
101 Princess Margaret Rd
Homantin, Kowloon

Dear Ir HUI

**Consultation on the
Playbook on Carbon Management
of the Civil Engineering and Development Department**

On behalf of the Institution, I am pleased to present to you our views and suggestions as set out in the enclosure for your consideration on the captioned subject.

The Institution welcomes the opportunity to work with the Department and offer our expertise and experience on the area of concern if and when it is needed.

Thank you.

Yours sincerely



Ms Sandy SO
Senior Executive Manager –
External Affairs

Enclosure

Views from The Hong Kong Institution of Engineers On the Playbook on Carbon Management of the Civil Engineering and Development Department

In response to the Civil Engineering and Development Department's (CEDD) draft *Playbook on Carbon Management*, The Hong Kong Institution of Engineers (HKIE) would like to offer the following views for the Department's consideration.

2. The HKIE fully supports the CEDD's ongoing efforts to enhance environmental sustainability and welcomes the initiative to provide a Carbon Digital Platform (CDP) for the industry to estimate and manage carbon emissions in infrastructure projects. Drawing on our *Research Report on Carbon Management for Infrastructure and Building Works of Hong Kong*, we advocate the principle of “assess carbon early, assess carbon always” across the entire asset lifecycle. In this regard, we recognise the Playbook as an important pioneering initiative that can serve as a benchmark for promoting whole-life carbon management across other government works departments and the wider Hong Kong construction sector.
3. The platform's ability to establish a “connected carbon thread” from the early design stages through to construction completion is an important step toward data-driven carbon governance. By enabling early-stage estimation and design optioneering, the platform empowers engineers to make well-informed and optimised decisions, embedding sustainability at the core of project planning.
4. While digital platforms for carbon management, most notably the Construction Industry Council (CIC) Carbon Assessment Tool, are already available, current localised frameworks are often fragmented and not yet systematically aligned or recognised. Therefore, we recommend that the CEDD or relevant government bodies provide a standardised approach for carbon estimation and management. This coordination would ensure that data and results from various platforms can be effectively cross-referenced and assessed based on an authority-recognised methodology and set of criteria, thereby addressing the current limitations in local applicability.
5. To provide a more comprehensive evaluation of project sustainability, it is highly recommended that the Playbook further highlight the broader environmental benefits of low-carbon construction methods. Technologies such as the electrification of machinery and the use of Battery Energy Storage Systems (BESS) can significantly reduce local air pollutants through zero tailpipe emissions and lower noise levels, creating a cleaner and quieter working environment.

6. Furthermore, innovative methods such as the U-shaped Tunnel Boring Machine (UTBM) and modular shoring systems can substantially reduce material waste and ground disturbance. We suggest that these additional benefits — specifically air quality improvement, noise reduction and waste minimisation — be explicitly quantified within the digital platform’s outputs.

7. To guide the industry effectively, the Playbook should include a strategic roadmap, for example, targeting a 50% reduction in carbon footprint by 2035 and achieving carbon neutrality by 2050. To ensure alignment with these goals, relevant terms and conditions should be included in subsequent CEDD contracts. Additionally, the use of artificial intelligence and robotics should be emphasised, as these technologies could potentially accelerate the implementation of Hong Kong’s Climate Action Plan 2030+ and 2050.

8. We believe the engineering and construction sector now has a critical opportunity to move beyond fragmented assessments and establish a coherent, system-wide carbon management framework. By establishing this Playbook, the CEDD can play a pivotal role in driving Hong Kong’s transition toward data-driven, whole-life carbon governance. Moving forward, the HKIE remains committed to supporting the Department and collaborating with government bodies to scale up these best practices across the industry and reinforce Hong Kong’s position as a sustainable leader within the Greater Bay Area.