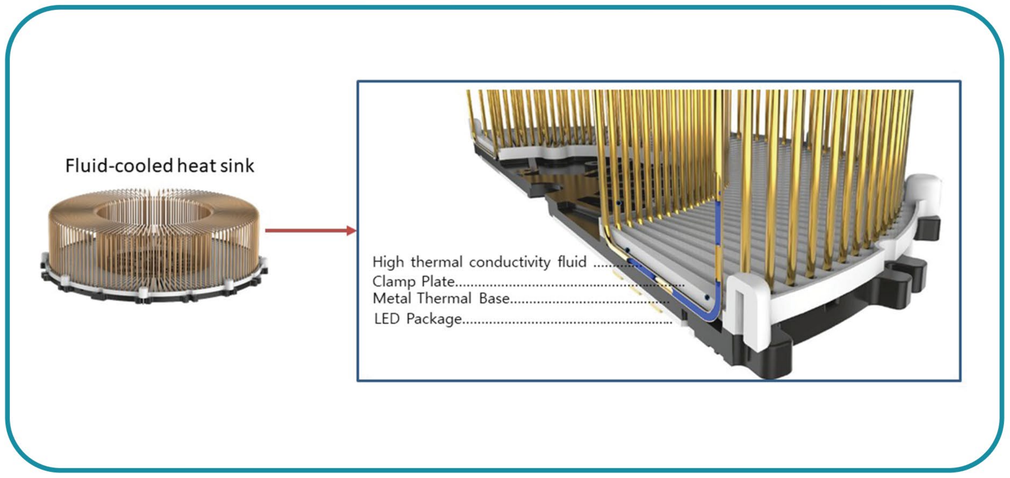
應用智能科技實現邁向零碳
Application of Smart Technology to achieve Advancing Net Zero

液冷散熱器的 LED 燈具
Fluid-cooled Heatsink LED Lighting

作為香港特區政府的創新推動者，機電工程署(機電署)於 2019 年推出機電創科網上平台，列出各政府部門、公營機構及機電業界的服務願望，並邀請創科界別提出相關創科方案進行對接。機電署會為成功匹配的項目進行實地試驗，以推動創新技術的研發和應用。

創新創科解決方案示例：
液冷散熱器 LED 燈具採用振盪毛細管式熱管和高導熱率液體來增強散熱。機電署進行的一項試驗顯示用於高棚燈的液冷散熱器 LED 比傳統鋁散熱器 LED 的效率提高約 10%。



Being the innovation facilitator for the HKSAR government, Electrical and Mechanical Services Department (EMSD) launched the E&M InnoPortal in 2019 to list the service wishes of various government departments, public organisations and the E&M trades, and invite the I&T sector to propose relevant I&T solutions for matching. For successfully matched projects, EMSD will carry out field trials in a bid to promote and drive the research & development and application of innovative technologies.

Example of innovative I&T solution:
The fluid-cooled heatsink LED lighting uses oscillating capillary tube-type heat pipes and a high thermal conductivity fluid to enhance the heat dissipation.
A trial conducted by EMSD showed that the fluid-cooled heat sink LED lighting is approximately 10% more efficient than traditional aluminum heat sink LED lighting for high bay lights.

如想發掘更多創科項目，歡迎瀏覽機電創科網上平台。
If you would like to explore more I&T projects, please visit E&M InnoPortal.

https://inno.emsd.gov.hk/en/home/index.html