

成立創新辦公室 開設網上創新科技協作平台

Establishing Inno-Office and E&M InnoPortal

機電工程署(機電署)一直積極支持初創企業的發展，鼓勵把其研發的創新科技項目轉化為產品推出市場。為全力支持初創企業，繼早前宣布機電署總部大樓用作機電初創公司的共享試驗場地後，我們在今年2月成立「創新辦公室」，專責統籌一系列支援創新科技的措施，並且開設網上創新科技協作平台E&M InnoPortal，以加強與大學及初創的合作。

為發掘更多具潛力的初創項目，E&M InnoPortal會彙列各政府部門、公共機構和機電行業的技術開發需求清單，讓各大學和初創企業提供與機電相關的創新和技術解決方案。我們希望以E&M InnoPortal作為配對平台，由機電署作橋樑聯繫雙方，把具潛質的技術安排在總部大樓以至其他設施試驗，共同協作和推動產品的研發和應用。

網上創新科技協作平台讓各大學和初創企業按機電需要提供相關的創新和技術解決方案。
The E&M InnoPortal enables universities and start-ups to offer their I&T solutions for the E&M needs.

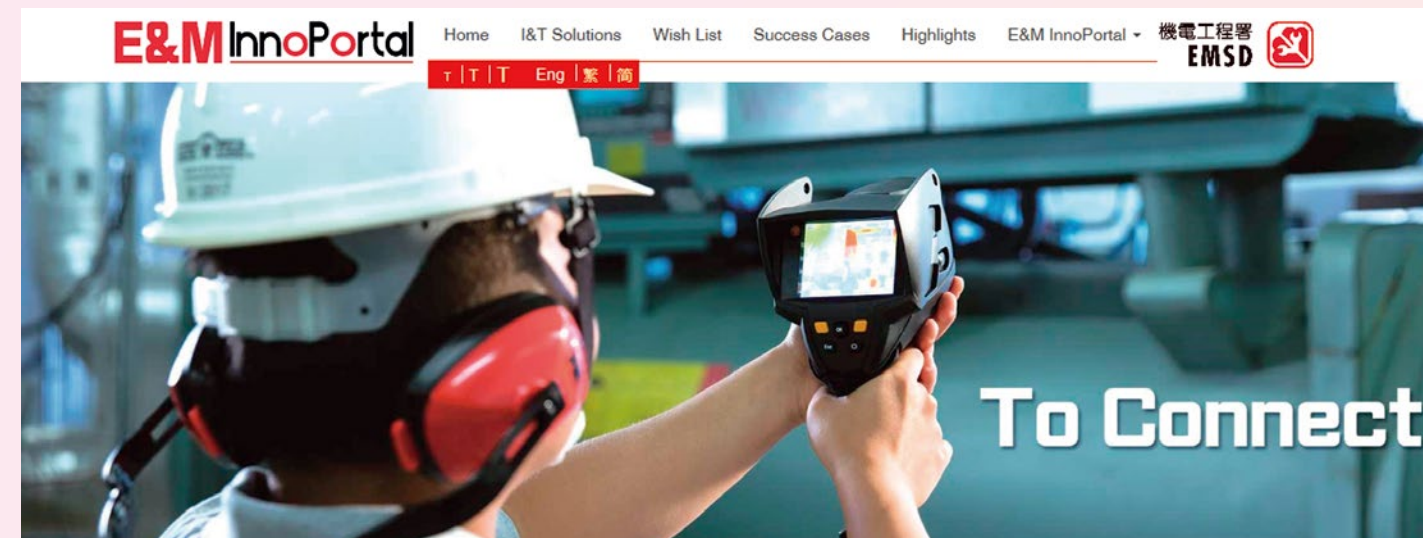
The EMSD has been actively supporting the development of start-ups and encouraging them to turn their research and development projects on innovation and technology (I&T) into products for launching in the market. Following our earlier announcement on opening up the EMSD Headquarters Building as a common testing ground for E&M start-ups, the "Inno-Office" was established in February this year to coordinate a series of measures in fostering the development of I&T. In addition, an online I&T collaboration platform "E&M InnoPortal" has been set up to help enhance cooperation with universities and start-ups.

To identify more start-up projects with good potential, E&M InnoPortal will maintain a list of the technology development needs of various government departments, public bodies and the E&M trade, enabling various universities and start-ups to offer E&M related I&T solutions. With the E&M InnoPortal as a matching platform,

EMSD plays a bridging role between both parties in a partnership, and facilitate trial application of technologies with good potential in our headquarters building or other facilities, with a view to jointly promoting and driving the development and application of new products.

E&M InnoPortal已經正式啟用，有興趣的客戶部門、大學和初創企業請致電2808 3879與高級工程師林鑫駿先生聯絡，亦可掃描以下二維碼或登入網址www.emsd.gov.hk/inno，以獲取更多相關資訊。

The E&M InnoPortal is officially launched. For more information, interested clients, universities and start-ups may contact Mr. Tommy Lam, Senior Engineer, at 2808 3879. You may also scan the QR code on the right or visit www.emsd.gov.hk/inno.



