

2019 Smart City @ Kowloon East Symposium on 5 January 2019
Transforming Kowloon East into a Smart City District
(20 minutes including a 6-minute video)

Transforming Kowloon East Into a Smart City District

Good morning, colleagues and friends of EKEO. As the host of the Symposium, I would like to extend a very warm welcome to you all. We have an overwhelming response for the Symposium, and we are so blessed to have your continuous support throughout the past few years.

Our Smart City Journey

EKEO's core role is to steer, oversee and facilitate the transformation of Kowloon East into Hong Kong's CBD2. And we have been working on various initiatives, focusing on enhancing connectivity, improving the environment, and releasing development potential in the district. We have even taken a very bold step onto our Smart City journey in Kowloon East, and that was even before the setting up of the Innovation and Technology Bureau.

Before I go into more details, I would like to show you [a short video](#) on this special journey.

Smart City Framework for Kowloon East

A lot has happened since we set off. We commenced eight proof of concept trials (or PoCs in short), and with the support of the Lands Department, developed the MyKE mobile app. The Smart City Framework for Kowloon East we have formulated for Kowloon East is tailor-made to address the urban issues in the district and with people in mind.

Enhancing mobility and walkability has always been our top priority, optimizing resources management and improving the urban environment is another important aspect, considering there are so many new developments and redevelopments in the transformation process.

And as a CBD2, injecting more socio-economic vibrancy is equally important.

Innovation-oriented Platform

What I treasure most is the experience of having various parties joining us in our Smart City journey, to co-create, collaborate and share the knowledge gained.

At the core of the Framework is Kowloon East as an Innovation-oriented Platform. EKEO is a small office, but the range of stakeholders we are engaging is very wide. And seeing our small pilot projects growing to become part of a bigger picture, and being deployed elsewhere in the territory has been really encouraging.

Starting Small and Scaling Up

We have worked closely with ASTRI, on one of the collaboration projects that EKEO provided support for seeking research funding. Under the project, a scalable indoor and outdoor GIS for Kowloon East, enabling data capture and monitoring of a vast number of IoT devices has been built. The system supports a number of our smart city initiatives, including Easy Parking and indoor positioning functions in MyKE. We are happy to see that a similar system is now deployed in Tsuen Wan, after our experience. The real-time parking vacancy data we collected, with the data owners' consent, are fed to the Government's public sector information portal in API format. We also share the data with TD for disseminating via their HKeMobility app.

Starting Young

We support our youth in their STEM related education. We share the Kowloon East experience with secondary and university students through workshops and briefings. We have also supported a number of competitions, events and students' projects using Kowloon East as a case study. It is so promising to see the bright young minds coming up with innovative solutions.

Opportunities for Start-ups

Our PoCs have also provided opportunities for start-ups to get themselves involved in government projects and familiarise with government procedures. Three start-ups have worked with us so far, and one of them has subsequently been engaged in CEDD's GreenWay trial project on Kwun Tong Promenade.

From Vision to Implementation – Mobility and Walkability

For improving way-finding for pedestrians, we have collaborated with LandsD in developing a 3D pedestrian map for Kowloon East in MyKE. With the experience gained, LandsD has secured further funding for expanding this 3D internal mapping to some 300 buildings in Kowloon Bay. As improving walkability is high on our agenda, the way-finding function has been extended to the San Po Kong Business Area.

And I have to thank Jimmy from HKUST, who has kindly agreed to share real-time air quality information in Kowloon East later this year. With such information, pedestrians will be able to select a walking route with cleaner air. HKUST's PRAISE project is also a research project that EKEO has supported. I will leave Jimmy to fill you in on how amazing their system would be.

KMB is another close partner of EKEO. A busy section of Kwun Tong Road is now installed with estimated bus arrival time panels, and Gary from KMB will tell you more on their smart initiatives and how they are going to materialise.

From Vision to Implementation – Resources Management & Urban Environment

On the environmental front, we believe from the very beginning that the adoption of smart electricity and water meters would increase consumers' consciousness, leading to a greener lifestyle. Since November 2016, all land sale sites in Kowloon East have been mandated to install smart water meters. In parallel, we have engaged some households in two public housing estates in a Smart Energy Saving Scheme. The results for the first 6 months of the Scheme indicate that an energy saving of some 5% on average has been achieved, when compared with the same period the year before.

We have also worked closely with CLP Power in supporting their Smart Energy Community project in Kai Tak. Some 3,400 smart energy meters have already been installed, in advance of their 5-year Plan to upgrade existing meters.

From Vision to Implementation – Governance & Socio-economic Vibrancy

The adoption of new technologies usually involves re-engineering to the normal way we work. So, for most of the PoCs, we have been working closely with the departments concerned in devising systems meeting their operational needs while enhancing efficiency. One of our key partners is the Police. The Government's

objective is to make use of new technologies to assist frontline officers in taking enforcement actions against traffic contraventions in future, and to enhance the efficiency of the back-end support process.

We have also invited DSD, HyD and WSD who are responsible for scheduled or emergency road opening works to participate in the “Real-time Roadworks Information” PoC. The feedback from these user departments would enable us to refine the workflow for collecting and disseminating real-time roadworks information, enabling drivers to select the best driving route. We would extend the trial to cover roadworks by utility companies, if the initial outcome is successful.

When you came this morning, you might have noticed the three multi-purpose lamp posts erected on Hoi Bun Road, including one right outside our entrance. There will be four more coming very soon under our PoC, all with different configurations. The trial has involved close dialogues with relevant government departments to ensure the data measured by the sensors suit their purposes, while serving as an IoT backbone.

For all our PoCs, we share our hands-on experience with other departments which are considering similar solutions. We hope the initial findings from our multi-purpose lamp post trial would be useful to OGCI’s bigger pilot project of some 400 in number.

To enhance city resilience and safeguard public safety, we have also supported a research team from three local universities and Friends of the Earth to develop an early warning system against potential tree risk.

Our Smart City journey continues. We always welcome further collaboration opportunities to create a smarter future, for and beyond Kowloon East, together.

Thank you again for joining us today.