首個試驗項目率先展開

First Pilot Project Kicks Off

自去年11月宣布機電署總部大樓用作機電初創企業的共享試驗場地後，在短短數月間，我們已選出具有潛力的初創節能項目「智能風機盤管控制器」，並率先在總部大樓內採用。把研發項目轉化為真正的產品，將有助初創企業發展，同時亦向客戶和業界展示節能環保的新機會，達到雙贏的效果。

傳統冷氣機風機盤管的電動馬達以「高」、「中」和「低」三種速度推動風扇運行。「智能風機盤管控制器」是一個節能裝置，透過調節電壓，控制風機馬達的速度，能降低中央冷氣機內風機的用电量，為總部大樓節約能源之餘，還可延長風機馬達的壽命。

目前，我們正進行試行，並且持續進行現場勘測和安裝，目標是在大樓內多個場地安裝該節能控制器，預計整項工程在年中完成。我們將持續監察控制器的運行，收集和對比數據，以確定節能成效。



安裝「智能風機盤管控制器」後(見圖示)，當風機馬達以低速運行時，控制器的節能效果尤其明顯。
After installing the Fan Coil Unit Energy Saver (see photo), the energy saving effect is especially noticeable when the fan motor is running at a low speed.

Last November, we announced the use of the EMSD Headquarters Building as a common testing ground for E&M start-ups. In the subsequent few months, a potential energy saving start-up project, Fan Coil Unit Energy Saver, has been selected and being deployed in our headquarters building. Converting research projects into real-life products not only helps the development of start-ups, but also demonstrates new opportunities for energy saving and environmental protection to our clients and the trade, achieving a win-win outcome.

In a conventional fan coil unit, the electric motor operates in three discrete speed settings: high, medium, and low. The Fan Coil Unit Energy Saver is an energy saving device. By varying the voltage to control the fan motor speed, the overall electricity consumption of the fan motor in a central air-conditioning system can be reduced. Besides saving energy for the headquarters building, the device also extends the life of the fan motor.

Currently, we are conducting trial tests, on-going site surveys and installations. Our goal is to install this energy saving device at multiple locations within the building. The entire project is expected to be completed in the middle of the year. We will continue to monitor the operation, collect and compare data to evaluate its effectiveness.

開拓節能新領域

Explore New Frontiers for Energy Saving

機電署不但支持初創企業的創新科技項目發展，而且積極為客戶部門研究和尋求創新技術。為鼓勵客戶部門開拓能源效益和節能減排的新領域，機電署提出了新意念，設計和研製行人天橋「智能調光照明控制系統」，為客戶及市民提供安全可靠、環保及合乎成本效益的公共照明系統。

我們研發的行人天橋「智能調光照明控制系統」採用自動調光，當運動傳感器探測到行人接近時，發光二極管燈具會自動調節至符合《公共照明設施設計手冊》的亮度標準。這個智能省電設計系統靈活、富彈性，在行人不易察覺的情況下，既可符合設計標準，又可根據個別天橋的行人流量而設計不同智能調光的操作模式，例如改變燈的光暗度和時間長短，以照顧市民的實際需要，達到節能效果。

首個試驗項目在人流相對較低的彩虹斧山道橫跨龍翔道行人天橋展開，在應用新的「智能調光照明控制系統」和採用發光二極管燈具後，用电量較以往節省高達50%。由於節能效果理想，我們已經在元朗、彩虹、葵涌、太古城及銅鑼灣等地區的行人天橋安裝這個系統，並相繼投入服務。展望未來，我們會繼續物色合適的行人天橋供安裝「智能調光照明控制系統」，並持續監測以優化系統設計。

如客戶對「智能風機盤管控制器」和「智能調光照明控制系統」感興趣，歡迎致電3757 6134與我們的高級工程師鄧偉豪先生聯絡。

The EMSD not only supports the development of I&T projects by start-ups, but also proactively conducts studies and searches for new technologies for our client departments. To encourage clients explore new frontiers for energy efficiency, energy saving and emission reduction, EMSD introduced a new concept in designing and manufacturing a Smart Footbridge Lighting Dimming Control System. It provides safe, reliable, environmentally friendly and cost-effective public lighting, benefiting both our clients and the public.

The Smart Footbridge Lighting Dimming Control System will automatically adjust the lighting level. When the motion sensor detects a pedestrian passing nearby, the LED light will be adjusted automatically to meet the lighting level specified in the Public Lighting Design Manual. This Smart Footbridge Lighting Dimming Control System is flexible and easily configurable. Without making noticeable difference to pedestrians, the system allows further design of different lighting modes, for example, by varying the lighting brightness and duration to suit different pedestrian flows of individual footbridge while meeting the lighting standards. It takes care of the practical needs of the public and saves energy.



我們率先在彩虹斧山道橫跨龍翔道的行人天橋裝設新的「智能調光照明控制系統」，安裝後用电量較以往節省多達50%。
The new Smart Footbridge Lighting Dimming Control System was first installed at the footbridge at Hammer Hill Road, Choi Hung, across Lung Cheung Road. The electricity consumption was then saved by as much as 50%.

The first pilot project was launched at the footbridge at Hammer Hill Road, Choi Hung, across Lung Cheung Road. The pedestrian flow there is relatively low. After application of the new Smart Footbridge Lighting Dimming Control System and LED lamps, the saving on electricity consumption was up to 50%. In view of the satisfactory result, we have started installing this system at footbridges in Yuen Long, Choi Hung, Kwai Chung, Taikoo Shing and Causeway Bay. Looking forward, we will continue to identify suitable footbridges for installation of the system, and to monitor its performance with a view to optimising the system design.

If clients are interested in the Fan Coil Unit Energy Saver and Smart Footbridge Lighting Dimming Control System, please contact Mr. Tang Wai-ho, Ronald, Senior Engineer, at 3757 6134.